



**The Safer Affordable Fuel-Efficient (SAFE)
Vehicles Rule for Model Year 2021-2026
Passenger Cars and Light Trucks**

Draft Environmental Impact Statement

Appendices

July 2018

Docket No. NHTSA-2017-0069



U.S. Department of Transportation
**National Highway Traffic Safety
Administration**



APPENDIX A

Air Quality Nonattainment Area Results

Table A-1. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Particulate Matter (PM_{2.5}), 2025

Nonattainment or Maintenance Area												
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.31	0.29	0.27	0.24	0.17	0.16	0.12	0.11
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	1.12	1.04	0.99	0.88	0.64	0.60	0.46	0.40
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.57	0.53	0.50	0.45	0.32	0.30	0.23	0.21
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.05	0.05	0.05	0.03	0.03	0.02	0.02
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.78	0.72	0.69	0.61	0.44	0.41	0.32	0.28
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.48	0.44	0.42	0.37	0.27	0.25	0.19	0.17
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.55	0.51	0.49	0.43	0.31	0.29	0.22	0.20
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.27	-3.03	-2.90	-2.50	-1.81	-1.73	-1.30	-1.18
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.09	0.09	0.08	0.07	0.05	0.05	0.04	0.03
Anchorage; Eagle River, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.98	0.91	0.87	0.77	0.56	0.52	0.40	0.35
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.07	0.07	0.05	0.05

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-3.26	-3.01	-2.91	-2.46	-1.77	-1.71	-1.28	-1.17
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.04	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.15	0.14	0.13	0.12	0.09	0.08	0.06	0.05
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.49	0.46	0.43	0.38	0.28	0.26	0.20	0.18
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.46	0.43	0.41	0.36	0.26	0.25	0.19	0.17
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	5.00	4.65	4.41	3.90	2.84	2.66	2.04	1.80
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-0.47	-0.44	-0.42	-0.36	-0.26	-0.25	-0.19	-0.17
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	2.47	2.29	2.18	1.93	1.40	1.31	1.01	0.89
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-36.33	-33.69	-32.29	-27.85	-20.11	-19.21	-14.51	-13.07
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-6.07	-5.63	-5.40	-4.66	-3.36	-3.21	-2.43	-2.18
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-6.14	-5.69	-5.45	-4.71	-3.40	-3.25	-2.45	-2.21

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.99	0.92	0.87	0.77	0.56	0.53	0.40	0.36
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.31	0.29	0.27	0.24	0.17	0.16	0.12	0.11
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.51	0.48	0.45	0.40	0.29	0.27	0.21	0.18
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-3.93	-3.64	-3.49	-3.01	-2.18	-2.08	-1.57	-1.41
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.02	0.02
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-3.02	-2.79	-2.68	-2.31	-1.67	-1.59	-1.20	-1.08
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.28	0.26	0.24	0.22	0.16	0.15	0.11	0.10
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	1.33	1.23	1.17	1.03	0.75	0.71	0.54	0.48
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2.48	2.31	2.19	1.94	1.41	1.32	1.01	0.90
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-5.45	-5.04	-4.88	-4.10	-2.94	-2.86	-2.13	-1.95
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.17	0.16	0.15	0.13	0.10	0.09	0.07	0.06
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03

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Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.17	0.16	0.15	0.13	0.09	0.09	0.07	0.06
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	1.82	1.70	1.61	1.42	1.03	0.97	0.74	0.66
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1.65	1.54	1.46	1.29	0.94	0.88	0.67	0.60
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.98	0.91	0.86	0.76	0.55	0.52	0.40	0.35
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	1.22	1.13	1.07	0.95	0.69	0.65	0.50	0.44
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2.48	2.31	2.19	1.94	1.41	1.32	1.01	0.90
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	2.31	2.15	2.04	1.81	1.31	1.23	0.94	0.83
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.45	0.42	0.40	0.35	0.26	0.24	0.18	0.16
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.71	1.59	1.51	1.34	0.97	0.91	0.70	0.62
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.02	0.02
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.75	0.70	0.66	0.59	0.43	0.40	0.31	0.27
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.97	0.91	0.86	0.76	0.55	0.52	0.40	0.35
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	6.38	5.94	5.63	4.99	3.62	3.40	2.60	2.30
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-11.39	-10.56	-10.12	-8.73	-6.30	-6.02	-4.55	-4.10

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-2.41	-2.23	-2.16	-1.82	-1.31	-1.27	-0.95	-0.87
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-1.88	-1.73	-1.68	-1.40	-1.00	-0.98	-0.73	-0.67
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	0.36	0.33	0.31	0.29	0.21	0.19	0.15	0.13
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.68	-0.63	-0.61	-0.52	-0.37	-0.36	-0.27	-0.25
Detroit-Ann Arbor, MI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	3.00	2.79	2.64	2.35	1.71	1.60	1.23	1.08
Dona Ana County; Anthony, NM	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.09	0.08	0.07	0.05	0.05	0.04	0.03
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-4.96	-4.60	-4.41	-3.80	-2.75	-2.62	-1.98	-1.78
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.81	-0.75	-0.72	-0.62	-0.45	-0.43	-0.32	-0.29
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.74	-0.68	-0.66	-0.56	-0.40	-0.39	-0.29	-0.26
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.12	-1.04	-1.00	-0.86	-0.62	-0.59	-0.45	-0.40
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.18	0.17	0.16	0.14	0.10	0.10	0.07	0.07
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.14	-0.13	-0.12	-0.11	-0.08	-0.07	-0.06	-0.05
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-0.13	-0.12	-0.11	-0.10	-0.07	-0.07	-0.05	-0.05
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01

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Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.11	0.11	0.10	0.09	0.06	0.06	0.05	0.04
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.44	0.41	0.39	0.34	0.25	0.23	0.18	0.16
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.32	1.22	1.16	1.03	0.75	0.70	0.54	0.47
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.91	0.84	0.80	0.71	0.51	0.48	0.37	0.33
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.90	0.84	0.80	0.70	0.51	0.48	0.37	0.32
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-26.24	-24.32	-23.35	-20.05	-14.46	-13.85	-10.44	-9.43
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.12	0.10	0.07	0.07	0.05	0.05
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.13	0.12	0.12	0.10	0.07	0.07	0.05	0.05
Imperial County; Imperial Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.81	-0.75	-0.72	-0.62	-0.45	-0.43	-0.32	-0.29
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.44	0.41	0.39	0.34	0.25	0.23	0.18	0.16
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.13	0.12	0.11	0.10	0.07	0.07	0.05	0.05
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.12	0.11	0.11	0.09	0.07	0.06	0.05	0.04
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.77	-0.71	-0.68	-0.59	-0.42	-0.41	-0.31	-0.28
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.02	0.02
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.69	0.65	0.61	0.54	0.39	0.37	0.28	0.25
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.84	0.78	0.74	0.65	0.47	0.44	0.34	0.30
La Porte County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.21	0.19	0.18	0.16	0.12	0.11	0.08	0.07
Lake County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-4.71	-4.37	-4.19	-3.61	-2.61	-2.49	-1.88	-1.69
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.83	-4.48	-4.29	-3.70	-2.67	-2.55	-1.93	-1.74
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c									
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6		Alt. 8
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.40	0.37	0.35	0.31	0.23	0.21	0.16	0.14
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.40	0.37	0.35	0.31	0.23	0.21	0.16	0.14
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.18	0.17	0.16	0.14	0.10	0.10	0.07	0.07
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	1.65	1.54	1.46	1.29	0.94	0.88	0.67	0.60
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-6.14	-5.69	-5.45	-4.71	-3.40	-3.24	-2.45	-2.21
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.10	0.10	0.09	0.08	0.06	0.06	0.04	0.04
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-6.36	-5.90	-5.65	-4.87	-3.52	-3.36	-2.54	-2.29
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.02
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	2.15	2.03	1.83	1.83	1.36	1.19	0.96	0.78
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-10.22	-9.48	-9.09	-7.83	-5.65	-5.40	-4.08	-3.68
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	2.16	2.04	1.84	1.84	1.37	1.19	0.97	0.79

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	2.16	2.04	1.84	1.84	1.37	1.19	0.97	0.79
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	2.16	2.04	1.84	1.83	1.37	1.19	0.97	0.79
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	2.13	2.02	1.82	1.82	1.36	1.18	0.96	0.78
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-5.42	-5.03	-4.82	-4.15	-3.00	-2.87	-2.16	-1.95
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-3.23	-3.00	-2.87	-2.48	-1.79	-1.71	-1.29	-1.16
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.03	0.03
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	3.20	2.97	2.82	2.49	1.81	1.70	1.30	1.15
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.41	0.38	0.36	0.32	0.23	0.22	0.17	0.15
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.28	-2.11	-2.03	-1.75	-1.26	-1.21	-0.91	-0.82
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.02
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.61	-1.49	-1.43	-1.22	-0.88	-0.85	-0.64	-0.58
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.37	-1.26	-1.22	-1.03	-0.74	-0.72	-0.54	-0.49
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.99	0.93	0.88	0.78	0.56	0.53	0.41	0.36
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.18	-2.94	-2.84	-2.40	-1.72	-1.67	-1.25	-1.14

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.64	-0.59	-0.57	-0.49	-0.35	-0.34	-0.25	-0.23
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.64	-0.59	-0.57	-0.49	-0.35	-0.34	-0.26	-0.23
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.13	0.12	0.12	0.10	0.07	0.07	0.05	0.05
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.70	0.65	0.61	0.54	0.39	0.37	0.28	0.25

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01
New York County, NY	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.30	0.28	0.27	0.24	0.17	0.16	0.12	0.11
New York, NY-NJ-CT	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	8.18	7.61	7.20	6.42	4.68	4.37	3.36	2.95
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	3.78	3.52	3.32	2.98	2.17	2.02	1.56	1.36
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	7.98	7.43	7.02	6.27	4.57	4.26	3.28	2.88
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Nogales, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Oakridge, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Ogden Area, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Olmsted County; (part), MN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.08	0.08	0.07	0.07	0.05	0.04	0.03	0.03
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.53	-0.49	-0.47	-0.41	-0.29	-0.28	-0.21	-0.19
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.62	-4.28	-4.11	-3.53	-2.55	-2.44	-1.84	-1.66

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-15.96	-14.79	-14.20	-12.18	-8.79	-8.42	-6.34	-5.74
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-14.64	-13.56	-13.04	-11.16	-8.04	-7.72	-5.81	-5.26
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	3.07	2.86	2.71	2.40	1.74	1.64	1.25	1.11
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.21	2.99	2.83	2.51	1.82	1.71	1.31	1.16
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.05	-0.05	-0.04	-0.03	-0.03	-0.02	-0.02
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.25	0.23	0.22	0.19	0.14	0.13	0.10	0.09
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.17	0.16	0.15	0.13	0.10	0.09	0.07	0.06
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.35	1.26	1.19	1.06	0.77	0.72	0.55	0.49
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	1.20	1.12	1.06	0.94	0.69	0.64	0.49	0.43
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.02	0.95	0.90	0.80	0.58	0.54	0.42	0.37
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.07	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.40	0.38	0.36	0.32	0.23	0.22	0.16	0.15
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.48	1.38	1.31	1.16	0.84	0.79	0.60	0.53
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.31	0.29	0.28	0.25	0.18	0.17	0.13	0.11
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.25	0.23	0.22	0.20	0.14	0.13	0.10	0.09
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.37	0.34	0.32	0.29	0.21	0.19	0.15	0.13
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.43	0.40	0.38	0.33	0.24	0.23	0.17	0.15
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	2.09	1.98	1.78	1.79	1.34	1.16	0.94	0.77
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.08	-0.08	-0.06	-0.05	-0.04	-0.03	-0.03
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.13	1.05	0.99	0.88	0.64	0.60	0.46	0.41
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.09	1.01	0.96	0.85	0.62	0.58	0.44	0.39
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.22	0.21	0.18	0.20	0.15	0.12	0.10	0.08
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.19	0.18	0.16	0.17	0.13	0.11	0.09	0.07
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.19	0.18	0.17	0.15	0.11	0.10	0.08	0.07

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-1.07	-1.00	-0.96	-0.82	-0.59	-0.57	-0.43	-0.39
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-0.14	-0.13	-0.13	-0.09	-0.06	-0.07	-0.05	-0.05
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.39	-0.36	-0.35	-0.29	-0.21	-0.20	-0.15	-0.14
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.39	-0.36	-0.35	-0.29	-0.21	-0.20	-0.15	-0.14
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.46	0.43	0.41	0.36	0.26	0.25	0.19	0.17
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.76	2.57	2.44	2.16	1.57	1.47	1.13	1.00
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.77	2.58	2.45	2.16	1.57	1.48	1.13	1.00
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-23.77	-22.02	-21.15	-18.15	-13.09	-12.55	-9.45	-8.54
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-23.74	-21.99	-21.13	-18.13	-13.07	-12.53	-9.44	-8.53
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-24.23	-22.45	-21.56	-18.51	-13.35	-12.79	-9.64	-8.71
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	2.36	2.20	2.08	1.86	1.35	1.26	0.97	0.85
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	2.36	2.20	2.08	1.86	1.35	1.26	0.97	0.85
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	2.36	2.20	2.08	1.86	1.35	1.26	0.97	0.85
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	2.36	2.20	2.08	1.86	1.35	1.26	0.97	0.85
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.14	-0.13	-0.12	-0.11	-0.08	-0.07	-0.06	-0.05
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.21	0.20	0.19	0.17	0.12	0.11	0.09	0.08
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	2.30	2.14	2.03	1.80	1.31	1.23	0.94	0.83
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.33	0.30	0.29	0.26	0.19	0.17	0.13	0.12
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.03	0.03
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.24	0.22	0.21	0.18	0.13	0.13	0.10	0.09
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.24	0.23	0.21	0.19	0.14	0.13	0.10	0.09
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.12	0.11	0.10	0.09	0.07	0.06	0.05	0.04
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-12.89	-11.95	-11.45	-9.88	-7.14	-6.81	-5.15	-4.64
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.56	0.52	0.49	0.44	0.32	0.30	0.23	0.20
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-1.29	-1.19	-1.16	-0.96	-0.69	-0.68	-0.50	-0.46
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.24	0.22	0.21	0.19	0.14	0.13	0.10	0.09
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.36	0.34	0.32	0.28	0.21	0.19	0.15	0.13
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.14	-0.13	-0.12	-0.10	-0.07	-0.07	-0.05	-0.05
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.78	0.72	0.68	0.61	0.44	0.41	0.32	0.28
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Utah County, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.40	0.38	0.36	0.32	0.23	0.22	0.16	0.15
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.24	0.22	0.21	0.18	0.13	0.13	0.10	0.09
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.69	0.64	0.61	0.54	0.39	0.37	0.28	0.25
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.07	-0.07	-0.06	-0.05	-0.04	-0.04	-0.03	-0.03
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-1.41	-1.31	-1.25	-1.08	-0.78	-0.74	-0.56	-0.51
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-1.40	-1.30	-1.25	-1.08	-0.78	-0.74	-0.56	-0.50
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.40	-1.30	-1.24	-1.07	-0.78	-0.74	-0.56	-0.50
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.63	0.59	0.56	0.50	0.36	0.34	0.26	0.23
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	4.50	4.18	3.97	3.51	2.55	2.39	1.83	1.62
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.25	0.23	0.22	0.20	0.14	0.13	0.10	0.09
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Wayne County; (part), MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.85	-0.78	-0.75	-0.65	-0.47	-0.45	-0.34	-0.30
West Central Pinal County, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.33	0.31	0.29	0.26	0.19	0.18	0.13	0.12
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Yakima County; (part), WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.07	0.07	0.06	0.04	0.04	0.03	0.03

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c									
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.16	0.15	0.14	0.12	0.09	0.09	0.07	0.06
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.11	0.10	0.07	0.07	0.05	0.04

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million; NO_x = nitrogen oxides

Table A-2. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Particulate Matter (PM_{2.5}), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.84	0.78	0.72	0.62	0.44	0.36	0.19	0.23
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	3.12	2.91	2.68	2.33	1.62	1.35	0.70	0.86
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.55	1.44	1.34	1.16	0.81	0.67	0.35	0.43
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.18	0.17	0.15	0.13	0.09	0.08	0.04	0.05
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	2.12	1.97	1.82	1.58	1.11	0.91	0.47	0.59
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.12	0.11	0.11	0.09	0.06	0.05	0.03	0.03
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	1.30	1.21	1.12	0.97	0.68	0.56	0.29	0.36
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.50	1.40	1.29	1.12	0.78	0.65	0.33	0.42
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-7.59	-7.05	-6.58	-5.68	-4.15	-3.22	-1.70	-2.26
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.24	0.23	0.21	0.18	0.13	0.11	0.05	0.07
Anchorage; Eagle River, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.66	2.47	2.29	1.99	1.39	1.15	0.59	0.74
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.03
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.35	0.33	0.30	0.26	0.18	0.15	0.08	0.10
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-6.55	-6.06	-5.72	-4.90	-3.76	-2.72	-1.47	-2.09

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.08	-0.08	-0.07	-0.06	-0.05	-0.04	-0.02	-0.03
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.41	0.38	0.35	0.31	0.21	0.18	0.09	0.11
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.35	1.25	1.16	1.01	0.70	0.58	0.30	0.37
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.26	1.18	1.09	0.94	0.66	0.55	0.28	0.35
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	13.58	12.63	11.68	10.14	7.09	5.86	3.03	3.77
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-0.95	-0.88	-0.83	-0.71	-0.55	-0.40	-0.21	-0.30
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	6.70	6.24	5.77	5.01	3.50	2.89	1.50	1.86
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-84.14	-78.08	-72.96	-62.95	-46.08	-35.69	-18.86	-25.09
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-14.09	-13.07	-12.22	-10.54	-7.71	-5.98	-3.16	-4.20
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-14.26	-13.24	-12.37	-10.67	-7.80	-6.05	-3.20	-4.25
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	2.68	2.49	2.31	2.00	1.40	1.16	0.60	0.74
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.84	0.78	0.72	0.62	0.44	0.36	0.19	0.23
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.41	1.31	1.21	1.05	0.74	0.61	0.31	0.39
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-9.13	-8.47	-7.91	-6.83	-4.99	-3.87	-2.05	-2.72
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.13	0.12	0.11	0.09	0.07	0.05	0.03	0.04
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-6.89	-6.39	-5.98	-5.16	-3.79	-2.92	-1.55	-2.07
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.44	0.41	0.38	0.33	0.23	0.19	0.10	0.12
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.75	0.70	0.64	0.56	0.39	0.32	0.17	0.21
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	3.60	3.35	3.10	2.69	1.88	1.55	0.80	1.00
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	6.77	6.30	5.83	5.06	3.54	2.92	1.51	1.88
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-10.30	-9.51	-9.03	-7.72	-6.04	-4.24	-2.32	-3.39
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.46	0.43	0.40	0.34	0.24	0.20	0.10	0.13
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.21	0.20	0.18	0.16	0.11	0.09	0.05	0.06
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.46	0.42	0.39	0.34	0.24	0.20	0.10	0.13
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	4.96	4.62	4.27	3.71	2.59	2.14	1.11	1.38
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	4.50	4.19	3.88	3.37	2.35	1.95	1.00	1.25
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.66	2.47	2.29	1.99	1.39	1.15	0.59	0.74

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	3.31	3.08	2.85	2.47	1.73	1.43	0.74	0.92
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	6.75	6.28	5.81	5.04	3.53	2.92	1.51	1.88
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	6.29	5.85	5.41	4.70	3.28	2.72	1.40	1.75
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.24	1.16	1.07	0.93	0.65	0.54	0.28	0.34
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	4.66	4.33	4.01	3.48	2.43	2.01	1.04	1.29
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.17	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.19	0.17	0.16	0.14	0.10	0.08	0.04	0.05
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.00	1.86	1.72	1.50	1.05	0.87	0.45	0.56
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.65	2.46	2.28	1.98	1.38	1.14	0.59	0.74
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	17.39	16.18	14.96	12.99	9.08	7.51	3.88	4.83
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-26.33	-24.44	-22.84	-19.70	-14.43	-11.17	-5.90	-7.86
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-4.72	-4.36	-4.13	-3.54	-2.73	-1.96	-1.06	-1.53
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-3.22	-2.97	-2.84	-2.42	-1.96	-1.31	-0.73	-1.11
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	1.09	1.02	0.92	0.81	0.52	0.49	0.24	0.26
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.43	-1.32	-1.24	-1.07	-0.80	-0.60	-0.32	-0.44
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	8.51	7.92	7.31	6.35	4.39	3.69	1.90	2.32
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.27	0.25	0.23	0.20	0.14	0.12	0.06	0.07
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-11.52	-10.69	-9.99	-8.62	-6.30	-4.89	-2.58	-3.43
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.89	-1.75	-1.64	-1.41	-1.03	-0.80	-0.42	-0.56
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.58	-1.47	-1.38	-1.18	-0.89	-0.66	-0.36	-0.49
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.61	-2.42	-2.26	-1.95	-1.43	-1.11	-0.58	-0.78
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.51	0.47	0.44	0.38	0.27	0.22	0.11	0.14
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.32	-0.30	-0.28	-0.24	-0.18	-0.14	-0.07	-0.10
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-0.29	-0.27	-0.25	-0.21	-0.16	-0.12	-0.06	-0.09
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.02
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.31	0.29	0.26	0.23	0.16	0.13	0.07	0.09
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.18	1.10	1.02	0.88	0.62	0.51	0.26	0.33
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	3.57	3.32	3.07	2.67	1.87	1.54	0.80	0.99
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.48	0.45	0.41	0.36	0.25	0.21	0.11	0.13
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	0.00	-0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	2.46	2.29	2.12	1.84	1.28	1.06	0.55	0.68
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.45	2.28	2.11	1.83	1.28	1.06	0.55	0.68
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-58.81	-54.54	-51.08	-44.01	-32.54	-24.84	-13.20	-17.80
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.36	0.34	0.31	0.27	0.19	0.16	0.08	0.10
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.44	0.41	0.38	0.33	0.23	0.19	0.10	0.12
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.36	0.34	0.31	0.27	0.19	0.16	0.08	0.10
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.44	0.41	0.38	0.33	0.23	0.19	0.10	0.12
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.89	-1.75	-1.64	-1.41	-1.04	-0.80	-0.42	-0.56
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.20	0.18	0.17	0.15	0.10	0.09	0.04	0.06
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.16	1.08	1.00	0.87	0.61	0.50	0.26	0.32
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.03

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.36	0.33	0.31	0.27	0.19	0.15	0.08	0.10
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.33	0.30	0.28	0.24	0.17	0.14	0.07	0.09
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.27	0.26	0.24	0.21	0.14	0.12	0.06	0.08
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-1.78	-1.65	-1.55	-1.33	-0.98	-0.75	-0.40	-0.53
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.17	0.16	0.14	0.13	0.09	0.07	0.04	0.05
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.17	0.16	0.14	0.12	0.09	0.07	0.04	0.05
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.18	0.17	0.16	0.14	0.09	0.08	0.04	0.05
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.89	1.75	1.62	1.41	0.99	0.81	0.42	0.52
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	2.27	2.11	1.95	1.69	1.19	0.98	0.51	0.63
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.56	0.52	0.48	0.42	0.29	0.24	0.13	0.16
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-10.88	-10.09	-9.43	-8.14	-5.97	-4.61	-2.44	-3.25

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-11.20	-10.39	-9.71	-8.38	-6.13	-4.75	-2.51	-3.34
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.06	0.05	0.04	0.03	0.03	0.01	0.02
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.08	1.01	0.93	0.81	0.56	0.47	0.24	0.30
Lancaster, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	1.08	1.01	0.93	0.81	0.56	0.47	0.24	0.30
Lane County (part); Oakridge, OR	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.51	0.47	0.44	0.38	0.27	0.22	0.11	0.14
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	4.49	4.18	3.87	3.36	2.35	1.94	1.00	1.25
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-14.26	-13.23	-12.36	-10.67	-7.80	-6.05	-3.20	-4.25
Lebanon County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.28	0.26	0.24	0.21	0.15	0.12	0.06	0.08
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-14.72	-13.66	-12.76	-11.01	-8.06	-6.24	-3.30	-4.39
Liberty-Clairton, PA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Logan, UT-ID	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.27	0.25	0.23	0.20	0.14	0.12	0.06	0.07
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.19	0.18	0.16	0.14	0.10	0.08	0.04	0.05

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	10.23	9.58	8.64	7.62	4.71	4.61	2.26	2.34
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-23.50	-21.80	-20.39	-17.58	-12.91	-9.96	-5.27	-7.04
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	10.25	9.60	8.65	7.63	4.72	4.62	2.26	2.34
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	10.25	9.60	8.65	7.63	4.72	4.62	2.26	2.35
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	10.25	9.60	8.66	7.63	4.72	4.62	2.26	2.35
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	10.18	9.53	8.59	7.58	4.69	4.59	2.24	2.33
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.21	0.19	0.18	0.15	0.11	0.09	0.05	0.06
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-12.51	-11.60	-10.85	-9.36	-6.86	-5.30	-2.80	-3.74
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-7.50	-6.96	-6.50	-5.61	-4.11	-3.18	-1.68	-2.23
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.23	0.21	0.19	0.17	0.12	0.10	0.05	0.06
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	8.68	8.07	7.47	6.48	4.53	3.75	1.94	2.41
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.09	1.01	0.94	0.81	0.57	0.47	0.24	0.30
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-5.29	-4.91	-4.59	-3.96	-2.90	-2.24	-1.19	-1.58
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.19	0.17	0.16	0.14	0.10	0.08	0.04	0.05
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.42	-3.17	-2.98	-2.56	-1.92	-1.43	-0.77	-1.06
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-2.75	-2.55	-2.41	-2.06	-1.58	-1.15	-0.62	-0.88
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	2.72	2.53	2.34	2.03	1.42	1.18	0.61	0.75
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.32	-5.85	-5.53	-4.73	-3.64	-2.63	-1.42	-2.03
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.45	-1.35	-1.26	-1.09	-0.80	-0.62	-0.33	-0.44
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.46	-1.36	-1.27	-1.09	-0.80	-0.62	-0.33	-0.44
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.35	0.32	0.30	0.26	0.18	0.15	0.08	0.10
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.16	0.15	0.14	0.12	0.08	0.07	0.04	0.04
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.20	0.19	0.18	0.15	0.11	0.09	0.05	0.06
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.26	0.24	0.22	0.19	0.13	0.11	0.06	0.07
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	1.89	1.76	1.63	1.41	0.99	0.82	0.42	0.53
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.04	-0.04	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.82	0.76	0.70	0.61	0.43	0.35	0.18	0.23
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	23.39	21.78	20.08	17.46	12.05	10.15	5.21	6.36
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	11.20	10.44	9.61	8.37	5.72	4.88	2.49	3.01
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	22.86	21.29	19.63	17.07	11.77	9.92	5.09	6.22
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.07	0.07	0.06	0.06	0.04	0.03	0.02	0.02
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.02
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.04	0.03	0.03	0.01	0.02
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.23	0.21	0.20	0.17	0.12	0.10	0.05	0.06
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.20	0.18	0.17	0.15	0.10	0.09	0.04	0.05
Perth Amboy Area,14 NJ	CO (1971 8-hour)	Maintenance, --	100	0	-1.21	-1.12	-1.05	-0.90	-0.66	-0.51	-0.27	-0.36
Philadelphia-Camd4en County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-10.42	-9.66	-9.05	-7.80	-5.75	-4.40	-2.34	-3.15
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-35.58	-33.00	-30.92	-26.63	-19.72	-15.02	-7.99	-10.80

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-32.00	-29.66	-27.83	-23.95	-17.85	-13.47	-7.19	-9.80
Phoenix Area, AZ5	CO (1971 8-hour)	Maintenance, Serious	100	0	8.33	7.75	7.17	6.22	4.35	3.60	1.86	2.32
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	8.71	8.11	7.50	6.51	4.55	3.76	1.94	2.42
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.12	-0.11	-0.09	-0.07	-0.05	-0.03	-0.04
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.69	0.64	0.59	0.51	0.36	0.30	0.15	0.19
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.45	0.42	0.38	0.33	0.23	0.19	0.10	0.12
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	3.80	3.54	3.27	2.84	1.97	1.65	0.85	1.04
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	3.40	3.17	2.92	2.54	1.76	1.48	0.76	0.93
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.79	2.60	2.40	2.08	1.46	1.21	0.62	0.78
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.17	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.19	0.18	0.17	0.15	0.10	0.08	0.04	0.05
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	1.10	1.02	0.94	0.82	0.57	0.47	0.24	0.31
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	4.02	3.74	3.46	3.01	2.10	1.74	0.90	1.12
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.85	0.79	0.73	0.64	0.45	0.37	0.19	0.24
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.67	0.63	0.58	0.50	0.35	0.29	0.15	0.19
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.97	0.90	0.83	0.72	0.50	0.42	0.22	0.27
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	1.13	1.05	0.97	0.84	0.59	0.49	0.25	0.31
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	10.09	9.45	8.52	7.51	4.64	4.55	2.22	2.30
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.19	-0.17	-0.16	-0.14	-0.10	-0.08	-0.04	-0.06
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.99	2.78	2.57	2.23	1.56	1.29	0.67	0.83
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.96	2.75	2.55	2.21	1.55	1.28	0.66	0.82
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	1.27	1.19	1.07	0.95	0.57	0.58	0.28	0.28
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.20	1.12	1.01	0.89	0.53	0.55	0.26	0.26
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.54	0.50	0.46	0.40	0.28	0.23	0.12	0.15
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-2.46	-2.28	-2.13	-1.84	-1.35	-1.04	-0.55	-0.74
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.21	0.20	0.16	0.15	0.02	0.12	0.04	-0.01
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.59	-0.54	-0.53	-0.44	-0.38	-0.23	-0.13	-0.22
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.59	-0.54	-0.53	-0.44	-0.38	-0.23	-0.13	-0.22

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.18	1.10	1.02	0.88	0.62	0.51	0.26	0.33
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	7.51	6.99	6.46	5.61	3.92	3.24	1.68	2.09
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	7.52	7.00	6.47	5.62	3.93	3.25	1.68	2.09
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-53.05	-49.19	-46.09	-39.70	-29.39	-22.39	-11.91	-16.09
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-52.97	-49.12	-46.02	-39.65	-29.35	-22.36	-11.89	-16.07
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-54.31	-50.37	-47.17	-40.64	-30.05	-22.94	-12.19	-16.44
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	6.80	6.33	5.84	5.08	3.50	2.95	1.51	1.85
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	6.80	6.33	5.84	5.08	3.50	2.95	1.51	1.85
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	6.80	6.33	5.84	5.08	3.50	2.95	1.51	1.85
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	6.80	6.33	5.84	5.08	3.50	2.95	1.51	1.85
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.32	-0.30	-0.28	-0.24	-0.18	-0.14	-0.07	-0.10
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.02
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.58	0.54	0.50	0.43	0.30	0.25	0.13	0.16
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	6.27	5.84	5.40	4.69	3.27	2.71	1.40	1.74
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.90	0.83	0.77	0.67	0.47	0.39	0.20	0.25
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.23	0.22	0.20	0.17	0.12	0.10	0.05	0.06

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.63	0.59	0.55	0.47	0.33	0.27	0.14	0.18
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.65	0.61	0.56	0.49	0.34	0.28	0.15	0.18
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.32	0.30	0.28	0.24	0.17	0.14	0.07	0.09
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-29.94	-27.79	-25.96	-22.40	-16.38	-12.70	-6.71	-8.91
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	1.50	1.40	1.29	1.12	0.78	0.65	0.33	0.42
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.22	-2.05	-1.96	-1.67	-1.35	-0.90	-0.50	-0.77
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.21	0.19	0.18	0.16	0.11	0.09	0.05	0.06
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.65	0.60	0.56	0.48	0.34	0.28	0.14	0.18
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.99	0.92	0.85	0.74	0.52	0.43	0.22	0.28
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.32	-0.29	-0.28	-0.24	-0.18	-0.13	-0.07	-0.10
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.20	0.19	0.17	0.15	0.10	0.09	0.04	0.06
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.20	0.19	0.17	0.15	0.10	0.09	0.04	0.06
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	2.11	1.96	1.82	1.58	1.10	0.91	0.47	0.59
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.10	1.02	0.94	0.82	0.57	0.47	0.24	0.31
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.64	0.60	0.55	0.48	0.33	0.28	0.14	0.18
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	1.88	1.75	1.62	1.40	0.98	0.81	0.42	0.52
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.12	-0.11	-0.11	-0.09	-0.07	-0.05	-0.03	-0.04
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.11	0.10	0.09	0.08	0.06	0.05	0.02	0.03
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-3.27	-3.04	-2.84	-2.45	-1.79	-1.39	-0.73	-0.97
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-3.25	-3.02	-2.82	-2.43	-1.78	-1.38	-0.73	-0.97
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.25	-3.02	-2.82	-2.43	-1.78	-1.38	-0.73	-0.97
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.72	1.60	1.48	1.29	0.90	0.74	0.38	0.48
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	12.22	11.37	10.51	9.13	6.38	5.27	2.72	3.40
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.67	0.62	0.57	0.50	0.35	0.29	0.15	0.19
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.14	0.13	0.12	0.11	0.07	0.06	0.03	0.04

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.92	-1.78	-1.67	-1.44	-1.06	-0.81	-0.43	-0.58
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.14	0.13	0.12	0.11	0.07	0.06	0.03	0.04
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.20	0.19	0.17	0.15	0.10	0.09	0.04	0.06
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.89	0.83	0.77	0.67	0.47	0.39	0.20	0.25
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.46	0.42	0.39	0.34	0.24	0.20	0.10	0.13
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.20	0.19	0.17	0.15	0.11	0.09	0.05	0.06
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.44	0.41	0.37	0.33	0.23	0.19	0.10	0.12
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.33	0.31	0.29	0.25	0.17	0.14	0.07	0.09

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million; NO_x = nitrogen oxides

Table A-3. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Particulate Matter (PM_{2.5}), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.62	0.57	0.53	0.45	0.29	0.24	0.11	0.15
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.07	1.92	1.76	1.49	0.95	0.79	0.37	0.46
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.14	1.06	0.97	0.83	0.54	0.44	0.21	0.27
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.13	0.12	0.11	0.09	0.06	0.05	0.02	0.03
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	1.54	1.43	1.31	1.12	0.73	0.60	0.28	0.37
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01	-0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.95	0.89	0.81	0.69	0.45	0.37	0.17	0.23
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.10	1.02	0.94	0.80	0.52	0.43	0.20	0.26
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-9.28	-8.62	-8.00	-6.86	-4.90	-3.73	-1.74	-2.68
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.17	0.16	0.15	0.13	0.08	0.07	0.03	0.04
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.94	1.81	1.66	1.41	0.93	0.75	0.35	0.46
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.07	0.06	0.05	0.03	0.03	0.01	0.02
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.26	0.24	0.22	0.19	0.12	0.10	0.05	0.06
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-11.45	-10.65	-9.93	-8.55	-6.32	-4.67	-2.19	-3.56

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.11	-0.10	-0.10	-0.08	-0.06	-0.04	-0.02	-0.03
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.30	0.28	0.26	0.22	0.14	0.12	0.05	0.07
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.02
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.94	0.87	0.80	0.68	0.44	0.36	0.17	0.22
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.93	0.86	0.79	0.67	0.44	0.36	0.17	0.22
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	9.98	9.28	8.52	7.25	4.75	3.87	1.80	2.38
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.01
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-1.64	-1.53	-1.42	-1.23	-0.90	-0.67	-0.31	-0.51
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	4.93	4.58	4.21	3.58	2.35	1.91	0.89	1.18
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-103.77	-96.47	-89.54	-76.82	-54.86	-41.70	-19.52	-30.01
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-17.30	-16.08	-14.92	-12.80	-9.14	-6.95	-3.25	-5.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-17.42	-16.20	-15.03	-12.89	-9.20	-7.00	-3.27	-5.03
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1.97	1.83	1.68	1.43	0.94	0.76	0.36	0.47
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.62	0.57	0.53	0.45	0.29	0.24	0.11	0.15

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.02	0.95	0.87	0.74	0.48	0.40	0.18	0.24
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-11.15	-10.37	-9.62	-8.25	-5.89	-4.48	-2.10	-3.22
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.09	0.09	0.08	0.07	0.04	0.04	0.02	0.02
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.02	0.01	0.02
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-8.80	-8.19	-7.60	-6.52	-4.68	-3.54	-1.66	-2.57
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.32	0.30	0.28	0.24	0.15	0.13	0.06	0.08
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.55	0.51	0.47	0.40	0.26	0.21	0.10	0.13
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	2.65	2.46	2.26	1.92	1.26	1.03	0.48	0.63
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	4.99	4.64	4.26	3.63	2.38	1.94	0.90	1.19
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-20.52	-19.08	-17.82	-15.35	-11.46	-8.41	-3.94	-6.52
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.34	0.31	0.29	0.25	0.16	0.13	0.06	0.08
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.17	0.16	0.15	0.12	0.08	0.07	0.03	0.04
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.34	0.31	0.29	0.24	0.16	0.13	0.06	0.08
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	3.63	3.37	3.09	2.63	1.72	1.40	0.66	0.86

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	3.32	3.08	2.83	2.41	1.58	1.29	0.60	0.79
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.96	1.82	1.67	1.42	0.93	0.76	0.35	0.47
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	2.43	2.26	2.08	1.77	1.16	0.94	0.44	0.58
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	4.97	4.62	4.24	3.61	2.36	1.93	0.90	1.19
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	4.63	4.30	3.95	3.36	2.20	1.79	0.84	1.10
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.90	0.83	0.76	0.65	0.42	0.35	0.16	0.21
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	3.42	3.18	2.92	2.49	1.63	1.33	0.62	0.82
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.02	0.03
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.02	0.03
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.42	1.32	1.21	1.03	0.68	0.55	0.26	0.34
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.95	1.81	1.66	1.41	0.93	0.76	0.35	0.46
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	12.64	11.75	10.78	9.18	6.00	4.90	2.28	3.00
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-32.59	-30.30	-28.12	-24.13	-17.24	-13.10	-6.13	-9.43
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-8.75	-8.13	-7.59	-6.54	-4.85	-3.58	-1.68	-2.75
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-7.76	-7.21	-6.75	-5.82	-4.40	-3.20	-1.50	-2.53

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	-0.55	-0.52	-0.50	-0.44	-0.40	-0.25	-0.12	-0.26
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.95	-1.81	-1.69	-1.45	-1.06	-0.79	-0.37	-0.59
Detroit-Ann Arbor, MI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	5.23	4.86	4.44	3.76	2.36	1.99	0.93	1.12
Dona Ana County; Anthony, NM	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.22	0.20	0.19	0.16	0.10	0.08	0.04	0.05
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-14.09	-13.10	-12.16	-10.43	-7.44	-5.66	-2.65	-4.07
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-2.34	-2.17	-2.02	-1.73	-1.24	-0.94	-0.44	-0.68
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-2.48	-2.30	-2.15	-1.85	-1.35	-1.01	-0.47	-0.75
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.22	-2.99	-2.78	-2.38	-1.70	-1.29	-0.61	-0.93
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.39	0.36	0.33	0.28	0.18	0.15	0.07	0.09
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.41	-0.38	-0.35	-0.30	-0.21	-0.16	-0.08	-0.12
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-0.38	-0.35	-0.33	-0.28	-0.20	-0.15	-0.07	-0.11
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.22	0.21	0.19	0.16	0.11	0.09	0.04	0.05

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.01
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.86	0.80	0.73	0.62	0.41	0.33	0.15	0.20
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	2.62	2.44	2.24	1.90	1.25	1.02	0.47	0.63
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.24	0.23	0.20	0.17	0.10	0.09	0.04	0.04
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.01	-0.01
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.04	-0.04	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	1.81	1.68	1.54	1.31	0.86	0.70	0.33	0.43
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.81	1.68	1.54	1.31	0.86	0.70	0.33	0.43
Hayden, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-79.18	-73.61	-68.42	-58.75	-42.38	-31.96	-14.96	-23.39
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.27	0.25	0.23	0.19	0.13	0.10	0.05	0.06

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.32	0.30	0.28	0.24	0.15	0.13	0.06	0.08
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.27	0.25	0.23	0.19	0.13	0.10	0.05	0.06
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.32	0.30	0.28	0.24	0.15	0.13	0.06	0.08
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.34	-2.18	-2.02	-1.73	-1.24	-0.94	-0.44	-0.68
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.15	0.14	0.12	0.11	0.07	0.06	0.03	0.03
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.83	0.77	0.71	0.60	0.39	0.32	0.15	0.20
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.01	0.02
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.27	0.25	0.23	0.20	0.13	0.11	0.05	0.06
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.24	0.22	0.20	0.17	0.11	0.09	0.04	0.06
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.07	0.06	0.05	0.03	0.03	0.01	0.02
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.09	0.09	0.08	0.07	0.04	0.04	0.02	0.02
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.20	0.19	0.17	0.15	0.10	0.08	0.04	0.05
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-2.27	-2.11	-1.96	-1.68	-1.20	-0.91	-0.43	-0.66
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.15	0.14	0.13	0.11	0.07	0.06	0.03	0.04
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.15	0.14	0.13	0.11	0.07	0.06	0.03	0.04
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.16	0.15	0.14	0.11	0.08	0.06	0.03	0.04
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.39	1.29	1.18	1.01	0.66	0.54	0.25	0.33
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.67	1.55	1.42	1.21	0.79	0.65	0.30	0.40
La Porte County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.09	0.09	0.08	0.07	0.04	0.04	0.02	0.02
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.41	0.38	0.35	0.30	0.20	0.16	0.07	0.10
Lake County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-13.64	-12.68	-11.77	-10.10	-7.23	-5.49	-2.57	-3.96
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-13.88	-12.91	-11.98	-10.28	-7.34	-5.58	-2.61	-4.02
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.79	0.74	0.68	0.58	0.38	0.31	0.14	0.19
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.79	0.74	0.68	0.58	0.38	0.31	0.14	0.19

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.39	0.36	0.33	0.28	0.18	0.15	0.07	0.09
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	3.31	3.08	2.82	2.40	1.58	1.28	0.60	0.79
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.02	0.01	0.02
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-17.42	-16.20	-15.03	-12.89	-9.20	-7.00	-3.27	-5.03
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.21	0.19	0.18	0.15	0.10	0.08	0.04	0.05
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-18.15	-16.87	-15.66	-13.44	-9.60	-7.29	-3.41	-5.25
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01	-0.01
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.20	0.18	0.17	0.14	0.09	0.08	0.04	0.05
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.03
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-4.84	-4.50	-4.43	-3.95	-3.92	-2.31	-1.10	-2.71
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-29.72	-27.63	-25.66	-22.02	-15.77	-11.96	-5.60	-8.65
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-4.82	-4.48	-4.41	-3.93	-3.91	-2.30	-1.09	-2.70
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	-4.82	-4.48	-4.41	-3.93	-3.91	-2.30	-1.09	-2.70
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-4.82	-4.48	-4.41	-3.93	-3.91	-2.30	-1.09	-2.70
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-4.88	-4.54	-4.46	-3.98	-3.94	-2.33	-1.11	-2.72
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.15	0.14	0.13	0.11	0.07	0.06	0.03	0.04

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-15.68	-14.57	-13.53	-11.61	-8.31	-6.30	-2.95	-4.55
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-9.21	-8.56	-7.95	-6.82	-4.87	-3.70	-1.73	-2.66
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.16	0.15	0.14	0.12	0.08	0.06	0.03	0.04
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	6.38	5.93	5.44	4.63	3.04	2.47	1.15	1.52
Marion County; Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.79	0.73	0.67	0.57	0.38	0.31	0.14	0.19
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.05	0.03	0.03	0.01	0.02
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-6.48	-6.02	-5.59	-4.79	-3.42	-2.60	-1.22	-1.87
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.03
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.25	-4.88	-4.54	-3.91	-2.86	-2.13	-1.00	-1.60
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-4.76	-4.42	-4.13	-3.55	-2.62	-1.94	-0.91	-1.48
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1.95	1.81	1.66	1.41	0.92	0.75	0.35	0.46
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.28	-10.49	-9.78	-8.42	-6.24	-4.61	-2.16	-3.52
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.87	-1.73	-1.61	-1.38	-0.99	-0.75	-0.35	-0.54
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.87	-1.74	-1.62	-1.39	-1.00	-0.75	-0.35	-0.55
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.21	0.19	0.17	0.15	0.09	0.08	0.04	0.05

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.02	0.03
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.15	0.14	0.13	0.11	0.07	0.06	0.03	0.04
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.18	0.17	0.15	0.13	0.09	0.07	0.03	0.04
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	1.39	1.29	1.18	1.01	0.66	0.54	0.25	0.33
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.05	-0.05	-0.05	-0.04	-0.03	-0.02	-0.01	-0.02
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.60	0.56	0.51	0.44	0.29	0.23	0.11	0.14
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	13.85	12.87	11.73	9.94	6.16	5.25	2.44	2.89
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	5.59	5.19	4.70	3.96	2.31	2.07	0.96	1.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	13.48	12.53	11.42	9.67	5.98	5.11	2.38	2.80
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Nogales, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Oakridge, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.09	0.08	0.07	0.04	0.04	0.02	0.02
Ogden Area, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.09	0.08	0.07	0.04	0.04	0.02	0.02
Olmsted County; (part), MN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.17	0.15	0.14	0.12	0.08	0.06	0.03	0.04
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.07	0.06	0.05	0.03	0.03	0.01	0.02
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.14	0.13	0.12	0.10	0.07	0.05	0.03	0.03
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-1.53	-1.42	-1.32	-1.14	-0.81	-0.62	-0.29	-0.45
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-13.83	-12.85	-11.94	-10.25	-7.39	-5.58	-2.61	-4.07
Philadelphia-Wilmington, PA-NJ-DE	PM _{2.5} (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-48.52	-45.11	-41.94	-36.02	-26.02	-19.60	-9.18	-14.38
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-45.88	-42.65	-39.68	-34.10	-24.76	-18.57	-8.70	-13.75
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	6.11	5.68	5.22	4.44	2.91	2.37	1.11	1.46

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	6.40	5.95	5.46	4.65	3.05	2.48	1.16	1.53
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.14	-0.13	-0.11	-0.08	-0.06	-0.03	-0.04
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.09	0.06	0.05	0.02	0.03
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.51	0.48	0.44	0.37	0.24	0.20	0.09	0.12
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.28	0.26	0.24	0.20	0.13	0.11	0.05	0.06
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	2.42	2.25	2.05	1.74	1.10	0.92	0.43	0.53
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	2.13	1.98	1.81	1.53	0.96	0.81	0.38	0.46
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.06	1.91	1.75	1.49	0.98	0.80	0.37	0.49
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.13	0.12	0.11	0.10	0.06	0.05	0.02	0.03
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.14	0.13	0.12	0.10	0.07	0.05	0.03	0.03
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.81	0.75	0.69	0.59	0.38	0.31	0.15	0.19
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.96	2.75	2.52	2.15	1.41	1.15	0.53	0.71

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.63	0.58	0.54	0.46	0.30	0.24	0.11	0.15
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.48	0.45	0.41	0.35	0.23	0.19	0.09	0.12
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.01	0.02
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.69	0.64	0.59	0.50	0.33	0.27	0.12	0.16
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.81	0.75	0.69	0.58	0.38	0.31	0.15	0.19
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-4.94	-4.59	-4.51	-4.02	-3.97	-2.35	-1.12	-2.73
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.26	-0.24	-0.23	-0.19	-0.14	-0.11	-0.05	-0.08
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.13	1.98	1.82	1.55	1.01	0.83	0.38	0.51
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.17	2.02	1.86	1.58	1.04	0.84	0.39	0.52
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.97	-0.90	-0.88	-0.77	-0.71	-0.44	-0.21	-0.47
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.02	-0.95	-0.91	-0.81	-0.73	-0.46	-0.22	-0.48
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.40	0.38	0.35	0.29	0.19	0.16	0.07	0.10
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-3.19	-2.97	-2.76	-2.37	-1.70	-1.29	-0.60	-0.93
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-1.52	-1.42	-1.34	-1.17	-0.94	-0.65	-0.31	-0.57
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.81	-1.68	-1.57	-1.36	-1.04	-0.75	-0.35	-0.60
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-1.81	-1.68	-1.57	-1.36	-1.04	-0.75	-0.35	-0.60

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.80	0.74	0.68	0.58	0.38	0.31	0.14	0.19
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5.52	5.13	4.71	4.01	2.63	2.14	1.00	1.32
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	5.53	5.14	4.72	4.02	2.63	2.14	1.00	1.32
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-72.10	-67.03	-62.31	-53.51	-38.64	-29.11	-13.63	-21.35
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-72.04	-66.97	-62.26	-53.47	-38.61	-29.09	-13.62	-21.33
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-73.03	-67.89	-63.10	-54.19	-39.08	-29.47	-13.80	-21.57
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	4.02	3.73	3.40	2.88	1.78	1.52	0.71	0.83
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	4.02	3.73	3.40	2.88	1.78	1.52	0.71	0.83
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	4.02	3.73	3.40	2.88	1.78	1.52	0.71	0.83
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	4.02	3.73	3.40	2.88	1.78	1.52	0.71	0.83
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.40	-0.37	-0.34	-0.29	-0.21	-0.16	-0.07	-0.12
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.43	0.40	0.37	0.31	0.20	0.17	0.08	0.10
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	4.54	4.22	3.87	3.30	2.15	1.76	0.82	1.08
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.59	0.55	0.50	0.42	0.27	0.23	0.11	0.13
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.17	0.16	0.15	0.12	0.08	0.07	0.03	0.04

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.46	0.43	0.39	0.33	0.22	0.18	0.08	0.11
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.47	0.44	0.40	0.34	0.23	0.18	0.09	0.11
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.25	0.23	0.21	0.18	0.12	0.10	0.04	0.06
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-36.60	-34.03	-31.58	-27.09	-19.33	-14.70	-6.88	-10.56
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	1.08	1.00	0.92	0.78	0.51	0.42	0.20	0.26
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-5.33	-4.96	-4.64	-4.00	-3.02	-2.20	-1.03	-1.74
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.11	0.10	0.09	0.08	0.05	0.04	0.02	0.03
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.09	0.06	0.05	0.02	0.03
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.44	0.40	0.37	0.32	0.20	0.17	0.08	0.10
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.73	0.68	0.62	0.53	0.35	0.28	0.13	0.17
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.47	-0.44	-0.40	-0.35	-0.25	-0.19	-0.09	-0.14
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.03
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.15	0.14	0.13	0.11	0.07	0.06	0.03	0.04
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	1.55	1.44	1.33	1.13	0.74	0.60	0.28	0.37
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	0.00	-0.01
Utah County, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.81	0.75	0.69	0.59	0.38	0.31	0.15	0.19
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.47	0.44	0.40	0.34	0.22	0.18	0.09	0.11
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	1.38	1.28	1.17	1.00	0.66	0.53	0.25	0.33
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.30	-0.28	-0.26	-0.22	-0.17	-0.12	-0.06	-0.10
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.01	0.02
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-4.00	-3.72	-3.45	-2.96	-2.11	-1.61	-0.75	-1.15
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-3.99	-3.71	-3.45	-2.96	-2.11	-1.60	-0.75	-1.15

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.99	-3.71	-3.44	-2.95	-2.11	-1.60	-0.75	-1.15
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.27	1.18	1.08	0.92	0.60	0.49	0.23	0.30
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	8.98	8.35	7.66	6.52	4.27	3.48	1.62	2.14
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.48	0.45	0.41	0.35	0.23	0.19	0.09	0.11
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.11	0.10	0.09	0.08	0.05	0.04	0.02	0.03
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.39	-2.22	-2.06	-1.77	-1.27	-0.96	-0.45	-0.70
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.11	0.10	0.09	0.08	0.05	0.04	0.02	0.03
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.15	0.14	0.12	0.11	0.07	0.06	0.03	0.03
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.66	0.61	0.56	0.48	0.31	0.25	0.12	0.16
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.35	0.33	0.30	0.25	0.17	0.14	0.06	0.08
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.15	0.14	0.13	0.11	0.07	0.06	0.03	0.04
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.32	0.30	0.27	0.23	0.15	0.12	0.06	0.08
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.24	0.22	0.21	0.18	0.12	0.09	0.04	0.06

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-4. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Sulfur Dioxide (SO₂), 2025

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.02
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.32	0.30	0.29	0.24	0.17	0.16	0.11	0.10
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.11	0.10	0.10	0.08	0.06	0.05	0.04	0.03
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.19	0.17	0.17	0.14	0.10	0.09	0.07	0.06
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.06	0.06	0.04	0.04
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.14	0.12	0.12	0.10	0.07	0.07	0.05	0.04
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-75.12	-69.69	-67.10	-57.75	-42.06	-39.53	-29.49	-26.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.24	0.22	0.21	0.18	0.13	0.12	0.08	0.08
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-44.21	-41.02	-39.50	-34.00	-24.77	-23.29	-17.38	-15.32

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.06	-0.06	-0.05	-0.05	-0.03	-0.03	-0.02	-0.02
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.13	0.12	0.12	0.10	0.07	0.06	0.05	0.04
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.11	0.11	0.10	0.09	0.06	0.06	0.04	0.04
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.23	1.13	1.08	0.92	0.65	0.59	0.43	0.39
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-4.86	-4.51	-4.34	-3.74	-2.72	-2.56	-1.91	-1.68
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.60	0.56	0.53	0.45	0.32	0.29	0.21	0.19
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-57.42	-53.27	-51.29	-44.15	-32.16	-30.23	-22.55	-19.88
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-47.39	-43.96	-42.33	-36.43	-26.53	-24.94	-18.60	-16.40
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-47.41	-43.98	-42.34	-36.44	-26.54	-24.95	-18.61	-16.41
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.24	0.22	0.21	0.18	0.13	0.12	0.08	0.08

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.02
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.99	-0.91	-0.88	-0.76	-0.56	-0.52	-0.39	-0.35
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-10.37	-9.62	-9.26	-7.97	-5.81	-5.46	-4.07	-3.59
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-3.68	-3.41	-3.28	-2.83	-2.06	-1.94	-1.45	-1.27
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.32	0.30	0.29	0.24	0.17	0.16	0.11	0.10
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.61	0.56	0.54	0.46	0.32	0.30	0.21	0.19
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-104.13	-96.60	-93.02	-80.07	-58.34	-54.86	-40.94	-36.08
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	-0.31	-0.29	-0.28	-0.25	-0.19	-0.18	-0.14	-0.12
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.40	0.37	0.36	0.30	0.21	0.20	0.14	0.13
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.32	-2.16	-2.08	-1.79	-1.31	-1.23	-0.92	-0.81
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-2.27	-2.10	-2.03	-1.75	-1.28	-1.20	-0.90	-0.79
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.95	-1.82	-1.75	-1.51	-1.11	-1.05	-0.79	-0.70
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-2.00	-1.85	-1.79	-1.54	-1.13	-1.07	-0.81	-0.71
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.12	0.11	0.10	0.09	0.06	0.06	0.04	0.04
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.37	0.34	0.33	0.28	0.19	0.18	0.13	0.12
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-2.38	-2.21	-2.13	-1.83	-1.34	-1.26	-0.94	-0.83
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.33	-2.16	-2.08	-1.79	-1.31	-1.23	-0.92	-0.81
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.59	-0.55	-0.55	-0.48	-0.38	-0.38	-0.30	-0.25
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-98.93	-91.77	-88.36	-76.05	-55.39	-52.07	-38.84	-34.24
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-6.05	-5.61	-5.41	-4.66	-3.40	-3.21	-2.40	-2.11

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-5.95	-5.52	-5.32	-4.58	-3.35	-3.16	-2.37	-2.08
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	-3.80	-3.52	-3.39	-2.92	-2.13	-2.01	-1.50	-1.32
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-4.05	-3.76	-3.62	-3.11	-2.27	-2.13	-1.59	-1.40
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-3.15	-2.92	-2.82	-2.43	-1.79	-1.69	-1.28	-1.12
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-30.06	-27.89	-26.85	-23.11	-16.83	-15.82	-11.80	-10.40
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-4.94	-4.58	-4.41	-3.80	-2.77	-2.60	-1.94	-1.71
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-3.16	-2.93	-2.82	-2.43	-1.77	-1.67	-1.24	-1.10
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.25	-3.02	-2.90	-2.50	-1.82	-1.71	-1.28	-1.13
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.01
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.28	-0.26	-0.25	-0.22	-0.16	-0.15	-0.11	-0.10
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-0.28	-0.26	-0.25	-0.21	-0.16	-0.15	-0.11	-0.10
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.11	0.10	0.09	0.08	0.06	0.05	0.04	0.03
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.32	0.30	0.28	0.24	0.17	0.16	0.11	0.10
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.70	-0.65	-0.62	-0.54	-0.39	-0.37	-0.27	-0.24
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.70	-0.65	-0.62	-0.54	-0.39	-0.37	-0.27	-0.24
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.22	0.21	0.20	0.17	0.12	0.11	0.08	0.07
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.22	0.20	0.19	0.17	0.12	0.11	0.08	0.07
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-190.39	-176.62	-170.07	-146.39	-106.64	-100.26	-74.80	-65.94

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Imperial County; Imperial Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-4.94	-4.58	-4.41	-3.80	-2.77	-2.60	-1.94	-1.71
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.11	0.10	0.09	0.08	0.06	0.05	0.04	0.03
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-4.93	-4.57	-4.40	-3.79	-2.76	-2.60	-1.94	-1.71
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.17	0.16	0.15	0.13	0.09	0.08	0.06	0.05
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.20	0.19	0.18	0.15	0.11	0.10	0.07	0.06
La Porte County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.02	0.02
Lake County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-30.00	-27.83	-26.80	-23.07	-16.80	-15.79	-11.78	-10.39
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-30.03	-27.86	-26.82	-23.09	-16.81	-15.81	-11.79	-10.39
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.10	0.09	0.09	0.07	0.05	0.05	0.03	0.03
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.10	0.09	0.09	0.07	0.05	0.05	0.03	0.03
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.01
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.40	0.37	0.36	0.30	0.21	0.20	0.14	0.13
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-47.41	-43.97	-42.34	-36.44	-26.54	-24.95	-18.61	-16.41
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-75.22	-69.77	-67.18	-57.82	-42.11	-39.59	-29.53	-26.03
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-78.28	-72.63	-69.95	-60.23	-43.92	-41.33	-30.87	-27.19
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-81.31	-75.43	-72.63	-62.51	-45.53	-42.80	-31.93	-28.15
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-78.28	-72.63	-69.95	-60.23	-43.92	-41.33	-30.87	-27.19
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	-78.28	-72.63	-69.95	-60.23	-43.92	-41.33	-30.87	-27.19
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-78.28	-72.63	-69.95	-60.23	-43.92	-41.33	-30.87	-27.19

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-78.28	-72.63	-69.95	-60.24	-43.93	-41.33	-30.87	-27.20
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-37.31	-34.61	-33.32	-28.68	-20.89	-19.64	-14.65	-12.91
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-75.11	-69.68	-67.09	-57.74	-42.05	-39.53	-29.49	-26.00
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.78	0.72	0.69	0.59	0.42	0.38	0.27	0.25
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.09	0.09	0.07	0.05	0.05	0.03	0.03
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-281.43	-261.06	-251.36	-216.35	-157.56	-148.11	-110.48	-97.40
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.31	-1.21	-1.17	-1.01	-0.74	-0.70	-0.52	-0.46
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.25	-1.16	-1.12	-0.96	-0.71	-0.67	-0.50	-0.44
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.25	0.24	0.22	0.19	0.13	0.12	0.09	0.08
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-44.19	-41.00	-39.48	-33.99	-24.76	-23.29	-17.38	-15.32
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.04	-0.04	-0.04	-0.03	-0.03	-0.02	-0.02
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.17	0.16	0.15	0.13	0.09	0.08	0.06	0.05
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.70	-0.65	-0.62	-0.54	-0.39	-0.37	-0.27	-0.24
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.07	0.06	0.04	0.04	0.03	0.02
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-4.29	-3.99	-3.86	-3.34	-2.48	-2.37	-1.80	-1.57

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.05	0.04	0.03	0.01	-0.02	-0.03	-0.05	-0.03
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-4.35	-4.04	-3.91	-3.39	-2.52	-2.40	-1.82	-1.59
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-5.55	-5.15	-4.96	-4.27	-3.11	-2.92	-2.18	-1.92
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.76	-11.84	-11.40	-9.82	-7.15	-6.73	-5.02	-4.42
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-119.58	-110.93	-106.81	-91.94	-66.98	-62.97	-46.98	-41.42

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-119.25	-110.63	-106.53	-91.70	-66.81	-62.81	-46.87	-41.31
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.75	0.70	0.66	0.57	0.40	0.37	0.26	0.24
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.79	0.73	0.69	0.59	0.42	0.38	0.27	0.25
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.02	0.02
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.95	-2.73	-2.64	-2.27	-1.66	-1.57	-1.17	-1.03
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.98	-2.77	-2.67	-2.30	-1.68	-1.58	-1.19	-1.04
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.22	0.21	0.20	0.17	0.12	0.11	0.08	0.07
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.10	0.09	0.09	0.07	0.05	0.05	0.03	0.03

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.36	0.34	0.32	0.27	0.19	0.18	0.13	0.11
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.02
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.02	0.02
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.09	0.08	0.08	0.07	0.05	0.04	0.03	0.03
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.10	0.10	0.09	0.08	0.06	0.05	0.04	0.03
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-78.29	-72.64	-69.96	-60.24	-43.93	-41.34	-30.88	-27.20
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.28	0.26	0.24	0.21	0.15	0.13	0.10	0.09
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.27	0.25	0.24	0.20	0.14	0.13	0.09	0.08
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-56.28	-52.21	-50.27	-43.28	-31.52	-29.64	-22.11	-19.49
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-56.29	-52.22	-50.28	-43.28	-31.53	-29.64	-22.12	-19.50
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.02	0.02
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-43.22	-40.09	-38.60	-33.22	-24.20	-22.75	-16.97	-14.96
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-49.45	-45.88	-44.17	-38.02	-27.70	-26.04	-19.43	-17.13

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-43.05	-39.94	-38.45	-33.10	-24.11	-22.66	-16.91	-14.91
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-43.05	-39.94	-38.45	-33.10	-24.11	-22.66	-16.91	-14.91
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.11	0.10	0.10	0.09	0.06	0.06	0.04	0.04
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.68	0.63	0.60	0.51	0.36	0.33	0.24	0.21
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.68	0.63	0.60	0.51	0.36	0.33	0.24	0.21
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-115.45	-107.10	-103.13	-88.78	-64.68	-60.81	-45.38	-40.00
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-115.44	-107.09	-103.12	-88.77	-64.67	-60.81	-45.38	-40.00
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-115.56	-107.20	-103.23	-88.86	-64.74	-60.87	-45.42	-40.04
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-4.30	-3.99	-3.85	-3.32	-2.43	-2.29	-1.72	-1.51
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-4.30	-3.99	-3.85	-3.32	-2.43	-2.29	-1.72	-1.51
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-4.30	-3.99	-3.85	-3.32	-2.43	-2.29	-1.72	-1.51
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-4.30	-3.99	-3.85	-3.32	-2.43	-2.29	-1.72	-1.51
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-5.07	-4.70	-4.52	-3.89	-2.84	-2.67	-1.99	-1.75
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.58	0.53	0.51	0.43	0.31	0.28	0.20	0.18
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.05	0.03	0.03
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.04	0.03	0.03	0.02	0.02
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-20.67	-19.18	-18.46	-15.89	-11.57	-10.88	-8.12	-7.15
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.14	0.13	0.12	0.10	0.07	0.07	0.05	0.04
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-74.65	-69.25	-66.68	-57.40	-41.81	-39.31	-29.33	-25.85
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-0.68	-0.63	-0.60	-0.52	-0.38	-0.36	-0.27	-0.23
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.52	-0.48	-0.46	-0.40	-0.29	-0.27	-0.20	-0.18
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.03	0.03
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.19	0.18	0.17	0.14	0.10	0.09	0.07	0.06
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.07	0.05	0.05	0.03	0.03
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-45.89	-42.56	-40.98	-35.27	-25.69	-24.15	-18.01	-15.88
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-45.88	-42.56	-40.98	-35.27	-25.69	-24.15	-18.01	-15.88
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-45.88	-42.56	-40.98	-35.27	-25.69	-24.15	-18.01	-15.88
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.16	0.14	0.14	0.12	0.08	0.08	0.05	0.05
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.10	1.02	0.97	0.83	0.58	0.53	0.38	0.35
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.02	0.02
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.09	-3.79	-3.65	-3.14	-2.29	-2.15	-1.61	-1.42
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-5. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Sulfur Dioxide (SO₂), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.23	0.21	0.20	0.17	0.11	0.09	0.04	0.05
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.00	0.92	0.85	0.72	0.47	0.37	0.18	0.23
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.36	0.33	0.31	0.26	0.16	0.13	0.06	0.08
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.58	0.54	0.50	0.42	0.27	0.22	0.10	0.13
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.36	0.33	0.31	0.26	0.17	0.13	0.06	0.08
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.42	0.38	0.35	0.30	0.20	0.16	0.07	0.09
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-171.03	-158.61	-148.67	-127.54	-93.29	-69.73	-35.05	-46.28
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.74	0.68	0.63	0.53	0.35	0.28	0.13	0.17
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.01
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.02
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-100.15	-92.88	-87.09	-74.73	-54.78	-40.90	-20.58	-27.19

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Washington Counties (Minneapolis-St. Paul), MN												
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.14	-0.13	-0.12	-0.10	-0.07	-0.06	-0.03	-0.04
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.11	0.11	0.10	0.08	0.05	0.04	0.02	0.03
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.40	0.37	0.34	0.29	0.19	0.15	0.07	0.09
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.35	0.33	0.30	0.25	0.17	0.13	0.06	0.08
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.78	3.49	3.21	2.71	1.77	1.41	0.67	0.86
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-10.99	-10.19	-9.56	-8.20	-6.01	-4.49	-2.26	-2.98
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.86	1.72	1.59	1.34	0.87	0.70	0.33	0.42
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-130.59	-121.10	-113.52	-97.39	-71.27	-53.26	-26.78	-35.36
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-107.88	-100.04	-93.78	-80.45	-58.85	-43.98	-22.11	-29.19
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-107.93	-100.09	-93.82	-80.48	-58.87	-44.00	-22.12	-29.20
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.75	0.69	0.63	0.53	0.35	0.28	0.13	0.17
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.23	0.21	0.20	0.17	0.11	0.09	0.04	0.05

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.14	-1.98	-1.86	-1.60	-1.20	-0.88	-0.45	-0.60
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-23.61	-21.89	-20.52	-17.60	-12.88	-9.62	-4.84	-6.39
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-8.31	-7.71	-7.23	-6.20	-4.55	-3.40	-1.71	-2.26
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.02	0.03
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.21	0.19	0.18	0.15	0.10	0.08	0.04	0.05
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	1.00	0.92	0.85	0.72	0.47	0.37	0.18	0.23
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.88	1.74	1.60	1.35	0.88	0.70	0.33	0.43
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-235.87	-218.76	-205.12	-176.01	-129.01	-96.32	-48.47	-64.02
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.13	0.12	0.11	0.09	0.06	0.05	0.02	0.03
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.09	0.06	0.05	0.02	0.03
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	-0.35	-0.33	-0.33	-0.30	-0.29	-0.19	-0.11	-0.15
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1.25	1.15	1.07	0.90	0.59	0.47	0.22	0.28

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.10	-4.73	-4.44	-3.82	-2.84	-2.10	-1.07	-1.41
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-4.92	-4.56	-4.29	-3.69	-2.75	-2.04	-1.03	-1.37
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.96	-3.68	-3.48	-3.00	-2.30	-1.68	-0.86	-1.15
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-4.09	-3.80	-3.58	-3.10	-2.36	-1.73	-0.89	-1.18
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.36	0.33	0.30	0.26	0.17	0.13	0.06	0.08
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.18	1.09	1.00	0.85	0.55	0.44	0.21	0.26
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-5.28	-4.90	-4.60	-3.95	-2.92	-2.17	-1.10	-1.45
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.10	-4.73	-4.45	-3.82	-2.84	-2.10	-1.07	-1.41
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.08	-0.14	-0.18	-0.41	-0.20	-0.15	-0.23
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-225.17	-208.82	-195.74	-167.91	-122.84	-91.81	-46.15	-60.94
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-13.33	-12.37	-11.61	-9.98	-7.40	-5.49	-2.78	-3.68
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-12.97	-12.04	-11.31	-9.73	-7.24	-5.36	-2.72	-3.60
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	-8.46	-7.85	-7.37	-6.33	-4.68	-3.48	-1.76	-2.33
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-9.16	-8.49	-7.96	-6.83	-5.01	-3.74	-1.88	-2.49

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-6.39	-5.94	-5.61	-4.85	-3.71	-2.71	-1.39	-1.86
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.01	0.02
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-68.44	-63.47	-59.49	-51.04	-37.33	-27.90	-14.03	-18.52
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-11.25	-10.43	-9.78	-8.39	-6.14	-4.59	-2.31	-3.04
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-7.11	-6.60	-6.19	-5.31	-3.90	-2.91	-1.47	-1.94
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-7.40	-6.86	-6.43	-5.52	-4.04	-3.02	-1.52	-2.00
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.14	0.13	0.12	0.10	0.07	0.05	0.03	0.03
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.64	-0.59	-0.55	-0.48	-0.35	-0.26	-0.13	-0.17
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-0.63	-0.58	-0.55	-0.47	-0.34	-0.26	-0.13	-0.17
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.08	0.07	0.06	0.04	0.03	0.02	0.02
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.33	0.30	0.28	0.23	0.15	0.12	0.06	0.07
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.99	0.92	0.85	0.71	0.47	0.37	0.18	0.23
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.07	0.06	0.05	0.03	0.02	0.01	0.01
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.58	-1.47	-1.38	-1.18	-0.87	-0.65	-0.33	-0.43
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-1.58	-1.47	-1.38	-1.18	-0.86	-0.65	-0.32	-0.43
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.68	0.63	0.58	0.49	0.32	0.26	0.12	0.16
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.68	0.63	0.58	0.49	0.32	0.25	0.12	0.15
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-432.37	-400.99	-375.92	-322.54	-236.16	-176.42	-88.73	-117.18
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.02
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.02	0.03
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.02
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.12	0.11	0.10	0.09	0.06	0.05	0.02	0.03

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-11.25	-10.43	-9.78	-8.39	-6.14	-4.59	-2.31	-3.04
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.32	0.30	0.28	0.23	0.15	0.12	0.06	0.07
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.02
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.09	0.08	0.08	0.07	0.04	0.03	0.02	0.02
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.05	0.04	0.03	0.01	0.02
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-11.22	-10.40	-9.75	-8.37	-6.12	-4.57	-2.30	-3.04
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.52	0.48	0.45	0.38	0.25	0.20	0.09	0.12
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.63	0.58	0.54	0.45	0.30	0.24	0.11	0.14
La Porte County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.16	0.14	0.13	0.11	0.07	0.06	0.03	0.04
Lake County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-68.26	-63.31	-59.34	-50.91	-37.25	-27.84	-14.00	-18.48
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-68.35	-63.39	-59.42	-50.97	-37.29	-27.87	-14.01	-18.50
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.30	0.28	0.26	0.22	0.14	0.11	0.05	0.07
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.30	0.28	0.26	0.22	0.14	0.11	0.05	0.07
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.14	0.13	0.12	0.10	0.07	0.05	0.03	0.03
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	1.25	1.15	1.06	0.90	0.59	0.47	0.22	0.28
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-107.93	-100.09	-93.82	-80.48	-58.87	-44.00	-22.12	-29.20
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.01	0.02
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-171.22	-158.78	-148.83	-127.68	-93.40	-69.81	-35.09	-46.34
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.05	0.03	0.03	0.01	0.02
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-175.61	-162.89	-152.83	-131.22	-96.54	-71.94	-36.27	-47.95
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-184.99	-171.55	-160.81	-137.96	-100.95	-75.44	-37.93	-50.08
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-175.60	-162.89	-152.82	-131.22	-96.54	-71.94	-36.27	-47.95
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	-175.60	-162.89	-152.82	-131.22	-96.54	-71.93	-36.27	-47.95
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-175.60	-162.89	-152.82	-131.22	-96.54	-71.93	-36.27	-47.95
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-175.62	-162.91	-152.84	-131.24	-96.55	-71.94	-36.27	-47.96
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-84.88	-78.72	-73.79	-63.30	-46.32	-34.61	-17.40	-22.98
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-171.00	-158.58	-148.65	-127.52	-93.28	-69.72	-35.05	-46.27
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	2.41	2.23	2.05	1.73	1.13	0.90	0.43	0.55
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.30	0.28	0.26	0.22	0.14	0.11	0.05	0.07

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-640.72	-594.18	-556.96	-477.78	-349.49	-261.22	-131.31	-173.38
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.82	-2.62	-2.46	-2.12	-1.58	-1.17	-0.60	-0.79
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-2.64	-2.45	-2.30	-1.99	-1.50	-1.10	-0.56	-0.75
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.78	0.72	0.67	0.56	0.37	0.29	0.14	0.18
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-100.08	-92.82	-87.03	-74.69	-54.75	-40.87	-20.57	-27.17
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.07	-0.07	-0.06	-0.05	-0.04	-0.02	-0.03
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.05	0.03	0.03	0.01	0.02
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.53	0.49	0.45	0.38	0.25	0.20	0.09	0.12
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-1.59	-1.47	-1.38	-1.19	-0.87	-0.65	-0.33	-0.43
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.23	0.21	0.19	0.16	0.11	0.08	0.04	0.05
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-7.56	-7.05	-6.72	-5.87	-4.77	-3.37	-1.78	-2.41
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.33	1.22	1.08	0.87	0.37	0.38	0.14	0.16
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-7.74	-7.21	-6.87	-6.00	-4.85	-3.44	-1.82	-2.45
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.02	0.01	0.01
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-12.63	-11.71	-10.98	-9.42	-6.89	-5.15	-2.59	-3.42
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-28.90	-26.80	-25.13	-21.56	-15.81	-11.80	-5.94	-7.85
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-271.48	-251.78	-236.04	-202.53	-148.30	-110.78	-55.72	-73.59
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-270.49	-250.86	-235.19	-201.81	-147.84	-110.41	-55.54	-73.36
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	2.32	2.14	1.97	1.66	1.09	0.86	0.41	0.53
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.42	2.24	2.06	1.74	1.14	0.90	0.43	0.55
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.19	0.18	0.16	0.14	0.09	0.07	0.03	0.04

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.09	0.06	0.05	0.02	0.03
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-6.38	-5.92	-5.56	-4.79	-3.57	-2.64	-1.34	-1.78
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-6.48	-6.02	-5.66	-4.87	-3.63	-2.68	-1.36	-1.81
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.71	0.66	0.60	0.51	0.33	0.26	0.12	0.16
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.31	0.28	0.26	0.22	0.14	0.11	0.05	0.07
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.12	1.03	0.95	0.80	0.52	0.42	0.20	0.25
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.24	0.22	0.20	0.17	0.11	0.09	0.04	0.05
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.19	0.17	0.16	0.13	0.09	0.07	0.03	0.04
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.27	0.25	0.23	0.19	0.13	0.10	0.05	0.06
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.31	0.29	0.27	0.23	0.15	0.12	0.06	0.07

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-175.65	-162.93	-152.86	-131.25	-96.56	-71.95	-36.27	-47.96
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.83	0.77	0.71	0.60	0.39	0.31	0.15	0.19
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.82	0.76	0.70	0.59	0.39	0.31	0.15	0.19
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-127.76	-118.48	-111.08	-95.31	-69.80	-52.14	-26.22	-34.63
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-127.78	-118.50	-111.10	-95.32	-69.81	-52.14	-26.23	-34.64
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.15	0.14	0.13	0.11	0.07	0.06	0.03	0.03
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-98.37	-91.23	-85.51	-73.36	-53.67	-40.11	-20.16	-26.62
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-112.32	-104.17	-97.66	-83.79	-61.34	-45.83	-23.05	-30.44
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-97.85	-90.75	-85.07	-72.98	-53.42	-39.92	-20.07	-26.51
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-97.85	-90.75	-85.07	-72.98	-53.42	-39.92	-20.07	-26.51
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.33	0.30	0.28	0.24	0.15	0.12	0.06	0.07
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.09	1.93	1.78	1.50	0.98	0.78	0.37	0.47
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.09	1.93	1.78	1.50	0.98	0.78	0.37	0.47
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-261.75	-242.75	-227.60	-195.30	-143.09	-106.86	-53.76	-71.01
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-261.73	-242.74	-227.59	-195.29	-143.08	-106.85	-53.76	-71.01
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-262.10	-243.08	-227.90	-195.55	-143.26	-106.99	-53.82	-71.09

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-9.14	-8.48	-7.98	-6.88	-5.17	-3.81	-1.94	-2.58
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-9.14	-8.48	-7.98	-6.88	-5.17	-3.81	-1.94	-2.58
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-9.14	-8.48	-7.99	-6.88	-5.17	-3.81	-1.94	-2.58
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-9.14	-8.48	-7.99	-6.88	-5.17	-3.81	-1.94	-2.58
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-11.53	-10.70	-10.03	-8.60	-6.29	-4.70	-2.36	-3.12
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.16	0.15	0.14	0.12	0.08	0.06	0.03	0.04
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.78	1.64	1.52	1.28	0.84	0.66	0.32	0.40
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.29	0.26	0.24	0.20	0.13	0.11	0.05	0.06
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.02	0.01	0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.18	0.16	0.15	0.13	0.08	0.07	0.03	0.04

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.18	0.17	0.15	0.13	0.09	0.07	0.03	0.04
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.09	0.08	0.08	0.06	0.04	0.03	0.02	0.02
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-47.06	-43.64	-40.91	-35.09	-25.67	-19.19	-9.65	-12.73
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.42	0.39	0.36	0.30	0.20	0.16	0.07	0.09
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-169.56	-157.25	-147.42	-126.48	-92.60	-69.18	-34.79	-45.95
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-1.52	-1.41	-1.32	-1.14	-0.83	-0.62	-0.31	-0.41
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.07	0.07	0.05	0.03	0.03	0.01	0.01
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.17	-1.09	-1.02	-0.87	-0.64	-0.48	-0.24	-0.32
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.28	0.26	0.24	0.20	0.13	0.10	0.05	0.06
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.59	0.54	0.50	0.42	0.28	0.22	0.10	0.13
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.31	0.28	0.26	0.22	0.14	0.11	0.05	0.07
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.18	0.16	0.15	0.13	0.08	0.07	0.03	0.04
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.12	0.11	0.10	0.08	0.03	0.03	0.01	0.01
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.09	0.08	0.07	0.06	0.04	0.03	0.02	0.02
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-104.47	-96.88	-90.81	-77.90	-56.98	-42.59	-21.41	-28.27
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-104.46	-96.87	-90.80	-77.89	-56.98	-42.59	-21.41	-28.27
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-104.46	-96.87	-90.80	-77.89	-56.98	-42.59	-21.41	-28.27
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.48	0.44	0.41	0.34	0.22	0.18	0.08	0.11
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	3.39	3.13	2.89	2.44	1.59	1.27	0.60	0.77
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.19	0.17	0.16	0.13	0.09	0.07	0.03	0.04
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-9.30	-8.62	-8.08	-6.93	-5.07	-3.79	-1.91	-2.52
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.25	0.23	0.21	0.18	0.12	0.09	0.04	0.06
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.09	0.06	0.05	0.02	0.03
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.02	0.03
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.09	0.08	0.07	0.04	0.03	0.02	0.02

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-6. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Sulfur Dioxide (SO₂), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.23	0.22	0.20	0.17	0.11	0.08	0.04	0.05
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.01	0.93	0.86	0.72	0.46	0.36	0.17	0.22
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.35	0.32	0.29	0.25	0.15	0.12	0.06	0.07
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.58	0.54	0.50	0.42	0.26	0.21	0.10	0.13
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.36	0.34	0.31	0.26	0.16	0.13	0.06	0.08
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.42	0.39	0.36	0.30	0.19	0.15	0.07	0.09
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-209.76	-195.10	-181.72	-155.52	-111.76	-82.61	-37.80	-57.29
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.74	0.69	0.63	0.53	0.34	0.27	0.12	0.16
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.01
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.09	0.08	0.07	0.04	0.04	0.02	0.02
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-123.26	-114.65	-106.81	-91.44	-65.83	-48.61	-22.24	-33.78

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Washington Counties (Minneapolis-St. Paul), MN												
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.17	-0.16	-0.15	-0.13	-0.09	-0.07	-0.03	-0.05
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.11	0.11	0.10	0.08	0.05	0.04	0.02	0.02
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.41	0.38	0.35	0.29	0.18	0.15	0.07	0.09
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.35	0.33	0.30	0.25	0.16	0.13	0.06	0.08
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.80	3.52	3.23	2.72	1.73	1.37	0.64	0.82
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-13.53	-12.59	-11.73	-10.04	-7.23	-5.34	-2.44	-3.71
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.88	1.74	1.60	1.34	0.85	0.68	0.32	0.41
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-160.28	-149.08	-138.87	-118.85	-85.44	-63.14	-28.89	-43.81
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-132.32	-123.07	-114.63	-98.11	-70.50	-52.11	-23.85	-36.14
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-132.37	-123.12	-114.68	-98.14	-70.53	-52.13	-23.86	-36.15

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.75	0.69	0.64	0.54	0.34	0.27	0.13	0.16
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.23	0.22	0.20	0.17	0.11	0.08	0.04	0.05
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.70	-2.52	-2.35	-2.01	-1.47	-1.08	-0.49	-0.76
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-28.95	-26.93	-25.08	-21.47	-15.43	-11.40	-5.22	-7.91
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-10.24	-9.53	-8.88	-7.60	-5.47	-4.04	-1.85	-2.81
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.12	0.11	0.11	0.09	0.06	0.04	0.02	0.03
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.21	0.19	0.18	0.15	0.10	0.08	0.04	0.05
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	1.01	0.93	0.86	0.72	0.46	0.36	0.17	0.22
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.90	1.76	1.62	1.36	0.86	0.69	0.32	0.41
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-290.28	-270.01	-251.55	-215.34	-155.02	-114.47	-52.37	-79.54
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.13	0.12	0.11	0.09	0.06	0.05	0.02	0.03
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.06	0.06	0.05	0.03	0.02	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.09	0.06	0.05	0.02	0.03
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY Maintenance (OH, IN), Marginal	100	0	-0.73	-0.68	-0.65	-0.58	-0.50	-0.33	-0.15	-0.28
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1.26	1.17	1.07	0.90	0.57	0.46	0.21	0.27
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.41	-5.97	-5.57	-4.77	-3.48	-2.55	-1.16	-1.79
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-6.23	-5.80	-5.41	-4.64	-3.39	-2.48	-1.13	-1.75
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-5.27	-4.91	-4.59	-3.95	-2.96	-2.14	-0.97	-1.55
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-5.40	-5.03	-4.70	-4.05	-3.01	-2.18	-0.99	-1.57
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.36	0.33	0.31	0.26	0.16	0.13	0.06	0.08
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.16	1.08	0.99	0.83	0.52	0.42	0.20	0.24
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-6.62	-6.16	-5.74	-4.92	-3.57	-2.62	-1.20	-1.84
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.42	-5.97	-5.57	-4.78	-3.48	-2.55	-1.16	-1.79
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-1.16	-1.10	-1.08	-0.99	-1.01	-0.62	-0.26	-0.60
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-276.21	-256.91	-239.30	-204.80	-147.19	-108.79	-49.78	-75.45

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-16.72	-15.56	-14.51	-12.44	-9.04	-6.64	-3.03	-4.66
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-16.39	-15.25	-14.23	-12.20	-8.90	-6.52	-2.98	-4.60
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	-10.70	-9.95	-9.28	-7.95	-5.76	-4.24	-1.94	-2.96
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-11.23	-10.44	-9.73	-8.33	-6.00	-4.43	-2.03	-3.08
Detroit-Ann Arbor, MI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	-8.49	-7.91	-7.40	-6.37	-4.76	-3.44	-1.56	-2.49
Dona Ana County; Anthony, NM	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.08	0.07	0.06	0.04	0.03	0.01	0.02
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-83.94	-78.07	-72.72	-62.24	-44.72	-33.06	-15.13	-22.93
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-13.80	-12.83	-11.95	-10.23	-7.35	-5.43	-2.49	-3.77
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-8.80	-8.19	-7.63	-6.53	-4.71	-3.48	-1.59	-2.42
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-9.08	-8.45	-7.87	-6.73	-4.84	-3.58	-1.64	-2.48
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.15	0.14	0.13	0.11	0.07	0.05	0.02	0.03
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.78	-0.73	-0.68	-0.58	-0.42	-0.31	-0.14	-0.21
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-0.77	-0.72	-0.67	-0.57	-0.41	-0.31	-0.14	-0.21
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.08	0.07	0.06	0.04	0.03	0.01	0.02
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.32	0.30	0.27	0.23	0.15	0.12	0.05	0.07
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.00	0.92	0.85	0.71	0.45	0.36	0.17	0.22
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.04	0.03	0.01	0.01	0.01	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.95	-1.81	-1.69	-1.44	-1.04	-0.77	-0.35	-0.53
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-1.94	-1.81	-1.68	-1.44	-1.04	-0.77	-0.35	-0.53
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.69	0.64	0.59	0.49	0.31	0.25	0.12	0.15
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.69	0.64	0.58	0.49	0.31	0.25	0.12	0.15
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-531.20	-494.09	-460.27	-393.96	-283.36	-209.34	-95.79	-145.32
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.02
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.11	0.09	0.06	0.04	0.02	0.03
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.02
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.12	0.11	0.11	0.09	0.06	0.04	0.02	0.03
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-13.80	-12.84	-11.96	-10.23	-7.35	-5.44	-2.49	-3.77
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.32	0.29	0.27	0.23	0.14	0.11	0.05	0.07
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.10	0.10	0.09	0.07	0.05	0.04	0.02	0.02
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.09	0.08	0.08	0.07	0.04	0.03	0.02	0.02
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.06	0.05	0.03	0.03	0.01	0.02
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-13.77	-12.81	-11.93	-10.21	-7.34	-5.43	-2.48	-3.76
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.53	0.49	0.45	0.38	0.24	0.19	0.09	0.11
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.63	0.59	0.54	0.45	0.29	0.23	0.11	0.14
La Porte County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.16	0.15	0.13	0.11	0.07	0.06	0.03	0.03
Lake County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-83.77	-77.92	-72.58	-62.12	-44.65	-33.00	-15.10	-22.89
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-83.86	-78.00	-72.65	-62.18	-44.69	-33.03	-15.12	-22.91
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.30	0.28	0.26	0.22	0.14	0.11	0.05	0.07
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.30	0.28	0.26	0.22	0.14	0.11	0.05	0.07
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.15	0.14	0.13	0.11	0.07	0.05	0.02	0.03
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	1.26	1.17	1.07	0.90	0.57	0.45	0.21	0.27
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-132.37	-123.11	-114.67	-98.14	-70.53	-52.13	-23.86	-36.15
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.01	0.02
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-210.01	-195.33	-181.94	-155.71	-111.90	-82.71	-37.85	-57.36
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.05	0.03	0.03	0.01	0.02
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.05	0.04	0.02	0.02	0.01	0.01
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-217.54	-202.37	-188.62	-161.54	-116.69	-86.00	-39.32	-59.98
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-227.01	-211.15	-196.68	-168.33	-121.00	-89.42	-40.92	-62.03
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-217.53	-202.36	-188.61	-161.54	-116.69	-85.99	-39.32	-59.98

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	-217.53	-202.36	-188.61	-161.54	-116.69	-85.99	-39.32	-59.98
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-217.53	-202.36	-188.61	-161.54	-116.69	-85.99	-39.32	-59.98
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-217.56	-202.38	-188.63	-161.56	-116.70	-86.00	-39.32	-59.99
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-104.16	-96.88	-90.24	-77.23	-55.51	-41.03	-18.78	-28.46
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-209.73	-195.07	-181.70	-155.50	-111.75	-82.60	-37.80	-57.28
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	2.43	2.25	2.07	1.74	1.10	0.88	0.41	0.52
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.30	0.28	0.26	0.21	0.14	0.11	0.05	0.06
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.01
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-785.81	-730.89	-680.78	-582.63	-418.69	-309.48	-141.63	-214.62
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.05	0.04	0.02	0.02	0.01	0.01
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.59	-3.34	-3.12	-2.68	-1.96	-1.44	-0.65	-1.02
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.41	-3.17	-2.96	-2.55	-1.88	-1.37	-0.62	-0.98
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.79	0.73	0.67	0.57	0.36	0.29	0.13	0.17
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-123.19	-114.59	-106.76	-91.39	-65.80	-48.58	-22.23	-33.76

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.12	-0.11	-0.10	-0.08	-0.05	-0.02	-0.04
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.03	0.02	0.01	0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.53	0.49	0.45	0.38	0.24	0.19	0.09	0.11

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-1.95	-1.81	-1.69	-1.45	-1.04	-0.77	-0.35	-0.53
New York County, NY	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.23	0.21	0.19	0.16	0.10	0.08	0.04	0.05
New York, NY-NJ-CT	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	-11.12	-10.37	-9.77	-8.46	-6.59	-4.65	-2.10	-3.52
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.62	0.56	0.47	0.34	-0.04	0.09	0.06	-0.10
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-11.30	-10.54	-9.92	-8.59	-6.68	-4.72	-2.13	-3.56
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	-0.01
Nogales, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Oakridge, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Ogden Area, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Olmsted County; (part), MN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.02	0.01	0.01
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.01
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.02	0.02	0.01	0.01
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-15.49	-14.41	-13.42	-11.49	-8.26	-6.10	-2.79	-4.23
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-35.58	-33.09	-30.83	-26.39	-19.01	-14.03	-6.42	-9.75

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-333.60	-310.29	-289.06	-247.41	-177.97	-131.47	-60.16	-91.28
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-332.59	-309.36	-288.20	-246.69	-177.51	-131.11	-59.99	-91.06
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	2.33	2.16	1.98	1.67	1.06	0.84	0.39	0.50
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.44	2.26	2.07	1.75	1.11	0.88	0.41	0.53
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.20	0.18	0.17	0.14	0.09	0.07	0.03	0.04
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.12	0.11	0.10	0.08	0.05	0.04	0.02	0.02
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-8.10	-7.54	-7.04	-6.04	-4.42	-3.23	-1.47	-2.28
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-8.21	-7.64	-7.13	-6.12	-4.47	-3.27	-1.49	-2.31
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.70	0.65	0.60	0.50	0.31	0.25	0.12	0.15
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.05	0.05	0.05	0.04	0.02	0.02	0.01	0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.31	0.28	0.26	0.22	0.14	0.11	0.05	0.07
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.13	1.04	0.96	0.81	0.51	0.41	0.19	0.24
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.24	0.22	0.20	0.17	0.11	0.09	0.04	0.05
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.18	0.17	0.16	0.13	0.08	0.07	0.03	0.04
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.26	0.24	0.22	0.19	0.12	0.09	0.04	0.06
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.31	0.28	0.26	0.22	0.14	0.11	0.05	0.07
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-217.58	-202.40	-188.65	-161.57	-116.71	-86.01	-39.33	-59.99
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.81	0.75	0.69	0.58	0.37	0.29	0.14	0.18
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.83	0.77	0.70	0.59	0.38	0.30	0.14	0.18
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-157.00	-146.03	-136.04	-116.44	-83.77	-61.88	-28.31	-42.96
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-157.02	-146.05	-136.05	-116.46	-83.77	-61.89	-28.32	-42.97

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.15	0.14	0.13	0.11	0.07	0.06	0.03	0.03
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-120.67	-112.24	-104.55	-89.47	-64.30	-47.53	-21.75	-32.96
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-137.98	-128.34	-119.55	-102.33	-73.60	-54.37	-24.88	-37.74
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-120.15	-111.75	-104.10	-89.10	-64.06	-47.34	-21.66	-32.85
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-120.15	-111.75	-104.10	-89.10	-64.06	-47.34	-21.66	-32.85
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.30	0.28	0.26	0.22	0.14	0.11	0.05	0.07
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.10	1.95	1.79	1.51	0.95	0.76	0.36	0.45
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.11	1.95	1.79	1.51	0.96	0.76	0.36	0.46
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-321.94	-299.45	-278.97	-238.80	-171.86	-126.92	-58.07	-88.16
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-321.91	-299.43	-278.95	-238.79	-171.85	-126.92	-58.07	-88.16
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-322.29	-299.78	-279.27	-239.06	-172.02	-127.05	-58.13	-88.24
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-11.74	-10.92	-10.21	-8.76	-6.45	-4.70	-2.14	-3.35
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-11.74	-10.92	-10.21	-8.76	-6.45	-4.70	-2.14	-3.35
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-11.74	-10.93	-10.21	-8.77	-6.45	-4.70	-2.14	-3.35
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-11.74	-10.93	-10.21	-8.77	-6.45	-4.70	-2.14	-3.35
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-14.15	-13.16	-12.26	-10.49	-7.54	-5.57	-2.55	-3.86
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.16	0.15	0.14	0.12	0.07	0.06	0.03	0.04
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.79	1.66	1.52	1.28	0.81	0.65	0.30	0.39
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.28	0.26	0.24	0.20	0.13	0.10	0.05	0.06
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.06	0.05	0.03	0.02	0.01	0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.17	0.16	0.15	0.13	0.08	0.06	0.03	0.04
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.18	0.17	0.15	0.13	0.08	0.07	0.03	0.04
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.09	0.09	0.08	0.07	0.04	0.03	0.02	0.02
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-57.72	-53.68	-50.00	-42.80	-30.75	-22.73	-10.40	-15.76
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.41	0.38	0.35	0.29	0.19	0.15	0.07	0.09
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-208.28	-193.73	-180.47	-154.47	-111.09	-82.08	-37.56	-56.97
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-1.88	-1.75	-1.63	-1.40	-1.01	-0.74	-0.34	-0.52

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.03	0.01	0.01	0.01	0.00
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.44	-1.34	-1.25	-1.07	-0.77	-0.57	-0.26	-0.39
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.28	0.26	0.24	0.20	0.13	0.10	0.05	0.06
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.05	0.04	0.02	0.02	0.01	0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.59	0.55	0.50	0.42	0.27	0.21	0.10	0.13
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.31	0.28	0.26	0.22	0.14	0.11	0.05	0.07
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.18	0.17	0.15	0.13	0.08	0.06	0.03	0.04
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.04	0.03	0.02	0.01	-0.02	0.00	0.00	-0.02
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.09	0.08	0.07	0.06	0.04	0.03	0.01	0.02
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-128.12	-119.17	-111.00	-94.99	-68.26	-50.46	-23.09	-34.99
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-128.11	-119.16	-110.99	-94.99	-68.26	-50.46	-23.09	-34.99
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-128.11	-119.16	-110.99	-94.99	-68.26	-50.45	-23.09	-34.99
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.48	0.45	0.41	0.35	0.22	0.17	0.08	0.10
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	3.41	3.16	2.91	2.45	1.55	1.24	0.58	0.74
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.18	0.17	0.16	0.13	0.08	0.07	0.03	0.04
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Wayne County; (part), MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-11.40	-10.60	-9.87	-8.45	-6.08	-4.49	-2.05	-3.12
West Central Pinal County, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.01	0.01	0.01
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.25	0.23	0.21	0.18	0.11	0.09	0.04	0.05
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.06	0.05	0.02	0.03
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00
Yakima County; (part), WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.06	0.04	0.02	0.03
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.09	0.08	0.07	0.04	0.03	0.02	0.02

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-7. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Nitrogen Oxides (NO_x), 2025

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	11.62	10.77	10.20	9.08	6.55	6.32	4.95	4.27
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	50.06	46.39	43.96	39.15	28.24	27.22	21.34	18.42
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	21.59	20.00	18.95	16.88	12.18	11.74	9.20	7.94
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.71	2.51	2.38	2.12	1.53	1.47	1.15	1.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	29.67	27.50	26.05	23.21	16.74	16.14	12.66	10.92
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.36	0.34	0.32	0.28	0.20	0.20	0.15	0.13
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.54	2.36	2.23	1.99	1.44	1.38	1.09	0.94
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	17.74	16.44	15.57	13.87	10.00	9.65	7.57	6.53
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	20.57	19.06	18.06	16.09	11.60	11.19	8.78	7.57
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-176.68	-164.21	-157.63	-136.72	-100.26	-94.83	-71.58	-64.72
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	3.37	3.12	2.96	2.64	1.90	1.83	1.44	1.24
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.17	0.16	0.15	0.14	0.10	0.10	0.08	0.06
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	37.10	34.38	32.58	29.01	20.93	20.18	15.82	13.65
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.39	1.29	1.22	1.09	0.78	0.75	0.59	0.51
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	4.78	4.43	4.20	3.74	2.70	2.60	2.04	1.76
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-24.03	-22.60	-22.82	-17.78	-13.97	-12.19	-7.64	-8.63

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-5.01	-4.66	-4.47	-3.88	-2.84	-2.69	-2.02	-1.83
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	5.72	5.30	5.02	4.47	3.23	3.11	2.44	2.11
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.93	1.79	1.69	1.51	1.09	1.05	0.82	0.71
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	20.21	18.73	17.75	15.81	11.40	10.99	8.62	7.44
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	17.53	16.24	15.39	13.71	9.89	9.53	7.47	6.45
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.65	0.60	0.57	0.51	0.37	0.36	0.28	0.24
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.13	0.12	0.11	0.10	0.07	0.07	0.06	0.05
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.32	0.30	0.28	0.25	0.18	0.17	0.14	0.12
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	188.37	174.57	165.42	147.32	106.25	102.45	80.31	69.32
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	1.15	1.07	1.01	0.90	0.65	0.63	0.49	0.42
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	6.43	5.94	5.54	5.09	3.60	3.55	2.89	2.38
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.35	0.32	0.31	0.27	0.20	0.19	0.15	0.13
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	92.25	85.49	81.00	72.15	52.03	50.18	39.35	33.95
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-187.29	-174.15	-167.49	-144.71	-106.38	-100.33	-75.28	-68.56
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.48	0.44	0.42	0.37	0.27	0.26	0.20	0.18
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.76	0.70	0.67	0.59	0.43	0.41	0.32	0.28
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-61.75	-57.40	-55.13	-47.77	-35.05	-33.13	-24.96	-22.61
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-64.23	-59.70	-57.31	-49.71	-36.45	-34.48	-26.02	-23.53
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	37.38	34.64	32.83	29.23	21.09	20.33	15.93	13.76

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	11.62	10.77	10.20	9.08	6.55	6.32	4.95	4.27
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.33	0.31	0.29	0.26	0.19	0.18	0.14	0.12
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	19.88	18.43	17.46	15.55	11.22	10.82	8.48	7.32
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-51.66	-48.02	-46.09	-39.98	-29.32	-27.73	-20.93	-18.92
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.30	0.27	0.26	0.23	0.17	0.16	0.13	0.11
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.77	1.64	1.55	1.38	1.00	0.96	0.75	0.65
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	1.14	1.06	1.01	0.90	0.65	0.62	0.49	0.42
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-6.61	-6.18	-6.05	-5.03	-3.79	-3.47	-2.45	-2.40
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	6.17	5.72	5.42	4.83	3.48	3.36	2.63	2.27
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.46	0.43	0.41	0.36	0.26	0.25	0.20	0.17
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	10.45	9.69	9.18	8.17	5.90	5.68	4.46	3.85
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	50.21	46.53	44.10	39.27	28.32	27.31	21.40	18.48
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	94.16	87.26	82.69	73.63	53.11	51.21	40.13	34.65
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-76.18	-71.42	-71.14	-57.10	-44.00	-39.27	-26.05	-27.51
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	6.34	5.87	5.57	4.96	3.58	3.45	2.70	2.33
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.76	2.55	2.42	2.16	1.55	1.50	1.18	1.01
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	6.26	5.80	5.49	4.89	3.53	3.40	2.67	2.30

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	69.57	64.47	61.09	54.40	39.24	37.83	29.66	25.60
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	62.70	58.11	55.07	49.04	35.37	34.10	26.73	23.08
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	37.03	34.32	32.52	28.96	20.89	20.14	15.78	13.63
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	46.10	42.73	40.49	36.05	26.01	25.07	19.65	16.97
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	94.13	87.24	82.67	73.61	53.10	51.19	40.12	34.64
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	87.68	81.25	77.00	68.57	49.46	47.68	37.37	32.27
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.88	0.82	0.77	0.69	0.50	0.48	0.38	0.32
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	17.47	16.19	15.34	13.67	9.85	9.50	7.46	6.43
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	64.41	59.69	56.56	50.37	36.33	35.03	27.47	23.71
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.89	1.75	1.65	1.48	1.06	1.03	0.81	0.70
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.42	2.24	2.12	1.89	1.36	1.32	1.04	0.89
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	28.46	26.38	25.00	22.26	16.06	15.48	12.13	10.47
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	36.88	34.18	32.39	28.84	20.80	20.06	15.72	13.57
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	243.04	225.23	213.40	190.09	137.09	132.20	103.67	89.45
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-126.87	-117.95	-113.36	-98.09	-72.04	-68.01	-51.15	-46.45
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	41.99	38.79	36.27	33.19	23.54	23.14	18.82	15.53

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	24.53	22.50	20.36	19.88	13.55	13.94	12.25	9.17
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	39.16	36.27	34.28	30.70	22.06	21.36	16.87	14.43
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.14	-0.15	-0.24	-0.04	-0.11	-0.02	0.12	-0.04
Detroit-Ann Arbor, MI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	139.63	129.38	122.51	109.26	78.74	76.00	59.69	51.40
Dona Ana County; Anthony, NM	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.26	0.24	0.23	0.21	0.15	0.14	0.11	0.10
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.74	0.69	0.65	0.58	0.42	0.40	0.32	0.27
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.33	0.30	0.29	0.26	0.18	0.18	0.14	0.12
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.48	3.23	3.06	2.72	1.96	1.89	1.48	1.28
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-163.12	-151.61	-145.54	-126.23	-92.57	-87.55	-66.08	-59.75
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-6.41	-5.96	-5.73	-4.95	-3.64	-3.43	-2.58	-2.35
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-9.28	-8.67	-8.49	-7.06	-5.32	-4.87	-3.43	-3.37
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-23.92	-22.23	-21.35	-18.50	-13.58	-12.83	-9.67	-8.76
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	6.94	6.43	6.09	5.43	3.91	3.77	2.96	2.55
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-8.55	-7.94	-7.63	-6.61	-4.85	-4.58	-3.46	-3.13
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-8.07	-7.50	-7.21	-6.24	-4.58	-4.32	-3.25	-2.95
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.06	0.05	0.05	0.05	0.03	0.03	0.02	0.02
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	1.21	1.12	1.06	0.94	0.68	0.66	0.51	0.44
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.15	0.14	0.13	0.12	0.09	0.08	0.07	0.06

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	4.27	3.96	3.75	3.34	2.41	2.32	1.82	1.57
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.44	0.41	0.38	0.34	0.25	0.24	0.19	0.16
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.26	0.24	0.22	0.20	0.14	0.14	0.11	0.09
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	1.15	1.07	1.01	0.90	0.65	0.63	0.49	0.42
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	16.75	15.52	14.71	13.10	9.45	9.11	7.14	6.16
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.13	1.04	0.99	0.88	0.63	0.61	0.48	0.41
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	49.85	46.20	43.78	38.99	28.12	27.11	21.25	18.35
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-31.81	-29.59	-28.52	-24.53	-18.08	-17.00	-12.68	-11.63
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-2.55	-2.37	-2.28	-1.97	-1.45	-1.37	-1.02	-0.93
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-2.54	-2.36	-2.27	-1.96	-1.44	-1.36	-1.02	-0.93
Harrisburg-Lebanon-Carlisle-York, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	34.17	31.66	30.00	26.72	19.27	18.58	14.57	12.57
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	34.14	31.64	29.99	26.70	19.26	18.57	14.55	12.57
Hayden, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.03
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.03	0.02
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.03	0.02
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.55	0.51	0.49	0.43	0.31	0.30	0.24	0.20
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-276.02	-257.11	-249.19	-211.89	-157.34	-146.66	-107.38	-100.74

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.73	0.68	0.64	0.57	0.41	0.40	0.31	0.27
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	5.01	4.64	4.40	3.92	2.83	2.72	2.14	1.84
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	6.17	5.71	5.41	4.82	3.48	3.35	2.63	2.27
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	5.01	4.64	4.40	3.92	2.83	2.72	2.14	1.84
Imperial County; Imperial Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	6.11	5.67	5.37	4.78	3.45	3.32	2.61	2.25
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-6.43	-5.98	-5.75	-4.97	-3.65	-3.45	-2.59	-2.35
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.77	2.57	2.43	2.17	1.56	1.51	1.18	1.02
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.05	0.03	0.03	0.02	0.02
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	16.63	15.42	14.61	13.01	9.38	9.05	7.09	6.12
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.23	0.22	0.20	0.18	0.13	0.13	0.10	0.09
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.37	1.27	1.20	1.07	0.77	0.74	0.58	0.50
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	4.87	4.52	4.28	3.81	2.75	2.65	2.08	1.79
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	4.57	4.23	4.01	3.57	2.58	2.48	1.95	1.68
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.33	1.23	1.17	1.04	0.75	0.72	0.57	0.49
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.63	1.51	1.43	1.27	0.92	0.89	0.69	0.60
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.13	0.12	0.12	0.10	0.08	0.07	0.06	0.05
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	3.85	3.57	3.38	3.01	2.17	2.10	1.64	1.42
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	1.13	1.04	0.99	0.88	0.63	0.61	0.48	0.41
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.25	0.24	0.22	0.20	0.14	0.14	0.11	0.09

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-4.76	-4.43	-4.28	-3.66	-2.71	-2.53	-1.87	-1.74
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.70	0.65	0.62	0.55	0.40	0.38	0.30	0.26
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.30	0.28	0.27	0.24	0.17	0.16	0.13	0.11
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.09	1.93	1.83	1.63	1.18	1.14	0.89	0.77
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.07	1.92	1.82	1.62	1.17	1.12	0.88	0.76
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	2.27	2.10	1.99	1.77	1.28	1.23	0.97	0.83
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	26.29	24.37	23.09	20.56	14.83	14.30	11.21	9.68
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	31.65	29.33	27.80	24.75	17.85	17.21	13.49	11.65
La Porte County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.85	1.72	1.63	1.45	1.05	1.01	0.79	0.68
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	7.84	7.27	6.89	6.13	4.42	4.27	3.34	2.89
Lake County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-153.81	-142.98	-137.36	-118.95	-87.31	-82.49	-62.10	-56.32
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.13	1.05	1.00	0.89	0.64	0.62	0.48	0.42
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-158.13	-146.99	-141.15	-122.33	-89.75	-84.84	-63.95	-57.91
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.03	0.02
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.58	0.53	0.51	0.45	0.32	0.31	0.25	0.21
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.32	0.30	0.28	0.25	0.18	0.17	0.14	0.12
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.97	0.90	0.85	0.76	0.55	0.53	0.41	0.36

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	15.07	13.97	13.24	11.79	8.50	8.20	6.42	5.55
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	15.07	13.97	13.24	11.79	8.50	8.20	6.42	5.55
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	6.94	6.43	6.09	5.43	3.91	3.77	2.96	2.55
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	62.54	57.96	54.93	48.91	35.28	34.01	26.66	23.02
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.16	1.08	1.02	0.91	0.66	0.63	0.50	0.43
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-64.20	-59.67	-57.28	-49.68	-36.43	-34.46	-26.01	-23.52
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	3.95	3.66	3.47	3.09	2.23	2.15	1.68	1.45
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-135.29	-125.76	-120.77	-104.66	-76.79	-72.58	-54.70	-49.55
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.36	0.34	0.32	0.28	0.20	0.20	0.15	0.13
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3.72	3.45	3.27	2.91	2.10	2.03	1.59	1.37
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.46	2.28	2.16	1.92	1.39	1.34	1.05	0.90
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.44	1.34	1.27	1.13	0.81	0.78	0.61	0.53
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	326.71	302.31	284.54	256.89	183.72	178.89	142.87	120.53
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-141.94	-132.01	-127.04	-109.61	-80.64	-75.98	-56.90	-51.94
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	327.06	302.65	284.86	257.17	183.92	179.08	143.02	120.66
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	327.07	302.65	284.87	257.17	183.93	179.09	143.02	120.66
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	327.04	302.62	284.84	257.15	183.91	179.07	143.01	120.65

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	326.18	301.83	284.09	256.48	183.43	178.61	142.64	120.34
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	2.81	2.60	2.46	2.19	1.58	1.53	1.20	1.03
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-101.65	-94.51	-90.84	-78.57	-57.72	-54.48	-40.94	-37.21
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-175.37	-163.00	-156.48	-135.70	-99.52	-94.12	-71.02	-64.23
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	3.24	3.00	2.84	2.53	1.83	1.76	1.38	1.19
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	121.10	112.23	106.35	94.70	68.31	65.86	51.62	44.57
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	15.35	14.22	13.48	12.00	8.66	8.35	6.54	5.65
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.35	1.25	1.18	1.05	0.76	0.73	0.57	0.50
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-31.33	-29.12	-27.96	-24.24	-17.78	-16.81	-12.68	-11.47
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.50	2.32	2.20	1.96	1.41	1.36	1.07	0.92
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	8.48	7.80	7.14	6.82	4.71	4.77	4.09	3.16
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	17.65	16.30	15.19	13.99	9.88	9.76	8.00	6.54
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.40	0.37	0.35	0.31	0.22	0.22	0.17	0.15
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.40	0.37	0.35	0.31	0.22	0.22	0.17	0.15
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.40	0.37	0.35	0.31	0.22	0.22	0.17	0.15
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	39.36	36.48	34.57	30.78	22.20	21.41	16.78	14.48
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-20.97	-19.76	-20.13	-15.39	-12.24	-10.53	-6.34	-7.50
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.56	2.37	2.25	2.00	1.45	1.39	1.09	0.94
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	2.46	2.28	2.16	1.92	1.39	1.34	1.05	0.90

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5.73	5.31	5.03	4.48	3.23	3.12	2.45	2.11
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.12	1.96	1.86	1.66	1.19	1.15	0.90	0.78
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.99	0.92	0.87	0.78	0.56	0.54	0.42	0.37
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.14	0.13	0.12	0.11	0.08	0.07	0.06	0.05
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.97	0.90	0.85	0.76	0.55	0.53	0.41	0.36
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.65	0.60	0.57	0.51	0.37	0.35	0.28	0.24
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.33	0.31	0.29	0.26	0.19	0.18	0.14	0.12
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.62	0.58	0.55	0.49	0.35	0.34	0.27	0.23
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.20	0.19	0.18	0.16	0.11	0.11	0.09	0.07
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	2.79	2.59	2.45	2.18	1.57	1.52	1.19	1.03
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.70	3.43	3.25	2.89	2.08	2.01	1.58	1.36
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.62	0.57	0.54	0.49	0.35	0.34	0.26	0.23
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	25.95	24.05	22.79	20.30	14.64	14.12	11.07	9.55
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-2.79	-2.59	-2.49	-2.16	-1.58	-1.50	-1.13	-1.02
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	11.41	10.58	10.02	8.93	6.44	6.21	4.86	4.20
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	353.38	327.31	309.39	276.91	199.11	192.67	152.08	130.17

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	178.95	165.69	156.41	140.38	100.76	97.70	77.41	65.95
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	345.78	320.26	302.71	270.97	194.82	188.54	148.85	127.37
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.92	0.85	0.81	0.72	0.52	0.50	0.40	0.34
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.21	1.12	1.07	0.95	0.68	0.66	0.52	0.45
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.87	1.74	1.65	1.47	1.06	1.02	0.80	0.69
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.87	1.74	1.65	1.47	1.06	1.02	0.80	0.69
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.89	0.82	0.78	0.69	0.50	0.48	0.38	0.33
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	3.18	2.95	2.80	2.49	1.80	1.73	1.36	1.17
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.33	1.23	1.17	1.04	0.75	0.72	0.57	0.49
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.82	2.61	2.48	2.21	1.59	1.53	1.20	1.04
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-12.64	-11.76	-11.31	-9.77	-7.18	-6.77	-5.08	-4.63
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-40.98	-38.17	-37.00	-31.46	-23.36	-21.77	-15.94	-14.96
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-92.96	-86.79	-84.96	-70.76	-53.24	-48.87	-34.60	-33.80

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-43.14	-40.62	-41.20	-31.79	-25.13	-21.77	-13.36	-15.46
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	116.43	107.90	102.25	91.05	65.68	63.32	49.63	42.85
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	121.62	112.71	106.81	95.11	68.61	66.14	51.84	44.76
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	2.15	1.99	1.89	1.68	1.21	1.17	0.92	0.79
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.82	0.76	0.72	0.64	0.46	0.45	0.35	0.30
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	9.36	8.67	8.22	7.32	5.28	5.09	3.99	3.44
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.78	0.72	0.69	0.61	0.44	0.42	0.33	0.29
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	6.99	6.48	6.14	5.47	3.94	3.80	2.98	2.57
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	62.84	58.23	55.17	49.15	35.44	34.18	26.81	23.13
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	57.27	53.08	50.29	44.80	32.30	31.15	24.43	21.08
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.17	0.16	0.15	0.14	0.10	0.09	0.07	0.06
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.85	0.79	0.75	0.67	0.48	0.46	0.36	0.31
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	38.06	35.27	33.41	29.77	21.47	20.70	16.24	14.01
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.38	2.20	2.09	1.86	1.34	1.29	1.01	0.88
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	2.81	2.61	2.47	2.20	1.59	1.53	1.20	1.03
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	15.32	14.20	13.46	11.98	8.64	8.33	6.53	5.64

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.43	0.40	0.38	0.34	0.24	0.23	0.18	0.16
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	56.12	52.01	49.29	43.89	31.66	30.52	23.92	20.65
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.03
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	11.90	11.03	10.45	9.31	6.71	6.47	5.07	4.38
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	9.56	8.86	8.39	7.47	5.39	5.20	4.07	3.52
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.06	0.99	0.93	0.83	0.60	0.58	0.45	0.39
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	13.86	12.84	12.17	10.84	7.82	7.54	5.91	5.10
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	16.18	15.00	14.21	12.66	9.13	8.80	6.90	5.96
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	324.72	300.47	282.80	255.33	182.60	177.81	142.02	119.80
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.28	0.26	0.25	0.22	0.16	0.15	0.12	0.10
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.76	0.70	0.66	0.59	0.43	0.41	0.33	0.28
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-0.11	-0.11	-0.09	-0.07	-0.07	-0.05	-0.04
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	42.46	39.35	37.29	33.21	23.95	23.09	18.10	15.63
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	41.12	38.11	36.11	32.16	23.20	22.37	17.53	15.13
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	41.43	38.31	35.95	32.66	23.27	22.75	18.32	15.30
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	40.23	37.20	34.90	31.72	22.59	22.10	17.81	14.86
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	7.38	6.84	6.48	5.77	4.16	4.01	3.15	2.72
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-19.16	-17.82	-17.16	-14.78	-10.89	-10.24	-7.65	-7.01
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	8.02	7.31	6.44	6.62	4.38	4.66	4.32	3.02

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	6.67	6.11	5.51	5.41	3.68	3.80	3.36	2.49
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	6.67	6.11	5.51	5.41	3.68	3.80	3.36	2.49
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	17.56	16.27	15.42	13.73	9.91	9.55	7.48	6.46
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	104.72	97.05	91.97	81.89	59.07	56.95	44.63	38.54
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	104.98	97.29	92.20	82.10	59.22	57.09	44.75	38.63
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	47.73	43.80	39.67	38.65	26.38	27.11	23.76	17.84
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	48.81	44.80	40.61	39.49	26.99	27.69	24.22	18.24
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	30.30	27.65	24.36	25.02	16.55	17.63	16.33	11.43
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	114.82	106.39	100.73	89.86	64.74	62.51	49.12	42.27
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	114.82	106.39	100.73	89.86	64.74	62.51	49.12	42.27
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	114.79	106.36	100.70	89.84	64.73	62.49	49.11	42.26
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	114.79	106.36	100.70	89.84	64.73	62.49	49.11	42.26
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.48	-2.31	-2.22	-1.92	-1.41	-1.33	-1.00	-0.91
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.19	0.17	0.16	0.15	0.11	0.10	0.08	0.07
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.29	0.27	0.25	0.22	0.16	0.16	0.12	0.11
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.21	1.12	1.07	0.95	0.68	0.66	0.52	0.45
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	8.08	7.49	7.10	6.32	4.56	4.40	3.45	2.98

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Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	89.36	82.82	78.48	69.88	50.41	48.60	38.09	32.89
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	14.45	13.39	12.69	11.30	8.15	7.86	6.16	5.32
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.24	3.00	2.85	2.53	1.83	1.76	1.38	1.19
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.41	0.38	0.36	0.32	0.23	0.22	0.18	0.15
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.72	0.67	0.63	0.56	0.41	0.39	0.31	0.27
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.79	0.74	0.70	0.62	0.45	0.43	0.34	0.29
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.36	0.34	0.32	0.28	0.21	0.20	0.15	0.13
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.31	0.29	0.27	0.24	0.18	0.17	0.13	0.12
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	8.96	8.30	7.87	7.00	5.05	4.87	3.82	3.30
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	9.22	8.55	8.10	7.21	5.20	5.02	3.93	3.39
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	4.36	4.04	3.83	3.41	2.46	2.37	1.86	1.61
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-91.74	-85.27	-81.86	-70.99	-52.06	-49.24	-37.15	-33.60
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.51	1.40	1.32	1.18	0.85	0.82	0.64	0.55
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	21.23	19.67	18.64	16.60	11.97	11.54	9.05	7.81
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-102.91	-95.85	-92.85	-79.02	-58.65	-54.70	-40.10	-37.56
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.88	1.74	1.65	1.47	1.06	1.02	0.80	0.69
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.66	0.61	0.54	0.54	0.36	0.38	0.34	0.25
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	9.37	8.68	8.22	7.33	5.28	5.10	4.01	3.45

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.17	-0.16	-0.16	-0.13	-0.10	-0.09	-0.05	-0.06
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	13.94	12.92	12.24	10.90	7.86	7.58	5.94	5.13
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.74	0.69	0.65	0.58	0.42	0.40	0.32	0.27
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.84	1.70	1.61	1.44	1.04	1.00	0.78	0.68
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.84	2.64	2.50	2.22	1.60	1.55	1.21	1.05
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.10	0.10	0.09	0.08	0.06	0.06	0.04	0.04
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	2.73	2.53	2.40	2.13	1.54	1.48	1.16	1.00
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	29.40	27.24	25.82	22.99	16.58	15.99	12.53	10.82
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.52	0.48	0.46	0.41	0.29	0.28	0.22	0.19
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.56	-0.52	-0.51	-0.43	-0.32	-0.30	-0.21	-0.20
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	15.32	14.20	13.46	11.98	8.64	8.33	6.53	5.64
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	8.95	8.29	7.86	7.00	5.05	4.87	3.81	3.29
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	26.11	24.19	22.92	20.42	14.73	14.20	11.13	9.61
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.47	0.44	0.41	0.37	0.27	0.26	0.20	0.17
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	4.33	4.01	3.80	3.38	2.44	2.35	1.84	1.59

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.11	0.10	0.10	0.08	0.06	0.06	0.05	0.04
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	1.53	1.41	1.34	1.19	0.86	0.83	0.65	0.56
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-11.42	-10.61	-10.19	-8.83	-6.48	-6.13	-4.62	-4.18
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-11.10	-10.32	-9.91	-8.59	-6.30	-5.96	-4.49	-4.07
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-11.00	-10.22	-9.82	-8.51	-6.24	-5.90	-4.44	-4.03
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	24.04	22.28	21.12	18.80	13.56	13.08	10.25	8.85
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	170.31	157.84	149.57	133.19	96.07	92.62	72.60	62.68
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	9.48	8.79	8.33	7.42	5.35	5.16	4.04	3.49
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.94	1.80	1.71	1.52	1.10	1.06	0.83	0.72
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.35	-5.91	-5.69	-4.90	-3.61	-3.39	-2.53	-2.32
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.91	1.77	1.68	1.50	1.08	1.04	0.82	0.70
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.37	0.34	0.32	0.29	0.21	0.20	0.16	0.13
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.78	2.58	2.44	2.17	1.57	1.51	1.18	1.02
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	12.45	11.54	10.94	9.74	7.03	6.77	5.31	4.58
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	6.16	5.71	5.41	4.82	3.47	3.35	2.63	2.27
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.96	0.89	0.85	0.75	0.54	0.52	0.41	0.35
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.81	2.61	2.47	2.20	1.59	1.53	1.20	1.03
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	6.06	5.62	5.32	4.74	3.42	3.30	2.58	2.23

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	4.66	4.32	4.09	3.64	2.63	2.53	1.99	1.71

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million; NO_x = nitrogen oxides

Table A-8. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Nitrogen Oxides (NO_x), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	15.02	13.93	12.92	11.24	8.01	6.65	3.55	4.40
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	64.37	59.70	55.36	48.17	34.33	28.51	15.20	18.83
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	27.62	25.61	23.75	20.66	14.72	12.23	6.52	8.07
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	3.69	3.42	3.17	2.76	1.97	1.64	0.87	1.08
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	37.84	35.10	32.54	28.31	20.16	16.77	8.94	11.06
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.38	0.35	0.32	0.28	0.20	0.17	0.09	0.11
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.74	2.54	2.35	2.05	1.46	1.21	0.65	0.80
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	22.44	20.81	19.29	16.78	11.94	9.94	5.30	6.55
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	26.09	24.19	22.42	19.51	13.89	11.56	6.16	7.62
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-413.23	-384.57	-360.37	-312.95	-233.04	-180.67	-99.24	-128.22
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	4.13	3.83	3.55	3.09	2.19	1.83	0.97	1.20
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.18	0.17	0.16	0.14	0.09	0.08	0.04	0.05
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	47.39	43.96	40.76	35.46	25.27	20.99	11.19	13.86
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.79	1.66	1.54	1.34	0.95	0.79	0.42	0.52
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	6.01	5.58	5.17	4.50	3.20	2.67	1.42	1.75
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-160.34	-149.61	-141.37	-122.58	-94.31	-69.38	-39.01	-52.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-12.01	-11.17	-10.47	-9.09	-6.78	-5.25	-2.88	-3.73
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	7.37	6.84	6.34	5.52	3.93	3.26	1.74	2.16
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.49	2.31	2.14	1.86	1.33	1.10	0.59	0.73
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	26.04	24.15	22.40	19.49	13.89	11.53	6.15	7.62
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	22.41	20.79	19.27	16.77	11.94	9.93	5.29	6.55
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.84	0.78	0.72	0.63	0.45	0.37	0.20	0.25
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.15	0.14	0.13	0.11	0.08	0.06	0.03	0.04
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.44	0.41	0.38	0.33	0.23	0.19	0.10	0.13
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	241.58	224.06	207.74	180.76	128.80	107.00	57.06	70.66
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	1.48	1.37	1.27	1.10	0.79	0.65	0.35	0.43
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.70	0.60	0.40	0.37	-0.14	0.41	0.10	-0.09
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.44	0.41	0.38	0.33	0.23	0.20	0.10	0.13
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	117.61	109.08	101.12	87.99	62.66	52.10	27.77	34.37
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-467.67	-435.35	-408.29	-354.51	-264.85	-204.27	-112.46	-145.76
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.64	0.59	0.55	0.48	0.34	0.28	0.15	0.19
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.98	0.91	0.84	0.73	0.52	0.43	0.23	0.29
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-147.07	-136.88	-128.30	-111.41	-83.04	-64.28	-35.33	-45.69
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-150.21	-139.79	-130.99	-113.76	-84.71	-65.67	-36.07	-46.61
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	48.13	44.64	41.39	36.02	25.67	21.32	11.37	14.08

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	15.02	13.93	12.92	11.24	8.01	6.65	3.55	4.40
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.46	0.42	0.39	0.34	0.24	0.20	0.11	0.13
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	25.43	23.59	21.86	19.02	13.54	11.27	6.00	7.43
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-120.92	-112.54	-105.46	-91.58	-68.20	-52.87	-29.04	-37.52
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.33	0.31	0.29	0.25	0.18	0.15	0.08	0.10
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	2.28	2.11	1.96	1.71	1.22	1.01	0.54	0.67
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	1.50	1.39	1.29	1.13	0.80	0.67	0.36	0.44
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-27.05	-25.22	-23.77	-20.62	-15.69	-11.75	-6.55	-8.65
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	7.95	7.37	6.83	5.95	4.24	3.52	1.88	2.33
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.43	0.40	0.37	0.32	0.23	0.19	0.10	0.13
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	13.47	12.49	11.58	10.08	7.18	5.96	3.18	3.94
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	64.69	60.00	55.64	48.41	34.51	28.65	15.28	18.93
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	121.71	112.89	104.67	91.08	64.93	53.90	28.75	35.62
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-417.37	-389.34	-367.52	-318.73	-244.33	-180.82	-101.39	-134.69
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	8.09	7.51	6.96	6.05	4.31	3.58	1.91	2.37
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.74	3.47	3.22	2.80	2.00	1.66	0.88	1.09
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	8.02	7.43	6.89	6.00	4.27	3.55	1.89	2.34

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	89.32	82.84	76.81	66.83	47.62	39.56	21.10	26.13
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	80.95	75.08	69.62	60.58	43.18	35.85	19.12	23.69
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	47.76	44.30	41.08	35.74	25.48	21.15	11.28	13.98
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	59.44	55.13	51.12	44.48	31.71	26.33	14.04	17.40
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	121.32	112.53	104.34	90.79	64.72	53.73	28.66	35.50
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	113.00	104.81	97.18	84.56	60.28	50.05	26.69	33.07
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.13	1.05	0.97	0.84	0.60	0.50	0.27	0.33
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	22.16	20.55	19.05	16.57	11.79	9.82	5.23	6.47
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	82.41	76.44	70.86	61.66	43.93	36.51	19.46	24.10
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.94	1.80	1.66	1.44	1.00	0.87	0.45	0.55
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.32	2.15	1.98	1.73	1.21	1.04	0.54	0.66
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	36.00	33.39	30.96	26.94	19.20	15.94	8.50	10.54
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	47.55	44.10	40.90	35.58	25.37	21.06	11.23	13.92
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	309.40	286.95	266.00	231.46	164.80	137.07	73.06	90.40
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-309.33	-287.93	-269.95	-234.41	-174.92	-135.16	-74.35	-96.26
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	8.33	7.41	5.94	5.32	1.34	4.27	1.57	0.64

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-58.04	-54.45	-52.32	-45.22	-37.04	-24.58	-14.49	-20.50
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	37.58	34.80	32.09	27.95	19.45	16.76	8.80	10.65
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-7.66	-7.16	-6.82	-5.91	-4.68	-3.28	-1.89	-2.59
Detroit-Ann Arbor, MI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	171.09	158.63	146.91	127.86	90.68	75.89	40.34	49.73
Dona Ana County; Anthony, NM	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.35	0.32	0.30	0.26	0.18	0.15	0.08	0.10
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.03	0.95	0.88	0.77	0.55	0.45	0.24	0.30
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.43	0.40	0.37	0.32	0.23	0.19	0.10	0.12
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	4.83	4.48	4.15	3.61	2.58	2.14	1.14	1.41
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-381.91	-355.43	-333.07	-289.24	-215.40	-166.98	-91.72	-118.52
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-16.07	-14.96	-14.03	-12.18	-9.09	-7.02	-3.86	-5.00
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-38.40	-35.80	-33.72	-29.25	-22.25	-16.68	-9.30	-12.26
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-56.88	-52.93	-49.61	-43.08	-32.10	-24.86	-13.66	-17.66
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	9.16	8.50	7.88	6.86	4.89	4.06	2.16	2.68
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-20.36	-18.95	-17.76	-15.43	-11.50	-8.90	-4.89	-6.33
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-19.73	-18.36	-17.21	-14.95	-11.16	-8.62	-4.74	-6.14
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	1.58	1.46	1.36	1.18	0.84	0.70	0.37	0.46
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.19	0.17	0.16	0.14	0.10	0.08	0.04	0.05

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5.40	5.00	4.64	4.04	2.88	2.39	1.27	1.58
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.61	0.57	0.53	0.46	0.33	0.27	0.14	0.18
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.14	0.12	0.11	0.10	0.06	0.06	0.03	0.03
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.48	1.38	1.28	1.11	0.79	0.66	0.35	0.43
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	21.27	19.73	18.29	15.92	11.34	9.42	5.02	6.22
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.52	1.41	1.31	1.14	0.81	0.67	0.36	0.44
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	64.16	59.51	55.18	48.02	34.23	28.42	15.16	18.78
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-84.83	-78.98	-74.13	-64.36	-48.23	-37.01	-20.42	-26.55
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.42	-5.98	-5.61	-4.87	-3.64	-2.80	-1.54	-2.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-6.38	-5.94	-5.57	-4.83	-3.61	-2.79	-1.53	-1.99
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	43.85	40.68	37.71	32.82	23.38	19.42	10.36	12.83
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	44.05	40.86	37.88	32.96	23.50	19.51	10.41	12.89
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.74	0.68	0.63	0.55	0.39	0.33	0.17	0.22
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-866.63	-807.37	-759.05	-658.77	-497.00	-377.37	-209.19	-273.70
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.94	0.87	0.81	0.70	0.50	0.42	0.22	0.28

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	6.51	6.04	5.60	4.87	3.47	2.88	1.54	1.90
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	7.94	7.37	6.83	5.94	4.24	3.52	1.88	2.32
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	6.51	6.04	5.60	4.87	3.47	2.88	1.54	1.90
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	7.90	7.33	6.80	5.91	4.22	3.50	1.87	2.31
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-16.12	-15.00	-14.07	-12.21	-9.12	-7.04	-3.87	-5.02
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	3.57	3.31	3.07	2.67	1.91	1.58	0.84	1.05
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.02	0.02
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	20.90	19.38	17.97	15.64	11.15	9.26	4.94	6.12
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.31	0.28	0.26	0.23	0.16	0.14	0.07	0.09
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.76	1.64	1.52	1.32	0.94	0.78	0.42	0.52
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	6.43	5.96	5.53	4.81	3.43	2.85	1.52	1.88
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	5.87	5.45	5.05	4.40	3.13	2.60	1.39	1.72
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.72	1.60	1.48	1.29	0.92	0.76	0.41	0.50
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.15	2.00	1.85	1.61	1.15	0.95	0.51	0.63
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	4.94	4.58	4.25	3.70	2.63	2.19	1.17	1.45
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.52	1.41	1.31	1.14	0.81	0.67	0.36	0.44
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.33	0.31	0.28	0.25	0.18	0.15	0.08	0.10
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-14.19	-13.21	-12.41	-10.77	-8.09	-6.19	-3.42	-4.45
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.98	0.91	0.84	0.73	0.52	0.43	0.23	0.29

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.37	0.34	0.31	0.27	0.20	0.16	0.09	0.11
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.01	2.80	2.59	2.26	1.61	1.34	0.71	0.88
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.00	2.78	2.58	2.24	1.60	1.33	0.71	0.88
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3.25	3.02	2.80	2.43	1.73	1.44	0.77	0.95
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	33.89	31.43	29.15	25.36	18.08	15.01	8.01	9.92
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	40.77	37.81	35.06	30.51	21.75	18.05	9.63	11.93
La Porte County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.34	2.17	2.01	1.75	1.25	1.03	0.55	0.68
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.23	0.21	0.20	0.17	0.12	0.10	0.05	0.07
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	10.10	9.37	8.69	7.56	5.39	4.47	2.39	2.96
Lake County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-370.52	-344.86	-323.28	-280.72	-209.33	-161.93	-89.03	-115.19
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.40	1.30	1.21	1.05	0.75	0.62	0.33	0.41
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-376.16	-350.09	-328.12	-284.94	-212.33	-164.43	-90.36	-116.84
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.67	0.62	0.58	0.50	0.36	0.30	0.16	0.20
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.36	0.33	0.31	0.27	0.19	0.16	0.09	0.11
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.06	0.99	0.91	0.80	0.57	0.47	0.25	0.31
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	19.41	18.00	16.69	14.53	10.35	8.60	4.59	5.68
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	19.41	18.00	16.69	14.53	10.35	8.60	4.59	5.68

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	9.16	8.50	7.88	6.86	4.89	4.06	2.16	2.68
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	80.73	74.88	69.43	60.42	43.07	35.75	19.07	23.63
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.52	1.41	1.31	1.14	0.81	0.67	0.36	0.45
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-150.16	-139.75	-130.96	-113.72	-84.69	-65.65	-36.06	-46.60
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	5.09	4.72	4.38	3.81	2.72	2.26	1.20	1.49
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-321.58	-299.30	-280.53	-243.60	-181.56	-140.56	-77.26	-99.90
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.38	0.35	0.32	0.28	0.20	0.17	0.09	0.11
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.19	0.18	0.16	0.14	0.10	0.08	0.05	0.06
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	4.81	4.46	4.13	3.60	2.56	2.13	1.14	1.41
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.08	2.86	2.65	2.30	1.64	1.37	0.73	0.90
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.73	1.61	1.49	1.30	0.92	0.77	0.41	0.51
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	243.01	224.16	204.19	178.27	117.46	109.89	55.84	64.07
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-362.80	-337.75	-316.84	-275.09	-205.71	-158.42	-87.27	-113.22
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	243.31	224.44	204.45	178.49	117.62	110.02	55.91	64.16
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	243.35	224.47	204.48	178.52	117.65	110.04	55.92	64.17
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	243.40	224.52	204.53	178.56	117.67	110.06	55.93	64.19
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	242.04	223.26	203.36	177.55	116.95	109.46	55.61	63.79
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	3.69	3.42	3.17	2.76	1.97	1.63	0.87	1.08

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-249.73	-232.45	-217.96	-189.25	-141.26	-109.11	-60.03	-77.74
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-411.59	-383.05	-358.97	-311.73	-232.17	-179.95	-98.85	-127.75
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	4.05	3.75	3.48	3.03	2.16	1.79	0.96	1.18
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	155.96	144.66	134.13	116.71	83.20	69.07	36.84	45.64
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	19.54	18.12	16.81	14.62	10.42	8.65	4.62	5.72
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.74	1.61	1.49	1.30	0.93	0.77	0.41	0.51
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-73.71	-68.60	-64.29	-55.83	-41.59	-32.23	-17.70	-22.88
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.35	3.11	2.88	2.51	1.79	1.49	0.79	0.98
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.52	-11.78	-11.40	-9.84	-8.27	-5.25	-3.16	-4.59
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.68	-0.79	-1.21	-0.98	-1.95	0.00	-0.36	-1.12
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.41	0.38	0.35	0.30	0.22	0.18	0.10	0.12
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.41	0.38	0.35	0.30	0.22	0.18	0.10	0.12
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.41	0.38	0.35	0.30	0.22	0.18	0.10	0.12
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	50.71	47.03	43.61	37.95	27.05	22.46	11.98	14.84
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-156.26	-145.84	-137.86	-119.53	-92.14	-67.57	-38.04	-50.81
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.31	3.07	2.85	2.48	1.77	1.47	0.78	0.97
Missoula county; Missoula and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	3.17	2.94	2.72	2.37	1.69	1.40	0.75	0.93
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	6.79	6.30	5.83	5.08	3.61	3.01	1.60	1.98
Mohave County (part); Bullhead City, AZ	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	2.84	2.64	2.45	2.13	1.52	1.26	0.67	0.83

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.42	1.32	1.22	1.06	0.76	0.63	0.34	0.42
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.19	0.18	0.17	0.14	0.10	0.09	0.05	0.06
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.20	1.11	1.03	0.89	0.64	0.53	0.28	0.35
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.85	0.79	0.73	0.64	0.45	0.38	0.20	0.25
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.43	0.40	0.37	0.32	0.23	0.19	0.10	0.13
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.83	0.77	0.71	0.62	0.44	0.37	0.20	0.24
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.27	0.25	0.24	0.21	0.15	0.12	0.06	0.08
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	3.67	3.41	3.16	2.75	1.96	1.63	0.87	1.07
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.14	0.13	0.12	0.11	0.08	0.06	0.03	0.04
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4.63	4.29	3.98	3.46	2.47	2.05	1.09	1.36
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.75	0.69	0.64	0.56	0.40	0.33	0.18	0.22
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	32.97	30.58	28.35	24.67	17.56	14.61	7.79	9.63
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-6.70	-6.24	-5.85	-5.08	-3.79	-2.93	-1.61	-2.08
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	14.70	13.64	12.65	11.00	7.84	6.51	3.47	4.30
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	382.99	354.73	327.45	285.16	199.40	170.53	89.84	109.24
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	174.53	161.49	148.59	129.48	89.28	78.01	40.74	48.86
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	373.36	345.81	319.17	277.96	194.26	166.27	87.57	106.42

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	1.11	1.03	0.95	0.83	0.59	0.49	0.26	0.32
Nogales, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	1.61	1.50	1.39	1.21	0.86	0.71	0.38	0.47
Oakridge, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.39	2.21	2.05	1.79	1.27	1.06	0.56	0.70
Ogden Area, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	2.39	2.21	2.05	1.79	1.27	1.06	0.56	0.70
Olmsted County; (part), MN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	1.07	0.99	0.92	0.80	0.57	0.47	0.25	0.31
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	4.08	3.78	3.51	3.05	2.17	1.81	0.96	1.19
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.73	1.61	1.49	1.30	0.92	0.77	0.41	0.51
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	3.56	3.30	3.06	2.66	1.90	1.57	0.84	1.04
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-31.26	-29.10	-27.29	-23.70	-17.71	-13.65	-7.52	-9.75
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-129.01	-120.19	-112.99	-98.07	-73.99	-56.17	-31.14	-40.75
Philadelphia-Wilmington, PA-NJ-DE	PM _{2.5} (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-369.69	-344.63	-324.65	-281.66	-214.18	-160.58	-89.52	-118.01
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-305.22	-284.83	-269.20	-233.41	-179.78	-132.02	-74.29	-99.14
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	149.75	138.90	128.79	112.06	79.89	66.32	35.38	43.83
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	156.61	145.26	134.69	117.20	83.55	69.36	37.00	45.83

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	2.93	2.71	2.52	2.19	1.56	1.30	0.69	0.86
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.17	1.08	1.00	0.87	0.62	0.52	0.28	0.34
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	12.33	11.44	10.61	9.23	6.58	5.46	2.91	3.61
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.01	0.93	0.87	0.75	0.54	0.45	0.24	0.29
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	8.43	7.81	7.24	6.30	4.49	3.73	1.99	2.46
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	79.90	74.10	68.69	59.77	42.55	35.40	18.87	23.34
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	72.79	67.51	62.58	54.45	38.76	32.25	17.19	21.26
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.15	0.13	0.12	0.11	0.08	0.06	0.03	0.04
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.10	1.02	0.95	0.82	0.59	0.49	0.26	0.32
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	48.33	44.82	41.54	36.15	25.72	21.41	11.41	14.11
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.14	2.91	2.70	2.35	1.67	1.39	0.74	0.92
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	3.50	3.25	3.01	2.62	1.87	1.55	0.83	1.02
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	19.73	18.30	16.97	14.77	10.53	8.74	4.66	5.77
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.64	0.59	0.55	0.48	0.34	0.28	0.15	0.19
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	72.30	67.06	62.18	54.11	38.57	32.02	17.08	21.16
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.11	0.10	0.09	0.08	0.06	0.05	0.03	0.03

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	15.31	14.20	13.17	11.46	8.17	6.78	3.62	4.48
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	12.09	11.21	10.40	9.05	6.45	5.35	2.86	3.54
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.51	1.41	1.30	1.13	0.81	0.67	0.36	0.44
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	17.35	16.09	14.92	12.98	9.26	7.68	4.10	5.08
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	20.27	18.80	17.43	15.17	10.81	8.98	4.79	5.93
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	240.47	221.80	202.00	176.37	116.11	108.76	55.24	63.33
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.55	0.51	0.47	0.41	0.29	0.24	0.13	0.16
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.79	0.74	0.68	0.59	0.41	0.35	0.19	0.23
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.34	-0.31	-0.29	-0.25	-0.19	-0.15	-0.08	-0.11
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	53.25	49.39	45.79	39.85	28.39	23.59	12.58	15.58
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	52.81	48.98	45.42	39.52	28.16	23.39	12.47	15.45
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	20.77	19.04	16.98	14.89	8.86	9.61	4.62	4.79
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	19.44	17.80	15.84	13.89	8.15	9.02	4.31	4.40
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	9.69	8.99	8.33	7.25	5.17	4.29	2.29	2.84
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-50.59	-47.11	-44.20	-38.38	-28.73	-22.08	-12.18	-15.81
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-34.74	-32.53	-31.09	-26.90	-21.59	-14.82	-8.60	-11.94
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-17.03	-15.97	-15.33	-13.25	-10.82	-7.22	-4.25	-5.99
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-17.03	-15.97	-15.33	-13.25	-10.82	-7.22	-4.25	-5.99
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	21.24	19.70	18.26	15.89	11.33	9.41	5.02	6.22

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	134.96	125.18	116.07	101.00	72.00	59.77	31.88	39.50
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	135.23	125.43	116.31	101.20	72.14	59.89	31.95	39.58
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-108.06	-101.40	-97.49	-84.26	-69.17	-45.72	-27.01	-38.29
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-106.68	-100.13	-96.30	-83.23	-68.43	-45.11	-26.69	-37.89
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-130.68	-122.38	-116.94	-101.19	-81.23	-55.73	-32.35	-44.91
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	139.69	129.51	119.91	104.36	73.92	61.98	32.92	40.54
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	139.69	129.51	119.91	104.36	73.92	61.98	32.92	40.54
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	139.66	129.48	119.88	104.34	73.91	61.97	32.92	40.53
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	139.66	129.48	119.88	104.34	73.91	61.97	32.92	40.53
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-5.99	-5.58	-5.23	-4.54	-3.38	-2.62	-1.44	-1.86
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.21	0.19	0.18	0.16	0.11	0.09	0.05	0.06
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.37	0.34	0.32	0.28	0.20	0.16	0.09	0.11
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.61	1.50	1.39	1.21	0.86	0.71	0.38	0.47
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	10.43	9.68	8.97	7.81	5.56	4.62	2.46	3.05
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	115.02	106.69	98.92	86.08	61.36	50.94	27.17	33.66
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	18.43	17.09	15.85	13.79	9.83	8.16	4.35	5.39
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4.17	3.87	3.59	3.12	2.23	1.85	0.99	1.22
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.27	0.25	0.22	0.20	0.13	0.12	0.06	0.07

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.93	0.86	0.80	0.69	0.50	0.41	0.22	0.27
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.04	0.97	0.90	0.78	0.56	0.46	0.25	0.30
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.44	0.41	0.38	0.33	0.24	0.20	0.10	0.13
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.41	0.38	0.35	0.31	0.22	0.18	0.10	0.12
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	11.39	10.57	9.80	8.53	6.08	5.05	2.69	3.33
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	11.74	10.89	10.10	8.79	6.26	5.20	2.77	3.44
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	5.78	5.36	4.97	4.33	3.08	2.56	1.37	1.69
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-215.34	-200.41	-187.81	-163.09	-121.47	-94.14	-51.72	-66.84
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.91	1.77	1.64	1.43	1.02	0.85	0.45	0.56
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	26.91	24.96	23.14	20.14	14.35	11.92	6.36	7.87
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-319.48	-297.63	-279.78	-242.82	-183.12	-139.14	-77.11	-100.84
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.47	2.29	2.12	1.85	1.32	1.09	0.58	0.72
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-2.26	-2.11	-2.02	-1.75	-1.41	-0.96	-0.56	-0.78
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	11.09	10.28	9.52	8.29	5.87	4.92	2.61	3.22
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.18	-1.10	-1.04	-0.90	-0.69	-0.51	-0.29	-0.38
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	17.95	16.65	15.44	13.44	9.58	7.95	4.24	5.25
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.95	0.88	0.82	0.71	0.51	0.42	0.22	0.28
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.03	1.88	1.74	1.52	1.08	0.90	0.48	0.59
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.59	3.33	3.09	2.69	1.92	1.59	0.85	1.05

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.18	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	3.58	3.32	3.08	2.68	1.91	1.58	0.85	1.05
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	37.92	35.17	32.62	28.38	20.23	16.80	8.96	11.10
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.78	0.73	0.67	0.59	0.42	0.35	0.18	0.23
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.19	-2.04	-1.92	-1.67	-1.27	-0.95	-0.53	-0.70
Utah County, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	19.73	18.30	16.97	14.77	10.53	8.74	4.66	5.77
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	11.51	10.68	9.90	8.61	6.14	5.10	2.72	3.37
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	33.46	31.03	28.77	25.03	17.84	14.82	7.90	9.78
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.83	0.77	0.71	0.62	0.44	0.37	0.20	0.24
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	5.57	5.17	4.79	4.17	2.97	2.47	1.32	1.63
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	1.95	1.81	1.68	1.46	1.04	0.86	0.46	0.57
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-26.84	-24.98	-23.41	-20.33	-15.14	-11.74	-6.45	-8.33
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-26.52	-24.68	-23.13	-20.09	-14.97	-11.59	-6.37	-8.24
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-26.42	-24.59	-23.05	-20.01	-14.92	-11.55	-6.35	-8.21
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	30.98	28.73	26.64	23.18	16.52	13.72	7.32	9.07

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	219.33	203.43	188.63	164.13	117.00	97.14	51.81	64.18
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	11.98	11.11	10.31	8.97	6.39	5.31	2.83	3.51
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.56	2.38	2.20	1.92	1.37	1.14	0.61	0.75
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-16.54	-15.40	-14.46	-12.56	-9.42	-7.22	-3.98	-5.19
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	2.56	2.38	2.20	1.92	1.37	1.13	0.61	0.75
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.49	0.46	0.43	0.37	0.26	0.22	0.12	0.14
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	3.58	3.32	3.08	2.68	1.91	1.59	0.85	1.05
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	16.03	14.87	13.79	12.00	8.55	7.10	3.79	4.69
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	8.20	7.61	7.06	6.14	4.38	3.63	1.94	2.40
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	1.31	1.22	1.13	0.98	0.70	0.58	0.31	0.38
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.64	3.37	3.13	2.72	1.94	1.61	0.86	1.06
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	7.83	7.26	6.74	5.86	4.18	3.47	1.85	2.29
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	5.96	5.53	5.13	4.46	3.18	2.64	1.41	1.74

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million; NO_x = nitrogen oxides

Table A-9. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Nitrogen Oxides (NO_x), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	8.71	8.08	7.45	6.41	4.37	3.54	1.74	2.30
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	37.02	34.33	31.66	27.21	18.57	15.03	7.39	9.76
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	15.69	14.55	13.41	11.52	7.85	6.36	3.13	4.12
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.30	2.14	1.97	1.69	1.15	0.93	0.46	0.60
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	21.33	19.78	18.23	15.67	10.66	8.65	4.25	5.59
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.12	0.12	0.11	0.09	0.06	0.05	0.02	0.03
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.06	0.98	0.90	0.78	0.53	0.43	0.21	0.28
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	12.39	11.48	10.58	9.09	6.17	5.02	2.47	3.23
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	14.50	13.44	12.38	10.64	7.23	5.87	2.89	3.79
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-499.92	-466.01	-433.95	-374.62	-272.59	-207.46	-102.60	-150.56
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	2.15	2.00	1.84	1.58	1.07	0.87	0.43	0.56
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	26.97	25.01	23.06	19.82	13.52	10.95	5.38	7.11
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.03	0.96	0.88	0.76	0.52	0.42	0.21	0.27
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	3.28	3.04	2.80	2.40	1.63	1.33	0.65	0.85
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-274.68	-256.40	-239.39	-206.89	-152.98	-114.66	-56.79	-85.46

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-14.73	-13.73	-12.79	-11.04	-8.04	-6.11	-3.02	-4.44
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	4.26	3.95	3.64	3.13	2.14	1.73	0.85	1.12
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.44	1.33	1.23	1.06	0.72	0.58	0.29	0.38
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	15.04	13.95	12.86	11.06	7.55	6.11	3.00	3.97
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	12.71	11.78	10.86	9.34	6.36	5.16	2.53	3.34
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.49	0.45	0.42	0.36	0.24	0.20	0.10	0.13
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.02
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.29	0.27	0.25	0.21	0.14	0.12	0.06	0.08
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	138.06	128.02	118.02	101.44	69.15	56.02	27.54	36.35
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.85	0.79	0.72	0.62	0.43	0.34	0.17	0.22
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-10.30	-9.65	-9.08	-7.87	-6.06	-4.37	-2.17	-3.48
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.22	0.20	0.19	0.16	0.11	0.09	0.04	0.05
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	66.20	61.38	56.57	48.61	33.07	26.84	13.19	17.35
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-588.74	-548.91	-511.32	-441.49	-321.93	-244.51	-120.94	-178.08
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.39	0.36	0.34	0.29	0.20	0.16	0.08	0.10
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.57	0.52	0.48	0.42	0.28	0.23	0.11	0.15
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-179.93	-167.73	-156.21	-134.86	-98.18	-74.69	-36.94	-54.25
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-181.70	-169.38	-157.72	-136.16	-99.08	-75.41	-37.29	-54.72
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	27.77	25.75	23.75	20.41	13.93	11.27	5.54	7.33
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	8.71	8.08	7.45	6.41	4.37	3.54	1.74	2.30

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.29	0.27	0.25	0.21	0.15	0.12	0.06	0.08
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	14.29	13.25	12.21	10.49	7.12	5.79	2.85	3.73
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-146.36	-136.43	-127.04	-109.68	-79.80	-60.74	-30.04	-44.08
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.15	0.13	0.12	0.11	0.07	0.06	0.03	0.04
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.32	1.22	1.13	0.97	0.66	0.53	0.26	0.35
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.89	0.83	0.76	0.65	0.45	0.36	0.18	0.24
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-41.71	-38.92	-36.31	-31.37	-23.10	-17.38	-8.61	-12.87
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	4.59	4.25	3.92	3.37	2.30	1.86	0.92	1.21
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	7.78	7.22	6.65	5.72	3.90	3.16	1.55	2.05
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	37.38	34.67	31.97	27.48	18.76	15.18	7.46	9.87
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	70.56	65.44	60.34	51.87	35.41	28.65	14.08	18.63
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-690.43	-644.41	-601.51	-519.82	-383.84	-288.06	-142.65	-214.23
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	4.57	4.24	3.91	3.36	2.29	1.85	0.91	1.20
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.30	2.14	1.97	1.69	1.15	0.93	0.46	0.60
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	4.55	4.22	3.89	3.34	2.28	1.85	0.91	1.19
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	51.16	47.44	43.73	37.59	25.63	20.76	10.21	13.48
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	46.87	43.47	40.08	34.45	23.52	19.03	9.36	12.38

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	27.66	25.65	23.65	20.33	13.88	11.23	5.52	7.30
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	34.40	31.90	29.41	25.28	17.26	13.96	6.86	9.08
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	70.15	65.06	59.99	51.57	35.20	28.48	14.00	18.53
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	65.34	60.60	55.88	48.03	32.79	26.53	13.04	17.26
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.64	0.60	0.55	0.47	0.32	0.26	0.13	0.17
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	12.25	11.35	10.46	8.99	6.10	4.96	2.44	3.19
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	46.83	43.42	40.02	34.40	23.43	19.00	9.34	12.31
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.43	0.40	0.35	0.30	0.16	0.16	0.08	0.07
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.41	0.37	0.33	0.28	0.15	0.15	0.07	0.06
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	20.10	18.65	17.19	14.78	10.09	8.16	4.01	5.31
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	27.52	25.52	23.53	20.23	13.81	11.17	5.49	7.27
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	173.57	160.92	148.30	127.44	86.67	70.37	34.59	45.46
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-383.99	-357.99	-333.43	-287.88	-209.76	-159.43	-78.86	-115.97
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-59.60	-55.86	-52.56	-45.58	-35.27	-25.31	-12.59	-20.32
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-159.81	-149.36	-139.78	-120.93	-90.69	-67.06	-33.26	-51.16
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	4.55	4.10	3.58	3.00	1.25	1.63	0.77	0.32
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-15.12	-14.14	-13.24	-11.45	-8.62	-6.35	-3.15	-4.87

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	86.47	80.08	73.63	63.22	42.36	34.89	17.12	21.95
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.20	0.19	0.17	0.15	0.10	0.08	0.04	0.05
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.66	0.61	0.56	0.48	0.33	0.27	0.13	0.17
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.25	0.23	0.21	0.18	0.12	0.10	0.05	0.07
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.10	2.87	2.65	2.28	1.55	1.26	0.62	0.82
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-462.37	-431.01	-401.36	-346.50	-252.13	-191.89	-94.89	-139.26
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-20.14	-18.77	-17.49	-15.10	-11.00	-8.36	-4.14	-6.08
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-59.01	-55.06	-51.36	-44.38	-32.65	-24.59	-12.17	-18.18
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-69.45	-64.74	-60.29	-52.05	-37.89	-28.82	-14.25	-20.93
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	5.46	5.07	4.67	4.02	2.74	2.22	1.09	1.44
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-24.90	-23.21	-21.61	-18.66	-13.58	-10.33	-5.11	-7.50
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-24.51	-22.85	-21.29	-18.38	-13.39	-10.18	-5.03	-7.40
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.92	0.86	0.79	0.68	0.46	0.38	0.18	0.24
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.03
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.01	2.79	2.57	2.21	1.51	1.22	0.60	0.79
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.40	0.37	0.34	0.29	0.20	0.16	0.08	0.11
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.18	-0.17	-0.16	-0.14	-0.12	-0.08	-0.04	-0.07
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.86	0.80	0.73	0.63	0.43	0.35	0.17	0.23

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	12.03	11.16	10.29	8.84	6.03	4.88	2.40	3.17
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.93	0.87	0.80	0.69	0.47	0.38	0.19	0.25
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	37.02	34.33	31.66	27.21	18.58	15.03	7.39	9.78
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-110.71	-103.23	-96.19	-83.07	-60.69	-46.01	-22.76	-33.61
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-8.11	-7.56	-7.04	-6.08	-4.43	-3.37	-1.67	-2.45
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-8.05	-7.51	-7.00	-6.04	-4.41	-3.35	-1.65	-2.44
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	25.12	23.29	21.47	18.46	12.59	10.19	5.01	6.62
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	25.50	23.65	21.81	18.75	12.80	10.35	5.09	6.73
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.44	0.41	0.37	0.32	0.22	0.18	0.09	0.12
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-1,219.79	-1,137.80	-1,060.85	-916.32	-671.91	-507.62	-251.22	-373.17
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.54	0.50	0.46	0.40	0.27	0.22	0.11	0.14
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3.79	3.52	3.24	2.79	1.90	1.54	0.76	1.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4.59	4.26	3.92	3.37	2.30	1.86	0.92	1.21
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	3.79	3.52	3.24	2.79	1.90	1.54	0.76	1.00
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	4.58	4.25	3.92	3.37	2.30	1.86	0.91	1.21
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-20.18	-18.81	-17.52	-15.13	-11.02	-8.38	-4.14	-6.09

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.07	1.92	1.77	1.52	1.04	0.84	0.41	0.55
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	11.71	10.86	10.01	8.60	5.87	4.75	2.34	3.09
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.22	0.20	0.19	0.16	0.11	0.09	0.04	0.06
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.01	0.94	0.87	0.74	0.51	0.41	0.20	0.27
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	3.83	3.55	3.27	2.81	1.92	1.55	0.76	1.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	3.38	3.14	2.89	2.49	1.70	1.37	0.68	0.89
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.00	0.93	0.86	0.74	0.50	0.41	0.20	0.26
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.32	1.22	1.13	0.97	0.66	0.54	0.26	0.35
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.08	0.07	0.06	0.04	0.03	0.02	0.02
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	2.83	2.62	2.42	2.08	1.42	1.15	0.56	0.75
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.93	0.87	0.80	0.69	0.47	0.38	0.19	0.25
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.19	0.18	0.17	0.14	0.10	0.08	0.04	0.05
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-19.20	-17.90	-16.68	-14.41	-10.53	-7.98	-3.95	-5.83
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.62	0.57	0.53	0.45	0.31	0.25	0.12	0.16
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.20	0.18	0.17	0.14	0.10	0.08	0.04	0.05
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	2.12	1.97	1.81	1.56	1.06	0.86	0.42	0.56
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.12	1.97	1.81	1.56	1.06	0.86	0.42	0.56
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	2.24	2.07	1.91	1.64	1.12	0.91	0.45	0.59

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	19.59	18.17	16.76	14.40	9.83	7.95	3.91	5.17
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	23.55	21.84	20.14	17.31	11.82	9.56	4.70	6.22
La Porte County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.31	1.21	1.12	0.96	0.66	0.53	0.26	0.35
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.41	0.38	0.35	0.30	0.20	0.16	0.08	0.11
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	5.84	5.41	4.99	4.29	2.93	2.37	1.17	1.54
Lake County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-456.31	-425.39	-396.18	-342.04	-249.10	-189.43	-93.68	-137.67
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.77	0.71	0.66	0.56	0.39	0.31	0.15	0.20
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-459.58	-428.42	-398.98	-344.44	-250.74	-190.75	-94.34	-138.53
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.32	0.30	0.27	0.24	0.16	0.13	0.06	0.08
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.17	0.16	0.15	0.13	0.09	0.07	0.03	0.05
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.44	0.41	0.38	0.32	0.22	0.18	0.09	0.12
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	11.21	10.39	9.58	8.24	5.62	4.55	2.24	2.96
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	11.21	10.39	9.58	8.24	5.62	4.55	2.24	2.96
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	5.46	5.07	4.67	4.02	2.74	2.22	1.09	1.44
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	46.74	43.35	39.97	34.36	23.46	18.97	9.33	12.34
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.90	0.83	0.77	0.66	0.45	0.37	0.18	0.24
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-181.68	-169.35	-157.70	-136.14	-99.06	-75.40	-37.29	-54.71
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	2.94	2.73	2.52	2.16	1.48	1.19	0.59	0.78
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-393.14	-366.49	-341.31	-294.67	-214.54	-163.19	-80.71	-118.54
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.12	0.12	0.11	0.09	0.06	0.05	0.02	0.03
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.04	0.04	0.02	0.02
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	2.78	2.58	2.38	2.05	1.40	1.13	0.56	0.73
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.61	1.50	1.38	1.18	0.79	0.65	0.32	0.41
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.91	0.85	0.78	0.67	0.46	0.37	0.18	0.24
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-111.21	-105.44	-101.34	-88.66	-76.80	-49.51	-24.92	-47.29
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-462.31	-431.05	-401.57	-346.74	-252.98	-192.04	-95.00	-140.00
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-111.00	-105.25	-101.16	-88.51	-76.70	-49.43	-24.88	-47.24
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	-110.99	-105.23	-101.15	-88.50	-76.69	-49.42	-24.88	-47.24
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-110.95	-105.20	-101.12	-88.47	-76.67	-49.41	-24.87	-47.23
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-111.84	-106.02	-101.87	-89.13	-77.12	-49.77	-25.05	-47.46
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	2.19	2.03	1.87	1.61	1.10	0.89	0.44	0.58
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-311.27	-290.20	-270.30	-233.37	-170.07	-129.25	-63.93	-94.03
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-499.02	-465.17	-433.18	-373.96	-272.13	-207.10	-102.42	-150.32
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	2.24	2.08	1.92	1.65	1.13	0.91	0.45	0.59
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	90.10	83.56	77.05	66.23	45.22	36.58	17.98	23.79
Marion County; Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	11.13	10.32	9.52	8.18	5.59	4.52	2.22	2.94

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.00	0.93	0.86	0.74	0.50	0.41	0.20	0.27
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-89.52	-83.45	-77.71	-67.09	-48.83	-37.15	-18.37	-26.97
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.03	1.89	1.74	1.49	1.02	0.83	0.41	0.54
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-40.23	-37.61	-35.22	-30.48	-22.93	-16.90	-8.39	-12.97
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-33.40	-31.28	-29.38	-25.46	-19.51	-14.13	-7.02	-11.17
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.10	0.06	0.05	0.03	0.03
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.06	0.05	0.03	0.03
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.13	0.12	0.11	0.10	0.06	0.05	0.03	0.03
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	29.30	27.17	25.05	21.54	14.70	11.89	5.85	7.74
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-272.25	-254.15	-237.31	-205.11	-151.76	-113.67	-56.30	-84.82
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.92	1.78	1.64	1.41	0.96	0.78	0.38	0.51
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.83	1.70	1.56	1.34	0.92	0.74	0.36	0.48
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.32	3.08	2.83	2.43	1.64	1.34	0.66	0.85
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.73	1.60	1.48	1.27	0.87	0.70	0.34	0.46
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.95	0.88	0.82	0.70	0.48	0.39	0.19	0.25
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.12	0.11	0.11	0.09	0.06	0.05	0.02	0.03
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.65	0.60	0.55	0.48	0.33	0.26	0.13	0.17
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.48	0.45	0.41	0.35	0.24	0.20	0.10	0.13

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.25	0.24	0.22	0.19	0.13	0.10	0.05	0.07
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.50	0.46	0.42	0.36	0.25	0.20	0.10	0.13
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.18	0.17	0.15	0.13	0.09	0.07	0.04	0.05
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	2.18	2.02	1.87	1.60	1.09	0.89	0.44	0.58
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.54	2.36	2.18	1.87	1.28	1.03	0.51	0.67
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.39	0.36	0.33	0.28	0.19	0.16	0.08	0.10
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	18.42	17.08	15.73	13.52	9.19	7.47	3.67	4.82
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-8.25	-7.69	-7.16	-6.18	-4.50	-3.42	-1.69	-2.49
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	8.50	7.88	7.27	6.25	4.26	3.45	1.70	2.24
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	119.59	109.98	99.75	85.11	51.54	46.79	22.77	24.34
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	21.86	19.55	16.74	13.90	4.38	7.50	3.51	0.14
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	114.13	104.91	95.07	81.10	48.79	44.57	21.68	22.89
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.52	0.48	0.44	0.38	0.25	0.21	0.10	0.13
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.96	0.89	0.82	0.71	0.48	0.39	0.19	0.25
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.36	1.26	1.16	1.00	0.68	0.55	0.27	0.36
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.36	1.26	1.16	1.00	0.68	0.55	0.27	0.36
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.57	0.53	0.49	0.42	0.29	0.23	0.11	0.15

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.34	2.17	2.00	1.72	1.17	0.95	0.47	0.62
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.02	0.94	0.87	0.75	0.51	0.41	0.20	0.27
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.99	1.85	1.70	1.46	1.00	0.81	0.40	0.53
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-39.28	-36.63	-34.12	-29.46	-21.49	-16.32	-8.07	-11.89
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-181.77	-169.55	-158.08	-136.55	-100.13	-75.64	-37.44	-55.61
Philadelphia-Wilmington, PA-NJ-DE	PM _{2.5} (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-565.26	-527.43	-492.06	-425.13	-312.90	-235.55	-116.61	-174.24
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-527.86	-492.75	-460.08	-397.64	-294.13	-220.37	-109.15	-164.36
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	86.38	80.11	73.86	63.49	43.35	35.07	17.24	22.81
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	90.46	83.89	77.36	66.49	45.40	36.72	18.06	23.89
Pierce County; Tacoma, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Pima County; Ajo planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	1.79	1.66	1.53	1.32	0.90	0.73	0.36	0.47
Pinal and Gila Counties; Payson, AZ	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.79	0.73	0.67	0.58	0.39	0.32	0.16	0.21
Pinal County (part); West Pinal, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	7.27	6.74	6.22	5.34	3.65	2.95	1.45	1.92
Pitkin County; Aspen, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.58	0.54	0.50	0.43	0.29	0.24	0.12	0.15
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	4.28	3.97	3.65	3.14	2.14	1.73	0.85	1.12

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	44.69	41.43	38.18	32.81	22.30	18.12	8.90	11.70
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	40.64	37.67	34.71	29.83	20.27	16.47	8.09	10.63
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.64	0.59	0.54	0.47	0.32	0.26	0.13	0.17
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	26.79	24.84	22.88	19.66	13.34	10.86	5.33	6.99
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.87	1.74	1.60	1.38	0.94	0.76	0.37	0.49
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.95	1.81	1.67	1.43	0.98	0.79	0.39	0.51
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	11.39	10.56	9.74	8.37	5.71	4.62	2.27	3.01
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	41.78	38.75	35.73	30.71	20.97	16.96	8.34	11.03
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	8.83	8.19	7.55	6.49	4.43	3.58	1.76	2.33
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	6.84	6.34	5.85	5.03	3.43	2.78	1.37	1.81
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.09	1.01	0.93	0.80	0.55	0.44	0.22	0.29
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	9.74	9.03	8.33	7.16	4.89	3.95	1.94	2.57
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	11.37	10.55	9.73	8.36	5.71	4.62	2.27	3.00
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-112.62	-106.74	-102.54	-89.70	-77.51	-50.08	-25.20	-47.67
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.43	0.40	0.37	0.32	0.22	0.18	0.09	0.11
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.20	0.19	0.17	0.14	0.08	0.08	0.04	0.04

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.44	-0.41	-0.39	-0.33	-0.24	-0.18	-0.09	-0.13
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	29.46	27.32	25.18	21.65	14.76	11.95	5.88	7.76
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	30.28	28.08	25.89	22.25	15.18	12.29	6.04	7.98
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-33.94	-31.90	-30.16	-26.21	-20.86	-14.58	-7.27	-12.24
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-34.57	-32.48	-30.70	-26.68	-21.18	-14.83	-7.40	-12.40
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	5.72	5.30	4.89	4.20	2.87	2.32	1.14	1.51
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-65.48	-61.06	-56.89	-49.12	-35.86	-27.21	-13.46	-19.85
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-83.54	-78.05	-73.01	-63.15	-47.20	-35.01	-17.36	-26.57
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-45.87	-42.87	-40.12	-34.71	-26.02	-19.25	-9.54	-14.67
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-45.87	-42.87	-40.12	-34.71	-26.02	-19.25	-9.54	-14.67
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	11.32	10.50	9.68	8.32	5.68	4.59	2.26	2.99
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	78.03	72.36	66.72	57.35	39.16	31.68	15.57	20.60
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	78.14	72.47	66.82	57.44	39.21	31.72	15.60	20.63
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-301.14	-281.46	-263.42	-227.90	-170.99	-126.38	-62.68	-96.49
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-300.30	-280.68	-262.70	-227.29	-170.56	-126.04	-62.52	-96.26
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-314.29	-293.65	-274.66	-237.57	-177.58	-131.72	-65.31	-99.96
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	68.65	63.55	58.40	50.12	33.42	27.65	13.57	17.25
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	68.65	63.55	58.40	50.12	33.42	27.65	13.57	17.25
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	68.64	63.54	58.39	50.11	33.41	27.65	13.57	17.24

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	68.64	63.54	58.39	50.11	33.41	27.65	13.57	17.24
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-7.37	-6.87	-6.40	-5.53	-4.02	-3.06	-1.51	-2.22
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.10	0.09	0.08	0.05	0.04	0.02	0.03
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.21	0.20	0.18	0.16	0.11	0.09	0.04	0.06
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.96	0.89	0.82	0.71	0.48	0.39	0.19	0.25
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	6.04	5.60	5.16	4.44	3.03	2.45	1.20	1.59
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	66.39	61.57	56.77	48.80	33.32	26.95	13.25	17.53
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	10.51	9.75	8.99	7.73	5.28	4.27	2.10	2.78
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.41	2.24	2.06	1.77	1.21	0.98	0.48	0.64
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.21	-0.20	-0.19	-0.17	-0.14	-0.09	-0.05	-0.08
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.54	0.50	0.46	0.39	0.27	0.22	0.11	0.14
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.61	0.57	0.53	0.45	0.31	0.25	0.12	0.16
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.24	0.22	0.20	0.18	0.12	0.10	0.05	0.06
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.25	0.24	0.22	0.19	0.13	0.10	0.05	0.07
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	6.48	6.01	5.54	4.76	3.25	2.63	1.29	1.71
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	6.69	6.20	5.72	4.91	3.36	2.71	1.33	1.77
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	3.47	3.22	2.97	2.55	1.74	1.41	0.69	0.92
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-261.11	-243.40	-226.66	-195.68	-142.40	-108.37	-53.59	-78.66

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.07	0.99	0.91	0.78	0.53	0.43	0.21	0.28
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	15.17	14.07	12.97	11.15	7.61	6.16	3.03	4.00
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-447.58	-417.49	-389.24	-336.21	-246.48	-186.25	-92.17	-136.87
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.49	1.38	1.28	1.10	0.75	0.61	0.30	0.39
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	-5.68	-5.30	-4.96	-4.29	-3.21	-2.38	-1.18	-1.81
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5.22	4.83	4.44	3.81	2.54	2.10	1.03	1.31
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.98	-1.85	-1.72	-1.49	-1.10	-0.83	-0.41	-0.61
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	10.37	9.62	8.87	7.63	5.21	4.21	2.07	2.74
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.54	0.50	0.47	0.40	0.27	0.22	0.11	0.14
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.80	0.74	0.68	0.59	0.40	0.32	0.16	0.21
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	2.03	1.88	1.74	1.49	1.02	0.82	0.41	0.54
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.10	0.09	0.09	0.08	0.05	0.04	0.02	0.03
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	2.12	1.96	1.81	1.56	1.06	0.86	0.42	0.56
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	21.95	20.36	18.77	16.13	11.01	8.91	4.38	5.80
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.57	0.53	0.49	0.42	0.29	0.23	0.11	0.15
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-3.33	-3.11	-2.90	-2.51	-1.84	-1.39	-0.69	-1.03

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	11.39	10.56	9.74	8.37	5.71	4.62	2.27	3.01
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	6.64	6.16	5.68	4.88	3.33	2.70	1.33	1.75
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	19.09	17.70	16.31	14.02	9.56	7.74	3.81	5.02
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	3.22	2.99	2.75	2.37	1.62	1.31	0.64	0.85
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.01	0.02
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	1.12	1.03	0.95	0.82	0.56	0.45	0.22	0.29
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-32.57	-30.36	-28.28	-24.41	-17.76	-13.52	-6.69	-9.81
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-32.50	-30.29	-28.21	-24.36	-17.73	-13.49	-6.67	-9.80
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-32.48	-30.28	-28.20	-24.34	-17.73	-13.48	-6.67	-9.80
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	17.90	16.60	15.31	13.16	8.98	7.27	3.57	4.73
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	126.61	117.42	108.26	93.06	63.52	51.40	25.27	33.42
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	6.77	6.28	5.79	4.97	3.40	2.75	1.35	1.79
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.54	1.43	1.32	1.13	0.77	0.63	0.31	0.41
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-21.38	-19.94	-18.59	-16.05	-11.76	-8.89	-4.40	-6.52
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.53	1.42	1.31	1.13	0.77	0.62	0.31	0.40
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.32	0.29	0.27	0.23	0.16	0.13	0.06	0.08
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.07	1.92	1.77	1.52	1.04	0.84	0.41	0.55
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	9.25	8.58	7.91	6.80	4.64	3.76	1.85	2.44

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	4.96	4.60	4.24	3.65	2.49	2.01	0.99	1.31
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.81	0.75	0.69	0.59	0.41	0.33	0.16	0.21
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.11	1.96	1.81	1.55	1.06	0.86	0.42	0.56
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	4.54	4.21	3.88	3.34	2.28	1.84	0.91	1.20
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	3.42	3.17	2.92	2.51	1.72	1.39	0.68	0.90

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million; NO_x = nitrogen oxides

Table A-10. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Volatile Organic Compounds (VOC), 2025

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	14.01	13.08	12.34	11.16	8.23	7.82	6.13	5.38
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-15.20	-14.13	-14.55	-11.02	-8.42	-7.64	-4.97	-5.45
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	22.39	20.89	19.65	17.89	13.18	12.53	9.87	8.61
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.86	1.74	1.62	1.51	1.11	1.06	0.85	0.72
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	21.94	20.48	19.09	17.68	12.99	12.40	9.91	8.49
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.10	0.07	0.07	0.06	0.05
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.74	1.63	1.51	1.41	1.03	0.99	0.79	0.68
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	6.10	5.70	5.13	5.09	3.69	3.58	3.02	2.42
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	9.24	8.63	7.88	7.59	5.54	5.33	4.39	3.62
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-22.49	-20.97	-20.15	-17.59	-13.06	-12.30	-9.33	-8.52
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-5.82	-5.42	-5.28	-4.49	-3.35	-3.13	-2.32	-2.18
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.40	-0.37	-0.36	-0.31	-0.23	-0.22	-0.16	-0.15
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	35.76	33.38	31.34	28.62	21.07	20.05	15.83	13.77
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.51	1.41	1.32	1.20	0.89	0.84	0.66	0.58
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-2.45	-2.28	-2.28	-1.83	-1.38	-1.27	-0.88	-0.90
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	26.58	24.87	21.96	22.50	16.24	15.86	13.68	10.66

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Washington Counties (Minneapolis-St. Paul), MN												
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.21	0.20	0.19	0.17	0.13	0.12	0.10	0.08
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	4.92	4.59	4.30	3.95	2.90	2.77	2.19	1.90
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.07	-0.06	-0.09	-0.02	-0.02	-0.01	0.02	-0.01
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	24.41	22.78	21.49	19.44	14.34	13.62	10.67	9.37
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	22.07	20.60	19.44	17.57	12.96	12.30	9.63	8.46
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.24	0.22	0.20	0.20	0.14	0.14	0.12	0.09
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.34	0.32	0.30	0.27	0.20	0.19	0.15	0.13
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	209.73	195.74	184.34	167.34	123.36	117.21	92.09	80.57
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.85	0.79	0.74	0.68	0.50	0.48	0.38	0.33
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	3.93	3.67	3.26	3.31	2.39	2.33	1.99	1.57
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.14	0.13	0.11	0.11	0.08	0.08	0.07	0.05
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	85.01	79.35	74.40	68.11	50.14	47.73	37.77	32.76
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-37.64	-35.07	-34.24	-28.95	-21.63	-20.20	-14.86	-14.08
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.42	0.39	0.37	0.33	0.25	0.23	0.19	0.16
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.67	0.63	0.59	0.54	0.40	0.38	0.30	0.26
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-52.51	-48.97	-47.09	-41.04	-30.49	-28.68	-21.73	-19.87
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-46.19	-43.08	-41.38	-36.14	-26.83	-25.26	-19.17	-17.49
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	33.71	31.47	29.50	27.02	19.88	18.93	14.99	12.99
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	14.01	13.08	12.34	11.16	8.23	7.82	6.13	5.38
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.14	0.14	0.12	0.12	0.09	0.08	0.07	0.06

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.45	-4.13	-4.36	-3.13	-2.42	-2.16	-1.31	-1.56
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-10.81	-10.08	-9.68	-8.45	-6.28	-5.91	-4.48	-4.09
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.24	0.22	0.21	0.19	0.14	0.13	0.11	0.09
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.88	1.76	1.65	1.50	1.11	1.05	0.83	0.72
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	1.33	1.24	1.17	1.06	0.78	0.74	0.58	0.51
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	10.46	9.76	9.16	8.37	6.17	5.87	4.64	4.03
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	7.49	6.99	6.60	5.97	4.40	4.18	3.27	2.87
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.26	0.25	0.23	0.21	0.16	0.15	0.12	0.10
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	8.49	7.93	7.41	6.82	5.02	4.78	3.80	3.28
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	54.11	50.50	47.54	43.20	31.84	30.26	23.80	20.80
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	89.37	83.42	78.30	71.54	52.67	50.13	39.60	34.41
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	219.56	204.94	192.42	175.69	129.38	123.10	97.20	84.52
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	7.03	6.56	6.17	5.61	4.13	3.93	3.09	2.70
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.05	2.85	2.68	2.44	1.80	1.71	1.34	1.17
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	6.94	6.47	6.10	5.54	4.08	3.88	3.05	2.67
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	79.50	74.20	69.91	63.40	46.75	44.41	34.86	30.53
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	68.19	63.64	59.91	54.43	40.12	38.12	29.97	26.20
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	45.10	42.08	39.71	35.92	26.50	25.15	19.70	17.30

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	56.35	52.58	49.61	44.88	33.10	31.43	24.61	21.62
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	118.06	110.17	104.00	93.98	69.34	65.82	51.51	45.28
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	110.27	102.90	97.14	87.78	64.76	61.47	48.10	42.29
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.28	0.26	0.23	0.23	0.17	0.17	0.14	0.11
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.69	-4.36	-4.54	-3.36	-2.58	-2.33	-1.47	-1.67
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	79.35	74.05	69.87	63.20	46.62	44.26	34.66	30.44
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.73	2.55	2.40	2.17	1.60	1.52	1.19	1.05
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.35	3.13	2.95	2.67	1.97	1.87	1.47	1.29
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	34.66	32.35	30.52	27.61	20.37	19.34	15.14	13.30
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	44.92	41.92	39.55	35.77	26.39	25.05	19.62	17.23
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	293.27	273.69	258.10	233.68	172.35	163.66	128.28	112.55
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-6.05	-5.63	-5.65	-4.53	-3.42	-3.15	-2.19	-2.22
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-64.61	-60.17	-59.47	-49.07	-36.84	-34.19	-24.53	-23.95
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-567.02	-528.64	-509.96	-441.68	-328.49	-308.61	-232.38	-214.06
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	44.49	41.52	38.96	35.62	26.23	24.96	19.73	17.13
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.91	-0.84	-0.97	-0.57	-0.46	-0.39	-0.16	-0.29
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	147.97	138.11	129.79	118.31	87.15	82.89	65.36	56.93
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.28	0.26	0.25	0.23	0.17	0.16	0.12	0.11

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.24	0.22	0.20	0.20	0.14	0.14	0.12	0.09
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.31	0.29	0.28	0.25	0.19	0.18	0.14	0.12
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.50	-3.26	-3.20	-2.68	-2.01	-1.87	-1.36	-1.30
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-31.07	-28.97	-27.84	-24.30	-18.04	-16.98	-12.88	-11.76
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-9.76	-9.10	-8.76	-7.62	-5.66	-5.33	-4.03	-3.69
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	10.95	10.22	9.52	8.83	6.48	6.19	4.95	4.24
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-7.88	-7.34	-7.07	-6.15	-4.57	-4.30	-3.25	-2.98
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	7.46	6.96	6.55	5.96	4.39	4.17	3.28	2.87
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.82	-3.56	-3.43	-2.98	-2.22	-2.08	-1.58	-1.44
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-4.40	-4.10	-3.96	-3.43	-2.55	-2.40	-1.80	-1.66
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.47	-0.44	-0.45	-0.35	-0.27	-0.24	-0.16	-0.17
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.06	-0.06	-0.06	-0.04	-0.03	-0.03	-0.02	-0.02
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.10	-0.18	-0.01	-0.03	0.00	0.07	-0.01
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.36	0.33	0.31	0.29	0.21	0.20	0.16	0.14
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.19	-0.18	-0.18	-0.14	-0.11	-0.10	-0.07	-0.07
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.67	0.62	0.58	0.54	0.40	0.38	0.31	0.26
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	19.97	18.64	17.57	15.91	11.74	11.14	8.74	7.66

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.63	0.59	0.55	0.52	0.38	0.36	0.29	0.25
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	40.46	37.77	35.31	32.51	23.91	22.79	18.12	15.62
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-504.33	-470.27	-451.95	-394.36	-292.88	-275.66	-209.03	-190.92
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.99	-1.86	-1.79	-1.55	-1.15	-1.08	-0.82	-0.75
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-2.40	-2.23	-2.15	-1.87	-1.39	-1.31	-0.98	-0.91
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	13.14	12.28	11.13	10.87	7.91	7.64	6.37	5.18
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	28.94	27.01	25.28	23.23	17.09	16.28	12.92	11.16
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.07	-0.07	-0.06	-0.04	-0.04	-0.03	-0.03
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.09	-0.08	-0.08	-0.07	-0.05	-0.05	-0.03	-0.03
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.08	-0.08	-0.07	-0.05	-0.05	-0.03	-0.03
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.37	-0.34	-0.34	-0.28	-0.21	-0.19	-0.14	-0.13
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-64.38	-59.85	-61.59	-46.73	-35.70	-32.40	-21.10	-23.11
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.96	0.90	0.85	0.76	0.56	0.53	0.42	0.37
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3.52	3.29	3.06	2.84	2.09	1.99	1.60	1.36
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4.34	4.05	3.77	3.50	2.57	2.46	1.97	1.68
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	3.52	3.29	3.06	2.84	2.09	1.99	1.60	1.36
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	4.30	4.02	3.74	3.47	2.55	2.43	1.95	1.67
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-9.78	-9.12	-8.78	-7.64	-5.68	-5.34	-4.04	-3.70
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.99	2.79	2.63	2.39	1.76	1.67	1.32	1.15
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	18.61	17.36	16.36	14.84	10.94	10.40	8.16	7.15

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.28	0.26	0.24	0.22	0.16	0.15	0.12	0.11
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.67	1.56	1.47	1.33	0.98	0.93	0.73	0.64
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.89	1.77	1.60	1.56	1.14	1.10	0.92	0.75
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	3.65	3.41	3.19	2.94	2.16	2.06	1.64	1.41
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.04	0.98	0.91	0.84	0.62	0.59	0.47	0.40
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.63	1.52	1.43	1.30	0.96	0.91	0.72	0.63
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.13	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	3.16	2.95	2.76	2.54	1.87	1.78	1.41	1.22
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.63	0.59	0.55	0.52	0.38	0.36	0.29	0.25
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.30	-0.28	-0.28	-0.23	-0.17	-0.16	-0.12	-0.11
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-8.00	-7.46	-7.21	-6.21	-4.63	-4.34	-3.25	-3.01
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.68	0.63	0.59	0.54	0.40	0.38	0.30	0.26
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.29	0.27	0.25	0.23	0.17	0.16	0.13	0.11
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.33	1.24	1.15	1.08	0.79	0.75	0.61	0.52
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.32	1.23	1.14	1.07	0.78	0.75	0.60	0.51
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.44	1.35	1.25	1.17	0.86	0.82	0.66	0.56
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	32.30	30.14	28.44	25.72	18.98	18.01	14.11	12.39
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	39.08	36.47	34.41	31.12	22.96	21.79	17.06	14.99
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.30	2.14	2.02	1.83	1.35	1.28	1.00	0.88
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.13	0.12	0.12	0.11	0.08	0.07	0.06	0.05

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	10.31	9.62	9.09	8.20	6.05	5.74	4.49	3.95
Lake County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-22.17	-20.67	-20.05	-17.18	-12.80	-11.99	-8.94	-8.34
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.49	1.39	1.31	1.19	0.88	0.83	0.65	0.57
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-26.30	-24.52	-23.66	-20.48	-15.23	-14.31	-10.77	-9.93
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.42	0.39	0.37	0.34	0.25	0.24	0.19	0.16
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.37	0.34	0.32	0.29	0.22	0.20	0.16	0.14
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.17	1.09	1.03	0.93	0.69	0.65	0.51	0.45
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	15.69	14.65	13.77	12.54	9.24	8.78	6.91	6.03
Lancaster, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	15.69	14.65	13.77	12.54	9.24	8.78	6.91	6.03
Lane County (part); Oakridge, OR	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Lane County; Eugene/Springfield, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	7.46	6.96	6.55	5.96	4.39	4.17	3.28	2.87
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	68.01	63.48	59.76	54.29	40.01	38.03	29.89	26.13
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	1.35	1.26	1.19	1.08	0.79	0.75	0.59	0.52
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-46.27	-43.15	-41.45	-36.20	-26.88	-25.30	-19.20	-17.52
Lebanon County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-1.40	-1.31	-1.33	-1.03	-0.78	-0.72	-0.48	-0.51
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.36	-3.13	-3.10	-2.54	-1.91	-1.77	-1.26	-1.24
Liberty-Clairton, PA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.10	0.10	0.07	0.07	0.06	0.05
Lincoln County; Libby and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3.96	3.70	3.48	3.16	2.33	2.21	1.74	1.52
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.88	-2.68	-2.63	-2.21	-1.65	-1.54	-1.13	-1.07
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.79	1.67	1.57	1.42	1.05	1.00	0.78	0.69
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	527.99	492.78	463.68	421.63	310.73	295.36	232.39	202.95
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-11.42	-10.62	-10.76	-8.44	-6.40	-5.86	-3.97	-4.15
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	528.41	493.17	464.05	421.97	310.97	295.59	232.57	203.11
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	528.42	493.18	464.05	421.97	310.98	295.60	232.58	203.11
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	528.38	493.14	464.02	421.94	310.95	295.57	232.56	203.10
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	527.37	492.20	463.13	421.14	310.36	295.01	232.12	202.71
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	1.10	1.03	0.94	0.91	0.66	0.64	0.53	0.43
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-7.42	-6.91	-6.85	-5.61	-4.22	-3.91	-2.78	-2.74
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-21.53	-20.08	-19.31	-16.82	-12.50	-11.76	-8.90	-8.15
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	3.93	3.67	3.46	3.13	2.31	2.19	1.72	1.51
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	153.30	143.05	135.06	122.01	90.03	85.44	66.85	58.78
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	17.17	16.02	15.09	13.69	10.10	9.59	7.53	6.59
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.60	1.49	1.41	1.27	0.94	0.89	0.70	0.61
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.98	-0.91	-0.89	-0.76	-0.57	-0.53	-0.39	-0.37
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.97	0.91	0.82	0.80	0.58	0.56	0.47	0.38
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	28.65	26.74	25.09	22.94	16.89	16.08	12.71	11.03
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	31.63	29.53	27.58	25.43	18.70	17.83	14.19	12.22

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.11	0.08	0.08	0.06	0.05
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.13	0.12	0.11	0.11	0.08	0.08	0.06	0.05
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.13	0.12	0.11	0.11	0.08	0.08	0.06	0.05
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	46.14	43.06	40.59	36.77	27.12	25.76	20.20	17.71
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	29.58	27.68	24.59	24.91	18.01	17.54	15.00	11.82
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.54	-0.50	-0.53	-0.38	-0.29	-0.26	-0.16	-0.19
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.52	-0.48	-0.51	-0.36	-0.28	-0.25	-0.15	-0.18
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	6.52	6.08	5.73	5.20	3.83	3.64	2.86	2.50
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.76	0.71	0.64	0.63	0.46	0.44	0.37	0.30
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.26	1.17	1.11	1.00	0.74	0.70	0.55	0.48
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.08	0.08	0.06	0.05	0.04	0.04
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.06	0.06	0.06	0.04	0.04	0.03	0.03
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.28	1.19	1.13	1.02	0.75	0.71	0.56	0.49
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.16	-0.15	-0.14	-0.12	-0.09	-0.09	-0.06	-0.06
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.46	0.43	0.40	0.37	0.27	0.26	0.21	0.18
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.15	0.14	0.13	0.12	0.09	0.09	0.07	0.06
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.28	0.26	0.24	0.23	0.17	0.16	0.13	0.11
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.25	0.23	0.22	0.20	0.14	0.14	0.11	0.09
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	3.39	3.16	2.98	2.70	1.99	1.89	1.48	1.30
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.18	-0.17	-0.16	-0.14	-0.10	-0.10	-0.07	-0.07
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4.30	4.01	3.78	3.43	2.53	2.40	1.88	1.65

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.44	0.41	0.38	0.35	0.26	0.25	0.20	0.17
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	18.30	17.09	15.90	14.77	10.84	10.36	8.30	7.09
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-1.49	-1.38	-1.33	-1.16	-0.86	-0.81	-0.61	-0.56
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	4.77	4.46	4.06	3.93	2.86	2.76	2.28	1.87
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	247.06	230.75	213.44	200.57	146.93	140.73	113.80	96.11
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	131.08	122.43	113.08	106.56	78.02	74.78	60.60	51.04
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	245.26	229.07	211.96	199.03	145.82	139.65	112.85	95.39
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.88	0.82	0.77	0.70	0.52	0.49	0.39	0.34
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.64	0.60	0.55	0.52	0.38	0.37	0.30	0.25
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.09	1.95	1.83	1.66	1.23	1.17	0.92	0.80
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	2.09	1.95	1.83	1.66	1.23	1.17	0.92	0.80
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.08	0.06	0.08	0.06	0.06	0.06	0.04
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.30	0.28	0.21	0.29	0.20	0.21	0.21	0.13
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.18	-0.17	-0.16	-0.14	-0.10	-0.10	-0.07	-0.07
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.57	1.47	1.38	1.25	0.92	0.88	0.69	0.60
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	3.24	3.02	2.85	2.58	1.90	1.81	1.42	1.24
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-1.29	-1.21	-1.19	-0.98	-0.74	-0.68	-0.49	-0.48

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.21	2.09	1.39	2.27	1.54	1.63	1.76	1.03
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	38.27	35.81	31.57	32.44	23.40	22.86	19.75	15.37
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	68.91	64.43	58.10	57.27	41.61	40.28	33.80	27.27
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	148.24	138.33	130.61	117.97	87.05	82.61	64.62	56.84
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	153.96	143.67	135.65	122.54	90.42	85.81	67.14	59.04
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.67	-1.56	-1.50	-1.31	-0.97	-0.91	-0.69	-0.63
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.16	1.08	1.00	0.94	0.69	0.66	0.54	0.45
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.27	0.25	0.22	0.22	0.16	0.16	0.13	0.11
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	5.48	5.12	4.73	4.45	3.26	3.12	2.52	2.13
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.52	0.49	0.45	0.42	0.31	0.29	0.24	0.20
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	5.06	4.72	4.40	4.08	2.99	2.86	2.29	1.96
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	32.17	30.05	27.62	26.27	19.20	18.44	15.05	12.57
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	39.86	37.22	34.62	32.19	23.63	22.57	18.10	15.45
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.10	0.07	0.07	0.06	0.05
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.12	1.05	0.99	0.89	0.66	0.62	0.49	0.43
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	44.43	41.47	39.08	35.43	26.13	24.82	19.48	17.06
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.68	1.57	1.46	1.36	0.99	0.95	0.76	0.65

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	3.56	3.32	3.14	2.83	2.09	1.98	1.55	1.37
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	19.37	18.08	17.06	15.42	11.38	10.80	8.45	7.43
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.21	0.20	0.18	0.17	0.13	0.12	0.10	0.08
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	42.00	39.21	36.58	33.83	24.85	23.72	18.93	16.24
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.01
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	5.23	4.88	4.46	4.29	3.13	3.02	2.49	2.05
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5.37	5.02	4.63	4.37	3.20	3.07	2.48	2.09
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.03	-0.05	-0.01	-0.01	-0.01	0.01	-0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	16.92	15.79	14.90	13.47	9.94	9.44	7.39	6.49
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	19.79	18.47	17.43	15.76	11.63	11.04	8.65	7.59
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	525.51	490.47	461.49	419.66	309.27	293.98	231.31	202.00
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.17	-0.16	-0.16	-0.13	-0.10	-0.09	-0.06	-0.06
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.42	-1.32	-1.29	-1.09	-0.82	-0.76	-0.56	-0.53
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.22	-0.20	-0.19	-0.17	-0.13	-0.12	-0.09	-0.08
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	49.49	46.19	43.54	39.46	29.10	27.63	21.68	19.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	49.95	46.62	43.98	39.79	29.35	27.87	21.83	19.17
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	80.26	74.91	70.54	64.04	47.21	44.86	35.25	30.83
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	79.06	73.78	69.49	63.08	46.50	44.18	34.71	30.37
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	5.85	5.46	5.10	4.70	3.46	3.30	2.62	2.26
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-2.75	-2.56	-2.56	-2.06	-1.55	-1.43	-1.00	-1.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	42.33	39.52	36.97	34.00	25.00	23.83	18.93	16.34
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	29.67	27.70	26.00	23.75	17.49	16.64	13.14	11.42
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	29.67	27.70	26.00	23.75	17.49	16.64	13.14	11.42
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	16.21	15.13	14.20	12.99	9.56	9.10	7.20	6.25
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	122.53	114.35	107.81	97.66	72.03	68.40	53.64	47.03
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	122.84	114.64	108.08	97.91	72.21	68.57	53.78	47.15
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	205.28	191.60	179.98	164.20	120.94	115.05	90.78	79.00
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	206.52	192.76	181.07	165.19	121.67	115.74	91.32	79.48
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	185.21	172.88	162.33	148.20	109.14	103.84	81.98	71.30
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	129.29	120.67	113.51	103.27	76.10	72.34	56.94	49.70
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	129.29	120.67	113.51	103.27	76.10	72.34	56.94	49.70
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	129.25	120.64	113.48	103.24	76.08	72.32	56.93	49.69
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	129.25	120.64	113.48	103.24	76.08	72.32	56.93	49.69
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.50	-0.46	-0.45	-0.39	-0.29	-0.27	-0.20	-0.19
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.19	-0.18	-0.17	-0.14	-0.11	-0.10	-0.07	-0.07
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.64	0.60	0.55	0.52	0.38	0.37	0.30	0.25

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Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
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Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-14.81	-13.81	-13.42	-11.45	-8.54	-7.99	-5.93	-5.56
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	90.46	84.43	79.36	72.31	53.27	50.66	39.92	34.80
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	15.19	14.18	13.34	12.14	8.94	8.50	6.69	5.84
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.35	-0.32	-0.37	-0.22	-0.18	-0.15	-0.06	-0.11
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.28	0.27	0.24	0.23	0.17	0.16	0.14	0.11
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.95	0.88	0.83	0.75	0.56	0.53	0.41	0.36
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.51	0.47	0.44	0.41	0.30	0.29	0.23	0.20
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.09	0.08	0.07	0.07	0.05	0.05	0.05	0.04
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.33	0.31	0.29	0.26	0.19	0.18	0.14	0.13
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	11.28	10.52	9.94	8.98	6.62	6.29	4.92	4.32
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	11.61	10.84	10.23	9.25	6.82	6.47	5.07	4.45
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	2.82	2.63	2.44	2.28	1.67	1.60	1.29	1.09
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-13.58	-12.66	-12.18	-10.61	-7.88	-7.42	-5.62	-5.14
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.88	0.82	0.76	0.71	0.52	0.50	0.40	0.34
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	16.35	15.26	14.25	13.16	9.67	9.22	7.35	6.32
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	47.91	44.74	41.51	38.77	28.43	27.20	21.88	18.60
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.93	0.87	0.80	0.76	0.55	0.53	0.43	0.36
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-1.30	-1.21	-1.23	-0.95	-0.72	-0.66	-0.44	-0.47
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	11.51	10.75	10.13	9.18	6.77	6.43	5.05	4.42
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.68	0.64	0.60	0.55	0.40	0.38	0.30	0.26
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	4.03	3.77	3.35	3.39	2.45	2.39	2.04	1.61

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.88	0.82	0.77	0.70	0.52	0.49	0.38	0.34
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.23	2.08	1.97	1.78	1.31	1.25	0.98	0.86
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	3.52	3.28	3.10	2.80	2.07	1.96	1.53	1.35
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.03	-0.03	-0.02	-0.02	-0.02	-0.01	-0.01
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.08	0.07	0.07	0.05	0.05	0.04	0.03
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.17	0.16	0.15	0.14	0.10	0.10	0.08	0.07
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	1.95	1.82	1.69	1.57	1.15	1.10	0.88	0.75
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.91	-0.85	-0.82	-0.71	-0.53	-0.50	-0.38	-0.34
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	15.82	14.78	13.62	12.88	9.43	9.04	7.35	6.17
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.19	-0.17	-0.18	-0.14	-0.10	-0.09	-0.06	-0.07
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-7.69	-7.17	-6.91	-6.00	-4.46	-4.20	-3.17	-2.91
Utah County, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	19.37	18.08	17.07	15.42	11.38	10.80	8.45	7.43
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	11.21	10.47	9.88	8.93	6.59	6.25	4.89	4.30
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	28.44	26.54	24.98	22.70	16.73	15.90	12.50	10.93
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.62	0.58	0.54	0.49	0.36	0.34	0.27	0.24
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	5.26	4.90	4.63	4.19	3.09	2.93	2.30	2.02
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.09	-0.08	-0.08	-0.07	-0.05	-0.05	-0.03	-0.03
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.60	0.56	0.51	0.50	0.36	0.35	0.29	0.24
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-1.27	-1.19	-1.14	-0.99	-0.74	-0.70	-0.53	-0.48
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-2.92	-2.72	-2.63	-2.28	-1.69	-1.59	-1.20	-1.10
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.47	-3.23	-3.12	-2.70	-2.01	-1.89	-1.42	-1.31

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	25.07	23.40	22.01	20.03	14.76	14.03	11.05	9.64
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	167.43	156.27	146.80	133.92	98.64	93.83	74.03	64.43
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	5.33	4.98	4.60	4.33	3.17	3.04	2.47	2.08
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.56	2.39	2.25	2.03	1.50	1.42	1.11	0.98
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-8.20	-7.64	-7.38	-6.38	-4.75	-4.46	-3.35	-3.09
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.02	0.96	0.88	0.83	0.61	0.59	0.48	0.40
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.48	0.45	0.42	0.38	0.28	0.27	0.21	0.18
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	3.32	3.10	2.92	2.65	1.95	1.85	1.45	1.27
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	11.09	10.36	9.71	8.89	6.55	6.23	4.94	4.28
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	4.62	4.32	4.03	3.72	2.74	2.61	2.08	1.79
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.08	0.05	0.08	0.05	0.06	0.06	0.04
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.23	0.22	0.16	0.23	0.16	0.16	0.17	0.11
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	6.24	5.82	5.48	4.99	3.67	3.49	2.75	2.40
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.55	1.45	1.30	1.29	0.94	0.91	0.77	0.62

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million; VOC = volatile organic compound

Table A-11. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Volatile Organic Compounds (VOC), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	13.74	12.79	11.86	10.47	7.58	6.45	3.64	4.23
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-124.94	-117.05	-110.69	-96.91	-75.30	-57.08	-34.00	-44.16
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	16.23	15.08	13.87	12.28	8.62	7.71	4.25	4.71
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.28	-0.28	-0.30	-0.25	-0.29	-0.10	-0.09	-0.20
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.64	0.46	0.02	0.17	-0.85	0.61	0.00	-0.88
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.37	-0.35	-0.33	-0.29	-0.23	-0.17	-0.10	-0.14
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.31	-0.30	-0.31	-0.26	-0.27	-0.12	-0.10	-0.18
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-16.96	-15.94	-15.23	-13.28	-10.69	-7.63	-4.68	-6.41
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-14.30	-13.47	-12.95	-11.26	-9.24	-6.38	-3.98	-5.61
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-54.73	-51.18	-48.10	-42.22	-32.09	-25.23	-14.77	-18.55
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-19.86	-18.59	-17.51	-15.36	-11.78	-9.12	-5.38	-6.85
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.30	-1.22	-1.15	-1.01	-0.77	-0.60	-0.35	-0.45
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	21.43	19.87	18.16	16.13	11.04	10.26	5.56	5.91
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.23	1.14	1.05	0.93	0.66	0.58	0.32	0.37
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-14.56	-13.64	-12.89	-11.29	-8.74	-6.66	-3.96	-5.11
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-109.31	-102.65	-97.84	-85.37	-68.14	-49.36	-30.06	-40.65

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.02	0.01
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.92	1.77	1.58	1.42	0.89	0.94	0.48	0.44
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-3.54	-3.32	-3.15	-2.75	-2.16	-1.61	-0.97	-1.27
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	23.87	22.23	20.61	18.19	13.16	11.21	6.32	7.35
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	22.61	21.06	19.55	17.25	12.53	10.61	6.00	7.02
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.57	-0.53	-0.51	-0.45	-0.36	-0.26	-0.16	-0.22
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.10	0.09	0.09	0.08	0.05	0.05	0.03	0.03
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.29	0.27	0.25	0.22	0.16	0.14	0.08	0.09
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	177.54	165.16	152.58	134.91	96.33	83.81	46.79	53.27
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.03	0.02	0.02	-0.02	0.03	0.00	-0.03
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-14.44	-13.57	-12.94	-11.29	-9.03	-6.52	-3.98	-5.39
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.36	-0.34	-0.32	-0.28	-0.23	-0.16	-0.10	-0.14
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	42.75	39.55	35.87	31.97	21.23	20.67	10.99	11.08
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-141.02	-131.99	-124.43	-109.07	-83.83	-64.72	-38.21	-48.82
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.18	0.17	0.15	0.14	0.09	0.09	0.05	0.04
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.30	0.28	0.25	0.23	0.15	0.15	0.08	0.07
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-131.58	-123.05	-115.67	-101.52	-77.24	-60.64	-35.51	-44.68
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-112.26	-104.96	-98.64	-86.58	-65.81	-51.75	-30.28	-38.04
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	16.35	15.12	13.69	12.21	8.05	7.92	4.19	4.18
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	13.74	12.79	11.86	10.47	7.58	6.45	3.64	4.23
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.24	-0.23	-0.22	-0.19	-0.16	-0.11	-0.07	-0.10

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-46.49	-43.56	-41.22	-36.08	-28.09	-21.22	-12.66	-16.50
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-26.28	-24.57	-23.09	-20.27	-15.41	-12.11	-7.09	-8.91
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.07	-0.07	-0.06	-0.04	-0.03	-0.02	-0.03
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.02	0.03	0.01	0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.48	1.37	1.27	1.12	0.79	0.70	0.39	0.44
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	1.25	1.16	1.08	0.95	0.69	0.59	0.33	0.38
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	6.07	5.62	5.13	4.56	3.11	2.91	1.57	1.65
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	7.38	6.87	6.37	5.62	4.07	3.46	1.95	2.28
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.14	-0.13	-0.13	-0.11	-0.09	-0.06	-0.04	-0.06
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	2.31	2.11	1.84	1.67	0.93	1.17	0.56	0.40
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	43.45	40.41	37.28	32.98	23.42	20.55	11.43	12.90
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	52.00	48.20	43.98	39.09	26.62	24.95	13.48	14.18
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	133.97	124.25	113.60	100.89	69.20	64.12	34.81	37.10
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	5.84	5.43	5.02	4.44	3.16	2.76	1.54	1.75
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.70	2.51	2.32	2.05	1.46	1.28	0.71	0.81
Chico, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	5.78	5.38	4.97	4.39	3.13	2.73	1.52	1.73
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	70.65	65.75	60.82	53.75	38.56	33.30	18.65	21.40
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	55.87	51.96	47.95	42.42	30.18	26.41	14.70	16.65
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	44.71	41.64	38.62	34.09	24.69	21.00	11.85	13.80

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	56.13	52.28	48.49	42.80	31.02	26.35	14.87	17.34
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	121.89	113.55	105.41	93.01	67.60	57.17	32.33	37.88
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	114.27	106.45	98.82	87.20	63.40	53.59	30.31	35.53
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.86	-0.81	-0.77	-0.67	-0.54	-0.39	-0.24	-0.32
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-42.89	-40.18	-38.01	-33.27	-25.88	-19.59	-11.67	-15.19
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	78.94	73.52	68.19	60.19	43.62	37.07	20.92	24.39
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.50	2.33	2.16	1.90	1.37	1.18	0.66	0.76
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.83	2.63	2.44	2.15	1.55	1.33	0.75	0.86
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	33.70	31.39	29.11	25.69	18.61	15.83	8.93	10.40
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	44.51	41.46	38.45	33.94	24.58	20.90	11.79	13.74
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	280.31	261.00	241.85	213.56	154.24	131.78	74.18	86.02
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-35.81	-33.54	-31.68	-27.75	-21.48	-16.38	-9.73	-12.57
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-307.26	-287.68	-271.54	-237.91	-183.63	-140.76	-83.38	-107.23
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	- 1,573.5 7	- 1,471.8 4	- 1,384.7 0	- 1,214.9 0	-926.96	-724.30	-425.12	-537.22
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	21.36	19.77	17.97	16.00	10.71	10.31	5.50	5.62
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-15.52	-14.56	-13.81	-12.07	-9.48	-7.06	-4.24	-5.60
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	100.02	92.86	85.21	75.56	52.58	47.64	26.12	28.51

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.23	0.21	0.20	0.17	0.12	0.11	0.06	0.07
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.78	-0.73	-0.70	-0.61	-0.49	-0.35	-0.22	-0.29
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.19	0.18	0.16	0.15	0.10	0.09	0.05	0.05
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-15.73	-14.73	-13.89	-12.18	-9.38	-7.22	-4.27	-5.47
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-76.30	-71.34	-67.05	-58.86	-44.75	-35.17	-20.59	-25.87
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-25.35	-23.71	-22.29	-19.56	-14.89	-11.68	-6.84	-8.62
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.98	-0.98	-1.13	-0.92	-1.19	-0.30	-0.35	-0.88
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-20.64	-19.30	-18.15	-15.93	-12.13	-9.51	-5.57	-7.02
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	6.11	5.68	5.24	4.64	3.29	2.89	1.61	1.81
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-9.68	-9.05	-8.51	-7.47	-5.69	-4.46	-2.61	-3.29
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-12.01	-11.24	-10.57	-9.28	-7.08	-5.53	-3.25	-4.10
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.14	-0.13	-0.12	-0.11	-0.08	-0.06	-0.04	-0.05
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-3.32	-3.11	-2.94	-2.57	-1.99	-1.52	-0.90	-1.17
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.39	-0.37	-0.35	-0.30	-0.23	-0.18	-0.11	-0.14
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-7.76	-7.27	-6.90	-6.03	-4.72	-3.53	-2.12	-2.79
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.11	0.10	0.09	0.08	0.05	0.06	0.03	0.02
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.41	-1.32	-1.25	-1.09	-0.85	-0.64	-0.38	-0.50
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.40	-0.37	-0.37	-0.32	-0.28	-0.17	-0.11	-0.18
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	18.83	17.53	16.24	14.34	10.36	8.85	4.98	5.77

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.45	-0.43	-0.42	-0.36	-0.31	-0.20	-0.13	-0.20
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	10.90	9.97	8.68	7.88	4.35	5.54	2.65	1.88
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-1,242.99	-1,162.29	-1,092.41	-958.85	-729.08	-572.93	-335.37	-421.57
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.40	-5.05	-4.75	-4.17	-3.18	-2.48	-1.46	-1.84
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-6.58	-6.16	-5.79	-5.08	-3.88	-3.03	-1.78	-2.25
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-28.25	-26.56	-25.44	-22.16	-17.96	-12.67	-7.82	-10.82
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	10.46	9.62	8.57	7.70	4.73	5.17	2.62	2.30
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.32	-0.30	-0.28	-0.25	-0.19	-0.15	-0.09	-0.11
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.31	-0.29	-0.27	-0.24	-0.18	-0.14	-0.08	-0.11
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.31	-0.29	-0.27	-0.24	-0.18	-0.14	-0.08	-0.11
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.94	-1.81	-1.71	-1.50	-1.16	-0.89	-0.53	-0.68
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-525.79	-492.57	-465.82	-407.81	-316.85	-240.21	-143.06	-185.83
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.05	0.98	0.91	0.80	0.59	0.49	0.28	0.33
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.23	-0.23	-0.29	-0.23	-0.34	-0.05	-0.09	-0.26
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.27	-0.28	-0.34	-0.27	-0.41	-0.06	-0.11	-0.31
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.23	-0.23	-0.29	-0.23	-0.34	-0.05	-0.09	-0.26
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.26	-0.27	-0.34	-0.27	-0.41	-0.06	-0.11	-0.31
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-25.38	-23.74	-22.32	-19.58	-14.91	-11.69	-6.85	-8.63
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.41	2.24	2.07	1.83	1.30	1.14	0.63	0.72
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	15.64	14.56	13.45	11.89	8.51	7.38	4.13	4.71
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.27	0.25	0.23	0.20	0.15	0.12	0.07	0.08
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.67	1.55	1.44	1.27	0.92	0.78	0.44	0.51
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-4.04	-3.80	-3.64	-3.17	-2.57	-1.81	-1.12	-1.55
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.87	0.79	0.68	0.62	0.32	0.45	0.21	0.13
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.20	0.19	0.16	0.14	0.07	0.11	0.05	0.02
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.14	1.06	0.97	0.86	0.60	0.54	0.30	0.32
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.08	0.07	0.07	0.05	0.04	0.02	0.02
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.91	0.83	0.73	0.66	0.38	0.46	0.22	0.17
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.45	-0.43	-0.42	-0.36	-0.31	-0.20	-0.13	-0.20
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.20	-1.12	-1.06	-0.93	-0.71	-0.55	-0.32	-0.41
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-24.13	-22.57	-21.24	-18.63	-14.23	-11.10	-6.52	-8.26
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.44	0.41	0.38	0.33	0.23	0.21	0.11	0.12
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.16	0.15	0.14	0.12	0.08	0.08	0.04	0.05
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.48	-0.46	-0.47	-0.40	-0.38	-0.20	-0.14	-0.25
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.48	-0.46	-0.46	-0.39	-0.38	-0.20	-0.14	-0.25
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.52	-0.50	-0.50	-0.43	-0.41	-0.21	-0.15	-0.27
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	32.40	30.18	27.99	24.71	17.92	15.21	8.59	10.02
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	39.46	36.75	34.10	30.10	21.84	18.52	10.46	12.22
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.28	2.12	1.97	1.74	1.26	1.07	0.60	0.71

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	11.30	10.53	9.79	8.63	6.31	5.29	3.00	3.54
Lake County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-71.41	-66.81	-62.92	-55.18	-42.25	-32.82	-19.32	-24.54
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.57	1.46	1.36	1.20	0.88	0.74	0.42	0.49
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-73.83	-69.05	-64.97	-57.00	-43.49	-33.98	-19.95	-25.20
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.05	-0.04	-0.04	-0.04	-0.03	-0.02	-0.01	-0.02
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01	-0.02	0.01	0.00	-0.02
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.29	0.27	0.25	0.22	0.16	0.13	0.08	0.09
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.96	0.89	0.83	0.73	0.53	0.45	0.25	0.29
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	11.69	10.86	10.00	8.85	6.24	5.55	3.07	3.41
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	11.69	10.86	10.00	8.85	6.24	5.55	3.07	3.41
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	6.11	5.68	5.24	4.64	3.29	2.89	1.61	1.81
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	55.71	51.82	47.83	42.30	30.10	26.33	14.66	16.60
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.26	1.17	1.09	0.96	0.69	0.59	0.33	0.38
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-112.51	-105.20	-98.86	-86.78	-65.96	-51.87	-30.35	-38.13
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-10.35	-9.69	-9.16	-8.02	-6.23	-4.73	-2.81	-3.65
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-17.02	-15.94	-15.05	-13.18	-10.19	-7.79	-4.62	-5.96
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.37	-0.35	-0.33	-0.29	-0.23	-0.17	-0.10	-0.14

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.28	-0.26	-0.25	-0.22	-0.17	-0.13	-0.08	-0.10
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3.10	2.88	2.66	2.35	1.66	1.47	0.81	0.91
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.78	-11.03	-10.40	-9.12	-7.02	-5.40	-3.19	-4.09
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.69	1.58	1.46	1.29	0.94	0.79	0.45	0.52
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	411.50	382.55	352.58	312.05	220.83	194.87	108.10	121.30
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-78.35	-73.38	-69.36	-60.73	-47.09	-35.83	-21.30	-27.58
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	411.74	382.76	352.79	312.23	220.95	194.99	108.16	121.37
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	411.77	382.79	352.81	312.25	220.97	195.00	108.17	121.38
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	411.82	382.84	352.85	312.29	221.00	195.02	108.18	121.39
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	410.63	381.73	351.83	311.39	220.35	194.46	107.87	121.03
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	-2.29	-2.15	-2.06	-1.79	-1.46	-1.02	-0.63	-0.88
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-37.91	-35.49	-33.51	-29.36	-22.67	-17.36	-10.29	-13.24
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-54.71	-51.16	-48.10	-42.21	-32.13	-25.21	-14.77	-18.59
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	3.76	3.50	3.24	2.86	2.07	1.76	0.99	1.16
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	160.26	149.31	138.64	122.31	89.00	75.14	42.53	49.90
Marion County; Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	14.63	13.61	12.58	11.12	7.95	6.90	3.86	4.41
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.52	1.42	1.31	1.16	0.84	0.72	0.40	0.47
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.23	-3.02	-2.85	-2.50	-1.91	-1.48	-0.87	-1.11
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.11	-1.98	-1.90	-1.65	-1.34	-0.94	-0.58	-0.81
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	15.58	14.43	13.13	11.69	7.87	7.50	4.02	4.16

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	6.75	6.14	5.21	4.78	2.32	3.53	1.59	0.83
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.30	-0.28	-0.27	-0.24	-0.19	-0.14	-0.08	-0.11
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.30	-0.28	-0.27	-0.24	-0.19	-0.14	-0.08	-0.11
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.30	-0.28	-0.27	-0.24	-0.19	-0.14	-0.08	-0.11
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	43.10	40.12	37.16	32.82	23.65	20.28	11.40	13.17
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-107.41	-100.89	-96.23	-83.95	-67.15	-48.46	-29.57	-40.12
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.82	-5.46	-5.16	-4.52	-3.52	-2.66	-1.59	-2.07
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-5.57	-5.22	-4.94	-4.32	-3.36	-2.54	-1.52	-1.98
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5.15	4.79	4.42	3.91	2.79	2.43	1.36	1.54
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.96	-1.84	-1.76	-1.53	-1.24	-0.88	-0.54	-0.74
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.46	1.36	1.27	1.12	0.81	0.69	0.39	0.46
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.08	-0.07	-0.07	-0.06	-0.05	-0.03	-0.02	-0.03
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.34	1.25	1.16	1.02	0.75	0.63	0.36	0.42
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.42	-0.39	-0.37	-0.32	-0.25	-0.19	-0.11	-0.14
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.06	-0.06	-0.07	-0.05	-0.06	-0.02	-0.02	-0.05
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.22	-0.21	-0.20	-0.17	-0.14	-0.10	-0.06	-0.09
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.42	-0.40	-0.38	-0.33	-0.27	-0.19	-0.12	-0.17
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.25	0.24	0.22	0.19	0.14	0.12	0.07	0.08
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	3.41	3.17	2.94	2.60	1.88	1.60	0.90	1.05
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.55	-0.51	-0.48	-0.42	-0.33	-0.25	-0.15	-0.19

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.86	3.59	3.33	2.94	2.11	1.82	1.02	1.18
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.05	-0.04	-0.05	-0.01	-0.01	-0.04
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	-1.79	-1.79	-2.05	-1.66	-2.13	-0.55	-0.64	-1.56
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-3.88	-3.63	-3.41	-3.00	-2.28	-1.79	-1.05	-1.32
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-8.43	-7.93	-7.61	-6.62	-5.41	-3.77	-2.34	-3.27
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-140.00	-132.80	-130.66	-112.52	-99.36	-60.17	-40.23	-62.81
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-89.28	-84.53	-82.66	-71.37	-61.87	-38.75	-25.44	-38.73
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-131.10	-124.44	-122.70	-105.57	-93.84	-56.14	-37.78	-59.53
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.35	0.32	0.29	0.26	0.16	0.17	0.09	0.08
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.59	-0.56	-0.54	-0.47	-0.40	-0.26	-0.17	-0.25
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.76	1.64	1.51	1.34	0.96	0.83	0.46	0.53
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.76	1.64	1.51	1.34	0.96	0.83	0.46	0.53
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.27	-1.19	-1.13	-0.99	-0.78	-0.58	-0.35	-0.46
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-4.83	-4.53	-4.30	-3.76	-2.96	-2.19	-1.32	-1.75
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.43	-0.41	-0.38	-0.34	-0.25	-0.20	-0.12	-0.15
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.51	1.41	1.30	1.15	0.83	0.71	0.40	0.46
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.86	2.66	2.47	2.18	1.56	1.35	0.76	0.87
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-6.85	-6.41	-6.06	-5.31	-4.10	-3.14	-1.86	-2.39

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-50.02	-46.91	-44.53	-38.92	-30.62	-22.73	-13.68	-18.10
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-161.30	-151.47	-144.35	-125.97	-100.49	-72.86	-44.36	-59.93
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-174.23	-163.78	-156.62	-136.48	-110.12	-78.30	-48.14	-66.14
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	155.81	145.17	134.81	118.93	86.58	73.03	41.35	48.57
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	160.94	149.94	139.22	122.83	89.37	75.45	42.71	50.11
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.20	-3.92	-3.69	-3.24	-2.46	-1.93	-1.13	-1.42
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.01	-0.96	-0.93	-0.80	-0.69	-0.44	-0.29	-0.43
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.87	-0.82	-0.78	-0.68	-0.55	-0.39	-0.24	-0.33
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-3.16	-3.00	-2.95	-2.54	-2.24	-1.36	-0.91	-1.42
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.10	-0.11	-0.09	-0.09	-0.04	-0.03	-0.06
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	-0.15	-0.17	-0.26	-0.19	-0.36	0.00	-0.08	-0.30
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-33.78	-31.87	-30.83	-26.74	-22.41	-14.91	-9.48	-13.77
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-5.25	-5.17	-5.67	-4.68	-5.47	-1.82	-1.76	-3.90
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.23	1.15	1.07	0.94	0.69	0.58	0.33	0.39
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	39.92	37.16	34.38	30.38	21.81	18.81	10.54	12.11
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.10	-0.12	-0.10	-0.15	-0.02	-0.04	-0.12

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	3.59	3.34	3.11	2.74	1.99	1.68	0.95	1.12
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	20.19	18.81	17.46	15.41	11.21	9.47	5.36	6.28
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.26	-0.25	-0.21	-0.18	-0.12	-0.08	-0.11
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.66	3.17	2.20	2.22	-0.15	2.27	0.66	-0.80
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.07	-0.06	-0.05	-0.04	-0.03	-0.02	-0.03
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-8.19	-7.71	-7.41	-6.44	-5.29	-3.65	-2.28	-3.21
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.64	-3.44	-3.36	-2.91	-2.52	-1.58	-1.04	-1.57
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.16	-2.02	-1.92	-1.68	-1.31	-0.98	-0.59	-0.77
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	16.34	15.21	14.11	12.46	9.03	7.67	4.33	5.05
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	19.15	17.84	16.55	14.61	10.59	8.99	5.08	5.92
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	408.98	380.19	350.40	310.12	219.43	193.69	107.43	120.52
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.38	-1.29	-1.22	-1.07	-0.83	-0.63	-0.38	-0.48
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.07	-4.75	-4.48	-3.92	-3.01	-2.33	-1.37	-1.75
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.60	-0.56	-0.53	-0.46	-0.35	-0.28	-0.16	-0.20
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	44.28	41.22	38.16	33.71	24.25	20.85	11.70	13.49
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	49.00	45.63	42.31	37.35	27.04	23.02	12.98	15.10
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	67.85	63.11	58.30	51.55	36.80	32.03	17.88	20.35
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	67.18	62.49	57.73	51.04	36.45	31.71	17.70	20.16
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	1.31	1.19	1.01	0.93	0.46	0.68	0.31	0.17
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-16.16	-15.13	-14.29	-12.52	-9.68	-7.40	-4.39	-5.66

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	13.51	12.40	10.95	9.87	5.83	6.76	3.35	2.72
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	17.66	16.37	14.95	13.29	9.08	8.46	4.58	4.85
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	17.66	16.37	14.95	13.29	9.08	8.46	4.58	4.85
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	7.94	7.35	6.68	5.95	3.98	3.83	2.05	2.09
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	114.19	106.31	98.45	86.96	62.66	53.73	30.19	34.89
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	114.43	106.52	98.65	87.13	62.78	53.84	30.26	34.96
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	131.86	122.36	112.08	99.46	68.73	62.96	34.35	37.06
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	132.96	123.38	113.03	100.29	69.32	63.48	34.64	37.39
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	113.48	105.25	96.25	85.47	58.67	54.30	29.49	31.47
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	98.47	91.52	84.29	74.63	52.67	46.68	25.84	28.87
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	98.47	91.52	84.29	74.63	52.67	46.68	25.84	28.87
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	98.45	91.50	84.28	74.61	52.65	46.67	25.84	28.86
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	98.45	91.50	84.28	74.61	52.65	46.67	25.84	28.86
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-1.50	-1.40	-1.32	-1.16	-0.88	-0.69	-0.40	-0.51
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.34	-0.32	-0.30	-0.27	-0.21	-0.16	-0.09	-0.12
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.96	-0.90	-0.85	-0.75	-0.58	-0.44	-0.26	-0.34
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.59	-0.56	-0.54	-0.47	-0.40	-0.26	-0.17	-0.25
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-50.29	-47.06	-44.34	-38.88	-29.81	-23.10	-13.61	-17.34

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	63.16	58.65	53.88	47.76	33.37	30.04	16.52	18.15
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	11.42	10.61	9.78	8.66	6.11	5.41	3.00	3.35
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-6.53	-6.12	-5.79	-5.07	-3.96	-2.97	-1.78	-2.33
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.48	-0.46	-0.44	-0.38	-0.31	-0.22	-0.13	-0.19
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.04	0.97	0.90	0.79	0.58	0.49	0.28	0.33
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.16	-0.16	-0.16	-0.13	-0.13	-0.07	-0.05	-0.08
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.40	-0.38	-0.36	-0.31	-0.25	-0.18	-0.11	-0.15
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.26	0.24	0.22	0.20	0.14	0.12	0.07	0.08
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	11.55	10.76	9.99	8.82	6.41	5.42	3.07	3.59
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	11.91	11.09	10.30	9.09	6.61	5.58	3.16	3.70
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	-0.83	-0.80	-0.81	-0.69	-0.67	-0.34	-0.25	-0.44
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-34.33	-32.10	-30.18	-26.49	-20.15	-15.82	-9.26	-11.66
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.56	-0.53	-0.52	-0.45	-0.39	-0.24	-0.16	-0.25
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	2.21	1.97	1.56	1.48	0.44	1.24	0.47	-0.01
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-15.22	-14.56	-14.73	-12.54	-11.99	-6.24	-4.54	-7.89
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.94	-0.89	-0.86	-0.75	-0.63	-0.41	-0.26	-0.39
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-9.50	-8.90	-8.41	-7.37	-5.72	-4.34	-2.58	-3.35
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	10.16	9.45	8.75	7.73	5.55	4.78	2.68	3.09
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.41	0.38	0.35	0.31	0.22	0.20	0.11	0.12
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-14.65	-13.76	-13.12	-11.45	-9.16	-6.61	-4.03	-5.47
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.83	0.77	0.71	0.63	0.46	0.39	0.22	0.25
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.88	1.76	1.63	1.44	1.04	0.89	0.50	0.58

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.49	3.25	3.01	2.66	1.93	1.64	0.92	1.08
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.17	-0.16	-0.15	-0.13	-0.10	-0.08	-0.04	-0.06
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.18	0.16	0.15	0.13	0.10	0.08	0.05	0.05
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.06	-0.06	-0.10	-0.07	-0.15	0.00	-0.03	-0.12
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-2.27	-2.12	-2.00	-1.75	-1.33	-1.05	-0.61	-0.77
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	-13.12	-12.40	-12.06	-10.43	-8.89	-5.74	-3.71	-5.52
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.59	-1.49	-1.41	-1.23	-0.96	-0.73	-0.43	-0.56
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-20.16	-18.86	-17.73	-15.56	-11.85	-9.29	-5.44	-6.86
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	20.19	18.81	17.46	15.41	11.21	9.47	5.36	6.28
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	11.55	10.76	9.99	8.81	6.41	5.42	3.06	3.59
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	23.04	21.42	19.77	17.49	12.43	10.89	6.06	6.85
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.93	0.86	0.80	0.71	0.52	0.43	0.25	0.29
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	5.18	4.83	4.48	3.95	2.86	2.43	1.37	1.60
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.39	-0.37	-0.34	-0.30	-0.23	-0.18	-0.11	-0.14
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	-1.21	-1.14	-1.09	-0.95	-0.77	-0.54	-0.33	-0.46
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-3.21	-3.00	-2.82	-2.48	-1.89	-1.48	-0.87	-1.09
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-7.89	-7.38	-6.95	-6.09	-4.65	-3.63	-2.13	-2.69
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-9.34	-8.74	-8.22	-7.21	-5.50	-4.30	-2.52	-3.19
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	18.76	17.43	16.05	14.21	10.01	8.90	4.92	5.48
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	108.05	100.27	91.87	81.51	56.37	51.58	28.15	30.41

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-3.60	-3.41	-3.33	-2.88	-2.49	-1.57	-1.03	-1.56
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.87	2.67	2.48	2.19	1.60	1.34	0.76	0.90
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-23.09	-21.60	-20.33	-17.84	-13.63	-10.62	-6.24	-7.91
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.89	-0.84	-0.82	-0.71	-0.60	-0.39	-0.25	-0.37
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.55	0.52	0.48	0.42	0.31	0.26	0.15	0.17
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	3.20	2.98	2.76	2.44	1.76	1.50	0.85	0.98
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5.11	4.72	4.26	3.81	2.49	2.48	1.31	1.28
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.45	0.39	0.28	0.28	0.00	0.27	0.08	-0.08
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	-1.58	-1.48	-1.41	-1.23	-0.97	-0.72	-0.43	-0.57
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.38	-4.11	-3.90	-3.41	-2.68	-1.99	-1.20	-1.59
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	4.55	4.23	3.89	3.45	2.42	2.16	1.19	1.32
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-4.37	-4.11	-3.92	-3.42	-2.75	-1.97	-1.21	-1.65

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million; VOC = volatile organic compound

Table A-12. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Volatile Organic Compounds (VOC), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	4.18	3.84	3.52	3.03	2.02	1.70	0.80	1.01
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-207.17	-194.35	-181.86	-159.02	-119.52	-92.03	-50.15	-70.33
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.74	-3.64	-3.53	-3.16	-2.81	-1.93	-1.25	-1.94
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-3.88	-3.66	-3.43	-3.01	-2.31	-1.75	-0.98	-1.39
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-31.75	-29.92	-28.13	-24.68	-19.01	-14.39	-8.06	-11.50
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.69	-0.64	-0.60	-0.53	-0.40	-0.31	-0.17	-0.23
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.05	-1.93	-1.81	-1.59	-1.22	-0.92	-0.51	-0.73
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-40.38	-37.93	-35.54	-31.11	-23.56	-18.04	-9.91	-13.98
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-40.19	-37.77	-35.41	-31.01	-23.54	-18.00	-9.92	-14.01
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-66.94	-62.70	-58.58	-51.16	-38.12	-29.53	-15.94	-22.21
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-27.33	-25.62	-23.95	-20.93	-15.67	-12.10	-6.56	-9.17
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.75	-1.64	-1.54	-1.34	-1.01	-0.78	-0.42	-0.59
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-13.94	-13.28	-12.62	-11.16	-9.09	-6.62	-3.93	-5.81
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.02	-0.05	-0.02	-0.02	-0.05
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-23.13	-21.69	-20.30	-17.74	-13.32	-10.27	-5.59	-7.83
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-241.06	-226.39	-212.09	-185.60	-140.35	-107.60	-59.04	-83.15

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.17	-0.16	-0.15	-0.13	-0.10	-0.08	-0.04	-0.06
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-3.85	-3.64	-3.43	-3.02	-2.37	-1.77	-1.01	-1.46
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-6.42	-6.03	-5.64	-4.93	-3.72	-2.86	-1.56	-2.19
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	7.27	6.68	6.12	5.28	3.51	2.95	1.40	1.76
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	8.49	7.84	7.22	6.24	4.28	3.52	1.73	2.24
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.40	-1.32	-1.23	-1.08	-0.82	-0.63	-0.34	-0.49
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.02
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	11.92	10.00	8.22	6.48	0.88	2.86	-0.30	-2.15
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-1.18	-1.11	-1.05	-0.92	-0.71	-0.54	-0.30	-0.43
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-32.56	-30.58	-28.65	-25.07	-18.97	-14.54	-7.98	-11.24
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.94	-0.88	-0.82	-0.72	-0.55	-0.42	-0.23	-0.32
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-48.96	-46.43	-43.93	-38.71	-30.79	-22.78	-13.21	-19.25
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-203.04	-190.35	-177.99	-155.56	-116.49	-89.93	-48.81	-68.26
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.33	-0.32	-0.30	-0.26	-0.21	-0.15	-0.09	-0.13
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.45	-0.43	-0.41	-0.36	-0.28	-0.21	-0.12	-0.17
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-162.99	-152.67	-142.64	-124.59	-92.88	-71.93	-38.84	-54.14
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-137.26	-128.56	-120.10	-104.89	-78.15	-60.55	-32.68	-45.53
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	-20.47	-19.40	-18.34	-16.16	-12.82	-9.50	-5.49	-7.99
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	4.18	3.84	3.52	3.03	2.02	1.70	0.80	1.01
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.75	-0.71	-0.66	-0.58	-0.44	-0.34	-0.19	-0.26

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-79.46	-74.55	-69.77	-61.01	-45.89	-35.32	-19.26	-27.02
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-31.89	-29.87	-27.90	-24.37	-18.16	-14.07	-7.59	-10.58
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.07	-0.06	-0.06	-0.04	-0.03	-0.02	-0.02
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.16	-0.15	-0.14	-0.13	-0.10	-0.07	-0.04	-0.06
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.12	-0.12	-0.11	-0.12	-0.07	-0.06	-0.09
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.27	0.25	0.22	0.19	0.12	0.10	0.04	0.05
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-4.53	-4.31	-4.10	-3.62	-2.93	-2.14	-1.26	-1.86
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.35	2.16	1.98	1.71	1.14	0.96	0.46	0.58
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.15	-0.15	-0.14	-0.12	-0.09	-0.07	-0.04	-0.05
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-8.50	-8.02	-7.56	-6.64	-5.16	-3.88	-2.20	-3.16
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	-1.26	-1.49	-1.69	-1.66	-2.29	-1.19	-1.13	-2.04
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-39.18	-37.28	-35.39	-31.25	-25.26	-18.48	-10.90	-16.05
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-83.24	-79.37	-75.51	-66.78	-54.52	-39.62	-23.60	-34.97
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.20	0.15	0.10	0.06	-0.09	0.01	-0.06	-0.14
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.07	0.05	0.03	-0.05	0.00	-0.03	-0.07
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.20	0.15	0.10	0.06	-0.09	0.01	-0.06	-0.14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	10.63	9.53	8.49	7.16	3.87	3.80	1.37	1.27
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.25	-0.16	-0.52	-0.69	-1.83	-0.69	-0.98	-1.95
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	14.54	13.39	12.29	10.60	7.12	5.94	2.85	3.63

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	18.68	17.21	15.80	13.63	9.19	7.65	3.68	4.71
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	47.07	43.50	40.08	34.66	23.86	19.57	9.64	12.58
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	44.74	41.36	38.12	32.97	22.73	18.62	9.20	12.01
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.97	-1.85	-1.74	-1.52	-1.15	-0.88	-0.48	-0.68
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-72.13	-67.67	-63.32	-55.37	-41.63	-32.05	-17.47	-24.50
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	26.18	24.12	22.14	19.10	12.88	10.72	5.16	6.59
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.51	0.46	0.41	0.35	0.21	0.19	0.08	0.09
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.50	0.45	0.41	0.35	0.21	0.19	0.08	0.09
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	10.57	9.74	8.94	7.71	5.18	4.32	2.07	2.64
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	14.47	13.32	12.23	10.55	7.09	5.91	2.83	3.61
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	75.67	69.35	63.33	54.41	35.39	30.25	13.93	17.15
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-56.82	-53.29	-49.85	-43.59	-32.73	-25.22	-13.73	-19.23
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-468.70	-439.52	-411.12	-359.38	-269.55	-207.85	-113.01	-158.23
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-2,047.03	-1,917.94	-1,792.42	-1,565.88	-1,168.97	-904.42	-489.18	-682.52
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	-23.48	-22.22	-20.99	-18.47	-14.55	-10.84	-6.22	-9.01
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-28.41	-26.68	-24.99	-21.87	-16.53	-12.68	-6.95	-9.79
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-38.11	-36.61	-35.08	-31.18	-26.32	-18.69	-11.53	-17.41
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-2.01	-1.89	-1.77	-1.55	-1.17	-0.90	-0.49	-0.69
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.12	-0.12	-0.11	-0.10	-0.08	-0.06	-0.03	-0.05
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-25.85	-24.23	-22.66	-19.81	-14.85	-11.45	-6.22	-8.71
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-93.85	-87.90	-82.12	-71.73	-53.45	-41.41	-22.35	-31.15
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	0.00	-0.01
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-31.78	-29.77	-27.81	-24.29	-18.11	-14.03	-7.58	-10.56
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-17.75	-16.71	-15.70	-13.77	-10.56	-8.01	-4.47	-6.36
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-26.06	-24.41	-22.81	-19.92	-14.86	-11.50	-6.22	-8.66
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	-0.24	-0.27	-0.29	-0.28	-0.36	-0.20	-0.18	-0.32
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-11.87	-11.12	-10.39	-9.07	-6.77	-5.24	-2.83	-3.94
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-15.41	-14.44	-13.49	-11.79	-8.80	-6.81	-3.68	-5.14
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.20	-0.19	-0.17	-0.15	-0.11	-0.09	-0.05	-0.07
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-5.46	-5.12	-4.79	-4.19	-3.15	-2.42	-1.32	-1.85
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.59	-0.56	-0.52	-0.46	-0.34	-0.26	-0.14	-0.20
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-13.97	-13.11	-12.27	-10.73	-8.09	-6.22	-3.40	-4.77
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.43	-0.40	-0.38	-0.33	-0.26	-0.20	-0.11	-0.16
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.73	-2.56	-2.40	-2.10	-1.58	-1.21	-0.66	-0.93
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.73	-1.63	-1.53	-1.34	-1.02	-0.78	-0.43	-0.61
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	4.92	4.50	4.11	3.53	2.28	1.96	0.90	1.10
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.95	-1.83	-1.72	-1.50	-1.15	-0.87	-0.48	-0.69

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-40.52	-38.26	-36.04	-31.66	-24.62	-18.51	-10.47	-15.04
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-1,530.59	-1,433.62	-1,339.37	-1,169.82	-871.80	-675.33	-364.57	-508.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.63	-6.22	-5.81	-5.07	-3.79	-2.93	-1.59	-2.21
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-8.57	-8.03	-7.50	-6.55	-4.89	-3.79	-2.05	-2.86
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-71.71	-67.37	-63.14	-55.27	-41.90	-32.07	-17.64	-24.89
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-24.31	-22.98	-21.67	-19.05	-14.91	-11.16	-6.36	-9.17
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.44	-0.41	-0.39	-0.34	-0.25	-0.20	-0.11	-0.15
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.44	-0.41	-0.38	-0.34	-0.25	-0.19	-0.11	-0.15
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.44	-0.41	-0.38	-0.34	-0.25	-0.19	-0.11	-0.15
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.12	-2.92	-2.73	-2.39	-1.79	-1.38	-0.75	-1.05
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-871.02	-817.11	-764.60	-668.56	-502.52	-386.92	-210.86	-295.70
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.50	0.46	0.43	0.37	0.26	0.21	0.11	0.14
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-5.79	-5.46	-5.13	-4.50	-3.46	-2.62	-1.46	-2.09
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-7.00	-6.60	-6.20	-5.44	-4.18	-3.17	-1.77	-2.52
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-5.79	-5.46	-5.13	-4.50	-3.46	-2.62	-1.46	-2.09
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-6.99	-6.59	-6.19	-5.43	-4.17	-3.16	-1.77	-2.52
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-31.78	-29.77	-27.81	-24.29	-18.11	-14.02	-7.57	-10.56
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.07	-0.08	-0.08	-0.12	-0.06	-0.06	-0.11
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.51	1.32	1.14	0.94	0.37	0.47	0.10	-0.01
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.08	0.08	0.07	0.06	0.04	0.03	0.02	0.02
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.53	0.49	0.45	0.39	0.26	0.22	0.10	0.13

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-10.66	-10.01	-9.39	-8.22	-6.23	-4.77	-2.62	-3.70
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-3.86	-3.65	-3.43	-3.02	-2.34	-1.76	-1.00	-1.43
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.20	-1.14	-1.07	-0.94	-0.73	-0.55	-0.31	-0.44
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.44	-0.43	-0.41	-0.36	-0.31	-0.22	-0.14	-0.20
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01	-0.01
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-3.04	-2.87	-2.71	-2.38	-1.85	-1.39	-0.79	-1.13
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.95	-1.83	-1.72	-1.50	-1.15	-0.87	-0.48	-0.69
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.76	-1.65	-1.54	-1.35	-1.01	-0.78	-0.42	-0.59
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-31.85	-29.85	-27.89	-24.37	-18.20	-14.08	-7.61	-10.63
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.31	-0.30	-0.28	-0.25	-0.20	-0.15	-0.09	-0.13
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.09	-0.09	-0.08	-0.06	-0.05	-0.03	-0.04
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.80	-3.58	-3.36	-2.94	-2.25	-1.71	-0.95	-1.35
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.80	-3.58	-3.36	-2.94	-2.25	-1.71	-0.95	-1.35
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-4.01	-3.77	-3.54	-3.11	-2.38	-1.81	-1.00	-1.43
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	11.13	10.26	9.43	8.14	5.51	4.58	2.21	2.84
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	13.97	12.89	11.85	10.24	6.97	5.76	2.80	3.61
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.80	0.74	0.68	0.59	0.40	0.33	0.16	0.21
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.42	-0.40	-0.38	-0.33	-0.26	-0.19	-0.11	-0.16
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	5.33	4.94	4.57	3.96	2.79	2.25	1.14	1.51
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-97.42	-91.30	-85.35	-74.58	-55.75	-43.09	-23.35	-32.61

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
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Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.70	0.65	0.60	0.52	0.37	0.30	0.15	0.20
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-95.49	-89.47	-83.61	-73.04	-54.51	-42.18	-22.81	-31.82
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.11	-0.10	-0.10	-0.09	-0.06	-0.05	-0.03	-0.04
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	-0.50	-0.47	-0.44	-0.39	-0.30	-0.22	-0.13	-0.18
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.01	0.01	0.01	0.01
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.20	0.18	0.17	0.14	0.10	0.08	0.04	0.05
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.04	-2.00	-1.96	-1.77	-1.63	-1.09	-0.74	-1.16
Lancaster, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-2.04	-2.00	-1.96	-1.77	-1.63	-1.09	-0.74	-1.16
Lane County (part); Oakridge, OR	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.24	-0.27	-0.29	-0.28	-0.36	-0.20	-0.18	-0.32
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.24	-0.16	-0.52	-0.68	-1.82	-0.69	-0.98	-1.94
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.27	0.24	0.22	0.19	0.11	0.10	0.04	0.05
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-137.63	-128.90	-120.42	-105.18	-78.36	-60.71	-32.77	-45.65
Lebanon County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-16.93	-15.88	-14.86	-12.99	-9.76	-7.52	-4.10	-5.74
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-26.47	-24.83	-23.23	-20.30	-15.24	-11.75	-6.39	-8.95
Liberty-Clairton, PA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.69	-0.64	-0.60	-0.53	-0.40	-0.31	-0.17	-0.23
Lincoln County; Libby and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.41	-0.38	-0.36	-0.31	-0.24	-0.18	-0.10	-0.14
Logan, UT-ID	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.24	-0.25	-0.26	-0.24	-0.26	-0.16	-0.12	-0.20
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-17.71	-16.60	-15.53	-13.57	-10.17	-7.85	-4.26	-5.96

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Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.56	0.52	0.47	0.41	0.28	0.23	0.11	0.15
Los Angeles, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-37.44	-38.15	-38.61	-35.55	-36.92	-22.86	-17.20	-28.53
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-125.98	-118.16	-110.55	-96.66	-72.60	-55.93	-30.45	-42.68
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-37.40	-38.12	-38.58	-35.52	-36.91	-22.85	-17.19	-28.52
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	-37.40	-38.11	-38.58	-35.52	-36.90	-22.85	-17.19	-28.52
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-37.38	-38.10	-38.56	-35.51	-36.90	-22.84	-17.19	-28.52
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-37.72	-38.41	-38.84	-35.75	-37.05	-22.97	-17.25	-28.59
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	-6.05	-5.69	-5.33	-4.67	-3.54	-2.71	-1.49	-2.10
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-58.38	-54.74	-51.20	-44.76	-33.57	-25.89	-14.07	-19.70
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-68.22	-63.91	-59.71	-52.15	-38.88	-30.11	-16.26	-22.67
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	1.14	1.05	0.96	0.83	0.56	0.47	0.22	0.28
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	64.96	60.10	55.42	47.96	33.21	27.12	13.46	17.65
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.44	1.25	1.08	0.89	0.35	0.44	0.09	-0.01
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.40	0.37	0.33	0.29	0.19	0.16	0.07	0.09
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-4.68	-4.38	-4.10	-3.58	-2.68	-2.07	-1.12	-1.57
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.66	-5.32	-4.99	-4.37	-3.31	-2.53	-1.39	-1.97
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-14.33	-13.61	-12.90	-11.38	-9.12	-6.71	-3.92	-5.74
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-35.12	-33.14	-31.20	-27.40	-21.25	-16.00	-9.03	-12.94
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.39	-0.37	-0.35	-0.30	-0.23	-0.18	-0.10	-0.14
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.39	-0.37	-0.35	-0.30	-0.23	-0.18	-0.10	-0.14
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.39	-0.37	-0.35	-0.30	-0.23	-0.18	-0.10	-0.14

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	10.05	9.17	8.33	7.13	4.49	3.93	1.74	2.06
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-242.35	-227.62	-213.25	-186.62	-141.18	-108.21	-59.40	-83.68
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-9.93	-9.32	-8.72	-7.63	-5.74	-4.41	-2.41	-3.38
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-9.47	-8.88	-8.31	-7.27	-5.47	-4.21	-2.29	-3.22
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.13	0.09	0.05	0.02	-0.09	-0.01	-0.06	-0.13
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.03	-4.72	-4.42	-3.87	-2.93	-2.25	-1.23	-1.74
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.69	0.64	0.59	0.51	0.35	0.29	0.14	0.19
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.29	-0.27	-0.25	-0.22	-0.17	-0.13	-0.07	-0.10
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.59	0.55	0.51	0.44	0.31	0.25	0.13	0.17
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.53	-0.49	-0.46	-0.40	-0.30	-0.23	-0.13	-0.18
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.88	-0.83	-0.78	-0.68	-0.53	-0.40	-0.22	-0.32
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.64	-0.60	-0.56	-0.49	-0.38	-0.29	-0.16	-0.22
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.25	-1.18	-1.10	-0.97	-0.73	-0.56	-0.31	-0.44
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.08	0.07	0.06	0.04	0.03	0.02	0.02
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	1.11	1.02	0.94	0.81	0.54	0.45	0.22	0.27
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.60	-0.57	-0.53	-0.46	-0.35	-0.27	-0.15	-0.20
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.78	0.71	0.65	0.55	0.34	0.30	0.13	0.15
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.65	-0.61	-0.57	-0.50	-0.39	-0.29	-0.16	-0.23
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	-30.72	-28.94	-27.19	-23.85	-18.32	-13.89	-7.75	-11.04
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-4.87	-4.56	-4.26	-3.72	-2.78	-2.15	-1.16	-1.62

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-22.67	-21.30	-19.97	-17.48	-13.26	-10.14	-5.59	-7.89
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-628.77	-591.52	-555.12	-486.38	-371.21	-282.74	-156.70	-222.18
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-361.75	-340.25	-319.26	-279.69	-213.25	-162.54	-89.99	-127.50
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-610.12	-574.01	-538.72	-472.03	-360.37	-274.43	-152.15	-215.77
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.71	-0.67	-0.63	-0.56	-0.44	-0.33	-0.19	-0.27
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-2.15	-2.02	-1.90	-1.66	-1.27	-0.97	-0.53	-0.76
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.15	0.12	0.11	0.09	0.03	0.04	0.00	-0.01
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.15	0.12	0.11	0.09	0.03	0.04	0.00	-0.01
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.27	-2.13	-2.00	-1.75	-1.32	-1.01	-0.55	-0.78
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-9.27	-8.70	-8.15	-7.13	-5.38	-4.13	-2.26	-3.18
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.53	-0.50	-0.46	-0.41	-0.30	-0.23	-0.13	-0.18
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.40	0.36	0.33	0.28	0.18	0.16	0.07	0.09
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.49	0.45	0.40	0.34	0.20	0.18	0.07	0.08
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-11.64	-10.91	-10.21	-8.93	-6.70	-5.16	-2.81	-3.93
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-95.37	-89.52	-83.82	-73.32	-55.29	-42.47	-23.23	-32.65
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-354.29	-332.73	-311.70	-272.76	-206.25	-158.13	-86.75	-122.19

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-424.49	-398.78	-373.71	-327.10	-247.79	-189.74	-104.30	-147.09
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	64.49	59.69	55.07	47.67	33.10	26.98	13.43	17.65
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	65.23	60.34	55.65	48.16	33.35	27.23	13.52	17.72
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.20	-4.87	-4.55	-3.97	-2.96	-2.29	-1.24	-1.73
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-3.92	-3.69	-3.46	-3.03	-2.31	-1.76	-0.97	-1.38
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.39	-2.24	-2.10	-1.84	-1.39	-1.07	-0.59	-0.83
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-14.51	-13.65	-12.81	-11.22	-8.57	-6.53	-3.62	-5.13
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.98	-0.92	-0.86	-0.76	-0.58	-0.44	-0.25	-0.35
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	-6.77	-6.38	-5.99	-5.26	-4.04	-3.06	-1.71	-2.44
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-110.45	-103.84	-97.39	-85.29	-64.88	-49.53	-27.35	-38.69
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-69.46	-65.42	-61.46	-53.90	-41.37	-31.38	-17.51	-24.92
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.58	0.54	0.50	0.43	0.30	0.24	0.12	0.16
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	6.58	5.92	5.29	4.48	2.52	2.40	0.92	0.92
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.84	-2.67	-2.51	-2.20	-1.69	-1.28	-0.72	-1.02
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.38	1.28	1.18	1.02	0.71	0.58	0.29	0.37
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	8.08	7.47	6.89	5.96	4.12	3.37	1.67	2.18
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-56.32	-53.09	-49.93	-43.82	-33.82	-25.56	-14.34	-20.49
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.16	-0.15	-0.13	-0.10	-0.08	-0.04	-0.06
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-22.92	-21.54	-20.19	-17.68	-13.42	-10.26	-5.65	-7.99
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-14.31	-13.46	-12.63	-11.06	-8.43	-6.43	-3.56	-5.04
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-4.86	-4.56	-4.27	-3.73	-2.81	-2.16	-1.18	-1.66
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	5.22	4.80	4.41	3.80	2.56	2.14	1.03	1.31
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	6.18	5.70	5.23	4.51	3.04	2.53	1.22	1.56
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-38.36	-39.00	-39.39	-36.23	-37.39	-23.24	-17.38	-28.77
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-2.94	-2.76	-2.58	-2.26	-1.69	-1.31	-0.71	-0.99
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-7.21	-6.76	-6.32	-5.52	-4.14	-3.19	-1.73	-2.42
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.77	-0.72	-0.67	-0.59	-0.44	-0.34	-0.18	-0.26
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	8.41	7.63	6.89	5.87	3.53	3.20	1.33	1.49
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	15.20	13.98	12.82	11.04	7.37	6.18	2.93	3.71
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	4.24	3.52	2.86	2.23	0.14	0.95	-0.20	-0.94
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	4.54	3.80	3.13	2.47	0.33	1.09	-0.11	-0.82
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	-6.69	-6.31	-5.94	-5.22	-4.05	-3.05	-1.72	-2.47
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-25.31	-23.74	-22.20	-19.41	-14.56	-11.23	-6.10	-8.55
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-38.78	-36.64	-34.53	-30.35	-23.68	-17.76	-10.08	-14.51
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-12.04	-11.47	-10.90	-9.64	-7.83	-5.71	-3.38	-5.00
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-12.04	-11.47	-10.90	-9.64	-7.83	-5.71	-3.38	-5.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-7.73	-7.33	-6.94	-6.12	-4.87	-3.60	-2.09	-3.05
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	26.17	23.87	21.67	18.55	11.63	10.22	4.49	5.30
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	26.21	23.90	21.71	18.57	11.65	10.23	4.50	5.31
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-65.75	-62.87	-59.98	-53.16	-43.98	-31.67	-19.13	-28.57
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-65.56	-62.71	-59.83	-53.03	-43.91	-31.60	-19.10	-28.54
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-69.27	-66.07	-62.86	-55.61	-45.44	-33.00	-19.68	-29.17
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-13.63	-13.53	-13.38	-12.14	-11.63	-7.59	-5.30	-8.52
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-13.63	-13.53	-13.38	-12.14	-11.63	-7.59	-5.30	-8.52
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-13.63	-13.53	-13.38	-12.14	-11.63	-7.59	-5.30	-8.52
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-13.63	-13.53	-13.38	-12.14	-11.63	-7.59	-5.30	-8.52
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-1.97	-1.84	-1.72	-1.51	-1.12	-0.87	-0.47	-0.66
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.56	-0.53	-0.49	-0.43	-0.32	-0.25	-0.14	-0.19
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.49	-1.40	-1.31	-1.14	-0.86	-0.66	-0.36	-0.50
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-2.15	-2.02	-1.90	-1.66	-1.27	-0.97	-0.53	-0.76
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-70.44	-66.02	-61.73	-53.94	-40.36	-31.18	-16.91	-23.63
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-19.34	-18.67	-17.97	-16.02	-13.80	-9.66	-6.08	-9.29
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.57	-1.56	-1.54	-1.40	-1.34	-0.87	-0.61	-0.98

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-11.49	-10.78	-10.09	-8.82	-6.64	-5.11	-2.79	-3.91
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.35	-1.27	-1.19	-1.04	-0.79	-0.60	-0.33	-0.47
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.49	0.45	0.42	0.36	0.26	0.21	0.10	0.14
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.10	-1.03	-0.97	-0.85	-0.65	-0.50	-0.28	-0.39
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.81	-0.76	-0.71	-0.62	-0.47	-0.36	-0.20	-0.28
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	4.48	4.14	3.82	3.30	2.28	1.87	0.92	1.20
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	4.62	4.27	3.94	3.41	2.35	1.92	0.95	1.24
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	-6.10	-5.74	-5.39	-4.73	-3.62	-2.75	-1.53	-2.17
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-42.79	-40.09	-37.45	-32.71	-24.39	-18.89	-10.20	-14.22
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.35	-2.21	-2.07	-1.82	-1.38	-1.06	-0.58	-0.83
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	-19.93	-18.79	-17.68	-15.52	-11.99	-9.05	-5.08	-7.27
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-99.91	-94.04	-88.30	-77.40	-59.23	-45.03	-25.03	-35.56
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.05	-2.87	-2.69	-2.36	-1.80	-1.37	-0.76	-1.08
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-15.54	-14.57	-13.64	-11.92	-8.96	-6.90	-3.76	-5.27
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.73	1.56	1.40	1.19	0.69	0.64	0.25	0.27
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.19	-0.18	-0.17	-0.15	-0.12	-0.09	-0.05	-0.08
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-33.01	-31.00	-29.04	-25.42	-19.23	-14.74	-8.09	-11.40
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.21	0.20	0.18	0.15	0.10	0.09	0.04	0.05
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.41	0.38	0.35	0.30	0.20	0.17	0.08	0.10
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.21	1.12	1.03	0.89	0.61	0.50	0.24	0.31
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.27	-0.25	-0.24	-0.21	-0.15	-0.12	-0.06	-0.09
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.09	-0.08	-0.08	-0.07	-0.05	-0.04	-0.02	-0.03

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-3.15	-2.97	-2.79	-2.45	-1.88	-1.43	-0.80	-1.14
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-2.78	-2.60	-2.43	-2.12	-1.58	-1.23	-0.66	-0.92
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	-48.00	-45.14	-42.34	-37.09	-28.25	-21.55	-11.92	-16.87
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-3.29	-3.09	-2.89	-2.53	-1.90	-1.46	-0.80	-1.12
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-25.56	-23.95	-22.38	-19.55	-14.58	-11.29	-6.10	-8.51
Utah County, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	8.08	7.47	6.89	5.96	4.12	3.37	1.67	2.18
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	4.44	4.10	3.78	3.27	2.25	1.85	0.91	1.19
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.29	-0.43	-0.56	-0.58	-0.98	-0.46	-0.50	-0.94
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.65	1.52	1.40	1.20	0.81	0.67	0.32	0.41
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.57	-0.53	-0.50	-0.44	-0.33	-0.25	-0.14	-0.19
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	-3.09	-2.90	-2.72	-2.38	-1.80	-1.38	-0.76	-1.07
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-3.73	-3.50	-3.27	-2.86	-2.13	-1.65	-0.89	-1.24
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-9.88	-9.26	-8.65	-7.56	-5.64	-4.37	-2.36	-3.29
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-11.46	-10.74	-10.03	-8.77	-6.54	-5.06	-2.74	-3.82
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.10	-3.06	-3.00	-2.71	-2.52	-1.67	-1.14	-1.80
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-52.50	-50.23	-47.94	-42.49	-35.21	-25.32	-15.32	-22.91
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-14.15	-13.31	-12.49	-10.94	-8.34	-6.36	-3.52	-4.99
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.40	1.30	1.20	1.04	0.73	0.59	0.30	0.40
Wayne County; (part), MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-30.58	-28.66	-26.79	-23.41	-17.51	-13.53	-7.33	-10.24
West Central Pinal County, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-3.34	-3.14	-2.95	-2.58	-1.97	-1.50	-0.83	-1.17
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.29	0.27	0.25	0.21	0.15	0.12	0.06	0.08
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.90	0.83	0.76	0.65	0.43	0.36	0.17	0.21
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	-7.23	-6.85	-6.47	-5.70	-4.51	-3.35	-1.93	-2.80
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	-6.64	-6.26	-5.89	-5.17	-3.99	-3.01	-1.69	-2.42
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	-3.24	-3.04	-2.84	-2.49	-1.88	-1.44	-0.79	-1.11
Yakima County; (part), WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-8.46	-7.94	-7.43	-6.50	-4.90	-3.77	-2.06	-2.90
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.02	-0.99	-0.96	-0.86	-0.77	-0.53	-0.34	-0.53
Yuma County; Yuma planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-10.28	-9.65	-9.05	-7.92	-5.99	-4.59	-2.52	-3.56

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM_{2.5} = particulate matter less than 2.5 microns in size; ppm = parts per million; VOC = volatile organic compound

Table A-13. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Carbon Monoxide (CO), 2025

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	176.28	164.10	155.52	138.38	101.22	95.28	73.41	65.07
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	761.31	708.71	671.66	597.65	437.14	411.50	317.05	281.00
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.37	0.34	0.33	0.29	0.21	0.20	0.15	0.14
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	328.22	305.55	289.55	257.69	188.49	177.43	136.72	121.17
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	41.62	38.75	36.72	32.68	23.90	22.50	17.34	15.36
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	455.32	423.87	401.71	357.45	261.45	246.12	189.63	168.07
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	5.68	5.29	5.01	4.46	3.26	3.07	2.37	2.10
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	39.15	36.45	34.54	30.74	22.48	21.16	16.31	14.45
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	274.64	255.67	242.30	215.61	157.70	148.45	114.38	101.38
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	317.61	295.66	280.20	249.34	182.38	171.68	132.27	117.23
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-52.66	-48.89	-46.92	-40.54	-29.47	-27.98	-21.12	-18.99
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	52.98	49.32	46.74	41.59	30.42	28.64	22.06	19.55
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.14	2.93	2.77	2.47	1.81	1.70	1.31	1.16
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	565.35	526.29	498.78	443.82	324.62	305.58	235.44	208.68
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	21.07	19.61	18.59	16.54	12.10	11.39	8.77	7.78
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	74.43	69.29	65.67	58.44	42.74	40.23	31.00	27.48
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1,463.06	1,362.08	1,290.42	1,149.16	840.69	791.18	609.93	540.37

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-1.16	-1.07	-1.06	-0.83	-0.59	-0.58	-0.41	-0.39
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	86.81	80.82	76.59	68.15	49.85	46.92	36.15	32.04
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	29.28	27.26	25.83	22.98	16.81	15.83	12.19	10.81
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	306.91	285.71	270.77	240.93	176.23	165.89	127.81	113.28
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	268.41	249.86	236.80	210.71	154.12	145.08	111.78	99.07
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	9.91	9.22	8.74	7.78	5.69	5.35	4.13	3.66
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	1.97	1.83	1.74	1.54	1.13	1.06	0.82	0.73
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	4.84	4.50	4.27	3.80	2.78	2.62	2.02	1.79
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2,874.36	2,675.77	2,535.91	2,256.44	1,650.45	1,553.64	1,197.03	1,060.95
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	17.46	16.25	15.40	13.71	10.03	9.44	7.27	6.44
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	200.92	187.05	177.20	157.83	115.47	108.66	83.78	74.22
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5.78	5.38	5.10	4.54	3.32	3.12	2.41	2.13
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1,417.20	1,319.29	1,250.32	1,112.56	813.77	766.03	590.22	523.11
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	197.02	183.97	171.81	158.11	116.46	108.57	85.56	74.64
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	7.26	6.76	6.40	5.70	4.17	3.92	3.02	2.68
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	11.53	10.73	10.17	9.05	6.62	6.23	4.80	4.25
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-2.30	-2.04	-2.37	-1.21	-0.74	-0.88	-0.35	-0.52
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-39.95	-37.10	-35.59	-30.77	-22.37	-21.24	-16.03	-14.42
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	567.40	528.20	500.59	445.43	325.80	306.69	236.30	209.43
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	176.28	164.10	155.52	138.38	101.22	95.28	73.41	65.07
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	5.02	4.68	4.43	3.94	2.88	2.71	2.09	1.85

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	307.04	285.83	270.88	241.04	176.31	165.97	127.88	113.34
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-39.35	-36.53	-35.07	-30.28	-22.01	-20.90	-15.77	-14.19
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.40	0.37	0.35	0.31	0.23	0.22	0.17	0.15
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	4.50	4.19	3.97	3.53	2.58	2.43	1.87	1.66
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	26.85	24.99	23.69	21.08	15.42	14.51	11.18	9.91
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	17.37	16.17	15.33	13.64	9.98	9.39	7.24	6.41
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	157.34	146.50	138.73	123.67	90.49	85.14	65.68	58.16
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	93.69	87.22	82.66	73.55	53.80	50.64	39.02	34.58
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	7.06	6.57	6.23	5.54	4.05	3.82	2.94	2.61
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	158.62	147.66	139.95	124.52	91.08	85.74	66.06	58.55
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	761.96	709.31	672.24	598.15	437.51	411.85	317.32	281.24
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1,428.88	1,330.16	1,260.64	1,121.71	820.46	772.34	595.06	527.41
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3,350.44	3,119.22	2,954.99	2,631.79	1,925.38	1,811.94	1,396.94	1,237.57
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	97.24	90.52	85.79	76.34	55.84	52.56	40.50	35.89
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	42.29	39.37	37.31	33.20	24.28	22.86	17.61	15.61
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	96.01	89.37	84.70	75.37	55.13	51.89	39.98	35.44
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	1,060.11	986.87	935.28	832.22	608.72	573.01	441.49	391.30
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	951.59	885.84	839.54	747.02	546.40	514.35	396.29	351.24
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	561.94	523.11	495.77	441.14	322.66	303.74	234.02	207.42

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	699.65	651.31	617.26	549.24	401.73	378.17	291.37	258.24
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1,428.48	1,329.78	1,260.28	1,121.39	820.23	772.12	594.89	527.26
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1,330.54	1,238.61	1,173.87	1,044.51	763.99	719.18	554.11	491.11
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	13.39	12.46	11.81	10.51	7.69	7.24	5.58	4.94
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	270.77	252.07	238.89	212.57	155.48	146.36	112.77	99.95
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	985.61	917.52	869.56	773.73	565.94	532.74	410.46	363.80
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	35.21	32.78	31.06	27.65	20.23	19.04	14.67	13.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	43.25	40.26	38.15	33.96	24.84	23.38	18.02	15.97
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.30	0.28	0.26	0.23	0.17	0.16	0.12	0.11
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	431.94	402.10	381.08	339.08	248.02	233.47	179.88	159.43
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	559.68	521.02	493.78	439.37	321.37	302.52	233.08	206.58
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3,737.11	3,478.93	3,297.03	2,933.80	2,145.91	2,020.02	1,556.40	1,379.44
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	140.71	131.09	123.78	111.08	81.40	76.43	59.23	52.28
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	1,281.31	1,192.82	1,130.28	1,006.12	735.98	692.73	533.87	473.09
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1,603.01	1,492.41	1,413.73	1,259.32	921.33	867.01	668.51	592.20
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	718.08	668.48	633.50	563.76	412.37	388.17	299.10	265.08
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	121.53	113.14	107.19	95.46	69.83	65.72	50.66	44.89
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	2,243.13	2,088.16	1,978.98	1,760.96	1,288.05	1,212.48	934.21	827.98
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	3.99	3.72	3.52	3.14	2.29	2.16	1.66	1.47

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	11.23	10.45	9.91	8.81	6.45	6.07	4.68	4.14
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	4.97	4.62	4.38	3.90	2.85	2.69	2.07	1.83
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	52.81	49.17	46.60	41.46	30.33	28.55	21.99	19.49
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-29.15	-27.04	-26.03	-22.34	-16.22	-15.43	-11.59	-10.46
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.12	0.11	0.10	0.09	0.07	0.06	0.05	0.04
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	6.10	5.70	5.32	4.89	3.60	3.36	2.65	2.31
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	227.47	211.77	200.63	178.67	130.71	123.01	94.83	84.02
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5.30	4.95	4.61	4.26	3.14	2.92	2.31	2.01
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	105.29	98.01	92.89	82.65	60.46	56.91	43.85	38.86
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	3.70	3.45	3.25	2.92	2.14	2.01	1.56	1.37
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	10.94	10.18	9.64	8.60	6.30	5.92	4.57	4.05
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.89	0.82	0.78	0.70	0.51	0.48	0.37	0.33
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	18.32	17.05	16.16	14.38	10.52	9.90	7.63	6.76
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	2.33	2.17	2.05	1.83	1.34	1.26	0.97	0.86
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	65.48	60.96	57.77	51.41	37.60	35.39	27.27	24.17
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	6.64	6.18	5.86	5.21	3.81	3.59	2.77	2.45
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	7.25	6.75	6.39	5.69	4.17	3.92	3.02	2.68
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	17.48	16.28	15.43	13.73	10.04	9.45	7.28	6.45
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	255.05	237.43	225.01	200.22	146.45	137.86	106.22	94.14
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	17.08	15.90	15.07	13.41	9.81	9.23	7.11	6.30

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	756.57	704.30	667.48	593.93	434.42	408.94	315.07	279.26
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	106.99	99.71	94.01	84.64	62.06	58.22	45.22	39.85
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	4.49	4.19	3.95	3.55	2.60	2.44	1.90	1.67
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	4.65	4.33	4.08	3.67	2.69	2.53	1.96	1.73
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	520.40	484.44	459.12	408.53	298.82	281.29	216.73	192.09
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	518.14	482.34	457.13	406.75	297.51	280.06	215.78	191.25
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.38	1.28	1.21	1.08	0.79	0.74	0.57	0.51
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.94	0.87	0.83	0.73	0.54	0.51	0.39	0.35
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.94	0.87	0.83	0.73	0.54	0.51	0.39	0.35
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	8.43	7.85	7.44	6.62	4.84	4.56	3.51	3.11
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2,964.98	2,760.69	2,613.85	2,331.01	1,705.80	1,604.69	1,238.26	1,096.31
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	11.08	10.31	9.77	8.69	6.36	5.99	4.61	4.09
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	76.03	70.78	67.08	59.69	43.66	41.10	31.66	28.06
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	93.57	87.10	82.55	73.45	53.73	50.57	38.97	34.54
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	76.03	70.78	67.08	59.69	43.66	41.10	31.66	28.06
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	92.77	86.36	81.84	72.82	53.27	50.14	38.63	34.24
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	5.80	5.41	5.05	4.66	3.43	3.20	2.52	2.20
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	42.06	39.15	37.11	33.02	24.15	22.73	17.52	15.52
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.89	0.83	0.78	0.70	0.51	0.48	0.37	0.33
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	252.44	235.00	222.72	198.18	144.95	136.45	105.13	93.18
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	3.53	3.29	3.11	2.77	2.03	1.91	1.47	1.30
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	20.95	19.50	18.48	16.44	12.03	11.32	8.72	7.73

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	73.94	68.83	65.23	58.04	42.46	39.97	30.79	27.29
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	69.28	64.49	61.12	54.39	39.78	37.45	28.85	25.57
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	20.20	18.81	17.83	15.86	11.60	10.92	8.41	7.46
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	24.71	23.01	21.80	19.40	14.19	13.36	10.29	9.12
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.04	1.90	1.80	1.60	1.17	1.10	0.85	0.75
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	58.47	54.43	51.58	45.90	33.57	31.60	24.35	21.58
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	17.08	15.90	15.07	13.41	9.81	9.23	7.11	6.30
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.86	3.60	3.41	3.03	2.22	2.09	1.61	1.43
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	31.21	29.07	27.47	24.60	18.02	16.93	13.10	11.58
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	10.69	9.95	9.43	8.39	6.14	5.78	4.45	3.94
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	4.58	4.27	4.04	3.60	2.63	2.48	1.91	1.69
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	31.68	29.49	27.95	24.87	18.19	17.12	13.19	11.69
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	31.37	29.20	27.68	24.63	18.01	16.96	13.06	11.58
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	34.38	32.00	30.33	26.99	19.74	18.58	14.32	12.69
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	399.02	371.45	352.03	313.24	229.12	215.68	166.17	147.28
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	480.30	447.11	423.74	377.04	275.78	259.61	200.02	177.28
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	28.13	26.18	24.82	22.08	16.15	15.20	11.71	10.38
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.43	2.27	2.15	1.91	1.40	1.32	1.01	0.90
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	119.03	110.80	105.01	93.44	68.34	64.34	49.57	43.93
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	113.75	105.98	100.04	89.83	65.83	61.81	47.92	42.29

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	17.21	16.02	15.18	13.51	9.88	9.30	7.17	6.35
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	47.49	44.29	41.58	37.82	27.79	25.99	20.32	17.83
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.93	0.86	0.82	0.73	0.53	0.50	0.39	0.34
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	8.74	8.14	7.71	6.86	5.02	4.73	3.64	3.23
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	4.87	4.54	4.30	3.83	2.80	2.63	2.03	1.80
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	14.77	13.75	13.03	11.60	8.48	7.99	6.15	5.45
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	228.83	213.02	201.89	179.64	131.39	123.69	95.30	84.46
Lancaster, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	228.83	213.02	201.89	179.64	131.39	123.69	95.30	84.46
Lane County (part); Oakridge, OR	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	1.06	0.99	0.94	0.83	0.61	0.57	0.44	0.39
Lane County; Eugene/Springfield, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	105.29	98.01	92.89	82.65	60.46	56.91	43.85	38.86
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	949.17	883.59	837.41	745.12	545.01	513.04	395.28	350.35
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	17.67	16.45	15.59	13.87	10.14	9.55	7.36	6.52
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-39.51	-36.68	-35.20	-30.42	-22.11	-21.00	-15.85	-14.25
Lebanon County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	59.99	55.84	52.93	47.09	34.45	32.43	24.98	22.14
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	4.53	4.39	3.37	4.63	3.64	3.10	2.98	2.27
Liberty-Clairton, PA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	5.68	5.29	5.01	4.46	3.26	3.07	2.37	2.10
Lincoln County; Libby and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	2.49	2.32	2.20	1.96	1.43	1.35	1.04	0.92
Logan, UT-ID	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	56.51	52.61	49.86	44.36	32.45	30.55	23.54	20.86
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	39.22	36.51	34.60	30.79	22.52	21.20	16.34	14.48

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	21.87	20.36	19.30	17.17	12.56	11.82	9.11	8.07
Los Angeles, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	7,473.25	6,957.11	6,592.61	5,867.84	4,292.24	4,040.12	3,113.43	2,759.08
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	358.99	334.38	316.05	282.97	207.25	194.74	150.68	133.15
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	7,478.67	6,962.16	6,597.40	5,872.10	4,295.35	4,043.05	3,115.69	2,761.08
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	7,478.82	6,962.29	6,597.52	5,872.21	4,295.43	4,043.13	3,115.75	2,761.13
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	7,478.31	6,961.82	6,597.08	5,871.82	4,295.15	4,042.86	3,115.54	2,760.95
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	7,465.35	6,949.75	6,585.64	5,861.64	4,287.70	4,035.85	3,110.14	2,756.16
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	42.59	39.65	37.58	33.44	24.46	23.02	17.74	15.72
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	73.36	68.53	63.89	59.02	43.50	40.51	32.00	27.87
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-32.81	-30.41	-29.41	-24.96	-18.07	-17.25	-12.85	-11.67
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	49.14	45.75	43.35	38.58	28.22	26.56	20.46	18.14
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	1,837.73	1,710.76	1,621.34	1,442.66	1,055.22	993.32	765.33	678.32
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	232.92	216.83	205.49	182.85	133.74	125.90	97.00	85.97
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	20.47	19.05	18.06	16.07	11.75	11.06	8.52	7.55
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.43	2.28	2.11	1.97	1.46	1.35	1.08	0.93
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	37.94	35.32	33.47	29.78	21.78	20.51	15.80	14.00
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	458.01	426.39	403.99	359.69	263.13	247.65	190.88	169.13
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	597.57	556.31	527.12	469.25	343.26	323.08	249.01	220.65
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	6.02	5.61	5.31	4.73	3.46	3.26	2.51	2.22
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	6.02	5.61	5.31	4.73	3.46	3.26	2.51	2.22
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	6.02	5.61	5.31	4.73	3.46	3.26	2.51	2.22

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	597.46	556.18	527.11	469.02	343.06	322.94	248.81	220.53
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1,509.47	1,405.28	1,331.37	1,185.59	867.33	816.27	629.25	557.50
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	38.12	35.49	33.63	29.94	21.90	20.61	15.89	14.08
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	36.52	34.00	32.22	28.68	20.98	19.75	15.22	13.49
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	89.51	83.33	78.96	70.28	51.41	48.39	37.29	33.04
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	32.14	29.92	28.36	25.23	18.46	17.37	13.39	11.86
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	15.05	14.01	13.28	11.82	8.64	8.14	6.27	5.56
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.15	1.07	1.02	0.91	0.66	0.62	0.48	0.43
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.08	1.94	1.83	1.63	1.19	1.12	0.87	0.77
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	14.74	13.72	13.01	11.57	8.47	7.97	6.14	5.44
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.26	0.25	0.23	0.21	0.15	0.14	0.11	0.10
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	10.26	9.55	9.05	8.06	5.89	5.55	4.27	3.79
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	5.00	4.65	4.41	3.92	2.87	2.70	2.08	1.85
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	9.48	8.82	8.36	7.44	5.44	5.12	3.95	3.50
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	3.07	2.86	2.71	2.41	1.77	1.66	1.28	1.13
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	42.35	39.43	37.37	33.25	24.32	22.89	17.64	15.63
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.12	1.97	1.87	1.66	1.22	1.14	0.88	0.78
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	56.08	52.21	49.48	44.03	32.20	30.31	23.36	20.70
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	9.57	8.91	8.44	7.51	5.49	5.17	3.98	3.53
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	399.74	372.12	352.66	313.81	229.53	216.07	166.48	147.55
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.89	0.83	0.77	0.72	0.54	0.50	0.40	0.34

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	173.20	161.23	152.81	135.97	99.45	93.62	72.13	63.93
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	6,393.72	5,952.01	5,640.73	5,019.46	3,671.48	3,456.06	2,662.92	2,360.10
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	3,523.05	3,279.66	3,108.15	2,765.78	2,023.03	1,904.33	1,467.29	1,300.44
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	6,279.67	5,845.84	5,540.11	4,929.93	3,606.00	3,394.42	2,615.42	2,318.01
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	15.38	14.32	13.57	12.08	8.83	8.31	6.41	5.68
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	18.41	17.14	16.24	14.45	10.57	9.95	7.67	6.80
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.06	0.99	0.94	0.83	0.61	0.57	0.44	0.39
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	28.45	26.48	25.10	22.33	16.33	15.38	11.85	10.50
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	28.45	26.48	25.10	22.33	16.33	15.38	11.85	10.50
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	13.45	12.52	11.86	10.56	7.72	7.27	5.60	4.96
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	48.31	44.97	42.62	37.93	27.74	26.11	20.12	17.83
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	20.14	18.75	17.77	15.81	11.57	10.89	8.39	7.43
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.53	0.49	0.47	0.42	0.30	0.29	0.22	0.20
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	42.79	39.83	37.75	33.59	24.57	23.13	17.82	15.79
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	19.65	18.32	17.27	15.55	11.40	10.70	8.31	7.32
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	416.27	387.67	366.71	327.72	239.93	225.57	174.31	154.17
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	2,077.50	1,934.26	1,831.81	1,632.72	1,194.67	1,124.03	867.04	767.84

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	2,833.62	2,638.15	2,498.90	2,226.29	1,628.83	1,532.73	1,181.93	1,046.93
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	1,766.89	1,644.82	1,558.84	1,387.05	1,014.54	955.04	735.83	652.17
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1,845.66	1,718.15	1,628.34	1,448.89	1,059.77	997.61	768.63	681.25
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.07	1.00	0.94	0.84	0.61	0.58	0.45	0.39
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.37	0.34	0.33	0.29	0.21	0.20	0.15	0.14
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	32.64	30.39	28.80	25.63	18.74	17.64	13.59	12.05
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	12.43	11.57	10.96	9.76	7.14	6.72	5.18	4.59
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	142.03	132.22	125.31	111.50	81.56	76.77	59.15	52.43
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	11.85	11.04	10.46	9.31	6.81	6.41	4.94	4.38
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	107.39	99.97	94.74	84.31	61.67	58.05	44.73	39.64
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	967.99	901.11	854.00	759.91	555.83	523.22	403.13	357.30
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	883.47	822.43	779.43	693.56	507.30	477.54	367.93	326.10
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	2.62	2.44	2.32	2.06	1.51	1.42	1.09	0.97
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	12.95	12.06	11.43	10.17	7.44	7.00	5.39	4.78
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	590.17	549.40	520.68	463.30	338.88	319.00	245.78	217.84
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	36.09	33.60	31.84	28.33	20.72	19.51	15.03	13.32
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	42.81	39.85	37.77	33.60	24.58	23.14	17.83	15.80
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	232.64	216.57	205.25	182.63	133.58	125.75	96.88	85.87
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	6.52	6.07	5.75	5.12	3.74	3.52	2.71	2.41

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	851.67	792.83	751.39	668.58	489.03	460.34	354.68	314.36
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.33	1.23	1.17	1.04	0.76	0.72	0.55	0.49
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	180.78	168.29	159.50	141.92	103.81	97.72	75.29	66.73
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	145.03	135.01	127.95	113.85	83.27	78.39	60.40	53.53
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	16.14	15.03	14.24	12.67	9.27	8.73	6.72	5.96
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	210.27	195.74	185.51	165.07	120.74	113.65	87.57	77.61
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	245.60	228.63	216.68	192.80	141.02	132.75	102.28	90.65
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	7,443.10	6,929.04	6,566.01	5,844.17	4,274.93	4,023.82	3,100.87	2,747.95
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	4.27	3.98	3.77	3.35	2.45	2.31	1.78	1.58
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	13.94	12.97	12.29	10.94	8.00	7.53	5.81	5.15
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.60	0.56	0.53	0.47	0.35	0.32	0.25	0.22
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	647.50	602.76	571.26	508.30	371.79	349.99	269.65	239.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	626.35	583.07	552.60	491.70	359.65	338.55	260.85	231.19
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	1,096.06	1,020.35	966.95	860.52	629.44	592.49	456.55	404.61
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1,077.79	1,003.34	950.83	846.18	618.95	582.62	448.94	397.87
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	111.97	104.23	98.79	87.90	64.29	60.52	46.63	41.33
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	62.95	58.64	55.39	49.66	36.38	34.17	26.46	23.37
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	740.95	689.83	653.41	582.15	425.92	400.79	309.07	273.76
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	454.79	423.41	401.09	357.26	261.37	245.97	189.65	168.00
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	454.79	423.41	401.09	357.26	261.37	245.97	189.65	168.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	266.47	248.06	235.10	209.19	153.01	144.03	110.97	98.36
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1,589.12	1,479.33	1,402.00	1,247.50	912.47	858.95	661.79	586.56
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1,593.11	1,483.04	1,405.52	1,250.63	914.76	861.10	663.45	588.03
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	3,100.25	2,886.24	2,734.52	2,434.92	1,781.27	1,676.43	1,292.28	1,144.97
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3,116.58	2,901.44	2,748.94	2,447.74	1,790.65	1,685.26	1,299.08	1,151.00
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2,835.79	2,640.05	2,501.21	2,227.32	1,629.42	1,533.49	1,182.14	1,047.35
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1,862.03	1,733.40	1,642.70	1,461.86	1,069.29	1,006.53	775.57	687.36
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	1,862.03	1,733.40	1,642.70	1,461.86	1,069.29	1,006.53	775.57	687.36
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	1,861.55	1,732.95	1,642.28	1,461.48	1,069.01	1,006.27	775.37	687.18
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	1,861.55	1,732.95	1,642.28	1,461.48	1,069.01	1,006.27	775.37	687.18
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.79	1.67	1.58	1.41	1.04	0.97	0.75	0.67
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.84	2.65	2.51	2.23	1.63	1.54	1.18	1.05
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	4.36	4.05	3.84	3.42	2.50	2.35	1.81	1.61
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	18.41	17.14	16.24	14.45	10.57	9.95	7.67	6.80
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	122.76	114.27	108.30	96.37	70.49	66.35	51.12	45.31
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1,356.10	1,262.41	1,196.42	1,064.57	778.67	733.00	564.75	500.55
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	219.30	204.15	193.48	172.16	125.92	118.54	91.33	80.95

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	49.17	45.77	43.38	38.60	28.23	26.58	20.48	18.15
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	9.96	9.28	8.79	7.82	5.72	5.39	4.15	3.68
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	10.93	10.18	9.65	8.58	6.28	5.91	4.55	4.04
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	12.06	11.22	10.64	9.47	6.92	6.52	5.02	4.45
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	5.52	5.13	4.87	4.33	3.17	2.98	2.30	2.04
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	4.75	4.42	4.19	3.73	2.73	2.57	1.98	1.75
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	135.92	126.53	119.91	106.70	78.04	73.47	56.60	50.17
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	139.97	130.30	123.49	109.88	80.37	75.66	58.29	51.67
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	66.23	61.66	58.43	51.99	38.03	35.80	27.58	24.45
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-43.50	-40.36	-38.85	-33.33	-24.19	-23.02	-17.28	-15.60
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	23.26	21.66	20.52	18.26	13.36	12.57	9.69	8.59
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	322.51	300.23	284.54	253.18	185.19	174.33	134.31	119.04
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1,084.36	1,009.57	956.20	852.06	623.42	586.61	452.41	400.70
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	28.53	26.56	25.17	22.40	16.38	15.42	11.88	10.53
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	53.24	49.57	46.96	41.82	30.60	28.79	22.20	19.67
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	152.02	141.52	134.12	119.34	87.29	82.17	63.31	56.11
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-6.01	-5.56	-5.44	-4.48	-3.22	-3.10	-2.26	-2.09
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	211.49	196.88	186.59	166.03	121.44	114.32	88.08	78.06
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	11.25	10.47	9.93	8.83	6.46	6.08	4.69	4.15
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	27.90	25.97	24.62	21.90	16.02	15.08	11.62	10.30
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	43.16	40.18	38.08	33.88	24.78	23.33	17.98	15.93
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.78	0.72	0.68	0.61	0.45	0.42	0.32	0.29
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	1.57	1.46	1.38	1.23	0.90	0.85	0.65	0.58

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	2.11	1.96	1.86	1.65	1.21	1.14	0.88	0.78
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	41.43	38.56	36.55	32.52	23.79	22.39	17.25	15.29
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.36	0.34	0.32	0.29	0.21	0.20	0.15	0.13
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	446.09	415.27	393.57	350.19	256.14	241.12	185.78	164.66
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	7.91	7.36	6.98	6.21	4.54	4.27	3.29	2.92
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	12.23	11.39	10.79	9.61	7.03	6.62	5.10	4.52
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	232.69	216.62	205.29	182.67	133.61	125.78	96.91	85.89
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	135.76	126.38	119.78	106.58	77.96	73.38	56.54	50.11
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	398.26	370.75	351.36	312.65	228.69	215.27	165.86	147.01
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	7.13	6.64	6.29	5.60	4.10	3.86	2.97	2.63
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	65.66	61.12	57.92	51.54	37.70	35.49	27.34	24.23
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1.65	1.53	1.45	1.29	0.95	0.89	0.69	0.61
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	23.14	21.54	20.42	18.17	13.29	12.51	9.64	8.54
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-1.56	-1.45	-1.41	-1.17	-0.85	-0.81	-0.60	-0.55
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	4.22	3.94	3.69	3.37	2.48	2.31	1.81	1.59
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	6.14	5.73	5.39	4.88	3.58	3.35	2.61	2.30
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	364.89	339.68	321.93	286.45	209.52	197.23	151.96	134.68
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	2,586.09	2,407.41	2,281.58	2,030.14	1,484.93	1,397.83	1,076.98	954.55
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	143.93	133.99	126.98	112.99	82.64	77.80	59.94	53.13
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	29.51	27.47	26.04	23.17	16.95	15.95	12.29	10.89
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	27.24	25.36	24.00	21.43	15.69	14.75	11.39	10.08
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	29.04	27.03	25.62	22.80	16.67	15.70	12.09	10.72
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	5.55	5.17	4.90	4.36	3.19	3.00	2.31	2.05
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	42.17	39.26	37.21	33.11	24.22	22.80	17.56	15.57
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	189.01	175.95	166.75	148.38	108.53	102.16	78.71	69.77
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	93.47	87.01	82.47	73.38	53.67	50.52	38.93	34.50
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	14.63	13.62	12.91	11.49	8.40	7.91	6.09	5.40
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	42.66	39.71	37.64	33.49	24.50	23.06	17.77	15.75
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	91.95	85.60	81.13	72.19	52.80	49.70	38.29	33.94
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	70.69	65.80	62.36	55.49	40.59	38.21	29.44	26.09

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-14. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Carbon Monoxide (CO), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	331.55	307.92	285.32	248.38	177.17	146.04	76.63	96.31
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1,426.42	1,324.76	1,227.54	1,068.62	762.22	628.32	329.70	414.35
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	613.89	570.15	528.26	459.91	327.97	270.51	141.94	178.32
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	83.56	77.61	71.91	62.60	44.65	36.81	19.32	24.27
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	852.81	792.04	733.90	638.89	455.70	375.67	197.13	247.72
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	8.89	8.25	7.65	6.66	4.75	3.92	2.05	2.58
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	62.09	57.66	53.43	46.51	33.18	27.35	14.35	18.04
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	514.31	477.65	442.59	385.30	274.81	226.57	118.88	149.39
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	594.80	552.41	511.86	445.60	317.83	262.02	137.49	172.78
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-124.32	-115.44	-108.00	-93.15	-68.31	-52.40	-27.57	-36.37
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	97.28	90.35	83.72	72.88	51.98	42.85	22.49	28.26
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	5.71	5.31	4.92	4.28	3.05	2.52	1.32	1.66
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1,054.16	979.03	907.18	789.73	563.30	464.35	243.66	306.21
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	39.47	36.65	33.96	29.57	21.09	17.38	9.12	11.46
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	139.38	129.45	119.95	104.42	74.48	61.40	32.22	40.49
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2,721.16	2,527.25	2,340.97	2,038.57	1,452.62	1,200.48	629.87	790.24

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-5.10	-4.73	-4.48	-3.82	-2.90	-2.03	-1.07	-1.51
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	162.64	151.05	139.97	121.85	86.91	71.64	37.59	47.24
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	54.85	50.94	47.20	41.09	29.31	24.16	12.68	15.93
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	575.29	534.29	495.08	430.98	307.42	253.41	132.97	167.11
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	502.82	466.99	432.71	376.69	268.69	221.49	116.22	146.06
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	18.56	17.24	15.97	13.90	9.92	8.18	4.29	5.39
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	3.24	3.01	2.79	2.43	1.73	1.43	0.75	0.94
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	9.67	8.98	8.32	7.25	5.17	4.26	2.24	2.81
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	5,385.05	5,001.28	4,634.25	4,034.26	2,877.59	2,372.04	1,244.67	1,564.26
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	32.57	30.25	28.03	24.40	17.40	14.35	7.53	9.46
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	374.51	347.82	322.16	280.56	199.88	165.28	86.71	108.75
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	11.37	10.56	9.79	8.52	6.08	5.01	2.63	3.30
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	2,655.63	2,466.37	2,285.35	1,989.49	1,419.03	1,169.82	613.84	771.41
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	259.19	240.82	218.63	194.11	130.33	124.41	64.96	74.16
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	14.10	13.09	12.13	10.56	7.53	6.21	3.26	4.10
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	21.59	20.05	18.58	16.18	11.54	9.51	4.99	6.27
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-24.60	-22.83	-21.94	-18.44	-14.56	-9.07	-4.82	-7.34
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-93.79	-87.09	-81.47	-70.27	-51.52	-39.55	-20.81	-27.44
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1,062.62	986.89	914.47	796.08	567.83	468.08	245.61	308.67
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	331.55	307.92	285.32	248.38	177.17	146.04	76.63	96.31
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	10.10	9.38	8.70	7.57	5.40	4.45	2.34	2.94

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	580.03	538.70	499.15	434.54	309.92	255.53	134.08	168.49
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-93.46	-86.78	-81.20	-70.03	-51.37	-39.37	-20.71	-27.35
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.63	0.59	0.54	0.47	0.34	0.28	0.15	0.18
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	7.34	6.82	6.32	5.50	3.92	3.23	1.70	2.13
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	50.30	46.71	43.28	37.68	26.88	22.16	11.63	14.61
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	33.19	30.82	28.56	24.86	17.73	14.62	7.67	9.64
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	289.98	269.32	249.36	217.24	154.60	128.18	67.25	84.18
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	175.34	162.85	150.90	131.36	93.70	77.24	40.53	50.93
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	9.49	8.82	8.17	7.11	5.07	4.18	2.19	2.76
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	297.18	276.00	255.74	222.63	158.80	130.90	68.69	86.32
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	1,427.61	1,325.87	1,228.57	1,069.51	762.87	628.84	329.97	414.70
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2,685.93	2,494.51	2,311.45	2,012.19	1,435.27	1,183.11	620.81	780.21
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	6,229.51	5,785.61	5,358.91	4,666.88	3,325.01	2,748.82	1,442.23	1,809.03
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	182.18	169.20	156.78	136.48	97.35	80.25	42.11	52.92
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	84.29	78.29	72.54	63.15	45.04	37.13	19.48	24.49
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	180.47	167.60	155.30	135.20	96.43	79.49	41.71	52.42
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	1,986.60	1,845.03	1,709.62	1,488.28	1,061.56	875.09	459.18	577.07
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1,786.56	1,659.24	1,537.47	1,338.42	954.68	786.96	412.94	518.96
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1,054.03	978.92	907.08	789.64	563.24	464.29	243.62	306.18

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	1,311.83	1,218.35	1,128.94	982.78	701.00	577.85	303.21	381.06
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2,677.35	2,486.55	2,304.07	2,005.76	1,430.68	1,179.34	618.83	777.72
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	2,493.79	2,316.07	2,146.10	1,868.25	1,332.60	1,098.48	576.40	724.40
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	24.87	23.10	21.41	18.64	13.29	10.96	5.75	7.23
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	508.78	472.52	437.84	381.16	271.86	224.13	117.61	147.79
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1,846.52	1,714.93	1,589.07	1,383.34	986.72	813.37	426.80	536.38
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	65.79	61.10	56.61	49.29	35.14	29.00	15.22	19.11
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	74.16	68.88	63.81	55.56	39.61	32.69	17.15	21.54
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.38	0.36	0.33	0.29	0.21	0.17	0.09	0.11
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	794.47	737.85	683.70	595.19	424.54	349.95	183.63	230.78
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1,049.38	974.60	903.08	786.16	560.76	462.24	242.55	304.83
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	6,999.16	6,500.37	6,023.24	5,243.50	3,739.95	3,083.24	1,617.85	2,033.11
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	243.77	226.42	208.98	182.61	128.79	109.23	57.26	70.61
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	2,393.29	2,222.74	2,059.27	1,792.96	1,278.26	1,055.00	553.56	695.12
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2,975.01	2,763.02	2,559.05	2,228.74	1,587.57	1,313.18	688.97	863.89
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	1,253.76	1,164.41	1,078.90	939.27	669.85	552.41	289.86	364.18
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	254.87	236.71	219.27	190.94	136.08	112.41	58.98	74.02
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	4,201.64	3,902.21	3,615.78	3,147.70	2,245.10	1,850.91	971.22	1,220.49
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	7.63	7.09	6.57	5.72	4.08	3.36	1.76	2.22

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	22.65	21.03	19.49	16.97	12.10	9.98	5.23	6.58
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	9.40	8.73	8.09	7.04	5.02	4.14	2.17	2.73
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	106.56	98.96	91.70	79.83	56.94	46.94	24.63	30.95
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-70.86	-65.79	-61.67	-53.10	-39.14	-29.61	-15.59	-20.76
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	4.33	4.03	3.60	3.24	2.07	2.22	1.15	1.22
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	412.13	382.76	354.54	308.75	219.99	181.83	95.40	119.68
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	4.37	4.06	3.63	3.27	2.10	2.22	1.16	1.24
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	202.22	187.81	174.03	151.50	108.06	89.08	46.74	58.74
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	5.39	5.01	4.62	4.04	2.84	2.43	1.27	1.56
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	19.48	18.09	16.74	14.59	10.37	8.63	4.53	5.65
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.47	1.37	1.27	1.10	0.79	0.65	0.34	0.43
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	34.82	32.34	29.97	26.09	18.61	15.34	8.05	10.12
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	4.10	3.81	3.53	3.07	2.19	1.81	0.95	1.19
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	121.47	112.82	104.54	91.00	64.91	53.51	28.08	35.29
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	13.53	12.57	11.65	10.14	7.23	5.96	3.13	3.93
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	14.68	13.63	12.63	11.00	7.84	6.48	3.40	4.26
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	32.76	30.42	28.19	24.54	17.50	14.43	7.57	9.52
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	472.88	439.18	406.95	354.27	252.68	208.31	109.31	137.36
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	33.52	31.13	28.85	25.11	17.91	14.77	7.75	9.74

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1,416.01	1,315.10	1,218.59	1,060.82	756.67	623.73	327.29	411.33
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	179.64	166.86	153.76	134.57	94.45	81.07	42.48	51.97
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	7.00	6.50	5.99	5.24	3.68	3.16	1.66	2.03
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	7.97	7.40	6.83	5.97	4.20	3.59	1.88	2.31
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	974.77	905.31	838.86	730.26	520.87	429.39	225.31	283.15
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	972.10	902.83	836.57	728.26	519.46	428.20	224.69	282.38
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.85	1.72	1.59	1.38	0.99	0.81	0.43	0.54
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	1.55	1.44	1.33	1.16	0.83	0.68	0.36	0.45
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.55	1.44	1.33	1.16	0.83	0.68	0.36	0.45
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	16.42	15.25	14.13	12.30	8.77	7.23	3.80	4.77
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	5,445.87	5,057.87	4,682.20	4,079.77	2,901.95	2,409.03	1,263.77	1,580.80
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	20.75	19.27	17.86	15.55	11.09	9.14	4.80	6.03
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	143.60	133.37	123.58	107.58	76.74	63.25	33.19	41.71
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	175.30	162.80	150.86	131.32	93.67	77.22	40.52	50.92
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	143.60	133.37	123.58	107.58	76.74	63.25	33.19	41.71
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	174.43	162.00	150.11	130.67	93.21	76.83	40.32	50.67
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.26	3.03	2.67	2.44	1.49	1.75	0.91	0.91
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	78.86	73.24	67.86	59.08	42.14	34.73	18.23	22.91
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	1.44	1.33	1.24	1.08	0.77	0.63	0.33	0.42
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	461.22	428.35	396.92	345.53	246.46	203.16	106.60	133.98
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	6.74	6.26	5.80	5.05	3.60	2.97	1.56	1.96
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	39.63	36.81	34.11	29.69	21.18	17.46	9.16	11.51

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	141.92	131.80	122.13	106.32	75.83	62.51	32.80	41.22
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	129.63	120.39	111.56	97.11	69.27	57.10	29.96	37.66
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	38.01	35.30	32.71	28.48	20.31	16.74	8.79	11.04
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	47.55	44.16	40.92	35.62	25.41	20.95	10.99	13.81
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.64	3.38	3.13	2.73	1.94	1.60	0.84	1.06
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	109.00	101.23	93.80	81.66	58.24	48.01	25.19	31.66
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	33.52	31.13	28.85	25.11	17.91	14.77	7.75	9.74
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	7.30	6.78	6.28	5.47	3.90	3.22	1.69	2.12
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	45.90	42.63	39.37	34.38	24.28	20.53	10.76	13.30
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	21.67	20.13	18.65	16.24	11.58	9.55	5.01	6.30
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	8.07	7.49	6.94	6.04	4.31	3.55	1.86	2.34
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	66.53	61.79	57.25	49.84	35.55	29.30	15.38	19.33
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	66.15	61.43	56.93	49.56	35.35	29.14	15.29	19.21
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	71.77	66.66	61.77	53.77	38.35	31.61	16.59	20.85
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	747.89	694.59	643.62	560.29	399.65	329.44	172.86	217.25
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	899.69	835.58	774.26	674.01	480.77	396.30	207.95	261.35
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	51.56	47.89	44.37	38.63	27.55	22.71	11.92	14.98
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	5.07	4.71	4.37	3.80	2.71	2.23	1.17	1.47
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	222.99	207.10	191.90	167.06	119.16	98.23	51.54	64.78
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	185.66	172.44	159.08	139.08	97.93	83.38	43.70	53.75

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	30.97	28.76	26.65	23.20	16.55	13.64	7.16	9.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	58.73	54.56	49.85	43.99	30.11	27.47	14.36	16.88
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.67	1.55	1.44	1.25	0.89	0.74	0.39	0.49
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	14.77	13.71	12.71	11.06	7.89	6.50	3.41	4.29
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	7.96	7.39	6.85	5.96	4.25	3.51	1.84	2.31
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	23.47	21.80	20.20	17.58	12.54	10.34	5.42	6.82
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	428.71	398.16	368.94	321.17	229.09	188.84	99.09	124.53
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	428.71	398.16	368.94	321.17	229.09	188.84	99.09	124.53
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.54	1.43	1.32	1.15	0.82	0.68	0.36	0.45
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	202.22	187.81	174.03	151.50	108.06	89.08	46.74	58.74
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	1,781.75	1,654.77	1,533.33	1,334.82	952.11	784.84	411.82	517.57
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	33.58	31.19	28.90	25.16	17.94	14.79	7.76	9.75
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-92.88	-86.24	-80.69	-69.59	-51.04	-39.15	-20.60	-27.17
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	112.39	104.38	96.72	84.20	60.06	49.51	25.98	32.65
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-23.00	-21.33	-21.18	-17.25	-14.85	-6.93	-3.73	-7.04
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	8.89	8.25	7.65	6.66	4.75	3.92	2.05	2.58
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	4.20	3.90	3.62	3.15	2.25	1.85	0.97	1.22
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	106.04	98.49	91.26	79.44	56.67	46.71	24.51	30.80

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	74.93	69.59	64.48	56.13	40.03	33.01	17.32	21.77
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	38.26	35.53	32.93	28.66	20.44	16.85	8.84	11.11
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	13,999.09	13,001.48	12,045.83	10,487.55	7,477.90	6,169.85	3,237.38	4,066.11
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	621.59	577.33	533.45	465.65	329.42	277.24	145.37	180.18
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	14,005.76	13,007.67	12,051.57	10,492.55	7,481.46	6,172.79	3,238.92	4,068.05
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	14,006.64	13,008.49	12,052.32	10,493.20	7,481.93	6,173.17	3,239.12	4,068.30
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	14,007.81	13,009.58	12,053.33	10,494.08	7,482.56	6,173.69	3,239.39	4,068.64
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	13,977.81	12,981.71	12,027.52	10,471.61	7,466.53	6,160.47	3,232.46	4,059.93
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	81.40	75.60	70.05	60.98	43.50	35.86	18.81	23.64
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	85.17	79.14	71.46	63.78	42.13	41.75	21.78	24.27
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-88.29	-81.97	-76.99	-66.16	-49.06	-36.53	-19.24	-25.91
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	89.34	82.97	76.88	66.93	47.74	39.35	20.65	25.95
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	3,441.91	3,196.62	2,962.04	2,578.55	1,839.24	1,516.12	795.55	999.82
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	431.25	400.51	371.12	323.07	230.44	189.96	99.68	125.27
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	38.34	35.61	33.00	28.72	20.49	16.89	8.86	11.14
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.84	2.64	2.36	2.13	1.37	1.44	0.75	0.80
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	74.01	68.73	63.69	55.44	39.55	32.60	17.11	21.50
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	853.50	792.67	734.32	639.40	455.74	376.38	197.48	247.88
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1,116.50	1,036.94	960.65	836.44	596.28	492.23	258.28	324.28
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	8.94	8.31	7.70	6.70	4.78	3.94	2.07	2.60

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	8.94	8.31	7.70	6.70	4.78	3.94	2.07	2.60
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	8.94	8.31	7.70	6.70	4.78	3.94	2.07	2.60
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	1,119.69	1,039.89	963.58	838.82	598.32	493.21	258.80	325.25
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2,811.06	2,610.74	2,418.33	2,105.92	1,500.66	1,240.08	650.65	816.36
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	71.27	66.19	61.32	53.39	38.06	31.43	16.49	20.70
Missoula county; Missoula and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	68.05	63.20	58.55	50.98	36.34	30.01	15.75	19.76
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	159.32	147.96	137.09	119.35	85.11	70.21	36.84	46.28
Mohave County (part); Bullhead City, AZ	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	62.75	58.28	54.01	47.01	33.53	27.64	14.50	18.23
Mono County; Mammoth Lake planning area, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	31.34	29.11	26.97	23.48	16.75	13.81	7.24	9.10
Mono County; Mono Basin, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.83	0.77	0.72	0.62	0.44	0.37	0.19	0.24
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	4.26	3.95	3.66	3.19	2.28	1.88	0.98	1.24
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	26.38	24.50	22.70	19.76	14.10	11.62	6.10	7.66
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.37	0.35	0.32	0.28	0.20	0.16	0.09	0.11
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	20.03	18.60	17.24	15.01	10.70	8.82	4.63	5.82
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	9.51	8.83	8.18	7.12	5.08	4.19	2.20	2.76
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	18.29	16.99	15.74	13.71	9.78	8.06	4.23	5.31
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	6.05	5.62	5.21	4.53	3.23	2.67	1.40	1.76
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	81.06	75.29	69.76	60.73	43.32	35.71	18.74	23.55
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	3.19	2.96	2.74	2.39	1.70	1.40	0.74	0.93
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	102.18	94.90	87.93	76.55	54.60	45.01	23.62	29.68
New Haven County, CT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	17.01	15.80	14.64	12.74	9.09	7.49	3.93	4.94

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	748.26	694.94	643.93	560.57	399.83	329.62	172.96	217.35
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.79	0.73	0.65	0.59	0.36	0.42	0.22	0.22
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	324.52	301.40	279.28	243.12	173.41	142.95	75.01	94.27
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	11,975.24	11,121.83	10,305.32	8,971.37	6,398.60	5,275.63	2,768.24	3,478.52
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	6,605.08	6,134.37	5,684.06	4,948.27	3,529.28	2,909.76	1,526.82	1,918.63
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	11,767.29	10,928.70	10,126.37	8,815.59	6,287.48	5,184.03	2,720.18	3,418.11
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	29.25	27.17	25.17	21.91	15.63	12.89	6.76	8.50
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	35.59	33.05	30.63	26.66	19.02	15.68	8.23	10.34
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.54	1.43	1.32	1.15	0.82	0.68	0.36	0.45
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	52.67	48.92	45.33	39.46	28.14	23.20	12.17	15.30
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	52.67	48.92	45.33	39.46	28.14	23.20	12.17	15.30
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	23.61	21.92	20.31	17.68	12.61	10.40	5.46	6.86
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	89.96	83.55	77.42	67.40	48.07	39.63	20.79	26.13
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	38.23	35.50	32.90	28.64	20.43	16.84	8.84	11.10
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.90	0.84	0.78	0.68	0.48	0.40	0.21	0.26
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	78.47	72.88	67.53	58.79	41.93	34.56	18.14	22.79
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	38.29	35.56	32.79	28.68	20.17	17.22	9.03	11.08
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	750.00	696.58	644.23	561.85	398.55	333.15	174.73	217.55

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	3,833.75	3,560.59	3,296.89	2,872.06	2,044.28	1,694.15	888.80	1,113.04
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	5,256.62	4,882.06	4,521.38	3,938.02	2,804.62	2,320.91	1,217.68	1,526.35
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	3,304.78	3,069.27	2,844.02	2,475.81	1,765.96	1,455.71	763.85	959.98
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3,456.20	3,209.89	2,974.33	2,589.25	1,846.88	1,522.41	798.85	1,003.97
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.71	1.59	1.47	1.28	0.91	0.75	0.39	0.50
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	64.56	59.96	55.56	48.37	34.50	28.44	14.92	18.75
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	25.78	23.94	22.19	19.31	13.78	11.36	5.96	7.49
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	272.21	252.81	234.26	203.93	145.46	119.91	62.92	79.07
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	22.21	20.63	19.11	16.64	11.87	9.78	5.13	6.45
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	190.19	176.64	163.67	142.49	101.63	83.78	43.96	55.25
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1,813.09	1,683.88	1,560.29	1,358.30	968.82	798.68	419.09	526.67
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	1,656.10	1,538.08	1,425.19	1,240.69	884.94	729.53	382.80	481.06
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	3.20	2.98	2.76	2.40	1.71	1.41	0.74	0.93
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	24.26	22.53	20.88	18.18	12.96	10.69	5.61	7.05
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1,109.74	1,030.65	955.01	831.37	593.00	488.84	256.51	322.36
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	69.27	64.34	59.62	51.90	37.02	30.51	16.01	20.12
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	77.75	72.21	66.91	58.25	41.55	34.25	17.97	22.59

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	435.93	404.86	375.15	326.58	232.95	192.02	100.76	126.63
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	14.05	13.05	12.09	10.52	7.51	6.19	3.25	4.08
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1,595.59	1,481.88	1,373.13	1,195.35	852.63	702.84	368.80	463.49
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.43	2.26	2.09	1.82	1.30	1.07	0.56	0.71
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	338.69	314.55	291.47	253.73	180.98	149.19	78.28	98.38
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	266.84	247.82	229.63	199.90	142.59	117.54	61.68	77.51
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	33.43	31.05	28.77	25.05	17.87	14.73	7.73	9.71
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	382.91	355.62	329.52	286.86	204.61	168.67	88.50	111.23
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	447.26	415.39	384.90	335.07	239.00	197.01	103.38	129.92
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	13,943.03	12,949.41	11,997.58	10,445.55	7,447.94	6,145.15	3,224.42	4,049.82
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	12.05	11.19	10.37	9.03	6.44	5.31	2.79	3.50
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	26.03	24.17	22.40	19.50	13.90	11.47	6.02	7.56
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.00	0.93	0.86	0.75	0.53	0.44	0.23	0.29
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1,186.05	1,101.52	1,020.68	888.54	633.78	522.44	274.14	344.53
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1,173.39	1,089.76	1,009.79	879.05	627.01	516.87	271.21	340.85
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	2,053.85	1,907.48	1,767.38	1,538.66	1,097.30	904.95	474.85	596.58
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	2,024.38	1,880.12	1,742.03	1,516.59	1,081.55	891.97	468.03	588.02
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	213.82	198.58	184.01	160.18	114.26	94.18	49.42	62.11
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	103.40	96.04	88.67	77.46	54.67	46.27	24.26	29.96
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	1,374.40	1,276.47	1,182.15	1,029.64	733.26	606.87	318.39	399.08

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	844.23	784.07	726.21	632.46	450.55	372.60	195.49	245.15
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	844.23	784.07	726.21	632.46	450.55	372.60	195.49	245.15
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	468.68	435.28	403.34	351.12	250.45	206.45	108.33	136.14
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2,978.42	2,766.16	2,563.16	2,231.31	1,591.56	1,311.95	688.42	865.18
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2,984.48	2,771.79	2,568.38	2,235.86	1,594.81	1,314.62	689.82	866.94
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	5,776.87	5,365.21	4,969.97	4,327.78	3,084.23	2,548.05	1,336.93	1,677.70
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	5,807.22	5,393.40	4,996.09	4,350.52	3,100.45	2,561.42	1,343.94	1,686.52
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5,277.67	4,901.59	4,540.37	3,953.80	2,817.47	2,328.16	1,221.54	1,532.69
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	3,498.07	3,248.78	3,010.20	2,620.61	1,868.96	1,541.21	808.71	1,016.09
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	3,498.07	3,248.78	3,010.20	2,620.61	1,868.96	1,541.21	808.71	1,016.09
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	3,497.36	3,248.13	3,009.60	2,620.09	1,868.58	1,540.91	808.54	1,015.88
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	3,497.36	3,248.13	3,009.60	2,620.09	1,868.58	1,540.91	808.54	1,015.88
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	2.41	2.24	2.06	1.80	1.27	1.08	0.57	0.70
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	4.61	4.28	3.96	3.45	2.46	2.03	1.06	1.34
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	8.16	7.58	7.02	6.11	4.36	3.59	1.89	2.37
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	35.59	33.05	30.63	26.66	19.02	15.68	8.23	10.34
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	230.47	214.05	198.34	172.66	123.16	101.52	53.27	66.95

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	2,538.41	2,357.51	2,184.50	1,901.68	1,356.44	1,118.14	586.72	737.36
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	406.64	377.66	349.94	304.64	217.29	179.12	93.99	118.12
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	92.11	85.55	79.27	69.01	49.22	40.57	21.29	26.76
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	18.89	17.54	16.25	14.15	10.09	8.32	4.37	5.49
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	20.48	19.02	17.63	15.35	10.95	9.02	4.73	5.95
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	22.98	21.34	19.77	17.21	12.28	10.12	5.31	6.67
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	9.79	9.09	8.42	7.33	5.23	4.31	2.26	2.84
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	9.08	8.44	7.82	6.80	4.85	4.00	2.10	2.64
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	251.44	233.52	216.38	188.37	134.36	110.75	58.12	73.04
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	259.12	240.66	223.00	194.13	138.47	114.14	59.89	75.27
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	127.55	118.46	109.77	95.56	68.16	56.18	29.48	37.05
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-107.56	-99.87	-93.61	-80.60	-59.42	-44.95	-23.66	-31.51
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	43.59	40.48	37.51	32.66	23.29	19.20	10.08	12.66
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	595.23	552.81	512.24	445.92	318.07	262.19	137.58	172.90
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	2,005.53	1,862.63	1,724.87	1,502.45	1,069.75	885.83	464.74	582.30
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	54.51	50.62	46.91	40.83	29.13	24.01	12.60	15.83
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	98.94	91.89	85.12	74.12	52.81	43.66	22.91	28.73
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	278.54	258.69	239.70	208.67	148.83	122.70	64.38	80.91
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-20.89	-19.39	-18.28	-15.65	-11.73	-8.49	-4.48	-6.15
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	396.22	367.99	340.98	296.84	211.73	174.53	91.58	115.10
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	20.94	19.45	18.02	15.69	11.19	9.22	4.84	6.08
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	44.71	41.52	38.48	33.50	23.89	19.69	10.33	12.99

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	79.27	73.62	68.22	59.38	42.36	34.92	18.32	23.03
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.50	1.39	1.29	1.12	0.80	0.66	0.35	0.44
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	2.99	2.78	2.57	2.24	1.60	1.32	0.69	0.87
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	3.92	3.65	3.38	2.94	2.10	1.73	0.91	1.14
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	78.98	73.35	67.97	59.17	42.20	34.79	18.26	22.94
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	836.93	777.28	720.24	626.99	447.23	368.66	193.44	243.11
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	17.27	16.04	14.86	12.94	9.23	7.61	3.99	5.02
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	22.70	21.08	19.52	17.00	12.11	10.02	5.26	6.59
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	435.93	404.86	375.15	326.58	232.95	192.02	100.76	126.63
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	254.04	235.93	218.62	190.32	135.75	111.90	58.72	73.79
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	745.92	692.76	641.92	558.82	398.58	328.59	172.42	216.68
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	18.27	16.97	15.72	13.69	9.76	8.05	4.22	5.31
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	123.00	114.24	105.85	92.15	65.73	54.18	28.43	35.73
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	2.98	2.77	2.57	2.23	1.59	1.31	0.69	0.87
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	43.04	39.97	37.04	32.25	23.00	18.96	9.95	12.50
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-4.86	-4.51	-4.25	-3.64	-2.72	-1.99	-1.05	-1.43
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	5.91	5.49	5.01	4.42	3.03	2.76	1.45	1.70
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	9.23	8.57	7.87	6.91	4.80	4.23	2.21	2.66
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	683.61	634.90	588.30	512.14	365.30	301.12	158.01	198.58
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	4,845.52	4,500.20	4,169.95	3,630.07	2,589.28	2,134.39	1,119.97	1,407.54

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	264.44	245.60	227.58	198.11	141.31	116.48	61.12	76.82
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	56.56	52.53	48.67	42.37	30.22	24.91	13.07	16.43
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	58.80	54.61	50.54	44.05	31.30	26.04	13.66	17.06
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	56.55	52.52	48.67	42.37	30.22	24.91	13.07	16.43
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	10.92	10.14	9.40	8.18	5.83	4.81	2.52	3.17
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	79.01	73.38	68.00	59.19	42.22	34.80	18.26	22.95
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	353.79	328.57	304.46	265.04	189.05	155.84	81.77	102.77
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	181.05	168.15	155.81	135.64	96.75	79.75	41.85	52.59
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	29.00	26.93	24.95	21.72	15.49	12.77	6.70	8.42
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	80.26	74.54	69.07	60.13	42.89	35.35	18.55	23.31
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	172.83	160.52	148.74	129.48	92.36	76.13	39.95	50.21
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	131.51	122.14	113.18	98.52	70.27	57.93	30.40	38.20

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-15. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Carbon Monoxide (CO), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	201.18	186.47	171.96	147.59	100.25	80.99	39.92	52.52
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	862.14	799.11	736.94	632.50	429.62	347.07	171.07	225.05
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	367.99	341.07	314.49	269.94	183.20	148.18	73.11	95.95
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	56.12	52.01	47.96	41.17	27.96	22.59	11.14	14.64
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	514.80	477.16	440.03	377.67	256.50	207.25	102.17	134.36
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.55	3.29	3.03	2.60	1.77	1.43	0.71	0.93
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	26.02	24.12	22.24	19.09	12.96	10.48	5.17	6.79
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	310.19	287.51	265.13	227.56	154.54	124.88	61.57	80.95
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	358.85	332.61	306.73	263.26	178.78	144.47	71.22	93.65
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-152.57	-141.86	-131.83	-112.86	-80.55	-60.39	-27.78	-42.63
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	57.38	53.19	49.05	42.10	28.59	23.10	11.39	14.98
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.31	3.07	2.83	2.43	1.65	1.33	0.66	0.86
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	633.12	586.84	541.18	464.49	315.49	254.88	125.63	165.26
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	23.86	22.11	20.39	17.50	11.89	9.60	4.73	6.23
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	84.04	77.90	71.83	61.66	41.87	33.84	16.68	21.93
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1,584.34	1,468.17	1,353.16	1,161.62	785.98	638.61	316.31	411.38

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-10.66	-9.92	-9.24	-7.91	-5.73	-4.19	-1.88	-3.04
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	98.31	91.12	84.03	72.13	48.99	39.58	19.51	25.66
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	33.16	30.73	28.34	24.32	16.52	13.35	6.58	8.66
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	347.97	322.53	297.44	255.29	173.40	140.08	69.04	90.84
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	303.84	281.63	259.72	222.91	151.41	122.32	60.29	79.31
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	11.22	10.40	9.59	8.23	5.59	4.52	2.23	2.93
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	1.37	1.27	1.17	1.01	0.68	0.55	0.27	0.36
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	6.64	6.15	5.67	4.87	3.31	2.67	1.32	1.73
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3,255.05	3,017.10	2,782.37	2,388.07	1,622.09	1,310.37	645.85	849.72
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	19.56	18.13	16.72	14.35	9.75	7.87	3.88	5.11
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	217.13	201.20	185.41	159.18	107.61	87.54	43.41	56.31
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	7.30	6.77	6.24	5.36	3.64	2.94	1.45	1.90
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1,604.25	1,486.96	1,371.25	1,176.94	799.34	645.84	318.36	418.72
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-178.31	-167.19	-158.55	-134.83	-108.47	-67.29	-24.55	-58.73
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	9.07	8.41	7.75	6.66	4.52	3.65	1.80	2.37
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	13.05	12.10	11.16	9.58	6.50	5.25	2.59	3.41
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-73.43	-68.39	-63.82	-54.56	-39.97	-28.79	-12.70	-21.27
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-114.40	-106.36	-98.84	-84.62	-60.39	-45.28	-20.83	-31.96
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	641.72	594.80	548.53	470.79	319.78	258.33	127.33	167.51
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	201.18	186.47	171.96	147.59	100.25	80.99	39.92	52.52
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	6.73	6.24	5.75	4.94	3.35	2.71	1.34	1.76

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	353.78	327.91	302.39	259.54	176.24	142.43	70.23	92.31
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-115.72	-107.59	-99.99	-85.60	-61.11	-45.79	-21.06	-32.35
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.24	0.22	0.20	0.18	0.12	0.10	0.05	0.06
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	3.35	3.10	2.86	2.46	1.67	1.35	0.66	0.87
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	30.40	28.18	25.99	22.30	15.15	12.24	6.03	7.94
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	20.56	19.05	17.57	15.08	10.24	8.28	4.08	5.37
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	160.66	148.83	137.06	117.70	79.21	64.87	32.35	41.41
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	105.86	98.12	90.48	77.66	52.75	42.61	21.00	27.63
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.30	1.21	1.11	0.95	0.65	0.52	0.26	0.34
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	179.63	166.50	153.55	131.79	89.52	72.31	35.64	46.89
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	863.00	799.91	737.68	633.14	430.06	347.41	171.23	225.28
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1,628.96	1,509.88	1,392.41	1,195.09	811.76	655.76	323.21	425.23
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3,611.31	3,346.42	3,084.02	2,647.56	1,790.43	1,455.90	721.62	937.00
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	110.12	102.07	94.13	80.79	54.88	44.33	21.85	28.75
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	55.49	51.43	47.43	40.71	27.65	22.34	11.01	14.48
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	109.62	101.61	93.70	80.42	54.63	44.13	21.75	28.62
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	1,200.65	1,112.88	1,026.29	880.85	598.29	483.35	238.25	313.40
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1,082.22	1,003.10	925.06	793.97	539.30	435.66	214.73	282.51
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	638.49	591.81	545.77	468.43	318.18	257.03	126.69	166.67

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	794.04	735.99	678.73	582.54	395.69	319.65	157.55	207.28
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1,619.50	1,501.11	1,384.33	1,188.15	807.05	651.95	321.33	422.76
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1,508.49	1,398.22	1,289.44	1,106.71	751.73	607.27	299.31	393.79
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	14.85	13.76	12.69	10.89	7.40	5.98	2.95	3.88
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	307.92	285.41	263.20	225.90	153.41	123.97	61.12	80.36
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1,116.15	1,034.56	954.07	818.86	556.21	449.32	221.46	291.37
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	39.06	36.20	33.37	28.65	19.42	15.73	7.77	10.17
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	38.52	35.70	32.91	28.25	19.15	15.52	7.67	10.03
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	464.13	430.20	396.73	340.51	231.29	186.84	92.09	121.16
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	635.22	588.78	542.97	466.03	316.55	255.72	126.04	165.82
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4,223.93	3,915.10	3,610.42	3,098.80	2,104.51	1,700.49	838.31	1,102.39
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	86.86	80.17	73.14	63.00	39.74	35.78	19.19	20.47
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	1,421.70	1,317.62	1,214.77	1,042.72	706.96	572.67	282.92	370.19
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1,709.63	1,584.14	1,459.73	1,253.20	846.73	689.44	342.10	443.04
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	642.29	595.31	548.93	471.16	319.79	258.63	127.60	167.49
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	187.62	173.88	160.29	137.59	93.22	75.59	37.38	48.80
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	2,535.25	2,349.89	2,167.01	1,859.93	1,263.11	1,020.67	503.19	661.64
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	4.70	4.36	4.02	3.45	2.34	1.89	0.93	1.23

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	15.13	14.02	12.93	11.10	7.54	6.09	3.00	3.95
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	5.75	5.33	4.91	4.22	2.86	2.31	1.14	1.50
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	71.46	66.23	61.08	52.42	35.61	28.77	14.18	18.65
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-94.43	-87.83	-81.68	-69.91	-50.12	-37.31	-17.04	-26.55
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-9.90	-9.23	-8.65	-7.38	-5.53	-3.85	-1.64	-2.95
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	232.28	215.24	198.37	170.29	115.18	93.64	46.40	60.28
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-8.62	-8.05	-7.55	-6.44	-4.87	-3.34	-1.40	-2.60
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	126.14	116.92	107.82	92.54	62.86	50.78	25.03	32.93
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.88	0.80	0.72	0.62	0.34	0.38	0.23	0.17
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	9.76	9.04	8.31	7.14	4.77	3.95	1.99	2.49
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.78	0.72	0.67	0.57	0.39	0.31	0.15	0.20
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	21.35	19.79	18.25	15.66	10.64	8.59	4.24	5.57
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	2.33	2.16	1.99	1.71	1.16	0.94	0.46	0.61
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	72.55	67.25	62.01	53.23	36.15	29.21	14.40	18.94
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	9.18	8.51	7.85	6.74	4.58	3.70	1.82	2.40
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	10.69	9.91	9.13	7.84	5.31	4.31	2.13	2.78
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	19.80	18.35	16.93	14.53	9.87	7.97	3.93	5.17
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	282.11	261.48	241.13	206.96	140.56	113.57	55.99	73.63
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	21.57	20.00	18.44	15.83	10.75	8.68	4.28	5.63

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	854.60	792.13	730.50	626.98	425.87	344.03	169.57	223.09
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	45.20	41.54	37.48	32.40	18.81	19.05	11.02	9.49
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.10	1.00	0.89	0.78	0.40	0.47	0.30	0.20
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.44	2.25	2.04	1.76	1.07	1.01	0.56	0.55
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	588.66	545.62	503.17	431.86	293.32	236.98	116.82	153.65
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	588.74	545.70	503.25	431.93	293.39	237.01	116.82	153.69
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.97	0.90	0.83	0.71	0.48	0.39	0.19	0.25
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.92	0.85	0.79	0.67	0.46	0.37	0.18	0.24
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.92	0.85	0.79	0.67	0.46	0.37	0.18	0.24
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	10.32	9.57	8.82	7.57	5.14	4.16	2.05	2.69
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2,958.56	2,740.37	2,522.82	2,166.55	1,454.81	1,195.49	597.81	760.18
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	12.54	11.63	10.72	9.20	6.25	5.05	2.49	3.27
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	87.52	81.12	74.81	64.21	43.61	35.23	17.37	22.85
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	105.96	98.21	90.57	77.74	52.80	42.66	21.02	27.66
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	87.52	81.12	74.81	64.21	43.61	35.23	17.37	22.85
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	105.83	98.09	90.46	77.64	52.74	42.60	21.00	27.63
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-10.86	-10.13	-9.47	-8.09	-6.01	-4.24	-1.83	-3.20
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	47.74	44.25	40.80	35.02	23.79	19.22	9.47	12.46
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.70	0.65	0.60	0.52	0.35	0.28	0.14	0.18
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	270.24	250.48	230.99	198.26	134.67	108.79	53.62	70.54
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	5.05	4.68	4.32	3.71	2.52	2.03	1.00	1.32
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	24.26	22.49	20.74	17.80	12.09	9.77	4.81	6.33

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	88.34	81.89	75.52	64.81	44.02	35.56	17.53	23.06
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	78.11	72.40	66.76	57.30	38.92	31.44	15.50	20.39
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	23.09	21.40	19.73	16.94	11.50	9.29	4.58	6.03
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	30.43	28.21	26.01	22.33	15.17	12.25	6.04	7.94
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.96	1.81	1.67	1.44	0.97	0.79	0.39	0.51
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	65.30	60.52	55.81	47.90	32.54	26.29	12.96	17.05
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	21.57	20.00	18.44	15.83	10.75	8.68	4.28	5.63
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	4.46	4.13	3.81	3.27	2.22	1.79	0.88	1.16
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	11.78	10.86	9.88	8.52	5.28	4.88	2.67	2.71
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	14.27	13.23	12.20	10.47	7.11	5.74	2.83	3.73
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	4.51	4.18	3.85	3.31	2.25	1.81	0.89	1.18
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	48.92	45.34	41.81	35.89	24.38	19.69	9.71	12.77
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	48.93	45.35	41.82	35.90	24.38	19.70	9.71	12.77
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	51.61	47.84	44.12	37.87	25.72	20.78	10.24	13.47
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	452.33	419.26	386.64	331.85	225.41	182.09	89.75	118.08
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	543.71	503.96	464.76	398.89	270.95	218.88	107.88	141.93
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	30.24	28.03	25.85	22.18	15.07	12.17	6.00	7.89
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	9.36	8.68	8.00	6.87	4.66	3.77	1.86	2.44
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	134.79	124.94	115.22	98.89	67.17	54.26	26.74	35.19
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	51.77	47.69	43.29	37.35	22.74	21.54	11.96	11.61

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	17.73	16.43	15.15	13.01	8.83	7.14	3.52	4.63
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-27.16	-25.47	-24.17	-20.55	-16.60	-10.23	-3.70	-8.99
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.92	0.86	0.79	0.68	0.46	0.37	0.18	0.24
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	7.38	6.84	6.31	5.42	3.68	2.97	1.46	1.93
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	4.02	3.73	3.44	2.95	2.00	1.62	0.80	1.05
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	10.17	9.43	8.69	7.46	5.07	4.09	2.02	2.66
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	259.12	240.18	221.50	190.11	129.13	104.31	51.41	67.64
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	259.12	240.18	221.50	190.11	129.13	104.31	51.41	67.64
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.57	0.53	0.49	0.42	0.28	0.23	0.11	0.15
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	126.14	116.92	107.82	92.54	62.86	50.78	25.03	32.93
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	1,079.14	1,000.25	922.43	791.71	537.77	434.42	214.12	281.70
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	20.76	19.24	17.74	15.23	10.34	8.36	4.12	5.42
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-113.80	-105.81	-98.34	-84.18	-60.09	-45.04	-20.71	-31.81
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	67.93	62.97	58.07	49.84	33.85	27.35	13.48	17.73
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-116.67	-108.74	-101.65	-86.85	-64.28	-45.56	-19.76	-34.27
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3.55	3.29	3.03	2.60	1.77	1.43	0.71	0.93
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	2.06	1.91	1.76	1.51	1.03	0.83	0.41	0.54
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	64.25	59.55	54.92	47.13	32.02	25.86	12.75	16.77
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	46.21	42.83	39.49	33.90	23.01	18.60	9.18	12.05

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	21.08	19.54	18.02	15.46	10.50	8.49	4.18	5.50
Los Angeles, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	8,369.25	7,756.78	7,151.84	6,138.75	4,164.07	3,370.67	1,664.23	2,180.66
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	253.94	234.73	215.00	184.95	119.96	103.74	54.02	62.20
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	8,373.93	7,761.12	7,155.84	6,142.18	4,166.40	3,372.56	1,665.15	2,181.88
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	8,374.34	7,761.50	7,156.20	6,142.49	4,166.61	3,372.72	1,665.24	2,181.99
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	8,375.20	7,762.29	7,156.93	6,143.11	4,167.04	3,373.07	1,665.41	2,182.22
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	8,354.70	7,743.30	7,139.41	6,128.08	4,156.82	3,364.82	1,661.34	2,176.87
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	50.51	46.82	43.17	37.06	25.17	20.33	10.02	13.19
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-93.96	-87.88	-82.86	-70.60	-54.94	-35.96	-14.16	-29.57
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-131.78	-122.59	-114.06	-97.61	-70.19	-52.02	-23.65	-37.21
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	51.83	48.04	44.30	38.02	25.83	20.86	10.28	13.53
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	2,080.10	1,928.04	1,778.04	1,526.07	1,036.58	837.38	412.72	543.00
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	256.93	238.15	219.62	188.50	128.04	103.43	50.98	67.07
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	23.18	21.48	19.81	17.00	11.55	9.33	4.60	6.05
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-4.03	-3.77	-3.55	-3.03	-2.37	-1.54	-0.60	-1.28
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	46.95	43.52	40.13	34.44	23.40	18.90	9.32	12.26
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	501.97	465.20	428.82	368.11	249.33	202.26	100.05	130.53
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	661.71	613.26	565.36	485.30	328.93	266.57	131.75	172.23
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	2.99	2.77	2.55	2.19	1.49	1.20	0.59	0.78
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.99	2.77	2.55	2.19	1.49	1.20	0.59	0.78
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.99	2.77	2.55	2.19	1.49	1.20	0.59	0.78

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	677.08	627.58	578.75	496.74	337.41	272.57	134.34	176.75
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1,640.47	1,520.20	1,401.14	1,202.81	813.95	661.21	327.45	426.04
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	42.11	39.02	35.97	30.88	20.92	16.97	8.39	10.95
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	40.03	37.10	34.19	29.35	19.88	16.13	7.98	10.41
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	88.75	82.26	75.85	65.10	44.17	35.74	17.64	23.13
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	39.87	36.95	34.08	29.25	19.87	16.05	7.91	10.41
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	22.01	20.40	18.82	16.15	10.97	8.86	4.37	5.75
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.86	2.65	2.45	2.10	1.43	1.15	0.57	0.75
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	14.96	13.87	12.79	10.98	7.46	6.02	2.97	3.91
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.15	0.14	0.13	0.11	0.08	0.06	0.03	0.04
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	12.78	11.84	10.92	9.37	6.37	5.14	2.54	3.33
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	5.85	5.42	5.00	4.29	2.92	2.36	1.16	1.53
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	11.45	10.61	9.79	8.40	5.71	4.61	2.27	2.99
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	4.16	3.85	3.55	3.05	2.07	1.67	0.82	1.09
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	50.37	46.68	43.05	36.95	25.10	20.28	9.99	13.15
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.47	1.36	1.26	1.08	0.73	0.59	0.29	0.38
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	58.72	54.43	50.19	43.08	29.26	23.64	11.65	15.33
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	9.52	8.82	8.14	6.98	4.74	3.83	1.89	2.48
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	451.30	418.30	385.75	331.09	224.85	181.69	89.57	117.78
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-2.05	-1.92	-1.80	-1.54	-1.17	-0.79	-0.33	-0.63

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	196.16	181.82	167.68	143.91	97.75	78.97	38.92	51.21
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	7,220.53	6,692.55	6,171.57	5,297.06	3,596.87	2,907.04	1,433.41	1,884.05
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	3,989.55	3,697.84	3,410.02	2,926.81	1,987.52	1,606.19	791.92	1,041.08
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	7,100.16	6,580.97	6,068.68	5,208.75	3,536.88	2,858.58	1,409.53	1,852.63
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	18.09	16.76	15.46	13.27	9.01	7.28	3.59	4.72
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	22.24	20.62	19.01	16.32	11.08	8.95	4.41	5.81
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.57	0.53	0.49	0.42	0.28	0.23	0.11	0.15
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	31.39	29.10	26.83	23.03	15.64	12.64	6.23	8.19
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	31.39	29.10	26.83	23.03	15.64	12.64	6.23	8.19
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	13.25	12.28	11.32	9.72	6.60	5.33	2.63	3.46
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	54.03	50.08	46.18	39.64	26.92	21.75	10.72	14.10
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	23.48	21.77	20.07	17.23	11.70	9.45	4.66	6.13
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.47	0.43	0.40	0.34	0.23	0.19	0.09	0.12
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	45.99	42.63	39.31	33.74	22.92	18.52	9.13	12.01
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	15.67	14.45	13.18	11.35	7.12	6.46	3.49	3.66
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	362.29	335.29	308.01	264.70	175.21	147.07	74.83	91.26
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	2,139.39	1,981.98	1,825.46	1,567.43	1,055.71	863.63	430.24	552.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	3,002.66	2,782.14	2,563.37	2,200.77	1,485.90	1,211.15	601.53	777.36
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	1,994.07	1,848.29	1,704.50	1,462.95	993.71	802.74	395.65	520.54
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2,088.36	1,935.69	1,785.10	1,532.12	1,040.69	840.70	414.36	545.16
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.82	0.76	0.70	0.60	0.41	0.33	0.16	0.21
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	41.39	38.37	35.38	30.37	20.63	16.66	8.21	10.81
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	18.16	16.84	15.53	13.33	9.05	7.31	3.60	4.74
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	167.82	155.56	143.45	123.12	83.63	67.56	33.30	43.81
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	13.42	12.44	11.48	9.85	6.69	5.40	2.66	3.50
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	103.65	96.07	88.60	76.04	51.64	41.73	20.57	27.05
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1,094.70	1,014.67	935.71	803.11	545.45	440.71	217.25	285.72
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	1,001.03	927.84	855.64	734.39	498.77	403.00	198.66	261.27
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	14.67	13.59	12.54	10.76	7.31	5.90	2.91	3.83
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	673.28	624.06	575.50	493.95	335.49	271.04	133.60	175.74
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	43.22	40.06	36.95	31.71	21.54	17.40	8.58	11.28
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	45.62	42.28	38.99	33.47	22.73	18.36	9.05	11.91
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	263.46	244.20	225.20	193.29	131.29	106.06	52.28	68.77
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	964.47	893.97	824.42	707.59	480.63	388.26	191.37	251.77
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.43	1.32	1.22	1.05	0.71	0.57	0.28	0.37
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	204.70	189.73	174.97	150.17	102.00	82.40	40.62	53.43
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	157.92	146.38	134.99	115.86	78.70	63.58	31.33	41.23
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	25.08	23.25	21.44	18.40	12.50	10.10	4.98	6.55
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	224.77	208.34	192.13	164.90	112.01	90.48	44.60	58.67
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	262.56	243.36	224.43	192.62	130.84	105.70	52.10	68.54
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	8,336.76	7,726.66	7,124.07	6,114.91	4,147.88	3,357.59	1,657.78	2,172.18
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	9.98	9.25	8.53	7.32	4.97	4.02	1.98	2.61
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	15.49	14.36	13.24	11.36	7.71	6.24	3.08	4.04
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.42	0.39	0.36	0.31	0.20	0.17	0.09	0.11
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	693.84	643.12	593.08	509.03	345.75	279.32	137.68	181.12
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	709.07	657.23	606.10	520.21	353.34	285.45	140.70	185.09
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	1,236.00	1,145.59	1,056.35	906.69	615.43	497.68	245.52	322.34
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1,221.34	1,132.00	1,043.82	895.93	608.13	491.78	242.61	318.51
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	132.05	122.40	112.87	96.88	65.80	53.16	26.20	34.47
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	33.80	31.20	28.46	24.52	15.45	13.93	7.48	7.96
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	784.27	726.66	669.51	574.81	388.03	316.36	157.16	202.99
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	486.53	450.83	415.44	356.66	241.06	196.18	97.30	126.14
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	486.53	450.83	415.44	356.66	241.06	196.18	97.30	126.14

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	261.28	242.18	223.34	191.69	130.20	105.18	51.84	68.21
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1,801.29	1,669.60	1,539.71	1,321.51	897.64	725.13	357.40	470.22
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1,803.88	1,672.01	1,541.93	1,323.42	898.93	726.18	357.92	470.89
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	3,383.98	3,135.96	2,890.53	2,481.32	1,679.79	1,363.78	675.06	879.30
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3,403.37	3,153.93	2,907.09	2,495.54	1,689.45	1,371.58	678.90	884.36
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3,080.59	2,854.74	2,631.18	2,258.73	1,528.59	1,241.64	614.86	800.10
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	2,111.05	1,956.66	1,804.28	1,548.63	1,051.30	849.99	419.25	550.65
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	2,111.05	1,956.66	1,804.28	1,548.63	1,051.30	849.99	419.25	550.65
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	2,110.75	1,956.38	1,804.02	1,548.41	1,051.15	849.87	419.19	550.57
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	2,110.75	1,956.38	1,804.02	1,548.41	1,051.15	849.87	419.19	550.57
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.25	0.22	0.20	0.17	0.09	0.11	0.07	0.04
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.40	2.22	2.05	1.76	1.20	0.97	0.48	0.63
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	4.93	4.57	4.22	3.62	2.46	1.99	0.98	1.29
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	22.24	20.62	19.01	16.32	11.08	8.95	4.41	5.81
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	139.64	129.43	119.36	102.45	69.59	56.21	27.71	36.45
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1,532.70	1,420.65	1,310.12	1,124.46	763.79	617.01	304.11	400.10
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	242.70	224.96	207.46	178.06	120.95	97.70	48.16	63.36

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	55.67	51.60	47.59	40.84	27.74	22.41	11.05	14.53
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	11.43	10.59	9.76	8.38	5.68	4.60	2.27	2.98
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	12.38	11.48	10.58	9.08	6.17	4.98	2.46	3.23
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	14.20	13.16	12.13	10.42	7.07	5.71	2.82	3.71
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	5.50	5.10	4.71	4.04	2.74	2.22	1.09	1.44
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	5.86	5.43	5.01	4.30	2.92	2.36	1.16	1.53
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	149.63	138.69	127.90	109.78	74.57	60.24	29.69	39.06
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	154.34	143.06	131.93	113.23	76.91	62.13	30.62	40.29
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	80.09	74.24	68.46	58.76	39.91	32.24	15.89	20.91
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-144.46	-134.35	-124.93	-106.93	-76.64	-57.09	-26.09	-40.60
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	26.34	24.41	22.52	19.32	13.13	10.60	5.23	6.88
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	352.07	326.33	300.95	258.30	175.45	141.73	69.86	91.91
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1,133.04	1,049.76	967.06	830.31	559.99	457.19	227.38	292.89
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	34.44	31.92	29.44	25.27	17.16	13.87	6.83	8.99
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	57.35	53.15	48.98	42.05	28.44	23.12	11.46	14.88
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	163.29	151.35	139.57	119.79	81.35	65.74	32.41	42.62
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-37.47	-34.86	-32.45	-27.77	-20.03	-14.77	-6.69	-10.62
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	239.50	221.99	204.72	175.71	119.35	96.41	47.52	62.52
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	12.55	11.64	10.73	9.21	6.26	5.05	2.49	3.28
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	18.43	17.08	15.76	13.52	9.19	7.42	3.66	4.81
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	46.88	43.46	40.07	34.40	23.36	18.87	9.30	12.24
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.94	0.87	0.80	0.69	0.47	0.38	0.19	0.24
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	1.85	1.71	1.58	1.36	0.92	0.74	0.37	0.48

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	2.36	2.19	2.02	1.73	1.18	0.95	0.47	0.62
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	48.90	45.32	41.80	35.87	24.37	19.68	9.70	12.76
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	506.71	469.67	433.13	371.75	252.51	203.99	100.54	132.28
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	13.21	12.24	11.29	9.69	6.58	5.32	2.62	3.45
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	13.04	12.08	11.14	9.56	6.46	5.26	2.61	3.38
Utah County, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	263.46	244.20	225.20	193.29	131.29	106.06	52.28	68.77
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	153.35	142.14	131.08	112.50	76.42	61.73	30.43	40.03
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	450.24	417.32	384.85	330.31	224.33	181.26	89.36	117.51
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	74.35	68.92	63.55	54.55	37.05	29.93	14.75	19.41
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	1.72	1.60	1.47	1.26	0.86	0.69	0.34	0.45
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	25.76	23.88	22.02	18.90	12.84	10.37	5.11	6.72
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-8.36	-7.78	-7.24	-6.20	-4.47	-3.30	-1.50	-2.37
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-2.04	-1.92	-1.84	-1.56	-1.33	-0.75	-0.23	-0.72
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.42	-0.42	-0.46	-0.37	-0.52	-0.10	0.09	-0.30
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	413.22	383.01	353.21	303.16	205.92	166.35	81.99	107.87
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	2,929.32	2,715.17	2,503.93	2,149.09	1,459.77	1,179.24	581.22	764.68
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	156.25	144.82	133.56	114.63	77.86	62.90	31.00	40.79
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	35.56	32.96	30.40	26.09	17.72	14.31	7.06	9.28
Wayne County; (part), MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	43.21	40.03	36.85	31.64	21.25	17.46	8.73	11.11
West Central Pinal County, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	35.34	32.75	30.21	25.93	17.61	14.23	7.01	9.22
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	7.28	6.75	6.22	5.34	3.63	2.93	1.44	1.90
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	47.76	44.27	40.82	35.04	23.80	19.23	9.48	12.47
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	213.63	198.01	182.61	156.73	106.46	86.00	42.39	55.77
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	114.51	106.14	97.88	84.01	57.06	46.10	22.72	29.89
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	18.66	17.29	15.95	13.69	9.30	7.51	3.70	4.87
Yakima County; (part), WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	48.76	45.19	41.68	35.77	24.30	19.63	9.67	12.73
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	104.83	97.17	89.61	76.91	52.24	42.20	20.80	27.37
Yuma County; Yuma planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	78.91	73.14	67.45	57.89	39.32	31.77	15.66	20.60

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM_{2.5} = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-16. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Acetaldehyde, 2025

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.07	0.06	0.05	0.04
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.51	0.47	0.45	0.40	0.29	0.27	0.21	0.18
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.22	0.21	0.19	0.17	0.13	0.12	0.09	0.08
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.31	0.28	0.27	0.24	0.17	0.16	0.12	0.11
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.18	0.17	0.16	0.14	0.10	0.10	0.08	0.07
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.21	0.20	0.19	0.17	0.12	0.11	0.09	0.08
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.38	0.35	0.33	0.30	0.22	0.20	0.15	0.14
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.95	0.89	0.84	0.74	0.54	0.51	0.39	0.34
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.05	0.05	0.05	0.03	0.03	0.02	0.02
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.21	0.19	0.18	0.16	0.12	0.11	0.08	0.07
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.18	0.17	0.16	0.14	0.10	0.10	0.07	0.07
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.92	1.79	1.70	1.50	1.09	1.03	0.78	0.70
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.14	0.13	0.12	0.11	0.08	0.07	0.06	0.05
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.95	0.88	0.84	0.74	0.54	0.51	0.39	0.34
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.29	0.27	0.25	0.22	0.16	0.15	0.12	0.10
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.38	0.35	0.33	0.30	0.22	0.20	0.15	0.14
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.12	0.11	0.10	0.09	0.07	0.06	0.05	0.04
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.21	0.19	0.18	0.16	0.12	0.11	0.08	0.07

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.11	0.10	0.09	0.08	0.06	0.06	0.04	0.04
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.51	0.47	0.45	0.40	0.29	0.27	0.21	0.18
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.96	0.89	0.84	0.75	0.54	0.51	0.39	0.35
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.32	2.15	2.04	1.81	1.32	1.23	0.94	0.84
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.03	0.02
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
Chico, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	0.71	0.66	0.63	0.55	0.40	0.38	0.29	0.26
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.64	0.59	0.56	0.50	0.36	0.34	0.26	0.23
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.38	0.35	0.33	0.29	0.21	0.20	0.15	0.14
Cleveland, OH	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.47	0.44	0.41	0.37	0.27	0.25	0.19	0.17
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.96	0.89	0.84	0.75	0.54	0.51	0.39	0.35

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.89	0.83	0.79	0.69	0.51	0.47	0.36	0.32
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.18	0.17	0.16	0.14	0.10	0.10	0.07	0.07
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.66	0.61	0.58	0.51	0.37	0.35	0.27	0.24
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.29	0.27	0.25	0.23	0.16	0.15	0.12	0.10
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.37	0.35	0.33	0.29	0.21	0.20	0.15	0.14
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.50	2.33	2.21	1.95	1.42	1.34	1.02	0.91
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.12	0.11	0.11	0.10	0.07	0.07	0.05	0.04
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.87	0.81	0.77	0.68	0.49	0.46	0.35	0.32
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.11	1.04	0.98	0.87	0.63	0.59	0.45	0.40
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	0.48	0.45	0.42	0.38	0.27	0.26	0.20	0.17
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.08	0.07	0.06	0.05	0.04	0.03	0.03
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1.50	1.40	1.32	1.17	0.85	0.80	0.61	0.54
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.16	0.15	0.14	0.12	0.09	0.08	0.06	0.06
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.07	0.06	0.05	0.04	0.04	0.03	0.03
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.17	0.16	0.15	0.13	0.10	0.09	0.07	0.06
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.51	0.47	0.45	0.40	0.29	0.27	0.21	0.18
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.35	0.32	0.31	0.27	0.20	0.19	0.14	0.13
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.35	0.32	0.31	0.27	0.20	0.18	0.14	0.13
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.80	1.67	1.58	1.40	1.02	0.96	0.73	0.65
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.06	0.06	0.05	0.05	0.04	0.03	0.03	0.02
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.17	0.16	0.15	0.13	0.10	0.09	0.07	0.06
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.05	0.04	0.04	0.04	0.03	0.02	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.27	0.25	0.24	0.21	0.15	0.14	0.11	0.10
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.32	0.30	0.28	0.25	0.18	0.17	0.13	0.12
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.07	0.07	0.06	0.05	0.04	0.03	0.03
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.15	0.14	0.14	0.12	0.09	0.08	0.06	0.06
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.15	0.14	0.14	0.12	0.09	0.08	0.06	0.06
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.07	0.06	0.05	0.04	0.04	0.03	0.03
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.64	0.59	0.56	0.50	0.36	0.34	0.26	0.23
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.01
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	4.42	4.11	3.89	3.45	2.51	2.35	1.80	1.59

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.34	-0.32	-0.31	-0.27	-0.20	-0.19	-0.14	-0.13
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	4.43	4.11	3.89	3.45	2.51	2.35	1.80	1.59
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	4.43	4.11	3.89	3.45	2.51	2.35	1.80	1.59
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	4.43	4.11	3.89	3.45	2.51	2.35	1.80	1.59
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	4.42	4.10	3.89	3.45	2.50	2.35	1.79	1.59
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.03
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	1.23	1.14	1.08	0.96	0.70	0.66	0.50	0.45
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.16	0.14	0.14	0.12	0.09	0.08	0.06	0.06
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.30	0.28	0.26	0.23	0.17	0.16	0.12	0.11
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.39	0.36	0.35	0.31	0.22	0.21	0.16	0.14
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.40	0.37	0.35	0.31	0.23	0.21	0.16	0.14
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.99	0.92	0.87	0.77	0.56	0.52	0.40	0.36

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.02	0.02
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.27	0.25	0.24	0.21	0.15	0.14	0.11	0.10
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.10	0.09	0.07	0.06	0.05	0.04
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	4.29	3.99	3.78	3.35	2.44	2.29	1.75	1.55

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	2.36	2.20	2.08	1.84	1.34	1.26	0.96	0.86
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	4.21	3.92	3.72	3.29	2.40	2.25	1.72	1.53
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.32	0.30	0.28	0.25	0.18	0.17	0.13	0.12
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	1.47	1.37	1.30	1.15	0.84	0.79	0.60	0.53
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.98	1.84	1.74	1.54	1.12	1.06	0.81	0.72
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	1.18	1.10	1.04	0.92	0.67	0.63	0.48	0.43

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.24	1.15	1.09	0.96	0.70	0.66	0.50	0.45
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.08	0.07	0.05	0.05	0.04	0.03
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.65	0.60	0.57	0.51	0.37	0.35	0.26	0.24
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.59	0.55	0.52	0.46	0.34	0.32	0.24	0.21
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.40	0.37	0.35	0.31	0.22	0.21	0.16	0.14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.16	0.14	0.14	0.12	0.09	0.08	0.06	0.06
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.57	0.53	0.50	0.44	0.32	0.30	0.23	0.21

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.12	0.11	0.11	0.09	0.07	0.06	0.05	0.04
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	4.40	4.09	3.87	3.43	2.49	2.34	1.79	1.58
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.43	0.40	0.38	0.34	0.25	0.23	0.18	0.16
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.42	0.39	0.37	0.33	0.24	0.22	0.17	0.15
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.73	0.68	0.65	0.57	0.42	0.39	0.30	0.27
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.72	0.67	0.64	0.56	0.41	0.39	0.29	0.26
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.52	0.48	0.46	0.40	0.29	0.28	0.21	0.19
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.32	0.29	0.28	0.25	0.18	0.17	0.13	0.11
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.32	0.29	0.28	0.25	0.18	0.17	0.13	0.11
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.18	0.17	0.16	0.14	0.10	0.10	0.07	0.06

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.06	0.99	0.94	0.83	0.60	0.57	0.43	0.39
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.07	0.99	0.94	0.83	0.61	0.57	0.43	0.39
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	2.05	1.90	1.80	1.60	1.16	1.09	0.83	0.74
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	2.06	1.91	1.81	1.60	1.17	1.10	0.84	0.74
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.87	1.74	1.65	1.46	1.06	0.99	0.76	0.68
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1.25	1.16	1.10	0.97	0.71	0.67	0.51	0.45
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	1.25	1.16	1.10	0.97	0.71	0.67	0.51	0.45
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	1.25	1.16	1.10	0.97	0.71	0.67	0.51	0.45
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	1.25	1.16	1.10	0.97	0.71	0.67	0.51	0.45
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.08	0.08	0.07	0.06	0.05	0.04	0.03	0.03
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.91	0.84	0.80	0.71	0.52	0.48	0.37	0.33
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.15	0.14	0.13	0.11	0.08	0.08	0.06	0.05
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.03
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.05	0.04	0.03
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.22	0.20	0.19	0.17	0.12	0.12	0.09	0.08
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.76	0.71	0.67	0.59	0.43	0.41	0.31	0.28
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.30	0.28	0.26	0.23	0.17	0.16	0.12	0.11
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.16	0.14	0.14	0.12	0.09	0.08	0.06	0.06
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.03
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.26	0.24	0.23	0.21	0.15	0.14	0.11	0.10
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.24	0.23	0.22	0.19	0.14	0.13	0.10	0.09
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.73	1.61	1.53	1.35	0.98	0.92	0.71	0.63
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.10	0.09	0.08	0.08	0.05	0.05	0.04	0.03
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.13	0.12	0.11	0.10	0.07	0.07	0.05	0.05
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.03	0.02
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-17. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Acetaldehyde, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.32	0.30	0.27	0.24	0.17	0.14	0.07	0.09
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.37	1.28	1.18	1.03	0.73	0.60	0.31	0.39
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.60	0.55	0.51	0.45	0.32	0.26	0.13	0.17
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.02	0.02
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.82	0.76	0.71	0.61	0.44	0.36	0.19	0.23
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.06	0.05	0.04	0.03	0.03	0.01	0.02
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.50	0.46	0.43	0.37	0.26	0.22	0.11	0.14
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.57	0.53	0.49	0.43	0.30	0.25	0.13	0.16
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.02	0.94	0.87	0.76	0.54	0.44	0.23	0.29
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.13	0.12	0.12	0.10	0.07	0.06	0.03	0.04
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	2.59	2.40	2.22	1.93	1.36	1.12	0.58	0.73
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.16	0.15	0.13	0.12	0.08	0.07	0.04	0.04
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.55	0.51	0.48	0.41	0.29	0.24	0.13	0.16
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.48	0.45	0.42	0.36	0.26	0.21	0.11	0.14
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	5.19	4.82	4.46	3.88	2.75	2.26	1.17	1.48
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.37	0.34	0.32	0.28	0.19	0.16	0.08	0.10
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	2.56	2.38	2.20	1.91	1.36	1.12	0.58	0.73
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.77	0.72	0.67	0.58	0.41	0.34	0.17	0.22
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1.02	0.95	0.88	0.76	0.54	0.45	0.23	0.29
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.32	0.30	0.27	0.24	0.17	0.14	0.07	0.09
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.56	0.52	0.48	0.42	0.30	0.24	0.13	0.16
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.27	0.25	0.24	0.20	0.14	0.12	0.06	0.08
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.17	0.16	0.15	0.13	0.09	0.07	0.04	0.05
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.29	0.27	0.25	0.21	0.15	0.12	0.06	0.08
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	1.37	1.28	1.18	1.03	0.73	0.60	0.31	0.39
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2.59	2.40	2.22	1.93	1.37	1.13	0.58	0.74
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	6.24	5.80	5.37	4.67	3.31	2.72	1.41	1.78
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.18	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.17	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	1.91	1.78	1.65	1.43	1.01	0.83	0.43	0.55
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1.72	1.60	1.48	1.29	0.91	0.75	0.39	0.49
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.02	0.94	0.87	0.76	0.54	0.44	0.23	0.29
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	1.26	1.17	1.09	0.94	0.67	0.55	0.29	0.36
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2.58	2.39	2.22	1.93	1.37	1.12	0.58	0.74
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	2.40	2.23	2.07	1.79	1.27	1.05	0.54	0.69

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.49	0.46	0.42	0.37	0.26	0.21	0.11	0.14
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.78	1.65	1.53	1.33	0.94	0.77	0.40	0.51
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.77	0.71	0.66	0.57	0.41	0.33	0.17	0.22
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.01	0.94	0.87	0.76	0.54	0.44	0.23	0.29
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	6.75	6.27	5.81	5.04	3.58	2.94	1.52	1.93
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.33	0.31	0.28	0.25	0.17	0.14	0.07	0.09
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	2.35	2.18	2.02	1.75	1.24	1.02	0.53	0.67
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.00	2.79	2.58	2.25	1.59	1.31	0.68	0.86
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	1.21	1.12	1.04	0.90	0.64	0.53	0.27	0.35
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.25	0.23	0.21	0.19	0.13	0.11	0.06	0.07
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	4.05	3.76	3.48	3.03	2.14	1.76	0.91	1.16
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.10	0.09	0.08	0.05	0.04	0.02	0.03
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.41	0.38	0.35	0.31	0.22	0.18	0.09	0.12
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.19	0.18	0.17	0.15	0.10	0.08	0.04	0.06
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.46	0.42	0.39	0.34	0.24	0.20	0.10	0.13
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.36	1.27	1.17	1.02	0.72	0.59	0.31	0.39
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.27	0.25	0.23	0.20	0.14	0.12	0.06	0.08

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.94	0.87	0.81	0.70	0.50	0.41	0.21	0.27
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.94	0.87	0.81	0.70	0.50	0.41	0.21	0.27
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4.94	4.58	4.23	3.67	2.57	2.13	1.08	1.36
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.17	0.16	0.15	0.13	0.09	0.07	0.04	0.05
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.17	0.16	0.14	0.13	0.09	0.07	0.04	0.05
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.44	0.41	0.38	0.33	0.24	0.19	0.10	0.13
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.12	0.12	0.11	0.09	0.07	0.05	0.03	0.04

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.10	0.10	0.09	0.08	0.06	0.05	0.02	0.03
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.72	0.67	0.62	0.54	0.38	0.31	0.16	0.21
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.87	0.80	0.75	0.65	0.46	0.38	0.20	0.25
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.21	0.20	0.18	0.16	0.11	0.09	0.05	0.06
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.26	0.24	0.22	0.19	0.14	0.11	0.06	0.07
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04

Appendix A Air Quality Nonattainment Area Results

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				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.41	0.38	0.36	0.31	0.22	0.18	0.09	0.12
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.41	0.38	0.36	0.31	0.22	0.18	0.09	0.12
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.19	0.18	0.17	0.15	0.10	0.08	0.04	0.06
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	1.72	1.59	1.48	1.28	0.91	0.75	0.39	0.49
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.11	0.10	0.09	0.08	0.06	0.05	0.02	0.03
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.14	0.13	0.12	0.11	0.08	0.06	0.03	0.04
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.08	0.05	0.04	0.02	0.03
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	12.12	11.25	10.39	9.02	6.33	5.24	2.66	3.37

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.76	-0.72	-0.69	-0.61	-0.50	-0.38	-0.25	-0.31
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	12.12	11.25	10.40	9.02	6.33	5.24	2.66	3.37
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	12.12	11.25	10.40	9.02	6.33	5.24	2.66	3.37
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	12.13	11.25	10.40	9.02	6.33	5.24	2.66	3.37
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	12.10	11.23	10.38	9.00	6.32	5.23	2.66	3.37
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.24	0.22	0.20	0.18	0.12	0.10	0.05	0.06
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.09	0.08	0.07	0.06	0.05	0.04	0.02	0.02
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	3.31	3.08	2.85	2.48	1.76	1.44	0.75	0.95
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.42	0.39	0.36	0.31	0.22	0.18	0.09	0.12
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.81	0.75	0.70	0.60	0.43	0.35	0.18	0.23
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.06	0.99	0.91	0.79	0.56	0.46	0.24	0.30
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	1.08	1.00	0.93	0.81	0.57	0.47	0.24	0.31
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.67	2.48	2.30	1.99	1.41	1.16	0.60	0.76

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.15	0.14	0.13	0.12	0.08	0.07	0.03	0.04
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.72	0.67	0.62	0.54	0.38	0.31	0.16	0.21
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.31	0.29	0.27	0.23	0.17	0.14	0.07	0.09
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	11.57	10.74	9.95	8.64	6.13	5.04	2.61	3.30

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	6.38	5.92	5.48	4.77	3.38	2.78	1.44	1.82
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	11.37	10.56	9.78	8.49	6.02	4.95	2.57	3.25
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Nogales, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Oakridge, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Ogden Area, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Olmsted County; (part), MN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.09	0.08	0.07	0.06	0.05	0.04	0.02	0.02
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.08	0.07	0.06	0.06	0.04	0.03	0.02	0.02
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.86	0.80	0.74	0.65	0.46	0.38	0.20	0.25
Philadelphia-Wilmington, PA-NJ-DE	PM _{2.5} (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	3.97	3.69	3.41	2.97	2.10	1.73	0.90	1.13
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	5.34	4.96	4.59	3.99	2.83	2.33	1.21	1.52
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	3.18	2.96	2.74	2.38	1.69	1.39	0.72	0.91

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.33	3.09	2.86	2.49	1.76	1.45	0.75	0.95
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.26	0.24	0.23	0.20	0.14	0.11	0.06	0.07
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.18	0.17	0.16	0.14	0.10	0.08	0.04	0.05
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.75	1.62	1.50	1.31	0.93	0.76	0.39	0.50
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	1.60	1.48	1.37	1.19	0.85	0.70	0.36	0.46
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.07	0.99	0.92	0.80	0.57	0.47	0.24	0.31
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.07	0.07	0.06	0.06	0.04	0.03	0.02	0.02
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.42	0.39	0.36	0.31	0.22	0.18	0.09	0.12
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.54	1.43	1.32	1.15	0.81	0.67	0.35	0.44

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.33	0.30	0.28	0.24	0.17	0.14	0.07	0.09
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.26	0.24	0.22	0.19	0.14	0.11	0.06	0.07
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.37	0.34	0.32	0.28	0.20	0.16	0.08	0.11
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.43	0.40	0.37	0.32	0.23	0.19	0.10	0.12
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	12.06	11.20	10.35	8.98	6.30	5.21	2.65	3.36
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.14	1.06	0.98	0.85	0.61	0.50	0.26	0.33
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.13	1.05	0.97	0.84	0.60	0.49	0.26	0.32
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	1.98	1.84	1.71	1.48	1.05	0.86	0.45	0.57
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.96	1.82	1.68	1.46	1.04	0.85	0.44	0.56
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.21	0.19	0.18	0.15	0.11	0.09	0.05	0.06
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	1.40	1.30	1.20	1.04	0.74	0.61	0.32	0.40
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.85	0.79	0.73	0.64	0.45	0.37	0.19	0.24
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.85	0.79	0.73	0.64	0.45	0.37	0.19	0.24
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.45	0.42	0.39	0.34	0.24	0.20	0.10	0.13

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.87	2.66	2.47	2.14	1.52	1.25	0.65	0.82
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.87	2.67	2.47	2.15	1.52	1.25	0.65	0.82
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	5.54	5.14	4.76	4.13	2.92	2.41	1.24	1.57
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	5.57	5.17	4.78	4.16	2.94	2.42	1.25	1.58
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5.06	4.70	4.35	3.77	2.67	2.20	1.13	1.43
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	3.38	3.14	2.90	2.52	1.79	1.47	0.76	0.96
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	3.38	3.14	2.90	2.52	1.79	1.47	0.76	0.96
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	3.38	3.14	2.90	2.52	1.79	1.47	0.76	0.96
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	3.38	3.14	2.90	2.52	1.79	1.47	0.76	0.96
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.22	0.21	0.19	0.17	0.12	0.10	0.05	0.06
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	2.44	2.27	2.10	1.83	1.29	1.06	0.55	0.70
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.39	0.36	0.34	0.29	0.21	0.17	0.09	0.11
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.24	0.22	0.21	0.18	0.13	0.11	0.05	0.07
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.25	0.23	0.21	0.19	0.13	0.11	0.06	0.07
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.12	0.11	0.11	0.09	0.07	0.05	0.03	0.04
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.01	-0.01
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.57	0.53	0.49	0.43	0.30	0.25	0.13	0.16
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	2.05	1.91	1.77	1.54	1.09	0.89	0.46	0.59
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.03
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.27	0.25	0.23	0.20	0.14	0.12	0.06	0.08
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.38	0.35	0.33	0.29	0.20	0.17	0.09	0.11
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.81	0.75	0.69	0.60	0.43	0.35	0.18	0.23
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.05	-0.05	-0.04	-0.03	-0.02	-0.02	-0.02
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.42	0.39	0.36	0.31	0.22	0.18	0.09	0.12
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.24	0.23	0.21	0.18	0.13	0.11	0.06	0.07
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.71	0.66	0.61	0.53	0.38	0.31	0.16	0.20
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.66	0.61	0.57	0.49	0.35	0.29	0.15	0.19
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	4.67	4.33	4.01	3.49	2.47	2.03	1.05	1.33
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.25	0.24	0.22	0.19	0.13	0.11	0.06	0.07
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.04	0.03	0.03	0.01	0.02

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.34	0.32	0.29	0.25	0.18	0.15	0.08	0.10
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.17	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.17	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.09	0.07	0.06	0.03	0.04

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-18. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Acetaldehyde, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.21	0.19	0.18	0.15	0.10	0.08	0.04	0.05
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.89	0.83	0.76	0.65	0.45	0.36	0.18	0.23
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.39	0.36	0.33	0.28	0.19	0.16	0.08	0.10
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.53	0.49	0.46	0.39	0.27	0.22	0.11	0.14
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.32	0.30	0.28	0.24	0.16	0.13	0.06	0.08
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.37	0.34	0.32	0.27	0.19	0.15	0.07	0.10
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.02
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.65	0.61	0.56	0.48	0.33	0.27	0.13	0.17
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.09	0.08	0.07	0.06	0.04	0.04	0.02	0.02
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.60	1.48	1.37	1.17	0.79	0.64	0.31	0.41
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.03
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.36	0.33	0.31	0.26	0.18	0.15	0.07	0.09
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.31	0.29	0.27	0.23	0.16	0.13	0.06	0.08
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.36	3.12	2.87	2.47	1.68	1.36	0.67	0.88
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.24	0.22	0.20	0.17	0.12	0.10	0.05	0.06
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.66	1.54	1.42	1.22	0.83	0.67	0.33	0.44
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.50	0.46	0.43	0.37	0.25	0.20	0.10	0.13
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.66	0.61	0.57	0.49	0.33	0.27	0.13	0.17
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.21	0.19	0.18	0.15	0.10	0.08	0.04	0.05
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.37	0.34	0.31	0.27	0.18	0.15	0.07	0.10

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.16	0.15	0.14	0.12	0.08	0.06	0.03	0.04
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.11	0.10	0.09	0.08	0.05	0.04	0.02	0.03
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.19	0.17	0.16	0.14	0.09	0.08	0.04	0.05
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.89	0.83	0.76	0.65	0.45	0.36	0.18	0.23
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.68	1.56	1.44	1.24	0.84	0.68	0.33	0.44
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4.05	3.76	3.46	2.98	2.03	1.64	0.80	1.06
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.11	0.11	0.10	0.08	0.06	0.05	0.02	0.03
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Chico, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.11	0.10	0.10	0.08	0.06	0.05	0.02	0.03
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	1.24	1.15	1.06	0.91	0.62	0.50	0.25	0.33
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	1.12	1.04	0.96	0.82	0.56	0.45	0.22	0.29
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.66	0.61	0.56	0.48	0.33	0.27	0.13	0.17
Cleveland, OH	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.82	0.76	0.70	0.60	0.41	0.33	0.16	0.22
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.67	1.55	1.43	1.23	0.84	0.68	0.33	0.44

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1.56	1.44	1.33	1.14	0.78	0.63	0.31	0.41
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.32	0.30	0.27	0.23	0.16	0.13	0.06	0.08
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.15	1.07	0.99	0.85	0.58	0.47	0.23	0.30
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.48	0.44	0.41	0.35	0.24	0.19	0.10	0.13
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.66	0.61	0.56	0.48	0.33	0.27	0.13	0.17
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4.37	4.06	3.74	3.21	2.19	1.77	0.87	1.15
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.21	0.20	0.18	0.16	0.11	0.09	0.04	0.06
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	1.52	1.41	1.30	1.12	0.76	0.62	0.30	0.40
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.95	1.81	1.67	1.43	0.97	0.79	0.39	0.51
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	0.67	0.62	0.57	0.49	0.33	0.27	0.13	0.18
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.20	0.18	0.17	0.15	0.10	0.08	0.04	0.05
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	2.62	2.43	2.24	1.93	1.31	1.06	0.52	0.69
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.01	0.02
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.26	0.24	0.22	0.19	0.13	0.11	0.05	0.07
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.07	0.05	0.03	0.03
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.07	0.06	0.06	0.04	0.03	0.01	0.02
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.29	0.27	0.25	0.21	0.15	0.12	0.06	0.08
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.88	0.82	0.75	0.65	0.44	0.36	0.18	0.23
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.18	0.16	0.15	0.13	0.09	0.07	0.04	0.05

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.61	0.56	0.52	0.45	0.30	0.25	0.12	0.16
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.61	0.56	0.52	0.45	0.30	0.25	0.12	0.16
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.73	2.52	2.31	1.98	1.29	1.07	0.50	0.64
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.02
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.11	0.10	0.09	0.08	0.05	0.04	0.02	0.03
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.02
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.11	0.10	0.09	0.08	0.05	0.04	0.02	0.03
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.28	0.26	0.24	0.21	0.14	0.11	0.06	0.07
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.02
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.47	0.43	0.40	0.34	0.23	0.19	0.09	0.12
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.56	0.52	0.48	0.41	0.28	0.23	0.11	0.15
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.16	0.15	0.14	0.12	0.08	0.07	0.03	0.04
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.27	0.25	0.23	0.20	0.13	0.11	0.05	0.07
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.27	0.25	0.23	0.20	0.13	0.11	0.05	0.07
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.13	0.12	0.11	0.10	0.07	0.05	0.03	0.03
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	1.11	1.03	0.95	0.82	0.56	0.45	0.22	0.29
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.01	0.02
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.02
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.04	0.02	0.02	0.01	0.01
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	6.99	6.47	5.94	5.08	3.36	2.76	1.31	1.70

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.39	-1.31	-1.22	-1.08	-0.83	-0.64	-0.36	-0.50
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	6.99	6.47	5.94	5.08	3.36	2.76	1.31	1.70
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	6.99	6.47	5.94	5.08	3.36	2.76	1.31	1.70
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	6.99	6.47	5.94	5.08	3.36	2.76	1.31	1.70
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	6.97	6.45	5.93	5.07	3.35	2.75	1.30	1.70
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.11	0.10	0.09	0.08	0.05	0.04	0.02	0.02
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	2.15	1.99	1.84	1.58	1.07	0.87	0.43	0.56
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.27	0.25	0.23	0.19	0.13	0.11	0.05	0.07
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.04	0.02	0.02	0.01	0.01
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.50	0.47	0.43	0.37	0.25	0.20	0.10	0.13
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.67	0.62	0.57	0.49	0.33	0.27	0.13	0.17
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.70	0.65	0.60	0.51	0.35	0.28	0.14	0.18
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.66	1.54	1.42	1.21	0.82	0.67	0.32	0.42

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.02
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.02
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.47	0.43	0.40	0.34	0.23	0.19	0.09	0.12
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.20	0.19	0.17	0.15	0.10	0.08	0.04	0.05
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	7.50	6.96	6.41	5.51	3.75	3.04	1.49	1.97

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	4.14	3.84	3.54	3.04	2.07	1.68	0.82	1.09
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	7.38	6.84	6.31	5.42	3.69	2.99	1.47	1.94
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Nogales, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Oakridge, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Ogden Area, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Olmsted County; (part), MN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.56	0.52	0.48	0.41	0.28	0.23	0.11	0.15
Philadelphia-Wilmington, PA-NJ-DE	PM _{2.5} (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	2.57	2.39	2.20	1.89	1.29	1.04	0.51	0.68
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	3.46	3.21	2.96	2.55	1.73	1.40	0.69	0.91
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	2.06	1.91	1.76	1.51	1.03	0.83	0.41	0.54

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.16	2.00	1.84	1.58	1.08	0.87	0.43	0.57
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.17	0.16	0.15	0.13	0.09	0.07	0.03	0.05
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.11	0.10	0.09	0.08	0.05	0.04	0.02	0.03
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.13	1.05	0.97	0.83	0.57	0.46	0.23	0.30
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	1.04	0.96	0.89	0.76	0.52	0.42	0.21	0.27
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.70	0.65	0.60	0.51	0.35	0.28	0.14	0.18
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.27	0.25	0.23	0.20	0.14	0.11	0.05	0.07
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.00	0.92	0.85	0.73	0.50	0.40	0.20	0.26

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.21	0.20	0.18	0.16	0.11	0.09	0.04	0.06
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.16	0.15	0.14	0.12	0.08	0.07	0.03	0.04
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.23	0.22	0.20	0.17	0.12	0.09	0.05	0.06
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.27	0.25	0.23	0.20	0.14	0.11	0.05	0.07
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	6.95	6.44	5.91	5.06	3.34	2.75	1.30	1.69
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.72	0.66	0.61	0.53	0.36	0.29	0.14	0.19
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.73	0.68	0.63	0.54	0.37	0.30	0.15	0.19
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	1.29	1.19	1.10	0.94	0.64	0.52	0.26	0.34
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.27	1.18	1.09	0.93	0.63	0.51	0.25	0.33
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.08	0.07	0.06	0.04	0.03	0.02	0.02
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.91	0.84	0.78	0.67	0.45	0.37	0.18	0.24
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.55	0.51	0.47	0.40	0.28	0.22	0.11	0.14
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.55	0.51	0.47	0.40	0.28	0.22	0.11	0.14
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.27	0.25	0.23	0.20	0.13	0.11	0.05	0.07

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.86	1.73	1.59	1.37	0.93	0.75	0.37	0.49
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.86	1.73	1.59	1.37	0.93	0.75	0.37	0.49
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	3.48	3.22	2.97	2.55	1.72	1.40	0.68	0.90
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3.50	3.24	2.99	2.56	1.73	1.41	0.68	0.90
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.16	2.93	2.70	2.32	1.57	1.27	0.62	0.81
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	2.19	2.03	1.87	1.61	1.10	0.89	0.43	0.57
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	2.19	2.03	1.87	1.61	1.10	0.89	0.43	0.57
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	2.19	2.03	1.87	1.61	1.10	0.89	0.43	0.57
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	2.19	2.03	1.87	1.61	1.10	0.89	0.43	0.57
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.14	0.13	0.12	0.11	0.07	0.06	0.03	0.04
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.58	1.47	1.35	1.16	0.79	0.64	0.31	0.42
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.25	0.23	0.21	0.18	0.13	0.10	0.05	0.07
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.15	0.14	0.13	0.11	0.08	0.06	0.03	0.04
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.16	0.15	0.14	0.12	0.08	0.06	0.03	0.04
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.08	0.07	0.06	0.04	0.03	0.02	0.02
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.06	-0.05	-0.05	-0.04	-0.03	-0.02	-0.02
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.36	0.34	0.31	0.27	0.18	0.15	0.07	0.10
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.33	1.23	1.14	0.98	0.67	0.54	0.26	0.35
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.17	0.16	0.14	0.12	0.08	0.07	0.03	0.04
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.25	0.23	0.21	0.18	0.12	0.10	0.05	0.06
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.04	0.02	0.02	0.01	0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.52	0.49	0.45	0.38	0.26	0.21	0.10	0.14
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.07	-0.07	-0.06	-0.05	-0.03	-0.02	-0.03
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.27	0.25	0.23	0.20	0.14	0.11	0.05	0.07
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.16	0.15	0.14	0.12	0.08	0.06	0.03	0.04
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.45	0.42	0.39	0.33	0.23	0.18	0.09	0.12
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.43	0.40	0.36	0.31	0.21	0.17	0.08	0.11
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	3.02	2.81	2.59	2.22	1.51	1.23	0.60	0.79
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.16	0.15	0.14	0.12	0.08	0.07	0.03	0.04
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.04	0.04	0.02	0.02	0.01	0.01
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.22	0.20	0.19	0.16	0.11	0.09	0.04	0.06
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.02	0.03
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.11	0.10	0.09	0.08	0.05	0.04	0.02	0.03
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.08	0.08	0.07	0.06	0.04	0.03	0.02	0.02

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-19. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Acrolein, 2025

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.18	-0.17	-0.16	-0.14	-0.10	-0.10	-0.07	-0.07
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.11	0.10	0.07	0.07	0.05	0.04
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.12	0.10	0.08	0.07	0.05	0.05
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.02	0.02
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.06	0.05	0.05	0.05	0.03	0.03	0.02	0.02
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.05	0.04	0.03	0.03
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.26	0.24	0.23	0.20	0.15	0.14	0.11	0.10

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.26	0.24	0.23	0.20	0.15	0.14	0.11	0.10
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	0.26	0.24	0.23	0.20	0.15	0.14	0.11	0.10
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.26	0.24	0.23	0.20	0.15	0.14	0.11	0.10
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.26	0.24	0.23	0.20	0.15	0.14	0.11	0.10
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.18	-0.16	-0.16	-0.14	-0.10	-0.10	-0.07	-0.07

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.23	0.21	0.20	0.18	0.13	0.12	0.09	0.08

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.12	0.12	0.11	0.10	0.07	0.07	0.05	0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.22	0.21	0.19	0.17	0.13	0.12	0.09	0.08
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nogales, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oakridge, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted County; (part), MN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Philadelphia-Wilmington, PA-NJ-DE	PM _{2.5} (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.10	0.10	0.09	0.08	0.06	0.06	0.04	0.04
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.06	0.06	0.05	0.05	0.04	0.03	0.03	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.26	0.24	0.23	0.20	0.15	0.14	0.11	0.09
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.11	0.10	0.10	0.09	0.06	0.06	0.05	0.04
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.11	0.10	0.10	0.09	0.06	0.06	0.05	0.04
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.10	0.09	0.08	0.06	0.05	0.04	0.04
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.02
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.02
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.02
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.02
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.01
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.03
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-20. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Acrolein, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7 ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.42	-0.40	-0.37	-0.33	-0.26	-0.20	-0.12	-0.15
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.27	0.25	0.23	0.20	0.15	0.12	0.06	0.08
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.32	0.30	0.28	0.24	0.18	0.14	0.08	0.10
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.12	0.11	0.11	0.09	0.07	0.06	0.03	0.04
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.02
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.35	0.32	0.30	0.26	0.19	0.16	0.08	0.10
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.12	0.11	0.10	0.09	0.07	0.05	0.03	0.04
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.15	0.14	0.13	0.12	0.08	0.07	0.04	0.05
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.21	0.19	0.18	0.16	0.11	0.09	0.05	0.06
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.27	0.25	0.23	0.20	0.15	0.12	0.06	0.08
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.69	0.64	0.59	0.52	0.38	0.31	0.16	0.21

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.69	0.64	0.59	0.52	0.38	0.31	0.16	0.21
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	0.69	0.64	0.59	0.52	0.38	0.31	0.16	0.21
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.69	0.64	0.59	0.52	0.38	0.31	0.16	0.21
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.69	0.64	0.59	0.52	0.38	0.31	0.16	0.21
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.17	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.42	-0.39	-0.37	-0.33	-0.25	-0.20	-0.12	-0.15

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.59	0.55	0.51	0.45	0.33	0.27	0.14	0.18

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.33	0.31	0.28	0.25	0.18	0.15	0.08	0.10
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.58	0.54	0.50	0.44	0.32	0.26	0.14	0.18
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	0.20	0.19	0.18	0.15	0.11	0.09	0.05	0.06
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.27	0.26	0.24	0.21	0.15	0.12	0.06	0.08
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.17	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.69	0.64	0.59	0.52	0.37	0.31	0.16	0.20
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.10	0.10	0.09	0.08	0.06	0.05	0.02	0.03
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.02	0.03
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.15	0.14	0.13	0.11	0.08	0.07	0.03	0.04
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.15	0.14	0.13	0.11	0.08	0.07	0.03	0.04
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.30	0.27	0.25	0.22	0.16	0.13	0.07	0.09
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.30	0.28	0.26	0.22	0.16	0.13	0.07	0.09
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.27	0.25	0.23	0.20	0.15	0.12	0.06	0.08
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.17	0.16	0.15	0.13	0.10	0.08	0.04	0.05
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.17	0.16	0.15	0.13	0.10	0.08	0.04	0.05
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.17	0.16	0.15	0.13	0.10	0.08	0.04	0.05
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.17	0.16	0.15	0.13	0.10	0.08	0.04	0.05
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.13	0.12	0.11	0.09	0.07	0.06	0.03	0.04
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.11	0.10	0.09	0.08	0.06	0.05	0.02	0.03
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.24	0.22	0.21	0.18	0.13	0.11	0.06	0.07
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-21. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Acrolein, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.60	-0.57	-0.53	-0.46	-0.35	-0.27	-0.15	-0.21
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.16	0.15	0.14	0.12	0.08	0.07	0.03	0.05
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.08	0.08	0.07	0.06	0.04	0.03	0.02	0.02
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.19	0.18	0.17	0.15	0.10	0.08	0.04	0.06
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	0.06	0.06	0.05	0.04	0.03	0.03	0.01	0.02
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Cleveland, OH	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.07	0.07	0.06	0.06	0.04	0.03	0.02	0.02
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.21	0.20	0.18	0.16	0.11	0.09	0.05	0.06
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.09	0.07	0.05	0.03	0.04
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.15	0.13	0.12	0.11	0.07	0.06	0.03	0.04
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.41	0.38	0.35	0.31	0.21	0.17	0.09	0.12

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.41	0.38	0.35	0.31	0.21	0.17	0.09	0.12
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	0.41	0.38	0.35	0.31	0.21	0.17	0.09	0.12
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.41	0.38	0.35	0.31	0.21	0.17	0.09	0.12
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.41	0.38	0.35	0.30	0.21	0.17	0.09	0.12
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.10	0.10	0.09	0.08	0.05	0.04	0.02	0.03
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.60	-0.56	-0.53	-0.46	-0.35	-0.27	-0.15	-0.21

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.36	0.33	0.31	0.27	0.19	0.15	0.08	0.10

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.20	0.18	0.17	0.15	0.10	0.08	0.04	0.06
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.36	0.33	0.30	0.26	0.19	0.15	0.08	0.10
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	0.12	0.11	0.11	0.09	0.07	0.05	0.03	0.04
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.17	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.03

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.10	0.10	0.09	0.08	0.05	0.04	0.02	0.03
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.41	0.38	0.35	0.30	0.21	0.17	0.09	0.12
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.18	0.17	0.15	0.13	0.09	0.08	0.04	0.05
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.18	0.17	0.15	0.13	0.09	0.08	0.04	0.05
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.11	0.10	0.09	0.08	0.06	0.04	0.02	0.03
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.11	0.10	0.09	0.08	0.06	0.04	0.02	0.03
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.11	0.10	0.09	0.08	0.06	0.04	0.02	0.03
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.11	0.10	0.09	0.08	0.06	0.04	0.02	0.03
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.15	0.14	0.12	0.11	0.08	0.06	0.03	0.04
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-22. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Benzene, 2025

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.45	0.42	0.40	0.36	0.26	0.25	0.20	0.17
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.46	1.36	1.28	1.16	0.85	0.81	0.64	0.55
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.81	0.76	0.72	0.64	0.47	0.45	0.35	0.31
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.09	0.09	0.08	0.06	0.06	0.04	0.04
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	1.11	1.04	0.98	0.88	0.65	0.61	0.48	0.42
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.10	0.09	0.08	0.08	0.06	0.05	0.04	0.04
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.65	0.61	0.57	0.52	0.38	0.36	0.28	0.25
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.76	0.71	0.67	0.60	0.44	0.42	0.33	0.29
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.02	0.02	0.01	0.02	0.01	0.01	0.01	0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.42	1.32	1.25	1.12	0.83	0.78	0.61	0.54
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.17	0.16	0.15	0.13	0.10	0.09	0.07	0.06
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	3.37	3.14	2.96	2.67	1.96	1.86	1.45	1.27
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.22	0.20	0.19	0.17	0.13	0.12	0.09	0.08
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.80	0.74	0.70	0.63	0.46	0.44	0.34	0.30
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.70	0.65	0.61	0.55	0.41	0.38	0.30	0.26
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	7.30	6.80	6.43	5.78	4.24	4.03	3.14	2.76
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.47	0.44	0.41	0.37	0.27	0.26	0.20	0.18
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	3.55	3.31	3.12	2.81	2.06	1.96	1.53	1.34
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.87	0.81	0.77	0.69	0.51	0.48	0.38	0.33
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-0.07	-0.07	-0.07	-0.06	-0.04	-0.04	-0.03	-0.03
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.14	-0.13	-0.13	-0.11	-0.08	-0.08	-0.06	-0.06
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1.43	1.33	1.26	1.13	0.83	0.79	0.61	0.54
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.45	0.42	0.40	0.36	0.26	0.25	0.20	0.17
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.71	0.66	0.62	0.56	0.41	0.39	0.30	0.27
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.29	-0.27	-0.26	-0.23	-0.17	-0.16	-0.12	-0.11

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.02
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.43	0.40	0.38	0.34	0.25	0.24	0.19	0.16
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.24	0.23	0.21	0.19	0.14	0.13	0.10	0.09
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.39	0.36	0.34	0.31	0.23	0.21	0.17	0.15
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	1.94	1.80	1.71	1.53	1.13	1.07	0.83	0.73
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	3.61	3.36	3.18	2.85	2.10	1.99	1.55	1.36
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	8.77	8.17	7.72	6.94	5.10	4.84	3.77	3.32
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.25	0.23	0.22	0.20	0.15	0.14	0.11	0.09
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.11	0.10	0.10	0.09	0.06	0.06	0.05	0.04
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.25	0.23	0.22	0.20	0.14	0.14	0.11	0.09
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	2.73	2.54	2.40	2.16	1.59	1.50	1.17	1.03
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	2.43	2.26	2.14	1.92	1.41	1.34	1.04	0.92
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.44	1.34	1.27	1.14	0.84	0.80	0.62	0.55
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	1.80	1.67	1.58	1.42	1.05	0.99	0.77	0.68
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	3.69	3.44	3.25	2.92	2.14	2.03	1.58	1.40
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	3.44	3.20	3.03	2.72	2.00	1.90	1.48	1.30

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.51	0.47	0.45	0.40	0.30	0.28	0.22	0.19
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2.54	2.36	2.23	2.01	1.47	1.40	1.09	0.96
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.05	0.04	0.03
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.11	0.10	0.10	0.09	0.07	0.06	0.05	0.04
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.11	1.03	0.98	0.88	0.64	0.61	0.48	0.42
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.44	1.34	1.27	1.14	0.84	0.79	0.62	0.54
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	9.69	9.02	8.53	7.66	5.63	5.34	4.16	3.67
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.32	0.29	0.28	0.25	0.18	0.17	0.14	0.12
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	2.43	2.26	2.12	1.93	1.41	1.34	1.05	0.92
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.98	1.84	1.70	1.58	1.15	1.10	0.88	0.74
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	1.84	1.71	1.62	1.46	1.07	1.02	0.79	0.70
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.32	0.30	0.28	0.25	0.19	0.18	0.14	0.12
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	5.67	5.28	4.99	4.48	3.29	3.12	2.43	2.14
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.11	0.10	0.09	0.09	0.06	0.06	0.05	0.04
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-0.07	-0.06	-0.06	-0.05	-0.04	-0.04	-0.03	-0.03
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.57	0.53	0.50	0.45	0.33	0.31	0.25	0.22
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.26	0.25	0.23	0.21	0.15	0.15	0.11	0.10
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.03	-0.03	-0.03	-0.02	-0.02	-0.02	-0.01
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-0.04	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.66	0.62	0.58	0.52	0.38	0.36	0.28	0.25
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.89	1.76	1.67	1.50	1.10	1.04	0.81	0.72
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-0.91	-0.85	-0.82	-0.71	-0.53	-0.50	-0.37	-0.35

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	1.27	1.18	1.12	1.01	0.74	0.70	0.55	0.48
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.30	1.21	1.14	1.03	0.76	0.72	0.56	0.49
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	7.35	6.84	6.46	5.82	4.27	4.06	3.17	2.78
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.19	0.18	0.17	0.15	0.11	0.11	0.08	0.07
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.24	0.22	0.21	0.19	0.14	0.13	0.10	0.09
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.19	0.18	0.17	0.15	0.11	0.11	0.08	0.07
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.23	0.22	0.21	0.19	0.14	0.13	0.10	0.09
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.11	0.10	0.09	0.08	0.06	0.06	0.05	0.04
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.65	0.60	0.57	0.51	0.38	0.36	0.28	0.25
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.18	0.16	0.15	0.14	0.10	0.10	0.08	0.07
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.17	0.15	0.15	0.13	0.10	0.09	0.07	0.06

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.04	0.03	0.03	0.02
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.15	0.14	0.13	0.12	0.09	0.08	0.06	0.06
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.08	0.08	0.07	0.07	0.05	0.05	0.04	0.03
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.03	0.96	0.91	0.82	0.60	0.57	0.44	0.39
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	1.24	1.16	1.10	0.98	0.72	0.69	0.53	0.47
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.31	0.29	0.27	0.25	0.18	0.17	0.13	0.12
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.30	0.28	0.26	0.23	0.17	0.16	0.13	0.11
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.02
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.13	0.12	0.11	0.10	0.07	0.07	0.06	0.05

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.58	0.54	0.51	0.46	0.34	0.32	0.25	0.22
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.58	0.54	0.51	0.46	0.34	0.32	0.25	0.22
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.26	0.25	0.23	0.21	0.15	0.15	0.11	0.10
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	2.42	2.26	2.13	1.92	1.41	1.34	1.04	0.92
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.14	-0.13	-0.13	-0.11	-0.08	-0.08	-0.06	-0.05
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.18	0.17	0.16	0.14	0.10	0.10	0.08	0.07
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	19.39	18.06	17.08	15.34	11.27	10.69	8.33	7.34

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	1.03	0.96	0.90	0.81	0.60	0.57	0.44	0.39
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	19.40	18.07	17.09	15.35	11.28	10.70	8.33	7.34
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	19.41	18.07	17.09	15.35	11.28	10.70	8.34	7.34
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	19.40	18.07	17.09	15.35	11.28	10.70	8.33	7.34
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	19.37	18.04	17.06	15.33	11.26	10.68	8.32	7.33
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.10	0.10	0.09	0.08	0.06	0.06	0.04	0.04
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.37	0.34	0.32	0.29	0.21	0.20	0.16	0.14
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.07	0.07	0.05	0.05
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	4.76	4.43	4.19	3.77	2.77	2.63	2.04	1.80
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.60	0.56	0.53	0.47	0.35	0.33	0.26	0.23
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.03
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.21	1.13	1.07	0.96	0.70	0.67	0.52	0.46
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.54	1.43	1.36	1.22	0.90	0.85	0.66	0.58
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	1.55	1.44	1.36	1.22	0.90	0.85	0.66	0.58
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.48	3.24	3.06	2.76	2.02	1.92	1.50	1.32

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.03
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.08	0.08	0.07	0.07	0.05	0.05	0.04	0.03
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.23	0.21	0.20	0.18	0.13	0.13	0.10	0.09
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.11	0.10	0.10	0.09	0.06	0.06	0.05	0.04
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.14	0.13	0.13	0.11	0.08	0.08	0.06	0.05
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.99	0.92	0.87	0.78	0.58	0.55	0.43	0.37
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.39	0.36	0.34	0.31	0.23	0.21	0.17	0.15
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	15.40	14.34	13.55	12.19	8.95	8.50	6.63	5.82

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	8.43	7.85	7.41	6.67	4.90	4.65	3.63	3.19
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	15.14	14.10	13.32	11.99	8.80	8.36	6.52	5.73
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Nogales, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02
Oakridge, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Ogden Area, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Olmsted County; (part), MN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.11	0.10	0.09	0.09	0.06	0.06	0.05	0.04
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.11	0.10	0.10	0.09	0.06	0.06	0.05	0.04
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.56	0.52	0.48	0.45	0.32	0.31	0.25	0.21
Philadelphia-Wilmington, PA-NJ-DE	PM _{2.5} (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	4.66	4.34	4.09	3.69	2.71	2.57	2.01	1.76
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	6.50	6.06	5.71	5.15	3.78	3.59	2.81	2.46
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	4.58	4.27	4.03	3.62	2.66	2.53	1.97	1.73

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4.78	4.45	4.21	3.78	2.78	2.64	2.05	1.81
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.08	0.07	0.07	0.06	0.05	0.04	0.03	0.03
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.35	0.33	0.31	0.28	0.20	0.19	0.15	0.13
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.26	0.24	0.23	0.21	0.15	0.14	0.11	0.10
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	2.37	2.20	2.08	1.87	1.38	1.31	1.02	0.89
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	2.18	2.03	1.92	1.73	1.27	1.20	0.94	0.82
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.51	1.41	1.33	1.20	0.88	0.83	0.65	0.57
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.03
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.11	0.10	0.10	0.09	0.06	0.06	0.05	0.04
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.60	0.56	0.53	0.48	0.35	0.33	0.26	0.23
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.11	1.97	1.86	1.67	1.23	1.16	0.91	0.80

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.45	0.42	0.39	0.35	0.26	0.25	0.19	0.17
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.35	0.33	0.31	0.28	0.21	0.20	0.15	0.13
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.55	0.51	0.48	0.43	0.32	0.30	0.23	0.21
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.64	0.59	0.56	0.50	0.37	0.35	0.27	0.24
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	19.31	17.99	17.01	15.28	11.23	10.65	8.30	7.31
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.67	1.56	1.47	1.32	0.97	0.92	0.72	0.63
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.62	1.51	1.43	1.28	0.94	0.89	0.70	0.61
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	2.84	2.65	2.50	2.25	1.65	1.57	1.22	1.08
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	2.80	2.60	2.46	2.21	1.63	1.54	1.20	1.06
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.28	0.26	0.24	0.22	0.16	0.15	0.12	0.10
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.15	0.14	0.13	0.12	0.09	0.08	0.07	0.06
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	1.86	1.73	1.64	1.47	1.08	1.03	0.80	0.70
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.16	1.08	1.02	0.92	0.67	0.64	0.50	0.44
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	1.16	1.08	1.02	0.92	0.67	0.64	0.50	0.44
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.68	0.63	0.60	0.54	0.40	0.38	0.29	0.26

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	4.10	3.82	3.62	3.25	2.39	2.26	1.76	1.55
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4.11	3.83	3.62	3.26	2.39	2.27	1.77	1.56
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	7.97	7.42	7.01	6.30	4.63	4.39	3.42	3.01
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	8.01	7.46	7.05	6.34	4.66	4.42	3.44	3.03
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	7.28	6.78	6.41	5.76	4.23	4.02	3.13	2.76
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	4.73	4.40	4.16	3.74	2.75	2.61	2.03	1.79
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	4.73	4.40	4.16	3.74	2.75	2.61	2.03	1.79
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	4.72	4.40	4.16	3.74	2.75	2.61	2.03	1.79
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	4.72	4.40	4.16	3.74	2.75	2.61	2.03	1.79
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.29	0.27	0.26	0.23	0.17	0.16	0.13	0.11
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	3.46	3.23	3.05	2.74	2.01	1.91	1.49	1.31
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.55	0.51	0.48	0.43	0.32	0.30	0.23	0.21
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.10	0.09	0.07	0.06	0.05	0.04
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.35	0.33	0.31	0.28	0.21	0.19	0.15	0.13
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.36	0.34	0.32	0.29	0.21	0.20	0.16	0.14
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.11	-0.10	-0.10	-0.08	-0.06	-0.06	-0.04	-0.04
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.81	0.76	0.72	0.64	0.47	0.45	0.35	0.31
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	2.87	2.67	2.52	2.27	1.67	1.58	1.23	1.08
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.02
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.12	0.11	0.10	0.09	0.07	0.07	0.05	0.04
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.39	0.37	0.35	0.31	0.23	0.22	0.17	0.15
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.46	0.43	0.41	0.37	0.27	0.26	0.20	0.18
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.11	0.10	0.10	0.09	0.07	0.06	0.05	0.04
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.10	0.09	0.09	0.08	0.06	0.06	0.04	0.04

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	1.07	0.99	0.94	0.84	0.62	0.59	0.46	0.40
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.60	0.56	0.53	0.48	0.35	0.33	0.26	0.23
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.35	0.33	0.31	0.28	0.20	0.19	0.15	0.13
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	1.03	0.95	0.90	0.81	0.60	0.57	0.44	0.39
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.17	0.16	0.15	0.13	0.10	0.09	0.07	0.06
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.93	0.86	0.82	0.73	0.54	0.51	0.40	0.35
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	6.52	6.07	5.74	5.16	3.79	3.60	2.80	2.47
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.35	0.33	0.31	0.28	0.20	0.19	0.15	0.13
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.05	0.04	0.03	0.03

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.10	0.10	0.09	0.08	0.06	0.06	0.05	0.04
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.47	0.44	0.41	0.37	0.27	0.26	0.20	0.18
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.23	0.22	0.20	0.18	0.13	0.13	0.10	0.09
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.10	0.10	0.09	0.08	0.06	0.06	0.04	0.04
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.24	0.22	0.21	0.19	0.14	0.13	0.10	0.09
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.16	0.15	0.14	0.13	0.10	0.09	0.07	0.06

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-23. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Benzene, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.60	0.56	0.52	0.45	0.33	0.28	0.15	0.18
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.36	1.26	1.16	1.02	0.71	0.62	0.31	0.37
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.03	0.96	0.89	0.78	0.56	0.47	0.26	0.31
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	1.39	1.30	1.20	1.06	0.76	0.64	0.35	0.42
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.03	0.03
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.79	0.74	0.68	0.60	0.43	0.36	0.20	0.24
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.94	0.87	0.81	0.71	0.51	0.43	0.23	0.28
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.11	-0.10	-0.10	-0.09	-0.07	-0.05	-0.03	-0.04
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.82	1.69	1.57	1.38	1.00	0.83	0.45	0.55
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.19	0.18	0.17	0.15	0.10	0.09	0.05	0.06
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	3.85	3.58	3.31	2.91	2.08	1.77	0.94	1.14
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.28	0.26	0.25	0.22	0.16	0.13	0.07	0.09
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.09	0.08	0.07	0.07	0.05	0.04	0.02	0.03
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.05	0.98	0.91	0.80	0.58	0.48	0.26	0.32
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.92	0.86	0.80	0.70	0.51	0.42	0.23	0.28
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	9.46	8.81	8.17	7.18	5.22	4.35	2.37	2.90
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.55	0.51	0.47	0.41	0.30	0.25	0.13	0.16
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	4.54	4.23	3.92	3.44	2.50	2.09	1.14	1.39
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.89	0.82	0.76	0.67	0.47	0.41	0.21	0.25
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-0.29	-0.27	-0.26	-0.22	-0.17	-0.13	-0.08	-0.10
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.35	-0.33	-0.31	-0.27	-0.21	-0.16	-0.10	-0.12
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	1.83	1.71	1.58	1.39	1.01	0.84	0.46	0.56
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.60	0.56	0.52	0.45	0.33	0.28	0.15	0.18
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.84	0.78	0.72	0.63	0.45	0.38	0.21	0.25

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.71	-0.67	-0.63	-0.55	-0.42	-0.33	-0.20	-0.24
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.02	0.02
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.57	0.53	0.49	0.43	0.31	0.26	0.14	0.17
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.32	0.30	0.28	0.24	0.18	0.15	0.08	0.10
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.48	0.45	0.42	0.37	0.27	0.22	0.12	0.15
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	2.51	2.34	2.17	1.91	1.39	1.16	0.63	0.77
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	4.67	4.34	4.03	3.54	2.57	2.14	1.17	1.43
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	11.36	10.57	9.81	8.62	6.26	5.22	2.85	3.47
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.33	0.31	0.28	0.25	0.18	0.15	0.08	0.10
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.15	0.14	0.13	0.12	0.08	0.07	0.04	0.05
Chico, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.33	0.30	0.28	0.25	0.18	0.15	0.08	0.10
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	3.57	3.33	3.09	2.71	1.97	1.64	0.90	1.10
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	3.17	2.95	2.74	2.40	1.75	1.45	0.79	0.97
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.89	1.76	1.63	1.44	1.04	0.87	0.47	0.58
Cleveland, OH	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	2.36	2.19	2.04	1.79	1.30	1.08	0.59	0.72
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	4.85	4.52	4.19	3.68	2.68	2.23	1.22	1.49

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	4.52	4.21	3.91	3.43	2.50	2.08	1.14	1.39
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.46	0.42	0.39	0.34	0.23	0.21	0.10	0.12
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	3.33	3.10	2.87	2.53	1.84	1.53	0.84	1.02
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.07	0.06	0.03	0.04
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.42	1.33	1.23	1.08	0.79	0.65	0.36	0.44
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.88	1.75	1.63	1.43	1.04	0.86	0.47	0.58
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	12.77	11.89	11.04	9.70	7.06	5.87	3.21	3.93
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.24	0.22	0.20	0.18	0.12	0.11	0.05	0.06
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	2.15	1.99	1.83	1.60	1.11	0.98	0.49	0.58
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.05	-0.11	-0.09	-0.22	-0.04	-0.13	-0.21
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	2.24	2.08	1.93	1.70	1.23	1.03	0.56	0.69
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.47	0.44	0.41	0.36	0.26	0.22	0.12	0.14
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	7.30	6.79	6.30	5.54	4.02	3.35	1.83	2.23
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.03
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-0.18	-0.17	-0.16	-0.14	-0.11	-0.08	-0.05	-0.06
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.10	-0.10	-0.09	-0.08	-0.06	-0.05	-0.03	-0.04
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.69	0.64	0.60	0.52	0.38	0.32	0.17	0.21
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.05	-0.05	-0.04	-0.03	-0.03	-0.02	-0.02
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.35	0.32	0.30	0.26	0.19	0.16	0.09	0.11
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.10	-0.10	-0.09	-0.08	-0.06	-0.05	-0.03	-0.04
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-0.12	-0.11	-0.11	-0.09	-0.07	-0.06	-0.03	-0.04
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.15	0.14	0.13	0.11	0.08	0.07	0.04	0.04
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.86	0.80	0.74	0.65	0.48	0.40	0.22	0.26
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	2.42	2.25	2.09	1.83	1.33	1.11	0.60	0.74
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-2.65	-2.48	-2.34	-2.06	-1.58	-1.23	-0.74	-0.93

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	1.59	1.48	1.37	1.20	0.87	0.73	0.40	0.48
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.67	1.55	1.44	1.26	0.92	0.77	0.42	0.51
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	8.65	8.04	7.44	6.53	4.70	3.96	2.12	2.58
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.25	0.23	0.22	0.19	0.14	0.11	0.06	0.08
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.30	0.28	0.26	0.23	0.17	0.14	0.08	0.09
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.25	0.23	0.22	0.19	0.14	0.11	0.06	0.08
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.30	0.28	0.26	0.23	0.17	0.14	0.08	0.09
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.10	-0.09	-0.08	-0.06	-0.05	-0.03	-0.04
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.14	0.13	0.12	0.11	0.08	0.06	0.03	0.04
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.83	0.77	0.72	0.63	0.46	0.38	0.21	0.25
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.22	0.20	0.19	0.16	0.12	0.10	0.05	0.07
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.20	0.19	0.17	0.15	0.11	0.09	0.05	0.06

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.19	0.17	0.16	0.14	0.10	0.09	0.05	0.06
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01	-0.01
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.11	0.10	0.09	0.08	0.06	0.05	0.03	0.03
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.11	0.10	0.09	0.08	0.06	0.05	0.03	0.03
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.04
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.36	1.27	1.18	1.03	0.75	0.63	0.34	0.42
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	1.64	1.53	1.42	1.25	0.91	0.75	0.41	0.50
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.41	0.38	0.35	0.31	0.23	0.19	0.10	0.13
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.27	0.25	0.23	0.20	0.14	0.12	0.06	0.07
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.75	0.70	0.65	0.57	0.42	0.35	0.19	0.23
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.75	0.70	0.65	0.57	0.42	0.35	0.19	0.23
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.35	0.32	0.30	0.26	0.19	0.16	0.09	0.11
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	3.16	2.94	2.73	2.40	1.74	1.45	0.79	0.97
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.02	0.02
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.35	-0.33	-0.31	-0.27	-0.21	-0.16	-0.10	-0.12
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.17	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.21	0.20	0.18	0.16	0.12	0.10	0.05	0.06
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.18	0.17	0.16	0.14	0.10	0.08	0.05	0.06
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	25.44	23.68	21.98	19.32	14.04	11.69	6.39	7.81

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	1.22	1.13	1.05	0.92	0.66	0.56	0.30	0.37
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	25.45	23.70	21.99	19.32	14.05	11.70	6.40	7.81
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	25.45	23.70	21.99	19.33	14.05	11.70	6.40	7.81
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	25.46	23.70	22.00	19.33	14.05	11.70	6.40	7.81
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	25.40	23.65	21.95	19.29	14.02	11.67	6.38	7.80
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.39	0.36	0.33	0.29	0.21	0.18	0.09	0.11
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	6.28	5.84	5.42	4.77	3.47	2.88	1.58	1.93
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.77	0.72	0.67	0.59	0.43	0.36	0.19	0.24
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.11	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.60	1.49	1.38	1.21	0.88	0.73	0.40	0.49
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2.00	1.86	1.73	1.52	1.10	0.92	0.50	0.61
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	2.04	1.90	1.76	1.55	1.13	0.94	0.51	0.63
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	4.00	3.71	3.43	3.02	2.16	1.83	0.98	1.18

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.09	0.08	0.07	0.05	0.05	0.02	0.03
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.28	0.26	0.24	0.21	0.15	0.13	0.07	0.09
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.15	0.14	0.13	0.11	0.08	0.07	0.04	0.05
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.19	0.17	0.16	0.14	0.10	0.09	0.05	0.06
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	1.25	1.17	1.08	0.95	0.69	0.58	0.31	0.38
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.44	0.41	0.38	0.33	0.24	0.20	0.11	0.13
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	18.97	17.65	16.35	14.37	10.38	8.71	4.71	5.73

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	10.32	9.60	8.89	7.81	5.64	4.73	2.56	3.11
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	18.68	17.38	16.10	14.15	10.22	8.57	4.64	5.64
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.12	0.11	0.10	0.09	0.07	0.06	0.03	0.04
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.14	0.13	0.12	0.11	0.08	0.06	0.03	0.04
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.04	-0.05	-0.05	-0.08	-0.02	-0.05	-0.07
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	4.98	4.62	4.26	3.74	2.66	2.28	1.20	1.44
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	7.29	6.77	6.26	5.50	3.93	3.34	1.77	2.14
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	6.03	5.62	5.21	4.58	3.33	2.77	1.52	1.85

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	6.30	5.87	5.45	4.79	3.48	2.90	1.59	1.94
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.02	0.03
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.45	0.42	0.39	0.34	0.25	0.21	0.11	0.14
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.31	0.29	0.27	0.24	0.17	0.14	0.08	0.09
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	2.96	2.75	2.55	2.24	1.62	1.36	0.74	0.90
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	2.75	2.56	2.38	2.09	1.51	1.26	0.69	0.84
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.99	1.85	1.72	1.51	1.10	0.91	0.50	0.61
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.11	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.14	0.13	0.12	0.11	0.08	0.07	0.04	0.04
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.80	0.74	0.69	0.60	0.44	0.37	0.20	0.24
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.67	2.49	2.31	2.03	1.47	1.23	0.67	0.81

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.57	0.53	0.49	0.43	0.31	0.26	0.14	0.17
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.44	0.41	0.38	0.33	0.24	0.20	0.11	0.13
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.70	0.65	0.60	0.53	0.39	0.32	0.18	0.22
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.82	0.76	0.71	0.62	0.45	0.38	0.21	0.25
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	25.34	23.59	21.89	19.24	13.99	11.64	6.37	7.78
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.15	2.00	1.86	1.63	1.19	0.99	0.54	0.66
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.14	1.99	1.85	1.62	1.18	0.98	0.54	0.66
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	3.74	3.48	3.23	2.84	2.07	1.72	0.94	1.15
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3.69	3.43	3.19	2.80	2.04	1.70	0.93	1.13
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.35	0.33	0.31	0.27	0.19	0.16	0.09	0.11
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.03
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	2.30	2.14	1.98	1.74	1.26	1.05	0.57	0.69
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	1.46	1.36	1.26	1.11	0.80	0.67	0.36	0.44
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	1.46	1.36	1.26	1.11	0.80	0.67	0.36	0.44
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.83	0.78	0.72	0.63	0.46	0.38	0.21	0.26

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	5.40	5.03	4.67	4.10	2.98	2.48	1.36	1.66
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	5.41	5.04	4.68	4.11	2.99	2.49	1.36	1.66
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	10.22	9.51	8.82	7.75	5.62	4.69	2.56	3.12
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	10.27	9.56	8.87	7.79	5.65	4.72	2.57	3.14
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	9.31	8.67	8.04	7.06	5.12	4.28	2.33	2.84
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	6.12	5.70	5.29	4.64	3.37	2.81	1.53	1.87
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	6.12	5.70	5.29	4.64	3.37	2.81	1.53	1.87
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	6.12	5.70	5.28	4.64	3.37	2.81	1.53	1.87
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	6.12	5.70	5.28	4.64	3.37	2.81	1.53	1.87
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.36	0.34	0.31	0.27	0.20	0.17	0.09	0.11
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	4.51	4.20	3.89	3.42	2.49	2.07	1.13	1.38
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.69	0.64	0.59	0.52	0.38	0.32	0.17	0.21
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.14	0.13	0.12	0.11	0.08	0.07	0.04	0.04
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.46	0.43	0.40	0.35	0.25	0.21	0.12	0.14
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.47	0.44	0.41	0.36	0.26	0.22	0.12	0.15
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.21	0.19	0.18	0.16	0.11	0.10	0.05	0.06
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.29	-0.28	-0.26	-0.23	-0.17	-0.14	-0.08	-0.10
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	1.03	0.96	0.89	0.78	0.57	0.47	0.26	0.31
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	3.69	3.43	3.18	2.80	2.03	1.69	0.92	1.13
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.02	0.02
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.51	0.47	0.44	0.38	0.28	0.23	0.13	0.16
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.52	0.48	0.44	0.39	0.28	0.24	0.13	0.15
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.14	0.13	0.13	0.11	0.08	0.07	0.04	0.04
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	1.31	1.22	1.13	0.99	0.71	0.60	0.32	0.39
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.80	0.74	0.69	0.60	0.44	0.37	0.20	0.24
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.46	0.43	0.40	0.35	0.26	0.21	0.12	0.14
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	1.34	1.25	1.16	1.02	0.74	0.62	0.34	0.41
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.22	0.21	0.19	0.17	0.12	0.10	0.06	0.07
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	-0.01
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.20	1.12	1.04	0.91	0.66	0.55	0.30	0.37
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	8.39	7.81	7.25	6.37	4.62	3.86	2.10	2.57
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.43	0.40	0.37	0.33	0.24	0.20	0.11	0.13
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.10	0.09	0.08	0.06	0.05	0.03	0.03
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.07	0.05	0.03	0.04

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.13	0.12	0.12	0.10	0.07	0.06	0.03	0.04
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.59	0.55	0.51	0.45	0.33	0.27	0.15	0.18
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.30	0.28	0.26	0.23	0.17	0.14	0.08	0.09
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.04	0.04	0.03	0.03	0.02	0.01	0.01
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.31	0.29	0.27	0.24	0.17	0.14	0.08	0.10
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.19	0.18	0.17	0.15	0.11	0.09	0.05	0.06

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-24. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Benzene, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.31	0.29	0.27	0.23	0.16	0.13	0.07	0.09
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.15	-0.15	-0.14	-0.15	-0.09	-0.07	-0.12
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.47	0.44	0.40	0.35	0.24	0.20	0.10	0.13
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.62	0.57	0.53	0.46	0.32	0.26	0.13	0.17
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.32	0.29	0.27	0.23	0.16	0.13	0.06	0.08
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.39	0.36	0.33	0.28	0.19	0.16	0.08	0.10
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.25	-0.23	-0.22	-0.19	-0.15	-0.11	-0.06	-0.09
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	-0.01
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.88	0.81	0.75	0.65	0.45	0.37	0.18	0.24
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	1.14	1.04	0.95	0.81	0.52	0.45	0.20	0.25
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.56	0.52	0.48	0.41	0.29	0.24	0.12	0.16
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.49	0.45	0.42	0.36	0.26	0.21	0.11	0.14
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	4.74	4.39	4.06	3.52	2.47	2.00	1.01	1.33
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.18	0.16	0.15	0.13	0.08	0.07	0.03	0.04
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	2.18	2.02	1.86	1.61	1.13	0.92	0.46	0.60
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.07	0.05	0.04	0.03	0.00	0.01	-0.01	-0.02
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-0.44	-0.41	-0.39	-0.34	-0.25	-0.20	-0.11	-0.15
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.43	-0.40	-0.38	-0.33	-0.25	-0.19	-0.10	-0.14
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.89	0.83	0.76	0.66	0.46	0.38	0.19	0.25
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.31	0.29	0.27	0.23	0.16	0.13	0.07	0.09
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.29	0.27	0.24	0.21	0.14	0.12	0.05	0.07

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.87	-0.82	-0.77	-0.67	-0.50	-0.39	-0.21	-0.29
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.30	0.28	0.26	0.22	0.16	0.13	0.06	0.08
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.17	0.16	0.14	0.13	0.09	0.07	0.04	0.05
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.22	0.20	0.18	0.16	0.11	0.09	0.04	0.06
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	1.26	1.17	1.08	0.94	0.66	0.53	0.27	0.36
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2.31	2.13	1.97	1.71	1.20	0.97	0.49	0.64
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	5.66	5.24	4.85	4.20	2.94	2.39	1.20	1.59
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.17	0.16	0.15	0.13	0.09	0.07	0.04	0.05
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Chico, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.17	0.16	0.15	0.13	0.09	0.07	0.04	0.05
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	1.85	1.71	1.58	1.37	0.97	0.78	0.39	0.52
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	1.61	1.49	1.38	1.19	0.84	0.68	0.34	0.45
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.98	0.90	0.84	0.73	0.51	0.41	0.21	0.28
Cleveland, OH	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	1.22	1.13	1.04	0.91	0.64	0.52	0.26	0.35
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2.54	2.35	2.18	1.89	1.33	1.07	0.54	0.72

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland-Akron-Lorain, OH	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	2.37	2.20	2.03	1.76	1.24	1.00	0.51	0.67
Cochise County; Paul Spur/Douglas planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.09	-0.09	-0.08	-0.07	-0.05	-0.04	-0.05
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.72	1.60	1.48	1.28	0.90	0.73	0.37	0.49
Cook County; Lyons Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Cook County; Southeast Chicago, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.71	0.66	0.61	0.53	0.37	0.30	0.15	0.20
Cuyahoga County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.97	0.90	0.83	0.72	0.51	0.41	0.21	0.28
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	6.72	6.23	5.76	5.00	3.53	2.85	1.44	1.92
Delaware County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.14	-0.14	-0.13	-0.11	-0.10	-0.07	-0.04	-0.06
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.46	-0.45	-0.44	-0.40	-0.37	-0.25	-0.18	-0.27
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-3.99	-3.77	-3.55	-3.12	-2.43	-1.83	-1.05	-1.49
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	0.97	0.90	0.83	0.72	0.50	0.41	0.21	0.27
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.30	0.28	0.26	0.22	0.16	0.13	0.06	0.08
Detroit-Ann Arbor, MI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	3.58	3.32	3.07	2.66	1.86	1.51	0.76	1.00
Dona Ana County; Anthony, NM	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-0.24	-0.22	-0.21	-0.18	-0.14	-0.11	-0.06	-0.08
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.16	-0.15	-0.14	-0.12	-0.09	-0.07	-0.04	-0.05
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.29	0.27	0.25	0.21	0.15	0.12	0.06	0.08
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.09	-0.08	-0.07	-0.06	-0.04	-0.02	-0.03
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.17	0.16	0.15	0.13	0.09	0.07	0.04	0.05
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.13	-0.12	-0.12	-0.10	-0.08	-0.06	-0.03	-0.04
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-0.17	-0.16	-0.15	-0.13	-0.10	-0.08	-0.04	-0.06
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.00
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.45	0.41	0.38	0.33	0.23	0.19	0.10	0.13
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.16	1.07	0.99	0.86	0.60	0.49	0.24	0.32
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-3.60	-3.38	-3.16	-2.76	-2.07	-1.60	-0.88	-1.22

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	-0.01
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	0.00	-0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.71	0.65	0.60	0.52	0.36	0.29	0.14	0.19
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.81	0.75	0.69	0.60	0.42	0.34	0.17	0.22
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.98	2.73	2.50	2.15	1.43	1.20	0.56	0.71
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.11	0.09	0.06	0.05	0.03	0.03
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.15	0.14	0.13	0.11	0.08	0.06	0.03	0.04
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.12	0.11	0.11	0.09	0.06	0.05	0.03	0.03
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.15	0.14	0.13	0.11	0.08	0.06	0.03	0.04
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.15	-0.14	-0.12	-0.09	-0.07	-0.04	-0.05
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.01	0.02
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.41	0.38	0.36	0.31	0.22	0.18	0.09	0.12
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.08	0.08	0.07	0.04	0.04	0.02	0.02
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.08	0.08	0.07	0.06	0.04	0.03	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.02
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.12	-0.12	-0.11	-0.10	-0.07	-0.06	-0.03	-0.04
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.04	0.03	0.03	0.01	0.02
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.72	0.67	0.62	0.53	0.38	0.30	0.15	0.20
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.86	0.80	0.74	0.64	0.45	0.37	0.19	0.25
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.22	0.20	0.19	0.16	0.12	0.09	0.05	0.06
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.01	-0.02
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.13	-0.13	-0.11	-0.09	-0.07	-0.04	-0.05

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.38	0.35	0.32	0.28	0.20	0.16	0.08	0.11
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.38	0.35	0.32	0.28	0.20	0.16	0.08	0.11
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.17	0.16	0.15	0.13	0.09	0.07	0.04	0.05
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	1.60	1.49	1.37	1.19	0.84	0.68	0.34	0.45
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.43	-0.40	-0.38	-0.33	-0.25	-0.19	-0.10	-0.14
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.02
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	13.14	12.18	11.26	9.77	6.87	5.56	2.81	3.73

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.45	0.42	0.38	0.33	0.22	0.19	0.09	0.11
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	13.15	12.19	11.27	9.78	6.88	5.56	2.81	3.73
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	13.15	12.19	11.27	9.78	6.88	5.56	2.81	3.73
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	13.15	12.19	11.27	9.78	6.88	5.56	2.81	3.73
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	13.12	12.16	11.24	9.75	6.86	5.55	2.80	3.72
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.01
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	3.31	3.07	2.84	2.46	1.74	1.40	0.71	0.94
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.39	0.37	0.34	0.29	0.21	0.17	0.08	0.11
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.84	0.78	0.72	0.62	0.44	0.36	0.18	0.24
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.00	0.92	0.85	0.74	0.52	0.42	0.21	0.28
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	1.07	0.99	0.92	0.80	0.56	0.45	0.23	0.31
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.20	1.09	1.00	0.86	0.55	0.47	0.21	0.26

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.01
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.13	0.12	0.11	0.10	0.07	0.05	0.03	0.04
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.58	0.54	0.50	0.43	0.30	0.24	0.12	0.16
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.09	0.06	0.05	0.02	0.03
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	7.96	7.35	6.76	5.85	4.01	3.30	1.61	2.09

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	4.23	3.90	3.59	3.10	2.12	1.75	0.85	1.10
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	7.88	7.27	6.69	5.79	3.97	3.27	1.59	2.07
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.01	0.02
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.18	-1.11	-1.05	-0.92	-0.72	-0.54	-0.31	-0.44
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	0.86	0.76	0.68	0.57	0.30	0.30	0.10	0.09
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.88	1.71	1.55	1.33	0.82	0.73	0.31	0.36
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	3.18	2.94	2.72	2.36	1.67	1.35	0.68	0.91

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.32	3.08	2.85	2.47	1.74	1.41	0.71	0.95
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01	-0.01
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.21	0.19	0.18	0.16	0.11	0.09	0.04	0.06
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.12	0.12	0.11	0.09	0.06	0.05	0.03	0.03
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.32	1.22	1.12	0.97	0.67	0.55	0.27	0.35
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	1.27	1.17	1.08	0.93	0.65	0.53	0.26	0.34
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.02	0.95	0.88	0.76	0.54	0.43	0.22	0.29
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.42	0.39	0.36	0.31	0.22	0.18	0.09	0.12
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.25	1.15	1.06	0.92	0.64	0.52	0.26	0.34

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.26	0.24	0.23	0.20	0.14	0.11	0.06	0.07
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.19	0.18	0.16	0.14	0.10	0.08	0.04	0.05
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.36	0.33	0.31	0.27	0.19	0.15	0.08	0.10
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.42	0.39	0.36	0.31	0.22	0.18	0.09	0.12
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	13.09	12.13	11.22	9.73	6.85	5.54	2.80	3.71
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.09	1.01	0.93	0.81	0.57	0.46	0.23	0.31
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.12	1.04	0.96	0.84	0.59	0.48	0.24	0.32
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	1.96	1.81	1.68	1.46	1.03	0.83	0.42	0.56
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.93	1.79	1.66	1.44	1.01	0.82	0.41	0.55
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.17	0.15	0.14	0.12	0.08	0.07	0.03	0.05
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.02
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.97	0.89	0.82	0.71	0.49	0.40	0.20	0.25
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.67	0.61	0.57	0.49	0.34	0.28	0.14	0.18
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.67	0.61	0.57	0.49	0.34	0.28	0.14	0.18
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.39	0.36	0.33	0.29	0.20	0.17	0.08	0.11

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.83	2.62	2.42	2.10	1.48	1.20	0.61	0.80
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.83	2.62	2.43	2.11	1.48	1.20	0.61	0.81
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	4.94	4.57	4.22	3.66	2.55	2.08	1.04	1.37
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	4.97	4.60	4.25	3.68	2.57	2.09	1.04	1.38
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	4.46	4.13	3.81	3.31	2.31	1.88	0.94	1.23
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	3.03	2.81	2.59	2.25	1.57	1.28	0.64	0.85
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	3.03	2.81	2.59	2.25	1.57	1.28	0.64	0.85
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	3.03	2.81	2.59	2.25	1.57	1.28	0.64	0.85
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	3.03	2.81	2.59	2.25	1.57	1.28	0.64	0.85
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.15	0.14	0.13	0.11	0.08	0.06	0.03	0.04
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	2.29	2.12	1.96	1.70	1.19	0.97	0.49	0.65
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.32	0.30	0.27	0.24	0.17	0.13	0.07	0.09
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.24	0.22	0.21	0.18	0.13	0.10	0.05	0.07
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.25	0.23	0.21	0.18	0.13	0.10	0.05	0.07
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.39	-0.36	-0.34	-0.30	-0.22	-0.17	-0.09	-0.13
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.49	0.46	0.42	0.37	0.26	0.21	0.10	0.14
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.80	1.67	1.54	1.33	0.93	0.76	0.38	0.50
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.00
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.26	0.24	0.22	0.19	0.14	0.11	0.06	0.07
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.13	0.12	0.11	0.09	0.06	0.05	0.02	0.02
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.07	0.06	0.06	0.04	0.03	0.02	0.02
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.54	0.49	0.46	0.39	0.27	0.22	0.11	0.14
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.03	-0.03	-0.03	-0.02	-0.01	-0.01	-0.01
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.42	0.39	0.36	0.31	0.22	0.18	0.09	0.12
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.25	0.23	0.21	0.18	0.13	0.10	0.05	0.07
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.69	0.64	0.59	0.52	0.36	0.29	0.15	0.20
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.04	-0.04	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.04	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.61	0.56	0.52	0.45	0.32	0.26	0.13	0.17
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	4.12	3.81	3.52	3.05	2.13	1.73	0.87	1.15
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.19	0.17	0.16	0.14	0.10	0.08	0.04	0.05
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.28	0.25	0.23	0.20	0.14	0.12	0.06	0.08
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.15	0.14	0.12	0.11	0.07	0.06	0.03	0.04
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.16	0.15	0.14	0.12	0.08	0.07	0.03	0.05
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.05	0.03	0.03	0.01	0.02

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-25. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—1,3-Butadiene, 2025

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.24	0.22	0.21	0.19	0.14	0.13	0.10	0.09
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.10	0.09	0.08	0.06	0.06	0.04	0.04
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.03
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.18	0.16	0.15	0.14	0.10	0.10	0.07	0.07
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.46	0.43	0.41	0.37	0.27	0.25	0.20	0.17
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.09	0.09	0.08	0.07	0.06	0.05	0.04	0.04
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.08	0.08	0.07	0.07	0.05	0.05	0.03	0.03
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.89	0.83	0.78	0.70	0.52	0.49	0.37	0.33
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.44	0.41	0.39	0.35	0.25	0.24	0.18	0.16
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.10	0.09	0.08	0.08	0.06	0.05	0.04	0.04
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.18	0.16	0.15	0.14	0.10	0.10	0.07	0.07
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.09	0.08	0.08	0.06	0.05	0.04	0.04

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.24	0.22	0.21	0.19	0.14	0.13	0.10	0.09
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.44	0.41	0.39	0.35	0.26	0.24	0.19	0.17
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.05	0.98	0.93	0.83	0.61	0.58	0.44	0.39
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	0.33	0.31	0.29	0.26	0.19	0.18	0.14	0.12
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.29	0.27	0.26	0.23	0.17	0.16	0.12	0.11
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.17	0.16	0.15	0.14	0.10	0.09	0.07	0.07
Cleveland, OH	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.22	0.20	0.19	0.17	0.13	0.12	0.09	0.08
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.44	0.41	0.39	0.35	0.26	0.24	0.19	0.17

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland-Akron-Lorain, OH	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.41	0.38	0.36	0.32	0.24	0.22	0.17	0.15
Cochise County; Paul Spur/Douglas planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.08	0.07	0.07	0.05	0.05	0.04	0.03
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.31	0.28	0.27	0.24	0.18	0.17	0.13	0.11
Cook County; Lyons Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Cook County; Southeast Chicago, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.13	0.12	0.12	0.11	0.08	0.07	0.06	0.05
Cuyahoga County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.17	0.16	0.15	0.14	0.10	0.09	0.07	0.06
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.16	1.08	1.02	0.91	0.67	0.63	0.49	0.43
Delaware County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.40	0.37	0.35	0.32	0.23	0.22	0.17	0.15
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.52	0.48	0.45	0.41	0.30	0.28	0.22	0.19
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	0.21	0.19	0.18	0.16	0.12	0.11	0.09	0.08
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Detroit-Ann Arbor, MI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.68	0.63	0.60	0.53	0.39	0.37	0.29	0.25
Dona Ana County; Anthony, NM	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.08	0.07	0.07	0.06	0.05	0.04	0.03	0.03
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.23	0.22	0.21	0.18	0.14	0.13	0.10	0.09
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.87	0.81	0.76	0.68	0.50	0.47	0.37	0.32
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.07	0.07	0.06	0.05	0.04	0.03	0.03
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.12	0.11	0.11	0.10	0.07	0.07	0.05	0.05
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.15	0.14	0.13	0.12	0.09	0.08	0.06	0.06
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.29	0.27	0.26	0.23	0.17	0.16	0.12	0.11
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	2.33	2.17	2.05	1.84	1.35	1.27	0.98	0.87

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.13	0.12	0.11	0.10	0.07	0.07	0.05	0.05
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	2.33	2.17	2.05	1.84	1.35	1.27	0.98	0.87
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	2.33	2.17	2.05	1.84	1.35	1.27	0.98	0.87
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	2.33	2.17	2.05	1.84	1.35	1.27	0.98	0.87
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	2.33	2.17	2.05	1.83	1.35	1.27	0.98	0.87
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.02	0.02
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.57	0.53	0.50	0.45	0.33	0.31	0.24	0.21
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.14	0.13	0.13	0.11	0.08	0.08	0.06	0.05
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.19	0.17	0.17	0.15	0.11	0.10	0.08	0.07
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.18	0.17	0.16	0.15	0.11	0.10	0.08	0.07
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.48	0.45	0.42	0.38	0.28	0.26	0.20	0.18

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.12	0.12	0.11	0.10	0.07	0.07	0.05	0.05
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1.98	1.85	1.75	1.56	1.15	1.08	0.84	0.74

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.09	1.02	0.96	0.86	0.63	0.60	0.46	0.41
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.95	1.81	1.72	1.54	1.13	1.06	0.82	0.73
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nogales, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Oakridge, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Ogden Area, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Olmsted County; (part), MN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.15	0.14	0.13	0.12	0.09	0.08	0.06	0.05
Philadelphia-Wilmington, PA-NJ-DE	PM _{2.5} (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	0.68	0.63	0.60	0.53	0.39	0.37	0.28	0.25
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.91	0.85	0.80	0.72	0.53	0.50	0.38	0.34
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.55	0.51	0.48	0.43	0.32	0.30	0.23	0.20

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.57	0.53	0.50	0.45	0.33	0.31	0.24	0.21
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.30	0.28	0.26	0.24	0.17	0.16	0.13	0.11
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.27	0.25	0.24	0.22	0.16	0.15	0.12	0.10
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.18	0.17	0.16	0.14	0.11	0.10	0.08	0.07
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.26	0.25	0.23	0.21	0.15	0.14	0.11	0.10

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.02
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.02
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	2.32	2.16	2.04	1.83	1.34	1.27	0.98	0.87
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.20	0.19	0.18	0.16	0.12	0.11	0.08	0.08
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.19	0.18	0.17	0.15	0.11	0.11	0.08	0.07
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.34	0.32	0.30	0.27	0.20	0.19	0.14	0.13
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.33	0.31	0.29	0.26	0.19	0.18	0.14	0.13
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.23	0.22	0.21	0.18	0.14	0.13	0.10	0.09
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.08	0.08	0.07	0.06	0.05	0.05	0.03	0.03

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.49	0.46	0.43	0.39	0.29	0.27	0.21	0.18
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.49	0.46	0.43	0.39	0.29	0.27	0.21	0.18
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.98	0.91	0.87	0.77	0.57	0.54	0.41	0.37
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.99	0.92	0.87	0.78	0.57	0.54	0.42	0.37
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.90	0.84	0.79	0.71	0.52	0.49	0.38	0.34
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.58	0.54	0.51	0.46	0.34	0.32	0.24	0.22
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.58	0.54	0.51	0.46	0.34	0.32	0.24	0.22
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.58	0.54	0.51	0.46	0.34	0.32	0.24	0.22
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.58	0.54	0.51	0.46	0.34	0.32	0.24	0.22
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.42	0.39	0.37	0.33	0.24	0.23	0.18	0.16
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.35	0.33	0.31	0.28	0.20	0.19	0.15	0.13
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.02
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.12	0.11	0.11	0.10	0.07	0.07	0.05	0.05
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.11	0.11	0.10	0.09	0.07	0.06	0.05	0.04
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.80	0.75	0.71	0.63	0.46	0.44	0.34	0.30
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.02
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.05	0.05	0.05	0.03	0.03	0.02	0.02
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-26. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—1,3-Butadiene, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.41	0.38	0.35	0.31	0.23	0.19	0.10	0.13
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.18	0.17	0.15	0.14	0.10	0.08	0.04	0.05
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.25	0.23	0.21	0.19	0.14	0.11	0.06	0.08
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.15	0.14	0.13	0.11	0.08	0.07	0.04	0.05
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.17	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.30	0.28	0.26	0.23	0.17	0.14	0.07	0.09
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.81	0.75	0.70	0.61	0.45	0.37	0.20	0.25
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.17	0.15	0.14	0.13	0.09	0.08	0.04	0.05
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.14	0.13	0.13	0.11	0.08	0.07	0.04	0.04
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.55	1.44	1.34	1.17	0.86	0.71	0.38	0.47
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.11	0.10	0.10	0.08	0.06	0.05	0.03	0.03
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.76	0.71	0.66	0.58	0.42	0.35	0.19	0.23
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.01	-0.01
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.31	0.28	0.26	0.23	0.17	0.14	0.07	0.09
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.17	0.16	0.14	0.13	0.09	0.08	0.04	0.05
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.02
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.09	0.08	0.07	0.06	0.05	0.04	0.02	0.03
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.41	0.38	0.35	0.31	0.23	0.19	0.10	0.13
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.77	0.72	0.67	0.59	0.43	0.35	0.19	0.24
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.83	1.70	1.58	1.38	1.01	0.83	0.44	0.56
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.02
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	0.57	0.53	0.49	0.43	0.32	0.26	0.14	0.17
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.51	0.48	0.44	0.39	0.28	0.23	0.13	0.16
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.30	0.28	0.26	0.23	0.17	0.14	0.07	0.09
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.38	0.35	0.33	0.29	0.21	0.17	0.09	0.12
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.77	0.72	0.67	0.58	0.43	0.35	0.19	0.24
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.72	0.67	0.62	0.54	0.40	0.33	0.17	0.22

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.15	0.14	0.13	0.11	0.08	0.07	0.04	0.04
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.53	0.49	0.46	0.40	0.29	0.24	0.13	0.16
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.23	0.21	0.20	0.17	0.13	0.10	0.06	0.07
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.30	0.28	0.26	0.23	0.17	0.14	0.07	0.09
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.02	1.88	1.74	1.53	1.11	0.92	0.49	0.62
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.70	0.65	0.61	0.53	0.39	0.32	0.17	0.21
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.90	0.84	0.78	0.68	0.50	0.41	0.22	0.27
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	0.32	0.30	0.28	0.24	0.17	0.15	0.08	0.10
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1.17	1.09	1.01	0.88	0.64	0.53	0.28	0.36
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.11	0.09	0.07	0.06	0.03	0.04
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.14	0.13	0.12	0.10	0.08	0.06	0.03	0.04
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.41	0.38	0.35	0.31	0.23	0.19	0.10	0.12
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.28	0.26	0.24	0.21	0.16	0.13	0.07	0.09
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.28	0.26	0.24	0.21	0.15	0.13	0.07	0.09
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.43	1.33	1.23	1.08	0.78	0.65	0.34	0.42
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.02
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.02
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.22	0.20	0.19	0.16	0.12	0.10	0.05	0.07
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.26	0.24	0.22	0.20	0.14	0.12	0.06	0.08
La Porte County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Lake County: (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.12	0.11	0.11	0.09	0.07	0.06	0.03	0.04
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.11	0.09	0.07	0.06	0.03	0.04
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.51	0.48	0.44	0.39	0.28	0.23	0.12	0.16
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.01	-0.01
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	4.06	3.78	3.51	3.08	2.24	1.85	0.99	1.24
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.21	0.20	0.18	0.16	0.12	0.10	0.05	0.06

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	4.06	3.78	3.51	3.08	2.25	1.85	0.99	1.24
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	4.06	3.78	3.51	3.08	2.25	1.85	0.99	1.24
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	4.06	3.79	3.51	3.08	2.25	1.85	0.99	1.24
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	4.06	3.78	3.50	3.08	2.24	1.85	0.99	1.24
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.99	0.92	0.86	0.75	0.55	0.45	0.24	0.30
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.12	0.12	0.11	0.09	0.07	0.06	0.03	0.04
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.25	0.23	0.22	0.19	0.14	0.11	0.06	0.08
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.33	0.30	0.28	0.25	0.18	0.15	0.08	0.10
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.32	0.30	0.28	0.24	0.18	0.15	0.08	0.10
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.83	0.78	0.72	0.63	0.46	0.38	0.20	0.25
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.22	0.20	0.19	0.16	0.12	0.10	0.05	0.07
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	3.46	3.22	2.99	2.62	1.91	1.57	0.84	1.06
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.91	1.77	1.65	1.44	1.05	0.87	0.46	0.58

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	3.40	3.16	2.93	2.58	1.88	1.55	0.83	1.04
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.25	0.24	0.22	0.19	0.14	0.12	0.06	0.08
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	1.17	1.09	1.02	0.89	0.65	0.53	0.29	0.36
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.58	1.48	1.37	1.20	0.88	0.72	0.39	0.48
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.95	0.89	0.82	0.72	0.53	0.43	0.23	0.29
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.99	0.93	0.86	0.75	0.55	0.45	0.24	0.30

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.02	0.02
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.52	0.49	0.45	0.40	0.29	0.24	0.13	0.16
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.48	0.44	0.41	0.36	0.26	0.22	0.12	0.15
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.32	0.30	0.28	0.24	0.18	0.15	0.08	0.10
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.46	0.43	0.40	0.35	0.25	0.21	0.11	0.14
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.11	0.10	0.10	0.08	0.06	0.05	0.03	0.03
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	4.05	3.77	3.50	3.07	2.24	1.84	0.98	1.24
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.34	0.32	0.29	0.26	0.19	0.16	0.08	0.10
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.34	0.31	0.29	0.26	0.19	0.15	0.08	0.10
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.59	0.55	0.51	0.45	0.33	0.27	0.14	0.18
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.58	0.54	0.51	0.44	0.32	0.27	0.14	0.18
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.41	0.38	0.35	0.31	0.22	0.18	0.10	0.12
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.24	0.23	0.21	0.18	0.13	0.11	0.06	0.07
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.24	0.23	0.21	0.18	0.13	0.11	0.06	0.07
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.13	0.13	0.12	0.10	0.07	0.06	0.03	0.04
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.86	0.80	0.74	0.65	0.47	0.39	0.21	0.26
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.86	0.80	0.74	0.65	0.47	0.39	0.21	0.26

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.71	1.59	1.48	1.30	0.95	0.78	0.42	0.52
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.72	1.60	1.49	1.30	0.95	0.78	0.42	0.53
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.57	1.46	1.35	1.19	0.87	0.71	0.38	0.48
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1.01	0.94	0.87	0.77	0.56	0.46	0.25	0.31
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	1.01	0.94	0.87	0.77	0.56	0.46	0.25	0.31
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	1.01	0.94	0.87	0.77	0.56	0.46	0.25	0.31
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	1.01	0.94	0.87	0.77	0.56	0.46	0.25	0.31
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.73	0.68	0.63	0.55	0.40	0.33	0.18	0.22
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.04
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.07	0.06	0.06	0.04	0.03	0.02	0.02
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.17	0.16	0.15	0.13	0.09	0.08	0.04	0.05
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.61	0.57	0.53	0.47	0.34	0.28	0.15	0.19
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.02	0.02
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.11	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.24	0.22	0.21	0.18	0.13	0.11	0.06	0.07
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.06	0.04	0.03	0.02	0.02
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.21	0.20	0.19	0.16	0.12	0.10	0.05	0.07
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.20	0.18	0.17	0.15	0.11	0.09	0.05	0.06
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.39	1.30	1.20	1.06	0.77	0.63	0.34	0.43
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.02	0.03
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.02
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-27. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—1,3-Butadiene, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.24	0.22	0.21	0.18	0.13	0.10	0.05	0.07
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.10	0.09	0.08	0.06	0.04	0.02	0.03
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.14	0.13	0.12	0.11	0.08	0.06	0.03	0.04
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.09	0.08	0.07	0.06	0.05	0.04	0.02	0.03
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.10	0.09	0.09	0.07	0.05	0.04	0.02	0.03
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.18	0.16	0.15	0.13	0.09	0.08	0.04	0.05
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.47	0.44	0.40	0.35	0.25	0.20	0.10	0.14
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.08	0.08	0.07	0.06	0.04	0.04	0.02	0.02
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.90	0.84	0.78	0.67	0.48	0.39	0.20	0.26
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.45	0.41	0.38	0.33	0.24	0.19	0.10	0.13
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-0.04	-0.04	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.05	-0.04	-0.04	-0.03	-0.02	-0.01	-0.02
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.18	0.17	0.15	0.13	0.09	0.08	0.04	0.05
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.24	0.22	0.21	0.18	0.13	0.10	0.05	0.07
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.45	0.42	0.39	0.34	0.24	0.19	0.10	0.13
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.04	0.97	0.89	0.78	0.55	0.45	0.23	0.30
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	0.33	0.31	0.29	0.25	0.18	0.14	0.07	0.10
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.30	0.28	0.26	0.22	0.16	0.13	0.07	0.09
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.18	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.22	0.20	0.19	0.16	0.12	0.09	0.05	0.06
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.45	0.42	0.39	0.34	0.24	0.19	0.10	0.13

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.42	0.39	0.36	0.31	0.22	0.18	0.09	0.12
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.08	0.07	0.06	0.05	0.04	0.02	0.03
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.31	0.29	0.27	0.23	0.16	0.13	0.07	0.09
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.18	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.18	1.09	1.01	0.88	0.62	0.50	0.26	0.34
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.41	0.38	0.35	0.31	0.22	0.18	0.09	0.12
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.52	0.49	0.45	0.39	0.28	0.22	0.11	0.15
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.09	0.07	0.05	0.03	0.03
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.65	0.60	0.56	0.49	0.34	0.28	0.14	0.19
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.01	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.24	0.22	0.20	0.18	0.13	0.10	0.05	0.07
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.64	0.59	0.55	0.47	0.33	0.27	0.13	0.17
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.07	0.06	0.06	0.04	0.03	0.02	0.02
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.13	0.12	0.11	0.09	0.07	0.05	0.03	0.04
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.15	0.14	0.13	0.11	0.08	0.06	0.03	0.04
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.30	0.28	0.26	0.22	0.16	0.13	0.07	0.09
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-0.05	-0.05	-0.04	-0.04	-0.03	-0.02	-0.01	-0.02
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	2.36	2.19	2.03	1.76	1.25	1.01	0.52	0.69

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.11	0.10	0.09	0.08	0.06	0.05	0.02	0.03
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	2.36	2.19	2.03	1.76	1.25	1.01	0.52	0.69
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	2.36	2.19	2.03	1.76	1.25	1.01	0.52	0.69
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	2.36	2.19	2.03	1.76	1.26	1.01	0.52	0.69
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	2.36	2.19	2.02	1.76	1.25	1.01	0.52	0.69
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.58	0.54	0.50	0.43	0.31	0.25	0.13	0.17
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.15	0.14	0.13	0.11	0.08	0.06	0.03	0.04
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.19	0.18	0.16	0.14	0.10	0.08	0.04	0.06
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.19	0.17	0.16	0.14	0.10	0.08	0.04	0.05
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.49	0.45	0.42	0.36	0.26	0.21	0.11	0.14

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.09	0.07	0.05	0.03	0.04
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	2.02	1.87	1.73	1.51	1.07	0.86	0.44	0.59

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.11	1.03	0.96	0.83	0.59	0.48	0.24	0.32
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.98	1.84	1.70	1.48	1.05	0.85	0.43	0.58
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nogales, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Oakridge, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Ogden Area, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Olmsted County; (part), MN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.15	0.14	0.13	0.11	0.08	0.06	0.03	0.04
Philadelphia-Wilmington, PA-NJ-DE	PM _{2.5} (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	0.68	0.63	0.58	0.51	0.36	0.29	0.15	0.20
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.92	0.85	0.79	0.68	0.49	0.39	0.20	0.27
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.55	0.51	0.48	0.41	0.29	0.24	0.12	0.16

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.58	0.54	0.50	0.43	0.31	0.25	0.13	0.17
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.30	0.28	0.26	0.23	0.16	0.13	0.07	0.09
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.28	0.26	0.24	0.21	0.15	0.12	0.06	0.08
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.19	0.17	0.16	0.14	0.10	0.08	0.04	0.05
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.27	0.25	0.23	0.20	0.14	0.11	0.06	0.08

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	2.35	2.18	2.02	1.76	1.25	1.01	0.51	0.68
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.19	0.18	0.17	0.14	0.10	0.08	0.04	0.06
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.20	0.18	0.17	0.15	0.10	0.08	0.04	0.06
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.35	0.32	0.30	0.26	0.18	0.15	0.08	0.10
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.34	0.32	0.29	0.26	0.18	0.15	0.07	0.10
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.23	0.21	0.20	0.17	0.12	0.10	0.05	0.07
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.50	0.46	0.43	0.37	0.27	0.21	0.11	0.15
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.50	0.46	0.43	0.37	0.27	0.21	0.11	0.15
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.00	0.92	0.86	0.74	0.53	0.43	0.22	0.29
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.00	0.93	0.86	0.75	0.53	0.43	0.22	0.29
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.91	0.85	0.78	0.68	0.49	0.39	0.20	0.27
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.59	0.55	0.51	0.44	0.31	0.25	0.13	0.17
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.59	0.55	0.51	0.44	0.31	0.25	0.13	0.17
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.59	0.55	0.51	0.44	0.31	0.25	0.13	0.17
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.59	0.55	0.51	0.44	0.31	0.25	0.13	0.17
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.43	0.39	0.37	0.32	0.23	0.18	0.09	0.12
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.01	0.02
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.36	0.33	0.31	0.27	0.19	0.15	0.08	0.10
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.01	0.02
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.14	0.13	0.12	0.11	0.07	0.06	0.03	0.04
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.13	0.12	0.11	0.09	0.07	0.05	0.03	0.04
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.11	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.81	0.75	0.70	0.61	0.43	0.35	0.18	0.24
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-28. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Diesel Particulate Matter (DPM), 2025

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.42	-0.39	-0.38	-0.33	-0.24	-0.23	-0.17	-0.15
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.03	-0.03	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.03	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-11.30	-10.51	-10.09	-8.76	-6.44	-6.08	-4.60	-4.16
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-14.90	-13.86	-13.30	-11.55	-8.48	-8.02	-6.06	-5.49

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.11	-0.10	-0.09	-0.08	-0.06	-0.06	-0.04	-0.04
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.10	-0.09	-0.09	-0.08	-0.06	-0.05	-0.04	-0.04
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-1.71	-1.59	-1.52	-1.32	-0.97	-0.92	-0.69	-0.63
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-72.01	-66.98	-64.31	-55.84	-41.00	-38.76	-29.31	-26.52
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-12.95	-12.05	-11.57	-10.04	-7.37	-6.97	-5.27	-4.77
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-12.95	-12.05	-11.57	-10.04	-7.37	-6.97	-5.27	-4.77
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.02
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-7.54	-7.02	-6.74	-5.85	-4.30	-4.06	-3.07	-2.78
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-6.41	-5.97	-5.73	-4.97	-3.65	-3.45	-2.61	-2.36
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-23.04	-21.43	-20.57	-17.86	-13.12	-12.40	-9.38	-8.48
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	-0.04	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.04	-0.03	-0.03	-0.02	-0.02	-0.02	-0.01
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.23	-0.21	-0.20	-0.18	-0.13	-0.12	-0.09	-0.08
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-22.31	-20.75	-19.92	-17.30	-12.70	-12.01	-9.08	-8.22
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-8.98	-8.35	-8.02	-6.96	-5.11	-4.83	-3.65	-3.31
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-9.16	-8.52	-8.18	-7.11	-5.22	-4.93	-3.73	-3.37
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	-1.96	-1.82	-1.75	-1.52	-1.11	-1.05	-0.80	-0.72
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.96	-1.82	-1.75	-1.52	-1.11	-1.05	-0.80	-0.72
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-1.97	-1.83	-1.76	-1.52	-1.12	-1.06	-0.80	-0.72
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-9.48	-8.82	-8.47	-7.35	-5.40	-5.10	-3.86	-3.49
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-1.71	-1.59	-1.53	-1.32	-0.97	-0.92	-0.70	-0.63
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-2.24	-2.09	-2.00	-1.74	-1.28	-1.21	-0.91	-0.83
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.24	-2.09	-2.00	-1.74	-1.28	-1.21	-0.91	-0.83
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.28	-0.26	-0.25	-0.22	-0.16	-0.15	-0.11	-0.10
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-0.28	-0.26	-0.25	-0.22	-0.16	-0.15	-0.11	-0.10
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-0.19	-0.18	-0.17	-0.15	-0.11	-0.10	-0.08	-0.07
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.02	-0.02
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.02	-0.02
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-68.77	-63.97	-61.41	-53.33	-39.16	-37.01	-27.99	-25.33
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.71	-1.59	-1.53	-1.32	-0.97	-0.92	-0.70	-0.63
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-1.71	-1.59	-1.53	-1.32	-0.97	-0.92	-0.70	-0.63
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-9.48	-8.82	-8.47	-7.35	-5.40	-5.10	-3.86	-3.49

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-9.48	-8.82	-8.47	-7.35	-5.40	-5.10	-3.86	-3.49
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County (part); Oakridge, OR	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-12.95	-12.05	-11.57	-10.04	-7.37	-6.97	-5.27	-4.77
Lebanon County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-13.57	-12.62	-12.12	-10.52	-7.73	-7.30	-5.52	-5.00
Liberty-Clairton, PA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
Lincoln County; Libby and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-23.49	-21.85	-20.98	-18.21	-13.37	-12.64	-9.56	-8.65
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-23.52	-21.87	-21.00	-18.23	-13.39	-12.66	-9.57	-8.66
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-23.49	-21.85	-20.98	-18.21	-13.37	-12.64	-9.56	-8.65
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	-23.49	-21.85	-20.98	-18.21	-13.37	-12.64	-9.56	-8.65
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-23.49	-21.85	-20.98	-18.21	-13.37	-12.64	-9.56	-8.65
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-23.49	-21.85	-20.98	-18.21	-13.37	-12.64	-9.56	-8.65
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-12.04	-11.20	-10.75	-9.33	-6.85	-6.48	-4.90	-4.43
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-11.30	-10.51	-10.09	-8.76	-6.44	-6.08	-4.60	-4.16
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-7.66	-7.13	-6.84	-5.94	-4.36	-4.12	-3.12	-2.82
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.61	-4.29	-4.12	-3.58	-2.63	-2.48	-1.88	-1.70
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-4.61	-4.29	-4.12	-3.58	-2.63	-2.48	-1.88	-1.70
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-0.10	-0.09	-0.09	-0.08	-0.06	-0.05	-0.04	-0.04
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-14.90	-13.86	-13.30	-11.55	-8.48	-8.02	-6.06	-5.49
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.34	-1.25	-1.20	-1.04	-0.77	-0.72	-0.55	-0.49
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.34	-1.25	-1.20	-1.04	-0.77	-0.72	-0.55	-0.49
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.07	-0.06	-0.05	-0.04	-0.04	-0.03	-0.03
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.02	-0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-6.77	-6.30	-6.05	-5.25	-3.85	-3.64	-2.75	-2.49
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-5.63	-5.23	-5.03	-4.36	-3.20	-3.03	-2.29	-2.07
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-6.77	-6.30	-6.05	-5.25	-3.85	-3.64	-2.76	-2.49
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-1.11	-1.03	-0.99	-0.86	-0.63	-0.60	-0.45	-0.41
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.53	-10.72	-10.30	-8.94	-6.56	-6.20	-4.69	-4.25
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-38.83	-36.12	-34.68	-30.11	-22.11	-20.90	-15.81	-14.30

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-38.83	-36.12	-34.68	-30.11	-22.11	-20.90	-15.80	-14.30
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.12	-0.11	-0.10	-0.07	-0.07	-0.05	-0.05
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	-0.03	-0.03	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.70	-0.65	-0.63	-0.54	-0.40	-0.38	-0.29	-0.26
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.70	-0.65	-0.63	-0.54	-0.40	-0.38	-0.29	-0.26
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.18	-0.17	-0.16	-0.14	-0.10	-0.10	-0.07	-0.07
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-0.18	-0.17	-0.16	-0.14	-0.10	-0.10	-0.07	-0.07
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-23.49	-21.85	-20.98	-18.21	-13.37	-12.64	-9.56	-8.65
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.19	-0.19	-0.16	-0.12	-0.11	-0.08	-0.08
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-4.35	-4.05	-3.89	-3.37	-2.48	-2.34	-1.77	-1.60
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-4.35	-4.05	-3.89	-3.37	-2.48	-2.34	-1.77	-1.60
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-4.79	-4.45	-4.27	-3.71	-2.72	-2.58	-1.95	-1.76
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-5.31	-4.94	-4.74	-4.12	-3.02	-2.86	-2.16	-1.96
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-4.78	-4.45	-4.27	-3.71	-2.72	-2.57	-1.95	-1.76
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-4.78	-4.45	-4.27	-3.71	-2.72	-2.57	-1.95	-1.76

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-62.32	-57.97	-55.65	-48.32	-35.48	-33.54	-25.36	-22.95
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-62.32	-57.97	-55.65	-48.32	-35.48	-33.54	-25.36	-22.95
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-62.32	-57.97	-55.65	-48.33	-35.48	-33.54	-25.36	-22.95
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-1.86	-1.73	-1.66	-1.44	-1.06	-1.00	-0.76	-0.68
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-1.86	-1.73	-1.66	-1.44	-1.06	-1.00	-0.76	-0.68
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-1.86	-1.73	-1.66	-1.44	-1.06	-1.00	-0.76	-0.68
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-1.86	-1.73	-1.66	-1.44	-1.06	-1.00	-0.76	-0.68
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.28	-0.26	-0.25	-0.21	-0.16	-0.15	-0.11	-0.10
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.12	-0.11	-0.11	-0.09	-0.07	-0.07	-0.05	-0.04
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.12	-0.11	-0.10	-0.07	-0.07	-0.05	-0.05

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-24.61	-22.89	-21.98	-19.09	-14.01	-13.25	-10.02	-9.06
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-11.31	-10.52	-10.10	-8.77	-6.44	-6.09	-4.60	-4.16
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.02	-0.02
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.05	-0.05	-0.04	-0.03	-0.03	-0.02	-0.02
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.35	-0.33	-0.31	-0.27	-0.20	-0.19	-0.14	-0.13
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.02	-0.02
Utah County, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.18	-0.17	-0.16	-0.14	-0.10	-0.10	-0.07	-0.07
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.35	-0.33	-0.31	-0.27	-0.20	-0.19	-0.14	-0.13
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-2.69	-2.50	-2.40	-2.08	-1.53	-1.45	-1.09	-0.99
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-2.70	-2.51	-2.41	-2.09	-1.54	-1.45	-1.10	-0.99
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.70	-2.51	-2.41	-2.09	-1.54	-1.45	-1.10	-0.99
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County; (part), MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.96	-1.82	-1.75	-1.52	-1.12	-1.05	-0.80	-0.72
West Central Pinal County, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yuma County; Yuma planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM_{2.5} = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-29. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Diesel Particulate Matter (DPM), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.02	-0.95	-0.89	-0.77	-0.58	-0.45	-0.25	-0.32
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.07	-0.06	-0.06	-0.05	-0.04	-0.03	-0.02	-0.02
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.07	-0.07	-0.06	-0.05	-0.04	-0.03	-0.02	-0.02
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.06	-0.06	-0.05	-0.04	-0.03	-0.02	-0.02
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.07	-0.06	-0.06	-0.05	-0.04	-0.03	-0.02	-0.02
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-27.15	-25.30	-23.72	-20.66	-15.45	-12.04	-6.74	-8.64
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-35.80	-33.36	-31.28	-27.24	-20.38	-15.87	-8.88	-11.40

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.26	-0.24	-0.22	-0.19	-0.15	-0.11	-0.06	-0.08
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.25	-0.23	-0.22	-0.19	-0.14	-0.11	-0.06	-0.08
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-4.10	-3.82	-3.58	-3.12	-2.34	-1.82	-1.02	-1.31
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-172.97	-161.19	-151.12	-131.61	-98.46	-76.69	-42.93	-55.06
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-31.11	-28.99	-27.18	-23.67	-17.71	-13.79	-7.72	-9.90
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-31.11	-28.99	-27.18	-23.67	-17.71	-13.79	-7.72	-9.90
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.10	-0.10	-0.08	-0.06	-0.05	-0.03	-0.04
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-18.12	-16.89	-15.83	-13.79	-10.32	-8.03	-4.50	-5.77
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-15.41	-14.36	-13.46	-11.72	-8.77	-6.83	-3.82	-4.90
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-55.37	-51.60	-48.37	-42.13	-31.52	-24.55	-13.74	-17.63
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	-0.10	-0.09	-0.08	-0.07	-0.05	-0.04	-0.02	-0.03
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.09	-0.08	-0.07	-0.05	-0.04	-0.02	-0.03
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.58	-0.54	-0.51	-0.44	-0.33	-0.26	-0.14	-0.18
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-53.58	-49.93	-46.81	-40.77	-30.50	-23.76	-13.30	-17.06
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-21.57	-20.10	-18.85	-16.41	-12.28	-9.56	-5.35	-6.87
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-22.03	-20.53	-19.24	-16.76	-12.54	-9.77	-5.47	-7.01
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	-4.71	-4.38	-4.11	-3.58	-2.68	-2.09	-1.17	-1.50
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-4.70	-4.38	-4.11	-3.58	-2.68	-2.09	-1.17	-1.50
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-4.74	-4.42	-4.14	-3.61	-2.70	-2.10	-1.18	-1.51
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-22.77	-21.22	-19.90	-17.33	-12.96	-10.10	-5.65	-7.25
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-4.10	-3.82	-3.58	-3.12	-2.34	-1.82	-1.02	-1.31
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-5.39	-5.02	-4.71	-4.10	-3.07	-2.39	-1.34	-1.72
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.39	-5.02	-4.71	-4.10	-3.07	-2.39	-1.34	-1.72
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.68	-0.63	-0.59	-0.51	-0.38	-0.30	-0.17	-0.21
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-0.68	-0.63	-0.59	-0.51	-0.38	-0.30	-0.17	-0.21
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.05	-0.05	-0.04	-0.04	-0.03	-0.02	-0.01	-0.02
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-0.45	-0.42	-0.40	-0.35	-0.26	-0.20	-0.11	-0.14
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.09	-0.09	-0.08	-0.06	-0.04	-0.03	-0.03
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.10	-0.09	-0.09	-0.08	-0.06	-0.04	-0.03	-0.03
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-165.21	-153.96	-144.34	-125.71	-94.04	-73.25	-41.00	-52.59
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.10	-3.82	-3.58	-3.12	-2.34	-1.82	-1.02	-1.31
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-4.10	-3.82	-3.58	-3.12	-2.34	-1.82	-1.02	-1.31
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-22.77	-21.22	-19.90	-17.33	-12.96	-10.10	-5.65	-7.25

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-22.77	-21.22	-19.90	-17.33	-12.96	-10.10	-5.65	-7.25
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County (part); Oakridge, OR	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-31.11	-28.99	-27.18	-23.67	-17.71	-13.79	-7.72	-9.90
Lebanon County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-32.60	-30.37	-28.48	-24.80	-18.55	-14.45	-8.09	-10.38
Liberty-Clairton, PA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.06	-0.06	-0.05	-0.04	-0.03	-0.02	-0.02
Lincoln County; Libby and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-56.48	-52.64	-49.35	-42.98	-32.15	-25.04	-14.02	-17.98
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-56.49	-52.64	-49.35	-42.98	-32.15	-25.04	-14.02	-17.98
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-56.48	-52.64	-49.35	-42.98	-32.15	-25.04	-14.02	-17.98
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	-56.48	-52.64	-49.35	-42.98	-32.15	-25.04	-14.02	-17.98
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-56.48	-52.64	-49.35	-42.98	-32.15	-25.04	-14.02	-17.98
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-56.48	-52.64	-49.35	-42.98	-32.15	-25.04	-14.02	-17.98
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-28.91	-26.94	-25.26	-22.00	-16.46	-12.82	-7.18	-9.20
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-27.15	-25.30	-23.72	-20.66	-15.45	-12.04	-6.74	-8.64
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-18.40	-17.15	-16.08	-14.00	-10.48	-8.16	-4.57	-5.86
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.09	-10.33	-9.69	-8.44	-6.31	-4.92	-2.75	-3.53
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-11.09	-10.33	-9.69	-8.44	-6.31	-4.92	-2.75	-3.53
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-0.25	-0.23	-0.22	-0.19	-0.14	-0.11	-0.06	-0.08
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-35.80	-33.36	-31.28	-27.24	-20.38	-15.87	-8.88	-11.40
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.23	-3.01	-2.82	-2.46	-1.84	-1.43	-0.80	-1.03
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-3.23	-3.01	-2.82	-2.46	-1.84	-1.43	-0.80	-1.03
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.17	-0.16	-0.15	-0.13	-0.10	-0.08	-0.04	-0.05
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.08	-0.07	-0.07	-0.06	-0.04	-0.03	-0.02	-0.02
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.10	-0.09	-0.09	-0.08	-0.06	-0.04	-0.03	-0.03

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-16.32	-15.21	-14.26	-12.42	-9.29	-7.24	-4.05	-5.20
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-13.55	-12.62	-11.84	-10.31	-7.71	-6.01	-3.36	-4.31
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-16.32	-15.21	-14.26	-12.42	-9.29	-7.24	-4.05	-5.20
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-2.66	-2.48	-2.32	-2.02	-1.51	-1.18	-0.66	-0.85
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-27.70	-25.81	-24.20	-21.07	-15.77	-12.28	-6.87	-8.82
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-93.30	-86.94	-81.51	-70.99	-53.11	-41.36	-23.16	-29.70

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-93.30	-86.94	-81.51	-70.99	-53.11	-41.37	-23.16	-29.70
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.31	-0.28	-0.27	-0.23	-0.17	-0.14	-0.08	-0.10
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	-0.07	-0.06	-0.06	-0.05	-0.04	-0.03	-0.02	-0.02
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.69	-1.58	-1.48	-1.29	-0.96	-0.75	-0.42	-0.54
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.69	-1.58	-1.48	-1.29	-0.96	-0.75	-0.42	-0.54
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.05	-0.05	-0.04	-0.03	-0.02	-0.01	-0.02
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.44	-0.41	-0.38	-0.33	-0.25	-0.19	-0.11	-0.14
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-0.44	-0.41	-0.38	-0.33	-0.25	-0.19	-0.11	-0.14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-56.48	-52.64	-49.35	-42.98	-32.15	-25.04	-14.02	-17.98
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.50	-0.47	-0.44	-0.38	-0.29	-0.22	-0.12	-0.16
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-10.46	-9.75	-9.14	-7.96	-5.96	-4.64	-2.60	-3.33
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-10.46	-9.75	-9.14	-7.96	-5.96	-4.64	-2.60	-3.33
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-11.50	-10.71	-10.04	-8.75	-6.54	-5.10	-2.85	-3.66
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-12.76	-11.89	-11.15	-9.71	-7.26	-5.66	-3.17	-4.06
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-11.49	-10.71	-10.04	-8.75	-6.54	-5.10	-2.85	-3.66
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-11.49	-10.71	-10.04	-8.75	-6.54	-5.10	-2.85	-3.66

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-149.72	-139.52	-130.81	-113.92	-85.22	-66.38	-37.16	-47.66
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-149.72	-139.52	-130.81	-113.92	-85.22	-66.38	-37.16	-47.66
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-149.72	-139.52	-130.81	-113.92	-85.22	-66.38	-37.16	-47.66
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-4.48	-4.17	-3.91	-3.41	-2.55	-1.98	-1.11	-1.43
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-4.48	-4.17	-3.91	-3.41	-2.55	-1.98	-1.11	-1.43
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-4.48	-4.17	-3.91	-3.41	-2.55	-1.98	-1.11	-1.43
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-4.48	-4.17	-3.91	-3.41	-2.55	-1.98	-1.11	-1.43
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.66	-0.62	-0.58	-0.50	-0.38	-0.29	-0.16	-0.21
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.30	-0.28	-0.27	-0.23	-0.17	-0.13	-0.08	-0.10
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.31	-0.28	-0.27	-0.23	-0.17	-0.14	-0.08	-0.10

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-59.12	-55.09	-51.65	-44.98	-33.65	-26.21	-14.67	-18.82
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-27.17	-25.32	-23.74	-20.67	-15.47	-12.05	-6.74	-8.65
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-0.10	-0.09	-0.09	-0.08	-0.06	-0.04	-0.03	-0.03
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.12	-0.12	-0.11	-0.10	-0.07	-0.06	-0.03	-0.04
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.06	-0.05	-0.05	-0.03	-0.03	-0.01	-0.02
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.85	-0.79	-0.74	-0.64	-0.48	-0.38	-0.21	-0.27
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.10	-0.10	-0.09	-0.08	-0.06	-0.05	-0.03	-0.03
Utah County, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.44	-0.41	-0.38	-0.33	-0.25	-0.19	-0.11	-0.14
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.85	-0.79	-0.74	-0.64	-0.48	-0.38	-0.21	-0.27
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-6.46	-6.02	-5.64	-4.91	-3.68	-2.86	-1.60	-2.06
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-6.48	-6.04	-5.66	-4.93	-3.69	-2.87	-1.61	-2.06
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-6.48	-6.04	-5.66	-4.93	-3.69	-2.87	-1.61	-2.06
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County; (part), MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-4.70	-4.38	-4.11	-3.58	-2.68	-2.09	-1.17	-1.50
West Central Pinal County, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yuma County; Yuma planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM_{2.5} = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-30. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Diesel Particulate Matter (DPM), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.24	-1.16	-1.08	-0.94	-0.69	-0.53	-0.27	-0.39
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	0.00	-0.01
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.08	-0.08	-0.07	-0.06	-0.05	-0.03	-0.02	-0.03
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.09	-0.08	-0.07	-0.06	-0.05	-0.04	-0.02	-0.03
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.08	-0.07	-0.06	-0.05	-0.03	-0.02	-0.03
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-0.08	-0.07	-0.06	-0.05	-0.03	-0.02	-0.03
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-33.18	-30.97	-28.86	-25.00	-18.30	-14.03	-7.14	-10.31
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-43.74	-40.83	-38.05	-32.96	-24.13	-18.49	-9.41	-13.60
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.31	-0.29	-0.27	-0.24	-0.17	-0.13	-0.07	-0.10

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.30	-0.28	-0.26	-0.23	-0.17	-0.13	-0.06	-0.09
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-5.01	-4.68	-4.36	-3.78	-2.77	-2.12	-1.08	-1.56
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-211.36	-197.30	-183.85	-159.27	-116.61	-89.35	-45.48	-65.71
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	-38.02	-35.49	-33.07	-28.65	-20.97	-16.07	-8.18	-11.82
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-38.02	-35.49	-33.07	-28.65	-20.97	-16.07	-8.18	-11.82
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.13	-0.12	-0.10	-0.08	-0.06	-0.03	-0.04
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-22.14	-20.67	-19.26	-16.69	-12.22	-9.36	-4.77	-6.88

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-18.82	-17.57	-16.37	-14.19	-10.39	-7.96	-4.05	-5.85
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-67.66	-63.16	-58.85	-50.98	-37.33	-28.60	-14.56	-21.03
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	-0.12	-0.11	-0.10	-0.09	-0.06	-0.05	-0.03	-0.04
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.12	-0.11	-0.10	-0.09	-0.06	-0.05	-0.02	-0.04
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.71	-0.66	-0.62	-0.54	-0.39	-0.30	-0.15	-0.22
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-65.48	-61.12	-56.95	-49.34	-36.12	-27.68	-14.09	-20.36
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-26.36	-24.61	-22.93	-19.86	-14.54	-11.14	-5.67	-8.20
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-26.92	-25.13	-23.41	-20.28	-14.85	-11.38	-5.79	-8.37
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	-5.75	-5.37	-5.00	-4.33	-3.17	-2.43	-1.24	-1.79
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-5.75	-5.37	-5.00	-4.33	-3.17	-2.43	-1.24	-1.79
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-5.79	-5.41	-5.04	-4.37	-3.20	-2.45	-1.25	-1.80
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	-27.83	-25.98	-24.21	-20.97	-15.35	-11.76	-5.99	-8.65
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-5.01	-4.68	-4.36	-3.78	-2.77	-2.12	-1.08	-1.56
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-6.59	-6.15	-5.73	-4.96	-3.64	-2.79	-1.42	-2.05
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.59	-6.15	-5.73	-4.96	-3.64	-2.79	-1.42	-2.05
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.83	-0.77	-0.72	-0.62	-0.46	-0.35	-0.18	-0.26
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-0.83	-0.77	-0.72	-0.62	-0.46	-0.35	-0.18	-0.26
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.06	-0.05	-0.05	-0.04	-0.03	-0.02	-0.01	-0.02
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	-0.56	-0.52	-0.48	-0.42	-0.31	-0.23	-0.12	-0.17

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.12	-0.11	-0.09	-0.07	-0.05	-0.03	-0.04
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.12	-0.12	-0.11	-0.09	-0.07	-0.05	-0.03	-0.04
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-201.88	-188.46	-175.61	-152.13	-111.38	-85.35	-43.45	-62.76
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.01	-4.68	-4.36	-3.78	-2.77	-2.12	-1.08	-1.56
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-5.01	-4.68	-4.36	-3.78	-2.77	-2.12	-1.08	-1.56
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-27.83	-25.98	-24.21	-20.97	-15.35	-11.76	-5.99	-8.65
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-27.83	-25.98	-24.21	-20.97	-15.35	-11.76	-5.99	-8.65

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-38.02	-35.49	-33.07	-28.65	-20.97	-16.07	-8.18	-11.82
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-39.83	-37.18	-34.65	-30.01	-21.97	-16.84	-8.57	-12.38
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.08	-0.07	-0.06	-0.05	-0.03	-0.02	-0.03
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-69.03	-64.43	-60.04	-52.01	-38.08	-29.18	-14.85	-21.46

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-69.03	-64.43	-60.04	-52.01	-38.08	-29.18	-14.85	-21.46
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-69.03	-64.43	-60.04	-52.01	-38.08	-29.18	-14.85	-21.46
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	-69.03	-64.43	-60.04	-52.01	-38.08	-29.18	-14.85	-21.46
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-69.03	-64.43	-60.04	-52.01	-38.08	-29.18	-14.85	-21.46
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-69.03	-64.43	-60.04	-52.01	-38.08	-29.18	-14.85	-21.46
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-35.33	-32.98	-30.73	-26.62	-19.49	-14.93	-7.60	-10.98
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-33.18	-30.97	-28.86	-25.00	-18.30	-14.03	-7.14	-10.31
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-22.49	-20.99	-19.56	-16.95	-12.41	-9.51	-4.84	-6.99
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-13.55	-12.65	-11.78	-10.21	-7.47	-5.73	-2.92	-4.21
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-13.55	-12.65	-11.78	-10.21	-7.47	-5.73	-2.92	-4.21
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-0.30	-0.28	-0.26	-0.23	-0.17	-0.13	-0.06	-0.09
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-43.74	-40.83	-38.05	-32.96	-24.13	-18.49	-9.41	-13.60

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.94	-3.68	-3.43	-2.97	-2.18	-1.67	-0.85	-1.23
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-3.94	-3.68	-3.43	-2.97	-2.18	-1.67	-0.85	-1.23
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.21	-0.19	-0.18	-0.16	-0.11	-0.09	-0.04	-0.06
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-0.10	-0.09	-0.08	-0.07	-0.05	-0.04	-0.02	-0.03
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.12	-0.12	-0.11	-0.09	-0.07	-0.05	-0.03	-0.04
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-19.95	-18.62	-17.35	-15.03	-11.01	-8.43	-4.29	-6.20

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-16.56	-15.46	-14.40	-12.48	-9.13	-7.00	-3.56	-5.15
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-19.95	-18.62	-17.35	-15.03	-11.01	-8.43	-4.29	-6.20
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nogales, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oakridge, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted County; (part), MN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	-3.25	-3.03	-2.83	-2.45	-1.79	-1.37	-0.70	-1.01
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-33.84	-31.59	-29.44	-25.50	-18.67	-14.31	-7.28	-10.52
Philadelphia-Wilmington, PA-NJ-DE	PM _{2.5} (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	-114.00	-106.42	-99.17	-85.91	-62.90	-48.20	-24.53	-35.44
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-114.01	-106.42	-99.17	-85.91	-62.90	-48.20	-24.53	-35.44
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.37	-0.35	-0.32	-0.28	-0.21	-0.16	-0.08	-0.12
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	-0.08	-0.08	-0.07	-0.06	-0.05	-0.03	-0.02	-0.03
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.07	-1.93	-1.80	-1.56	-1.14	-0.88	-0.45	-0.64
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.07	-1.93	-1.80	-1.56	-1.14	-0.88	-0.45	-0.64
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.06	-0.06	-0.05	-0.04	-0.03	-0.01	-0.02
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.53	-0.50	-0.46	-0.40	-0.29	-0.23	-0.11	-0.17
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-0.53	-0.50	-0.46	-0.40	-0.29	-0.23	-0.11	-0.17
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-69.03	-64.43	-60.04	-52.01	-38.08	-29.18	-14.85	-21.46
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.61	-0.57	-0.53	-0.46	-0.34	-0.26	-0.13	-0.19
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-12.79	-11.94	-11.12	-9.63	-7.05	-5.41	-2.75	-3.97
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-12.79	-11.94	-11.12	-9.63	-7.05	-5.41	-2.75	-3.97
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	-14.05	-13.11	-12.22	-10.58	-7.75	-5.94	-3.02	-4.37
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-15.59	-14.56	-13.56	-11.75	-8.60	-6.59	-3.36	-4.85
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-14.05	-13.11	-12.22	-10.58	-7.75	-5.94	-3.02	-4.37
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	-14.05	-13.11	-12.22	-10.58	-7.75	-5.94	-3.02	-4.37
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-182.95	-170.78	-159.14	-137.86	-100.94	-77.34	-39.37	-56.88
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-182.95	-170.78	-159.14	-137.86	-100.94	-77.34	-39.37	-56.88
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-182.95	-170.78	-159.14	-137.86	-100.94	-77.34	-39.37	-56.88
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-5.47	-5.11	-4.76	-4.12	-3.02	-2.31	-1.18	-1.70
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-5.47	-5.11	-4.76	-4.12	-3.02	-2.31	-1.18	-1.70
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-5.47	-5.11	-4.76	-4.12	-3.02	-2.31	-1.18	-1.70
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-5.47	-5.11	-4.76	-4.12	-3.02	-2.31	-1.18	-1.70
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.81	-0.76	-0.71	-0.61	-0.45	-0.34	-0.17	-0.25
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.37	-0.35	-0.32	-0.28	-0.21	-0.16	-0.08	-0.12
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.37	-0.35	-0.32	-0.28	-0.21	-0.16	-0.08	-0.12
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.03	-0.03	-0.02	-0.01	-0.01	-0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-72.24	-67.44	-62.84	-54.44	-39.86	-30.54	-15.55	-22.46
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.04	-0.04	-0.03	-0.02	-0.02	-0.01	-0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-33.20	-30.99	-28.88	-25.02	-18.32	-14.04	-7.15	-10.32
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-0.12	-0.12	-0.11	-0.09	-0.07	-0.05	-0.03	-0.04
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.14	-0.13	-0.12	-0.08	-0.06	-0.03	-0.05
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.07	-0.07	-0.06	-0.06	-0.04	-0.03	-0.02	-0.02
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	0.00	-0.01
Tazewell County: Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.04	-0.97	-0.90	-0.78	-0.57	-0.44	-0.22	-0.32
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.12	-0.12	-0.11	-0.09	-0.07	-0.05	-0.03	-0.04
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.53	-0.50	-0.46	-0.40	-0.29	-0.23	-0.11	-0.17
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-1.04	-0.97	-0.90	-0.78	-0.57	-0.44	-0.22	-0.32
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-7.89	-7.36	-6.86	-5.94	-4.35	-3.34	-1.70	-2.45
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-7.91	-7.39	-6.88	-5.96	-4.37	-3.35	-1.70	-2.46
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-7.92	-7.39	-6.89	-5.97	-4.37	-3.35	-1.70	-2.46
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.75	-5.37	-5.00	-4.33	-3.17	-2.43	-1.24	-1.79

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-31. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Formaldehyde, 2025

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.05	0.04	0.03
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.40	0.37	0.35	0.32	0.23	0.22	0.17	0.15
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.17	0.16	0.15	0.14	0.10	0.09	0.07	0.06
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.24	0.22	0.21	0.19	0.14	0.13	0.10	0.09
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.15	0.13	0.13	0.11	0.08	0.08	0.06	0.05
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.17	0.16	0.15	0.13	0.10	0.09	0.07	0.06
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.86	-1.73	-1.66	-1.45	-1.08	-1.02	-0.77	-0.71
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.30	0.28	0.26	0.23	0.17	0.16	0.13	0.11
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.28	0.26	0.24	0.23	0.16	0.15	0.12	0.10

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.02	0.02
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.14	0.13	0.12	0.11	0.08	0.08	0.06	0.05
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.52	1.41	1.34	1.19	0.87	0.83	0.64	0.56
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-0.22	-0.21	-0.20	-0.17	-0.13	-0.12	-0.09	-0.09
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.75	0.70	0.66	0.59	0.43	0.41	0.32	0.28
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.20	0.19	0.18	0.16	0.11	0.11	0.08	0.07
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.30	0.28	0.26	0.24	0.17	0.16	0.13	0.11
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.09	0.09	0.08	0.07	0.05	0.05	0.04	0.03
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.16	0.15	0.14	0.13	0.09	0.09	0.07	0.06
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.08	0.08	0.07	0.07	0.05	0.05	0.04	0.03
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.40	0.37	0.35	0.32	0.23	0.22	0.17	0.15
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.75	0.70	0.66	0.59	0.43	0.41	0.32	0.28
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.79	1.66	1.57	1.40	1.03	0.97	0.75	0.67
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	0.56	0.52	0.49	0.44	0.32	0.30	0.24	0.21
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.50	0.47	0.44	0.39	0.29	0.27	0.21	0.19
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.30	0.28	0.26	0.23	0.17	0.16	0.12	0.11

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.37	0.34	0.32	0.29	0.21	0.20	0.16	0.14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.75	0.70	0.66	0.59	0.43	0.41	0.32	0.28
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.70	0.65	0.62	0.55	0.40	0.38	0.30	0.26
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.14	0.13	0.13	0.11	0.08	0.08	0.06	0.05
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.52	0.48	0.46	0.41	0.30	0.28	0.22	0.19
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.23	0.21	0.20	0.18	0.13	0.12	0.10	0.08
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.30	0.27	0.26	0.23	0.17	0.16	0.12	0.11
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.97	1.84	1.74	1.55	1.14	1.07	0.83	0.74
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.10	0.09	0.08	0.08	0.06	0.05	0.04	0.04
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.56	0.52	0.49	0.44	0.32	0.30	0.24	0.21
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.75	0.69	0.65	0.59	0.43	0.41	0.31	0.28
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	-0.90	-0.85	-0.82	-0.71	-0.53	-0.50	-0.37	-0.35
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.22	-1.14	-1.09	-0.95	-0.71	-0.67	-0.51	-0.46
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-0.10	-0.10	-0.11	-0.07	-0.07	-0.06	-0.04	-0.05
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.32	-0.30	-0.29	-0.25	-0.19	-0.18	-0.13	-0.12
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.10	0.09	0.08	0.08	0.06	0.05	0.04	0.04
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.13	0.13	0.12	0.11	0.08	0.07	0.06	0.05
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.40	0.37	0.35	0.31	0.23	0.22	0.17	0.15
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.27	0.26	0.24	0.22	0.16	0.15	0.12	0.10
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.27	0.25	0.24	0.21	0.16	0.15	0.12	0.10
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.28	1.19	1.12	1.01	0.73	0.69	0.54	0.47
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.01
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.01
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.32	-0.30	-0.29	-0.25	-0.19	-0.18	-0.14	-0.12
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.13	0.12	0.12	0.10	0.08	0.07	0.06	0.05
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.31	-0.29	-0.28	-0.24	-0.18	-0.17	-0.13	-0.12
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.21	0.20	0.19	0.17	0.12	0.11	0.09	0.08
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.25	0.24	0.22	0.20	0.15	0.14	0.11	0.09
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.05	0.04	0.03	0.03

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Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.12	0.11	0.11	0.09	0.07	0.07	0.05	0.04
Lancaster, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.11	0.09	0.07	0.07	0.05	0.04
Lane County (part); Oakridge, OR	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.50	0.47	0.44	0.39	0.29	0.27	0.21	0.19
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Los Angeles, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	2.42	2.25	2.11	1.91	1.38	1.31	1.03	0.89
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.33	-1.24	-1.19	-1.04	-0.78	-0.73	-0.55	-0.51
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	2.42	2.25	2.11	1.91	1.39	1.32	1.03	0.89
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	2.42	2.25	2.11	1.91	1.39	1.32	1.03	0.89
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	2.42	2.25	2.11	1.91	1.39	1.32	1.03	0.89
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	2.42	2.24	2.11	1.91	1.38	1.31	1.03	0.89
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.85	-1.72	-1.65	-1.45	-1.08	-1.01	-0.77	-0.70
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.97	0.90	0.85	0.76	0.56	0.53	0.41	0.36
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.12	0.11	0.11	0.10	0.07	0.07	0.05	0.05
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.22	0.20	0.19	0.17	0.13	0.12	0.09	0.08
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.29	0.27	0.26	0.23	0.17	0.16	0.12	0.11
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.32	0.29	0.28	0.25	0.18	0.17	0.13	0.12
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.31	0.29	0.26	0.24	0.17	0.17	0.13	0.11
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.21	0.20	0.19	0.17	0.12	0.11	0.09	0.08
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.03
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	3.38	3.14	2.98	2.66	1.95	1.84	1.42	1.26
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.86	1.73	1.64	1.46	1.07	1.01	0.78	0.69
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	3.32	3.09	2.92	2.61	1.91	1.81	1.40	1.24
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.19	0.18	0.17	0.15	0.11	0.11	0.08	0.07
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	1.10	1.02	0.97	0.87	0.63	0.60	0.46	0.41

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.50	1.40	1.32	1.18	0.86	0.82	0.63	0.56
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.93	0.87	0.82	0.73	0.54	0.51	0.39	0.35
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.97	0.91	0.86	0.77	0.56	0.53	0.41	0.36
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.07	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.51	0.48	0.45	0.40	0.29	0.28	0.22	0.19
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.47	0.43	0.41	0.37	0.27	0.25	0.20	0.17
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.31	0.29	0.27	0.24	0.18	0.17	0.13	0.12
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.12	0.11	0.11	0.10	0.07	0.07	0.05	0.05
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.45	0.42	0.40	0.35	0.26	0.24	0.19	0.17
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.10	0.09	0.08	0.07	0.05	0.05	0.04	0.04
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.11	0.10	0.10	0.09	0.06	0.06	0.05	0.04
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.13	0.12	0.11	0.10	0.07	0.07	0.05	0.05
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	2.41	2.23	2.10	1.90	1.38	1.31	1.02	0.88
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.34	0.32	0.30	0.27	0.20	0.19	0.14	0.13
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.33	0.31	0.29	0.26	0.19	0.18	0.14	0.12
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.57	0.53	0.51	0.45	0.33	0.31	0.24	0.21
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.56	0.53	0.50	0.44	0.33	0.31	0.24	0.21
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.05	0.03	0.03	0.02	0.02
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.41	0.38	0.36	0.32	0.23	0.22	0.17	0.15
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.25	0.23	0.22	0.20	0.14	0.14	0.10	0.09
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.25	0.23	0.22	0.20	0.14	0.14	0.10	0.09

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.14	0.13	0.12	0.11	0.08	0.07	0.06	0.05
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.84	0.78	0.74	0.66	0.48	0.46	0.35	0.31
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.84	0.78	0.74	0.66	0.48	0.46	0.35	0.31
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.64	1.52	1.44	1.29	0.94	0.89	0.69	0.61
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.64	1.53	1.45	1.29	0.95	0.90	0.69	0.61
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.50	1.39	1.32	1.18	0.86	0.81	0.63	0.56
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.65	0.61	0.57	0.52	0.37	0.35	0.28	0.24
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.65	0.61	0.57	0.52	0.37	0.35	0.28	0.24
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.65	0.61	0.57	0.51	0.37	0.35	0.28	0.24
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.65	0.61	0.57	0.51	0.37	0.35	0.28	0.24
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.06	0.06	0.06	0.05	0.04	0.04	0.03	0.02
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.72	0.67	0.63	0.56	0.41	0.39	0.30	0.27
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.07	0.06	0.05	0.04

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.09	-0.08	-0.07	-0.05	-0.05	-0.04	-0.04
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.17	0.16	0.15	0.13	0.10	0.09	0.07	0.06
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-1.26	-1.17	-1.14	-0.98	-0.74	-0.69	-0.52	-0.48
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.07	0.07	0.06	0.05	0.04	0.03	0.03
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.11	0.10	0.10	0.09	0.06	0.06	0.05	0.04
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.24	0.22	0.21	0.18	0.14	0.13	0.10	0.09
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.01	-0.01
Utah County, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.11	0.10	0.07	0.07	0.05	0.05
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.06	0.04	0.04	0.03	0.03
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.17	0.16	0.15	0.13	0.10	0.09	0.07	0.06
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.19	0.18	0.17	0.15	0.11	0.10	0.08	0.07
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.36	1.27	1.20	1.07	0.79	0.74	0.57	0.51
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.03	0.03
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wayne County; (part), MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.27	-1.18	-1.14	-0.99	-0.74	-0.69	-0.53	-0.48
West Central Pinal County, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.10	0.09	0.09	0.08	0.06	0.05	0.04	0.04
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02
Yuma County; Yuma planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM_{2.5} = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-32. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Formaldehyde, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.69	0.64	0.60	0.52	0.38	0.31	0.17	0.21
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.30	0.28	0.26	0.23	0.16	0.14	0.07	0.09
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.41	0.38	0.36	0.31	0.23	0.19	0.10	0.12
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.25	0.23	0.22	0.19	0.14	0.11	0.06	0.08
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.29	0.27	0.25	0.22	0.16	0.13	0.07	0.09
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-4.53	-4.24	-3.98	-3.50	-2.67	-2.10	-1.24	-1.55
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.51	0.48	0.44	0.39	0.28	0.23	0.12	0.15
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.12	0.11	0.09	0.07	0.02	0.04	-0.01	-0.01
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.02	0.02
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.28	0.26	0.24	0.21	0.15	0.13	0.07	0.08
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.24	0.23	0.21	0.18	0.13	0.11	0.06	0.07
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	2.61	2.43	2.25	1.97	1.42	1.18	0.63	0.78
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-0.62	-0.58	-0.55	-0.48	-0.37	-0.29	-0.18	-0.22
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.29	1.20	1.11	0.97	0.70	0.58	0.31	0.39
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.33	0.30	0.28	0.24	0.17	0.15	0.08	0.10
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.52	0.48	0.44	0.39	0.28	0.23	0.12	0.15
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.28	0.26	0.24	0.21	0.15	0.13	0.07	0.08
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.09	0.07	0.06	0.03	0.04
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.08	0.07	0.06	0.05	0.04	0.02	0.03
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.14	0.13	0.12	0.11	0.08	0.06	0.03	0.04
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.69	0.64	0.60	0.52	0.38	0.31	0.17	0.21
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.30	1.21	1.12	0.98	0.71	0.59	0.31	0.39
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.05	2.84	2.63	2.30	1.66	1.37	0.73	0.91
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Chico, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	0.96	0.90	0.83	0.73	0.53	0.43	0.23	0.29
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.87	0.81	0.75	0.65	0.47	0.39	0.21	0.26
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.51	0.48	0.44	0.39	0.28	0.23	0.12	0.15
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.64	0.59	0.55	0.48	0.35	0.29	0.15	0.19
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.30	1.21	1.12	0.98	0.71	0.58	0.31	0.39
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	1.21	1.12	1.04	0.91	0.66	0.54	0.29	0.36

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.25	0.23	0.21	0.19	0.13	0.11	0.06	0.07
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.89	0.83	0.77	0.68	0.49	0.40	0.21	0.27
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.39	0.36	0.33	0.29	0.21	0.17	0.09	0.12
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.51	0.47	0.44	0.38	0.28	0.23	0.12	0.15
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	3.40	3.16	2.93	2.56	1.85	1.53	0.81	1.02
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.17	0.15	0.14	0.13	0.09	0.07	0.04	0.05
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.87	0.80	0.74	0.65	0.46	0.39	0.20	0.25
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.19	1.10	1.02	0.89	0.64	0.53	0.27	0.34
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	-2.52	-2.36	-2.23	-1.96	-1.51	-1.18	-0.71	-0.89
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.01	-2.81	-2.64	-2.32	-1.77	-1.39	-0.83	-1.03
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-1.09	-1.03	-0.99	-0.88	-0.73	-0.53	-0.37	-0.46
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.02
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.80	-0.75	-0.70	-0.62	-0.47	-0.37	-0.22	-0.27
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.05	-0.05	-0.04	-0.03	-0.03	-0.02	-0.02
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.05	0.05	0.04	0.03	0.03	0.01	0.02
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.23	0.21	0.20	0.17	0.13	0.10	0.06	0.07
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.69	0.64	0.59	0.52	0.37	0.31	0.16	0.21
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.47	0.44	0.41	0.36	0.26	0.21	0.11	0.14
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.47	0.44	0.41	0.36	0.26	0.21	0.11	0.14
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.91	1.77	1.63	1.42	1.00	0.85	0.42	0.53
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.08	0.08	0.07	0.06	0.05	0.04	0.02	0.03
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.08	0.08	0.07	0.06	0.05	0.04	0.02	0.03
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.80	-0.75	-0.70	-0.62	-0.47	-0.37	-0.22	-0.27
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.22	0.21	0.19	0.17	0.12	0.10	0.05	0.07
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.06	0.06	0.05	0.05	0.03	0.03	0.02	0.02
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Jefferson County; (part), OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.78	-0.73	-0.68	-0.60	-0.46	-0.36	-0.21	-0.27
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.36	0.34	0.31	0.27	0.20	0.16	0.09	0.11
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.44	0.41	0.38	0.33	0.24	0.20	0.10	0.13
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.11	0.10	0.09	0.08	0.06	0.05	0.03	0.03
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.21	0.19	0.18	0.16	0.11	0.09	0.05	0.06
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.21	0.19	0.18	0.16	0.11	0.09	0.05	0.06
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.86	0.80	0.74	0.65	0.47	0.39	0.21	0.26
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.02
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Los Angeles, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	3.07	2.84	2.59	2.25	1.51	1.33	0.61	0.76
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.41	-3.19	-3.01	-2.64	-2.03	-1.59	-0.95	-1.19

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	3.07	2.84	2.59	2.25	1.52	1.34	0.61	0.76
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	3.07	2.84	2.59	2.25	1.52	1.34	0.61	0.76
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	3.07	2.84	2.59	2.26	1.52	1.34	0.61	0.76
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	3.06	2.83	2.58	2.24	1.51	1.33	0.61	0.76
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-4.51	-4.22	-3.97	-3.48	-2.66	-2.09	-1.23	-1.55
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	1.67	1.55	1.44	1.26	0.91	0.75	0.40	0.50
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.21	0.19	0.18	0.16	0.11	0.09	0.05	0.06
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.36	0.33	0.31	0.27	0.19	0.16	0.08	0.11
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.49	0.45	0.42	0.37	0.26	0.22	0.11	0.14
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.54	0.50	0.47	0.41	0.30	0.24	0.13	0.16
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.17	0.15	0.13	0.11	0.04	0.06	0.00	0.00
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.07	0.07	0.06	0.04	0.04	0.02	0.02
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.36	0.34	0.31	0.27	0.20	0.16	0.09	0.11
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	5.82	5.42	5.02	4.39	3.18	2.62	1.40	1.75
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	3.21	2.99	2.77	2.42	1.75	1.45	0.77	0.96

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	5.72	5.32	4.94	4.32	3.12	2.58	1.37	1.72
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.29	0.27	0.25	0.22	0.15	0.13	0.07	0.08
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	1.85	1.72	1.60	1.40	1.01	0.83	0.44	0.55
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	2.54	2.37	2.19	1.92	1.38	1.14	0.61	0.76
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	1.60	1.49	1.38	1.21	0.87	0.72	0.38	0.48
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.68	1.56	1.44	1.26	0.91	0.75	0.40	0.50

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.88	0.82	0.76	0.66	0.48	0.40	0.21	0.26
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.80	0.75	0.69	0.61	0.44	0.36	0.19	0.24
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.54	0.50	0.46	0.41	0.29	0.24	0.13	0.16
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.21	0.20	0.18	0.16	0.12	0.10	0.05	0.06
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.77	0.72	0.67	0.58	0.42	0.35	0.19	0.23
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.16	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.19	0.17	0.16	0.14	0.10	0.08	0.04	0.06
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.22	0.20	0.19	0.16	0.12	0.10	0.05	0.07
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	3.04	2.81	2.56	2.23	1.50	1.32	0.60	0.76
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.57	0.53	0.49	0.43	0.31	0.26	0.14	0.17
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.57	0.53	0.49	0.43	0.31	0.26	0.14	0.17
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.99	0.92	0.85	0.74	0.54	0.44	0.24	0.30
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.97	0.90	0.84	0.73	0.53	0.44	0.23	0.29
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.10	0.10	0.09	0.08	0.06	0.05	0.02	0.03
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.02	0.02
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.70	0.65	0.61	0.53	0.38	0.32	0.17	0.21
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.43	0.40	0.37	0.32	0.23	0.19	0.10	0.13
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.43	0.40	0.37	0.32	0.23	0.19	0.10	0.13
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.22	0.20	0.19	0.17	0.12	0.10	0.05	0.07
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.44	1.34	1.25	1.09	0.79	0.65	0.35	0.43
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.45	1.35	1.25	1.09	0.79	0.65	0.35	0.43

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	2.79	2.60	2.41	2.11	1.52	1.26	0.67	0.84
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	2.81	2.61	2.42	2.12	1.53	1.26	0.67	0.84
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.55	2.37	2.20	1.92	1.39	1.15	0.61	0.76
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.89	0.83	0.76	0.66	0.45	0.39	0.19	0.23
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.89	0.83	0.76	0.66	0.45	0.39	0.19	0.23
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.89	0.83	0.76	0.66	0.45	0.39	0.19	0.23
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.89	0.83	0.76	0.66	0.45	0.39	0.19	0.23
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.11	0.10	0.10	0.08	0.06	0.05	0.03	0.03
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.23	1.14	1.06	0.93	0.67	0.55	0.30	0.37
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.20	0.18	0.17	0.15	0.11	0.09	0.05	0.06
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.12	0.11	0.11	0.09	0.07	0.05	0.03	0.04
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.13	0.12	0.11	0.09	0.07	0.06	0.03	0.04
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.23	-0.22	-0.20	-0.18	-0.14	-0.11	-0.06	-0.08
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.29	0.27	0.25	0.22	0.16	0.13	0.07	0.09
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-3.50	-3.28	-3.09	-2.72	-2.10	-1.63	-0.99	-1.24
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.19	0.18	0.17	0.14	0.10	0.09	0.05	0.06
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.41	0.38	0.35	0.31	0.22	0.18	0.10	0.12
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.09	-0.08	-0.08	-0.07	-0.05	-0.04	-0.02	-0.03
Utah County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.21	0.20	0.18	0.16	0.12	0.10	0.05	0.06
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.12	0.11	0.11	0.09	0.07	0.06	0.03	0.04
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.26	0.24	0.23	0.20	0.14	0.12	0.06	0.08
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.33	0.31	0.29	0.25	0.18	0.15	0.08	0.10
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	2.35	2.18	2.03	1.77	1.28	1.06	0.56	0.71
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Wayne County; (part), MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.10	-2.90	-2.72	-2.39	-1.83	-1.44	-0.85	-1.06
West Central Pinal County, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
West Silver Valley, ID	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.17	0.16	0.15	0.13	0.09	0.08	0.04	0.05
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Yakima County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.08	0.08	0.07	0.06	0.05	0.04	0.02	0.03
Yuma County; Yuma planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.02	0.02

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 tons per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM2.5 = particulate matter less than 2.5 microns in size; ppm = parts per million

Table A-33. Changes in Emissions from Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative—Formaldehyde, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.40	0.37	0.34	0.30	0.21	0.17	0.08	0.11
Addison Township (Gallia County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ajo, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Albuquerque Area, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.17	0.16	0.15	0.13	0.09	0.07	0.04	0.05
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.24	0.22	0.20	0.18	0.12	0.10	0.05	0.07
Allegheny County; The area including Liberty, Lincoln, Port Vue, and Glassport Boroughs and the City of Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.14	0.13	0.12	0.11	0.08	0.06	0.03	0.04
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.17	0.15	0.14	0.12	0.09	0.07	0.04	0.05
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-5.54	-5.19	-4.85	-4.24	-3.17	-2.46	-1.34	-1.86
Anchorage Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.29	0.27	0.25	0.22	0.15	0.12	0.06	0.08
AQCR 012: Portions of Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
AQCR 109: Millinocket, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
AQCR 131: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties (Minneapolis-St. Paul), MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.73	-0.69	-0.65	-0.58	-0.46	-0.34	-0.20	-0.29

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
AQCR 237: Brown County: Green Bay subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AQCR 238: Marathon County: Rothschild subcity area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01
AQCR 238: Oneida County: Rhinelander subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
AQCR 239: Milwaukee County: Milwaukee subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.16	0.15	0.14	0.12	0.08	0.07	0.03	0.05
AQCR 240: Dane County: Madison subcity area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.14	0.13	0.12	0.10	0.07	0.06	0.03	0.04
Archuleta County; Pagosa Springs, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Armstrong County: Madison Twp, Mahoning Twp, Boggs Twp, Washington Twp, Pine Twp, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.50	1.40	1.29	1.12	0.78	0.63	0.32	0.42
Atlantic City Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Bakersfield Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	-0.88	-0.82	-0.77	-0.67	-0.51	-0.39	-0.22	-0.30
Baltimore Area, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.74	0.69	0.64	0.55	0.39	0.31	0.16	0.21
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.15	0.13	0.12	0.11	0.07	0.06	0.03	0.04
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Billings Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.30	0.28	0.25	0.22	0.15	0.12	0.06	0.08
Boise-Northern Ada County Area, ID	CO (1971 8-hour)	Maintenance, --	100	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Boston Area, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.16	0.15	0.14	0.12	0.09	0.07	0.03	0.05
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burlington Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Center Township (Morgan County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, --	100	0	0.08	0.08	0.07	0.06	0.04	0.03	0.02	0.02
Charlotte Area, NC	CO (1971 8-hour)	Maintenance, --	100	0	0.40	0.37	0.34	0.30	0.21	0.17	0.08	0.11
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.75	0.70	0.65	0.56	0.39	0.32	0.16	0.21
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.70	1.57	1.45	1.26	0.88	0.71	0.36	0.47
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Chico Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Chico, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Nonattainment (KY) Maintenance (OH, IN), Marginal	100	0	0.56	0.52	0.48	0.41	0.29	0.23	0.12	0.16
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.50	0.46	0.43	0.37	0.26	0.21	0.11	0.14
Cleveland Area, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.30	0.27	0.25	0.22	0.15	0.12	0.06	0.08

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Cleveland, OH	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.37	0.34	0.31	0.27	0.19	0.15	0.08	0.10
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.75	0.69	0.64	0.56	0.39	0.32	0.16	0.21
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.70	0.65	0.60	0.52	0.36	0.29	0.15	0.20
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Colbert Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Springs Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.14	0.13	0.12	0.11	0.07	0.06	0.03	0.04
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.52	0.48	0.44	0.38	0.27	0.22	0.11	0.15
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cuyahoga County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.21	0.20	0.18	0.16	0.11	0.09	0.05	0.06
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.29	0.27	0.25	0.22	0.15	0.12	0.06	0.08
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	1.96	1.82	1.68	1.45	1.02	0.82	0.42	0.55
Delaware County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Denver-Boulder Area, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.30	0.27	0.25	0.21	0.14	0.12	0.05	0.06
Denver-Boulder-Greeley-Ft Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.48	0.44	0.40	0.35	0.23	0.19	0.09	0.11
Detroit Area, MI	CO (1971 8-hour)	Maintenance, --	100	0	-3.53	-3.31	-3.09	-2.71	-2.03	-1.57	-0.86	-1.20
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.74	-3.50	-3.27	-2.86	-2.14	-1.66	-0.91	-1.26
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	-2.65	-2.50	-2.34	-2.06	-1.58	-1.20	-0.68	-0.95
Dona Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Douglas, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duluth Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
East Chicago Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
East Kern County Area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.98	-0.92	-0.86	-0.75	-0.56	-0.44	-0.24	-0.33
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.01	0.01	0.00	0.01
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.07	-0.07	-0.06	-0.04	-0.03	-0.02	-0.03
Eugene-Springfield Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Fairbanks Area, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fort Collins Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Freehold Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Fresno Area, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.13	0.12	0.11	0.10	0.07	0.06	0.03	0.04
Grants Pass Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Great Falls Area, MT	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.39	0.37	0.34	0.29	0.21	0.17	0.08	0.11
Greeley Area, CO	CO (1971 8-hour)	Maintenance, --	100	0	0.07	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hancock County (Part) The city of Weirton, including Butler and Clay: Magisterial Districts, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.27	0.25	0.23	0.20	0.14	0.11	0.06	0.08
Hartford-New Britain-Middletown Area, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.27	0.25	0.23	0.20	0.14	0.11	0.06	0.08
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.46	0.41	0.37	0.31	0.18	0.16	0.06	0.06
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01
Imperial County; Imperial Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.98	-0.92	-0.86	-0.75	-0.56	-0.44	-0.24	-0.33
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Indianapolis Area, IN	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.12	0.12	0.11	0.09	0.07	0.05	0.03	0.04
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Jefferson County, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Jefferson County; (part), OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.97	-0.91	-0.85	-0.75	-0.56	-0.43	-0.24	-0.33
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Klamath County; Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Klamath Falls Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.21	0.19	0.18	0.16	0.11	0.09	0.04	0.06
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.25	0.23	0.22	0.19	0.13	0.11	0.05	0.07
La Porte County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Lake County; (part), IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe Nevada Area, NV	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore Area, CA	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Lancaster, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Lane County (part); Oakridge, OR	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.02
Las Vegas Area, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.50	0.46	0.43	0.37	0.26	0.21	0.11	0.14
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Lauderdale Co, AL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Laurel Area, MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Lemont, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.07	-0.07	-0.06	-0.06	-0.04	-0.03	-0.02	-0.03
Liberty-Clairton, PA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01
Longmont Area, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Lorain County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Los Angeles, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	100	0	-0.68	-0.67	-0.66	-0.61	-0.59	-0.39	-0.28	-0.44
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-4.43	-4.15	-3.88	-3.39	-2.54	-1.97	-1.08	-1.50
Los Angeles-South Coast Air Basin Area, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.68	-0.67	-0.66	-0.61	-0.59	-0.39	-0.28	-0.44
Los Angeles-South Coast Air Basin Area, CA	NO ₂ (1971 Annual)	Maintenance, --	100	0	-0.68	-0.67	-0.66	-0.61	-0.59	-0.39	-0.28	-0.44
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.68	-0.67	-0.66	-0.60	-0.59	-0.39	-0.28	-0.44
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.69	-0.68	-0.67	-0.61	-0.59	-0.39	-0.28	-0.44
Lowell Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Lucas County (part), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	-0.08	-0.07	-0.07	-0.06	-0.05	-0.04	-0.02	-0.03
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-5.53	-5.18	-4.84	-4.23	-3.16	-2.45	-1.34	-1.86
Manchester Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.96	0.89	0.82	0.71	0.50	0.40	0.20	0.27
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medford Area, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Memphis Area, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.16	0.15	0.14	0.12	0.08	0.07	0.03	0.04
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.24	0.22	0.20	0.18	0.12	0.10	0.05	0.06
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.31	0.29	0.27	0.23	0.16	0.13	0.07	0.09
Minneapolis-St. Paul Area, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.70	-0.67	-0.63	-0.56	-0.44	-0.33	-0.19	-0.28
Missoula Area, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Missoula county; Missoula and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Modesto Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Mono County; Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morenci, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Morristown Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Muhlenberg Co, KY	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine County; (part), IA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nashua Area, NH	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury Area, CT	CO (1971 8-hour)	Maintenance, --	100	0	0.21	0.19	0.18	0.16	0.11	0.09	0.04	0.06
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.08	0.08	0.07	0.05	0.04	0.02	0.03
New York, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, --	100	0	3.36	3.11	2.88	2.49	1.75	1.41	0.71	0.95
New York-N. New Jersey-Long Island Area, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	1.85	1.72	1.59	1.38	0.97	0.78	0.39	0.52
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	3.30	3.06	2.83	2.45	1.72	1.39	0.70	0.93
NJ portion of the Northeast Pennsylvania-Upper Delaware Valley Interstate AQCR: (part), NJ	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Nogales, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Oakridge, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ogden Area, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Ogden Area, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Olmsted County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Olmsted; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Penns Grove Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Peoria County: Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Perth Amboy Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Philadelphia-Camden County Area, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.07	0.06	0.05	0.03	0.03	0.01	0.01
Philadelphia-Wilmington, PA-NJ-DE	PM2.5 (2006 24-hour)	Maintenance, Moderate for PA and DE; Subject to Former Subpart 1 for NJ	100	0	0.98	0.90	0.83	0.72	0.50	0.41	0.20	0.27

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.38	1.27	1.18	1.02	0.71	0.58	0.29	0.38
Phoenix Area, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.92	0.85	0.79	0.68	0.48	0.39	0.20	0.26
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.97	0.90	0.83	0.72	0.50	0.41	0.21	0.27
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Pinal and Gila Counties; Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.08	0.07	0.07	0.06	0.04	0.03	0.02	0.02
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Pittsburgh Area, PA	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.51	0.47	0.43	0.38	0.26	0.21	0.11	0.14
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.46	0.43	0.40	0.34	0.24	0.20	0.10	0.13
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Portland Area: Portland Metro Service District Boundary, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.31	0.29	0.27	0.23	0.16	0.13	0.07	0.09
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.01
Provo Area, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Raleigh-Durham Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.45	0.41	0.38	0.33	0.23	0.19	0.09	0.13
Ramsey County; (part), MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.09	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Reno Area, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Rhineland, WI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.10	0.10	0.09	0.08	0.05	0.04	0.02	0.03
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Riverside, Los Angeles, Orange, and San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.69	-0.69	-0.68	-0.62	-0.60	-0.40	-0.29	-0.44
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.32	0.29	0.27	0.24	0.17	0.13	0.07	0.09
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.33	0.30	0.28	0.24	0.17	0.14	0.07	0.09
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.56	0.52	0.48	0.41	0.29	0.23	0.12	0.16
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.55	0.51	0.47	0.41	0.29	0.23	0.12	0.15
Salem Area, OR	CO (1971 8-hour)	Maintenance, --	100	0	0.06	0.06	0.05	0.05	0.03	0.03	0.01	0.02
Salt Lake City Area, UT	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	0.41	0.38	0.35	0.30	0.21	0.17	0.09	0.11
Salt Lake County, UT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.25	0.23	0.21	0.18	0.13	0.10	0.05	0.07
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.25	0.23	0.21	0.18	0.13	0.10	0.05	0.07

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
San Bernardino County (part); excluding Searles Valley Planning area and South Coast Air Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.11	0.10	0.09	0.08	0.06	0.05	0.02	0.03
San Diego Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.83	0.77	0.71	0.62	0.43	0.35	0.18	0.24
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.83	0.77	0.71	0.62	0.43	0.35	0.18	0.24
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.55	1.43	1.33	1.15	0.80	0.65	0.33	0.43
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.56	1.44	1.33	1.15	0.81	0.65	0.33	0.43
San Francisco-Oakland-San Jose Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.41	1.30	1.21	1.04	0.73	0.59	0.30	0.39
San Joaquin Valley Air Basin; Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare Counties, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.02	-0.03	-0.05	-0.02	-0.03	-0.05
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.01	-0.02	-0.03	-0.05	-0.02	-0.03	-0.05
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	100	0	-0.01	-0.01	-0.02	-0.03	-0.05	-0.03	-0.03	-0.05
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.02	-0.03	-0.05	-0.03	-0.03	-0.05
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Manuel, AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.06	0.06	0.06	0.05	0.03	0.03	0.01	0.02
Seattle-Tacoma Area, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.71	0.66	0.61	0.53	0.37	0.30	0.15	0.20
Seattle-Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.11	0.10	0.10	0.08	0.06	0.05	0.02	0.03

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Sheboygan County, WI	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County (part); excluding Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Somerville Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spokane Area, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.07	0.06	0.06	0.05	0.04	0.03	0.01	0.02
Spokane County; (part), WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Springfield Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.29	-0.27	-0.25	-0.22	-0.17	-0.13	-0.07	-0.10
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
St. Louis Area, MO	CO (1971 8-hour)	Maintenance, --	100	0	0.16	0.15	0.14	0.12	0.08	0.07	0.03	0.05
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-4.94	-4.63	-4.33	-3.79	-2.86	-2.21	-1.21	-1.69
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, --	100	0	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01
Stockton Area, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Syracuse Area; Onondaga County, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.11	0.10	0.09	0.08	0.06	0.05	0.02	0.03
Tazewell County; Groveland Twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toms River Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Tooele County (part), UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenton Area, NJ	CO (1971 8-hour)	Maintenance, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00
Tucson Area, AZ	CO (1971 8-hour)	Maintenance, --	100	0	0.23	0.22	0.20	0.17	0.12	0.10	0.05	0.07
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.11	-0.10	-0.09	-0.07	-0.05	-0.03	-0.04
Utah County, UT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.12	0.11	0.10	0.09	0.06	0.05	0.03	0.03
Vancouver Area: Clark County (part), WA	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.09	0.08	0.07	0.06	0.04	0.03	0.02	0.02
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waltham Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington Area, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.19	0.18	0.16	0.14	0.10	0.08	0.04	0.05
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.35	1.26	1.16	1.01	0.71	0.57	0.29	0.38
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02
Waterford Township (Washington County), OH	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^b	General Conformity Threshold ^c	Emission Reductions by Alternative (tons/year) ^a								
				Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, --	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Wayne County; (part), MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-3.81	-3.56	-3.33	-2.91	-2.18	-1.69	-0.92	-1.28
West Central Pinal County, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Williamson County, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Winston-Salem Area, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.09	0.08	0.07	0.05	0.04	0.02	0.03
Worcester Area, MA	CO (1971 8-hour)	Maintenance, --	100	0	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.01
Yakima Area, WA	CO (1971 8-hour)	Maintenance, --	100	0	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Yakima County; (part), WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
Yuma County; Yuma planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01

a. Reductions are shown as positive values. Negative values are emission increases. Values of less than 0.005 ton per year are rounded to zero.

b. Nonattainment or maintenance status as of 6/9/2017. Source: U.S. EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

c. Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

NAAQS = National Ambient Air Quality Standards; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide; CO = carbon monoxide; PM_{2.5} = particulate matter less than 2.5 microns in size; ppm = parts per million

APPENDIX B

Sources Identified in Public Comments

The list of scoping comment sources in Table B-1 is provided for information only. NHTSA has reviewed all comments received by the agency during the scoping process and considered all appropriate sources cited in developing the Draft EIS.

Table B-1. Sources Identified in Scoping Comments

Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0003	Samuel Brown	Yang, Z., and A. Bandivadekar. 2017. 2017 Global Update: Light-Duty Vehicle Greenhouse Gas and Fuel Economy Standards. The International Council on Clean Transportation. Available at: http://www.theicct.org/LDV-GHG-FE-standards-2017-global-update . (Accessed: November 20, 2017).	Examines how the greenhouse gas and fuel economy standards have changed over time and how the auto industry has reacted in different regions, compares characteristics of vehicle fleets in major markets, and estimates the policy impacts of fuel economy standards on transport greenhouse gas emission levels around the world.	No	No
NHTSA-2017-0069-0015	Rachel Morrison	American Council for an Energy-Efficient Economy. 2017. Automobiles & the Environment. <i>Greener Cars.org</i> . Available at: https://greenercars.org/why-buy-green/automobiles-environment . (Accessed: July 28, 2017).	Examines the various impacts automobiles have on the environment from cradle to grave.	No	No
NHTSA-2017-0069-0015	Rachel Morrison	Society, National Geographic. Buying Guide—Car Environmental Impact—National Geographic's Green Guide. <i>National Geographic</i> . N.p., n.d. Web. 28 July 2017. Available at: https://www.nationalgeographic.com/environment/green-guide/buying-guides/car/environmental-impact/ . (Accessed: November 20, 2017).	Describes the impacts cars have on the environment, including the environmental impacts production, fuel production, and transportation have on air quality.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0063	Laura Zurfluh	NJ.com. 2011. Lives lost: The New Jersey Victims of Hurricane Irene. Available at: http://www.nj.com/news/index.ssf/2011/09/nj_victims_of_hurricane_irene.html . (Accessed: November 20, 2017).	Discusses the impact of Hurricane Irene on New Jersey.	No	No
NHTSA-2017-0069-0063	Laura Zurfluh	NJ.com. 2012. Remembering New Jersey's 40 Victims of Hurricane Sandy. Available at: http://www.nj.com/news/index.ssf/2012/12/hurricane_sandy_victims_from_n.html . (Accessed: November 20, 2017).	Discusses the impact of Hurricane Sandy on New Jersey.	No	No
NHTSA-2017-0069-0063	Laura Zurfluh	World Resources Institute. 2012. Impacts of Hurricane Sandy and the Climate Change Connection. Available at: https://www.wri.org/sites/default/files/pdf/sandy_fact_sheet.pdf . (Accessed: November 20, 2017).	Highlights the historical magnitude of Hurricane Sandy and estimated losses.	No	No
NHTSA-2017-0069-0063	Laura Zurfluh	Climate Central. 2012. Hurricane Irene Ranked Most Costly Category 1 Storm. Available at: http://www.climatecentral.org/news/hurricane-irene-ranked-most-costly-category-1-storm . (Accessed: November 20, 2017).	Discusses the economic impact of Hurricane Irene.	No	No
NHTSA-2017-0069-0063	Laura Zurfluh	U.S. Department of Commerce. 2013. Economic Impact of Hurricane Sandy. Available at: https://www.esa.gov/sites/default/files/sandyfinal101713.pdf . (Accessed: November 20, 2017).	Discusses the economic impacts of Hurricane Sandy.	No	No
NHTSA-2017-0069-0063	Laura Zurfluh	Natural Resources Defense Council. 2017. U.S. Clean Energy Jobs Surpass Fossil Fuel Employment. Available at: https://www.nrdc.org/experts/lara-ettenson/us-clean-energy-jobs-surpass-fossil-fuel-employment . (Accessed: November 20, 2017).	Reports on jobs numbers in the clean energy industry.	No	No

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NHTSA-2017-0069-0063	Laura Zurfluh	Citizens' Climate Lobby. 2017. Carbon Fee and Dividend Policy and FAQs. Available at: https://citizensclimatelobby.org/carbon-fee-and-dividend/ . (Accessed: November 20, 2017).	Provides full text version of Citizens' Climate Lobby's preferred climate solution, known as Carbon Fee and Dividend.	No	No
NHTSA-2017-0069-0071	Jennifer Michael	Stewart, J. 2017. Mazda's Crafty New Engine Makes More Miles from Less Fuel. <i>Wired</i> . Available at: https://www.wired.com/story/mazda-injection-compression-skyactivx-engine/ . (Accessed: November 20, 2017).	Reports on Mazda's new engine technology.	No	No
NHTSA-2017-0069-0074	Esther Babson, American Security Project	American Security Project. 2011. ASP Welcomes the Corporate Average Fuel Economy (CAFE) Standards Announced Today. Available at: https://www.americansecurityproject.org/asp-welcomes-the-corporate-average-fuel-economy-cafe-standards-announced-today/ . (Accessed: November 20, 2017).	Discusses support for CAFE standards announced in 2011.	No	No
NHTSA-2017-0069-0077	Gina Oliver, American Chemistry Council	American Chemistry Council. 2014. Plastics and Polymer Composites for Automotive Markets Technology Roadmap. Available at: http://plastics-car.com/Tomorrows-Automobiles/Plastics-and-Polymer-Composites-Technology-Roadmap . (Accessed: November 20, 2017).	Synthesizes the findings from a 2001 report and sets a path forward for the plastics and polymer composites industry and automotive industry through 2030.	No	No
NHTSA-2017-0069-0077	Gina Oliver, American Chemistry Council	American Chemistry Council. 2016. Plastics and Polymer Composites in Light Vehicles Report, 2016. Available at: https://plastics-car.com/lightvehiclereport . (Accessed: November 20, 2017).	Presents the latest results of an assessment of the chemistry and other materials that make up light vehicles, a major end-use customer for American chemistry.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0077	Gina Oliver, American Chemistry Council	Brecher, A., J. Brewer, S. Summers, and S. Patel. Characterizing and Enhancing the Safety of Future Plastic and Composite Intensive Vehicles (PCIVs). Volpe National Transportation Systems Center National Highway Traffic Safety Administration. Available at: http://www-nrd.nhtsa.dot.gov/pdf/esv/esv21/09-0316.pdf . (Accessed: November 20, 2017).	Concentrates on safety-related research issues, assuming that other potential barriers to deployment of plastics and composites intensive vehicles (e.g., economic viability, manufacturability, sustainability) will be resolved.	No	No
NHTSA-2017-0069-0077	Gina Oliver, American Chemistry Council	National Highway Traffic Safety Administration. 2007. A Safety Roadmap for Future Plastics and Composites Intensive Vehicles (DOT HS 810 863). Available at: https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/810863.pdf . (Accessed: November 20, 2017).	Summarizes the approach, activities, and results of a study to evaluate the potential safety benefits of plastics and composites intensive vehicles to enable their deployment by 2020.	No	No
NHTSA-2017-0069-0077	Gina Oliver, American Chemistry Council	National Highway Traffic Safety Administration. 2012. Investigation of Opportunities for Lightweight Vehicles Using Advanced Plastics and Composites (DOT HS 811 692). Available at: https://www.nhtsa.gov/DOT/NHTSA/NVS/Crashworthiness/Plastics/811692.pdf . (Accessed: November 20, 2017).	Reviews the literature on the characteristics and mechanics of plastics and composites, the applicability of advanced plastics and composites to automotive components, and the capabilities and limitations of simulations to composite analysis.	No	No
NHTSA-2017-0069-0077	Gina Oliver, American Chemistry Council	National Highway Traffic Safety Administration. 2017. High Performance Computing Studies (DOT HS 812 404). Available at: https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812404_computingstudiesreport.pdf . (Accessed: November 20, 2017).	Investigates thermoplastic carbon fiber reinforced materials for vehicle sideframe structures, created requirements, and defined assessment strategies.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0083	Marguerite Moran	Cooper, M. 2017. Pocketbook Savings, Macroeconomic Growth and Other Public Benefits of Fuel Economy Standards: Benefit-Cost Analysis of Four Decades of Rules Shows They have Delivered Trillions of Dollars of Economic Value to Consumer and the Nation. <i>ConsumerFed</i> . Available at: http://consumerfed.org/wp-content/uploads/2017/07/benefits-of-fuel-economy-standards.pdf . (Accessed: November 20, 2017).	Analyzes the 40-year history of fuel economy standards and looks at the vehicles to which manufacturers have had a chance to make fuel economy improvements and those being totally revised in 2017, comparing the price and fuel efficiency of these vehicles with their 2011 counterparts (the year before the new standards were implemented).	No	No
NHTSA-2017-0069-0083	Marguerite Moran	Levy, J., J. J. Buonocore, and K. von Stackelberg. 2010. Evaluation of the Public Health Impacts of Traffic Congestion: A Health Risk Assessment. <i>NCBI</i> . Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2987789/ . (Accessed: November 20, 2017).	Evaluates the public health impacts of ambient exposures to fine particulate matter (PM2.5) concentrations associated with a business-as-usual scenario of predicted traffic congestion.	Yes	No
NHTSA-2017-0069-0085	Marguerite Moran	Consumers Union. 2017. Nearly 9 in 10 Americans Want Automakers to Raise Fuel Efficiency, According to Latest Consumers Union Survey. Available at: http://consumersunion.org/news/2017-fuel-economy-survey/ . (Accessed: November 20, 2017).	Describes the results of a national survey of Americans on whether or not they want increased fuel efficiency.	No	No
NHTSA-2017-0069-0086	Michael Geller, Manufacturers of Emission Controls Association	Automotive News. 2015. Delphi, GM Ready Advanced Cylinder Deactivation. Available at: http://www.autonews.com/article/20150915/OEM04/150919888/delphi-gm-ready-%20advanced-cylinder-deactivation . (Accessed: November 20, 2017).	Discusses the development of a new technology, Dynamic Skip Fire, which increases fuel efficiency for General Motors vehicles.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0086	Michael Geller, Manufacturers of Emission Controls Association	Martec. 2016. Diesel Engine Technology and the Midterm Evaluation: An Analysis of Compliance Costs and Benefits. Available at: https://www.martecgroup.com/wp-content/uploads/2016/05/The-Martec-Group-White-Paper-Diesel-Engine-Technology-and-the-Midterm-Evaluation-Summer-2016.pdf . (Accessed: November 20, 2017).	Provides updated cost/benefit analysis information for light-duty diesel cars and trucks during the 2016 Technical Assessment Report process.	No	No
NHTSA-2017-0069-0086	Michael Geller, Manufacturers of Emission Controls Association	California Air Resources Board. 2017. California's Advanced Clean Cars Midterm Review. Available at: https://www.arb.ca.gov/msprog/acc/mtr/acc_mtr_fin_alreport_full.pdf . (Accessed: November 20, 2017).	Discusses California Air Resources Board staff reviews specific to the California standards: the zero-emissions vehicle regulation, the 1-milligram-per-mile particulate matter emission standard, and a general review of the format of the greenhouse gas standards.	No	No
NHTSA-2017-0069-0087	Christopher Miller, Advanced Engine Systems Institute	World Weather Attribution. 2017. European Heat, June 2017. Available at: https://www.climatecentral.org/analyses/europe-heat-june-2017/ . (Accessed: November 20, 2017). (Link no longer active).	Provides an overview of weather in 2017 in Europe and assesses if human-caused climate change played a role in the weather experienced in June 2017.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	California Air Resources Board. 2015. Proposed Re-Adoption of the California Low Carbon Fuel Standard. Available at: http://www.arb.ca.gov/regact/2015/lcfs2015/lcf_s15isor.pdf (Link no longer active).	Unable to locate article.	No	No

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NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	U.S. Environmental Protection Agency. 2017. Overview of Greenhouse Gases. Available at: https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane . (Accessed: November 20, 2017).	Provides an overview of greenhouse gases and methane's involvement.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	U.S. Bureau of Economic Analysis. 2017. Auto and Truck Seasonal Adjustment. Available at: https://www.bea.gov/national/xls/gap_hist.xlsx . (Accessed: November 20, 2017).	Provides unit data on unadjusted and seasonally adjusted auto and truck sales.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	Kent, S. 2017. Shell Sees Future of 'Lower Forever' Oil Prices. Available at: http://www.marketwatch.com/story/shell-sees-future-of-lower-forever-oil-prices-2017-07-27 . (Accessed: November 20, 2017).	Discusses Shell Oil's prediction of permanently decreased oil prices and future declining demand.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	Oak Ridge National Laboratory. 2016. Transportation Energy Databook 2016. Available at: http://cta.ornl.gov/data/index.shtml . (Accessed: November 20, 2017).	Provides a compendium of data on transportation with an emphasis on energy.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	Couch, P. 2016. RNG in California: More Than You Think. Fleets and Fuels. Available at: http://www.fleetsandfuels.com/fuels/cng/2016/04/rng-in-california-more-than-you-think/ . (Accessed: November 20, 2017). (Link no longer active).	Discusses the amount of renewable natural gas in use in California.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	American Gas Foundation. 2011. The Potential for Renewable Gas: Biogas Derived from Biomass Feedstocks and Upgraded to Pipeline Quality. Available at: http://www.gasfoundation.org/researchstudies/agf-renewable-gas-assessment-report-110901.pdf . (Accessed: November 20, 2017).	Analyzes the overall impact of renewable gas on annual energy production, reduction in new carbon dioxide emissions, and job creation.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	Gladstein, Neandross and Associates. 2016. Game-Changer: Next Generation Heavy Duty Natural Gas Engines Fueled By Renewable Natural Gas. Available at: http://ngvgamechanger.com/pdfs/GameChanger_FullReport.pdf . (Accessed: November 20, 2017).	Explores the need—and approaches—to start deploying zero-emission and near-zero-emission heavy-duty vehicle technologies immediately on a wide-scale basis in the United States.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	National Petroleum Council. 2012. Renewable Natural Gas for Transportation: An Overview of the Feedstock Capacity, Economics, and GHG Emission Reduction Benefits of RNG as a Low-Carbon Fuel. Available at: http://www.npc.org/reports/FTF_Topic_papers/22-RNG.pdf . (Accessed: November 20, 2017).	Assesses the potential for renewable natural gas as a transportation fuel in terms of feedstock capacity, cost estimates, and lifecycle greenhouse gas emission reductions.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	Krauss, C. 2008. Surge in Natural Gas Has Utah Driving Cheaply. <i>The New York Times</i> . Available at: http://www.nytimes.com/2008/08/30/business/30gas cars.html . (Accessed: November 20, 2017).	Discusses the progress of Utah in obtaining consumer interest in the idea of running cars on clean natural gas.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	Raju, A. 2016. Renewable Natural Gas: Challenges and Opportunities. UC Riverside, Center for Renewable Natural Gas. Available at: http://www.cert.ucr.edu/research/rng/RNG_white_paper.pdf . (Accessed: November 20, 2017).	Provides an overview of the potential for, benefits of, and barriers to production of renewable natural gas in significant quantities.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	BCG Perspectives. 2014. A Realistic View of CNG Vehicles in the United States. Available at: https://www.bcgperspectives.com/content/articles/energy_environment_automotive_realistic_view_cng_vehicles_us/ . (Accessed: November 20, 2017).	Examines the benefits and shortcomings of the emerging market for natural-gas vehicles in the U.S.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	Ford Motor Company. 2015. Fuel Efficiency, Alternative Fuels and Sustainability Earn Ford F-150 2016 Green Truck of the Year Award. Available at: https://media.ford.com/content/fordmedia/fna/us/en/news/2015/11/19/ford-f-150-earns-2016-green-truck-of-the-year-award.html . (Accessed: November 20, 2017).	Provides a press release announcing Ford F-150 winning Green truck of the year award.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	Marks, J. F. 2012. CNG Vehicle Conversion Business is Booming for Oklahoma Company. <i>The Oklahoman</i> . Available at: http://newsok.com/article/3658028 . (Accessed: November 20, 2017).	Reports on compressed natural gas conversion business success in Oklahoma.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	Truett, R. 2015. Ram Will Expand Lineup CNG-Powered Trucks. Available at: http://www.autonews.com/article/20150304/OE M05/150309913/ram-will-expand-lineup-of-cng-powered-trucks . (Accessed: November 20, 2017).	Announces Fiat Chrysler's expansion of availability of compressed natural gas on its heavy-duty Dodge Ram pickups.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	Turkus, B. 2014. 2015 Chevy Silverado HD Gets CNG Option. Available at: http://www.autoblog.com/2014/02/06/2015-chevrolet-silverado-hd-cng-official/ . (Accessed: November 20, 2017).	Announces Chevrolet Silverado new bi-fuel conversion kit for 2500 HD and 3500 HD pickups.	No	No

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NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	U.S. Environmental Protection Agency. 2012. Certification and Compliance for Vehicles and Engines. Available at: https://www3.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm . (Accessed: November 20, 2017).	Provides compliance information to the vehicle and engine industry about certifying vehicles and engines through EPA, including paying fees and reporting to ensure compliance.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	Westport Innovations. 2015. Methane: The Performance Fuel. Available at: https://cleancities.energy.gov/files/u/news_events/document/document_url/128/Brad_Douville___Westport_NGVTf_.pdf . (Accessed: November 20, 2017).	Discusses the innovation of natural-gas vehicles and natural gas' comparative benefits to other vehicles types and the policy conditions necessary for its market success.	No	No
NHTSA-2017-0069-0091	Robert Atkinson, VNG.co LLC	U.S. Environmental Protection Agency. 2014. Renewable Fuel Pathways II Final Rule to Identify Additional Fuel Pathways under Renewable Fuel Standard Program Documents. Available at: https://www.epa.gov/renewable-fuel-standard-program/renewable-fuel-pathways-ii-final-rule-identify-additional-fuel . (Accessed: November 20, 2017).	Describes EPA's evaluation of biofuels derived from biogas fuel pathways under the Renewable Fuel Standard Program.	No	No
NHTSA-2017-0069-0094	Constance Voget	Natural Resources Defense Council. 2017. Supplying Ingenuity II: U.S. Suppliers of Key Clean, Fuel-Efficient Vehicle Technologies. Available at: https://www.nrdc.org/sites/default/files/supplying-ingenuity-clean-vehicle-technologies-report.pdf . (Accessed: November 20, 2017).	Discusses the U.S. automotive industry's success in creating jobs, profitability, pollution reduction, energy security, and costs saved to consumers. Gives policy recommendations for continuing this success.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0096	Brad Couch	National Renewable Energy Laboratory. 2016. Emissions Associated with Electric Vehicle Charging: Impact of Electricity Generation Mix, Charging Infrastructure Availability, and Vehicle Type. Available at: https://www.afdc.energy.gov/uploads/publication/ev_emissions_impact.pdf . (Accessed: November 20, 2017).	Analyzes anticipated emissions resulting from both battery electric and plug-in hybrid electric vehicles for four charging scenarios and five electricity grid profiles.	No	No
NHTSA-2017-0069-0098	Philip Bender	National Aeronautics and Space Administration. 2017. Climate Change: How Do We Know? Available at: https://climate.nasa.gov/evidence/ . (Accessed: November 20, 2017).	Provides various sources of evidence to prove existence of climate change.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Bowman, C., and A. Husain. 2004. Forecasting Commodity Prices: Futures Versus Judgment. IMF Working Paper. Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.165.6075&rep=rep1&type=pdf . (Accessed: November 20, 2017). (Link no longer active).	Assesses the performance of three types of commodity price forecasts—those based on judgment, those relying exclusively on historical price data, and those incorporating prices implied by commodity futures.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Baum, A. 2017. What's Driving the U.S. Auto Industry's Financial Performance? Ceres. Available at: https://www.ceres.org/sites/default/files/reports/2017-08/Ceres%20Analysis%208_10.pdf . (Accessed: November 20, 2017).	Examines the auto industry's financial performance, including the effect of the CAFE standards.	No	No

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NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	BlueGreen Alliance. 2017. Improving Vehicle Fuel Economy to Create 570,000 U.S. Jobs. Available at: https://www.bluegreenalliance.org/the-latest/improving-vehicle-fuel-economy-to-create-570000-u-s-jobs/ . (Accessed: November 20, 2017).	Provides a projection of the number of jobs created by 2030 because of the vehicle fuel economy standards proposed under the Obama administration.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Board of Governors of the Federal Reserve System. 2016. Report on the Economic Well-Being of U.S. Households in 2015. Available at: https://www.federalreserve.gov/2015-report-economic-well-being-us-households-201605.pdf . (Accessed: November 20, 2017).	Provides the results of a survey on the overall wellbeing of individual consumers, income and savings behaviors, economic preparedness, access to banking and credit, housing decisions, car purchases and auto lending, education and human capital, student loans, and retirement planning.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Ceres. 2011. More Jobs Per Gallon: How Strong Fuel Economy/GHG Standards will Fuel American Jobs. Available at: https://www.ceres.org/resources/reports/more-jobs-gallon-how-strong-fuel-economyghg-standards-will-fuel-american-jobs . (Accessed: November 20, 2017).	Discusses the economic impacts of strengthening fuel economy and greenhouse gas emission standards for passenger vehicles sold in the United States.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Ceres. 2016. Affordability of Vehicles Under the Current National Program in 2022–2025 for Detroit Three Automakers. Available at: https://www.ceres.org/resources/reports/affordability-vehicles-under-current-national-program-2022-2025-detroit-three . (Accessed: November 20, 2017).	Addresses the affordability and effects of 2022–2025 fuel economy regulations.	No	No

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NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Consumers Union. 2016. Investigation of Relationship between Fuel Economy and Owner Satisfaction. Available at: http://consumersunion.org/wp-content/uploads/2016/06/CU-MPG-Satisfaction-report-final.pdf . (Accessed: November 20, 2017).	Examines the association between several vehicle attributes—fuel economy, acceleration, horsepower, reliability, and price—and owner satisfaction. Finds a strong positive correlation between owner satisfaction and fuel economy.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Consumers Union. 2017. More Mileage for Your Money: Fuel Economy Increases While Vehicle Prices Remain Stable. Available at: http://consumersunion.org/wp-content/uploads/2017/03/Synapse-CU-Affordability-Report-3-15-corrected-1.pdf . (Accessed: November 20, 2017).	Discusses how car buyers are paying less for higher fuel economy in their vehicles.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	General Motors. 2017. SEC Filings. Available at: http://www.gm.com/investors/sec-filings.html . (Accessed: November 20, 2017).	Provides all of filings submitted by General Motors to the U.S. Securities and Exchange Commission.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Greene, D., and J. Welch. 2016. The Impact of Increased Fuel Economy for Light-Duty Vehicles on the Distribution of Income in the United States. Prepared for Oak Ridge National Laboratory. Available at: http://bakercenter.utk.edu/wp-content/uploads/2016/09/Equity-Impacts-of-Fuel-Economy-Report_final.pdf . (Accessed: November 20, 2017).	Analyzes the effects of increased fuel economy on households' expenditures on fuel and vehicles over the past four decades and quantifies the impacts by income quintile.	No	No

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NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	International Council on Clean Transportation. 2017. Consumer Benefits of Increased Efficiency in 2025–2030 Light-Duty Vehicles in the U.S. Available at: http://www.theicct.org/sites/default/files/publications/US-LDV-Efficiency-Consumer-Benefits_ICCT_Briefing_21062017_vF.pdf . (Accessed: November 20, 2017).	Outlines the consumer benefits of increases in the efficiency of light-duty vehicles to meet the 2025 U.S. standards, as well as a hypothetical extension of the standards through 2030.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Parkin, R., R. Wilk, E. Hirsh, and A. Singh. 2017. 2017 Automotive Trends. <i>Strategy&</i> . Available at: https://www.strategyand.pwc.com/trend/2017-automotive-industry-trends . (Accessed: November 20, 2017).	Reports that total shareholder return and return on invested capital are both declining in the global auto industry and gives policy and technology recommendations.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Snyder, J. 2017. Crossovers and SUVs Fatten Profit Margins. <i>Automotive News</i> . Available at: http://www.autonews.com/article/20170724/RETAIL01/170729911/crossovers-suvs-fatten-profit-margins . (Accessed: November 20, 2017).	Demonstrates that the average transaction price for SUVs and crossovers is higher than other vehicle types.	No	No
NHTSA-2017-0069-0104	Consumers Union, Shannon Baker-Branstetter	Strohm, M. 2017. September Car Loans Remain Surprisingly Cheap. Available at: http://www.interest.com/car-loans/news/car-loans/ . (Accessed: November 20, 2017).	Provides overview of car loan rates from different lenders for the month of October.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	U.S. Bureau of Labor Statistics. 2017. Consumer Expenditure Survey. Available at: https://www.bls.gov/cex/ . (Accessed: November 20, 2017).	Provides data on expenditures, income, and demographic characteristics of consumers in the United States.	No	No

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NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Union of Concerned Scientists. 2007. Creating Jobs, Saving Energy, and Protecting the Environment. Available at: http://www.ucsusa.org/sites/default/files/legacy/assets/documents/clean_vehicles/fueleconomyjobs.pdf . (Accessed: November 20, 2017).	Analyzes the potential benefits of investing in efficient cars and trucks.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Stone, D., and M. Hamilton. 2017. Fuel Economy Improvements are Projected to Reduce Future Gasoline Use. Available at: https://www.eia.gov/todayinenergy/detail.php?id=31332 . (Accessed: November 20, 2017).	Projects a decline in light-duty vehicle energy use between 2018 and 2040 as improvements in fuel economy more than offset increases in light-duty vehicle miles.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	U.S. Energy Information Administration. 2012. Annual Energy Outlook 2012. Available at: https://www.eia.gov/outlooks/aeo/pdf/0383(2012).pdf . (Accessed: November 20, 2017).	Presents long-term projections of energy supply, demand, and prices through 2035, based on results from Energy Information Administration's National Energy Modeling System.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	U.S. Energy Information Administration. 2017. Annual Energy Outlook 2017. Available at: https://www.eia.gov/outlooks/aeo/pdf/0383(2017).pdf . (Accessed: November 20, 2017).	Provides modeled projections of domestic energy markets through 2050, and includes cases with different assumptions of macroeconomic growth, world oil prices, technological progress, and energy policies.	No	No

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NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	U.S. Energy Information Administration. 2017. Oil: Crude and Petroleum Products Explained. Available at: https://www.eia.gov/energyexplained/index.cfm?page=oil_home#tab3 . (Accessed: November 20, 2017).	Provides preliminary data for the United States for 2016 on oil and petroleum product supply, consumption, pricing, and more.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	U.S. Energy Information Administration. 2017. Petroleum & Other Liquids. Available at: https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMM_EPMR_PTE_NUS_DPG&f=M . (Accessed: November 20, 2017).	Provides U.S. retail price of all formulations of gasoline from 1992 to 2016.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	U.S. Energy Information Administration. 2017. Short-Term Energy Outlook. Available at: https://www.eia.gov/outlooks/steo/report/us_oil.cfm . (Accessed: November 20, 2017).	Provides graphs, tables, and bullet points related to petroleum prices, production, consumption, and reserves.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Edmunds. 2017. Used Vehicle Market Report. Available at: https://dealers.edmunds.com/static/assets/articles/2017_Feb_Used_Market_Report.pdf . (Accessed: November 20, 2017).	Reports on sales in used vehicle market and their increase. Shows that the volume of certified pre-owned sales is high, and the price of used vehicles is at its highest in recorded history.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Ford Motor Company. 2017. New Ford F-150: Most Advanced F-150 Powertrain Lineup Ever Enables Best- In-Class Payload, Towing and Gas Mileage. Available at: https://media.ford.com/content/fordmedia/fna/ca/en/news/2017/08/09/new-ford-f150-most-advanced-powertrain-lineup-ever.pdf . (Accessed: November 20, 2017).	Announces the various benefits and technical specifications of the newest Ford F-150 vehicle model.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Infiniti USA. 2016. Infiniti VC-Turbo Engine. Available at: https://www.infinitiusa.com/now/technology/vc-turbo-engine . (Accessed: November 20, 2017).	Announces INFINITI's new Variable Compression Turbo (VC-Turbo) as the world's first production-ready variable compression ratio engine.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	International Council on Clean Transportation. 2016. Lightweighting Technology Development and Trends in U.S. Passenger Vehicles. Available at: http://www.theicct.org/sites/default/files/publications/ICCT_PVtech_lightweighting_wp2016-25.pdf . (Accessed: November 20, 2017).	Analyzes lightweighting (mass reduction) developments and trends in passenger vehicle design and technology.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	International Council on Clean Transportation. 2017. Efficiency Technology And Cost Assessment For U.S. 2025–2030 Light-Duty Vehicles. Available at: http://theicct.org/sites/default/files/publications/US-LDV-tech-potential_ICCT_white-paper_22032017.pdf . (Accessed: November 20, 2017).	Analyzes emerging vehicle efficiency technologies, their ability to achieve lower emission levels, and their costs in the 2025–2030 period.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Mazda. 2017. Mazda Announces Long-Term Vision for Technology Development, Sustainable Zoom-Zoom 2030. Available at: https://insidemazda.mazdausa.com/press-release/mazda-announces-long-term-vision-technology-development-sustainable-zoom-zoom-2030/ . (Accessed: November 20, 2017).	Announces Mazda's "Sustainable Zoom-Zoom 2030" long-term vision for technology development, which includes the release of their next-generation engine SKYACTIV-X, the world's first commercial gasoline engine to use compression ignition.	No	No

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NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	The National Academies. 2015. Cost, Effectiveness, and Deployment of Fuel Economy Technologies for Light-Duty Vehicles. Available at: https://www.nap.edu/read/21744/chapter/1 . (Accessed: November 20, 2017).	Reports on the cost, effectiveness, and deployment by the end of the next decade of new light-duty vehicles.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy. 2014. Lightweight Materials for Cars and Trucks. Available at: https://energy.gov/eere/vehicles/lightweight-materials-cars-and-trucks . (Accessed: November 20, 2017).	Provides information on the U.S. Department of Energy Vehicle Technologies Office's work on lightweight materials for cars and trucks.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Nadel, S. 2012. The Rebound Effect: Large or Small? American Council for an Energy-Efficient Economy. Available at: http://aceee.org/sites/default/files/pdf/white-paper/rebound-large-and-small.pdf . (Accessed: November 20, 2017).	Summarizes what is known and unknown about how large the rebound effect (i.e., people increase their use of products and facilities as a result of reduction in operating costs, thereby reducing energy savings achieved) is.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Pew Environment Group. 2011. History of Fuel Economy. Available at: http://www.pewtrusts.org/~media/assets/2011/04/history-of-fuel-economy-clean-energy-factsheet.pdf . (Accessed: November 20, 2017).	Provides a historical review of fuel economy from the 1970s to 2010.	No	No

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NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	Union of Concerned Scientists. 2015. Tomorrow's Clean Vehicles, Today. Available at: http://www.ucsusa.org/sites/default/files/attach/2015/05/tomorrows-vehicles-today.pdf . (Accessed: November 20, 2017).	Discusses how investments in fuel-efficiency technologies are allowing manufacturers to meet the regulatory targets for the 2012–2025 passenger vehicle fuel economy and global warming emissions standards.	No	No
NHTSA-2017-0069-0104	Shannon Baker-Branstetter, Consumers Union	National Highway Traffic Safety Administration. 2016. Relationships between Fatality Risk, Mass, and Footprint in Model Years 2003–2010 Passenger Cars and LTVs. No. NHTSA-2016-0068. Available at: https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/2016-prelim-relationship-fatalityrisk-mass-footprint-2003-10.pdf . (Accessed: November 20, 2017).	Details National Highway Traffic Safety Administration research supporting the development of potential safety impacts from the CAFE standards rulemaking.	No	No
NHTSA-2017-0069-0107	Alexander Bond, Edison Electric Institute	Electric Power Research Institute and Natural Resources Defense Council. 2015. Environmental Assessment of a Full Electric Transportation Portfolio. Available at: https://www.epri.com/#/pages/product/3002006881/ . (Accessed: November 20, 2017).	Provides in-depth analysis of the environmental impact of electrifying a range of vehicles, including U.S. light-duty and medium-duty transportation and industrial equipment such as forklifts.	No	No
NHTSA-2017-0069-0109	Jill Leukhardt	Baltimore City Health Department. 2017. Asthma. Available at: https://health.baltimorecity.gov/health-resources-topic/asthma . (Accessed: November 20, 2017).	Provides overview of incidence rate of asthma in Baltimore, as well as medical advice for individuals with asthma.	No	No

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NHTSA-2017-0069-0109	Jill Leukhardt	BlueGreen Alliance. 2011. Gearing Up: Smart Standards Create Good Jobs Building Cleaner Cars. Available at: https://www.bluegreenalliance.org/resources/gearing-up/ . (Accessed: November 20, 2017).	Analyzes the macroeconomic impacts of the proposed standards with particular attention to the net gain in U.S. employment.	No	No
NHTSA-2017-0069-0109	Jill Leukhardt	Union of Concerned Scientists. 2017. A Brief History of U.S. Fuel Efficiency Standards. Available at: http://www.ucsusa.org/clean-vehicles/fuel-efficiency/fuel-economy-basics.html#.WaBWS_iGNdg . (Accessed: November 20, 2017).	Provides an overview of U.S. Fuel Economy Standards, their implementation, projected future, and anticipated benefits.	No	No
NHTSA-2017-0069-0111	Curt Wells, Aluminum Association	Ducker Worldwide. 2017. Aluminum Content in North American Light Vehicles 2016 to 2028. Available at: http://www.drivealuminum.org/wp-content/uploads/2017/10/Ducker-Public_FINAL.pdf . (Accessed: November 20, 2017).	Details how over the next decade, automakers will continue to increase the adoption of high-strength, low-weight aluminum in new car and truck construction.	No	No
NHTSA-2017-0069-0111	Curt Wells, Aluminum Association	Ford Motor Company. 2016. Ford Recycles Enough Aluminum to Build 30,000 F-150 Bodies Every Month. Available at: https://media.ford.com/content/fordmedia/fna/us/en/news/2016/04/22/ford-recycles-enough-aluminum-to-build-30000-f150-bodies.html . (Accessed: November 20, 2017).	Reports on the environmental benefits of Ford's aluminum-alloy scrap used to produce the vehicle bodies of the Ford F-150.	No	No
NHTSA-2017-0069-0111	Curt Wells, Aluminum Association	Isidore, C. 2017. Aluminum Advantages: Safety. <i>DriveAluminum</i> . Available at: http://www.drivealuminum.org/aluminum-advantages/safety/ . (Accessed: November 20, 2017).	Discusses the safety advantages of aluminum-based motor vehicles, specifically impact absorption, and ability to support a larger, yet lightweight, frame.	No	No

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NHTSA-2017-0069-0111	Curt Wells, Aluminum Association	John Dunham and Associates. 2017. The Potential Economic Benefits from Substituting Aluminum for Steel In Automotive Bodies.	Unable to locate article.	No	No
NHTSA-2017-0069-0111	Curt Wells, Aluminum Association	Magna/Ford. 2015. MMLV Life Cycle Assessment. Available at: https://www.researchgate.net/publication/282939668_MMLV_Life_Cycle_Assessment . (Accessed: November 20, 2017).	Communicates the results of a life cycle assessment study which compares the lightweight auto parts of the new multi-material lightweight Mach-I (1.0l I3) vehicle design to the conventional auto parts of the baseline 2013 Ford Fusion (1.6l I4).	No	No
NHTSA-2017-0069-0111	Curt Wells, Aluminum Association	Oak Ridge National Laboratory. 2014. Life Cycle Assessment – Energy and CO2 Impacts of Aluminum Intensive Vehicles. Available at: http://drivealuminum.wpengine.com/wp-content/uploads/2016/06/OakRidgeLCAFinal_2014.pdf . (Accessed: November 20, 2017).	Finds that reducing vehicle weight with aluminum can result in the lowest total vehicle life cycle environmental impact—cradle-to-grave—as compared to both traditional and advanced steels.	No	No
NHTSA-2017-0069-0111	Curt Wells, Aluminum Association	Ricardo Incorporated. 2008. Impact of Vehicle Weight Reduction on Fuel Economy for Various Vehicle Architectures. Available at: https://www.h3xed.com/blogmedia/Ricardo_FE_MPG_Study.pdf . (Accessed: November 20, 2017).	Presents research on how vehicle-weight-reduction measures affect fuel economy for different vehicle types.	No	No

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NHTSA-2017-0069-0111	Curt Wells, Aluminum Association	Ricardo Incorporated. 2009. Impact of Vehicle Weight Reduction on Fuel Economy for Various Vehicle Architectures. Available at: http://www.drivealuminum.org/research-resources/ricardo-electric-vehicle-component-sizing-vs-vehicle-structural-weight-report/ . (Accessed: November 20, 2017).	Evaluates the impact of vehicle structural weight reduction on electric vehicle powertrain component size for various operating range targets.	No	No
NHTSA-2017-0069-0111	Aluminum Association, Curt Wells	The Aluminum Association. 2015. Aluminum Industry Equipped to Meet Auto Body Sheet Demand Increases, White Paper	Unable to locate article.	No	No
NHTSA-2017-0069-0111	Aluminum Association, Curt Wells	The Aluminum Association. 2016. New Economic Impact Study Shows Continued Strength of Domestic Aluminum Industry. Available at: http://aluminum.org/news/new-economic-impact-study-shows-continued-strength-domestic-aluminum-industry . (Accessed: November 20, 2017).	Summarizes a report showing the domestic aluminum industry employment and monetary contribution to the national economy.	No	No
NHTSA-2017-0069-0111	Curt Wells, Aluminum Association	Worcester Polytechnic Institute. 2016. Automotive Aluminum Recycling at End-of-Life: A Gate to Grave Analysis. Available at: http://www.drivealuminum.org/wp-content/uploads/2016/06/Final-Report-Automotive-Aluminum-Recycling-at-End-of-Life-A-Grave-to-Gate-Analysis.pdf . (Accessed: November 20, 2017).	Provides a quantitative analysis of the fate of automotive aluminum at the end of its service life.	No	No
NHTSA-2017-0069-0112	Jeff Gerlach, Securing America's Future Energy	Greenblatt, J., and S. Saxena. 2015. Autonomous Taxis Could Greatly Reduce Greenhouse-Gas Emissions of US Light-Duty Vehicles. <i>Nature Climate Change</i> . Available at: https://www.nature.com/nclimate/journal/v5/n9/full/nclimate2685.html#access . (Accessed: November 20, 2017).	Estimates 2014 and 2030 greenhouse gas emissions and costs of autonomous taxis.	Yes	No

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NHTSA-2017-0069-0112	Jeff Gerlach, Securing America's Future Energy	Liu, J., K. M. Kockelman, and A. Nichols. 2016. Anticipating the Emissions Impacts of Smoother Driving by Connected and Autonomous Vehicles, Using the MOVES Model. Available at: http://www.cae.utexas.edu/prof/kockelman/public_html/TRB17CAVEmissions.pdf . (Accessed: November 20, 2017).	Uses EPA driving cycles and Austin-specific driving schedules to reflect national, trip-based and local, link-based driving behaviors.	No	No
NHTSA-2017-0069-0112	Jeff Gerlach, Securing America's Future Energy	Brown, A., J. Gonder, and B. Repac. 2014. An Analysis of Possible Energy Impacts of Automated Vehicle. <i>Road Vehicle Automation</i> . Available at: https://link.springer.com/chapter/10.1007/978-3-319-05990-7_13 . (Accessed: November 20, 2017).	Estimates effects of vehicle automation on fuel efficiency.	Yes	No
NHTSA-2017-0069-0112	Jeff Gerlach, Securing America's Future Energy	Greene, D. L., R. S. Lee, and J. L. Hopson. 2013. OPEC and the Costs to the U.S. Economy of Oil Dependence: 1970–2010. White Paper 1-13. Available at: http://bakercenter.utk.edu/wp-content/uploads/2013/02/OilDependenceCosts2010-New-Cover021413.pdf . (Accessed: November 20, 2017).	Analyzes past estimates that showed that oil dependence costs reached a peak of about \$350 billion in 1980 and 1981.	No	No
NHTSA-2017-0069-0112	Jeff Gerlach, Securing America's Future Energy	Securing America's Future Energy. 2016. A National Strategy for Energy Security. Available at: http://secureenergy.org/wp-content/uploads/2016/06/SAFE-National-Strategy-for-Energy-Security-2016.pdf . (Accessed: November 20, 2017).	Offers policy recommendations that respond to the unfree nature of the global oil market and position our country's transportation sector for a timely and significant shift away from petroleum fuels, especially through the effective deployment of driverless cars.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0112	Jeff Gerlach, Securing America's Future Energy	U.S. Energy Information Administration. 2017. World Oil Transit Chokepoints. Available at: https://www.eia.gov/beta/international/analysis_includes/special_topics/World_Oil_Transit_Chokepoints/wotc.pdf . (Accessed: November 20, 2017).	Highlights seven chokepoints and argues that disruptions to these routes could affect oil prices and add thousands of miles of transit in alternative routes.	No	No
NHTSA-2017-0069-0112	Jeff Gerlach, Securing America's Future Energy	Mackenzie, D., Z. Wadud, and P. Leiby. 2016. Help or Hindrance? The Travel, Energy and Carbon Impact of Highly Automated Vehicles. <i>Transportation Research Part A: Policy and Practice</i> 86:1-18. Available at: https://ac.els-cdn.com/S0965856415002694/1-s2.0-S0965856415002694-main.pdf?_tid=6ab8e592-b570-11e7-abbb-00000aacb360&acdnat=1508488189_58b40436df17d949c6290e473ee43903 . (Accessed: November 20, 2017).	Identifies specific mechanisms through which vehicle automation may affect travel and energy demand and resulting greenhouse gas emissions.	Yes	No
NHTSA-2017-0069-0112	Jeff Gerlach, Securing America's Future Energy	Samaras, C., and A. Mersky. 2016. Fuel economy testing of autonomous vehicles. <i>Transportation Research Part C: Emerging Technologies</i> 65:31-48 Available at: http://www.sciencedirect.com/science/article/pii/S0968090X16000024 . (Accessed: November 20, 2017).	Develops a method to incorporate the impacts of autonomous vehicle technology within the bounds of current fuel economy tests, and simulates a range of automated following drive cycles to estimate changes in fuel economy.	Yes	No

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NHTSA-2017-0069-0113	Devin O'Connor, National Coalition for Advanced Transportation	Kim, H., C. S. Lee, S. D. Yu, J. S. Lee, J. Y. Chang, J. M. Jeon, H. R. Son, C. J. Park, D. C. Shin, and Y. W. Lim. 2015. Near-road exposure and impact of air pollution on allergic diseases in elementary school children: A cross-sectional study. <i>Yonsei Medical Journal</i> 57(3): 698–713. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4800361/ . (Accessed: November 20, 2017).	Classifies schools based on traffic pollutants and their complex sources in order to assess the environment, to determine the state of allergic diseases among students using the International Study of Asthma and Allergies in children questionnaire, and to assess their connection to air pollutants.	Yes	No
NHTSA-2017-0069-0113	Devin O'Connor, National Coalition for Advanced Transportation	U.S. Environmental Protection Agency. 2015. Best Practices for Reducing Near-Road Pollution Exposure at Schools. Available at: https://www.epa.gov/sites/production/files/2015-10/documents/ochp_2015_near_road_pollution_booklet_v16_508.pdf . (Accessed: November 20, 2017).	Provides strategies for reducing traffic-related pollution exposure at schools located downwind from heavily traveled roadways (such as highways), along corridors with significant trucking traffic, or near other traffic or vehicular pollution sources.	No	No
NHTSA-2017-0069-0113	Devin O'Connor, National Coalition for Advanced Transportation	International Energy Agency. 2017. Global EV Outlook 2017. Available at: https://www.iea.org/publications/freepublications/publication/GlobalEVOutlook2017.pdf . (Accessed: November 20, 2017).	Covers the elements of electric vehicle deployment—market evolution, policy support, vehicle stock, and progress toward deployment targets.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0113	Devin O'Connor, National Coalition for Advanced Transportation	Ewing, J. 2017. Volvo, Betting on Electric, Moves to Phase Out Conventional Engines. <i>The New York Times</i> . Available at: https://www.nytimes.com/2017/07/05/business/energy-environment/volvo-hybrid-electric-car.html . (Accessed: November 20, 2017).	Reports on Volvo Cars' announcement that in 2018 all models it introduces will be either hybrids or powered solely by batteries and discusses implications for other carmakers and the surrounding policy environment.	No	No
NHTSA-2017-0069-0113	Devin O'Connor, National Coalition for Advanced Transportation	Lambert, F. 2017. VW Confirms Two New Upcoming Electric Cars for US Market: I.D. Lounge and I.D. AEROe. <i>Electrek</i> . Available at: https://electrek.co/2017/06/26/vw-electric-cars-i-d-lounge-and-i-d-aeroe/ . (Accessed: November 20, 2017).	Reports on Volkswagen's release of two all-electric vehicles as part of its series of new I.D. concepts that will serve as the basis of its new electric car strategy.	No	No
NHTSA-2017-0069-0113	Devin O'Connor, National Coalition for Advanced Transportation	McKinsey & Company. 2016. An Integrated Perspective on the Future of Mobility. Available at: https://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/an-integrated-perspective-on-the-future-of-mobility . (Accessed: November 20, 2017).	Outlines a number of social, economic, and technological trends that will work together to disrupt mobility, potentially creating three new urban models by 2030.	No	No
NHTSA-2017-0069-0113	Devin O'Connor, National Coalition for Advanced Transportation	Rapier, R. 2017. U.S. Electric Vehicle Sales Soared in 2016. <i>Forbes</i> . Available at: https://www.forbes.com/sites/rrapier/2017/02/05/u-s-electric-vehicle-sales-soared-in-2016/#191002c4217f . (Accessed: November 20, 2017).	Discusses the jump in electric vehicles sales from 2015 and 2016 and the implications for future crude oil demand.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0113	Devin O'Connor, National Coalition for Advanced Transportation	U.S. Department of Energy. 2016. At a Glance: Electric-Drive Vehicles. Available at: https://www.afdc.energy.gov/uploads/publication/electric-drive_vehicles.pdf . (Accessed: November 20, 2017).	Provides information on the basics of owning and operating electric-drive vehicles and discusses the costs, benefits, and differences compared to gasoline-powered vehicles.	No	No
NHTSA-2017-0069-0113	Devin O'Connor, National Coalition for Advanced Transportation	U.S. Department of Energy. 2016. Revolution...Now, The Future Arrives for Five Clean Energy Technologies - 2016 Update. Available at: https://energy.gov/sites/prod/files/2016/09/f33/Revolutiona%CC%82%E2%82%ACNow%202016%20Report_2.pdf . (Accessed: November 20, 2017).	Updates the 2015 report to highlight additional technologies—hydrogen fuel cells, smart energy management, grid connected batteries, and big area additive manufacturing.	No	No
NHTSA-2017-0069-0113	Devin O'Connor, National Coalition for Advanced Transportation	California Air Resources Board. 2017. Advanced Clean Cars Midterm Review. Available at: https://www.arb.ca.gov/msprog/acc/mtr/res17-3.pdf . (Accessed: November 20, 2017).	Provides technical analysis for the midterm review of the adopted low-emission vehicle III greenhouse gas and particulate matter emission standards and zero-emission vehicle requirements.	No	No
NHTSA-2017-0069-0118	Paul Rothman	U.S. Environmental Protection Agency. 2017. Sources of Greenhouse Gas Emissions. Available at: https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#transportation . (Accessed: November 20, 2017).	Provides information on the transportation sector's contribution to U.S. greenhouse gases and strategies to reduce this amount.	No	No

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NHTSA-2017-0069-0119	Steven Lins, Sacramento Municipal Utility District	Bloomberg New Energy Finance. 2017. Electric Cars to Reach Price Parity by 2025. Available at: https://about.bnef.com/blog/electric-cars-reach-price-parity-2025/ . (Accessed: November 20, 2017).	Presents information on the cost of electric vehicles in the future compared to comparable internal combustion engine vehicles.	No	No
NHTSA-2017-0069-0122	Vishnu Laalitha Surapaneni	Brook, R. 2007. Why physicians who treat hypertension should know more about air pollution. <i>Journal of Clinical Hypertension</i> 9(8):629–635. doi: 10.1111/j.1524-6175.2007.07187.x. Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1524-6175.2007.07187.x/full . (Accessed: November 20, 2017).	Demonstrates how exposure to ambient levels of particulate matter air pollution increases the risk of a host of cardiovascular diseases and events.	Yes	No
NHTSA-2017-0069-0122	Vishnu Laalitha Surapaneni	Byrd, J. B., M. Morishita, R. L. Bard, R. Das, L. Wang, Z. Sun, C. Spino, J. Harkema, J. T. Dvonch, S. Rajagopalan, and R. D. Brook. 2015. Acute increase in blood pressure during inhalation of coarse particulate matter air pollution from an urban location. <i>Journal of the American Society of Hypertension</i> 10(2):133–139. doi: 10.1016/j.jash.2015.11.015 Available at: http://www.sciencedirect.com/science/article/pii/S1933171115007998 . (Accessed: November 20, 2017).	Evaluates the impact of coarse particulate matter differing in size (2.5–10 micrometers), sources, and chemistry, as a risk factor for cardiovascular mortality.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017- 0069-0122	Vishnu Laalitha Surapaneni	Cakmak, S., R. Dales, J. Leech, and L. Liu. 2013. The influence of air pollution on cardiovascular and pulmonary function and exercise capacity. Canadian Health Measures Survey. <i>Environmental Research</i> 111(8):1309–1312. Available at: http://www.sciencedirect.com/science/article/pii/S0013935111002416 . (Accessed: November 20, 2017).	Measures the association between air pollution, spirometry, blood pressure, and exercise capacity.	Yes	No
NHTSA-2017- 0069-0122	Vishnu Laalitha Surapaneni	Dockery, D. W., C. A. Pope, X. Xu, J. D. Spengler, J. H. Ware, M. E. Fav, B. G. Ferris, and F. E. Speizer. 1993. An association between air pollution and mortality in six U.S. cities. <i>The New England Journal of Medicine</i> 329(24):1753–1759. doi: 10.1056/NEJM199312093292401. Available at: http://www.scientificintegrityinstitute.org/Dockery1993.pdf . (Accessed: November 20, 2017).	Estimates the effects of air pollution on mortality, while controlling for individual risk factors.	Yes	No
NHTSA-2017- 0069-0122	Vishnu Laalitha Surapaneni	Folinsbee, L., W. F. McDonnell, and D. H. Horstman. 2012. Pulmonary function and symptoms responses after 6.6-hour exposure to 0.12 ppm ozone with moderate exercise. <i>JAPCA</i> 38(1):28–35. doi: 10.1080/08940630.1988.10466349. Available at: http://www.tandfonline.com/doi/pdf/10.1080/08940630.1988.10466349?needAccess=true . (Accessed: November 20, 2017).	Investigates the hypothesis that prolonged exposure to 0.12 parts per million of O ₃ would result in progressively larger changes in respiratory function and symptoms over time.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0122	Vishnu Laalitha Surapaneni	Giorgini, P., M. Rubenfire, R. Das, T. Gracik, L. Wang, M. Norishita, R. L. Bard, E. A. Jackson, C. A. Fitzner, C. Ferri, and R. D. Brook. 2015. Higher fine particulate matter and temperature levels impair exercise capacity in cardiac patients. <i>Heart Journal</i> 101(16). doi: 10.1136/heartjnl-2014-306993. Available at: http://heart.bmj.com/content/101/16/1293.long . (Accessed: November 20, 2017).	Assesses the effects of PM2.5 on directly measured aerobic functional capacity among high-risk patients for cardiovascular morbidity and mortality.	Yes	No
NHTSA-2017-0069-0122	Vishnu Laalitha Surapaneni	Strickland, M. J., L. A. Darrow, M. Klein, W. D. Flanders, J. A. Sarnat, L. A. Waller, S. E. Sarnat, J. A. Mulholland, and P. E. Tolbert. 2010. Short-term associations between ambient air pollutants and pediatric asthma emergency department visits. <i>Am J Respir Crit Care Med</i> 182(3):307–316. doi: 10.1164/rccm.200908-1201OC. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2921597/ . (Accessed: November 20, 2017).	Investigates short-term associations between ambient air pollutant concentrations and emergency department visits for pediatric asthma.	Yes	No
NHTSA-2017-0069-0122	Vishnu Laalitha Surapaneni	Vaduganathan M., G. De Palma, A. Manerba, M. Goldoni, M. Triggiani, P. Apostoli, L. Dei Cas, and S. Nodari. 2016. Risk of cardiovascular hospitalizations from exposure to coarse particulate matter (PM10) below the European Union safety threshold. <i>The American Journal of Cardiology</i> 117(8):1231–1235. doi: 10.1016/j.amjcard.2016.01.041. Available at: http://www.sciencedirect.com/science/article/pii/S002914916301631?via%3Dihub . (Accessed: November 20, 2017).	Explores the cross-sectional association between particulate matter with aerodynamic diameter less than 10 micrometers (PM10) and daily cardiovascular hospitalizations in Brescia, Italy, using Poisson regression models adjusted for age, gender, and meteorological indices.	Yes	No

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NHTSA-2017-0069-0124	Tracey King, Renewable Fuels Association	Ricardo Incorporated. 2017. Literature Review of Ethanol Use for High Octane Fuels. Prepared for Renewable Fuels Association. Available at: http://www.ethanolrfa.org/wp-content/uploads/2017/09/Literature-Review-of-Ethanol-Use-for-High-Octane-Fuels.pdf . (Accessed: November 20, 2017).	Reviews the existing body of research regarding the use of ethanol to produce high-octane gasolines in the United States and the impact of high-octane fuels on modern spark-ignited engine efficiency.	No	No
NHTSA-2017-0069-0136	Graham Noyes, Pearson Fuels	California Environmental Protection Agency. 2016. State Agency Greenhouse Gas Reduction Report Card. Available at: http://www.climatechange.ca.gov/climate_action_team/reports/2016_CalEPA_Report_Card.pdf . (Accessed: November 20, 2017).	Provides information gathered in 2015 for actual greenhouse gas reductions occurring in 2014.	No	No
NHTSA-2017-0069-0136	Graham Noyes, Pearson Fuels	Aguila, J. August 25, 2017—Letter to Graham Noyes about total amount of E85 sold in California 2012–2016. (Accessed: November 20, 2017).	Unable to locate article.	No	No
NHTSA-2017-0069-0136	Graham Noyes, Pearson Fuels	California Air Resources Board. 2017. Data Dashboard: Alternative Fuel Volumes and Credit Generation. Available at: https://www.arb.ca.gov/fuels/lcfs/dashboard/dashboard.htm . (Accessed: November 20, 2017).	Provides information regarding California Air Resources Board's Low Carbon Fuel Standard Program	No	No
NHTSA-2017-0069-0136	Pearson Fuels, Graham Noyes	U.S. Energy Information Administration. 2015. Table C8. Transportation Sector Energy Consumption Estimates, 2015. Available at: https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_sum/html/sum_btu_tra.html&sid=US . (Accessed: November 20, 2017).	Provides energy consumption estimates of the transportation sector for different states and fuel types.	No	No

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NHTSA-2017-0069-0136	Pearson Fuels, Graham Noyes	U.S. Energy Information Administration. 2016. Almost All U.S. Gasoline is Blended with 10% Ethanol. Available at: https://www.eia.gov/todayinenergy/detail.php?id=26092 . (Accessed: November 20, 2017).	Discusses the consumption and demand of biofuels, ethanol, gasoline, liquid fuels, and renewables. Points to the preponderance of E10 fuel consumed in motor vehicles with gasoline engines.	No	No
NHTSA-2017-0069-0136	Graham Noyes, Pearson Fuels	U.S. Energy Information Administration. 2017. U.S. Fuel Ethanol Production Continues to Grow in 2017. Available at: https://www.eia.gov/todayinenergy/detail.php?id=32152 . (Accessed: November 20, 2017).	Discusses the production and supply of biofuels, ethanol, and liquid fuels under the renewable fuel standards, as well as other regulations.	No	No
NHTSA-2017-0069-0136	Graham Noyes, Pearson Fuels	Bunker, Byron. 2014. To Manufacturers. November 12. E85 Flexible Fuel Vehicle Weighting Factor for Model Year 2016-2018 Vehicles. Available at: https://iaspub.epa.gov/otaqpub/display_file.jsp?docid=33581&flag=1 . (Accessed: November 20, 2017).	Provides the supporting analysis and rationale for the weighting factor being established by EPA under the light-duty vehicle greenhouse gas program to be used to weight E85 flexible fuel vehicle carbon dioxide emissions when tested with both gasoline and E85 (a mixture of 85% ethanol and gasoline).	No	No

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	California Air Resources Board. 2010. Estimate of Premature Deaths Associated with Fine Particle Pollution (PM _{2.5}) in California Using a U.S. Environmental Protection Agency Methodology. Available at: https://www.arb.ca.gov/research/health/pm-mort/pm-report_2010.pdf . (Accessed: November 20, 2017).	Describes EPA's risk assessment methodology for calculating premature mortality in the 2010 Quantitative Health Risk Assessment for Particulate Matter, and its 2009 Integrated Science Assessment for particulate matter that provides the underlying scientific basis for the calculations.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Cision. 2017. Government of Canada to Develop a National Zero-Emissions Vehicle Strategy by 2018. Available at: http://www.newswire.ca/news-releases/government-of-canada-to-develop-a-national-zero-emissions-vehicle-strategy-by-2018-624609563.html . (Accessed: November 20, 2017).	Reports on the Government of Canada's development of a national strategy to increase the number of zero-emission vehicles on Canadian roads by 2018.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Quebec Government. 2017. Zero-Emission Vehicles (ZEV) Standard. Available at: http://www.mddelcc.gouv.qc.ca/changementsclimatiques/vze/index-en.htm . (Accessed: November 20, 2017).	Discusses Quebec's regulation increase of the number of zero-emission vehicles, with information on the objective, targeted businesses, proposed procedure, and types of vehicles eligible for credits.	No	No

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	U.S. Environmental Protection Agency. 2010. Quantitative Health Risk Assessment for Particulate Matter. EPA-452/R-10-005. Available at: https://www3.epa.gov/ttn/naaqs/standards/pm/data/PM_RA_FINAL_June_2010.pdf . (Accessed: November 20, 2017).	Provides national estimates of premature mortality associated with fine particulate matter pollution (PM2.5), supported by its finding that the scientific evidence shows a causal connection between mortality and exposure to PM2.5.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	U.S. Environmental Protection Agency. 2012. Regulatory Impact Analysis for the Final Revisions to the National Ambient Air Quality Standards for Particulate Matter. EPA-452/R-12-005. Available at: https://www3.epa.gov/ttnecas1/regdata/RIAs/finalria.pdf . (Accessed: November 20, 2017).	Examines the costs and benefits of regulating regional air districts for particulate matter emissions.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	U.S. Environmental Protection Agency. 2013. Fine Particle Concentrations Based on Monitored Air Quality from 2009 – 2011. Available at: https://www.epa.gov/sites/production/files/2016-04/documents/map_meeting_standard.pdf . (Accessed: November 20, 2017).	Illustrates that most of the United States already meets the annual fine particle health standard of 12 nanograms per cubic meter.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	U.S. Environmental Protection Agency. 2015. Emissions Estimation Protocol for Petroleum Refineries. Available at: https://www3.epa.gov/ttn/chief/efpac/protocol/Protocol%20Report%202015.pdf . (Accessed: November 20, 2017).	Provides guidance and instructions to petroleum refinery owners and operators and to federal, state, and local agencies for improving emission inventories for the petroleum refining industry.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer-Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Blunden, J., and D. S. Arndt (eds). 2017. State of the climate in 2016. <i>Bulletin of American Meteorological Society</i> 98(8):Si–S277. doi:10.1175/2017BAMSStateoftheClimate.1. Available at: http://www.ametsoc.net/sotc2016/StateoftheClimate2016_lowres.pdf . (Accessed: November 20, 2017).	Documents the status and trajectory of the many components of the climate system and the status and trajectory of human capacity and commitment to observe it.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Bradley, B. A., D. S. Wilcove, and M. Oppenheimer. 2010. Climate change increases risk of plant invasion in the eastern United States. <i>Biological Invasions</i> 12:1855–1872. doi:10.1007/s10530-009-9597-y. Available at: http://europemc.org/abstract/AGR/IND44367832/road=0;jsessionid=geMUvZpMPs0zzRUz8D6h.2 . (Accessed: November 20, 2017).	Uses bioclimatic envelope modeling to assess current climatic habitat, or lands climatically suitable for invasion, for three of the most dominant and aggressive invasive plants in the southeast United States.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	California Air Resources Board. 2013. Available at: http://www.arb.ca.gov/desig/adm/2013/state_pm25.pdf . (Link no longer active).	Unable to locate article.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	California Air Resources Board. 2017. California Greenhouse Gas Emission Inventory - 2017 Edition. Available at: https://www.arb.ca.gov/cc/inventory/data/data.htm . (Accessed: November 20, 2017).	Provides breakdown of emissions by greenhouse gas and economic sector for 2015.	No	No

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NHTSA-2017- 0069-0138	Richard Corey, California Air Resources Board	California Air Resources Board. 2017. The 2017 Climate Change Scoping Plan Update of the Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. Available at: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf . (Accessed: November 20, 2017).	Establishes a proposed framework of action for California to meet the most aggressive climate target in North America: a 40% reduction in greenhouse gases by 2030 compared to 1990 levels.	No	No
NHTSA-2017- 0069-0138	Richard Corey, California Air Resources Board	Fitzgerald, D. M., M. S. Fenster, B. A. Argow, and I. V. Buynevich. 2008. Coastal impacts due to sea-level rise. <i>Annual Review of Earth and Planetary Sciences</i> , Annual Reviews 36: 601–647. Available at: https://doi.org/10.1146/annurev.earth.35.031306.140139 . (Accessed: November 20, 2017).	Discusses how rising sea level not only inundates low-lying coastal regions but also contributes to the redistribution of sediment along sandy coasts.	Yes	No

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Hansen, J., M. Sato, R. Ruedy, P. Kharecha, A. Lacis, R.L. Miller, L. Nazarenko, K. Lo, G. A. Schmidt, G. Russell, I. Aleinov, S. Bauer, E. Baum, B. Cairns, V. Canuto, M. Chandler, Y. Cheng, A. Cohen, A. Del Genio, G. Faluvegi, E. Fleming, A. Friend, T. Hall, C. Jackman, J. Jonas, M. Kelley, N.Y. Kiang, D. Koch, G. Labow, J. Lerner, S. Menon, T. Novakov, V. Oinas, J.P. Perlwitz, J. Perlwitz, D. Rind, A. Romanou, R. Schmunk, D. Shindell, P. Stone, S. Sun, D. Streets, N. Tausnev, D. Thresher, N. Unger, M. Yao, M. and S. Zhang. 2007. Dangerous human-made interference with climate: A GISS modelE study. <i>Atmospheric Chemistry and Physics</i> 7:2287–2312. doi:10.5194/acp-7-2287-2007. Available at: https://pubs.giss.nasa.gov/docs/2007/2007_Hansen_ha00210r.pdf . (Accessed: November 20, 2017).	Investigates the issue of "dangerous human-made interference with climate" using simulations with GISS modelE driven by measured or estimated forcings for 1880–2003 and extended to 2100 for Intergovernmental Panel on Climate Change greenhouse gas scenarios as well as the "alternative" scenario of Hansen and Sato (2004).	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Interagency Working Group on Social Cost of Carbon. 2015. Technical Support Document: - Social Cost of Carbon for Regulatory Impact Analysis - Under Executive Order 12866. Available at: https://www.epa.gov/sites/production/files/2016-12/documents/sc_co2_tsd_august_2016.pdf . (Accessed: November 20, 2017).	Provides a technical support document that responds to previous recommendations and updates the current estimates of the social cost of carbon.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	National Park Service. 2014. Preserving Coastal Heritage Summary Report. U.S. Department of Interior. Available at: http://www.achp.gov/docs/pch-summary-report.pdf . (Accessed: November 20, 2017).	Summarizes recommendations and feedback that emerged over a 2-day work session.	No	No

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	National Research Council. 2011. Understanding Earth's Deep Past: Lessons for Our Climate Future. The National Academies Press. https://doi.org/10.17226/13111 . Available at: https://www.nap.edu/catalog/13111/understanding-earths-deep-past-lessons-for-our-climate-future . (Accessed: November 20, 2017).	Describes past climate changes and discusses potential impacts of high levels of atmospheric greenhouse gases on regional climates, water resources, marine and terrestrial ecosystems, and the cycling of life-sustaining elements.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Staudinger, M. D., S. L. Carter, M. S. Cross, N. S. Dubois, J. E. Duffy, C. Enquist, R. Griffis, J. J. Hellmann, J. J. Lawler, J. O'Leary, S. A. Morrison, L. Sneddon, B. A. Stein, L. M. Thompson, and W. Turner. 2013. Biodiversity in a changing climate: A synthesis of current and projected trends in the US. <i>Frontiers in Ecology and the Environment</i> 11:465–473, doi:10.1890/120272. Available at: http://onlinelibrary.wiley.com/doi/10.1890/120272/abstract . (Accessed: November 20, 2017).	Provides a synthesis of the recent literature describing how global biodiversity is being affected by climate change and is projected to respond in the future.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Stralberg, D., D. Jongsomjit, C. A. Howell, M. A. Snyder, J. D. Alexander, J. A. Wiens, and T. L. Root. 2009. Re-shuffling of species with climate disruption: A no-analog future for California birds? <i>PLOS One</i> . 4: e6825. doi:10.1371/journal.pone.0006825. Available at: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0006825 . (Accessed: November 20, 2017).	Uses multivariate approach borrowed from paleoecology to quantify the potential change in California terrestrial breeding bird communities based on current and future species-distribution models for 60 focal species.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer-Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	U.S. Environmental Protection Agency. 2016. Climate Change Indicators in the United States. Available at: https://www.epa.gov/sites/production/files/2016-08/documents/climate_indicators_2016.pdf . (Accessed: November 20, 2017).	Presents 37 indicators to help readers understand changes observed from long-term records related to the causes and effects of climate change, the significance of these changes, and their possible consequences for people, the environment, and society.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	U.S. Environmental Protection Agency. 2016. U.S. Greenhouse Gas Inventory Report: 1990–2014. Available at: https://19january2017snapshot.epa.gov/ghgemissions/us-greenhouse-gas-inventory-report-1990-2014_.html . (Accessed: November 20, 2017).	Summarizes the latest information on U.S. anthropogenic greenhouse gas emission trends from 1990 through 2014.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	U.S. Fish and Wildlife Service. 2010. An Overview Climate Change Strategic Plan. Available at: https://www.fws.gov/home/climatechange/pdf/ClimatePlanOverview.pdf . (Accessed: November 20, 2017).	Discusses the U.S. Fish and Wildlife Service's Climate Change Strategic Plan, a framework for adaptation, mitigation, and engagement on climate change.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	U.S. Global Change Research Program. 2014. 2014 National Climate Assessment. Available at: http://nca2014.globalchange.gov/downloads . (Accessed: November 20, 2017).	Provides an in-depth look at climate change impacts on the United States. It details the multitude of ways climate change is already affecting and will increasingly affect the lives of Americans.	Yes	No

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Wenger, S. J., D. J. Isaak, C. H. Luce, H. M. Neville, K. D. Fausch, J. B. Dunham, D. C. Dauwalter, M. K. Young, M. M. Elsner, B. E. Rieman, A. F. Hamlet, and J. E. Williams. 2011. Flow regime, temperature, and biotic interactions drive differential declines of trout species under climate change. <i>Proceedings of the National Academy of Sciences of the United States of America</i> 108(34): 14175–14180. doi: 10.1073/pnas.1103097108. Available at: http://www.pnas.org/content/108/34/14175 . (Accessed: November 20, 2017).	Forecasts the effects of altered flows and increased temperatures on four interacting species of trout across the interior western United States.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Westerling, A. L., B. P. Bryant, H. K. Preisler, T. P. Holmes, H. G. Hidalgo, T. Das, and S. R. Shrestha. 2011. Climate change and growth scenarios for California wildfire. <i>Climate Change</i> 109(Suppl 1):445. Available at: https://doi.org/10.1007/s10584-011-0329-9 . (Accessed: November 20, 2017).	Models a large wildfire occurrence and burned area using hydroclimate and land surface characteristics under a range of future climate and development scenarios.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Chen, I.-C., J. K. Hill, R. Ohlemüller, D. B. Roy, and C. D. Thomas. 2011. Rapid range shifts of species associated with high levels of climate warming. <i>Science</i> 333(6045):1024–1026. doi: 10.1126/science.1206432. Available at: http://science.sciencemag.org/content/333/6045/1024 . (Accessed: November 20, 2017).	Estimates that the distributions of species have recently shifted to higher elevations at a median rate of 11.0 meters per decade, and to higher latitudes at a median rate of 16.9 kilometers per decade.	Yes	Yes

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017- 0069-0138	Richard Corey, California Air Resources Board	Cheung, W. W. L., V. W. Y. Lam, J. L. Sarmiento, K. Kearney, R. Watson, and D. Pauly. 2009. Projecting global marine biodiversity impacts under climate change scenarios. <i>Fish and Fisheries</i> 10(3):235–251. doi: 10.1111/j.1467-2979.2008.00315.x. Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1467-2979.2008.00315.x/abstract . (Accessed: November 20, 2017).	Investigates the global patterns of such impacts by projecting the distributional ranges of a sample of 1066 exploited marine fish and invertebrates for 2050 using a newly developed dynamic bioclimate envelope model.	Yes	Yes
NHTSA-2017- 0069-0138	Richard Corey, California Air Resources Board	Field, C.B., V. Barros, T. F. Stocker, D. Qin, D. J. Dokken, K. L. Ebi, M. D. Mastrandrea, K. J. Mach, G.-K. Plattner, S K. Allen, M. Tignor, and P. M. Midgley. 2012. Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change. IPCC. Cambridge University Press. Page 582. Available at: https://www.ipcc.ch/pdf/special-reports/srex/SREX_Full_Report.pdf . (Accessed: November 20, 2017).	Analyzes the relationship between climate change and extreme weather and climate events, the impacts of such events, and the strategies to manage the associated risks.	Yes	Yes

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Garfin, G., A. Jardine, R. Merideth, M. Black, and S. LeRoy. 2013. Assessment of Climate Change in the Southwest United States. Island Press, Chapter 6, Cayan, D., K. Kunkel, C. Castro, A. Gershunov, J. Barsugli, A. Ray, J. Overpeck, M. Anderson, J. Russell, R. B., R. I., and P. Duffy, pp. 153–196. Assessment of Climate Change in the Southwest United States. National Climate Assessment. Available at: http://www.swcarr.arizona.edu/sites/all/themes/files/SW-NCA-color-FINALweb.pdf . (Accessed: November 20, 2017).	Summarizes the current understanding of climate variability, climate change, climate impacts, and possible solution choices for the climate challenge.	Yes	Yes
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Grinsted, A., J. C. Moore, and S. Jevrejeva. 2010. Reconstructing sea level from paleo and projected temperatures 200 to 2100 AD. <i>Climate Dynamics</i> 34:461–472. doi:10.1007/s00382-008-0507-2. Available at: http://link.springer.com/article/10.1007/s00382-008-0507-2/fulltext.html . (Accessed: November 20, 2017).	Models future sea-level rises through different temperature scenarios.	Yes	Yes
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Hidalgo, H. G., T. Das, D. R. Cayan, D. W. Pierce, T. P. Barnett, G. Bala, A. Mirin, A. W. Wood, C. Bonfils, B. D. Santer, and T. Nozawa. 2009. Detection and attribution of streamflow timing changes to climate change in the western United States. <i>Journal of Climate</i> 22: 3838–3855. Available at: http://journals.ametsoc.org/doi/abs/10.1175/2009JCLI2470.1 . (Accessed: November 20, 2017).	Applies formal detection and attribution techniques to investigate the nature of observed shifts in the timing of streamflow in the western United States.	Yes	Yes

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Intergovernmental Panel on Climate Change. 2014. Fifth Assessment Report (AR5). Available at: https://www.ipcc.ch/report/ar5/ . (Accessed: November 20, 2017).	Provides discussions on the physical science basis of climate change; impacts, adaptation and vulnerability; mitigation of climate change; and the Synthesis Report—which synthesizes and integrates material contained within the Working Group reports and Special Reports.	Yes	Yes
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Jevrejeva, S., J. C. Moore, and A. Grinsted, A. 2012. Sea level projections to AD2500 with a new generation of climate change scenarios. <i>Global and Planetary Change</i> :80–81,14–20. doi:10.1016/j.gloplacha.2011.09.006. Available at: https://www.giaciology.net/pdf/Jevrejeva-gloplacha11-sl2500-rcp.pdf . (Accessed: November 20, 2017).	Uses models to project median sea-level rises of 0.57 for the lowest forcing and 1.10 meters for the highest forcing by 2100, which rise to 1.84 and 5.49 meters, respectively, by 2500.	Yes	Yes
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Karl, T. R., J. T. Melillo, and T. C. Peterson. 2009. <i>Global Climate Change Impacts in the United States</i> . Cambridge University Press. Available at: https://downloads.globalchange.gov/usimpacts/pdfs/climate-impacts-report.pdf . (Accessed: November 20, 2017).	Summarizes the science of climate change and the impacts of climate change on the United States, now and in the future, and discusses climate-related impacts for various societal and environmental sectors and regions across the nation.	Yes	Yes

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017- 0069-0138	Richard Corey, California Air Resources Board	National Research Council. 2010. Ocean Acidification: A National Strategy to Meet the Challenges of a Changing Ocean. The National Academies Press. Available at: https://www.nap.edu/read/12904/chapter/1 . (Accessed: November 20, 2017).	Demonstrates that ocean chemistry is changing at an unprecedented rate and magnitude due to anthropogenic carbon dioxide emissions; the rate of change exceeds any known to have occurred for at least the past hundreds of thousands of years.	Yes	Yes
NHTSA-2017- 0069-0138	Richard Corey, California Air Resources Board	National Research Council. 2011. Climate Stabilization Targets: Emissions, Concentrations, and Impacts over Decades to Millennia. The National Academies Press. https://doi.org/10.17226/12877 . Available at: https://www.nap.edu/catalog/12877/climate-stabilization-targets-emissions-concentrations-and-impacts-over-decades-to . (Accessed: November 20, 2017).	Quantifies the outcomes of different stabilization targets for greenhouse gas concentrations using analyses and information drawn from scientific literature. Although it does not recommend or justify any particular stabilization target, it does provide important scientific insights about the relationships among emissions, greenhouse gas concentrations, temperatures, and impacts.	Yes	Yes

Table B-1. Sources Identified in Scoping Comments

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Pierce, D. W., T. P. Barnett, H. G. Hidalgo, T. Das, C. Bonfils, B. D. Santer, G. Bala, M. D. Dettinger, D. R. Cayan, A. Mirin, A. W. Wood, and T. Nozawa. 2008. Attribution of declining western U.S. snowpack to human effects. <i>Journal of Climate</i> 20:6425–44. Available at: https://doi.org/10.1175/2008JCLI2405.1 . (Accessed: November 20, 2017).	Uses a formal model-based detection and attribution study of snowpack reductions.	Yes	Yes
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Rahmstorf, S., G. Foster, and A. Cazenave. 2012. Comparing climate projections to observations up to 2011. <i>Environmental Research Letters</i> 7(4). doi:10.1088/1748-9326/7/4/044035. Available at: http://iopscience.iop.org/article/10.1088/1748-9326/7/4/044035/pdf;jsessionid=9231676D59AC548104EBC2225C9C348E.c1.iopscience.cld.iop.org . (Accessed: November 20, 2017).	Analyzes global temperature and sea-level data for the past few decades and compares them to projections published in the third and fourth assessment reports of the Intergovernmental Panel on Climate Change.	Yes	Yes
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Schwalm, C. R., C. A. Williams, K. Schaefer, D. Baldocchi, T. Andrew Black, A. H. Goldstein, B. E. Law, W. C. Oechel, Kyaw Tha Paw U, and R. L. Scott. 2012. Reduction in carbon uptake during turn of the century drought in western North America. <i>Nature Geoscience</i> . doi: 10.1038/NGEO1529. Available at: https://www.nature.com/articles/ngeo1529 . (Accessed: November 20, 2017).	Examines the effect of the turn-of-the-century drought in western North America on carbon uptake in the region, using reanalysis data, remote sensing observations, and data from global monitoring networks.	Yes	Yes

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Staudinger, M. D., N. B. Grimm, A. Staudt, S. L. Carter, F. S. Chapin III, P. Karevia, M. Ruckelshaus, and B. A. Stein. 2012. Impacts of Climate Change on Biodiversity, Ecosystems, and Ecosystem Services: Technical Input to the 2013 National Climate Assessment. Cooperative Report to the 2013 National Climate Assessment. 296 p. Available at: https://downloads.globalchange.gov/nca/technical_inputs/Biodiversity-Ecosystems-and-Ecosystem-Services-Technical-Input.pdf . (Accessed: November 20, 2017).	Synthesizes the scientific understanding of the way climate change is affecting biodiversity, ecosystems, ecosystem services, and what strategies might be employed to decrease current and future risks.	Yes	Yes
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	U.S. Global Change Research Program. 2013. Climate Change Impacts in the United States: The Third National Climate Assessment. Available at: http://www.globalchange.gov/browse/reports/climate-change-impacts-united-states-third-national-climate-assessment-0 . (Accessed: November 20, 2017).	Provides an in-depth look at climate change impacts on the United States. It details the multitude of ways climate change is already affecting and potentially will increasingly affect the lives of Americans.	Yes	Yes
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Vermeer, M., and S. Rahmstorf. 2009. Global Sea Level Linked to Global Temperature. <i>Proceedings of the National Academy of Sciences</i> 106:21527–21532. Available at: http://www.pnas.org/content/106/51/21527.full.pdf . (Accessed: November 20, 2017).	Proposes a simple relationship linking global sea-level variations on time scales of decades to centuries to global mean temperature.	Yes	Yes

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	California Air Resources Board. 2017. Advanced Strong Hybrid and Plug-In Hybrid Engineering Evaluation and Cost Analysis. Al Steier, Munro & Associates, and Alan Munday, Ricardo Strategic Consulting. Available at: https://www.arb.ca.gov/msprog/acc/mtr/hybrid_phev_report_full.pdf . (Accessed: November 20, 2017).	Provides engineering evaluation and cost assessment of selected recent technologies available to support OEM hybridization strategies in the near and longer term.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Revesz, R., M. Greenstone, M. Hanemann, M. Livermore, T. Sterner, D. Grab, P. Howard, and J. Schwartz. 2017. Best cost estimate of greenhouse gases. <i>Science</i> 357 (6352):655. Available at: http://science.sciencemag.org/content/357/6352/655 . (Accessed: November 20, 2017).	Supports the work of the Interagency Working Group on the social cost of greenhouse gas.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	National Research Council. 2013. Climate and Social Stress: Implications for Security Analysis. The National Academies Press. https://doi.org/10.17226/14682 . Available at: https://www.nap.edu/download/14682 . (Accessed: November 20, 2017).	Evaluates the evidence on possible connections between climate change and U.S. national security concerns and identifies ways to increase the ability of the intelligence community to consider climate change in assessing political and social stresses with implications for U.S. national security.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Auto Alliance. 2017. ZEV Sales Dashboard. U.S. Light-Duty Zero Emission Vehicle (ZEV) Sales (2011–2017). Available at: https://autoalliance.org/energy-environment/zev-sales-dashboard/ . (Accessed: November 20, 2017).	Presents the U.S. Light-Duty Zero Emission Vehicle Sales from 2011 to 2017.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	National Research Council. 2011. National Security Implications of Climate Change for U.S. Naval Forces. The National Academies Press. https://doi.org/10.17226/12914 . Available at: https://www.nap.edu/catalog/12914/national-security-implications-of-climate-change-for-us-naval-forces . (Accessed: November 20, 2017).	Finds that even the most moderate current trends in climate, if continued, will present new national security challenges for the U.S. Navy, Marine Corps, and Coast Guard.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Aliotta, J. 2017. Driving the Army's Energy-Efficient Future. U.S. Army. Available at: https://www.army.mil/article/181692/driving_the_armys_energy_efficient_future . (Accessed: November 20, 2017).	Discusses the technological and operational innovations that the army has initiated that help make their machinery and equipment more energy-efficient.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Bilal, A. 2017. All Cars In Norway Will Be 100% Electric By 2025. Available at: http://wccftch.com/norway-electric-cars/ . (Accessed: November 20, 2017).	Reports on how starting in 2025, people in the Norway will no longer be able to buy a gasoline or diesel-powered car. Story also covers the needed price reductions to make the regulation economically feasible.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	California Air Resources Board. 2016. The Staff of the California Air Resources Board Present the Advanced Clean Cars Symposium: The Road Ahead. September 27–28, 2016. Available at: https://www.arb.ca.gov/msprog/acc/acc-symposium.htm . (Accessed: November 20, 2017).	Provides the Advanced Clean Cars Symposium presented by the California Air Resources Board.	No	No

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Castle, S. 2017. Britain to Ban New Diesel and Gas Cars by 2040. <i>The New York Times</i> . Available at: https://www.nytimes.com/2017/07/26/world/europe/uk-diesel-petrol-emissions.html . (Accessed: November 20, 2017).	Announces that Britain's sales of new diesel and gas cars would reach the end of the road by 2040.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Clean Energy Wire. 2017. Merkel Signals Support for Eventual Ban of Combustion Engine. Available at: https://www.cleanenergywire.org/news/merkel-open-combustion-engine-ban-onshore-wind-prices-drop/merkel-signals-support-eventual-ban-combustion-engine . (Accessed: November 20, 2017).	Reports on German Chancellor Angela Merkel's voicing of support for banning internal combustion engine cars, similar to other European Union countries.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Dukes, J. S., N. R. Chiariello, S. R. Loarie, and C. B. Field. 2011. Strong response of an invasive plant species (<i>Centaurea solstitialis</i> L.) to global environmental changes. <i>Ecological Applications</i> 21:1887–1894. doi:10.1890/11-0111.1. Available at: http://www.esajournals.org/doi/pdf/10.1890/11-0111.1 . (Accessed: November 20, 2017).	Examines how a suite of five environmental factors, singly and in combination, can affect the success of a highly invasive plant.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Eagle, A. J., M. E. Eiswerth, W. S. Johnson, S. E. Schoenig, and G. Cornelis van Kooten. 2007. Costs and losses imposed on California ranchers by yellow starthistle. <i>Rangeland Ecology & Management</i> 60(4):369–377. Available at: https://doi.org/10.2111/1551-5028(2007)60[369:CALIOC]2.0.CO;2 . (Accessed: November 20, 2017).	Reports on results of a survey administered to California cattle ranchers to investigate yellow star thistle infestation rates, loss of forage quantity and value, and control or eradication efforts.	Yes	No

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Farand, C. 2017. France Will Ban All Petrol and Diesel Vehicles by 2040. <i>The Independent</i> . Available at: http://www.independent.co.uk/environment/france-petrol-diesel-ban-vehicles-cars-2040-a7826831.html . (Accessed: November 20, 2017).	Reports that France will ban all petrol and diesel vehicles by 2040. The French Environment minister unveiled a 5-year-plan to fulfill the country's commitments under the Paris Agreement.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Fast Company. 2016. The Netherlands Will Ban New Gasoline-Powered Vehicles by 2025. Available at: https://www.fastcompany.com/3058649/the-netherlands-will-ban-new-gasoline-powered-vehicles-by-2025 . (Accessed: November 20, 2017).	Reports on how starting in 2025, people in the Netherlands will no longer be able to buy a gasoline or diesel-powered car. By law, only zero-emissions vehicles will be on sale.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Fujimoto, Y. 2016. Introduction of Variable Compression Turbo Engine. Nissan Motor Corporation. Available at: https://www.arb.ca.gov/msprog/consumer_info/advanced_clean_cars/vct_engine_technology_yutaka_fujimoto.pdf . (Accessed: November 20, 2017).	Provides an introduction by Nissan of the Variable Compression Turbo Engine.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Kane, M. 2017. China Considers ZEV Mandate Similar to California. Inside EVs. Available at: https://insideevs.com/china-considers-zev-mandate/ . (Accessed: November 20, 2017).	Discusses China's introduction of the National VI emissions standard in major cities for 2017 and for the whole country in 2018. The country is also considering a zero-emission vehicle mandate.	No	No

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Okita, R. 2016. Mazda SKYACTIV-G Engine with New Boosting Technology. ACC Symposium held on September 28. Mazda. Available at: https://www.arb.ca.gov/msprog/consumer_info/advanced_clean_cars/new_engine_technology_reiji_okita.pdf . (Accessed: November 20, 2017).	Presents Mazda's approach for environmental improvement and introduces the SKYACTIV-G Development Process and the SKYACTIV-G 2.5L TC development.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Peters, D. P. C., A. E. Lugo, F. S. Chapin III, S. T. A. Pickett, M. Duniway, A. V. Rocha, F. J. Swanson, C. Laney, and J. Jones. 2011. Cross-system comparisons elucidate disturbance complexities and generalities. <i>Ecosphere</i> 2(7):1–26. doi:10.1890/ES11-00115.1. Available at: http://onlinelibrary.wiley.com/doi/10.1890/ES11-00115.1/epdf . (Accessed: November 20, 2017).	Presents a conceptual framework and an operational analog to integrate the current knowledge on the ecological effects of disturbance across ecosystems to promote quantitative comparisons of disturbance effects across different types of ecosystems and disturbances.	Yes	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Raffa, K. F., B. H. Aukema, B. J. Bentz, A. L. Carroll, J. A. Hicke, M. G. Turner, and W. H. Romme. 2008. Cross-scale drivers of natural disturbances prone to anthropogenic amplification: The dynamics of bark beetle eruptions. <i>BioScience</i> 58 (6):501–517. Available at: https://doi.org/10.1641/B580607 . (Accessed: November 20, 2017).	Analyzes several anthropogenic influences on the recent bark beetle population eruption.	Yes	No

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NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Tomazic, D. 2016. GHG Reducing Advancements and Technologies. CARB ACC Symposium. FEV North America, Inc. Available at: https://www.arb.ca.gov/msprog/consumer_info/advanced_clean_cars/ghg_reducing_advancements_and_technologies_dean_tomazic.pdf . (Accessed: November 20, 2017).	Presents recent advancements in clean-car technologies.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	U.S. Fish and Wildlife Service. 2012. Consequences for Wildlife. Office of External Affairs. Available at: https://www.fws.gov/home/climatechange/impacts.html . (Accessed: November 20, 2017).	Outlines the impacts of climate change on fish and wildlife, their populations, and their habitats in the United States.	No	No
NHTSA-2017-0069-0138	Richard Corey, California Air Resources Board	Younkins, M. 2016. Tula Technology's Dynamic Skip Fire. TULA. Available at: https://www.arb.ca.gov/msprog/consumer_info/advanced_clean_cars/potential_benefits_of_cylinder_deactivation_matthew_younkins.pdf . (Accessed: November 20, 2017).	Introduces the Dynamic Skip Fire technology.	No	No
NHTSA-2017-0069-0144	Jeffrey Clarke, NGVAmerica	U.S. Department of Agriculture. 2014. Biogas Opportunities Roadmap. Voluntary Actions to Reduce Methane Emissions and Increase Energy Independence. U.S. Department of Agriculture, U.S. Environmental Protection Agency, U.S. Department of Energy. Available at: https://www.usda.gov/oce/reports/energy/Biogas_Opportunities_Roadmap_8-1-14.pdf . (Accessed: November 20, 2017).	Builds on progress made to date to identify voluntary actions that can be taken to reduce methane emissions with biogas systems and outlines strategies to overcome barriers to a robust biogas industry in the United States.	No	No

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NHTSA-2017-0069-0144	Jeffrey Clarke, NGVAmerica	California Air Resources Board. 2014. Staff Report, California Air Resources Board, Proposed Re-Adoption of the California Low Carbon Fuel Standard. Available at: https://www.arb.ca.gov/regact/2015/lcfs2015/lcfs15isr.pdf . (Accessed: November 20, 2017).	Proposes to re-adopt the Low Carbon Fuel Standard regulation and to include updates and revisions compared to the previous regulation.	No	No
NHTSA-2017-0069-0144	Jeffrey Clarke, NGVAmerica	Gas Technology Institute. 2011. The Potential for Renewable Gas: Biogas Derived from Biomass Feedstocks and Upgraded to Pipeline Quality. American Gas Foundation. Available at: http://www.gasfoundation.org/researchstudies/agf-renewable-gas-assessment-report-110901.pdf . (Accessed: November 20, 2017).	Evaluates the potential for renewable gas.	No	No
NHTSA-2017-0069-0144	Jeffrey Clarke, NGVAmerica	ICF. 2017. Economic Impacts of Deploying Low NOx Trucks Fueled by Renewable Natural Gas. Available at: https://static1.squarespace.com/static/53a09c47e4b050b5ad5bf4f5/t/590767ce59cc68a9a761ee54/1493657553202/ICF_RNG+Jobs+Study_FINAL+with+infographic.pdf . (Accessed: November 20, 2017).	Analyzes the economic impacts of deploying low nitrogen oxide trucks using renewable natural gas.	No	No
NHTSA-2017-0069-0144	Jeffrey Clarke, NGVAmerica	National Petroleum Council Future Transportation Fuels Study. 2012. Renewable Natural Gas for Transportation: An Overview of the Feedstock Capacity, Economics, and GHG Emission Reduction Benefits of RNG as a Low-Carbon Fuel. Available at: http://www.npc.org/reports/FTF_Topic_papers/22-RNG.pdf . (Accessed: November 20, 2017).	Provides an overview of the feedstock capacity, economics, and greenhouse gas emissions reduction benefits of renewable natural gas as a low-carbon fuel.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0144	Jeffrey Clarke, NGVAmerica	U.S. Department of Energy. 2017. Biofuels and Bioproducts from Wet and Gaseous Waste Streams: Challenges and Opportunities. Energy Efficiency & Renewable Energy. Bioenergy Technologies Office. Available at: https://energy.gov/eere/bioenergy/downloads/biofuels-and-bioproducts-wet-and-gaseous-waste-streams-challenges-and . (Accessed: November 20, 2017).	Assesses the resource potential and technology opportunities provided by feedstocks, including wastewater treatment-derived sludge and biosolids, animal manure, food waste, inedible fats and greases, biogas, and carbon dioxide streams.	No	No
NHTSA-2017-0069-0144	Jeffrey Clarke, NGVAmerica	RNG Coalition. 2016. RNG in California: More Than You Think. <i>Fleets & Fuels Magazine</i> . Available at: http://www.fleetsandfuels.com/fuels/cng/2016/04/rng-in-california-more-than-you-think/ . (Accessed: November 20, 2017). (Link no longer active. See Couch, P.)	Explains that new figures from the California Air Resources Board indicate that, as of the end of 2015, approximately half of the natural gas being used as a vehicle fuel in the state is bio-based renewable natural gas.	No	No
NHTSA-2017-0069-0144	Jeffrey Clarke, NGVAmerica	National Petroleum Council. 2012. Advancing Technologies for America's Transportation Future. Available at: http://www.npc.org/reports/trans.html . (Accessed: November 20, 2017).	Advises on accelerating development of advanced fuel-vehicle systems through 2050 for passenger and freight transport while examining ways to reduce the U.S. transportation sector's 2050 life-cycle greenhouse gas emissions.	No	No

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NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Gruenspecht, H. K. 1982. Differentiated regulation: The case of auto emissions standards. <i>American Economic Review</i> 72 (1982):328–331. Available at: https://www.jstor.org/stable/1802352?seq=1#page_scan_tab_contents . (Accessed: November 20, 2017).	Analyzes automotive emissions regulation that explicitly considers the link between regulation and the composition of the vehicle stock.	Yes	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Furth, S., and D. Kreutzer. 2016. Fuel Economy Standards are a Costly Mistake. The Heritage Foundation. No. 3096 Available at: http://www.heritage.org/government-regulation/report/fuel-economy-standards-are-costly-mistake . (Accessed: November 20, 2017).	Argues that the fuel economy standards are a costly mistake.	No	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Ullman, D. F. 2016. A difficult road ahead: Fleet fuel economy, footprint-based CAFE compliance, and manufacturer incentives. <i>Energy Economics</i> 57:94–105. Available at: https://doi.org/10.1016/j.eneco.2016.04.013 . (Accessed: November 20, 2017).	Analyzes the impact that identifiable vehicle characteristics and technological progress has on fleet fuel economy by vehicle type and class.	Yes	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Allcott, H., and N. Wozny. 2014. Gasoline Prices, Fuel Economy, and The Energy Paradox. NBER Working Paper Series 96(10):779–795. Available at: http://www.nber.org/papers/w18583 . (Accessed: November 20, 2017).	Measures whether relative prices of vehicles with different fuel economy ratings fully adjust to time series variation in gasoline price forecasts.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Allcott, H., and C. Knittel. 2017. Are Consumers Poorly Informed about Fuel Economy? Evidence from Two Experiments. NBER Working Paper 23076. Available at: http://www.nber.org/papers/w23076 . (Accessed: November 20, 2017).	Presents evidence on the assertion that consumers are poorly informed about and inattentive to fuel economy, causing them to buy low-fuel economy vehicles, through two experiments providing fuel economy information to new vehicle shoppers.	No	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Congressional Budget Office. 2003. The Economic Costs of Fuel Economy Standards Versus a Gasoline Tax. U.S. Congress. Available at: https://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/49xx/doc4917/12-24-03_cafe.pdf . (Accessed: November 20, 2017).	Compares the economic costs of two methods for reducing gasoline consumption: raising the CAFE standards for passenger vehicles and increasing the federal tax on gasoline.	No	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Dimitropoulos, A., W. Oueslati, and C. Sintek. 2016. The Rebound Effect in Road Transport: A Meta- Analysis of Empirical Studies. Environment Working Paper No. 113. Available at: http://dx.doi.org/10.1787/8516ab3a-en . (Accessed: November 20, 2017).	Presents a meta-analysis of 76 primary studies and 1,138 estimates of the direct rebound effect in road transport to synthesize past work and inform ongoing discussions about the determinants and magnitude of the rebound effect.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Fagnant, D. J., K. M. Kockelman, and P. Bansal. 2015. Operations of shared autonomous vehicle fleet for Austin, Texas, market. <i>Transportation Research Record</i> (2536):98–106, 2015. Available at: http://trrjournalonline.trb.org/doi/10.3141/2536-12 . (Accessed: November 20, 2017).	Discusses the effects of autonomous vehicles in Austin, Texas.	Yes	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Hayek, F. A. 1945. The use of knowledge in society. <i>American Economic Review</i> XXXV(4):519–530. Available at: http://www.econlib.org/library/Essays/hykKnw1.html . (Accessed: November 20, 2017).	Discusses the problems associated with a rational economic order.	Yes	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Jacobsen, M. R., and A. A. van Benthem. 2015. Vehicle scrappage and gasoline policy. <i>American Economic Review</i> 105:1312–1338. Available at: https://www.aeaweb.org/articles?id=10.1257/aer.20130935 . (Accessed: November 20, 2017).	Estimates the sensitivity of scrap decisions to changes in used car values and shows how this "scrap elasticity" produces emissions leakage under fuel efficiency standards, a process known as the Gruenspecht effect.	Yes	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Levinson, D. 2015. Climbing Mount Next: The effects of autonomous vehicles on society. <i>Minnesota Journal of Law, Science and Technology</i> 16(2):787–809. Available at: https://conservancy.umn.edu/handle/11299/172960 . (Accessed: November 20, 2017).	Discusses the effects of autonomous vehicles in the contemporary United States.	Yes	No

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NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Luk, J. M., B. A. Saville, and H. L. MacLean. 2016. Vehicle attribute trade-offs to meet the 2025 CAFE fuel economy target. Transportation Research Part D: Transport and Environment 49:154–171. Available at: https://doi.org/10.1016/j.trd.2016.09.005 . (Accessed: November 20, 2017).	Analyzes changes in vehicle attributes that can improve fuel economy to meet CAFE standards.	Yes	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Morris, J., and A. Wardle. 2017. CAFE and ZEV Standards: Environmental Effects and Alternatives. Reason Foundation. Available at: http://reason.org/news/show/cafe-zev-standards-environmental . (Accessed: November 20, 2017).	Considers the extent to which the CAFE standards are likely to achieve the objectives of reducing fuel consumption and greenhouse gas emissions and the relative importance of achieving such objectives compared with other possible environmental objectives, and more cost-effective alternative policies.	No	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Myrdal, G., and F. von Hayek. 1974. The Pretence of Knowledge. Nobel Prize Lecture. Available at: https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1974/hayek-lecture.html . (Accessed: November 20, 2017).	Provides a lecture to the memory of Alfred Nobel.	No	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Strata. 2017. Strata Policy Regarding Research Independence and Integrity. Available at: https://www.strata.org/stratas-policy-regarding-research-independence-and-integrity/ . (Accessed: November 20, 2017).	Reports on research independence and integrity.	No	No

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NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	U.S. Environmental Protection Agency. 2010. How Consumers Value Fuel Economy: A Literature Review. U.S. Environmental Protection Agency. EPA-420-R-10-008. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P1006V00.txt?ZyActionD=ZyDocument&Client=EPA&Index=2006%20Thru%202010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C06THRU10%5CTXT%5C00000016%5CP1006V00.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=2 . (Accessed: November 20, 2017).	Examines empirical evidence from 28 econometric studies that directly or indirectly estimated the value consumers place on fuel economy.	No	No
NHTSA-2017-0069-0147	Arthur Wardle, Reason Foundation and Strata Policy	Whitefoot, K. S., and S. J. Skerlos. 2012. Design incentives to increase vehicle size created from the U.S. footprint-based fuel economy standards. <i>Energy Policy</i> 41:402–411. Available at: https://doi.org/10.1016/j.enpol.2011.10.062 . (Accessed: November 20, 2017).	Considers whether the CAFE standards create an incentive for firms to increase vehicle size by presenting an oligopolistic-equilibrium model in which automotive firms can modify vehicle dimensions, implement fuel-saving technology features, and trade off acceleration performance and fuel economy.	Yes	No

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NHTSA-2017-0069-0148-1459	William Corcoran	Prehoda, E. W., and J. M. Pearce. 2017. Saving lives and money: The potential of solar to replace coal. <i>U.S. Renewable and Sustainable Energy Reviews</i> . doi: http://dx.doi.org/10.1016.j.rser.2017.05.119 . Available at: https://www.academia.edu/33288631/Potential_Lives_Saved_by_Replacing_Coal_with_Solar_Photovoltaic_Electricity_Production_in_the_U.S . (Accessed: November 20, 2017).	Informs health policies by examining the health and monetary impacts of switching from coal to solar power.	No	No
NHTSA-2017-0069-0148-1459	William Corcoran	Underwood, E. 2017. The polluted brain. <i>Science</i> (355)6323. Available at: http://science.sciencemag.org/content/355/6323/342 . (Accessed: November 20, 2017).	Examines the possibility that inhaling fine and ultrafine pollutant particles can lead to dementia.	Yes	No
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Cooper, M. 2012. American Federalism At Its Best: Why the Environmental Protection Agency Should Grant A Clean Air Act Waiver to the Clean Cars Program, to the Environmental Protection Agency, Pubic Hearing, September 19, 2012. Consumer Federation of America. Available at: http://consumerfed.org/testimonial/american-federalism-at-its-best/ . (Accessed: November 20, 2017).	Supports California's Advanced Clean Cars Program and urges EPA to grant California's waiver request as submitted.	No	No

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NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Cooper, M. 2016. Testimony of Dr. Mark Cooper, on Midterm Review and an Update on the Corporate Average Fuel Economy Program and Greenhouse Gas Emissions Standards for Motor Vehicles, before the Committee on Energy and Commerce Subcommittee on Commerce, Manufacturing, and Trade Subcommittee on Energy and Power, U.S. House of Representatives, September 22, 2016. Available at: https://energycommerce.house.gov/hearings/midterm-review-and-update-corporate-average-fuel-economy-program-and/ . (Accessed: November 20, 2017).	Provides the testimony of Dr. Mark Cooper on Midterm Review and an update on the CAFE program and greenhouse gas emissions standards for motor vehicles.	No	No
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Gillis, J., and R. Eckman. 2017. An Analysis of Consumer Savings and Automaker Progress on the Road to 2025 CAFE Standards. Consumer Federation of America. Available at: http://consumerfed.org/wp-content/uploads/2017/07/on-the-road-to-2025-cafe-standards.pdf . (Accessed: November 20, 2017).	Evaluates the direct consumer savings, and automaker progress, associated with the 2025 CAFE standards.	No	No
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	U.S. Bureau of Labor Statistics. 2017. Table 1101. Quintiles of Income before Taxes: Annual Expenditure Means, Shares, Standard Errors, and Coefficients of Variation, Consumer Expenditure Survey, 3rd Quarter 2015 through 2nd Quarter 2016. Available at: https://www.bls.gov/cex/22016/midyear/quintile.pdf . (Accessed: November 20, 2017).	Provides a table demonstrating the quintiles of income before taxes.	No	No

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NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Consumer Federation of America. 2017. Consumer Federation of America Issues Energy Web page. Available at: http://consumerfed.org/issues/energy/ . (Accessed: November 20, 2017).	Discusses energy issues in America.	No	No
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Cooper, M. 2012. A Key Step to Ending America's Oil Addiction: Policymakers, Consumers and Automakers are Shifting, New Vehicles to Higher Fuel Economy. Consumer Federation of America. Available at: http://www.consumerfed.org/pdfs/Studies.CooperHigherFuelEconomy.7-7.pdf . (Accessed: November 20, 2017).	Demonstrates that the primary force that has changed the direction of U.S. fuel economy policy and the glue that holds this consensus together is the favorable economics of increasing fuel economy.	No	No
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Cooper, M. 2012. Will They or Won't They? Consumer Adoption of High Fuel Economy Vehicles, 1999–2012, and the Role of the 2025 Standards in Speeding Diffusion of Advanced Technology. Consumer Federation of America. Available at: http://consumerfed.org/_archives/pdfs/PR.AdvancedTechnologyAdoptionAnalysisFuelEconomy12.13.12.pdf . (Accessed: November 20, 2017).	Provides statement of Dr. Mark Cooper, Director of Research: Consumer Adoption of High Fuel Economy Vehicles, 1999–2012, and the Role of the 2025 Standards in Speeding Diffusion of Advanced Technology.	No	No
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Consumer Federation of America. 2014. For First Time Over 50 Percent of Current Year Models Get More Than 23 MPG; Over 11 Percent Get 30 MPG! Available at: http://consumerfed.org/press_release/for-first-time-over-50-percent-of-current-year-models-get-more-than-23-mpg-over-11-percent-get-30-mpg/ . (Accessed: November 20, 2017).	States that more than 50% of the current year's vehicles get more than 23 miles per gallon according to the Consumer Federation of America.	No	No

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NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Consumer Federation of America. 2015. 2015 Cars Gain MPGs. CAFE Goals in Reach If Gains Continue: However, New Data Shows Some Companies Are Backsliding. Available at: http://www.consumerfed.org/pdfs/150519_2015-Fuel-Economy_pressrelease.pdf . (Accessed: November 20, 2017).	Reports on an analysis of 1,163 of 2015's new vehicles showing that fuel efficiency continues to increase on a model-by-model basis; however, individual car company fleets are backsliding on their overall fuel economy performance.	No	No
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Consumer Federation of America. 2015. Knowledge Affects Consumer Interest in EVs, New EVs Guide to Address Info Gap: New Survey Shows Nearly One-Third Are Willing to Consider Buying an EV for their Next Car. Available at: http://consumerfed.org/press_release/knowledge-affects-consumer-interest-in-evs-new-evs-guide-to-address-info-gap/ . (Accessed: November 20, 2017).	Provides survey results showing that most Americans (54%) have a positive view of electric vehicles.	No	No
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Consumer Federation of America. 2016. New Data Shows Consumer Interest in Electric Vehicles Is Growing: Prices Are Down; Number of Models Is Up; Free New Guide to EVs Available as Year over Year Sales Increase. Available at: http://consumerfed.org/press_release/new-data-shows-consumer-interest-electric-vehicles-growing/ . (Accessed: November 20, 2017).	Reports on new data showing that consumer interest in purchasing an electric vehicle has increased in the past year, and this interest is greatest among young adults.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Cooper, M. 2014. Paying the Freight: The Consumer Benefits of Increasing the Fuel Economy of Medium and Heavy Duty Trucks. Consumer Federation of America. Available at: http://www.consumerfed.org/pdfs/Paying-the-Freight.pdf . (Accessed: November 20, 2017).	Examines the costs of energy used by medium- and heavy-duty trucks, the potential for energy savings in this transportation sector, and the positive impact increased fuel efficiency will have on America's households.	No	No
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Cooper, M. 2015. Staying on the Road to 54.5 MPG by 2025: Riding the Gasoline Roller Coaster. Consumer Federation of America. Available at: http://www.consumerfed.org/pdfs/150215_Gasoline-Rollercoaster-Fuel-Economy_report.pdf . (Accessed: November 20, 2017).	Asserts that policy makers should keep a steady eye on road to the gradual increase to 54.5 miles per gallon by 2025.	No	No
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	Gillis, J., and M. Cooper. 2013. On the Road to 54 MPG: A Progress Report on Achievability. Consumer Federation of America. Available at: http://consumerfed.org/reports/on-the-road-to-54-mpg-a-progress-report-on-achievability/ . (Accessed: November 20, 2017).	Reports that consumer demand for more fuel-efficient vehicles is high and the nation is well on its way to adopting a more fuel-efficient vehicle fleet under the federal 54.5 mile-per-gallon standard.	No	No
NHTSA-2017-0069-0149	Mark Cooper, Consumer Federation of America	U.S. Department of Transportation. 2001. Household, Individual, and Vehicle Characteristics. Bureau of Transportation Equipment. Available at: https://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/highlights_of_the_2001_national_household_travel_survey/html/section_01.html . (Accessed: November 20, 2017). (Link no longer active).	Reports the U.S. Bureau of Transportation statistics on the prevalence of drivers and personal vehicle use in the nation.	No	No

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NHTSA-2017-0069-0150	Chris Nevers, Alliance of Automobile Manufacturers and Association of Global Automakers	Association of Global Automakers. 2017. Association of Global Automakers Website. Available at: www.globalautomakers.org . (Accessed: November 20, 2017).	Provides the main webpage of the Association of Global Automakers website.	No	No
NHTSA-2017-0069-0150	Chris Nevers, Alliance of Automobile Manufacturers and Association of Global Automakers	Auto Alliance. 2017. Auto Alliance Website. Available at: www.autoalliance.org . (Accessed: November 20, 2017).	Provides the main page of the Auto Alliance (Alliance of Automobile Manufacturers) website.	No	No
NHTSA-2017-0069-0150	Chris Nevers, Alliance of Automobile Manufacturers and Association of Global Automakers	National Highway Traffic Safety Administration. 2017. Projected Fuel Economy Performance Report. Available at: https://one.nhtsa.gov/CAFE_PIC/MY%202016%20and%202017%20Projected%20Fuel%20Economy%20Performance%20Report%20Final.pdf . (Accessed: November 20, 2017).	Estimates fuel economy values for manufacturers and fleets as a supplement to other reporting provided through the CAFE Public Information Center, which contains only EPA-verified final model year data.	No	No
NHTSA-2017-0069-0150	Chris Nevers, Alliance of Automobile Manufacturers and Association of Global Automakers	Obama White House. 2010. Presidential Memorandum Regarding Fuel Efficiency Standards. Available at: https://obamawhitehouse.archives.gov/the-press-office/presidential-memorandum-regarding-fuel-efficiency-standards . (Accessed: November 20, 2017).	Provides the text of the memorandum in which President Obama requested that additional coordinated steps be taken to produce a new generation of clean vehicles.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0150	Chris Nevers, Alliance of Automobile Manufacturers and Association of Global Automakers	Snively, B. 2017. EPA Eager to Work with Auto Industry to Evaluate Regulations. <i>USA Today</i> . Available at: https://www.usatoday.com/story/money/nation-now/2017/08/02/epa-eager-work-auto-industry-evaluate-regulations/531632001/ . (Accessed: November 20, 2017).	Reports on EPA's desire to work with the automotive industry as they restructure greenhouse gas emission regulations.	No	No
NHTSA-2017-0069-0150	Chris Nevers, Alliance of Automobile Manufacturers and Association of Global Automakers	U.S. Environmental Protection Agency. 2011. Auto Manufacturer and California Air Resources Board Commitment Letters to Support 2017–2025 Regulations. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/2011-commitment-letters-2017-2025-light-duty-national . (Accessed: November 20, 2017).	Provides letters of support from the State of California and major automakers for a continued national program of light-duty greenhouse gas and CAFE standards.	No	No
NHTSA-2017-0069-0150	Chris Nevers, Alliance of Automobile Manufacturers and Association of Global Automakers	WardsAuto InfoBank. 2017. WardsAuto Website. Available at: http://wardsauto.com/ . (Accessed: November 20, 2017).	Provides the latest news, data, and analyses for today's auto industry.	No	No
NHTSA-2017-0069-0151	Graham Noyes, Pearson Fuels	California Air Resources Board. 2012. State of California Air Resources Board, Resolution 12–11, January 26, 2012, at 20. Available at: https://arb.ca.gov/board/res/2012/res12-11.pdf . (Accessed: November 20, 2017).	Discusses the Advanced Clean Cars Regulation Package.	No	No

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NHTSA-2017-0069-0151	Graham Noyes, Pearson Fuels	Batres-Marquez, S. P. 2017. U.S. Ethanol: Production, Consumption, and the Relevance of Increasing Exports. Decision Innovation Solutions. Available at: https://www.agmrc.org/renewable-energy/renewable-energy-climate-change-report/renewable-energy-climate-change-report/april-2017-report/us-ethanol-production-consumption-and-the-relevance-of-increasing-exports/ . (Accessed: November 20, 2017).	Analyzes the production, consumption, and relevance of increasing ethanol exports.	No	No
NHTSA-2017-0069-0151	Graham Noyes, Pearson Fuels	Bunker, B. J. 2014. E85 Flexible Fuel Weight Factor for Model Year 2016–2018 Vehicles. U.S. Environmental Protection Agency. Available at: https://iaspub.epa.gov/otaqpub/display_file.jsp?docid=33581&flag=1 . (Accessed: November 20, 2017).	Provides a letter from EPA regarding the E85 flexible fuel vehicle-weighting factor for model year 2016–2018 vehicles.	No	No
NHTSA-2017-0069-0151	Graham Noyes, Pearson Fuels	Gas Buddy. 2017. About GasBuddy. Available at: https://www.gasbuddy.com/About . (Accessed: November 20, 2017).	Discusses a smartphone app connecting drivers with gas station information.	No	No
NHTSA-2017-0069-0151	Graham Noyes, Pearson Fuels	U.S. Department of Energy. 2017. Co-Optimization of Fuels and Engines. Office of Energy Efficiency and Renewable Energy. Available at: https://energy.gov/eere/bioenergy/co-optimization-fuels-engines . (Accessed: November 20, 2017).	Discusses the research and development collaboration between the U.S. Department of Energy, nine national laboratories, and industry to combine biofuels and combustion research and development, building on decades of advances in both fuels and engines.	No	No

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NHTSA-2017-0069-0151	Graham Noyes, Pearson Fuels	U.S. Energy Information Administration. 2017. How Much Oil is Consumed in the United States? U.S. Energy Information Administration. Available at: https://www.eia.gov/tools/faqs/faq.php?id=33&t=6 . (Accessed: November 20, 2017).	Provides details on U.S. oil consumption in general and in 2016.	No	No
NHTSA-2017-0069-0151	Graham Noyes, Pearson Fuels	U.S. Energy Information Administration. 2017. U.S. Imports of Crude Oil and Petroleum Products. U.S. Energy Information Administration. Available at: https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MTTIMUS1&f=M . (Accessed: November 20, 2017).	Illustrates the import of crude oil and petroleum products from 1981 to 2017.	No	No
NHTSA-2017-0069-0151	Graham Noyes, Pearson Fuels	Council on Environmental Quality. 1981. Memorandum to Agencies: Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations. Executive Office of the President. Available at: https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf . (Accessed: November 20, 2017).	Provides the 40 most-asked questions compiled in a memorandum to agencies for the information of relevant officials.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Liu, J. C., L. J. Mickley, M. P. Sulprizio, F. Dominici, X. Yue, K., Ebisu, G. B. Anderson, R. F. A. Khan, M. A. Bravo, and M. L. Bell. 2016. Particulate air pollution from wildfires in the Western US under climate change. <i>Climatic Change</i> 138(3–4):655–666. Available at: https://doi.org/10.1007/s10584-016-1762-6 . (Accessed: November 20, 2017).	Estimates levels of fine particulate matter (PM2.5) directly attributable to wildfires in 561 western U.S. counties during fire seasons for the present-day (2004–2009) and future (2046–2051), using a fire prediction model and GEOS-Chem, a 3-D global chemical transport model.	Yes	No

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NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	U.S. Environmental Protection Agency. 2017. Greenhouse Gas Emissions. Sources of Greenhouse Gas Emissions. Available at: https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions . (Accessed: November 20, 2017).	Estimates the total national greenhouse gas emissions and removals associated with human activities across the United States.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	U.S. Environmental Protection Agency. 2017. Municipal Solid Waste Landfills: New Source Performance Standards, Emission Guidelines and Compliance Times: Reconsideration and Stay of Effective Date. U.S. Environmental Protection Agency. Available at: https://www.epa.gov/stationary-sources-air-pollution/municipal-solid-waste-landfills-new-source-performance-standards-0 . (Accessed: November 20, 2017).	Provides guidelines on certain aspects of the 2016 New Source Performance Standards for municipal solid waste landfills.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Adelaine, S. A., M. Sato, Y. Jin, and H. Godwin. 2017. An assessment of climate change impacts on Los Angeles (California USA) hospitals, wildfires highest priority. <i>Prehospital and Disaster Medicine</i> 32(5):556–562. Available at: https://doi.org/10.1017/S1049023X17006586 . (Accessed: November 20, 2017).	Determines how much climate change is likely to increase emergency department visits by mid-century for each hospital.	Yes	No

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NHTSA-2017- 0069-0152	David Pettit, Acadia Center et al.	Auffhammer, M., P. Baylis, and C. H. Hausman. 2017. Climate change is projected to have severe impacts on the frequency and intensity of peak electricity demand across the United States. <i>Proceedings of the National Academy of Sciences</i> 114(8):1886–1891. doi: 10.1073/pnas.1613193114. Available at: http://www.pnas.org/content/114/8/1886.full . (Accessed: November 20, 2017).	Analyzes the estimated temperature response functions for total daily consumption in combination with the daily peak load with 18 downscaled global climate models to simulate climate change-driven impacts on both outcomes.	Yes	No
NHTSA-2017- 0069-0152	David Pettit, Acadia Center et al.	Balbus, J. M., J. B. Greenblatt, R. Chari, D. Millstein, and K. L. Ebi. 2014. A wedge-based approach to estimating health co-benefits of climate change mitigation activities in the United States. <i>Climatic Change</i> 127(2):199–210. Available at: https://doi.org/10.1007/s10584-014-1262-5 . (Accessed: November 20, 2017).	Presents a new framework for estimating the change in health outcomes resulting from implementation of specific carbon dioxide-reduction activities, allowing comparison of different sectors and options for climate-mitigation activities.	Yes	No
NHTSA-2017- 0069-0152	David Pettit, Acadia Center et al.	Bartos, M. D., and B. M. V. Chester. 2015. Impacts of climate change on electric power supply in the Western United States. <i>Nature Climate Change</i> 5:748–752. doi:10.1038/nclimate2648. Available at: https://www.nature.com/nclimate/journal/v5/n8/full/nclimate2648.html . (Accessed: November 20, 2017).	Estimates reductions to generating capacity in the western United States based on long-term changes in streamflow, air temperature, water temperature, humidity, and air density.	Yes	No

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NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Blunden, J. 2017. International Report Confirms 2016 was Third Consecutive Year of Record Global Warmth. NOAA. Available at: https://www.climate.gov/news-features/understanding-climate/international-report-confirms-2016-was-third-consecutive-year . (Accessed: November 20, 2017).	Confirms that 2016 surpassed 2015 as the warmest year in 137 years of recordkeeping.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Diffenbaugh, N. S., D. L. Swain, and D. Touma. 2015. Anthropogenic warming has increased drought risk in California. <i>Proceedings of the National Academy of Sciences</i> 112(13):3931–3936. doi: 10.1073/pnas.1422385112. Available at: http://www.pnas.org/content/112/13/3931.abstract . (Accessed: November 20, 2017).	Analyzes historical climate observations from California and finds that precipitation deficits in California were more than twice as likely to yield drought years if they occurred when conditions were warm.	Yes	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Gergel, D. R., B. Nijssen, J. T. Abatzoglou, D. P. Lettenmaier, and M. R. Stumbaugh. 2017. Effects of climate change on snowpack and fire potential in the western USA. <i>Climatic Change</i> 141(2):287–299. Available at: https://doi.org/10.1007/s10584-017-1899-y . (Accessed: November 20, 2017).	Evaluates the implications of ten 21st century climate scenarios for snow, soil moisture, and fuel moisture across the conterminous western United States using the Variable Infiltration Capacity hydrology model.	Yes	No

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NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Hauer, M. E., J. M. Evans, and D. R. Mishra. 2016. Millions projected to be at risk from sea-level rise in the continental United States. <i>Nature Climate Change</i> 6:691–695. doi:10.1038/nclimate2961. Available at: https://www.nature.com/nclimate/journal/v6/n7/full/nclimate2961.html . (Accessed: November 20, 2017).	Suggest that the absence of protective measures could lead to U.S. population movements of a magnitude similar to the 20th century Great Migration of southern African-Americans.	Yes	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Horne, J. R., and D. Dabdub. 2017. Impact of global climate change on ozone, particulate matter, and secondary organic aerosol concentrations in California: A model perturbation analysis. <i>Atmospheric Environment</i> 153:1–17. Available at: https://doi.org/10.1016/j.atmosenv.2016.12.049 . (Accessed: November 20, 2017).	Determines the impact of changes in future climate and emissions on regional air quality in the South Coast Air Basin of California.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Le Quéré, C., R. M. Andrew, J. G. Canadell, S. Sitch, J. I. Korsbakken, G. P. Peters, A. C. Manning, T. A. Boden, P. P. Tans, R. A. Houghton, R. F. Keeling, S. Alin, O. D. Andrews, P. Anthoni, L. Barbero, L. Bopp, F. Chevallier, L. P. Chini, P. Ciais, K. Currie, C. Delire, S. C. Doney, P. Friedlingstein, T. Gkritzalis, I. Harris, J. Hauck, V. Haverd, M. Hoppema, K. Klein Goldewijk, A. K. Jain, E. Kato, A. Körtzinger, P. Landschützer, N. Lefèvre, A. Lenton, S. Lienert, D. Lombardozzi, J. R. Melton, N. Metzl, F. Millero, P. M. S. Monteiro, D. R. Munro, J. E. M. S. Nabel, S.-I. Nakaoka, K. O'Brien, A. Olsen, A. M. Omar, T. Ono, D. Pierrot, B. Poulter, C. Rödenbeck, J. Salisbury, U. Schuster, J. Schwinger, R. Séférian, I. Skjelvan, B. D. Stocker, A. J. Sutton, T. Takahashi, H. Tian, B. Tilbrook, I. T. van der Laan-Luijkx, G. R. van der Werf, N. Viovy, A. P. Walker, A. J. Wiltshire, and S. Zaehle. 2016. Global Carbon Budget 2016. <i>Earth System Science Data</i> 8:605–649. https://doi.org/10.5194/essd-8-605-2016 , 2016. Available at: http://www.globalcarbonproject.org/carbonbudget/archive/2016/GCP_CarbonBudget_2016.pdf . (Accessed: November 20, 2017).	Presents the global carbon budget data.	Yes	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	National Research Council. 2013. Abrupt Impacts of Climate Change: Anticipating Surprises. The National Academies Press. Page 250. Available at: https://doi.org/10.17226/18373 . (Accessed: November 20, 2017).	Discusses the uncertainty associated with climate change and abrupt changes in climate.	Yes	No

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NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	National Research Council. 2014. The Arctic in the Anthropocene: Emerging Research Questions. The National Academies Press. Page 220. Available at: https://doi.org/10.17226/18726 . (Accessed: November 20, 2017).	Examines emerging research questions in the Arctic.	Yes	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Peters, G. P, R. M. Andrew, S. Solomon, and P. Friedlingstein. 2015. Measuring a fair and ambitious climate agreement using cumulative emissions. <i>Environmental Research Letters</i> 10(10). Available at: http://iopscience.iop.org/article/10.1088/1748-9326/10/10/105004 . (Accessed: November 20, 2017).	Develops a framework based on cumulative emissions of carbon dioxide to compare the consistency of countries' current emission pledges to the ambition of keeping global temperatures below 2°C, and, further, compares two alternative methods of sharing the remaining emissions allowance.	Yes	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Rogeli, J., M. Schaeffer, P. Friedlingstein, N. P. Gillett, D. P. Van Vuuren, K. Riahi, M. Allen, and R. Knutti. 2016. Differences between carbon budget estimates unraveled. <i>Nature Climate Change</i> 6:245–252. doi:10.1038/nclimate2868. Available at: http://www.nature.com/nclimate/journal/v6/n3/full/nclimate2868.html?WT.ec_id=NCLIMATE-201603&spMailingID=50767823&spUserID=ODkwMTM2NjQyMAS2&spJobID=862987827&spReportId=ODYyOTg3ODI3S0 . (Accessed: November 20, 2017).	Analyzes methods to estimate the cumulative carbon emissions that would keep global warming to below a given temperature.	Yes	No

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NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Schleussner, C., T. K. Lissner, E. M. Fischer, J. Wohland, M. Perrette, A. Golly, J. Rogelj, K. Childers, J. Schewe, K. Frieler, M. Mengel, W. Hare, and M. Schaeffer. 2016. Differential climate impacts for policy-relevant limits to global warming: the case of 1.5C and 2C. <i>Earth System Dynamics</i> 7:327–351. doi:10.5194/esd-7-327-2016. Available at: https://www.earth-syst-dynam.net/7/327/2016/esd-7-327-2016.pdf . (Accessed: November 20, 2017).	Provides an assessment of key impacts of climate change at warming levels of 1.5°C and 2°C.	Yes	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Shindell, D. T., Y. Lee, and G. Faluvegi. 2016. Climate and health impacts of US emissions reductions consistent with 2 °C. <i>Nature Climate Change</i> 6:503–507. doi:10.1038/nclimate2935. Available at: http://www.nature.com/nclimate/journal/v6/n5/full/nclimate2935.html?foxtrotcallback=true . (Accessed: November 20, 2017).	Examines the impacts of highly ambitious scenarios for clean energy and vehicles.	Yes	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Thompson, T. M, S. Rausch, R. K. Saari, and N. E. Selin. 2014. A systems approach to evaluating the air quality co-benefits of US carbon policies. <i>Nature Climate Change</i> 4:917–923. doi:10.1038/nclimate2342. Available at: https://www.nature.com/nclimate/journal/v4/n10/full/nclimate2342.html . (Accessed: November 20, 2017).	Quantifies air quality co-benefits of U.S. policies to reduce greenhouse gas emissions. Health-related benefits from reduced ozone and particulate matter (PM2.5) are assessed by linking three advanced models, representing the full pathway from policy to pollutant damages.	Yes	No

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NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	U.S. Environmental Protection Agency. 2015. 2015 Inventory of U.S. Greenhouse Gas Emissions and Sinks. Available at: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks . (Accessed: November 20, 2017).	Provides a comprehensive accounting of total greenhouse gas emissions for all human-made sources in the United States.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Wuebbles, D., D. Fahey, K. Hibbard, et. al. 2017. U.S. global change research program climate science special report. Fifth-Order Draft. Final Clearance June 28, 2017. Available at: http://www.nytimes.com/packages/pdf/climate/2017/climate-report-final-draft-clean.pdf . (Accessed: November 20, 2017).	Assesses the science of climate change, with a focus on the United States, to serve as the foundation for efforts to assess climate-related risks and inform decision-making about responses.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Caldeira, K., and M. E. Wickett. 2005. Ocean model predictions of chemistry changes from carbon dioxide emissions to the atmosphere and ocean. <i>Journal of Geophysical Research</i> 110 (C09S04). doi:10.1029/2004JC002671. Available at: http://onlinelibrary.wiley.com/doi/10.1029/2004JC002671/full . (Accessed: November 20, 2017).	Presents ocean chemistry calculations based on ocean general circulation model simulations of atmospheric carbon dioxide emission, stabilization of atmospheric carbon dioxide content, and stabilization of atmospheric carbon dioxide achieved in total or in part by injection of carbon dioxide to the deep ocean interior.	Yes	Yes

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NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Doney, S.C., V. J. Fabry, R. A. Feely, and J. A. Kleypas. 2009. Ocean acidification: The other CO ₂ problem. <i>Annual Review of Marine Science</i> 1(1):169–192. Available at: http://www.annualreviews.org/doi/abs/10.1146/annurev.marine.010908.163834 . (Accessed: November 20, 2017).	Reviews the ocean acidification process and discusses resulting issues such as increases in carbon fixation rates in some photosynthetic organisms (both calcifying and noncalcifying) and the potential for marine organisms to adapt to increasing carbon dioxide.	Yes	Yes
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel, and J. C. Minx. 2014. <i>Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change</i> . IPCC. Cambridge University Press. Page. 1435. Available at: http://www.ipcc.ch/report/ar5/wg3/ . (Accessed: November 20, 2017).	Provides an assessment of relevant options for mitigating climate change through limiting or preventing greenhouse gas emissions, as well as activities that reduce their concentrations in the atmosphere.	Yes	Yes

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NHTSA-2017- 0069-0152	David Pettit, Acadia Center et al.	Feely, R. A., C. L. Sabine, K. Lee, W. Berelson, W. Kleypas, V. J. Fabry, and F. J. Millero. 2004. Impact of anthropogenic CO ₂ on the CaCO ₃ system in the oceans. <i>Science</i> 305(5682): 362–366. doi: 10.1126/science.1097329. Available at: http://science.sciencemag.org/content/305/5682/362 . (Accessed: November 20, 2017).	Estimates the <i>in-situ</i> calcium carbonate dissolution rates for the global oceans from total alkalinity and chlorofluorocarbon data, and discusses the future impacts of anthropogenic carbon dioxide on calcium carbonate shell-forming species.	Yes	Yes
NHTSA-2017- 0069-0152	David Pettit, Acadia Center et al.	Field, C. B., V. R. Barros, D. J. Dokken, K. J. Mach, M. D. Mastrandrea, T. E. Bilir, M. Chatterjee, K. L. Ebi, Y. O. Estrada, R. C. Genova, B. Girma, E. S. Kissel, A. N. Levy, S. MacCracken, P. R. Mastrandrea, and L. L. White. 2014. Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC. Cambridge University Press. Page 1132. Available at: http://www.ipcc.ch/report/ar5/wg2/ . (Accessed: November 20, 2017).	Addresses climate impacts that have already occurred and risks of future impacts, especially the way those risks change with the amount of climate change that occurs and with investments in adaptation to climate changes that cannot be avoided.	Yes	Yes

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Hönisch, B., A. Ridgwell, D. N. Schmidt, E. Thomas, S. J. Gibbs, A. Sluijs, R. Zeebe, L. Kump, R. C. Martindale, S. E. Greene, W. Kiessling, J. Ries, J. C. Zachos, S. Barker, T. M. Marchitto Jr., R. Moyer, C. Pelejero, P. Ziveri, G. L. Foster, and B. Williams. 2012. The geological record of ocean acidification. <i>Science</i> 335(6072):1058–1063. doi: 10.1126/science.1208277. Available at: http://science.sciencemag.org/content/335/6072/1058 . (Accessed: November 20, 2017).	Reviews events exhibiting evidence for elevated atmospheric carbon dioxide, global warming, and ocean acidification over the past 300 million years of Earth's history, some with contemporaneous extinction or evolutionary turnover among marine calcifiers.	Yes	Yes
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Institute of Medicine. 2011. Climate Change, the Indoor Environment, and Health. The National Academies Press. P. 272. doi.org/10.17226/13115. Available at: https://www.nap.edu/catalog/13115/climate-change-the-indoor-environment-and-health . (Accessed: November 20, 2017).	Discusses how climate change has the potential to affect the indoor environment because conditions inside buildings are influenced by conditions outside them.	Yes	Yes
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Kroeker, K. J., R. L. Kordas, R. Crim, I. E. Hendriks, L. Ramajo, G. S. Singh, C. M. Duarte, and J. P. Gattuso. 2013. Impacts of ocean acidification on marine organisms: quantifying sensitivities and interaction with warming. <i>Global Change Biology</i> 19(6):1884–1896. doi: 10.1111/gcb.12179. Available at: https://www.ncbi.nlm.nih.gov/pubmed/23505245 . (Accessed: November 20, 2017).	Synthesizes the results of 228 studies examining biological responses to ocean acidification.	Yes	Yes

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Luthi, D., M. Le Floch, B. Bereiter, T. Blunier, J. M. Barnola, U. Siegenthaler, D. Raynaud, J. Jouzel, H. Fischer, K. Kawamura, and T. F. Stocker. 2008. High-resolution carbon dioxide concentration record 650,000–800,000 years before present. <i>Nature</i> 453:379–382. doi:10.1038/nature06949. Available at: http://www.nature.com/nature/journal/v453/n7193/abs/nature06949.html . (Accessed: November 20, 2017).	Reports the results of the lowest 200 meter of the Dome C ice core, extending the record of atmospheric carbon dioxide concentration by two complete glacial cycles to 800,000 years before present.	Yes	Yes
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	McNeil, B., and R. J. Matear. 2006. Projected climate change impact on oceanic acidification. <i>Carbon Balance and Management</i> 1(2):1–6. Available at: https://doi.org/10.1186/1750-0680-1-2 . (Accessed: November 20, 2017).	Demonstrates that the direct decrease in pH due to ocean warming is approximately equal to, but opposite in magnitude to, the indirect increase in pH associated with ocean warming.	Yes	Yes
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Melillo, J. M., T. C. Richmond, and G. W. Yohe. 2014. Climate Change Impacts in the United States: The Third National Climate Assessment. U.S. Global Change Research Program. P. 841. Available at: http://www.globalchange.gov/browse/reports/climate-change-impacts-united-states-third-national-climate-assessment-0 . (Accessed: November 20, 2017).	Summarizes the impacts of climate change on the United States, now and in the future.	Yes	Yes

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	National Research Council. 2012. Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future. The National Academies Press. Page 201. Available at: https://doi.org/10.17226/13389 . (Accessed: November 20, 2017).	Provides data on the global sea-level rise and the enormous risks it poses to the valuable infrastructure, development, and wetlands that line much of the 1,600-mile shoreline of California, Oregon, and Washington.	Yes	Yes
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Solomon, S., G. K. Plattner, R. Knutti, and P. Friedlingstein. 2009. Irreversible climate change due to carbon dioxide emissions. <i>Proceedings of the National Academy of Sciences</i> 106(6):1704–1709. doi: 10.1073/pnas.0812721106. Available at: http://www.pnas.org/content/106/6/1704.full . (Accessed: November 20, 2017).	Demonstrates the relationship between climate change and increases in carbon dioxide.	Yes	Yes
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Stocker, T. F., D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, and P. M. Midgley. 2013. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC. Cambridge University Press. Page 1535. doi:10.1017/CBO9781107415324. Available at: http://www.ipcc.ch/report/ar5/wg1/ . (Accessed: November 20, 2017).	Confirms that warming in the climate system is unequivocal, with many of the observed changes unprecedented over decades to millennia: warming of the atmosphere and the ocean, diminishing snow and ice, rising sea levels and increasing concentrations of greenhouse gases.	Yes	Yes

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NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Lutsey, N., D. Meszler, A. Isenstadt, J. German, and J. Miller. 2017. Efficiency Technology and Cost Assessment for U.S. 2025–2030 Light-Duty Vehicles. The International Council on Clean Transportation. Available at: http://www.theicct.org/sites/default/files/publications/US-LDV-tech-potential_ICCT_white-paper_22032017.pdf . (Accessed: November 20, 2017).	Analyzes emerging vehicle efficiency technologies, their ability to achieve lower emission levels, and their costs in the 2025–2030 period.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Saari, R. K., T. M. Thompson, and N. E. Selin. 2017. Human health and economic impacts of ozone reductions by income group. <i>Environmental Science & Technology</i> 51(4):1953–1961. doi: 10.1021/acs.est.6b04708. Available at: http://pubs.acs.org/doi/pdf/10.1021/acs.est.6b04708 . (Accessed: November 20, 2017).	Quantifies how three factors affect the relative benefits of ozone policies with household income: (1) unequal ozone reductions; (2) policy delay; and (3) economic valuation methods.	Yes	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Bloomberg New Energy Finance. 2017. Electric Vehicle Outlook. Available at: https://data.bloomberglp.com/bnef/sites/14/2017/07/BNEF_EVO_2017_ExecutiveSummary.pdf . (Accessed: November 20, 2017).	Analyzes how economics, technology, policy, and consumer behavior will affect electric vehicle adoption between now and 2040.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Cooper, A., and K. Schefter. 2017. Plug-In Electric Vehicle Sales Forecast through 2025 and the Charging Infrastructure Required. Edison Electric Institute, Institute for Electric Innovation. Available at: http://www.edisonfoundation.net/iei/publications/Documents/IEI_EEI%20PEV%20Sales%20and%20Infrastructure%20thru%202025_FINAL%20(2).pdf . (Accessed: November 20, 2017).	Identifies both the scope and scale of charging infrastructure needed to support plug-in electric vehicles and the different approaches to infrastructure build-out.	No	No

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NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	U.S. Department of Energy. 2016. Revolution Now. U.S. Department of Energy. Available at: https://energy.gov/revolution-now . (Accessed: November 20, 2017).	Reports on the accelerated deployment of five clean energy technologies thriving in the U.S. market—wind turbines, solar technologies for both utility-scale and distributed photovoltaic, electric vehicles, and light-emitting diodes.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	U.S. Environmental Protection Agency. 2017. EPA Proposes to Stay Oil and Gas Standards for Two Years. U.S. Environmental Protection Agency. Available at: https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/epa-proposes-stay-oil-and-gas-standards-two-0 . (Accessed: November 20, 2017).	Discusses how EPA is taking steps to ensure portions of the agency's 2016 New Source Performance Standards for the oil and natural gas industry remain stayed while the agency works through the reconsideration process.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Nealer, R., D. Reichmuth, and D. Anair. 2015. Cleaner Cars from Cradle to Grave, How Electric Cars Beat Gasoline Cars on Lifetime Global Warming Emissions. Union of Concerned Scientists. Available at: http://www.ucsusa.org/sites/default/files/attach/2015/11/Cleaner-Cars-from-Cradle-to-Grave-full-report.pdf . (Accessed: November 20, 2017).	Compares battery-electric vehicles with similar gasoline vehicles by examining their global warming emissions over their life cycles—from the raw materials to make the car through manufacturing, driving, and disposal or recycling.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	California Air Resources Board. 2011. Advanced Clean Cars. Available at: https://www.arb.ca.gov/regact/2012/leviighg2012/levisor.pdf . (Accessed: November 20, 2017).	Provides evidence that despite significant progress in reducing smog-forming and particulate matter criteria emissions from the passenger vehicle fleet, California needs further reductions in order to meet state and federal ambient air quality standards.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	Natural Resources Defense Council. 2017. Trump Wants to Kill the EPA's Environmental Justice Program. Natural Resources Defense Council. Available at: https://www.nrdc.org/trump-watch/trump-wants-kill-epas-environmental-justice-program . (Accessed: November 20, 2017).	States that President Trump's proposed EPA budget reveals that the environmental justice program would be cut.	No	No
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	U.N. Subsidiary Body for Scientific and Technological Advice. 2015. Report on the Structured Expert Dialogue on the 2013–2015 Review. FCCC/SB/2015/1NF.1. Available at: http://unfccc.int/resource/docs/2015/sb/eng/inf01.pdf . (Accessed: November 20, 2017).	Summarizes the face-to-face dialogue between more than 70 experts and parties on the adequacy of the long-term global climate goal and the overall progress made toward achieving the long-term global goal.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0152	David Pettit, Acadia Center et al.	U.S. Environmental Protection Agency. 2017. Environmental Justice and National Environmental Policy Act. Environmental Justice Considerations in the NEPA Process. U.S. Environmental Protection Agency. Available at: https://www.epa.gov/environmentaljustice/environmental-justice-and-national-environmental-policy-act . (Accessed: November 20, 2017).	Provides guidance, methodologies, and tools to analyze environmental justice in National Environmental Policy Act documents.	No	No
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Bates, J. R. 2016. Estimating climate sensitivity using two-zone energy balance models. <i>Earth and Space Science</i> 3(5):207–225. Available at: http://onlinelibrary.wiley.com/doi/10.1002/2015EA000154/full . (Accessed: November 20, 2017).	Provides estimates of carbon dioxide equilibrium climate sensitivity and effective climate sensitivity.	Yes	No
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Christy, J. R. 2017. Testimony to the House Science Committee, March 29, 2017. Available at: https://science.house.gov/sites/republicans.science.house.gov/files/documents/HHRG-115-SY-WState-JChristy-20170329.pdf . (Accessed: November 20, 2017). (Link no longer active).	Provides a testimony focusing on the temperature of the bulk atmospheric layer from the surface to about 50,000 feet.	No	No
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Lewis, N., and J. A. Curry. 2014. The implications for climate sensitivity of AR5 forcing and heat uptake estimates. <i>Climate Dynamics</i> 45:1009. Available at: https://doi.org/10.1007/s00382-014-2342-y . (Accessed: November 20, 2017).	Presents energy budget estimates of equilibrium climate sensitivity and transient climate response.	Yes	No
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Loehle, C. 2014. A minimal model for estimating climate sensitivity. <i>Ecological Modelling</i> 276:80–84. (Accessed: November 20, 2017).	Estimates the periodic temperature oscillations often associated with the Pacific Decadal Oscillation and Atlantic Multidecadal Oscillation.	Yes	No

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NHTSA-2017- 0069-0153	Patrick Michaels, Cato Institute	Masters, T. 2014. Observational estimate of climate sensitivity from changes in the rate of ocean heat uptake and comparison to CMIP5 models. <i>Climate Dynamics</i> 42:2173. Available at: https://doi.org/10.1007/s00382-013-1770-4 . (Accessed: November 20, 2017).	Presents an analysis that incorporates climate sensitivity, ocean heat uptake, the CMIP model sensitivity, and climate feedback.	Yes	No
NHTSA-2017- 0069-0153	Patrick Michaels, Cato Institute	Michaels, P. J. 2017. Reconciling competing climate science and policy paradigms. Extended Abstract # CC-38. Cato Institute. Available at: https://object.cato.org/sites/cato.org/files/wp-content/uploads/cc38-michaels.pdf . (Accessed: November 20, 2017).	Discusses if the Paris Agreement objectives will be met.	No	No
NHTSA-2017- 0069-0153	Patrick Michaels, Cato Institute	Michaels, P.J., and P. C. Knappenberger. 2016. Lukewarming. Cato Institute. Available at: https://store.cato.org/book/lukewarming . (Accessed: November 20, 2017).	Examines if the impacts from climate change have been exaggerated.	No	No

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NHTSA-2017- 0069-0153	Patrick Michaels, Cato Institute	Millar, R. J., J. S. Fuglestedt, P. Friedlingstein, J. Rogeli, M. J. Grubb, H. D. Matthews, R. B. Skeie, P. M. Forster, D. J. Frame, and M. R. Allen. 2017. Emission budgets and pathways consistent with limiting warming to 1.5 degrees Celsius. <i>Nature Geoscience</i> 10:741–748. doi:10.1038/NGEO3031. Available at: https://www.nature.com/articles/ngeo3031.epdf?referrer_access_token=mwnghdbL03wwT5ngwh6UadRgN0jAjWel9jnR3ZoTv00hiLdhtid2wIzB9ImkCPRiDCWVzOyNzNp_ToL3CZnXFOySvge_X48Y3hGnZ3sFnaDq28GuV1CtozcJIN2dJUbasl3jm5IKPn5UIntkCp5vbzHNQQ6CXHhGF2XyYDK3EPWuUQnCoa3ioodgNC0yDoMzuivauTmWjY_eXfd1LbkuNW2uiv2_OJILGgo0kQT-g0kDGkMCpCP9NGdqWL2VknHnFQbP_B6JgrA_Odmo mL4M1A%3D%3D&tracking_referrer=www.nature.com . (Accessed: November 20, 2017).	Shows that limiting warming to 1.5°C is not yet a geophysical impossibility, but is likely to require delivery on strengthened pledges for 2030, followed by challengingly deep and rapid mitigation.	Yes	No
NHTSA-2017- 0069-0153	Patrick Michaels, Cato Institute	Skeie, R. B., T. Bernsten, M. Aldrin, M. Holden, and G. Myhre. 2014. A lower and more constrained estimate of climate sensitivity using updated observations and detailed radiative forcing time series. <i>Earth System Dynamics</i> 5:139–175. doi:10.5194/esd-5-139-2014. Available at: https://www.earth-syst-dynam.net/5/139/2014/esd-5-139-2014.pdf . (Accessed: November 20, 2017).	Finds that using three ocean heat content datasets simultaneously and data for global mean temperature and ocean heat content up to 2010 substantially narrows the range in equilibrium climate sensitivity compared to using less updated data and only one ocean heat content data set.	Yes	No

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NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Stevens, B. 2015. Rethinking the Lower Bound on Aerosol Radiative Forcing. <i>American Meteorological Society</i> . Available at: http://journals.ametsoc.org/doi/abs/10.1175/JCLI-D-14-00656.1 . (Accessed: November 20, 2017).	Finds that aerosol radiative forcing is less negative and more certain than is commonly believed.	Yes	No
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Hateren, J. H. V. 2013. A fractal climate response function can simulate global average temperature trends of the modern era and the past millennium. <i>Climate Dynamics</i> 40(11-12):2651-2670. doi: 10.1007/s00382-012-1375-3.	Discusses how the temperature rise from 1820 to 1950 can be attributed for about 70% to increased solar irradiance, while the temperature changes after 1950 are almost completely produced by the interplay of anthropogenic greenhouse gases and aerosols.	Yes	No
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Voosen, P. 2016. Climate scientists open up their black boxes to scrutiny. <i>Science</i> 354(6311):401–402. doi: 10.1126/science.354.6311.401. Available at: http://science.sciencemag.org/content/354/6311/401 . (Accessed: November 20, 2017).	Explains that some processes, like cloud formation, are too fine-grained, and lead modelers to use "parameterizations."	Yes	No
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Aldrin, M., M. Holden, P. Guttorp, R. B. Skeie, G. Myhre, and T. K. Berntsen. 2012. Bayesian estimation of climate sensitivity based on a simple climate model fitted to observations of hemispheric temperatures and global ocean heat content. <i>Environmetrics</i> 23(3):253–271. (Accessed: November 20, 2017).	Presents a model framework for estimating climate sensitivity.	Yes	Yes

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NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Annan, J. D., and J. C. Hargreaves. 2013. A new global reconstruction of temperature changes at the Last Glacial Maximum. <i>Climate of the Past</i> 9:367–376. Available at: https://www.clim-past.net/9/367/2013/cp-9-367-2013.pdf . (Accessed: November 20, 2017).	Presents data and models to generate a spatially complete reconstruction of surface air (and sea surface) temperatures over time.	Yes	Yes
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Hargreaves, J. C., J. D. Annan, M. Yoshimori, and A. Abe-Ouchi. 2012. Can the last glacial maximum constrain climate sensitivity? <i>Geophysical Research Letters</i> 39(24). Available at: http://onlinelibrary.wiley.com/doi/10.1029/2012GL053872/full . (Accessed: November 20, 2017).	Investigates the relationship between the Last Glacial Maximum and climate sensitivity across the PMIP2 multi-model ensemble of global climate change models and finds a correlation between tropical temperature and climate sensitivity.	Yes	Yes
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Lindzen, R. S., and Y. S. Choi. 2011. On the observational determination of climate sensitivity and its implications. <i>Asia-Pacific Journal of the Atmospheric Sciences</i> 47(4):377–390. doi:10.1007/s13143-011-0023-x. Available at: http://www-eaps.mit.edu/faculty/lindzen/236-Lindzen-Choi-2011.pdf . (Accessed: November 20, 2017).	Estimates climate sensitivity from observations using the deseasonalized fluctuations in sea surface temperatures and the concurrent fluctuations in the top-of-atmosphere outgoing radiation from the Earth Radiation Budget Experiment (ERBE) (1985–1999) and the Clouds and the Earth's Radiant Energy System (CERES) (2000–2008) satellite instruments.	Yes	Yes

Table B-1. Sources Identified in Scoping Comments

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NHTSA-2017- 0069-0153	Patrick Michaels, Cato Institute	Otto, A., F. E. L. Otto, O. Boucher, J. Church, G. Hegerl, P. M. Forster, N. P. Gillett, J. Gregory, G. C. Johnson, R. Knutti, N. Lewis, U. Lohmann, J. Marotzke, G. Myhre, D. Shindell, B. Stevens, and M. R. Allen. 2013. Energy budget constraints on climate response. <i>Nature Geoscience</i> 6:415–416 (2013). doi:10.1038/ngeo1836. Available at: https://www.nature.com/articles/ngeo1836 . (Accessed: November 20, 2017).	Finds that the global energy budget implies a range of values for the equilibrium climate sensitivity that is in agreement with earlier estimates, within the limits of uncertainty.	Yes	Yes
NHTSA-2017- 0069-0153	Patrick Michaels, Cato Institute	Ring, M. J., D. Lindner, E. F. Cross, and M. E. Schlesinger. 2012. Causes of the global warming observed since the 19th century. <i>Atmospheric and Climate Sciences</i> 2:401–415. Available at: http://dx.doi.org/10.4236/acs.2012.24035 . (Accessed: November 20, 2017).	Discusses° methods for temperature measurements (Singular Spectrum Analysis and Climate Model Simulation) and suggests that global warming is predominantly human-caused.	Yes	Yes
NHTSA-2017- 0069-0153	Patrick Michaels, Cato Institute	Roe, G. H., and M. B. Baker. 2007. Why is climate sensitivity so unpredictable? <i>Science</i> 318(5850):629–632. Available at: http://science.sciencemag.org/content/318/5850/629 . (Accessed: November 20, 2017).	Explains that both models and observations yield broad probability distributions for long-term increases in global mean temperature expected from the doubling of atmospheric carbon dioxide, with small but finite probabilities of very large increases.	Yes	Yes

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NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Schmittner, A., N. M. Urban, J. D. Shakun, N. M. Mahowald, N. P. U. Clark, P. J. Bartlein, A. C. Mix, and A. Rosell-Mele. 2011. Climate sensitivity estimated from temperature reconstructions of the last glacial maximum. <i>Science</i> 334(6061):1385–1388. doi: 10.1126/science.1203513. (Accessed: November 20, 2017).	Finds a lower probability of imminent extreme climatic change than previously thought.	Yes	Yes
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Spencer, R. W., and W. D. Braswell. 2010. On the diagnosis of radiative feedback in the presence of unknown radiative forcing. <i>Journal of Geophysical Research</i> 115(D16):109. doi:10.1029/2009JD013371. Available at: http://onlinelibrary.wiley.com/doi/10.1029/2009JD013371/full . (Accessed: November 20, 2017).	Analyzes the need for more accurate methods of diagnosing feedback from satellite data and for quantitatively relating those feedbacks to long-term climate sensitivity.	Yes	Yes
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Christy, J. R. 2017. State of the Climate. <i>American Meteorological Society</i> . Available at: https://www.ametsoc.org/ams/index.cfm/publications/bulletin-of-the-american-meteorological-society-bams/state-of-the-climate/ . (Accessed: November 20, 2017).	Unable to locate article.	No	No
NHTSA-2017-0069-0153	Patrick Michaels, Cato Institute	Christy, J. R. 2017. Figure S2-10. <i>American Meteorological Society</i> . Available at: https://www.ametsoc.org/ams/index.cfm/publications/bulletin-of-the-american-meteorological-society-bams/state-of-the-climate/ . (Accessed: November 20, 2017). (Link no longer active).	Unable to locate article.	No	No

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NHTSA-2017-0069-0154	Ann Wilson, Motor & Equipment Manufacturers Association	Alliance of Automobile Manufacturers. 2017. Cars Move America: State of the Auto Industry. Available at: https://autoalliance.org/resources/cars-move-america/ . (Accessed: November 20, 2017).	Reports that automakers are driving innovation in the automobile industry.	No	No
NHTSA-2017-0069-0154	Ann Wilson, Motor & Equipment Manufacturers Association	Motor and Equipment Manufacturers Association and The Boston Consulting Group. 2016. Driving the Future: The Employment and Economic Impact of the Vehicle Supplier Industry in the U.S. Available at: https://www.mema.org/sites/default/files/MEMA_ImpactBook.pdf . (Accessed: November 20, 2017).	Provides statistics regarding the automobile industry.	No	No
NHTSA-2017-0069-0154	Ann Wilson, Motor & Equipment Manufacturers Association	National Highway Traffic Safety Administration. 2016. Projected Fuel Economy Performance Report. Available at: https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/my_2015_and_2016_projected_fuel_economy_performance_report_final.pdf . (Accessed: November 20, 2017).	Provides projected fuel economy based on each manufacturer's pre-and mid-model year reports.	No	No
NHTSA-2017-0069-0155	Yueh-ru Chu, Attorneys General of New York, the District of Columbia, Iowa, Maine, Maryland, Massachusetts, Oregon, Pennsylvania, Vermont and Washington	U.S. Energy Information Administration. 2017. Today in Energy. U.S. energy-related CO2 emissions fell 1.7% in 2016. Available at: https://www.eia.gov/todayinenergy/detail.php?id=30712 . (Accessed: November 20, 2017).	Illustrates energy related carbon dioxide emissions and energy-related carbon intensity.	No	No

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NHTSA-2017-0069-0155	Yueh-ru Chu, Attorneys General of New York, the District of Columbia, Iowa, Maine, Maryland, Massachusetts, Oregon, Pennsylvania, Vermont and Washington	U.S. Environmental Protection Agency. 2017. Nitrogen Dioxide Pollution. Available at: https://www.epa.gov/no2-pollution/basic-information-about-no2#Effects . (Accessed: November 20, 2017).	Explains the basics of nitrogen dioxide, where it comes from, and its harmful effects.	No	No
NHTSA-2017-0069-0155	Yueh-ru Chu, Attorneys General of New York, the District of Columbia, Iowa, Maine, Maryland, Massachusetts, Oregon, Pennsylvania, Vermont and Washington	U.S. Environmental Protection Agency. 2017. Particulate Matter Pollution. Available at: https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM . (Accessed: November 20, 2017).	Explains the basics of particulate matter, where it comes from, and its harmful effects.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0155	Yueh-ru Chu, Attorneys General of New York, the District of Columbia, Iowa, Maine, Maryland, Massachusetts, Oregon, Pennsylvania, Vermont and Washington	Ford, W. C., and J. Hackett. 2017. The Science Behind Our Climate Change Strategy. Available at: https://corporate.ford.com/microsites/sustainability-report-2016-17/strategy-governance/strategy/science.html . (Accessed: November 20, 2017).	Provides Ford's plans and targets that are rooted in climate change.	No	No
NHTSA-2017-0069-0155	Yueh-ru Chu, Attorneys General of New York, the District of Columbia, Iowa, Maine, Maryland, Massachusetts, Oregon, Pennsylvania, Vermont and Washington	National Aeronautics and Space Administration. 2017. Global Climate Change; Vital Signs of the Planet; Facts; Effects. Available at: https://climate.nasa.gov/effects/ . (Accessed: November 20, 2017).	Presents Intergovernmental Panel on Climate Change predictions on increased temperatures and the extent of climate change effects.	No	No

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NHTSA-2017-0069-0155	Yueh-ru Chu, Attorneys General of New York, the District of Columbia, Iowa, Maine, Maryland, Massachusetts, Oregon, Pennsylvania, Vermont and Washington	Revesz, R., M. Greenstone, M. Hanemann, M. Livermore, T. Sterner, D. Grab, P. Howard, J. and Schwartz. 2017. Best cost estimate of greenhouse gases. <i>Science</i> 357:655. doi: 10.1126/science. Available at: http://science.sciencemag.org/content/357/6352/655 . (Accessed: November 20, 2017).	Suggests that the social cost of greenhouse gases should be regularly updated, especially to reflect the latest evidence about damage functions.	Yes	No
NHTSA-2017-0069-0155	Yueh-ru Chu, Attorneys General of New York, the District of Columbia, Iowa, Maine, Maryland, Massachusetts, Oregon, Pennsylvania, Vermont and Washington	U.S. Global Change Research Program. 2014. U.S. National Climate Assessment. Available at: http://nca2014.globalchange.gov/ . (Accessed: November 20, 2017).	Provides an in-depth look at climate change impacts on the United States and details the multitude of ways climate change is already affecting and will increasingly affect the lives of Americans.	Yes	No
NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	American Public Health Association. 2011. Climate Change: Mastering the Public Health Role. A Practical Guidebook. Available at: https://apha.org/~media/files/pdf/factsheets/climate_change_guidebook.ashx . (Accessed: November 20, 2017).	Guides the public health community on the challenges of climate change.	No	No

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NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	Finkelstein, M. M., M. Jerrett, P. DeLuca, N. Finkelstein, D. K. Verma, K. Chapman, and M. R. Sears. 2003. Relation between income, air pollution and mortality: A cohort study. <i>Canadian Medical Association Journal</i> 169:397–402. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC183288/ . (Accessed: November 20, 2017).	Investigates mortality in relation to neighborhood levels of income and air pollution in an urban area.	Yes	No
NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	Health Effects Institute Panel on the Health Effects of Traffic Related Air Pollution. 2010. Traffic Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects. HEI Special Report 17. Health Effects Institute, Boston, MA. Available at: https://www.healtheffects.org/publication/traffic-related-air-pollution-critical-review-literature-emissions-exposure-and-health . (Accessed: November 20, 2017).	Discusses the associations between exposure to air pollution from traffic and human health, and important remaining data gaps.	No	No
NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	National Wildlife Federation and Asthma and Allergy Foundation of America. 2010. Extreme Allergies and Global Warming. National Wildlife Foundation. Available at: http://www.aafa.org/media/Extreme-Allergies-Global-Warming-Report-2010.pdf . (Accessed: November 20, 2017).	Provides evidence that unchecked global warming will worsen respiratory allergies for approximately 25 million Americans.	No	No

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NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	O'Neill, M. S., M. Jerrett, I. Kawachi, J. I. Levy, A. J. Cohen, N. Gouveia, P. Wilkinson, T. Fletcher, L. Cifuentes, J. Schwartz, et al. 2003. Health, wealth, and air pollution: Advancing theory and methods. <i>Environmental Health Perspectives</i> 111:1861–1870. Available at: https://pdfs.semanticscholar.org/a180/e2bb97e6671eef84994fccd91c86e3bc0a37.pdf . (Accessed: November 20, 2017).	Introduces methodologic and conceptual approaches in the fields of air pollution and social epidemiology; proposes theories and hypotheses about how air pollution and socioeconomic factors may interact to influence health; discusses methodologic issues in the design and analysis of studies; and proposes specific steps to improve public health in collaboration with affected communities.	Yes	No
NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	Ostro, B., R. Broadwin, S. Green, W. Feng, M. Lipsett. 2005. Fine particulate air pollution and mortality in nine California counties: Results from CALFINE. <i>Environmental Health Perspectives</i> 114:29–33. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1332652/ . (Accessed: November 20, 2017).	Analyzes the evidence linking PM2.5 with mortality.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	Pinkerton, K. E., W. N. Rom, M. Akpınar-Elci, J. R. Balmes, H. Bayram, O. Brandli, J. W. Hollingsworth, P. L. Kinney, H. G. Margolis, W. J. Martin, E. N. Sasser, K. R. Smith, and T. K. Takaro. 2012. An official American Thoracic Society Workshop Report: Climate change and human health. <i>Proceedings American Thoracic Society</i> 9(1):3–8. Available at: https://www.ncbi.nlm.nih.gov/pubmed/22421581 . DOI: 10.1513/pats.201201-015ST. (Accessed: November 20, 2017).	This document presents the proceedings from the American Thoracic Society Climate Change and Respiratory Health Workshop that was held on May 15, 2010, in New Orleans, Louisiana. The purpose of the 1-day meeting was to address the threat to global respiratory health posed by climate change.	No	No
NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	U.S. Environmental Protection Agency. 2017. Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2015. EPA 430-P-17-001. Available at: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2015 . (Accessed: November 20, 2017).	Provides an emissions inventory that identifies and quantifies the primary anthropogenic sources and sinks of greenhouse gases.	No	No
NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	U.S. Environmental Protection Agency. Nonattainment Areas for Criteria Pollutants (Green Book). 2017. Available at: https://www.epa.gov/green-book . (Accessed: November 20, 2017).	Provides detailed information about area National Ambient Air Quality Standards designations, classifications, and nonattainment status.	No	No

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NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	U.S. Global Change Research Program. 2016. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Crimmins A, Balbus J, Gamble JL, Beard CB, et al. Eds. U.S. Global Change Research Program, Washington DC. Available at: http://dx.doi.org/10.7930/J0R49NQX . (Accessed: November 20, 2017).	Provides a comprehensive, evidence-based, and, where possible, quantitative estimation of observed and projected climate change-related health impacts in the United States.	Yes	No
NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	Zeka, A., A. Zanobetti, J. Schwartz. 2006. Short-term effects of particulate matter on cause specific mortality: Effects of lags and modification by city characteristics. <i>Occupational and Environmental Medicine</i> 62:718–725. Available at: http://oem.bmj.com/content/62/10/718 . (Accessed: November 20, 2017).	Examines the increased all-cause mortality and mortality from broad categories of causes associated with airborne particles in 20 U.S. cities, between 1989 and 2000.	Yes	No
NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	Buonocore, J. J., K. F. Lambert, D. Burtaw, S. Sekar, and C. T. Driscoll. 2016. An analysis of costs and health co-benefits for a U.S. power plant carbon standard. <i>PLOS One</i> 11(6):e0156308. Available at: https://doi.org/10.1371/journal.pone.0156308 . (Accessed: November 20, 2017).	Examines the costs and health co-benefits, in monetary terms, for a policy that resembles EPA's Clean Power Plan.	Yes	No

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NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	U.S. Energy Information Administration. 2017. Monthly Energy Review. Available at: https://www.eia.gov/totalenergy/data/monthly/index.php#renewable . (Accessed: November 20, 2017).	Provides statistics on total energy production, consumption, and trade; energy prices; overviews of petroleum, natural gas, coal, electricity, nuclear energy, renewable energy, and international petroleum; carbon dioxide emissions; and data unit conversion values.	No	No
NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	California Air Resources Board. 2017. California's Advanced Clean Cars Midterm Review: Summary Report for the Technical Analysis of the Light Duty Vehicle Standards. Page ES-61. Available at: https://www.arb.ca.gov/msprog/acc/mtr/acc_mtr_fin_alreport_full.pdf . (Accessed: November 20, 2017).	Assesses specific California standards including the zero-emission vehicle regulation, the 1-milligram-per-mile particulate matter emission standard, and a general review of the format of the greenhouse gas standards.	No	No
NHTSA-2017-0069-0156	Janice Nolen, American Lung Association	Institute of Medicine. 1999. Toward Environmental Justice: Research, Education, and Health Policy Needs. Washington, DC: The National Academies Press. Available at: https://doi.org/10.17226/6034 . (Accessed: November 20, 2017).	Discusses how poor and minority populations are burdened with more than their share of toxic waste, pesticide runoff, and other hazardous byproducts of modern economic life.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0157	Aminah Zaghab, Multiple Organizations	International Council on Clean Transportation. 2017. New ICCT Study Shows Cost Estimates for Meeting MPG and Pollution Standards Are Overstated by As Much As 40 Percent. Available at: http://www.theicct.org/news/press-release-cost-estimates-for-meeting-mpg-and-pollution-standards-are-overstated . (Accessed: November 20, 2017).	Reports on a new study that finds that the cost of meeting fuel economy standards in 2025 is likely being overstated by as much as 40% in the current debate and that even more stringent standards out to 2030 are feasible.	No	No
NHTSA-2017-0069-0157	Aminah Zaghab, Multiple Organizations	St. Clair., C. 2017. Carbon Pollution Standards for Cars and Light Trucks to Remain Unchanged Through 2025. EPA. Available at: https://archive.epa.gov/epa/newsreleases/carbon-pollution-standards-cars-and-light-trucks-remain-unchanged-through-2025.html . (Accessed: November 20, 2017).	Determines that a wide variety of effective technologies are available to reduce greenhouse gas emissions from cars and light trucks, and that automakers are well positioned to meet the standards through model year 2025 at lower costs than predicted.	No	No
NHTSA-2017-0069-0157	Aminah Zaghab, Multiple Organizations	BlueGreen Alliance. Backgrounder Vehicle Standards and Jobs. Available at: http://www.bluegreenalliance.org/news/publications/document/Backgrounder-Vehicle-Standards-and-Jobs-FINAL.pdf . (Link no longer active).	Unable to locate article.	No	No
NHTSA-2017-0069-0158	Ann Mesnikoff, Environmental Law and Policy Center	Great Lakes Integrated Sciences Assessment. 2014. Climate Change in the Great Lakes Region. Available at: http://glisa.umich.edu/media/files/GLISA_climate_change_summary.pdf . (Accessed: November 20, 2017).	Summarizes climate change impacts in the Great Lakes region.	No	No

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NHTSA-2017-0069-0158	Ann Mesnikoff, Environmental Law and Policy Center	U.S. Global Change Research Program. 2014. Midwest Report. Available at: http://nca2014.globalchange.gov/report/regions/midwest . (Accessed: November 20, 2017).	Describes how climate change will amplify existing climate-related risks to people, ecosystems, and infrastructure in the Midwest.	Yes	No
NHTSA-2017-0069-0158	Ann Mesnikoff, Environmental Law and Policy Center	Brauer, K. 2017. 2018 Honda Accord: More from Less? Autotrader. Available at: https://www.autotrader.com/car-news/2018-honda-accord-more-from-less-266590 . (Accessed: November 20, 2017).	Provides information on the 2018 Honda Accord.	No	No
NHTSA-2017-0069-0158	Ann Mesnikoff, Environmental Law and Policy Center	Lippert, J. 2017. Honda Invests \$267 Million, Adds 300 Ohio Jobs for New Accord. Bloomberg. Available at: https://www.bloomberg.com/news/articles/2017-09-18/honda-invests-267-million-adds-300-ohio-jobs-for-new-accord . (Accessed: November 20, 2017).	Describes the strategy of Honda Motor Co., which involves investing \$267 million and adding 300 jobs at two Ohio factories as it begins mass production of the redesigned Accord flagship sedan for 2018.	No	No
NHTSA-2017-0069-0158	Ann Mesnikoff, Environmental Law and Policy Center	BlueGreen Alliance. 2017. Supplying Ingenuity II: U.S. Suppliers of Key Clean, Fuel-Efficient Vehicle Technologies. Available at: https://www.bluegreenalliance.org/wp-content/uploads/2017/05/Supplying-Ingenuity-vFINAL-low-res.pdf . (Accessed: November 20, 2017).	Summarizes how sound fuel economy and manufacturing policies remain critical to continued automotive recovery, to strong innovation and job growth, and to continuing to strengthen the manufacturing sector nationwide.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0159	Kim Coble, Chesapeake Bay Foundation	National Research Council. 2015. Cost, Effectiveness, and Deployment of Fuel Economy Technologies for Light-Duty Vehicles. Washington, DC: The National Academies Press. Available at: https://doi.org/10.17226/21744 . (Accessed: November 20, 2017).	Estimates the cost, potential efficiency improvements, and barriers to commercial deployment of technologies that might be employed from 2020 to 2030.	Yes	No
NHTSA-2017-0069-0159	Kim Coble, Chesapeake Bay Foundation	U.S. Department of Energy. 2014. Lightweight Materials for Cars and Trucks. Office of Energy Efficiency & Renewable Energy. Available at: https://energy.gov/eere/vehicles/lightweight-materials-cars-and-trucks . (Accessed: November 20, 2017).	Highlights the research and development on lightweight materials supported by the Vehicle Technologies Office at Oak Ridge National Laboratory.	No	No
NHTSA-2017-0069-0159	Kim Coble, Chesapeake Bay Foundation	Isenstadt, A., J. German, P. Bubna, M. Wiseman, U. Venkatakrishnan, L. Abbasov, P. Guillen, N. Moroz, D. Richman, and G. Kolwich. 2016. Lightweighting Technology Development and Trends in U.S. Passenger Vehicles. International Council on Clean Transportation. Available at: http://www.theicct.org/sites/default/files/publications/ICCT_PVtech_lightweighting_wp2016-25.pdf . (Accessed: November 20, 2017).	Provides an analysis of lightweighting (mass reduction) developments and trends in passenger vehicle design and technology.	No	No
NHTSA-2017-0069-0159	Kim Coble, Chesapeake Bay Foundation	Consumer Reports. Survey Finds Consumers Want Better Gas Mileage, Stricter MPG Standards. Available at: https://www.consumerreports.org/fuel-economy-efficiency/survey-finds-consumerswant-better-gas-mileage-stricter-mpg-standards/ (Accessed: November 20, 2017).	Claims that consumers want stricter miles-per-gallon standards and better gas mileage.	No	No

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NHTSA-2017-0069-0159	Kim Coble, Chesapeake Bay Foundation	U.S. Environmental Protection Agency. 2010. Chesapeake Bay TMDL Document. U.S. Environmental Protection Agency. Available at: https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-tmdl-document . (Accessed: November 20, 2017).	Identifies the necessary pollution reductions of nitrogen, phosphorus, and sediment across Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia, and the District of Columbia.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Ackerman, F., E. A. Stanton, and R. Bueno. 2012. Reason, Empathy, and Fair Play: The Climate Policy Gap. Economics & Social Affairs. DESA Working Paper No. 113. Available at: http://www.un.org/esa/desa/papers/2012/wp113_2012.pdf . (Accessed: November 20, 2017).	Presents three changes to the basic assumptions of the DICE model.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Ackerman, F., E. A. Stanton, and R. Bueno. 2013. CRED: A New Model of Climate and Development. <i>Ecological Economics</i> 85(166). Available at: http://www.un.org/esa/desa/papers/2010/wp96_2010.pdf . (Accessed: November 20, 2017).	Describes a new model, Climate and Regional Economics of Development, which is designed to analyze the economics of climate and development choices.	Yes	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Anthoff, D., and R. Tol. 2012. The Climate Framework for Uncertainty, Negotiation and Distribution (FUND), Technical Description, Version 3.6. Available at: http://www.fund-model.org/versions . (Accessed: November 20, 2017).	Presents various versions of the FUND model, their applications, and their availability.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Council of Environmental Quality. 2016. Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews. Available at: https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/nepa_final_ghg_guidance.pdf . (Accessed: November 20, 2017).	Guides federal departments and agencies on consideration of greenhouse gas emissions and the effects of climate change in NEPA reviews.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Dietz, S., and N. Stern. 2015. Endogenous growth, convexity of damage and climate risk: How Nordhaus' framework supports deep cuts in carbon emissions. <i>The Economic Journal</i> 125(574). Available at: http://onlinelibrary.wiley.com/doi/10.1111/ecoj.12188/full . (Accessed: November 20, 2017).	Uses DICE to provide evidence that optimal policy comprises strong controls.	Yes	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Gayer, T., and W. Kip Viscusi. 2016. Determining the proper scope of climate change policy benefits in U.S. regulatory analyses: Domestic versus global approaches. <i>Review of Environmental Economics and Policy Advance Access</i> 10 (245). Available at: https://www.brookings.edu/wp-content/uploads/2016/08/rev-enviro-econ-policy-2016-gayer-reep-rew002.pdf . (Accessed: November 20, 2017).	Describes how economic guidelines for policy assessment generally recommend that policies should be selected to maximize social welfare.	Yes	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Havranek, T., Z. Irsova, K. Janda, and D. Zilberman. 2015. Selective reporting and the social cost of carbon. Available at: https://poseidon01.ssrn.com/delivery.php?ID=068096001126024098071084120116122117122011005035010028104088102024123025074005066091031007000042033007027069115098123009112071049007088022007111083099116126085109105024020000023076021116002070093089118093072000002004104097097089084122116088097118073091&EXT=pdf . (Accessed: November 20, 2017).	Examines the potential selective reporting (publication bias) in the literature on the social cost of carbon by conducting a meta-analysis of 809 estimates of the social cost of carbon reported in 101 studies.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Holladay, S. J., J. Horne, and J. A. Schwartz. 2009. Economists and Climate Change. Institute for Policy Institute, New York University School of Law. Policy Brief No. 5. Available at: http://policyintegrity.org/files/publications/EconomistandClimateChange.pdf . (Accessed: November 20, 2017).	Surveys top experts in the field to find out if there is widespread agreement among economists on some of the key questions raised by climate change policy.	No	No
NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Howard, P. 2014. Omitted Damages: What's Missing from the Social Cost of Carbon 5 (Cost of Carbon Project Report, 2014). Available at: http://costofcarbon.org/files/Omitted_Damages_Whats_Missing_From_the_Social_Cost_of_Carbon.pdf . (Accessed: November 20, 2017).	Examines and documents omissions for the latest versions of the three integrated assessment models used by the Interagency Working Group, as well as earlier versions when they are used in calibrating the updated models.	No	No

Table B-1. Sources Identified in Scoping Comments

Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Howard, P., and D. Sylvan. 2015. The Economic Climate: Establishing Expert Consensus on the Economics of Climate Change. Institute for Policy Institute, New York University School of Law. Working Paper No. 2015/1. Available at: http://policyintegrity.org/files/publications/EconomicClimateConsensus.pdf . (Accessed: November 20, 2017).	Clarifies the level of consensus among economists with respect to climate change risks, economic impacts, and policy responses. It also compares the views of economic experts to the views of the public.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Intertemporal Computable Equilibrium System. 2017. Centro Euro-Mediterraneo sui Cambiamenti Climatici. Available at: https://www.cmcc.it/models/ices-intertemporal-computable-equilibrium-system . (Accessed: November 20, 2017).	Explains the Intertemporal Computable Equilibrium System, a recursive dynamic general equilibrium model developed with the main (but not exclusive) purpose to assess the final welfare implication of climate change impacts on world economies.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Keeler, B. L., J. D. Gourevitch, S. Polasky, F. Isbell, C. W. Tessum, J. D. Hill, and J. D. Marshall. 2016. The social costs of nitrogen. <i>Science Advances</i> 2(10): e1600219. Available at: doi: 10.1126/sciadv.1600219.	Proposes a comprehensive approach for estimating the social cost of nitrogen, defined as the present value of the monetary damages caused by an incremental increase in nitrogen.	Yes	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Mensbrugghe, D. 2008. The Environmental Impact and Sustainability Applied General Equilibrium (ENVISAGE) Model. The World Bank. Available at: http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1193838209522/Envisage7b.pdf . (Accessed: November 20, 2017).	Provides a complete specification of the equations of the World Bank's Environmental Impact and Sustainability Applied General Equilibrium Model.	No	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Moore, F., U. Baldos, and T. Hertel. 2017. Economic impacts of climate change on agriculture: A comparison of process-based and statistical yield models. <i>Environmental Research Letters</i> 12 065008. Available at: http://iopscience.iop.org/article/10.1088/1748-9326/aa6eb2/pdf . (Accessed: November 20, 2017).	Uses a database of yield impact studies compiled for the Intergovernmental Panel on Climate Change Fifth Assessment Report to compare results from process-based and empirical studies on climate change impacts, agricultural impacts, adaptation, and carbon dioxide fertilization.	Yes	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Moore, F. C., and D. B. Diaz. 2015. Temperature impacts on economic growth warrant stringent mitigation policy. <i>Nature Climate Change</i> 5:127–131. doi:10.1038/nclimate2481.	Implements empirical estimates of temperature effects on gross domestic product growth rates in the DICE model through two pathways: total factor productivity growth and capital depreciation.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	National Academies of Sciences, Engineering, and Medicine. 2017. Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide. Washington, DC: The National Academies Press. Available at: https://doi.org/10.17226/24651 . (Accessed: November 20, 2017).	Examines potential approaches to developing social cost of carbon, along with their relative merits and challenges, and recommends near- and longer-term research priorities to ensure that the social cost of carbon estimates reflect the best available science.	Yes	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Newell, R., W. Pizer, and D. Raimi. 2014. Carbon market lessons and global policy outlook. <i>Science</i> 343(6177):1316–1317. doi: 10.1126/science.1246907. Available at: https://pdfs.semanticscholar.org/6840/11dd0fa2315a5a4e0786262554be9a690981.pdf . (Accessed: November 20, 2017). (Link no longer active).	Discusses California's launch of its cap-and-trade program in 2013 and its 2014 link to Quebec's market.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Nocera, S., S. Tonin, and F. Cavallaro. 2014. The economic impact of greenhouse gas abatement through a meta-analysis: Valuation, consequences and implications in terms of transport policy. <i>Transport Policy</i> 37:31–43. Available at: http://www.sciencedirect.com/science/article/pii/S0967070X14002030 . (Accessed: November 20, 2017).	Presents a database of nearly 700 different observations coming from 60 studies on the economic valuation of greenhouse gas emissions.	Yes	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Nordhaus, W. 2017. Revisiting the social cost of carbon. <i>Proceedings of the National Academy of Sciences</i> 114(7):1518–1523. doi: 10.1073/pnas.1609244114. Available at: http://www.pnas.org/content/114/7/1518.full . (Accessed: November 20, 2017).	Presents updated social cost of carbon estimates based on a revised DICE model.	Yes	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Pindyck, R. S. 2016. The Social Cost of Carbon Revisited. National Bureau of Economic Research. No. w22807. Available at: http://web.mit.edu/rpindyck/www/Papers/SCCRevisitedNov2016.pdf . (Accessed: November 20, 2017).	Presents an approach to estimating an average social cost of carbon.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Revesz, R., M. Greenstone, M. Hanemann, M. Livermore, T. Sterner, D. Grab, P. Howard, and J. Schwartz. 2017. Best cost estimate of greenhouse gases. <i>Science</i> 357(6352):655. doi: 10.1126/science.aao4322. Available at: http://science.sciencemag.org/content/357/6352/655 . (Accessed: November 20, 2017).	States that the social cost of carbon should be regularly updated, especially to reflect the latest evidence about damage functions.	Yes	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Revesz, R., P. Howard, K. Arrow, L. Goulder, R. Kopp, M. Livermore, M. Oppenheimer, and T. Sterner. 2014. Global warming: Improve economic models of climate change. <i>Nature</i> 508:173–175. doi:10.1038/508173a. Available at: https://www.nature.com/news/global-warming-improve-economic-models-of-climate-change-1.14991 . (Accessed: November 20, 2017).	Explains how the social cost of carbon is useful for policymaking, notwithstanding the significant uncertainties.	Yes	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Tol, R. 2015. Economic Impacts of Climate Change. Univ. Sussex Working Paper No. 75-2015. Available at: https://www.sussex.ac.uk/webteam/gateway/file.php?name=wps-75-2015.pdf&site=24 . (Accessed: November 20, 2017).	Presents a technical discussion on the impacts of climate change, economic development, and the social cost of carbon.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	U.S. Environmental Protection Agency. 2015. Climate Change in the United States: Benefits of Global Action. United States Environmental Protection Agency, Office of Atmospheric Programs. EPA 430-R-15-001. Available at: https://www.epa.gov/cira . (Accessed: November 20, 2017).	Estimates the physical and monetary benefits to the United States of reducing global greenhouse gas emissions.	Yes	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Van Den Bergh, J. C. J. M., and W. J. W. Botzen. A lower bound to the social cost of CO2 emissions. <i>Nature Climate Change</i> 4:253–258. doi:10.1038/nclimate2135	Evaluates critically the social cost of carbon estimates, focusing on omitted cost categories, discounting, uncertainties about damage costs, and risk aversion.	Yes	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Anthoff, D., and R. Tol. 2013. The uncertainty about the social cost of carbon: A decomposition analysis using FUND. <i>Climatic Change</i> 177(3):515–530. Available at: https://link.springer.com/article/10.1007/s10584-013-0706-7 . (Accessed: November 20, 2017).	Reports the results of an uncertainty decomposition analysis of the social cost of carbon as estimated by FUND.	Yes	Yes
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Hope, C. 2006. The marginal impact of CO2 from PAGE2002: An integrated assessment model incorporating the IPCC's five reasons for concern. <i>Integrated Assessment</i> 6(1). Available at: http://journals.sfu.ca/int_assess/index.php/iaj/article/viewArticle/227 . (Accessed: November 20, 2017).	Introduces a new version of the PAGE model, PAGE2002, which includes all five of the Intergovernmental Panel on Climate Change's reasons for concern about climate change.	Yes	Yes

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NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Hope, C. 2011. The Social Cost of CO2 from the PAGE09 Model. University of Cambridge, Judge Business School. Available at: https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/workingpapers/wp1105.pdf . (Accessed: November 20, 2017).	Introduces a new version of the PAGE integrated assessment model (PAGE09) that values the impacts of climate change and the costs of policies to abate and adapt to it.	No	Yes
NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Hope, C. 2013. Critical issues for the calculation of the social cost of CO2: Why the estimates from PAGE09 are higher than those from PAGE2002. <i>Climatic Change</i> 117(3):531. Available at: https://doi.org/10.1007/s10584-012-0633-z . (Accessed: November 20, 2017).	Describes how PAGE09 is an updated version of the PAGE2002 integrated assessment model with higher estimates.	Yes	Yes

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Tol, R. S. J. 2013. Targets for global climate policy: An overview. <i>Journal of Economic Dynamics and Control</i> 37(5):911. doi.org/10.1016/j.jedc.2013.01.001. Available at: http://www.sciencedirect.com/science/article/pii/S0165188913000092 . (Accessed: November 20, 2017).	Provides an overview of the economic impacts of climate change.	Yes	Yes
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Tol, R. S. J. 2011. The social cost of carbon. <i>Annual Review of Resource Economics</i> 3:419–443. Available at: https://doi.org/10.1146/annurev-resource-083110-120028 . (Accessed: November 20, 2017).	Provides a review of social cost of carbon estimates.	Yes	Yes

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Council of Environmental Quality. 2014. Revised Draft Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews. Available at: https://obamawhitehouse.archives.gov/sites/default/files/docs/nepa_revised_draft_ghg_guidance_searchable.pdf . (Accessed: November 20, 2017).	Provides guidance to federal agencies on when and how to consider the effects of greenhouse gas emissions and climate change in their evaluation of all proposed federal actions in accordance with NEPA and the CEQ Regulations Implementing the Procedural Provisions of NEPA.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Graham, D., and T. Johns. 2012. The Corporate Emergency Response Plan: A Smart Strategy. <i>Natural Resources and Environment</i> . Available at: https://www.americanbar.org/groups/environment_energy_resources/publications/natural_resources_environment/2012_13/fall_2012/the_corporate_emergency_response_plan_smart_strategy.html . (Accessed: November 20, 2017).	Presents research on corporate emergency response planning to provide strategies, tactics, and principles in order to minimize losses while effectively surmounting the challenges presented by a crisis.	No	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Howard, P. 2015. Expert Consensus on the Economics of Climate Change. Institute for Policy Integrity. Available at: http://policyintegrity.org/files/publications/ExpertConsensusReport.pdf . (Accessed: November 20, 2017).	Compares the views of economic experts with the views of the public to help establish expert consensus on the likely economic impacts of climate change and the recommended policy responses.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Howard, P., and J. Schwartz. 2017. Think global: International reciprocity as justification for a global social cost of carbon. <i>Columbia Journal of Environmental Law</i> 42(203). Available at: http://www.columbiaenvironmentallaw.org/wp-content/uploads/sites/14/2017/03/howard-schwartz-think-global.pdf . (Accessed: November 20, 2017).	Outlines both the economic arguments for why a global perspective on climate costs and benefits is in the interest of the United States and the legal arguments for why a global perspective may be required in any regulatory or deregulatory actions on climate change.	No	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Interagency Working Group on Social Cost of Carbon, Technical Support Document. 2010. Technical Support Document: - Social Cost of Carbon for Regulatory Impact Analysis - Under Executive Order 12866. Available at: https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/for-agencies/Social-Cost-of-Carbon-for-RIA.pdf . (Accessed: November 20, 2017).	Presents a summary of the interagency process that developed social cost of carbon estimates.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	National Academies of Sciences, Engineering, and Medicine. 2016. Assessment of Approaches to Updating the Social Cost of Carbon: Phase 1 Report on a Near-Term Update. Committee on Assessing Approaches to Updating the Social Cost of Carbon, Board on Environmental Change and Society. Washington, DC: The National Academies Press. doi: 10.17226/21898.	Assesses the merits and challenges of a limited near-term update to the social cost of carbon and of a comprehensive update of the social cost of carbon to ensure that the estimates reflect the best available science.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Nordhaus, W. 2014. Estimates of the social cost of carbon: concepts and results from the DICE-2013R model and alternative approaches. <i>Journal of the Association of Environmental and Resource Economists</i> 1(1/2):273–312. Available at: http://www.journals.uchicago.edu/doi/10.1086/676035 . (Accessed: November 20, 2017).	Reviews the development of social cost of carbon, provides examples of its use in current U.S. regulatory policies, examines its analytical background, and estimates the social cost of carbon using an updated integrated assessment model (DICE-2013-R).	Yes	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Dana, D. A. 2009. Valuing Foreign Lives and Civilizations in Cost-Benefit Analysis: The Case of the United States and Climate Change Policy. Northwestern Faculty Working Paper. Paper 196. Available at: http://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1195&context=facultyworkingpapers . (Accessed: November 20, 2017).	Explores the case for including losses of foreign (non-U.S.) lives and settlements in the estimated cost to the United States of unmitigated climate change in the future.	No	No

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NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Drupp, M., M. Freeman, B. Groom, and F. Nesje. 2015. Discounting Disentangled: An Expert Survey on the Determinants of the Long-Term Social Discount Rate. The Centre for Climate Change and Economics and Policy. The Centre for Climate Change Economics and the Environment. Working Paper 172. Available at: http://piketty.pse.ens.fr/files/DruppFreeman2015.pdf . (Accessed: November 20, 2017).	Elicits expert recommendations on the social discount rate and disentangles central components of discounting: the risk-free interest rate, rate of pure time preference, elasticity of marginal utility, and a prediction of long-term per capita consumption growth.	No	No
NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Revesz, R., J. A. Schwartz, P. H. Howard, K. Arrow, A. Livermore, M. Oppenheimer, and T. Sterner. 2017. The social cost of carbon: A global imperative. <i>Review of Environmental Economics and Policy</i> 11(1):172–173. doi: 10.1093/reep/rew022. Available at: http://policyintegrity.org/files/publications/REEP_SCC_2017.pdf . (Accessed: November 20, 2017).	Expresses support for the continued use of a global social cost of carbon.	No	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Arrow, K. J., M. L. Cropper, C. Gollier, B. Groom, G. M. Heal, R. G. Newell, W. D. Nordhaus, R. S. Pindyck, W. A. Pizer, P. R. Portney, T. Sterner, R. S. J. Tol, and M. L. Weitzman. 2012. How Should Benefits and Costs Be Discounted in an Intergenerational Context? Resources for the Future. Available at: http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-12-53.pdf . (Accessed: November 20, 2017).	Summarizes the use of the Ramsey formula as an organizing principle for determining discount rates over long horizons, whether the discount rate should decline over time, and how intra- and intergenerational discounting practices can be made compatible.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Arrow, K. J., M. L. Cropper, G. C. Eads, R. W. Hahn, B. L. Lester, R. G. Noll, P. R. Portney, M. Russell, R. Schmalensee, V. K. Smith, and R. N. Stavins. 1996. Is there a role for benefit-cost analysis in Environmental, Health, and Safety Regulation? <i>Science</i> 272(5259):221–222. doi: 10.1126/science.272.5259.221. Available at: http://science.sciencemag.org/content/272/5259/221 . (Accessed: November 20, 2017).	Describes how a formal benefit-cost analysis should not be viewed as either necessary or sufficient for designing sensible public policy, but that it can provide an exceptionally useful framework for consistently organizing disparate information, and can greatly improve the process and the outcome of policy analysis.	Yes	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Callen, T. 2012. Gross Domestic Product: An Economy's All. International Monetary Fund. Available at: http://www.imf.org/external/pubs/ft/fandd/basics/gdp.htm . (Accessed: November 20, 2017).	Defines gross domestic product (GDP) and real GDP, how to measure GDP, and how to compare the GDPs of two countries.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Council of Economic Advisers. 2017. Discounting for Public Policy: Theory and Recent Evidence on the Merits of Updating the Discount Rate. Available at: https://obamawhitehouse.archives.gov/sites/default/files/page/files/201701_cea_discounting_issue_brief.pdf . (Accessed: November 20, 2017).	Reassesses the current choice of discount rates for public policy and methodologies for selecting the 3% and 7% rates.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	The World Bank. 2017. GNI, Atlas method (current US\$). Available at: https://data.worldbank.org/indicator/NY.GNP.ATLS.CD . (Accessed: November 20, 2017).	Presents the World Bank national accounts data and OECD National Accounts data files.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	U.S. Office of Management and Budget & Secretariat General of the European Commission. 2008. Review of Application of EU and U.S. Regulatory Impact Assessment Guidelines on the Analysis of Impacts on International Trade and Development. Available at: https://georgewbush-whitehouse.archives.gov/omb/inforeg/reports/sg-omb_final.pdf . (Accessed: November 20, 2017).	Reviews the application of the Office of Management and Budget's Circular A-4, regulatory analysis guidance, and the European Commission's Impact Assessment Guidelines, with the goal of ensuring that assessment of future regulations takes due account of their impacts on international trade and investment.	No	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Furman, J., and B. Deese. 2016. The Economic Benefits of a 50 Percent Target for Clean Energy Generation by 2025. The White House. Available at: https://obamawhitehouse.archives.gov/blog/2016/06/29/economic-benefits-50-percent-target-clean-energy-generation-2025 . (Accessed: November 20, 2017).	Describes how a new target for 50% clean energy generation across North America will help the environment, foster growing industries, and support hundreds of thousands of jobs.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Howard, P., and J. Schwartz. 2015. Foreign Action, Domestic Windfall: The U.S. Economy Stands to Gain Trillions from Foreign Climate Action. Institute for Policy Integrity. Available at: http://policyintegrity.org/files/publications/ForeignActionDomesticWindfall.pdf . (Accessed: November 20, 2017).	Discusses the economic benefits of the United States participating in and helping to lead international cooperation to avoid climate deterioration.	No	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	U.S. Department of the Interior, Bureau of Land Management. 2014. Environmental Assessment DOI-BLM-MT-C020-2014-0091-EA, 76. Available at: https://www.blm.gov/sites/blm.gov/files/MT-DAKs%20MCFO%20Final%20EA%20October%202014%20Protest.pdf . (Accessed: November 20, 2017).	Provides an environmental assessment on an oil and gas lease parcel.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	U.S. Department of Defense. 2015. National Security Implications of Climate-Related Risks and a Changing Climate. Available at: http://archive.defense.gov/pubs/150724-congressional-report-on-national-implications-of-climate-change.pdf?source=govdelivery . (Accessed: November 20, 2017).	Reports on the most serious and likely climate-related security risks for each Combatant Command, the ways in which the Combatant Commands are integrating mitigation of these risks into their planning processes, and a description of the resources required for an effective response.	No	No

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NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Association of Americans Residents Overseas. 2016. Available at: https://www.aaro.org .	Unable to locate article.	No	No
NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Axelrod, R. 1984. The Evolution of Cooperation. Basic Books: New York. Pages 10–11.	Explores the emergence of cooperation in society.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Canadian Environmental Protection Act. 2013. Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations. P.C. 2013-160. Available at: http://canadagazette.gc.ca/rp-pr/p2/2013/2013-03-13/html/sor-dors24-eng.html . (Accessed: November 20, 2017).	Presents Canada's Environmental Protection Act, including regulations on heavy-duty vehicle and engine greenhouse gas emissions.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Giles, Cynthia. Assistant Administrator. U.S. Environmental Protection Agency. April 22, 2013—Letter to Jose W. Fernandez and Dr. Kerri Anne Jones, U.S. Department of State.	Provides a letter from EPA to the U.S. Department of State, stating the Keystone Environmental Impact Report was insufficient.	No	No

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NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Hardin, G. 1968. The tragedy of the commons. <i>Science</i> 162(3859):1243–1248. doi: 10.1126/science.162.3859.1243. Available at: http://science.sciencemag.org/content/162/3859/1243.full . (Accessed: November 20, 2017).	Presents the concept of the tragedy of the commons.	Yes	No
NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Office of Information and Regulatory Affairs. 2011. Regulatory Impact Analysis: A Primer 2.	Unable to locate article.	No	No

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NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Sunstein, C. 2001. Probability Neglect: Emotions, Worst Cases, and Law. University of Chicago Law & Economics, Olin Working Paper No. 138. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=292149 . (Accessed: November 20, 2017).	Discusses probability neglect and its implications for policy. It discusses probability, behavioral economics, cost-benefit analysis, and environmental regulation.	No	No
NHTSA-2017- 0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	The Fallacy Files. 2017. The Base Rate Fallacy. Available at: http://www.fallacyfiles.org/baserate.html . (Accessed: November 20, 2017).	Discusses the base rate fallacy through a thought experiment.	No	No

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NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	U.S. Department of Agriculture Forest Service. 2016. Rulemaking for Colorado Roadless Areas Supplemental Final Environmental Impact Statement. Available at: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd525072.pdf . (Accessed: November 20, 2017).	Provides the Supplemental Final Environmental Impact Statement, supplementing the 2012 Final Environmental Impact Statement for the Colorado Roadless Rule with additional analyses.	No	No
NHTSA-2017-0069-0160	Jason Schwartz, Institute for Policy Integrity at New York University School of Law, Environmental Defense Fund, Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists	Western Regional Climate Center. 2015. Four Corners Power Plant and Navajo Mine Energy Project Final Environmental Impact Statement. Section 4.2, Climate Change. Available at: http://www.wrcc.osmre.gov/initiatives/fourCorners/documents/FinalEIS/Section%204.2%20-%20Climate%20Change.pdf . (Accessed: November 20, 2017).	Provides Section 4.2, Climate Change, of the Four Corners Power Plant and Navajo Mine Energy Project Final EIS.	No	No

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NHTSA-2017-0069-0162	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	U.S. Global Change Research Program. 2014. Highlights of Climate Change Impacts in the United States: The Third National Climate Assessment. Pp. 34–37, 46–47. Available at: http://www.globalchange.gov/browse/reports/highlights-climate-change-impacts-united-states-third-national-climate-assessment . (Accessed: November 20, 2017).	Reports on the major findings from Climate Change Impacts in the United States: The Third National Climate Assessment.	Yes	No
NHTSA-2017-0069-0162	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	Intergovernmental Panel on Climate Change. 2014. Summary for Policymakers. Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.	Summarizes the literature on the scientific, technological, environmental, economic, and social aspects of mitigation of climate change.	Yes	Yes

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NHTSA-2017-0069-0162	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	U.S. Environmental Protection Agency. 2016. Light-Duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends Report, 1975–2016. EPA-420-S-16-001. Available at: https://www.epa.gov/sites/production/files/201611/documents/420s16001.pdf . (Accessed: November 20, 2017). (Link no longer active).	Reports on carbon dioxide emissions, fuel economy, and powertrain technology trends for new personal vehicles in the United States.	No	No
NHTSA-2017-0069-0162	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	U.S. Environmental Protection Agency. 2017. 44 EPA's Optimization Model for reducing Emissions of Greenhouse Gases from Automobiles (OMEGA), Version 1.4.56 and Pre-Processors. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/optimization-model-reducing-emissions-greenhouse-gases . (Accessed: November 20, 2017).	Provides for the download of OMEGA, a free desktop computer application that estimates the technology cost for automobile manufacturers to achieve variable fleet-wide levels of vehicle greenhouse gas emissions.	No	No
NHTSA-2017-0069-0162	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	Myhre, Gunnar et al. 2013. Anthropogenic and Natural Radiative Forcing. Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available at: http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf . (Accessed: November 20, 2017).	Confirms that warming in the climate system is unequivocal, with many of the observed changes unprecedented over decades to millennia: warming of the atmosphere and the ocean, diminishing snow and ice, rising sea levels and increasing concentrations of greenhouse gases.	Yes	Yes

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NHTSA-2017-0069-0162	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	Garcia, A. 2017. Car Sales Set Another U.S. Record. <i>CNN Money</i> . Available at: http://money.cnn.com/2017/01/04/news/companies/car-sales-2016/index.html . (Accessed: November 20, 2017).	Provides a video discussing car sales being at a record high for the 7th year in a row.	No	No
NHTSA-2017-0069-0163	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	National Oceanic and Atmospheric Administration National Centers for Environmental Information. 2017. U.S. Billion-Dollar Weather and Climate Disasters. Available at: https://www.ncdc.noaa.gov/billions/time-series . (Accessed: November 20, 2017).	Presents a graphic that visualizes how the different types of identified U.S. billion-dollar disaster events have changed over time.	No	No
NHTSA-2017-0069-0163	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	Myhre, G., D. Shindell, F.-M. Bron, W. Collins, J. Fuglestad, J. Huang, D. Koch, J.-F. Lamarque, D. Lee, B. Mendoza, T. Nakajima, A. Robock, G. Stephens, T. Takemura, and H. Zhang. 2013. Anthropogenic and Natural Radiative Forcing. Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available at: http://www.ipcc.ch/report/ar5/wg1/ . (Accessed: November 20, 2017).	Discusses anthropogenic increases in greenhouse gases that have substantially enhanced the greenhouse effect.	Yes	Yes

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NHTSA-2017-0069-0163	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	Cackette, T., and R. Rykowski. 2017. Technical Assessment of CO2 Emission Reductions for Passenger Vehicles in the Post-2025 Timeframe. Environmental Defense Fund. Available at: https://www.edf.org/sites/default/files/content/final_public_white_paper_post_2026_co2_reductions2.27_clean.pdf . (Accessed: November 20, 2017).	Analyzes the feasibility and cost-effectiveness of reducing carbon dioxide emissions from passenger vehicles to below the current model year 2025 standards.	No	No
NHTSA-2017-0069-0163	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	German, J., N. Isenstadt, N. Lutsey, D. Meszler, and J. Miller. 2017. Efficiency Technology and Cost Assessment for U.S. 2025–2030 Light-Duty Vehicles. ICCT. Available at: http://www.theicct.org/US-2030-technology-cost-assessment . (Accessed: November 20, 2017).	Explores the technology implications of the shift to increased efficiency and lower carbon dioxide emissions in 2025–2030.	No	No

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NHTSA-2017-0069-0163	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	U.S. Environmental Protection Agency. 2007. A Wedge Analysis of the U.S. Transportation Sector. EPA420-F-07-049. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P1001YWG.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000005%5CP1001YWG.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL# . (Accessed: November 20, 2017).	Presents graphics depicting greenhouse gas emissions from the transportation sector, as well as the stabilization wedge approach.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Environmental Defense Fund. 2016. Public Comments on Proposed Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards Under the Midterm Evaluation. Available at: https://www.regulations.gov/document?D=NHTSA-2017-0069-0164 . (Accessed: November 20, 2017).	Provides Environmental Defense Fund's public comments to EPA.	No	No

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NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Environmental Defense Fund. 2016. Attachments to Public Comments on Proposed Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards Under the Midterm Evaluation. Available at: https://www.regulations.gov/document?D=NHTSA-2017-0069-0164 . (Accessed: November 20, 2017).	Provides Environmental Defense Fund's tables and data attachments to public comments to EPA.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	The Aluminum Association. 2017. Aluminum Industry Requests Regulatory Certainty from EPA Regulators during Public Hearing. Available at: http://www.aluminum.org/news/aluminum-industry-requests-regulatory-certainty-epa-regulators-during-public-hearing . (Accessed: November 20, 2017).	Summarizes Ganesh Panneer, chairman of the Aluminum Association Aluminum Transportation Group and vice president and general manager of automotive at Novelis, testimony to the EPA in Washington D.C. about the need for regulatory certainty for the automotive industry and its key suppliers.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Auto Alliance. 2017. Auto Alliance Letter to Administrator Pruitt on Final Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation. Available at: https://autoalliance.org/wp-content/uploads/2017/02/Letter-to-EPA-Admin.-Pruitt-Feb.-21-2016-Signed.pdf . (Accessed: November 20, 2017).	Provides the letter from Auto Alliance to Administrator Pruitt on MY 2022–2025 midterm evaluation.	No	No

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NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Ross, J. 2014. Honda is First Japanese Carmaker to Be a Net-Exporter from US. <i>Autoblog</i> . Available at: https://www.autoblog.com/2014/01/29/honda-first-japanese-carmaker-net-exporter-from-us/ . (Accessed: November 20, 2017).	Discusses Honda export totals to the United States.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	BlueGreen Alliance. 2016. Backgrounder: Sound Vehicle Standards & Policies Drive Strong Job Growth. Available at: https://www.bluegreenalliance.org/wp-content/uploads/2016/08/Backgrounder-Vehicle-Standards-and-Jobs-FINAL.pdf . (Accessed: November 20, 2017).	Summarizes research and analysis of the impact of CAFE standards on job growth in the United States.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	BlueGreen Alliance. 2016. Combating climate change 426,000 pickup trucks at a time. BlueGreen Alliance Issue Brief. Available at: https://www.bluegreenalliance.org/resources/combating-climate-change-426000-pickup-trucks-at-a-time/ . (Accessed: November 20, 2017).	Discusses Ford F-150 pickup trucks in relation to fuel standards.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Beene, R. 2017. Auto CEOs Ask Trump to Revisit Obama-era Fuel Efficiency Rules. <i>Bloomberg Auto</i> . Available at: https://www.bloomberg.com/news/articles/2017-02-11/auto-ceos-ask-trump-to-revisit-obama-era-fuel-efficiency-rules . (Accessed: November 20, 2017).	Reports on automakers requesting review of fuel standards.	No	No

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NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Comings, T., A. Allison, and F. Ackerman, PhD. 2016. Fueling Savings: Higher Fuel Economy Standards Result in Big Savings for Consumers. Consumers Union. Available at: http://consumersunion.org/wp-content/uploads/2016/09/Fueling-Savings-Consumer-Savings-from-CAFE-2025-Final-1.pdf . (Accessed: November 20, 2017).	Provides updated estimates of net savings under the latest CAFE standards for a typical car or light truck owner.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Smith, A. 2017. Automakers, Parts Suppliers at Odds Over EPA Emissions Standards. <i>Bloomberg News</i> . Available at: https://www.bna.com/automakers-parts-suppliers-n73014464219/ . (Accessed: November 20, 2017).	Discusses differing opinions between automakers and parts suppliers on fuel standards.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Busse, M. R., C. R. Knittel, J. Silva-Risso, and F. Zettelmeyer. 2016. Who is exposed to gas prices? How gasoline prices affect automobile manufacturers and dealerships. <i>Quantitative Marketing and Economics</i> 14(1):41–95. Available at: http://hdl.handle.net/1721.1/103416 . (Accessed: November 20, 2017).	Investigates the effects of gasoline prices on the automobile industry.	Yes	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Young, S., and D. Clegern. 2017. CARB Finds Vehicle Standards Are Achievable and Cost Effective. California Air Resources Board. #17-19. Available at: https://arb.ca.gov/newsrel/newsrelease.php?id=908 . (Accessed: November 20, 2017).	Discusses the California Air Resources Board vote to continue with the vehicle greenhouse gas emission standards and zero-emission vehicle program for cars and light trucks sold in California through 2025.	No	No

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NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Congressional Budget Office. 2012. Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output from October 2011 Through December 2011. Available at: https://www.cbo.gov/publication/43013 . (Accessed: November 20, 2017).	Reports on employment and economic output.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Cleantech Group. 2016. Clean Energy Patent Growth Index. Available at: http://cepgi.typepad.com/files/h0731144-1.pdf . (Accessed: November 20, 2017).	Reports on patents in the clean energy sector.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Baum, A., and D. Luria. 2016. Economic Implications of the Current National Program v. a Weakened National Program in 2022–2025 for Detroit Three Automakers and Tier One Suppliers. Ceres. Available at: https://www.ceres.org/resources/reports/economic-implications-current-national-program-v-weakened-national-program-2022 . (Accessed: November 20, 2017).	Evaluates the economic implications of retaining or weakening the CAFE and greenhouse gas emissions regulations for automakers and their suppliers under five fuel price scenarios.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Wattles, J. 2017. India to Sell Only Electric Cars by 2030. <i>CNN Tech</i> . Available at: http://money.cnn.com/2017/06/03/technology/future/india-electric-cars/index.html?iid=EL . (Accessed: November 20, 2017).	Reports on India's decision to sell only electric cars by 2030.	No	No
NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Petroff, A. 2017. These Countries Want to Ditch Gas and Diesel Cars. <i>CNN Money</i> . Available at: http://money.cnn.com/2017/07/26/autos/countries-that-are-banning-gas-cars-for-electric/index.html . (Accessed: November 20, 2017).	Reports on various countries moving toward electric automobiles.	No	No

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NHTSA-2017-0069-0164	Erin Murphy, Environmental Defense Fund	Northeast States for Coordinated Air Use Management. 2016. Letter from Northeast States for Coordinated Air Use Management to Administrator McCarthy on Proposed Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation. Available at: http://www.nescaum.org/topics/automobile-emissions . (Accessed: November 20, 2017).	Provides the comment letter to Administrator McCarthy on proposed EPA rule.	No	No
NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	New York State Department of Environmental Conservation. 2016. Letter from New York State Department of Environmental Conservation to Administrator McCarthy on Proposed Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation. Available at: https://www.regulations.gov/document?D=NHTSA-2017-0069-0165 . (Accessed: November 20, 2017).	Provides the comment letter from New York Department of Environmental Conservation to Administrator McCarthy on proposed EPA rule.	No	No
NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	Environmental Defense Fund. 2017. Supplemental Public Comments on Proposed Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/midterm-evaluation-light-duty-vehicle-greenhouse-gas . (Accessed: November 20, 2017).	Provides the supplemental comment letter to Administrator McCarthy on proposed EPA rule.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	U.S. Environmental Protection Agency. 2017. Final Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation. EPA-420-R-17-001. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100QQ91.pdf . (Accessed: November 20, 2017).	Provides EPA's Final Rule.	No	No
NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	U.S. Environmental Protection Agency. 2016. Proposed Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation. EPA-420-R-16-020. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100Q3DO.pdf . (Accessed: November 20, 2017).	Provides EPA's Proposed Rule.	No	No
NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	U.S. Environmental Protection Agency. 2017. Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emissions Standards for Model Years 2022–2025. Web page. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/midterm-evaluation-light-duty-vehicle-greenhouse-gas . (Accessed: November 20, 2017).	Provides EPA's midterm evaluation webpage.	No	No
NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	Fox Business. 2017. China sets new deadline for electric-car production. <i>Fox Business</i> . Available at: https://www.foxbusiness.com/markets/china-sets-new-deadline-for-electric-car-production . (Accessed: March 29, 2018).	Reports on China electric car rulemaking.	No	No

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NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	United States Government Accountability Office. 2010. NHTSA and EPA's Partnership for Setting Fuel Economy and Greenhouse Gas Emissions Standards Improved Analysis and Should Be Maintained. Available at: http://www.gao.gov/products/GAO-10-336 . (Accessed: November 20, 2017).	Provides a report to the Chairman, Subcommittee on Energy and Environment, Committee on Energy and Commerce, House of Representatives on fuel economy.	No	No
NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	Gillingham, K., D. Rapson, and G. Wagner. 2014. The Rebound Effect and Energy Efficiency Policy. RFF DP 14-39. Available at: http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-14-39.pdf . (Accessed: November 20, 2017).	Clarifies what the rebound effect is and provides a guide for economists and policymakers interested in its magnitude.	No	No
NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	Gillis, J., S. Brobeck, and M. Cooper. 2016. Automakers Are on the Road to Meeting Fuel Efficiency Standards. An Analysis of Automaker Progress in Meeting 2025 Fuel Efficiency Requirements and A Look At Consumer Attitudes Towards Fuel Efficiency. Consumer Federation of America. Available at: http://consumerfed.org/wp-content/uploads/2016/04/2016-Fuel-Economy-Report-April-25-2016.pdf . (Accessed: November 20, 2017).	Analyzes automaker progress in meeting 2025 fuel efficiency requirements and a look at consumer attitudes toward fuel efficiency.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	Association of Global Automakers. 2017. Letter from Association of Global Automakers to Administrator Pruitt to Petition for Reconsideration and Request to Withdraw Final Determination on the Appropriateness of the Model Year 2022–2025 Light-duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation. Available at: https://www.globalautomakers.org/system/files/document/attachments/2017-10-05_global_automakers_ghg-cafe_mte_comments.pdf . (Accessed: November 20, 2017). (Link no longer active).	Provides a letter from Global Automaker association requesting withdrawal of EPA determination for MYs 2022–2025.	No	No
NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	Greene, D., A. Hossain, J. Hofmann, G. Helfand, and R. Beach. No Date. Consumer Willingness to Pay for Vehicle Characteristics: What Do We Know? Available at: http://te3conference.com/2017/07/31/consumer-willingness-pay-vehicle-attributes-know/ . (Accessed: November 20, 2017).	Presents automobile consumer characteristics.	No	No
NHTSA-2017-0069-0165	Erin Murphy, Environmental Defense Fund	House of Representatives. 1965. House Report No. 89-899.	Provides a House of Representatives report to amend the Clean Air Act to require standards for controlling the emission of pollutants from gasoline-powered or diesel-powered vehicles, to establish a Federal Air Pollution Control Laboratory, and for other purposes.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0168	Erin Murphy, Environmental Defense Fund	Bolon, K. EPA's Technology Assessment for the 2025 GHG Standards, presented at the CTI Symposium USA. Available at https://www.epa.gov/sites/production/files/2017-06/documents/cti-novi-2017-epa-2017-05-17.pdf . (Accessed: November 20, 2017).	Presents how EPA greenhouse gas standards work, industry progress and contribution of powertrain improvements, EPA's consideration of technologies for 2025 timeframe, and future expectations.	No	No
NHTSA-2017-0069-0168	Erin Murphy, Environmental Defense Fund	U.S. Environmental Protection Agency, National Highway Traffic Safety Administration, and California Air Resources Board. 2016. Draft Technical Assessment Report: Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards for Model Years 2022–2025. EPA-420-D-16-900. Available at https://nepis.epa.gov/Exe/ZyPDF.cgi/P100OXEO.PDF?Dockey=P100OXEO.PDF . (Accessed: November 20, 2017).	Examines a wide range of technical issues relevant to greenhouse gas emissions and augural CAFE standards for MYs 2022–2025, and share with the public the initial technical analyses of those issues.	No	No
NHTSA-2017-0069-0168	Erin Murphy, Environmental Defense Fund	U.S. Environmental Protection Agency. 2016. Proposed Determination on the Appropriateness of the Model Year 2022–2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation: Technical Support Document. EPA-420-R-16-021. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100Q3L4.pdf . (Accessed: November 20, 2017).	Describes in more detail assessment of public comment on the Draft Technical Assessment Report, and updates to technology costs, technology effectiveness, consumer impacts, and other elements of our analysis.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0170	Emily Rosenblum, Environmental Defense Fund	Samaha, R. R., Prasad, P., Marzougui, D., Cui, C., Digges, K., Summers, S., Patel S., Zhao, L., & Barsan-Anelli, A. 2014. Methodology for evaluating fleet protection of new vehicle designs: Application to lightweight vehicle designs. Report No. DOT HS 812 051A. Washington, DC: National Highway Traffic Safety Administration. Available at: https://one.nhtsa.gov/Research/Crashworthiness/ci.Vehicle-Aggressivity-and-Fleet-Compatibility-Research.print . (Accessed: November 20, 2017).	Discusses the approach of elevating fleet protection in vehicle design and safety performance.	No	No
NHTSA-2017-0069-0170	Emily Rosenblum, Environmental Defense Fund	Samaha, R. R., P. Prasad, D. Marzougui, C. Cui, K. Digges, S. Summers, S. Patel, L. Zhao, and A. Barsan-Anelli. 2014. Methodology for Evaluating Fleet Protection of New Vehicle Designs: Application to Lightweight Vehicle Designs, Appendices. Report No. DOT HS 812 051B. Washington, DC: National Highway Traffic Safety Administration. Available at: https://one.nhtsa.gov/Research/Crashworthiness/ci.Vehicle-Aggressivity-and-Fleet-Compatibility-Research.print . (Accessed: November 20, 2017).	Provides appendices to the Methodology for Evaluating Fleet Protection of New Vehicle Designs: Application to Lightweight Vehicle Designs.	No	No
NHTSA-2017-0069-0170	Emily Rosenblum, Environmental Defense Fund	National Highway Traffic Safety Administration. 2014. Methodology for Evaluating Fleet Protection of New Vehicle Designs: Application To Lightweight Vehicle Designs. DOT HS 812 051C. Available at: https://one.nhtsa.gov/Research/Crashworthiness/ci.Vehicle-Aggressivity-and-Fleet-Compatibility-Research.print . (Accessed: November 20, 2017).	Provides the methods for evaluating the fleet protection of new vehicle designs.	Yes	No

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NHTSA-2017-0069-0170	Emily Rosenblum, Environmental Defense Fund	National Research Council. 2011. Assessment of Fuel Economy Technologies for Light-Duty Vehicles. The National Academies Press. Available at: https://doi.org/10.17226/12924 . (Accessed: November 20, 2017).	Assesses fuel economy improvements and various technologies that could be implemented.	No	No
NHTSA-2017-0069-0170	Emily Rosenblum, Environmental Defense Fund	Malliaris, A., H. Hsia, and H. Gould. 1976. Concise Description of Auto Fuel Economy and Performance in Recent Model Years. SAE Technical Paper 760045. Available at: https://doi.org/10.4271/760045 . (Accessed: November 20, 2017).	Provides fuel economy data from the early to mid-1970s.	Yes	No
NHTSA-2017-0069-0170	Emily Rosenblum, Environmental Defense Fund	Transportation Research Board and National Research Council. 2002. Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards. The National Academies Press. Available at: https://doi.org/10.17226/10172 . (Accessed: November 20, 2017).	Evaluates the implications changes in motor vehicle technology, globalization of the industry, the mix and characteristics of vehicle sales, and production capacity since CAFE standards were established, as well as anticipated changes in the next few years.	Yes	No

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NHTSA-2017-0069-0170	Emily Rosenblum, Environmental Defense Fund	Pickrell, D., and P. Schimek. 1999. Growth in motor vehicle ownership and use: Evidence from the Nationwide Personal Transportation Survey. <i>Journal of Transportation and Statistics</i> 1(2): 1–17. Available at: https://rosap.ntl.bts.gov/view/dot/4712 . (Accessed: March 30, 2017).	Uses information from the Nationwide Personal Transportation Survey to address three related subjects: 1) growth in personal motor vehicle travel and its sources; 2) changes in the number, types, and age distribution of household motor vehicles; and 3) the determinants of households' vehicle utilization patterns and demands for private motor vehicle travel.	Yes	No
NHTSA-2017-0069-0170	Emily Rosenblum, Environmental Defense Fund	Young, A.R. 1999. Regression Analysis for Acceleration Performance of Light Duty Vehicles. Final Report Peer Review. DOT HS 807 763. National Highway Safety Administration.	Provides the peer review of a study that provides an algorithmic method for calculating 0 to 60 miles-per-hour acceleration time for recent passenger cars and light trucks based on their horsepower-to-weight ratios.	Yes	No
NHTSA-2017-0069-0170	Emily Rosenblum, Environmental Defense Fund	National Highway Traffic Safety Administration. 1991. Regression Analysis for Acceleration Performance of Light Duty Vehicles. Final Report. DOT HS 807 763. Available at: https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB92113778.xhtml . (Accessed: November 20, 2017).	Provides an updated analysis of the relationship of acceleration to design parameters of light-duty vehicles.	Yes	No

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NHTSA-2017-0069-0170	Emily Rosenblum, Environmental Defense Fund	Manhattan Strategy Group. 2013. The Impact of Transportation on Affordability: LAI Auto Cost Research Synthesized. U.S. DOT and U.S. HUD Office of Sustainable Housing and Communities. Available at: http://www.locationaffordability.info/downloads/AutoCostResearch.pdf . (Accessed: November 20, 2017). (Link no longer active).	Analyzes the Location Affordability Index, which includes household transportation costs, comprising auto ownership, auto use, and transit use, based on a home's location.	No	No
NHTSA-2017-0069-0170	Emily Rosenblum, Environmental Defense Fund	National Highway Traffic Safety Administration. 2003. Vehicle Weight, Fatality Risk and Crash Compatibility of Model Year 1991-99 Passenger Cars and Light Trucks. NHTSA Technical Report. DOT HS 809 662. Available at: https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/809662 . (Accessed: November 20, 2017).	Examines fatality risk and crash compatibility of MY 1991–1999 passenger cars and light trucks.	No	No
NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	Kargul, J., A. Moskalik, D. Barba, K. Newman, and P. Dekraker. 2016. Estimating GHG Reduction from Combinations of Current Best-Available and Future Powertrain and Vehicle Technologies for a Midsized Car Using EPA's ALPHA Model. SAE Technical Paper. 2016-01-0910. doi: 10.4271/2016-01-0910. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/estimating-ghg-reduction-combinations-current-best . (Accessed: November 20, 2017).	Presents the ALPHA model inputs, results, and the lessons learned during this modeling and assessment activity.	Yes	No
NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	Winebrake, J.J., E. H. Green, B. Comer, J. J. Corbett, and S. Froman. 2012. Estimating the direct rebound effect for on-road freight transportation. <i>Energy Policy</i> 48:252–259. doi: 10.1016/j.enpol.2012.05.018	Provides a critical review of the literature related to the heavy-duty vehicles rebound effect.	Yes	No

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NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	DeKraker, P., J. Kargul, A. Moskalik, K. Newman, M. Doorlag, and D. Barba. 2017. Fleet-level modeling of real world factors influencing greenhouse gas emission simulation in ALPHA. <i>SAE International Journal of Fuels and Lubricants</i> 10(1). doi: 10.4271/2017-01-0899. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/fleet-level-modeling-real-world-factors-influencing . (Accessed: November 20, 2017).	Presents an overview of the laboratory benchmarking that was done to support validation of the ALPHA model. The paper also discusses a variety of real world factors that influence the simulation of fuel economy and greenhouse gas emissions.	Yes	No
NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	Stuhldreher, M. 2016. Fuel Efficiency Mapping of a 2014 6-Cylinder GM EcoTec 4.3L Engine with Cylinder Deactivation. SAE Technical Paper 2016-01-0662. doi: 10.4271/2016-01-0662. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/fuel-efficiency-mapping-2014-6-cylinder-gm-ecotec-43l . (Accessed: November 20, 2017).	Describes the test method and results for the engine dyno portion of the benchmarking.	Yes	No
NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	Lee, S., J. Cherry, B. Lee, J. McDonald, and M. Safoutin. 2014. HIL Development and Validation of Lithium-Ion Battery Packs. SAE Technical Paper 2014-01-1863. doi: 10.4271/2014-01-1863. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/hil-development-and-validation-lithium-ion-battery-packs . (Accessed: November 20, 2017).	Presents lithium-ion battery pack HIL development and validation integrated into the EPA Battery Test Facility.	Yes	No

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NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	U.S. Environmental Protection Agency. 2010. Peer Review for the Report, How Consumers Value Fuel Economy: A Literature Review. EPA-420-S-10-001.	Provides the peer review for the final RTI report summarizing the peer review of David Greene's literature survey, including the detailed comments of each peer reviewer and an overview of the most significant comments compiled by RTI.	Yes	No
NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	Gillingham, K. 2013. Identifying the elasticity of driving: Evidence from a gasoline price shock in California. <i>Regional Science & Urban Economics</i> 47(C):13–24. doi: 10.1016/j.regsciurbeco.2013.08.004. Available at: https://www.researchgate.net/publication/259099360_Identifying_the_elasticity_of_driving_Evidence_from_a_gasoline_price_shock_in_California . (Accessed: November 20, 2017).	Focuses on the intensive margin of consumer response to the recent gasoline price shock by providing new evidence on the utilization elasticity for vehicles; i.e., the elasticity of vehicle-miles-traveled with respect to the cost of driving.	Yes	No
NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	Marten, A. L., E. A. Kopits, C. W. Griffiths, S. C. Newbold, and A. Wolverton. 2015. Incremental CH ₄ and N ₂ O mitigation benefits consistent with the US Government's SC-CO ₂ estimates. <i>Climate Policy</i> 15(2):272–298. doi: http://dx.doi.org/10.1080/14693062.2014.912981 . Available at: http://www.tandfonline.com/doi/full/10.1080/14693062.2014.912981 . (Accessed: November 20, 2017).	Analyzes the social costs of non-carbon dioxide greenhouse gases particularly methane and nitrous oxide through integrated assessment models.	Yes	No

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NHTSA-2017- 0069-0171	Emily Rosenblum, Environmental Defense Fund	U.S. Environmental Protection Agency. 2016. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2014. EPA 430-R-16-002. Available at: https://www.epa.gov/sites/production/files/2016-04/documents/us-ghg-inventory-2016-main-text.pdf . (Accessed: November 20, 2017).	Summarizes the latest information on U.S. anthropogenic greenhouse gas emission trends from 1990 through 2014 and provides graphs and tables detailing U.S. emissions and sinks.	No	No
NHTSA-2017- 0069-0171	Emily Rosenblum, Environmental Defense Fund	Moskalik, A., A. Hula, D. Barba, and J. Kargul. Investigating the effect of advanced automatic transmissions on fuel consumption using vehicle testing and modeling. <i>SAE International Journal of Engines</i> 9(3):1916–1928. doi: 10.4271/2016-01-1142. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/investigating-effect-advanced-automatic-transmissions . (Accessed: November 20, 2017).	Uses the validated ALPHA model to predict the effectiveness improvement of real-world transmissions over a baseline circa 2008 four-speed transmission, and to predict further improvements possible from future eight-speed transmissions.	Yes	No

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NHTSA-2017- 0069-0171	Emily Rosenblum, Environmental Defense Fund	ICF International. 2011. Peer Review of FEV Inc. Report, Light Duty Technology Cost Analysis, Power-Split and P2 Hybrid Electric Vehicle Case Studies. EPA-420-R-11-016. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P100CVJS.txt?ZyActionD=ZyDocument&Client=EPA&Index=2011%20Thru%202015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C11THRU15%5CTXT%5C00000003%5CP100CVJS.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1 . (Accessed: November 20, 2017).	Presents the findings of the reviews conducted by four subcontracted subject matter experts.	Yes	No

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NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	FEV, Inc. 2011. Light Duty Technology Cost Analysis, Power-Split and P2 HEV Case Studies. EPA. EPA-420-R-11-015. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P100EG1R.txt?ZyActionD=ZyDocument&Client=EPA&Index=2011%20Thru%202015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C11THRU15%5CTXT%5C00000004%5CP100EG1R.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1 . (Accessed: November 20, 2017).	Provides incremental direct manufacturing costs for a set of advanced light-duty vehicle technologies.	No	No
NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	U.S. Environmental Protection Agency. 2014. Light-Duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends: 1975 through 2014. EPA-420-R-14-023a. Available at: https://www.epa.gov/fueleconomy/light-duty-automotive-technology-carbon-dioxide-emissions-and-fuel-economy-trends-1975 . (Accessed: November 20, 2017). (Link no longer active).	Reports on new light-duty (or personal) vehicle carbon dioxide emissions, fuel economy, and powertrain technology trends in the United States.	No	No

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NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	U.S. Environmental Protection Agency. 2016. Light-Duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends: 1975 through 2016, Executive Summary. EPA-420-R-16-010. Available at: https://www.epa.gov/fueleconomy/light-duty-automotive-technology-carbon-dioxide-emissions-and-fuel-economy-trends-1975-1 . (Accessed: November 20, 2017). (Link no longer active).	Provides the executive summary for the report on the new light-duty (or personal) vehicle carbon dioxide emissions, fuel economy, and powertrain technology trends in the United States.	No	No
NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	Dagci, O., N. Pereira, and J. Cherry. 2013. Maneuver-based battery-in-the-loop testing - bringing reality to lab. <i>SAE International Journal of Alternative Powertrains</i> 2(1):7–17. doi: 10.4271/2013-01-0157. Available at: http://papers.sae.org/2013-01-0157/ . (Accessed: November 20, 2017).	Describes testing mechanisms to drive down development costs and optimize the efficiency of these vehicles.	Yes	No
NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	Lee, S., J. Cherry, M. Safoutin, and J. McDonald. 2017. Modeling and Validation of 12V Lead-Acid Battery for Stop-Start Technology. SAE Technical Paper 2017-01-1211. doi-01-1211. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/modeling-and-validation-12v-lead-acid-battery-stop-start . (Accessed: November 20, 2017).	Presents the development and validation of the lead-acid battery model.	Yes	No

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NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	Lee, S., B. Lee, J. McDonald, and E. Nam. 2013. Modeling and Validation of Lithium-Ion Automotive Battery Packs. SAE Technical Paper 2013-01-1539. doi: 10.4271/2013-01-1539. Available at: https://www.researchgate.net/publication/291025131_Modeling_and_Validation_of_Lithium-Ion_Automotive_Battery_Packs . (Accessed: March 30, 2018).	Describes the battery pack model for ALPHA. This paper also presents lithium-polymer battery pack model development and validation integrated into the ALPHA tool.	Yes	No
NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	Lee, S., B. Lee, J. McDonald, L. Sanchez, and E. Nam. 2013. Modeling and Validation of Power-Split and P2 Parallel Hybrid Electric Vehicles. SAE Technical Paper 2013-01-1470. doi: 10.4271/2013-01-1470. Available at: https://www.sae.org/publications/technical-papers/content/2013-01-1470/ . (Accessed: March 30, 2018).	Presents the power-split and P2 parallel hybrid electric vehicle models, which will eventually be integrated into ALPHA, and discusses controls development and validation.	Yes	No
NHTSA-2017-0069-0171	Emily Rosenblum, Environmental Defense Fund	Newman, K., M. Doorlag, and D. Barba. 2016. Modeling of a Conventional Mid-Size Car with CVT Using ALPHA and Comparable Powertrain Technologies. SAE Technical Paper 2016-01-1141. doi:10.4271/2016-01-1141. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/modeling-conventional-mid-size-car-cvt-using-alpha-and . (Accessed: November 20, 2017).	Presents the results of testing a Nissan Altima with CVT and the initial development of a CVT shift algorithm (ALPHA shift-CVT) for use with EPA's ALPHA model.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017- 0069-0172	Emily Rosenblum, Environmental Defense Fund	ICF International. 2012. Peer Review of the Draft Report, Modeling the Cost and Performance of Lithium-Ion Batteries for Electric-Drive Vehicles. Revised Final Report. EPA. EPA-420-R-12-021. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P100F17H.txt?ZyActionD=ZyDocument&Client=EPA&Index=2011%20Thru%202015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C11THRU15%5CTXT%5C00000005%5CP100F17H.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1 . (Accessed: November 20, 2017).	Summarizes the peer reviewer comments to the Draft Report "Modeling the Cost and Performance of Lithium-Ion Batteries for Electric-Drive Vehicles Revised Final Report" according to technical, manufacturing, and tool categories.	Yes	No

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NHTSA-2017-0069-0172	Emily Rosenblum, Environmental Defense Fund	Argonne National Laboratory. 2011. Modeling the Cost and Performance of Lithium-Ion Batteries for Electric-Drive Vehicles. Final Report. EPA. EPA-420-R-12-023. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P100F84A.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2011+Thru+2015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C11thru15%5CTxt%5C00000005%5CP100F84A.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL . (Accessed: November 20, 2017).	Discusses the Battery Performance and Cost model developed at Argonne National Laboratory for lithium-ion battery packs used in automotive transportation.	Yes	No
NHTSA-2017-0069-0172	Emily Rosenblum, Environmental Defense Fund	Newman, K. A., and P. Dekraker. 2016. Modeling the Effects of Transmission Gear Count, Ratio Progression, and Final Drive Ratio on Fuel Economy and Performance Using ALPHA. SAE Technical Paper 2016-01-1143. doi: 10.4271/2016-01-1143. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/modeling-effects-transmission-gear-count-ratio . (Accessed: November 20, 2017).	Presents an analysis of the effects of varying the absolute and relative gear ratios of a given transmission on carbon emissions and performance.	Yes	No

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NHTSA-2017-0069-0172	Emily Rosenblum, Environmental Defense Fund	U.S. Environmental Protection Agency. 2016. Population and Activity of On-road Vehicles in MOVES2014. EPA-420-R-16-003. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P10007VJ.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2011+Thru+2015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C11thru15%5CTxt%5C00000019%5CP10007VJ.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL . (Accessed: November 20, 2017).	Describes the sources and derivation for on road vehicle population and activity information and associated adjustments as stored in the MOVES2014 and MOVES2014a default databases.	Yes	No
NHTSA-2017-0069-0172	Emily Rosenblum, Environmental Defense Fund	Schenk, C., and P. Dekraker. 2017. Potential Fuel Economy Improvements from the Implementation of cEGR and CDA on an Atkinson Cycle Engine. SAE Technical Paper 2017-01-1016. doi: 10.4271/2017-01-1016.	Presents the results from implementation of external exhaust gas recirculation and cylinder deactivation on an engine capable of Atkinson cycle operation.	Yes	No
NHTSA-2017-0069-0172	Emily Rosenblum, Environmental Defense Fund	Greene, D. L. 2012. Rebound 2007: Analysis of U.S. light-duty vehicle travel statistics. <i>Energy Policy</i> 43(35):14–28. doi: https://doi.org/10.1016/j.enpol.2010.03.083 . Available at: https://inis.iaea.org/search/search.aspx?orig_q=RN:43077006 . (Accessed: November 20, 2017).	Examines the impact price of gas has on light-duty vehicle travel and fuel efficiency.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0172	Emily Rosenblum, Environmental Defense Fund	Helfand, G., M. McWilliams, K. Bolon, L. Reichle, M. Sha, A. Smith, and R. Beach. 2016. Searching for hidden costs: A technology-based approach to the energy efficiency gap in light-duty vehicles. <i>Energy Policy</i> 98:590–606. doi: https://doi.org/10.1016/j.enpol.2016.09.014 . Available at: http://www.sciencedirect.com/science/article/pii/S0301421516304803?via%3Dihub . (Accessed: November 20, 2017).	Examines the existence of hidden costs in energy-saving technologies through a content analysis of auto reviews of model-year 2014 vehicles.	Yes	No
NHTSA-2017-0069-0172	Emily Rosenblum, Environmental Defense Fund	Rugh, J.P., V. Hovland, and S. O. Andersen. 2004. Significant Fuel Savings and Emission Reductions by Improving Vehicle Air Conditioning. National Renewable Energy Laboratory. Available at: https://www.nrel.gov/docs/legosti/old/62232.pdf . (Accessed: November 20, 2017).	Details vehicle air conditioning's impact on fuel use and tailpipe emissions and reviewed ways to improve vehicle air conditioning systems.	No	No

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NHTSA-2017- 0069-0172	Emily Rosenblum, Environmental Defense Fund	Helfand, G., C. Lui, M. Donahue, J. Doremus, A. Kahan, and M. Shelby. 2015. Testing a Model of Consumer Vehicle Purchases Draft. EPA. EPA-420-D-15-011. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P100NNOZ.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2011+Thru+2015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C11thru15%5CTxt%5C00000018%5CP100NNOZ.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL . (Accessed: November 20, 2017).	Presents a validation exercise for a model developed for EPA, intended to estimate the impacts of changes in vehicle prices and fuel economy due to changes in vehicle greenhouse gas emissions standards.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017- 0069-0172	Emily Rosenblum, Environmental Defense Fund	U.S. Environmental Protection Agency. 2015. Testing a Model of Consumer Vehicle Purchases. EPA-420-D-15-011. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P100NNOZ.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2011+Thru+2015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C11thru15%5CTxt%5C00000018%5CP100NNOZ.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL . (Accessed: November 20, 2017).	Provides the details of Testing a Model of Consumer Vehicle Purchases.	No	No
NHTSA-2017- 0069-0172	Emily Rosenblum, Environmental Defense Fund	Ferris, A. E., R. J. Shadbegian, and A. Wolverton. 2014. The effect of environmental regulation on power sector employment: Phase I of the Title IV SO ₂ Trading Program. <i>Journal of the Association of Environmental and Resource Economists</i> 1(4):521–553. Available at: http://www.journals.uchicago.edu/doi/abs/10.1086/679301 . (Accessed: November 20, 2017).	Examines the impact of Phase I of the Title IV sulfur dioxide trading program on electric utility employment.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0172	Emily Rosenblum, Environmental Defense Fund	Helfand, G., and R. Dorsey-Palmateer. 2015. The energy efficiency gap in EPA's benefit-cost analysis of vehicle greenhouse gas regulations: A case study. <i>Journal of Benefit-Cost Analysis</i> 6(2):432–454. Available at: https://www.cambridge.org/core/journals/journal-of-benefit-cost-analysis/article/div-classtitlethe-energy-efficiency-gap-in-epas-benefit-cost-analysis-of-vehicle-greenhouse-gas-regulations-a-case-studydiv/21A55026616C7C17496A56783F64FA3D . (Accessed: November 20, 2017).	Presents EPA's cost benefit analysis to lower greenhouse gas emissions and have better fuel economy by reviewing available technologies and their costs.	Yes	No
NHTSA-2017-0069-0172	Emily Rosenblum, Environmental Defense Fund	Jaffe, A. B., and R. N. Stavins. 1994. The energy paradox and the diffusion of conservation technology. <i>Resource and Energy Economics</i> 16(2):91–122. Available at: http://www.sciencedirect.com/science/article/pii/0928765594900019 . (Accessed: November 20, 2017).	Discusses diffusion of energy conservation technologies and potential market failures that may impede the growth of technology.	Yes	No
NHTSA-2017-0069-0172	Emily Rosenblum, Environmental Defense Fund	Hymel, K. M. and Small, K.A. 2015. The rebound effect for automobile travel: Asymmetric response to price changes and novel features of the 2000s. <i>Energy Economics</i> . 49 93-103. doi: 10.1016/j.eneco.2014.12.016.	Explains gasoline price changes during the 2000s and discussed the impact of the rebound effect.	Yes	No

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NHTSA-2017- 0069-0172	Emily Rosenblum, Environmental Defense Fund	ICF International. 2015. Peer Review for the Report, The Rebound Effect from Fuel Efficiency Standards: Measurement and Projection to 2035. EPA. EPA-420-R-15-013. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P100N141.txt?ZyActionD=ZyDocument&Client=EPA&Index=2011%20Thru%202015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C11THRU15%5CTXT%5C00000016%5CP100N141.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1 . (Accessed: November 20, 2017).	Provides a peer review <i>The Rebound Effect from Fuel Efficiency Standards: Measurement and Projection to 2035</i> .	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017- 0069-0172	Emily Rosenblum, Environmental Defense Fund	ICF International. 2015. The Rebound Effect from Fuel Efficiency Standards: Measurement and Projection to 2035. EPA. EPA-420-R-15-012. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P100N11T.txt?ZyActionD=ZyDocument&Client=EPA&Index=2011%20Thru%202015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C11THRU15%5CTXT%5C00000016%5CP100N11T.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1 . (Accessed: November 20, 2017).	Discusses empirical values of the “rebound effect” for travel in passenger vehicles in the United States.	Yes	No

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NHTSA-2017- 0069-0172	Emily Rosenblum, Environmental Defense Fund	Baldauf, R. W., R. B. Devlin, P. Gehr, R. Giannelli, B. Hassett-Sipple, H. Jung, G. Martini, J. McDonald, J. D. Sacks, and K. Walker. 2016. Ultrafine particle metrics and research considerations: Review of the 2015 UFP workshop. <i>International Journal of Environmental Research and Public Health</i> 13(11):1054. doi: 10.3390/ijerph13111054. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5129264/ . (Accessed: November 20, 2017).	Summarizes the presentations and discussions during a 2015 EPA sponsored workshop on emissions, air quality impacts, and health effects associated with exposures to ultrafine particles, highlighting the observations offered by individual speakers, summaries of the panel discussions, and potential opportunities to continue dialogue and enhance coordination and collaboration across multiple scientific disciplines.	Yes	No
NHTSA-2017- 0069-0172	Emily Rosenblum, Environmental Defense Fund	Rogozhin, A., M. Gallaher, G. Helfand, and W. McManus. 2010. Using indirect cost multipliers to estimate the total cost of adding new technology in the automobile industry. <i>International Journal of Production Economics</i> 124(2):360–368. doi: 10.1016/j.ijpe.2009.11.031. Available at: https://www.researchgate.net/publication/46487085_Using_indirect_cost_multipliers_to_estimate_the_to tal_cost_of_adding_new_technology_in_the_automobile_industry . (Accessed: November 20, 2017).	Develops modified multipliers, referred to as indirect cost multipliers that specifically include evaluation of the contributors to indirect costs that are likely to be affected by vehicle modifications.	Yes	No

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NHTSA-2017-0069-0172	Emily Rosenblum, Environmental Defense Fund	Moskalik, A., P. Dekraker, J. Kargul, and D. Barba. 2015. Vehicle component benchmarking using a chassis dynamometer. <i>SAE International Journal of Materials and Manufacturing</i> 8(3). doi:10.4271/2015-01-0589. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/vehicle-component-benchmarking-using-chassis-dynamometer . (Accessed: November 20, 2017).	Uses data from chassis dynamometer testing to determine the efficiency and operation of vehicle driveline components.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Lee, S., C. Schenk, and J. McDonald. 2016. Air Flow Optimization and Calibration in High-Compression Ratio Naturally Aspirated SI Engines with Cooled-EGR. SAE Technical Paper 2016-01-0565. doi:10.4271/2016-01-0565. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/air-flow-optimization-and-calibration-high-compression . (Accessed: November 20, 2017).	Presents initial results of a parametric study to determine appropriate rates of cooled, external exhaust gas recirculation; internal (residual) exhaust gas recirculation; and control development for a future engine technology demonstration project based upon the 2.0L, 14:1 CR version of the Mazda SkyActiv-G engine.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Hula, A., J. Alson, A. Bunker, and K. Bolon. 2014. Analysis of Technology Adoption Rates in New Vehicles. SAE Technical Paper 2014-01-0781. doi:10.4271/2014-01-0781. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/analysis-technology-adoption-rates-new-vehicles-sae . (Accessed: November 20, 2017).	Examines the pace at which manufacturers have added certain powertrain technology into new vehicles from MYs 1975 to the present.	Yes	No

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NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	RTI International and Transportation Research Institute University of Michigan. 2009. Automobile Industry Retail Price Equivalent and Indirect Cost Multipliers. EPA. EPA-420-R-09-003. Available at: https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryID=205147 . (Accessed: November 20, 2017).	Uses a modified multiplier to evaluate the components of indirect costs affected by vehicle modifications associated with environmental regulation.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Ellies, B., C. Schenk, and P. Dekraker. 2016. Benchmarking and Hardware-in-the-Loop Operation of a 2014 MAZDA SkyActiv 2.0L 13:1 Compression Ratio Engine. SAE Technical Paper 2016-01-1007. doi: 10.4271/2016-01-1007. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/benchmarking-and-hardware-loop-operation-2014-mazda . (Accessed: November 20, 2017).	Presents the results of EPA's benchmarking of a Mazda 2.0L 13:1 CR SkyActiv engine.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Newman, K., J. Kargul, and B. Barba. 2015. Benchmarking and Modeling of a Conventional Mid-Size Car Using ALPHA. SAE Technical Paper 2015-01-1140. doi:10.4271/2015-01-1140. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/benchmarking-and-modeling-conventional-mid-size-car-using . (Accessed: November 20, 2017).	Uses the ALPHA software tool to analyze current and future advanced vehicle technologies.	Yes	No

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NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Simon, K., J. Alson, L. Snapp, and A. Hula. 2015. Can transportation emission reductions be achieved autonomously? <i>Environmental Science and Technology</i> 49(24):13910-13911. doi: 10.1021/acs.est.5b05396. Available at: http://pubs.acs.org/doi/abs/10.1021/acs.est.5b05396 . (Accessed: November 20, 2017).	Discusses the benefits of connected and automated vehicles, particularly on fuel economy, connectivity and infrastructure, ride-sharing, urban environment and low carbon fuels and electrification.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Dekraker, P., M. Stuhldreher, and Y. Kim. 2017. Characterizing factors influencing SI engine transient fuel consumption for vehicle simulation in ALPHA. <i>SAE Journal of Engines</i> 10(2):529–540. doi:10.4271/2017-01-0533. Available at: https://www.epa.gov/sites/production/files/2017-06/documents/sae-2017-01-0533-characterizing-factors-influencing-si-engine-transient-fuel-consumption-alpha.pdf . (Accessed: November 20, 2017).	Examines a) typical transient engine operation encountered over the EPA city and highway drive cycles; b) EPA's vehicle and engine testing to characterize that transient fuel usage; and c) changes made to ALPHA to better model transient engine operation.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Fann, N., K. R. Baker, and C. M. Fulcher. 2012. Characterizing the PM2.5-related health benefits of emission reductions for 17 industrial, area and mobile emission sectors across the U.S. <i>Environmental International</i> 49:141–151. doi: 10.1016/j.envint.2012.08.017. Available at: http://www.sciencedirect.com/science/article/pii/S0160412012001985 . (Accessed: November 20, 2017).	Analyzes the health benefits of reducing PM2.5.	Yes	No

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NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Ricardo, Inc. and Systems Research and Applications Corporation. 2011. Response to Peer Review of Ricardo Computer Simulation of Light-Duty Vehicle Technologies for Greenhouse Gas Emission Reduction in the 2020-2025 Timeframe. EPA. EPA-420-R-11-021. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P100D5BX.txt?ZyActionD=ZyDocument&Client=EPA&Index=2011%20Thru%202015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C11THRU15%5CTXT%5C00000003%5CP100D5BX.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&slide . (Accessed: November 20, 2017).	Details the peer-reviewed response to Ricardo, Inc.'s simulation models and analysis of its report "Computer Simulation of Light-Duty Vehicle Technologies for Greenhouse Gas Emission Reduction in the 2020–2025 Timeframe."	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Ricardo, Inc. and Systems Research and Applications Corporation. 2011. Computer Simulation of Light-Duty Vehicle Technologies for Greenhouse Gas Emission Reduction in the 2020–2025 Timeframe. EPA. EPA-420-R-11-020. Available at: https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryID=236014 . (Accessed: November 20, 2017).	Assesses the effectiveness of a broad range of technologies including powertrain architecture (conventional and hybrid), engine, transmission, and other vehicle attributes such as engine displacement, final drive ratio, vehicle weight, and rolling resistance on seven light-duty vehicle classes.	Yes	No

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NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Systems Research and Applications International, Inc. 2012. Peer Review for the Consumer Vehicle Choice Model and Documentation. EPA. EPA-420-R-12-013. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZEB.PDF?Dockey=P100EZEB.PDF . (Accessed: November 20, 2017).	Contains the analysis and comments from the peer reviewers who examined the EPA's Consumer Vehicle Choice Model and associated documentation.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Oak Ridge National Laboratory. 2012. Consumer Vehicle Choice Model Documentation. EPA. EPA-420-B-12-052. Available at: https://nepis.epa.gov/Exe/ZyNET.exe/P100EZ37.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2011+Thru+2015&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C11thru15%5CTxt%5C00000005%5CP100EZ37.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL . (Accessed: November 20, 2017).	Details Consumer Vehicle Choice Model design principles, model equations, parameter calibration, implementation and user guide.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Caffrey, C., K. Bolon, H. Harris, G. Kolwich, R. Johnston, and T. Shaw. 2013. Cost-Effectiveness of a Lightweight Design for 2017–2020: An Assessment of a Midsize Crossover Utility Vehicle. SAE Technical Paper 2013-01-0656. doi: 10.4271/2013-01-0656. Available at: http://papers.sae.org/2013-01-0656/ . (Accessed: November 20, 2017).	Describes a holistic approach in which the most cost-effective mass-reduction ideas were selected using a structured optimization procedure and the crash safety of the resultant design was evaluated using a full-vehicle engineering analysis.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Caffrey, C., K. Bolon, G. Kolwich, R. Johnston, and T. Shaw. 2015. Cost-Effectiveness of a Lightweight Design for 2020–2025: An Assessment of a Light-Duty Pickup Truck. SAE Technical Paper 2015-01-0559. doi:10.4271/2015-01-0559. Available at: https://www.epa.gov/sites/production/files/2016-10/documents/2015-01-0559_0.pdf . (Accessed: November 20, 2017).	Presents an overview of the study “Vehicle Mass Reduction and Cost Analysis-Light-duty Pickup Truck Model Years 2020–2025” by FEV North America, Inc.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Hottle, T., C. Caffrey, J. McDonald, and R. Dodder. 2017. Critical factors affecting life cycle assessments of material choice for vehicle mass reduction. <i>Transportation Research Part D: Transport and Environment</i> . 56:241–257. doi: https://doi.org/10.1016/j.trd.2017.08.010 . Available at: http://www.sciencedirect.com/science/article/pii/S1361920916309142?via%3Dihub . (Accessed: November 20, 2017).	Details various factors such as materials used, which would decrease the overall mass of vehicles and reduce the life cycle impacts.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Sciance, F., B. Nelson, M. Yassine, A. Patti, and L. Rao. 2013. Developing the AC17 Efficiency Test for Mobile Air Conditioners. SAE Technical Paper 2013-01-0569. doi: https://doi.org/10.4271/2013-01-0569 . Available at: http://papers.sae.org/2013-01-0569/ . (Accessed: November 20, 2017).	Reviews efficiencies in mobile air conditioners.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Newman, K., J. Kargul, and D. Barba. 2015. Development and testing of an automatic transmission shift schedule algorithm for vehicle simulation. <i>SAE International. Journal of Engines</i> 8(3):1417—1427. doi:10.4271/2015-01-1142. Available at: http://papers.sae.org/2015-01-1142/ . (Accessed: November 20, 2017).	Presents ALPHA's shift logic algorithm and compares its predicted shift points to actual shift points from a mid-size light-duty vehicle and to the shift points predicted using a static table-based shift logic as calibrated to the same vehicle during benchmark testing.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Lee, B., S. Lee, J. Cherry, JA. Neam, J. Sanchez, and E. Nam 2013. Development of Advanced Light-Duty Powertrain and Hybrid Analysis Tool. SAE Technical Paper 2013-01-0808. doi: https://doi.org/10.4271/2013-01-0808 . Available at: http://papers.sae.org/2013-01-0808/ . (Accessed: November 20, 2017).	Discusses the development and capability of the advanced light-duty powertrain and hybrid analysis tool and the role this model played in determining the effects of off-cycle technologies on greenhouse gas emissions.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer-Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Stuhldreher, M., C. Schenk, J. Brakora, D. Hawkins, A. Moskalik, and P. Dekraker. 2015. Downsized Boosted Engine Benchmarking and Results. SAE Technical Paper 2015-01-1266. doi: 10.4271/2015-01-1266. Available at: https://www.epa.gov/sites/production/files/2016-10/documents/2015-01-1266_0.pdf . (Accessed: November 20, 2017).	Analyzes the technology of "downsized" boosted engines by measuring a benchmarked engine.	Yes	No
NHTSA-2017-0069-0173	Emily Rosenblum, Environmental Defense Fund	Safoutin, M., J. Cherry, J. McDonald, and S. Lee. 2015. Effect of Current and SOC on Round-Trip Energy Efficiency of a Lithium-Iron Phosphate (LiFePO4) Battery Pack. SAE Technical Paper 2015-01-1186. doi: https://doi.org/10.4271/2015-01-1186 . Available at: http://papers.sae.org/2015-01-1186/ . (Accessed: November 20, 2017).	Measures the roundtrip energy efficiency of a 22.8-kilowatt-hour A123 Li-ion (Lithium Iron Phosphate, LiFePO4) battery pack.	Yes	No
NHTSA-2017-0069-0174	Hilary Sinnamon, Environmental Defense Fund, Center for Energy Efficiency and Renewable Technologies, and Clean Power Campaign	EDF, CEERT, and the Clean Power Campaign. 2017. Re: Request for Comment on Reconsideration of the Final Determination of the Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022–2025 Light-Duty Vehicles; Request for Comment on Model Year 2021 Greenhouse Gas Emissions Standards (August 21, 2017); EPA–HQ–OAR–2015–0827.	Provides joint comments submitted by the Environmental Defense Fund, the Center for Energy Efficiency, and Renewable Technologies, and the Clean Power Campaign regarding the Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022–2025 Light-Duty Vehicles and the Model Year 2021 Greenhouse Gas Emissions Standards.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0175	Emily Rosenblum, Environmental Defense Fund	U.S. Environmental Protection Agency. 2015. Light-Duty Automotive Technology Carbon Dioxide Emissions and Fuel Economy Trends 1975 through 2015. EPA-420-R-15-016. Available at: https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P10005P6.pdf . (Accessed: November 20, 2017).	Addresses carbon dioxide emissions, fuel economy, and powertrain technology trends for new vehicles in the United States.	No	No
NHTSA-2017-0069-0175	Emily Rosenblum, Environmental Defense Fund	FEV, Inc. 2012. Light-Duty Vehicle Mass Reduction and Cost Analysis - Midsize Crossover Utility Vehicle. EPA. EPA-420-R-12-026. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EWVL.PDF?Dockey=P100EWVL.PDF . (Accessed: November 20, 2017).	Analyzes mass-reduction technologies and implementation of midsize crossover utility vehicles.	Yes	No
NHTSA-2017-0069-0175	Emily Rosenblum, Environmental Defense Fund	FEV, Inc. 2012. Peer Review of Light-Duty Vehicle Mass Reduction and Cost Analysis - Midsize Crossover Utility Vehicle (FEV Report). EPA. EPA-420-R-12-019. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EW1M.PDF?Dockey=P100EW1M.PDF . (Accessed: November 20, 2017).	Provides the peer-reviewed comments of the report titled "Light-Duty Vehicle Mass Reduction and Cost Analysis - Midsize Crossover Utility Vehicle."	Yes	No
NHTSA-2017-0069-0175	Emily Rosenblum, Environmental Defense Fund	FEV North America, Inc. 2015. Mass Reduction and Cost Analysis, Light-Duty Pickup Truck Model Years 2020–2025. EPA. EPA-420-R-15-006. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi/P100MS0E.PDF?Dockey=P100MS0E.PDF . (Accessed: November 20, 2017).	Details the potential of implementing mass-reducing technologies in light-duty pickup trucks and their associated costs.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0175	Emily Rosenblum, Environmental Defense Fund	Singh, H. 2012. Mass Reduction for Light-Duty Vehicles for Model Years 2017–2015. NHTSA. Available at: ftp://ftp.nhtsa.dot.gov/CAFE/2017-25_Final/811666.pdf . (Accessed: November 20, 2017).	Analyzes the maximum feasible weight reduction while maintaining the same vehicle functionalities, such as performance, safety, crash rating, and relative price as the baseline vehicle.	Yes	No
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	International Council on Clean Transportation. 2015. Factsheet Canada, Light-Duty Vehicle Efficiency Standards. Available at: www.theicct.org/info-tools/global-passenger-vehicle-standards . (Accessed: November 20, 2017).	Provides a fact sheet on Canadian fuel standards.	No	No
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	J.D. Power. 2017. Despite Cheap Gas, Fuel Efficiency Still a Primary Concern. Press Release. Available at: http://www.jdpower.com/press-releases/2015-us-avoider-study . (Accessed: November 20, 2017).	Provides press release on a study on consumer purchasing habits for automobiles.	No	No
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	Knittel, C. 2012. Automobiles on steroids: Product attribute trade-offs and technological progress in the automobile sector. <i>American Economic Review</i> 101: 3368–3399. Available at: http://www.aeaweb.org/articles.php?doi=10.1257/aer.101.7.3368 . (Accessed: November 20, 2017).	Estimates the technological progress that has occurred since 1980 in the automobile industry and the trade-offs faced when choosing between fuel economy, weight, and engine power characteristics.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	Leard, B., J. Linn, and Y. C. Zhou. 2017. How Much Do Consumers Value Fuel Economy and Performance? Evidence from Technology Adoption. June. Resources for the Future. Available at: http://www.rff.org/files/document/file/RFF-Rpt-WTP_FuelEconomy%26Performance.pdf . (Accessed: November 20, 2017).	Reports on consumer purchasing habits for automobiles.	No	No
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	Holmes, L. 2017. Oral Statement of the Motor & Equipment Manufacturers Association before the U.S. Environmental Protection Agency. Available at: https://www.mema.org/sites/default/files/resource/MEMA%20Testimony%20EPA%20MTE%20Sept%206%202017.pdf . (Accessed: November 20, 2017).	Provides the motor vehicle advocacy organization statement to EPA on reconsideration of 2022–2025 standards.	No	No
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	Castle, S. 2017. Britain to Ban New Diesel and Gas Cars by 2040. <i>The New York Times</i> . Available at: https://www.nytimes.com/2017/07/26/world/europe/uk-diesel-petrol-emissions.html . (Accessed: November 20, 2017).	Reports on Britain's automobile regulations.	No	No
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	Khan, S. 2017. Scotland to 'phase out' new petrol and diesel cars by 2032. <i>The Independent</i> . Available at: http://www.independent.co.uk/news/uk/politics/scotland-petrol-diesel-cars-phase-out-ban-2032-nicola-sturgeon-snp-environment-air-pollution-a7930781.html . (Accessed: November 20, 2017).	Reports on Scotland's automobile regulations.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	Transportpolicy.net. 2017. China: Light-Duty: Fuel Consumption. Available at: http://www.transportpolicy.net/standard/china-light-duty-fuel-consumption/ . (Accessed: November 20, 2017).	Reports on Chinese light-duty fuel consumption.	No	No
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	Transportpolicy.net. 2017. EU: Light-Duty: GHG Emissions. Available at: http://www.transportpolicy.net/standard/eu-light-duty-ghg-emissions/ . (Accessed: November 20, 2017).	Reports on European Union's light-duty greenhouse gas emissions.	No	No
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	Transportpolicy.net. 2017. India: Light-Duty: Fuel Consumption. Available at: http://www.transportpolicy.net/standard/india-light-duty-fuel-consumption/ . (Accessed: November 20, 2017).	Reports on India's light-duty fuel consumption.	No	No
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	Transportpolicy.net. 2017. South Korea: Light-Duty: Fuel Economy and GHG. Available at: http://www.transportpolicy.net/standard/south-korea-light-duty-fuel-economy-and-ghg/ . (Accessed: November 20, 2017).	Reports on India's light-duty fuel economy and greenhouse gas emissions.	No	No
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	White House. 2011. The Resurgence of the American Automotive Industry. Available at: https://obamawhitehouse.archives.gov/blog/2011/06/01/resurgence-american-automotive-industry . (Accessed: November 20, 2017).	Reports on American automakers' comeback from the recession.	No	No
NHTSA-2017-0069-0166	Erin Murphy, Environmental Defense Fund	Rogers, C. 2015. U.S. Car Exports Top 2 Million. <i>Wall Street Journal</i> . Available at: https://www.wsj.com/articles/u-s-car-exports-top-2-million-1423174695 . (Accessed: November 20, 2017).	Reports on U.S. car exports.	No	No

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NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Short, D., D. Vu, T. D. Durbin, G. Karavalakis, and A. Asa-Awuku. 2015. Components of particle emissions from light-duty spark-ignition vehicles with varying aromatic content and octane rating in gasoline. <i>Environmental Science & Technology</i> 49 (17): 10682-10691. Available at: https://pubs.acs.org/doi/abs/10.1021/acs.est.5b03138 . (Accessed: February 28, 2018).	Reports on the effects of aromatic hydrocarbons and octane ratings of gasoline and their impacts on particulate matter.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Young, S. 2017. Air quality environmental epidemiology studies are unreliable. <i>Regulatory Toxicology and Pharmacology</i> 86: 177-180. Available at: https://www.sciencedirect.com/science/article/pii/S0273230017300673?via%3Dihub . (Accessed: February 28, 2018).	Examines the assertion of the unreliability of meta-analysis regarding air quality environmental epidemiology studies.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Cox Jr., L. A. 2016. Do causal concentration-response functions exist? A critical review of associational and causal relations between fine particulate matter and mortality. <i>Critical Reviews in Toxicology</i> 47 (7): 609-637. Available at: https://www.tandfonline.com/doi/full/10.1080/10408444.2017.1311838 . (Accessed: February 28, 2018).	Critically reviews the concentration-response functions for fine particulate matter and mortality risks.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Cox Jr., L. A., and D. Popken. 2015. Has reducing fine particulate matter and ozone caused reduced mortality rates in the United States? <i>Annals of Epidemiology</i> 25 (3): 162-173. Available at: https://www.sciencedirect.com/science/article/pii/S1047279714005079 . (Accessed: February 28, 2018).	Compares county-level changes in average annual ambient pollutant levels to corresponding changes in all-cause and cardiovascular disease mortality rates from 2000 to 2010.	Yes	No

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NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Cox Jr., L. A. 2016. Rethinking the meaning of concentration-response functions and the estimated burden of adverse health effects attributed to exposure concentrations. <i>Risk Analysis</i> 36 (9): 1770-1779. Available at: http://onlinelibrary.wiley.com/doi/10.1111/risa.12670/full . (Accessed: February 28, 2018).	Questions the use of concentration-response relations to predict or estimate how changing exposure concentrations would change responses in a population.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Young, S., R. Smith, and K. Lopiano. 2017. Air quality and acute deaths in California, 2000-2012. <i>Regulatory Toxicology and Pharmacology</i> 88:173-184. Available at: https://www.sciencedirect.com/science/article/pii/S0273230017301538 . (Accessed: February 28, 2018).	Questions causal associations between air quality and acute deaths.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Enstrom, J. 2017. Fine particulate matter and total mortality in cancer prevention study cohort reanalysis. <i>Dose-Response</i> 15(1). Available at: http://journals.sagepub.com/doi/full/10.1177/1559325817693345 . (Accessed: February 28, 2018).	Tests the validity of the relationship between fine particulate matter and total mortality in the 1982 American Cancer Society Cancer Prevention Study cohort.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Voose, P. 2016. Climate scientists open up their black boxes to scrutiny. <i>Science</i> 354(6311):401-402. DOI: 10.1126/science.3546311.401. Available at: http://science.sciencemag.org/content/354/6311/401 . (Accessed: March 4, 2018).	Reports on problems with predictive "parameterizations" used by climate scientists and the recent development of climate scientists becoming more transparent with their methods.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Hourdin, F. and T. Mauritsen, et al. 2017. The art and science of climate model tuning. <i>American Meteorological Society</i> March 2017:589-602. Available at: https://journals.ametsoc.org/doi/full/10.1175/BAMS-D-15-00135.1 (Accessed: March 4, 2018).	Reports on the issues surrounding climate model tuning as well as the challenges and opportunities in applying so-called objective methods in climate model tuning.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	McCabe, G. J., M. Palecki, and J. Betancourt. 2004. Pacific and Atlantic Ocean influence on multidecadal drought frequency in the United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> 101(12):4136-4141. doi: https://doi.org/10/1073/pnas.0306738101 . Available at: http://www.u.arizona.edu/~conniew1/geog532/McCaletal2004.pdf . (Accessed: March 4, 2018). (Link no longer active).	Discusses the effects of Pacific Decadal Oscillation, Atlantic Multidecadal Oscillation, El Niño Southern Oscillation, and sea surface temperatures on droughts in the conterminous United States.	Yes	Yes
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Klotzback, P. K. 2017. "2017 Atlantic TC Activity Thru October 15." Available at: https://pbs.twimg.com/media/DMN3m6MVwAAFjK5.jpg . (Accessed March 4, 2018).	Lists various statistics related to 2017 Atlantic storm activity.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Browman, H. 2016. Applying organized skepticism to ocean acidification research. <i>ICES Journal of Marine Science</i> 73(3):529-536. DOI: https://doi.org/10/1093/icesjms/fsw010 . Available at: https://academic.oup.com/icesjms/article/73/3/529/2459146 . (Accessed: March 4, 2018). (Link no longer active).	Presents a brief overview of the history of research on ocean acidification.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Cook, A. R., and L. M. Leslie, et al. 2017. The impact of El Niño-Southern Oscillation (ENSO) on winter and early spring U.S. tornado outbreaks. <i>Journal of Applied Meteorology and Climatology</i> 36:2455-2478. DOI: 10.1175/JAMC-D-16-0248.1 Available at: http://www.spc.noaa.gov/publications/cook/ensojamc.pdf . (Accessed: March 4, 2018).	Reports on linkages between El Niño-Southern Oscillation and tornado outbreaks in the United States during winter and early spring.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Doerr, S. and C. Santin. 2016. Global trends in wildfire and its impacts: perceptions versus realities in a changing world. <i>Philosophical Transactions of the Royal Society B</i> 371(1696). DOI: 10.1098/rstb.2015.0345 Available at: http://rstb.royalsocietypublishing.org/content/371/1696/20150345 (Accessed: March 4, 2018).	Critiques the perception that wildfire is an accelerating problem.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	U.S. Department of the Interior. 2017. Secretary Zinke Directs Interior Bureaus to Take Aggressive Action to Prevent Wildfires. U.S. Department of the Interior. Last revised: September 12, 2017. Available at: https://www.doi.gov/pressreleases/secretary-zinke-directs-interior-bureaus-take-aggressive-action-prevent-wildfires . (Accessed: March 4, 2018).	Discusses memo issued by Secretary of the Interior Ryan Zinke directing all Department of Interior bureaus, superintendents, and land managers to adopt more aggressive practices aimed at preventing and combatting the spread of catastrophic wildfires through reduction and pre-suppression techniques.	No	No

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NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	McClintock, T. 2017. Hearing on Wildfire Prevention. Testimony to the U.S. House Subcommittee on Federal Lands. Last revised: May 17, 2017. Available at: https://mcclintock.house.gov/newsroom/speeches/hearing-on-wildfire-prevention . (Accessed March 4, 2018).	Provides testimony by U.S. Representative Tom McClintock from the 4th District of California regarding the management of forests by the government.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Leard, B, J. Linn, and Y. C. Zhou. 2017. How Much Do Consumers Value Fuel Economy and Performance?: Evidence from Technology Adoption. Resources for the Future. Available at: http://www.rff.org/files/document/file/RFF-Rpt-WTP_FuelEconomy%26Performance.pdf . (Accessed: March 4, 2018).	Evaluates the welfare consequences of automakers forgoing performance increases to raise fuel economy since 2012.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Allcott, H. and C. R. Knittel. 2017. Are Consumers Poorly-Informed about Fuel Economy? Evidence from Two Experiments. Working Paper. MIT Center for Energy and Environmental Policy Research. Available at: http://ceepr.mit.edu/files/papers/2017-008.pdf . (Accessed March 4, 2018).	Analyzes the effect of information related to fuel economy on people's vehicle-purchasing decisions.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Davis, L., and C. Knittel. 2016. Are Fuel Economy Standards Regressive? Working Paper. MIT Center for Energy and Environmental Policy Research. Available at: http://ceepr.mit.edu/files/papers/2016-016.pdf . (Accessed March 5, 2018).	Analyzes the distributional impact of U.S fuel economy standards as compared to carbon tax.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Nevers, C. and J. M. Rege. 2017. Comments on Notice of Intent to Prepare an Environmental Impact Statement for Model Year 2022-2025 Corporate Average Fuel Economy Standards. Alliance of Automobile Manufacturers, Association of Global Automakers. Available at: https://www.regulations.gov/document?D=NHTSA-2017-0069-0150 . (Accessed March 5, 2018).	Provides comments from the Alliance of Automobile Manufacturers and the Association of Global Automakers regarding NHTSA CAFE standards.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Nevers, C. 2017. Comments on Reconsideration of the Final Determination on the MTE. Alliance of Automobile Manufacturers. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-9194 . (Accessed March 5, 2018).	Provides comments from the Alliance of Automobile Manufacturers regarding EPA and NHTSA request for comment on reconsideration of the final determination of the mid-term evaluation of greenhouse gas emissions standards for MY 2022–2025 light-duty vehicles and request for comment on MY 2021 greenhouse gas emissions standards.	No	No

Table B-1. Sources Identified in Scoping Comments

Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Rege, J. 2017. Comments from the Association of Global Automakers, Inc. Association of Global Automakers. Available at: https://www.regulations.gov/document?D=NHTSA-2016-0068-0236 . (Accessed: March 5, 2018).	Provides comments from the Association of Global Automakers, Inc. on the request for comment on reconsideration of the final determination of the mid-term evaluation of greenhouse gas emissions standards for MY 2022–2025 light-duty vehicles and request for comment on MY 2021 greenhouse gas emissions standards.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Viera, J. 2016. Comments on Proposed Determination of the Appropriateness of the Model Year 2022-2025 Light Duty Vehicle Greenhouse Gas Emissions Standards Under the Mid-Term Evaluation. Ford Motor Company. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-6153 . (Accessed: March 5, 2018).	Provides comments on the proposed determination on the appropriateness of the MY 2022–2025 light-duty vehicle greenhouse gas emissions standards under the mid-term evaluation.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	FitzGerald, B. 2016. Comments of Mercedes-Benz Research and Development North America, Inc. and Daimler AG. Mercedes-Benz. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-4015 . (Accessed: March 5, 2018).	Provides comments in response to the technical assessment report for MY 2022–2025 light-duty vehicle greenhouse gas emissions and CAFE standards published by EPA and NHTSA as part of the midterm evaluation process.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Fiat Chrysler Automobiles. 2016. Comments on Draft Technical Assessment Report. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-4176 . (Accessed: March 5, 2018).	Provides comments in response to draft technical assessment report: midterm evaluation of light-duty vehicle greenhouse gas emission standards and corporate average fuel economy standards for MYs 2022–2025.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Kiss, B. 2016. General Motors Comments and Request to Withdraw the Proposed Determination. General Motors Company. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-6157 . (Accessed: March 5, 2018).	Provides comments formally requesting the withdrawal of the proposed determination and asking that the EPA return to the public timetable for proper completion of the midterm review.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Johnson, S. 2016. Comments on Midterm Evaluation Draft Technical Assessment Report for Model Year 2022-2025 Light-Duty Vehicle GHG Emissions and CAFE Standards. Volkswagen Group of America, Inc. Available at: https://www.regulations.gov/document?D=NHTSA-2016-0068-0093 . (Accessed: March 5, 2018).	Provides comments regarding the joint Midterm Evaluation Draft Technical Assessment Report for Model Year 2022–2025 Light-Duty GHG Emission and CAFE Standards published in the <i>Federal Register</i> on July 27, 2016.	No	No

Table B-1. Sources Identified in Scoping Comments

Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Novation Analytics. 2017. Evaluation of the Environmental Protection Agency's Lumped Parameter Model Informed Projections from the Proposed Determination. Prepared for: Alliance of Automobile Manufacturers and Association of Global Automakers. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-9194 . (Accessed: March 5, 2018).	Analyzes the technology effectiveness estimates generated by the EPA's Lumped Parameter Model and evaluating the efficacy of previous changes that EPA made to this model.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Novation Analytics. 2017. MY 2016 Baseline Study - Final Volumes. Prepared for: Alliance of Automobile Manufacturers and Association of Global Automakers. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-9194 . (Accessed: March 5, 2018).	Provides trend information to support the midterm review process and comments by the Associations and their members on the EPA Request for Comment on Reconsideration of the Final Determination and Request for Comment on Model Year 2021 GHG Standards.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	U.S. Energy Information Administration. 2018. Annual Energy Outlook 2018 With Projections to 2050. Available at: https://www.eia.gov/outlooks/aeo/ . (Accessed March 5, 2018).	Provides modeled projections of domestic energy markets through 2050, including cases with different assumptions regarding macroeconomic growth, world oil prices, technological progress, and energy policies.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Strategic Vision. 2018. New Vehicle Experience Study. Available at: https://www.strategicvision.com/nves (Accessed: March 5, 2018).	Provides information on car buyers with data dating back to the 1990s.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Exponent Failure Analysis Associates. 2017. Assessment of Greenhouse Gas (GHG) and Corporate Average Fuel Economy (CAFE) Technology Cost Assumptions Technical Memorandum. Prepared for: Alliance of Automobile Manufacturers and Association of Global Automakers. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-9194 . (Accessed: March 5, 2018).	Assesses the technical and modeling assumptions that EPA and NHTSA used in analyses for the development of the light-duty greenhouse gas emissions and corporate average fuel economy standards for MY 2017–2025 vehicles.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Center for Automotive Research. 2017. Automotive Product Development Cycles and the Need for Balance with the Regulatory Environment. Available at: http://www.cargroup.org/automotive-product-development-cycles-and-the-need-for-balance-with-the-regulatory-environment/ . (Accessed: March 5, 2018).	Discusses the challenges facing the automotive industry related to profitability and product development.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Carlson, T., J. Lyons, C. Green, D. Harrison, and E. Shakun. 2017. Critical Assessment of Certain Technical and Economic Assumptions Made in EPA's final Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emission Standards under the Midterm Evaluation. Prepared by: Trinity Consultants, NERA Economic Consulting. Prepared for: Alliance of Automobile Manufacturers. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-9194 . (Accessed: March 5, 2018).	Argues that EPA estimates of real-world greenhouse gas emission and fuel economy benefits are overestimated.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Pannone, G., B. Betz, M. Reale, and J. Thomas. 2017. Decomposing Fuel Economy and Greenhouse Gas Regulatory Standards in the Energy Conversion Efficiency and Tractive Energy Domain. <i>SAE International Journal of Fuels and Lubricants</i> 10(1):202-216. DOI: https://doi.org/10.4271/2017-01-0897 . Available at: https://www.sae.org/publications/technical-papers/content/2017-01-0897/ . (Accessed: March 5, 2018).	Evaluates the regulations established in the U.S. for fuel consumption and carbon dioxide emissions based on use of principles of tractive energy and efficiency to compute sustainable vehicle and propulsion system scenarios.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Kazman, S., and M. Lewis. 2017. Comment on the Environmental Protection Agency's Reconsideration of Its Final Mid-Term Evaluation of Greenhouse Gas Emission Standards for Model Year 2022-2025 Light-Duty Vehicles. Competitive Enterprise Institute. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-9731 . (Accessed: March 5, 2018).	Presents comments critical of EPA's final Mid-Term Evaluation and recommending reconsideration.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Walton, T. 2017. Opportunity Cost, Willingness to Pay, and Affordability of the MY 2016-2025 Fuel Economy Standards. Defour Group. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-9097 . (Accessed: March 5, 2018).	Analyzes what the author sees as a deficiency in the EPA and NHTSA's estimates of benefits, costs, and affordability of their proposed fuel economy standards for MYs 2017 to 2025.	No	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Gibson, T. 2017. The American Iron and Steel Institute's Comments on EPA and NHTSA's Reconsideration of the Mid-Term Evaluation of Greenhouse Gas Emissions Standards for MY 2022-2025 Light-Duty Vehicles. American Iron and Steel Institute. Available at: https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0827-9005 . (Accessed: March 5, 2018).	Supports return to previously established Mid-Term Evaluation schedule and coordination with NHTSA and other agencies.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	U.S. Environmental Protection Agency. 2016. Draft Technical Assessment Report: Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emissions Standards for Model Years 2022-2025.	Examines a wide range of technical issues relevant to greenhouse gas emissions and augural CAFE standards for MY 2022–2025.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Chen, L., M. Braisher, A. Crossley, and R. Stone. 2010. The influence of ethanol blends on particulate matter emissions from gasoline direct injection engines. SAE Technical Paper. Available at: https://www.sae.org/publications/technical-papers/content/2010-01-0793/ . (Accessed March 5, 2018).	Analyzes the effect of fuel composition on particulate matter emissions.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Karavalakis, G., D. Short, D. Vu, R. Russell. 2015. A complete assessment of the emissions performance of ethanol blends and iso-butanol blends from a fleet of nine PFI and GDI vehicles. <i>SAE International Journal of Fuels and Lubricants</i> 8(2):374-395. DOI: https://doi.org/10.4271/2015-01-0957 . Available at: https://www.sae.org/publications/technical-papers/content/2015-01-0957/ . (Accessed: March 5, 2018).	Evaluates the potential emissions impacts of different alcohol blends on a fleet of modern gasoline vehicles.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Sobotowski, R., A. Butler, and Z. Guerra. 2015. A pilot study of fuel impacts on PM emissions from light-duty gasoline vehicles. <i>SAE International Journal of Fuels and Lubricants</i> 8(1):214-233. DOI: https://doi.org/10.4271/2015-01-9071 . Available at: https://www.sae.org/publications/technical-papers/content/2015-01-9071/ . (Accessed: March 5, 2018).	Explores the effects of PM Index, low and high molecular weight aromatics, and ethanol content on particulate matter emissions from light-duty Tier-2 gasoline vehicles.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Saliba, G., R. Saleh, Y. Zhao, A. A. Presto, A. T. Lambe, B. Frodin, S. Sardar, H. Maldonado, C. Maddox, A. A. May, G. T. Drozd, A. H. Goldstein, L. M. Russell, F. Hagen, and A. L. Robinson. 2017. Comparison of gasoline direct-injection (GDI) and port fuel injection (PFI) vehicle emissions: emission certification standards, cold-start, secondary organic aerosol formation potential, and potential climate impacts. <i>Environmental Science & Technology</i> 51(11):6542-6552. DOI: 10.1021/acs.est.6b06509. Available at: https://pubs.acs.org/doi/abs/10.1021/acs.est.6b06509 . (Accessed: March 5, 2018).	Quantifies the effects of changes in engine technologies on emissions.	Yes	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Short, D., D. Vu, T. D. Durbin, G. Karavalakis, and A. Asa-Awuku. 2015. Components of particle emissions from light-duty spark-ignition vehicles with varying aromatic content and octane rating in gasoline. <i>Environmental Science & Technology</i> 49(17):10682-10691. DOI: 10.1021/acs.est.5b03138. Available at: https://pubs.acs.org/doi/abs/10.1021/acs.est.5b03138 . (Accessed: March 5, 2018).	Attempts to define the impacts of varying concentrations of aromatic hydrocarbons and octane ratings in gasolines on particulate matter such as black carbon and water-soluble and insoluble particle compositions.	Yes	No

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Comment No. (EIS Docket Number)	Commenter	Full Title and Citation of Source (with a link, if available)	Issue Addressed by Source	Peer- Reviewed? (Yes/No)	Included in IPCC's Fifth Assessment Report? (Yes/No)
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Toyota. 2017. Toyota Comments on Reconsideration of the Final Determination on the MTE. October 5, 2017. Available at: https://www.regulations.gov/document?D=NHTSA-2017-0068-0215 (Link no longer active).	Unable to access link.	No	No
NHTSA-2017-0069-0176	Alliance of Automobile Manufacturers	Nissan. 2017. Nissan Comments on Reconsideration of the Final Determination on the MTE. October 5, 2017. Available at: https://www.regulations.gov/document?D=NHTSA-2016-0068-9063 (Link no longer active).	Unable to access link.	No	No

EIS = environmental impact statement; IPCC = Intergovernmental Panel on Climate Change; NHTSA = National Highway Traffic Safety Administration; EPA = U.S. Environmental Protection Agency; CAFE = Corporate Average Fuel Economy; SUV = sport-utility vehicle; PM_{2.5} = particulate matter less than 2.5 microns in diameter; PM₁₀ = particulate matter less than 10 microns in diameter; E10 = fuel with 1% concentration of ethanol. E85 = fuel with 85% concentration of ethanol; OEM = original equipment manufacturer; 3-D = 3-dimensional; CMIP = Coupled Model Intercomparison Project; DICE = Dynamic Integrated Climate-Economy; FUND = Climate Framework for Uncertainty, Negotiation and Distribution; PAGE = Policy Analysis of the Greenhouse Effect; NEPA = National Environmental Policy Act; CEQ = Council on Environmental Quality; GDP = gross domestic product; OECD = Organisation for Economic Co-Operation and Development; OMEGA = Optimization Model for Reducing Emissions of Greenhouse Gases from Automobiles; ALPHA = Advanced Light-Duty Powertrain and Hybrid Analysis; RTI = Research Triangle Institute; CVT = continuously variable transmission; MOVES = Motor Vehicle Emission Simulator.

APPENDIX C

Life-Cycle Assessment Studies

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries^a	Environmental Impacts Estimated
Ahmadi, L., A. Yip, M. Fowler, S.B. Young, and R.A. Fraser. 2014. Environmental feasibility of re-use of electric vehicle batteries. <i>Sustain. Energy Technology Assessment</i> 6:64-74. doi:10.1016/j.seta.2014.01.006.	EV Li-ion batteries	Cradle to grave	GHG emissions
Arbabzadeh, M., J. X. Johnson, R. De Kleine, and G. A. Keoleian. (2015). Vanadium redox flow batteries to reach greenhouse gas emissions targets in an off-grid configuration. <i>Applied Energy</i> , 146, 397-408.	Vanadium redox flow batteries; energy storage systems	Cradle to grave	GHG emissions
Archsmith, J., A. Kendall, and D. Rapson. 2015. From cradle to junkyard: assessing the life cycle greenhouse gas benefits of electric vehicles. <i>Research in Transportation Economics</i> 52:72–90.	EVs	Cradle to grave plus well to wheels	GHG emissions
Bandivadekar, A., K. Bodek, L. Cheah, C. Evans, T. Groode, J. Heywood, E. Kasseris, K. Kromer, and M. Weiss. 2008. On the Road in 2035: Reducing Transportation's Petroleum Consumption and GHG Emissions. MIT Laboratory for Energy and the Environment. Report No. LFEE 2008 - 05 RP. Massachusetts Institute of Technology: Cambridge, MA. Available at: http://web.mit.edu/sloan-auto-lab/research/beforeh2/otr2035/ . (Accessed: February 15, 2018).	Lightweighting; vehicle design; engine downsizing; BEVs; fuel-cell vehicles; HSS; aluminum	Cradle to grave	Energy requirements; GHG emissions
Baroth, A., S. Karanam, and R. McKay. 2012. Life Cycle Assessment of Lightweight Noryl* GTX* Resin Fender and Its Comparison with Steel Fender. Society of Automotive Engineers (SAE) Paper 2012-01-0650. doi:10.4271/2012-01-0650.	Plastic, resin, and polymer composites; lightweighting	Cradle to grave	GHG emissions, energy requirements
Bertram, M., K. Buxmann, and P. Furrer. 2009. Analysis of Greenhouse Gas Emissions Related to Aluminum Transport Applications. <i>The International Journal of Life Cycle Assessment</i> 14(1):62–69. doi:10.1007/s11367-008-0058-0.	Aluminum; steel; cast iron	Cradle to grave	GHG emissions
Birat, J.P., L. Rocchia, V. Guérin, and M. Tuchman. 2003. Ecodesign of the Automobile, Based on Steel Sustainability. Society of Automotive Engineers (SAE) International Paper 2003-01-2850. doi:10.4271/2003-01-2850.	Aluminum; steel; recycling	Cradle to grave	CO ₂ emissions
Boland, S., and S. Unnasch. 2014. Carbon Intensity of Marginal Petroleum and Corn Ethanol Fuels. Life Cycle Associates Report. LCA.6075.83.2014, Prepared for Renewable Fuels Association. Available at: http://ethanolrfa.3cdn.net/8f1f5d7e868d849da0_gam6b4eab.pdf . (Accessed: February 15, 2018).	Petroleum fuel from crude oil, corn ethanol	Well to wheels	GHG emissions

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Boland, C., R. DeKleine, A. Moorthy, G. Keoleian, H. C. Kim, E. Lee, and T.J. Wallington. 2014. A Life Cycle Assessment of Natural Fiber Reinforced Composites in Automotive Applications. Society of Automotive Engineers (SAE) Technical Paper 2014-01-1959. doi:10.4271/2014-01-1959.	Glass-fiber-reinforced polymer, cellulose-fiber-reinforced polymer, polymer composites, lightweighting	Cradle to grave	Fuel use, GHG emissions
Boustani, A., S. Sahni, T. Gutowski, and S. Graves. 2010. Tire Remanufacturing and Energy Savings. Environmentally Benign Manufacturing Laboratory, Sloan School of Management, Massachusetts Institute of Technology. Available at: http://web.mit.edu/ebm/www/Publications/MITEL-1-h-2010.pdf . (Accessed: February 15, 2018).	Tires	Not applicable	Fuel use, energy requirements
Bushi, L., T. Skrzek, and D. Wagner. 2015. Comparative LCA Study of Lightweight Auto Parts of MMLV Mach-I Vehicle as per ISO 14040/44 LCA Standards and CSA Group 2014 LCA Guidance Document for Auto Parts. <i>Engineering Solutions for Sustainability</i> . In: Fergus J.W., Mishra B., Anderson D., Sarver E.A., Neelameggham N.R. (eds) <i>Engineering Solutions for Sustainability</i> . Springer, Cham.	Aluminum, steel, iron, lightweighting	Cradle to grave	Acidification potential, eutrophication potential, GHG emissions, ozone depletion, ozone creation, energy requirements
Cáceres, C. H. 2009. Transient Environmental Effects of Light Alloy Substitutions in Transport Vehicles. <i>Materials & Design</i> 30(8):2813–2822. doi:10.1016/j.matdes.2009.01.027.	Magnesium, aluminum	Gate to gate	Recycled materials
Canter, C. E., J. B. Dunn, J. Han, Z. Wang, and M. Wang., 2016. Policy implications of allocation methods in the life cycle analysis of integrated corn and corn stover ethanol production. <i>BioEnergy Research</i> 9(1): 77–87.	Combined ethanol, grain ethanol, stover ethanol	Well to wheels	GHG emissions
CARB (California Air Resources Board). 2015. Staff Report: Calculating Carbon Intensity Values from Indirect Land Use Change and Crop Based Biofuels. Appendix I: Detailed Analysis for Indirect Land Use Change. Available at: http://www.arb.ca.gov/regact/2015/lcfs2015/lcfs15appi.pdf . (Accessed: February 15, 2018).	Biomass based ethanol, biodiesel	Cradle to gate (land use change)	GHG emissions
Cecchel, S., G. Cornacchia, A. Panvini, A. 2016. Cradle-to-Gate Impact Assessment of a High-Pressure Die-Casting Safety-Relevant Automotive Component. <i>JOM</i> 65(9):2443-2448. doi:10.1007/s11837-016-2046-3.	Aluminum, high pressure die casting	Cradle to cradle (excludes use phase)	GHG emissions

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Cheah, L., J. B. Heywood, and R. Kirchain. 2009. Aluminum Stock and Flows in U.S. Passenger Vehicles and Implications for Energy Use. <i>Journal of Industrial Ecology</i> 13(5):718–734. doi:10.1111/j.1530-9290.2009.00176x. Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1530-9290.2009.00176.x/full . (Accessed: February 15, 2018).	Aluminum	Not applicable	Energy requirements
Cheah, L. 2010. Cars on a Diet: The Material and Energy Impacts of Passenger Vehicle Weight Reduction in the U.S. Massachusetts Institute of Technology: Cambridge, MA. Available at: http://web.mit.edu/sloan-auto-lab/research/beforeh2/files/LCheah_PhD_thesis_2010.pdf . (Accessed: February 15, 2018).	Magnesium, aluminum, HSS, polymer composites	Cradle to grave	Energy requirements, GHG emissions
Cheah, L., and J. B. Heywood. 2011. Meeting U.S. Passenger Vehicle Fuel Economy Standards in 2016 and Beyond. <i>Energy Policy</i> 39(1):454–466. Available at: http://web.mit.edu/sloan-auto-lab/research/beforeh2/files/Cheah%20&%20Heywood%202010.pdf . (Accessed: February 15, 2018).	Lightweighting, HEVs, PHEVs, advanced diesel	Not applicable	None
Chen, W.-Q., and T. Graedel. 2012a. Dynamic Analysis of Aluminum Stocks and Flows in the United States: 1900–2009. <i>Ecological Economics</i> 81:92–102. doi:10.1016/j.ecolecon.2012.06.008.	Aluminum	Not applicable	None
Chen, W.-Q., and T. Graedel. 2012b. Anthropogenic Cycles of the Elements: A Critical Review. <i>Environmental Science & Technology</i> 46(16):8574–8586. doi:10.1021/es3010333.	Aluminum, steel	Not applicable	None
CMU GDI (Carnegie Mellon University, Green Design Institute). 2008. Economic Input-Output Life Cycle Assessment (EIO-LCA), US 1997 Industry Benchmark model. Available at: http://www.eiolca.net . (Accessed: February 15, 2018).	Various	Cradle to grave	GHG emissions, energy requirements, water withdrawals, air emissions (CO, VOCs, NO _x , SO ₂ , NH ₃ , and PM), hazardous waste, toxic releases, land use, water pollution, human health impacts

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Colett, J. 2013. Impacts of Geographic Variation on Aluminum Lightweighted Plug-in Hybrid Electric Vehicle Greenhouse Gas Emissions. University of Michigan: Ann Arbor, MI. Available at: http://deepblue.lib.umich.edu/bitstream/handle/2027.42/101902/Joe%20Colett%20Thesis%20December%202013.pdf?sequence=1 . (Accessed: February 15, 2018).	Aluminum	Cradle to gate	GHG emissions
Continental. 1999. Life Cycle Assessment of a Car Tire. Hannover, Germany. Available at: https://www.continental-corporation.com/resource/blob/47500/b64cfd62d7c37b31e0141cb618756f86/oe-kobilanz-en-data.pdf . (Accessed: February 15, 2018).	Tires	Cradle to grave	Fuel use, energy requirements, water use, air emissions including CO and VOCs, GHG emissions, water pollution, acidification, eutrophication
Das, S. 2011. Life Cycle Assessment of Carbon Fiber-Reinforced Polymer Composites. <i>The International Journal of Life Cycle Assessment</i> 16(3):268–282. doi:10.1007/s11367-011-0264-z.	Steel, carbon-fiber-reinforced polymer	Cradle to grave	Energy requirements, GHG emissions
Das, S. 2014. Life Cycle Energy and Environmental Assessment of Aluminum-Intensive Vehicle Design. Society of Automotive Engineers (SAE) <i>International Journal of Materials and Manufacturing</i> 7(3):588–595. doi:10.4271/2014-01-1004.	Lightweighting, aluminum, HSS, steel	Cradle to grave	Energy requirements, GHG emissions
Delogu, M., F. Del Pero, F. Romoli, and M. Pierini. 2015. Life Cycle Assessment of a Plastic Air Intake Manifold. <i>International Journal of Life Cycle Assessment</i> , 20(10), 1429-1443. doi:10.1007/s11367-015-0946-z.	Plastics, air intake manifold, lightweighting	Cradle to grave	Energy requirements, acidification, eutrophication, GHG emissions, ozone depletion, ozone creation
Dubreuil, A., L. Bushi, S. Das, A. Tharumarajah, and G. Xianzheng. 2010. A Comparative Life Cycle Assessment of Magnesium Front End Autoparts. Presented at Society of Automotive Engineers (SAE) 2010 World Congress and Exhibition. doi:10.4271/2012-01-2325.	Magnesium, aluminum, steel	Cradle to grave	Energy requirements, GHG emissions, criteria air pollutant emissions
Dunn, J. B., L. Gaines, J. Sullivan, and M. Q. Wang. 2012. Impact of recycling on cradle-to-gate energy consumption and greenhouse gas emissions of automotive Li-ion batteries. <i>Environmental Science & Technology</i> 46(22):12704 –12710. doi:10.1021/es302420z.	EV Li-ion batteries	Non-use (cradle to gate and end-of-life)	Energy requirements, GHG emissions

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Dunn, J. B., S. Mueller, H. Y. Kwon, and M. Q. Wang. 2013. Land-use change and greenhouse gas emissions from corn and cellulosic ethanol. <i>Biotechnology for Biofuels</i> 6(1):51. doi:doi.org/10.1186/1754-6834-6-51. Available at: https://biotechnologyforbiofuels.biomedcentral.com/articles/10.1186/1754-6834-6-51 . (Accessed: February 15, 2018).	Corn and cellulosic ethanol	Gate to gate (land-use change)	GHG emissions
Dunn, J. B., L. Gaines, J. C. Kelly, C. James, and K. G. Gallagher. 2015a. The significance of Li-ion batteries in electric vehicle life-cycle energy and emissions and recycling's role in its reduction. <i>Energy & Environmental Science</i> 8(1):158–168. doi: 10.1039/C4EE03029J.	EVs, EV Li-ion batteries	Cradle to grave	Energy requirements, GHG emissions
Dunn, J. B., Z. Qin, S. Mueller, H. Kwon, M. Wander, M. Wang. 2015b. Carbon Calculator for Land Use Change from Biofuels Production (CCLUB), Users' Manual and Technical Documentation (No. ANL/ESD/12-5 Rev. 2). Argonne National Laboratory (ANL). Available at: https://greet.es.anl.gov/publications . (Accessed: February 15, 2018).	Biomass based ethanol, soy biodiesel	Cradle to gate (land use change)	GHG emissions
Easton, M., M. Gibson, A. Beer, M. Barnett, C. Davies, Y. Durandet, S. Blacket, X. Chen, N. Birbilis, and T. Abbot. 2012. The Application of Magnesium Alloys to the Lightweighting of Automotive Structures. <i>Sustainable Automotive Technologies</i> 2012:17–23. doi: 10.1007/978-3-642-24145-1_3.	Magnesium alloys	Not applicable	GHG emissions
Ehrenberger, S., and H. E. Friedrich. 2013. Life-Cycle Assessment of the Recycling of Magnesium Vehicle Components. <i>JOM</i> 65(10):1303-1309. doi:10.1007/s11837-013-0703-3.	Magnesium	Cradle to grave	GHG emissions
Elgowainy, A., J. Han, L. Poch, M. Wang, A. Vyas, M. Mahalik, and A. Rousseau. 2010. Well-to-Wheels Analysis of Energy Use and Greenhouse Gas Emissions of Plug-in Hybrid Electric Vehicles. ANL/ESD/10-1. Argonne National Laboratory: Argonne, IL. Available at: https://energy.gov/eere/fuelcells/downloads/well-wheels-analysis-energy-use-and-greenhouse-gas-emissions-plug-hybrid . (Accessed: February 15, 2018).	PHEVs using gasoline, diesel, E85 corn ethanol, and a hydrogen fuel cell	Well to wheels	GHG emissions, energy requirements

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Elgowainy, A., J. Han, J. Ward, F. Joseck, D. Gohlke, A. Lindauer, T. Ramsden, M. Bidy, M. Alexander, S. Barnhart, and I. Sutherland. 2016. Cradle-to-Grave Lifecycle Analysis of US Light Duty Vehicle-Fuel Pathways: A Greenhouse Gas Emissions and Economic Assessment of Current (2015) and Future (2025-2030) Technologies (ANL/ESD-16/7). Argonne National Laboratory: Argonne, IL. Available at: https://greet.es.anl.gov/publication-c2g-2016-report . (Accessed: February 15, 2018).	Internal combustion engine vehicles using gasoline, diesel, CNG, and LPG, FFVs using E85 corn ethanol, HEVs using gasoline, PHEVs using gasoline, FCEVs using hydrogen, and BEVs with 90- and 210-mile ranges	Cradle to grave and well to wheels	GHG emissions, energy requirements
Ellingsen, L. A. W., G. MajeauBettez, B. Singh, A. K. Srivastava, L. O. Valøen, and A. H. Strømman. 2014. Life cycle assessment of a lithium-ion battery vehicle pack. <i>Journal of Industrial Ecology</i> 18(1):113–124. doi:10.1111/jiec.12072.	EV Li-ion batteries	Cradle to gate	GHG emissions
Elliott, J., B. Sharma, N. Best, M. Glotter, J. B. Dunn, I. Foster, F. Miguez, S. Mueller, and M. Wang. 2014. A spatial modeling framework to evaluate domestic biofuel-induced potential land use changes and emissions. <i>Environmental Science & Technology</i> 48(4):2488 –2496. doi:10.1021/es404546r.	Biofuel	Gate to gate (land-use change)	GHG emissions
Englander, J. G., and A. R. Brandt. 2014. Oil Sands Energy Intensity Analysis for GREET Model Update. Department of Energy Resources Engineering, Stanford University. Palo Alto, CA. Available at: https://greet.es.anl.gov/publication-lca-update-oil-sands . (Accessed: February 15, 2018).	Oil sands	Gate to gate	GHG emissions
EPA (U.S. Environmental Protection Agency). 2013. Application of LifeCycle Assessment to Nanoscale Technology: Li-ion Batteries for Electric Vehicles. Design for the Environment Program. Office of Pollution Prevention and Toxics. Available at: https://www.epa.gov/sites/production/files/2014-01/documents/lithium_batteries_lca.pdf . (Accessed: February 15, 2018).	EVs, EV Li-ion batteries	Cradle to grave	Energy requirements, GHG emissions, abiotic depletion potential, water pollution, human health impacts, ozone depletion potential
EPA. 2014. Peer Review of Light-Duty Vehicle Mass-Reduction and Cost Analysis — Midsize Crossover Utility Vehicle (FEV Report). EPA-420-R-12-019. Washington DC. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EW1M.PDF?Dockey=P100EW1M.PDF . (Accessed: February 15, 2018).	Plastics, HSS, magnesium, lightweighting	Not applicable	Not applicable

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Faria, R., P. Marques, R. Garcia, P. Moura, F. Freire, J. Delgado, and A.T. de Almeida. 2014. Primary and secondary use of electric mobility batteries from a life cycle perspective. <i>Journal of Power Sources</i> 262:169–177. doi: 10.1016/j.jpowsour.2014.03.092.	EV Li-ion batteries	Cradle to grave	GHG emissions
Farquharson, D., P. Jaramillo, G. Schivley, K. Klima, and D. R. Carlson. 2016. Beyond Global Warming Potential: A Comparative Application of Climate Impact Metrics for the Life Cycle Assessment of Coal and Natural Gas Based Electricity. <i>Journal of Industrial Ecology</i> . doi:10.1111/jiec.12475. Available at: http://repository.cmu.edu/cgi/viewcontent.cgi?article=1166&context=epp . (Accessed: February 28, 2018).	Coal, natural gas, electricity generation	Cradle to gate	GHG emissions, global temperature change, technology warming, radiative forcing
Flugge, M., J. Lewandowski, J. Rosenfeld, C. Boland, T. Hendrickson, K. Jaglo, S. Kolansky, K. Moffroid, M. Riley-Gilbert, and D. Pape, 2017. A Life-Cycle Analysis of the Greenhouse Gas Emissions of Corn-Based Ethanol. Report prepared by ICF under USDA Contract No. AG-3142-D-16-0243. January 30, 2017.	Corn ethanol	Well to wheels	GHG emissions
Gaines, L., J. Sullivan, A. Burnham, and I. Belharouak. 2011. Life-Cycle Analysis for Lithium-Ion Battery Production and Recycling. Paper No. 11-3891. Argonne National Laboratory. 90th Annual Meeting of the Transportation Research Board. Washington, DC. Available at: https://www.researchgate.net/publication/265158823_Paper_No_11-3891_Life-Cycle_Analysis_for_Li-ion_Battery_Production_and_Recycling . (Accessed: February 28, 2018).	EV Li-ion batteries	Cradle to grave	Energy requirements
Galitsky, C., and E. Worrell. 2008. Energy Efficiency Improvement and Cost Saving Opportunities for the Vehicle Assembly Industry: An ENERGY STAR Guide for Energy and Plant Managers. Lawrence Berkeley National Laboratory. Berkeley, CA. Available at: http://escholarship.org/uc/item/33x4p6p9 . (Accessed: February 28, 2018).	Energy efficiency during vehicle assembly, hydroforming	Gate to gate	Energy requirements
Gaustad, G., E. Olivetti, and R. Kirchain. 2012. Improving aluminum recycling: A survey of sorting and impurity removal technologies. <i>Resources, Conservation and Recycling</i> 58(2012):79 – 87. doi: http://dx.doi.org/10.1016/j.resconrec.2011.10.010 .	Lightweighting	Not Applicable	None

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Geyer, R. 2008. Parametric Assessment of Climate Change Impacts of Automotive Material Substitution. <i>Environmental Science & Technology</i> 42(18):6973–6979.	Lightweighting, aluminum, HSS, steel	Material production and vehicle use stages only	GHG emissions
Ghandi, A., S. Yeh, A. R. Brandt, K. Vafi, H. Cai, M. Q. Wang, B. R. Scanlon, and R. C. Reedy. 2015. Energy intensity and greenhouse gas emissions from crude oil production in the Eagle Ford Region: Input data and analysis methods. UC Davis Institute of Transportation Studies. Prepared for Argonne National Laboratory: Argonne, IL. Available at: https://greet.es.anl.gov/publication-eagle-ford-oil . (Accessed: February 28, 2018).	Gasoline, diesel, jet fuel	Well to wheels	GHG emissions, energy requirements
Gibson, T. 2000. Life Cycle Assessment of Advanced Materials for Automotive Applications. <i>Society of Automotive Engineers, Inc.</i> 109(6):1932–1941. doi: https://doi.org/10.4271/2000-01-1486 .	Nine advanced and conventional materials including graphite, titanium, steel, aluminum, and carbon composites	Cradle to grave	Energy use, GHG emissions, air emissions including SO _x and NO _x , water emissions, solid waste, HF
Gradin, K. T., S. Poulikidou, A. Bjorklund, and C. Luttrupp. 2017. Scrutinising the electric vehicle material backpack. <i>Journal of Cleaner Production</i> . doi:10.1016/j.jclepro.2017.12.035.	EV Li-ion batteries	Cradle to gate	GHG emissions, energy requirements
Hakamada, M., T. Furuta, Y. Chino, Y. Chen, H. Kusuda, and M. Mabuchi. 2007. Life Cycle Inventory Study on Magnesium Alloy Substitution in Vehicles. <i>Energy</i> 32(8):1352–1360. doi:10.1016/j.energy.2006.10.020.	Magnesium, steel, aluminum	Cradle to grave	Energy requirements, CO ₂ emissions
Halvorson, A. D. 2014. Nitrogen Fertilizer Source and Management Effects on Nitrous Oxide Emissions. 16th World Fertilizer Congress of CIEC, Rio de Janeiro, Brazil, 20-24 October, 68–71.	EVs	Cradle to grave	Aggregated environmental impact score
Hawkins, T., O. Gausen, and A. Stromman. Environmental impacts of hybrid and electric vehicles—a review. 2012. <i>International Journal of Life Cycle Assessment</i> . 17:997–1014. doi:10.1007/s11367-012-0440-9.	EVs	Cradle to grave	GHG emissions, abiotic depletion potential, water pollution, human health impacts

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Hawkins, T. R., B. Singh, G. Majeau-Bettez, and A. H. Strømman. 2013. Comparative environmental life cycle assessment of conventional and electric vehicles. <i>Journal of Industrial Ecology</i> 17(1):53–64. doi:10.1111/j.1530-9290.2012.00532x. Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1530-9290.2012.00532.x/full . (Accessed: February 28, 2018).	EVs	Cradle to grave	GHG emissions, energy requirements, water pollution, air emissions including PM, human health impacts
Heath, G.A., P. O'Donoghue, D. J. Arent, and M. Bazilian. 2014. Harmonization of initial estimates of shale gas life cycle greenhouse gas emissions for electric power generation. <i>Proceedings of the National Academy of Sciences</i> 111(31):E3167 – E3176. doi:10.1073/pnas.1309334111. Available at: http://www.pnas.org/content/111/31/E3167 . (Accessed: February 28, 2018).	Shale gas	Well to wire	GHG emissions
Hendrickson, T.P., O. Kavadva, N. Shah, R. Sathre, and C. D. Scown. 2015. Life-cycle implications and supply chain logistics of electric vehicle battery recycling in California. <i>Environmental Research Letters</i> 10(1):014011. doi:10.1088/1748-9326/10/1/014011.	EV Li-ion batteries	Nonuse (cradle to gate and end-of-life)	Energy requirements, GHG emissions, air emissions (PM, NO _x , SO ₂ , and VOCs), water consumption, water withdrawals
Heuss, R., N. Muller, W. V. Sintern, A. Starke, A. Tschiesner, A. 2012. Lightweight, heavy impact. McKinsey and Company. Available at: https://www.mckinsey.com/~media/mckinsey/dotcom/client_service/automotive%20and%20assembly/pdfs/lightweight_heavy_impact.ashx . (Accessed: February 28, 2018).	Carbon fiber reinforced polymers, plastics, aluminum, magnesium	Not applicable	Not applicable
Holland, S., E. Mansur, N. Muller, and A. Yates. 2015. Measuring the Spatial Heterogeneity in Environmental Externalities from Driving: A Comparison of Gasoline and Electric Vehicles. NBER Working Paper, (21291). Available at: https://pdfs.semanticscholar.org/38fe/39ccbbc15deddc571b9f991426a32dd992ed.pdf . (Accessed: February 28, 2018).	Electric and internal combustion vehicles	Not applicable	PM emissions
Hottle, T., C. Caffrey, J. McDonald, and R. Dodder. 2017. Critical Factors Affecting Life Cycle Assessments of Material Choice for Vehicle Mass Reduction. <i>Transportation Research Part D</i> . 56. 241-257.	Steel, iron, plastics, aluminum, magnesium, lightweighting	Cradle to grave	Energy requirements, GHG emissions

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Johnson, M.C. and J.L. Sullivan. 2014. Lightweight Materials for Automotive Application: An Assessment of Material Production Data for Magnesium and Carbon Fiber. September 2014. Argonne National Laboratory: Argonne, IL. Available at: http://www.ipd.anl.gov/anlpubs/2014/09/107574.pdf . (Accessed: February 28, 2018).	Magnesium, carbon fiber reinforced polymers	Not applicable	GHG emissions
Kaierle, S., M. Dahmen, and O. Gudukurt. 2011. Eco-Efficiency of Laser Welding Applications. Proc. SPIE 8065. SPIE Eco-Photonics 2011: Sustainable Design, Manufacturing, and Engineering Workforce Education for a Green Future. 8065T. doi:10.1117/12.888794.	Laser welding	Cradle to grave	Energy requirements, material use
Kelly, J. C., J. L. Sullivan, A. Burnham, and A. Elgowainy. 2015. Impacts of Vehicle Weight Reduction via Material Substitution on Life-Cycle Greenhouse Gas Emissions. <i>Environmental Science & Technology</i> 49(20):12535–12542. doi:10.1021/acs.est.5b03192.	AHSS, wrought aluminum, cast aluminum, magnesium, carbon fiber reinforced polymers, lightweighting	Cradle to grave	GHG emissions
Keoleian, G. A., and K. Kar. 1999. Life Cycle Design of Air Intake Manifolds. In: Phase I: 2.0 L Ford Contour Air Intake Manifold. EPA/600/R-99/023. US Environmental Protection Agency. National Risk Management Research Laboratory: Cincinnati, Ohio. Available at: http://nepis.epa.gov/EPA/html/DLwait.htm?url=/Exe/ZyPDF.cgi?Dockey=P1006GAR.PDF . (Accessed: February 28, 2018).	Aluminum, nylon composite	Cradle to grave	Energy requirements, GHG emissions, solid waste, air emissions, water effluents
Khanna, V., and B. R. Bakshi. 2009. Carbon Nanofiber Polymer Composites: Evaluation of Life Cycle Energy Use. <i>Environmental Science & Technology</i> 43(6):2078–2084. doi:10.1021/es802101x.	Polymer nanocomposite, CNF and CNF-GF hybrid polymer, carbon nanofiber-reinforced polymer nanocomposite, carbon nanofiber glass-fiber hybrid PNCs, steel	Cradle to gate and use stage	Energy requirements

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Kim, H. J., C. McMillian, G. A. Keoleian, and S. J. Skerlos. 2010a. Greenhouse Gas Emissions Payback for Lightweighted Vehicles Using Aluminum and High - Strength Steel. <i>Journal of Industrial Ecology</i> 14(6):929–946. doi:10.1111/j.1530-9290.2010.00283x.	Lightweighting, aluminum, HSS	Cradle to grave	GHG emissions
Kim, H. J., G. A. Keoleian, and S. J. Skerlos. 2010b. Economic Assessment of Greenhouse Gas Emissions Reduction by Vehicle Lightweighting Using Aluminum and High Strength Steel. <i>Journal of Industrial Ecology</i> 15(1):64–80. doi:10.1111/j.1530-9290.2010.00288x.	Lightweighting, aluminum, HSS, steel, glass-fiber reinforced plastic	Cradle to grave	Energy requirements, GHG emissions
Kim, H. C., T. J. Wallington, J. L. Sullivan, and G. Keoleian. 2015. Life Cycle Assessment of Vehicle Lightweighting: Novel Mathematical Methods to Estimate Use-Phase Fuel Consumption. <i>Environmental Science & Technology</i> 49(16):10209–10216. doi:10.1021/acs.est.5b01655.	Lightweighting, fuel reduction value estimation, magnesium, carbon fiber composites	Cradle to gate	GHG emissions
Kocańda, A., and H. Sadłowska. 2008. Automotive Component Development by Means of Hydroforming. <i>Archives of Civil and Mechanical Engineering</i> 8(3):55–72. doi:10.1016/S1644-9665(12)60163-0.	Hydroforming	Not an LCA, but focuses on manufacturing and design, with some attention to use	Some discussion of fuel efficiency savings, but not quantified
Koffler, C., and J. Provo. 2012. Comparative Life Cycle Assessment of Aluminum and Steel Truck Wheels. Prepared by PE International, Inc. and Five Winds Strategic Consulting for Alcoa, Inc. Available at: http://www.alcoawheels.com/alcoawheels/north_america/en/pdf/Alcoa_Comparative_LCA_of_Truck_Wheels_with_CR_statement.pdf . (Accessed: February 28, 2018).	Truck wheels, aluminum, steel	Cradle to grave	Primary energy demand, acidification potential, eutrophication potential, GHG emissions, ozone depletion potential, smog formation potential, human toxicity, eco-toxicity
Lamb, B.K., S. L. Edburg, T. W. Ferrara, T. Howard, M. R. Harrison, C. E. Kolb, A. Townsend-Small, W. Dyck, A. Possolo and J. R. Whetstone., 2015. Direct measurements show decreasing methane emissions from natural gas local distribution systems in the United States. <i>Environmental Science & Technology</i> 49(8):5161-5169. doi: 10.1021/es505116p. Available at: https://pubs.acs.org/doi/pdf/10.1021/es505116p . (Accessed: February 28, 2018).	Natural gas distribution	Cradle to gate (distribution infrastructure)	Methane emissions

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Lattanzio, R. K. 2014. Canadian Oil Sands: Life-Cycle Assessments of Greenhouse Gas Emissions. Congressional Research Service. Available at: https://www.fas.org/sgp/crs/misc/R42537.pdf . (Accessed: February 28, 2018).	Oil sands	Well to wheels	GHG emissions
Laurenzi, I. J. Life Cycle Assessment of North American Shale Gases. 2015. In: <i>Proceedings of the 4th International Gas Processing Symposium</i> . Qatar, October 2014. <i>Advances in Gas Processing</i> 4(317–325). doi:10.1016/B978-0-444-63461-0.50033-X.	Shale oil, electricity generation	Cradle to gate	GHG emissions, water consumption
Laurenzi, I. J., J. A. Bergerson, and K. Motazed. 2016. Life cycle greenhouse gas emissions and freshwater consumption associated with Bakken tight oil. <i>Proceedings of the National Academy of Sciences</i> 113(48), E7672–E7680. doi:10.1073/pnas.1607475113. Available at: http://www.pnas.org/content/113/48/E7672 . (Accessed: February 28, 2018).	Shale oil	Well to wheels	GHG emissions, water consumption
Li, B., X. Gao, J. Li, and C. Yuan. 2014. Life cycle environmental impact of high-capacity lithium ion battery with silicon nanowires anode for electric vehicles. <i>Environmental Science & Technology</i> 48(5):3047–3055. doi:10.1021/es4037786.	EV Li-ion batteries	Nonuse (cradle to gate and end-of-life)	Abiotic depletion potential, GHG emissions, water pollution, ozone depletion potential, human health impacts, toxic releases
Li, H., W. Zhang, Q. Li, and B. Chen. 2015. Updated CO ₂ emission from Mg production by Pidgeon process: Implications for automotive application life cycle. <i>Resources, Conservation and Recycling</i> 100:41–48. doi:doi.org/10.1016/j.resconrec.2015.04.008.	Magnesium	Not applicable	GHG emissions
Litovitz, A., A. Curtright, S. Abramzon, N. Burger, and C. Samaras. 2013. Estimation of regional air-quality damages from Marcellus Shale natural gas extraction in Pennsylvania. <i>Environmental Research Letters</i> , 8(1):014017. doi:10.1088/1748-9326/8/1/014017. Available at: http://iopscience.iop.org/article/10.1088/1748-9326/8/1/014017/meta . (Accessed: February 28, 2018).	Natural gas production	Cradle to gate	Criteria air pollutants, human health impacts
Liu, G., and D. Muller. 2012. Addressing sustainability in the aluminum industry: a critical review of life cycle assessments. <i>Journal of Cleaner Production</i> 35:108–117. doi:10.1016/j.jclepro.2012.05.030.	Aluminum manufacturing, recycling	Not applicable	GHG emissions

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Lloyd, S. M., and L. B. Lave. 2003. Life Cycle Economic and Environmental Implications of Using Nanocomposites in Automobiles. <i>Environmental Science & Technology</i> 37(15):3458–3466. doi:10.1021/es026023q.	Steel, aluminum, clay-polypropylene nanocomposite	Cradle to gate	Energy requirements, GHG emissions, criteria air pollutants, fuel/ electricity use, resource depletion, water use, hazardous waste generation, toxic releases
Luk, J. M., H. C. Kim, R. De Kleine, T. J. Wallington, and H. L. MacLean. Review of the Fuel Saving, Life Cycle GHG Emission, and Ownership Cost Impacts of Lightweighting Vehicles with Different Powertrains. <i>Environmental Science & Technology</i> 51 (15):8215-8228. doi: 10.1021/acs.est.7b00909.	Lightweighting, EVs, internal combustion vehicles, HEVs, powertrain sizing	Cradle to grave	Energy requirements, GHG emissions
Lutsey, N., J. Regnier, A. Burke, M. Melaina, J. Bremson, and M. Keteltas. 2006. Institute of Transportation Studies. University of California, Davis. UCD—ITS—RR—06-11. Available at: https://itspubs.ucdavis.edu/wp-content/themes/ucdavis/pubs/download_pdf.php?id=1044 . (Accessed: February 28, 2018).	Tires, TPMS	Not applicable	Fuel use, energy requirements, waste generation
Lyon, D. R., D. Zavala-Araiza, R. A. Alvarez, R. Harriss, V. Palacios, X. Lan, R. Talbot, T. Lavoie, P. Shepson, T. I. Yacovitch, and S. C. Herndon. 2015. Constructing a spatially resolved methane emission inventory for the Barnett Shale region. <i>Environmental Science & Technology</i> , 49(13):8147-8157. doi:10.1021/es506359c. Available at: https://pubs.acs.org/doi/abs/10.1021/es506359c . (Accessed: February 28, 2018).	Natural gas production	Cradle to gate	Methane emissions
McLaren, J., J. Miller, E. O'Shaughnessy, E. Wood, and E. Shapiro. 2016. Emissions Associated with Electric Vehicle Charging: Impact of Electricity Generation Mix, Charging Infrastructure Availability, and Vehicle Type. NREL/TP-6A20-64852. April 2016. National Renewable Energy Laboratory. Available at: https://www.afdc.energy.gov/uploads/publication/ev_emissions_impact.pdf . (Accessed: February 28, 2018).	EVs, electricity generation	Cradle to gate	GHG emissions

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Marchese, A. J., T. L. Vaughn, D. J. Zimmerle, D. M. Martinez, L. L. Williams, A. L. Robinson, A. L. Mitchell, R. Subramanian, D. S. Tkacik, J. R. Roscioli, and S. C. Herndon. 2015. Methane emissions from United States natural gas gathering and processing. <i>Environmental Science & Technology</i> . 49(17):10718–10727. doi: 10.1021/acs.est.5b02275. Available at: https://pubs.acs.org/doi/abs/10.1021/acs.est.5b02275 . (Accessed: February 28, 2018).	Natural gas production	Cradle to gate	Methane emissions
Mayyas, A. T., A. Qattawi, A. R. Mayyas, and M. A. Omar. 2012a. Life cycle assessment-based selection for a sustainable lightweight body-in-white design. <i>Energy</i> 39(1):412–425. doi:doi.org/10.1016/j.energy.2011.12.033.	Lightweighting, HSS, aluminum, magnesium, carbon fiber/epoxy composite, glass fiber composite	Cradle to grave	Energy requirements, GHG emissions
Modaresi, R., S. Pauliuk, A. N. Løvik, and D. B. Müller. 2014. Global Carbon Benefits of Material Substitution in Passenger Cars until 2050 and the Impact on the Steel and Aluminum Industries.. <i>Environmental Science & Technology</i> 48(18):10776–10784. doi: 10.1021/es502930w. Available at: http://pubs.acs.org/doi/pdf/10.1021/es502930w . (Accessed: February 28, 2018).	HSS, aluminum	Cradle to gate (fleet-wide impacts)	GHG emissions
Mohapatra, S., and S. Das. 2014. Introduction of High Strength Steel for Commercial Vehicles—Light Weighting of Vehicles. Society of Automotive Engineers (SAE) Technical Paper 2014-28-0002. doi:10.4271/2014-28-0002.	Lightweighting, HSS	Not applicable	Energy requirements, GHG emissions
Morales, M., J. Quintero, R. Conejeros, and G. Aroca. 2015. Life cycle assessment of lignocellulosic bioethanol: environmental impacts and energy balance. <i>Renewable and Sustainable Energy Reviews</i> 42:1349–1361. doi:10.1016/j.rser.2014.10.097.	Lignocellulosic bioethanol	Well to wheels	GHG emissions, energy requirements
Munjurulimana, D., A. Kulkarni, D. Nagwanshi, J. Thambi, et al. 2016. Society of Automotive Engineers (SAE) Paper 2016-01-0399. Body-in-White Reinforcements for Light-Weight Automobiles. doi:10.4271/2016-01-0399.	Thermoplastics, polymer composites	Not applicable	Not applicable

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Murphy, C. W. and A. Kendall. 2015. Life cycle analysis of biochemical cellulosic ethanol under multiple scenarios. <i>Gcb Bioenergy</i> 7(5):1019–1033. doi:10.1111/gcbb.12204.	Corn stover and switchgrass biochemical cellulosic ethanol, petroleum-based liquid fuels	Field to blending terminal	GHG emissions, air pollutants (CO, NO _x , SO _x , PM, Pb, ozone, and NMVOCs), environmental indicators including global warming potential, acidification potential, eutrophication potential, and fossil energy
Nealer, R., and T. P. Hendrickson. 2015. Review of recent lifecycle assessments of energy and greenhouse gas emissions for electric vehicles. <i>Current Sustainable/Renewable Energy Reports</i> 2(3):66–73. doi:10.1007/s40518-015-0033x. Available at: https://link.springer.com/article/10.1007/s40518-015-0033-x . (Accessed: February 28, 2018).	EVs	Various	GHG emissions
NETL (National Energy Technology Laboratory). 2015. Approaches to Developing a Cradle-to-Grave Life Cycle Analysis of Conventional Petroleum Fuels Produced in the U.S. with an Outlook to 2040. DOE/NETL-2016/1749. October 2015. Available at: https://www.netl.doe.gov/energy-analyses/temp/ApproachestoDevelopingaCradle-to-GraveLCAofConvPetroleumFuelsProducedinUSOutlookto2040_100715.pdf . (Accessed: February 28, 2018).	Conventional oil production	Well to wheel	GHG emissions
Nitta, S. and Y. Moriguchi. 2011. New Methodology of Life Cycle Assessment for Clean Energy Vehicle and New Car Model. Society of Automotive Engineers (SAE) Technical Paper 2011-01-0851. doi:10.4271/2011-01-0851.	Hydrogen fuel cells	Cradle to grave	GHG emissions, waste generation, energy requirements
Notter, D. A., M. Gauch, R. Widmer, P. Wäger, A. Stamp, R. Zah, and H-J. Althaus. 2010. Contribution of Li-ion Batteries to the Environmental Impact of Electric Vehicles. <i>Environmental Science & Technology</i> 44(17):6550–6556. doi:10.1021/es903729a. Available at: http://pubs.acs.org/doi/ipdf/10.1021/es903729a . (Accessed: February 28, 2018).	EV Li-ion batteries	Cradle to grave	Energy requirements, GHG emissions/global warming potential, criteria air pollutants, resource depletion, Ecoindicator 99
Onat, N. C., M. Kucukvar, and O. Tatari. 2015. Conventional, hybrid, plug-in hybrid or electric vehicles? State-based comparative carbon and energy footprint analysis in the United States. <i>Applied Energy</i> 150:36–49. doi:10.1016/j.apenergy.2015.04.001.	HEVs, PHEVs, EVs	Cradle to grave and well to wheels	GHG emissions, energy requirements

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Overly, J. G., R. Dhingra, G. A. Davis, and S. Das. 2002. Environmental Evaluation of Lightweight Exterior Body Panels in New Generation Vehicles. Paper 2002-01-1965. Society of Automotive Engineers (SAE) International. doi:10.4271/2002-01-1965.	Aluminum, carbon-fiber-reinforced polymer, glass-fiber-reinforced polymer	Cradle to grave	CO ₂ emissions, particulate matter emissions, eutrophication, photochemical smog, solid and hazardous waste generation, water quality
Patterson, J., M. Alexander, and A. Gurr. 2011. Preparing for a Life Cycle CO ₂ Measure. Ricardo plc and Low Carbon Vehicle Partnership. RD.11/124801.4. Available at: http://www.lowcvp.org.uk/assets/presentations/1405%20Patterson,%20Ricardo%20-%20life-cycle%20assessment%20(LC%20seminar).pdf . (Accessed: February 28, 2018).	Gasoline vehicles, diesel vehicles, PHEVs, EREVs, EVs, FCEVs	Not applicable	GHG emissions
PE International. 2012. Life Cycle Assessment of Polymers in an Automotive Assist Step. Prepared for the American Chemistry Council. Boston, MA. Available at: https://plastics.americanchemistry.com/Education-Resources/Publications/Life-Cycle-Assessment-of-Polymers-in-an-Automotive-Assist-Step.pdf . (Accessed February 28, 2018).	Carbon fiber reinforced polymers	Cradle to grave	GHG emissions, energy requirements
Pike, E., and S. Schneider. 2013. Passenger Vehicle Replacement Tire Efficiency Study. Energy Solutions. Prepared for South Coast Air Quality Management District. Available at: https://energy-solution.com/library-item/passenger-vehicle-replacement-tire-efficiency-study/ . (Accessed: February 28, 2018).	Aerodynamics and drag reduction	Not applicable	Fuel use
Raugei, M., D. Morrey, A. Hutchinson, and P. Winfield. 2015. A coherent life cycle assessment of a range of lightweighting strategies for compact vehicles. <i>Journal of Cleaner Production</i> 108:1168–1176. doi: doi.org/10.1016/j.jclepro.2015.05.100.	Aluminum, magnesium, carbon fiber reinforced polymers	Cradle to grave	GHG emissions criteria pollutants, energy requirements
Rooks, B. 2001. Tailor-Welded Blanks Bring Multiple Benefits to Car Design. <i>Assembly Automation</i> 21(4):323–329. doi:10.1108/EUM0000000006014.	Tailor-welded blanks	Not applicable	Not applicable
Ryan, N. A., J. X. Johnson, and G. A. Keoleian. 2016. Comparative Assessment of Models and Methods to Calculate Grid Electricity Emissions. <i>Environmental Science & Technology</i> . 50(17):8937–8953. doi: 10.1021/acs.est.5b05216.	EVs, electricity generation	Well to tank	GHG emissions

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Samaras, C, and K. Meisterling. 2008. Life cycle assessment of greenhouse gas emissions from plug-in hybrid vehicles: implications for policy. <i>Environmental Science & Technology</i> 42(9):3170–3176. doi:10.1021/es702178s. Available at: https://pubs.acs.org/doi/abs/10.1021/es702178s . (Accessed: February 28, 2018).	Batteries (NiMH and Li-ion)	Cradle to gate	Energy requirements, GHG emissions
Sathre, R., C. D. Scown, O. Kavvada, and T. P. Hendrickson. 2015. Energy and climate effects of second-life use of electric vehicle batteries in California through 2050. <i>Journal of Power Sources</i> . 288:82-91. doi: 10.1016/j.jpowsour.2015.04.097.	EV Li-ion batteries, energy storage systems	Cradle to grave	Energy requirements, GHG emissions
Saur, K., M. Schuckert, J. Gediga, H. Florin, and J. Hesselbach. 1997. LCA Study on Tires With Reduced Roll Resistance. Society of Automotive Engineers (SAE) Technical Paper 971159. Affiliated with PE Product Engineering GmbH and University of Stuttgart, Germany. doi:10.4271/971159.	Tires	Cradle to grave (excluding end-of-life)	Fuel use, energy requirements, GHG emissions, water pollution
Scown, C. D., W. W. Nazaroff, U. Mishra, B. Strogon, A. B. Lobscheid, E. Masanet, N. J. Santero, A. Horvath, and T. E. McKone. 2012. Lifecycle greenhouse gas implications of US national scenarios for cellulosic ethanol production. <i>Environmental Research Letters</i> 7(1):014011. doi:10.1088/1748-9326/7/1/019502. Available at: http://iopscience.iop.org/article/10.1088/1748-9326/7/1/014011a . (Accessed: February 28, 2018).	Cellulosic ethanol	Gate to gate (land-use impacts)	GHG emissions
Searchinger, T., R. Heimlich, R. A. Houghton, F. Dong, A. Elobied, J. Fabiosa, S. Tokgoz, D. Hayes, and T.-H. Yu. 2008. Use of U.S. Croplands for Biofuels Increases Greenhouse Gases through Emissions from Land-Use Change. <i>Science</i> 319(5867):1238–1240. doi:10.1126/science.1151861. Available at: http://science.sciencemag.org/content/319/5867/1238.full . (Accessed: February 28, 2018).	Corn ethanol, biomass ethanol	Well to wheels	GHG emissions
Siler-Evans, K., I. Azevedo, and G. Morgan. 2012. Marginal emissions factors for the U.S. electricity system. <i>Environmental Science & Technology</i> . 46(9):4742–4748. doi: 10.1021/es300145v.	Electricity generation	Fuel combustion	GHG emissions
Sivertsen, L. K., J. Ö. Haagenen, and D. Albright. 2003. A Review of the Life Cycle Environmental Performance of Automotive Magnesium. Society of Automotive Engineers (SAE) Paper 2003-01-0641. March 3, 2003. doi:10.4271/2003-01-0641.	Magnesium, aluminum	Cradle to grave	Recycled materials

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Shan, Z., S. Qin, Q. Liu, and F. Liu. 2012. Key Manufacturing Technology and Equipment for Energy Saving and Emissions Reduction in Mechanical Equipment Industry. <i>International Journal of Precision Engineering and Manufacturing</i> 13(7):1095–1100. doi:10.1007/s12541-012-0143y.	Digital technology, new material, near-net shape forming technology, clean production, short production process technology, waste-free manufacturing technology, automatic control technology, remanufacturing and reusing technology	Cradle to grave	Energy requirements, GHG emissions
Shinde, P., K. Ravis, N. Nehru, S. Pawar, B. Balakrishnan, and V. Nair. 2016. Light Weight BIW Solutions for Improving Functional Properties: A Review. Society of Automotive Engineers (SAE) Paper 2016-01-8138. doi:10.4271/2016-01-8138.	Magnesium, aluminum, polymer composites, tailored blanks, hydroforming, welding, die casting	Not applicable	GHG emissions

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Spitzley, D. V., and G. A. Keoleian. 2001. Life Cycle Design of Air Intake Manifolds. In: Phase II: Lower Plenum of the 5.4: F-250 Intake Manifold, Including Recycling Scenarios. US Environmental Protection Agency (Eds.). National Risk Management Research Laboratory: Cincinnati, OH.	5.4 liter Ford F-250 with three different air intake manifolds: (1) a 2.89-kilogram lost-core composite used in most of the 5.4 liter engines, (2) a 5.58-kilogram sand-cast aluminum manifold currently used in Ford's 5.4-liter natural gas vehicles, and (3) a 2.89- kilogram vibration welded composite	Cradle to grave	Energy, solid waste, air pollutant emissions, GHG emissions, water pollution discharges
Sproesser, G., Y. Chang, A. Pittner, M. Finkbender, and M. Rethmeier. 2015. Life Cycle Assessment of welding technologies for thick metal plate welds. <i>Journal of Cleaner Production</i> 108:46–53. doi: 10.1016/j.jclepro.2015.06.121.	Manual metal Arc welding, automatic laser-arc hybrid welding, and gas metal Arc welding	Cradle to grave	GHG emissions, criteria pollutants
Sternberg, A., and A. Bardow. 2015. Power-to-What? –Environmental assessment of energy storage systems. <i>Energy & Environmental Science</i> 8.2 (2015):389–400. doi:10.1039/C4EE03051F.	Vanadium redox flow batteries, energy storage systems	Cradle to grave	GHG emissions, energy requirements
Stodolsky, F., A. Vyas, R. Cuenca, and L. Gaines. 1995. Life-Cycle Energy Savings Potential from Aluminum-Intensive Vehicles. Argonne National Laboratory. Conference Paper. 1995 Total Life Cycle Conference & Exposition. October 16–19, 1995. Vienna, Austria. doi:10.4271/951837.	Lightweighting, aluminum, and recycling technology	Cradle to grave	Energy requirements and fuel use

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Sullivan, J. L., A. Burnham, and M. Wang. 2010. Energy-Consumption and Carbon-Emission Analysis of Vehicle and Component Manufacturing. ANL/ESD/10-6. Argonne National Laboratory: Argonne, IL. September 2010. Available at: http://greet.es.anl.gov/publication-vehicle_and_components_manufacturing . (Accessed: February 28, 2018).	Aluminum, steel, iron, plastics, polymer, brass, copper, and lead	Gate to gate	None
Tamayao, M. A. M., J. J. Michalek, C. Hendrickson, and I. M. Azevedo. 2015. Regional variability and uncertainty of electric vehicle life cycle CO ₂ emissions across the United States. <i>Environmental Science & Technology</i> 49(14):8844-8855. doi:10.1021/acs.est.5b00815.	EVs, PHEVs, HEVs	Well to wheels and battery cradle to gate	GHG emissions
Tempelman, E. 2011. Multi-Parametric Study of the Effect of Materials Substitution of Life Cycle Energy Use and Waste Generation of Passenger Car Structures. <i>Transportation Research Part D: Transport and Environment</i> 16(7):476–485. doi:10.1016/j.trd.2011.05.007.	Lightweighting, HSS, fiber-reinforced plastics, aluminum	Cradle to grave	Energy requirements, waste generation
Tessum, C. W., J. D. Hill, and J. D. Marshall. 2014. Life cycle air quality impacts of conventional and alternative light-duty transportation in the United States. <i>Proceedings of the National Academy of Sciences</i> 111(52):18490–18495. doi:10.1073/pnas.1406853111.	Gasoline, diesel, CNG, corn ethanol and corn stover, EVs	Well to wheels and battery cradle to gate	GHG emissions, air pollutant emissions including NO _x , PM, SO _x , VOCs, NH ₃
Tharumarajah, A., and P. Koltun. 2007. Is There an Environmental Advantage of Using Magnesium Components for Light-Weighting Cars? <i>Journal of Cleaner Production</i> 15(11-12):1007–1013. doi:10.1016/j.jclepro.2006.05.022.	Lightweighting, magnesium, aluminum, and magnesium casting	Cradle to grave	GHG emissions
Theiss, T., T. Alleman, A. Brooker, A. Elgowainy, G. Fioroni, J. Han, S. Huff, C. Johnson, M. Kass, P. Leiby, R. U. Martinez, R. McCormick, K. Moriarty, E. Newes, G. Oladosu, J. Szybist, J. Thomas, M. Wang, and B. West. 2016. Summary of High-Octane Mid-Level Ethanol Blends Study. ORNL/TM-2016/42. July 2016. Prepared by Oak Ridge National Laboratory, National Renewable Energy Laboratory, and Argonne National Laboratory. Available at: http://info.ornl.gov/sites/publications/files/pub61169.pdf . (Accessed: February 28, 2018).	HOFs, corn ethanol, corn stover ethanol	Well to wheels	GHG emissions

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Tong, F., P. Jaramillo, and I. M. L. Azevedo. 2015. Comparison of Life Cycle Greenhouse Gases from Natural Gas Pathways for Light-Duty Vehicles. <i>Energy Fuels</i> . 29 (9): 6008-6018. doi: 10.1021/acs.energyfuels.5b01063.	EVs, compressed natural gas vehicles, natural gas production	Well to wheels	GHG emissions
Ungureanu, C. A., S. Das, and I. S. Jawahir. 2007. Life - Cycle Cost Analysis: Aluminum Versus Steel in Passenger Cars. Pgs. 11-24 in: <i>Aluminum Alloys for Transportation, Packaging, Aerospace, and Other Applications</i> . S.K. Das and W. Yin (Eds.). The Minerals, Metals & Materials Society (TMS):Orlando, FL. 234 pp.	Lightweighting	Cradle to grave	GHG emissions and energy requirements
Wang, M., M. Wu, and H. Huo. 2007. Life-Cycle Energy and Greenhouse Gas Emission Impacts of Different Corn Ethanol Plant Types. <i>Environmental Research Letters</i> 2 (2007):024001. doi:10.1088/1748-9326/2/2/024001. Available at: http://iopscience.iop.org/1748-9326/2/2/024001/pdf/erl7_2_024001.pdf . (Accessed: February 28, 2018).	Corn ethanol	Well to wheels	GHG emissions, energy requirements
Wang, M., J. Han, J. B. Dunn, H. Cai, and A. Elgowainy. 2012. Well-to-wheels energy use and greenhouse gas emissions of ethanol from corn, sugarcane and cellulosic biomass for US use. <i>Environmental Research Letters</i> 7(4):045905. doi:10.1088/1748-9326/7/4/045905. Available at: http://iopscience.iop.org/article/10.1088/1748-9326/7/4/045905 . (Accessed: February 28, 2018).	Ethanol from corn, sugarcane, and cellulosic biomass	Well to wheels	GHG emissions
Wang, Z., J. B. Dunn, J. Han, and M. Q. Wang. 2015. Influence of corn oil recovery on life-cycle greenhouse gas emissions of corn ethanol and corn oil biodiesel. <i>Biotechnology for Biofuels</i> 8(1):178. doi:10.1186/s13068-015-0350-8. Available at: https://biotechnologyforbiofuels.biomedcentral.com/articles/10.1186/s13068-015-0350-8 . (Accessed: February 28, 2018).	Corn ethanol, corn oil biodiesel	Well to wheels	GHG emissions
Weber, C. L., and C. Clavin. 2012. Life cycle carbon footprint of shale gas: Review of evidence and implications. <i>Environmental Science & Technology</i> 46(11):5688–5695. doi:10.1021/es300375n.	Shale gas	Well to wire	GHG emissions
Wei, H., Y. Zhang, L. Tan, and Z. Zhong. 2015. Energy efficiency evaluation of hot-wire laser welding based on process characteristic and power consumption. <i>Journal of Cleaner Production</i> 87:255–262. doi:10.1016/j.jclepro.2014.10.009.	Hot wire laser welding, cold wire laser welding	Not applicable	Not applicable

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Weis, A., P. Jaramillo, and J. Michalek. 2016. Consequential life cycle air emissions externalities for plug-in electric vehicles in the PJM interconnection. <i>Environmental Research Letters</i> 11(2):024009. doi:10.1088/1748-9326/11/2/024009. Available at: http://iopscience.iop.org/article/10.1088/1748-9326/11/2/024009 . (Accessed: February 28, 2018).	PHEVs, HEVs	Cradle to use-phase	GHG emissions, air pollutant emissions including VOCs, CO, NO _x , PM, SO ₂
Weiss, M. A., J. B. Heywood, E. M. Drake, A. Schafer, and F. F. AuYeung. 2000. On the Road in 2020: A Lifecycle Analysis of New Automobile Technologies. Energy Laboratory Report MIT EL 00-003. Massachusetts Institute of Technology: Cambridge, MA. Available at: http://web.mit.edu/energylab/www/pubs/el00-003.pdf . (Accessed: February 28, 2018).	Lightweighting, HEVs, EVs, fuel cells, HSS, aluminum, plastics, alternative fuels	Cradle to grave	Energy requirements, GHG emissions
Witik, R. A., J. Payet, V. Michaud, C. Ludwig, and J. E. Manson. 2011. Assessing the Life Cycle Costs and Environmental Performance of Lightweight Materials in Automotive Applications. <i>Composites: Part A</i> 42:1694–1709. doi:10.1016/j.compositesa.2011.07.024. Available at: http://www.ekoconception.eu/fr/wp-content/uploads/2013/03/PUBLI.13-WITIK-ET-AL.-PUBLI.13-2011-ASSESSING-THE-LIFE-CYCLE-COSTS-AND-ENVIRONMENTAL-PERFORMANCE-OF-LIGHTWEIGHT-MATERIALS-IN-AUTOMOBILE-APPLICATIONS.pdf . (Accessed: February 28, 2018).	Carbon fiber reinforced polymer	End of life, recycling	GHG emissions
Volkswagen. 2008. The DSG Dual-Clutch Gearbox Environmental Commendation – Background Report. Available at: www.evosoftware.dk/diagrams/ec_dsg_background.pdf . (Accessed: February 28, 2018).	Dual clutch transmission	Cradle to grave	Energy requirements, fuel use, GHG emissions, air emissions including CO, SO ₂ , NO _x , and NMVOCs, eutrophication, ozone depletion, acidification, raw material consumption
Zavala-Araiza, D., D. R. Lyon, R. A. Alvarez, K. J. Davis, R. Harriss, S. C. Herndon, A. Karion, E. A. Kort, B. K. Lamb, X. Lan, and A. J. Marchese. 2015. Reconciling divergent estimates of oil and gas methane emissions. <i>Proceedings of the National Academy of Sciences</i> , 112(51):15597–15602. doi:10.1073/pnas.1522126112. Available at: http://www.pnas.org/content/112/51/15597 . (Accessed: February 28, 2018).	Natural gas production	Cradle to gate	Methane emissions

Table C-1. Studies Analyzed in Chapter 6, Life-Cycle Assessment of Vehicle Energy, Material, and Technology Impacts

Study Analyzed	Technologies and Materials Covered	Life-Cycle Boundaries ^a	Environmental Impacts Estimated
Zavala-Araiza, D., D. Lyon, R. A. Alvarez, V. Palacios, R. Harriss, X. Lan, R. Talbot, and S. P. Hamburg. 2015. Toward a functional definition of methane super-emitters: Application to natural gas production sites. <i>Environmental Science & Technology</i> , 49(13):8167–8174. doi:10.1021/acs.est.5b00133. Available at: https://pubs.acs.org/doi/abs/10.1021/acs.est.5b00133 . (Accessed: February 28, 2018).	Natural gas production	Cradle to gate	Methane emissions
Zhang, Y., and A. Kendall. 2016. Life Cycle Performance of Cellulosic Ethanol and Corn Ethanol from a Retrofitted Dry Mill Corn Ethanol Plant. <i>BioEnergy Research</i> 10(1):183–198. doi:10.1007/s12155-016-9776-5.	Cellulosic ethanol, corn ethanol	Well to wheels	GHG emissions, energy requirements

Notes:

^aCradle to gate = assessment of a partial product life cycle that includes the raw material extraction and manufacturing stages, and transportation between these stages; cradle to grave = life-cycle assessment that includes all five stages of a product's life cycle (i.e., raw material extraction, manufacturing, vehicle use, end-of-life management, and transportation between the various stages); gate to gate = assessment of a partial product life-cycle that includes only the manufacturing stage.

EV = electric vehicle; GHG = greenhouse gas; PHEV = plug-in hybrid electric vehicle; HSS = high-strength steel; CO₂ = carbon dioxide; CO = carbon monoxide; VOC = volatile organic compound; NO_x = nitrogen oxides; SO₂ = sulfur dioxide; NH₃ = ammonia; PM = particulate matter; Li-ion = lithium-ion; E85 ethanol fuel blend of 85 percent ethanol fuel and 15% gasoline or other hydrocarbon; CNG = compressed natural gas; LPG = liquefied petroleum gas; FFV = flexible-fuel vehicles; HEV = hybrid electric vehicle; FCEV = fuel cell electric vehicle; AHSS = advanced high strength steel; CNF = carbon nanofiber; CNF-GF = carbon nanofiber-glass fiber; PNC = polymer nanocomposite; LCA = life-cycle analysis; TPMS = tire pressure management system; SO_x = oxides of sulfur; Pb = lead; NMVOCs = nonmethane volatile organic compounds; EREV = extended range electric vehicle; NiMH = nickel-metal hydride; HOF = high-octane fuel; HF = hydrogen fluoride

APPENDIX D

U.S. Passenger Cars and Light Truck Results Reported Separately

**Draft Environmental Impact Statement for the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for
Model Year 2021–2026 Passenger Cars and Light Trucks**

Table D-1. Nationwide Criteria Pollutant Emissions (tons/year) in 2025 from Passenger Cars and Light Trucks, by Vehicle Type and Alternative

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Carbon monoxide (CO)									
Cars tailpipe	4,105,984	4,017,718	4,021,687	4,026,855	4,032,145	4,047,196	4,053,315	4,065,824	4,067,563
Cars upstream	40,878	41,857	41,833	41,831	41,771	41,531	41,584	41,502	41,376
Trucks tailpipe	4,414,113	4,339,505	4,346,789	4,349,547	4,360,092	4,379,379	4,378,745	4,386,443	4,392,416
Trucks upstream	47,112	48,878	48,706	48,605	48,333	47,997	47,865	47,590	47,604
Total	8,608,087	8,447,959	8,459,016	8,466,838	8,482,342	8,516,102	8,521,510	8,541,360	8,548,960
Nitrogen oxides (NO_x)									
Cars tailpipe	193,809	189,550	189,746	190,001	190,251	190,992	191,265	191,855	191,965
Cars upstream	81,560	83,629	83,581	83,574	83,456	82,972	83,064	82,880	82,632
Trucks tailpipe	309,975	303,501	304,091	304,356	305,139	306,737	306,681	307,354	307,868
Trucks upstream	94,409	97,961	97,613	97,410	96,862	96,186	95,922	95,367	95,396
Total	679,752	674,640	675,030	675,341	675,709	676,888	676,932	677,455	677,861
Particulate matter (PM_{2.5})									
Cars tailpipe	6,816	6,667	6,674	6,682	6,692	6,717	6,727	6,749	6,751
Cars upstream	6,125	6,268	6,264	6,263	6,255	6,218	6,228	6,217	6,198
Trucks tailpipe	7,815	7,680	7,694	7,699	7,718	7,754	7,753	7,767	7,778
Trucks upstream	7,081	7,348	7,322	7,307	7,266	7,215	7,195	7,153	7,156
Total	27,838	27,964	27,954	27,951	27,930	27,904	27,903	27,886	27,883
Sulfur oxides (SO_x)									
Cars tailpipe	2,879	2,850	2,851	2,852	2,854	2,858	2,861	2,867	2,865
Cars upstream	61,195	62,601	62,566	62,575	62,476	62,133	62,191	62,062	61,855
Trucks tailpipe	2,878	2,838	2,842	2,844	2,851	2,863	2,862	2,866	2,870
Trucks upstream	68,928	71,489	71,238	71,092	70,697	70,211	70,020	69,619	69,641
Total	135,881	139,779	139,497	139,363	138,878	138,065	137,935	137,414	137,232

Appendix D U.S. Passenger Car and Light Truck Results Reported Separately

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Volatile organic compounds (VOCs)									
Cars tailpipe	250,790	243,697	244,028	244,467	244,861	246,103	246,557	247,533	247,735
Cars upstream	144,132	148,150	148,064	148,041	147,841	146,969	147,086	146,707	146,281
Trucks tailpipe	326,279	319,263	319,874	320,163	320,985	322,683	322,653	323,394	323,926
Trucks upstream	167,794	174,118	173,506	173,149	172,176	170,964	170,495	169,510	169,561
Total	888,994	885,227	885,472	885,820	885,862	886,719	886,791	887,144	887,503

Table D-2. Nationwide Criteria Pollutant Emissions (tons/year) in 2035 from Passenger Cars and Light Trucks, by Vehicle Type and Alternative

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Carbon monoxide (CO)									
Cars tailpipe	2,911,996	2,792,053	2,797,555	2,804,969	2,811,695	2,826,464	2,843,068	2,872,425	2,859,295
Cars upstream	37,881	41,359	41,230	40,986	40,779	39,891	39,481	38,888	39,039
Trucks tailpipe	3,068,375	2,883,178	2,899,422	2,912,805	2,940,077	2,990,850	3,002,893	3,037,417	3,032,438
Trucks upstream	46,668	49,634	49,303	49,161	48,598	48,199	47,786	47,090	47,395
Total	6,064,920	5,771,017	5,766,225	5,807,921	5,841,150	5,905,404	5,933,227	5,995,821	5,978,167
Nitrogen oxides (NO_x)									
Cars tailpipe	127,206	121,851	122,104	122,440	122,760	123,456	124,177	125,474	124,909
Cars upstream	73,541	80,740	80,487	79,999	79,605	77,854	77,005	75,793	76,115
Trucks tailpipe	160,677	152,205	152,954	153,550	154,775	157,050	157,582	159,142	158,926
Trucks upstream	91,616	97,562	96,903	96,621	95,507	94,715	93,899	92,521	93,120
Total	453,039	452,357	452,447	452,611	452,647	453,076	452,663	452,930	453,071
Particulate matter (PM_{2.5})									
Cars tailpipe	6,308	5,980	5,995	6,017	6,038	6,088	6,128	6,206	6,176
Cars upstream	5,544	6,046	6,027	5,990	5,961	5,829	5,774	5,687	5,712
Trucks tailpipe	7,090	6,649	6,687	6,720	6,786	6,909	6,938	7,021	7,009
Trucks upstream	6,871	7,321	7,271	7,250	7,166	7,106	7,045	6,941	6,986
Total	25,814	25,996	25,981	25,977	25,951	25,932	25,885	25,856	25,883
Sulfur oxides (SO_x)									
Cars tailpipe	2,763	2,731	2,732	2,733	2,731	2,728	2,737	2,745	2,738
Cars upstream	55,007	60,041	59,855	59,529	59,206	57,952	57,290	56,441	56,605
Trucks tailpipe	3,091	2,909	2,924	2,939	2,969	3,025	3,037	3,071	3,068
Trucks upstream	66,634	70,632	70,163	69,964	69,171	68,616	68,033	67,050	67,480
Total	127,495	136,313	135,674	135,164	134,077	132,321	131,097	129,308	129,890

Appendix D U.S. Passenger Car and Light Truck Results Reported Separately

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Volatile organic compounds (VOCs)									
Cars tailpipe	144,942	138,339	138,637	139,050	139,414	140,292	141,130	142,662	142,083
Cars upstream	130,883	144,990	144,536	143,623	142,945	139,755	138,087	135,776	136,422
Trucks tailpipe	167,627	158,763	159,518	160,122	161,341	163,650	164,198	165,797	165,636
Trucks upstream	165,086	176,111	174,932	174,429	172,408	170,947	169,468	166,972	168,064
Total	608,539	618,203	617,623	617,225	616,108	614,643	612,883	611,208	612,204

Table D-3. Nationwide Criteria Pollutant Emissions (tons/year) in 2050 from Passenger Cars and Light Trucks, by Vehicle Type and Alternative

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Carbon monoxide (CO)									
Cars tailpipe	2,664,117	2,660,730	2,660,242	2,657,861	2,650,895	2,638,395	2,644,288	2,646,601	2,640,225
Cars upstream	38,430	43,285	43,085	42,702	42,349	41,071	40,486	39,567	39,916
Trucks tailpipe	2,480,139	2,299,081	2,313,053	2,328,734	2,358,043	2,413,947	2,425,717	2,461,059	2,455,883
Trucks upstream	41,610	44,616	44,264	44,130	43,506	43,119	42,665	41,904	42,320
Total	5,224,297	5,047,712	5,060,644	5,073,428	5,094,793	5,136,531	5,153,157	5,189,131	5,178,344
Nitrogen oxides (NO_x)									
Cars tailpipe	111,627	111,231	111,223	111,144	110,879	110,405	110,679	110,844	110,551
Cars upstream	73,326	83,225	82,838	82,083	81,419	78,934	77,750	75,907	76,622
Trucks tailpipe	103,710	96,117	96,704	97,361	98,585	100,923	101,415	102,899	102,677
Trucks upstream	80,593	86,594	85,903	85,638	84,416	83,655	82,767	81,275	82,086
Total	369,256	377,167	376,668	376,226	375,299	373,917	372,611	370,925	371,935
Particulate matter (PM_{2.5})									
Cars tailpipe	5,992	5,908	5,911	5,912	5,907	5,899	5,918	5,941	5,922
Cars upstream	5,582	6,285	6,256	6,198	6,148	5,960	5,880	5,745	5,801
Trucks tailpipe	6,544	6,063	6,100	6,141	6,219	6,367	6,399	6,493	6,479
Trucks upstream	6,098	6,557	6,504	6,484	6,391	6,334	6,266	6,153	6,214
Total	24,216	24,812	24,770	24,736	24,665	24,560	24,463	24,332	24,416
Sulfur oxides (SO_x)									
Cars tailpipe	3,029	3,044	3,042	3,038	3,029	3,013	3,017	3,014	3,010
Cars upstream	54,263	61,288	61,005	60,485	59,969	58,189	57,282	55,975	56,426
Trucks tailpipe	3,209	2,979	2,996	3,016	3,055	3,127	3,143	3,188	3,182
Trucks upstream	58,336	62,389	61,897	61,711	60,843	60,312	59,680	58,620	59,198
Total	118,836	129,699	128,941	128,251	126,896	124,641	123,121	120,797	121,816

Appendix D U.S. Passenger Car and Light Truck Results Reported Separately

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Volatile organic compounds (VOCs)									
Cars tailpipe	114,259	114,085	114,064	113,959	113,647	113,066	113,343	113,472	113,168
Cars upstream	131,076	150,514	149,813	148,398	147,234	142,670	140,352	136,844	138,230
Trucks tailpipe	96,491	89,377	89,927	90,540	91,683	93,870	94,329	95,721	95,511
Trucks upstream	146,267	157,577	156,311	155,832	153,592	152,169	150,546	147,815	149,305
Total	488,092	511,534	510,114	508,729	506,155	501,775	498,570	493,851	496,213

Table D-4. Nationwide Toxic Air Pollutant Emissions (tons/year) in 2025 from Passenger Cars and Light Trucks, by Vehicle Type and Alternative

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Acetaldehyde									
Cars tailpipe	3,048	2,992	2,995	2,998	3,001	3,010	3,015	3,023	3,023
Cars upstream	27	28	28	28	28	28	28	28	27
Trucks tailpipe	3,324	3,270	3,275	3,277	3,285	3,299	3,299	3,304	3,309
Trucks upstream	32	33	33	33	33	32	32	32	32
Total	6,430	6,323	6,331	6,336	6,347	6,369	6,373	6,387	6,392
Acrolein									
Cars tailpipe	178	175	175	176	176	176	177	177	177
Cars upstream	4	4	4	4	4	4	4	4	4
Trucks tailpipe	169	167	167	167	167	168	168	168	169
Trucks upstream	4	5	5	4	4	4	4	4	4
Total	356	350	351	351	351	353	353	354	354
Benzene									
Cars tailpipe	8,367	8,162	8,171	8,184	8,195	8,230	8,244	8,273	8,278
Cars upstream	549	564	564	564	563	560	560	559	557
Trucks tailpipe	10,629	10,410	10,430	10,438	10,465	10,519	10,518	10,541	10,558
Trucks upstream	640	664	662	660	657	652	650	646	647
Total	20,185	19,800	19,826	19,846	19,880	19,961	19,972	20,019	20,039
1,3-Butadiene									
Cars tailpipe	1,209	1,185	1,186	1,187	1,189	1,193	1,194	1,198	1,198
Cars upstream	6	6	6	6	6	6	6	6	6
Trucks tailpipe	1,336	1,310	1,313	1,314	1,317	1,323	1,323	1,326	1,328
Trucks upstream	7	7	7	7	7	7	7	7	7
Total	2,558	2,508	2,512	2,514	2,519	2,529	2,531	2,537	2,539

Appendix D U.S. Passenger Car and Light Truck Results Reported Separately

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Diesel particulate matter (DPM)									
Cars tailpipe	11	10	10	10	10	10	10	10	10
Cars upstream	12,882	13,212	13,205	13,203	13,185	13,108	13,122	13,093	13,054
Trucks tailpipe	6	6	6	6	6	6	6	6	6
Trucks upstream	14,920	15,480	15,426	15,394	15,308	15,201	15,159	15,072	15,076
Total	27,819	28,708	28,646	28,613	28,509	28,325	28,298	28,181	28,146
Formaldehyde									
Cars tailpipe	1,934	1,893	1,894	1,897	1,899	1,906	1,909	1,915	1,916
Cars upstream	203	209	209	209	209	207	208	207	207
Trucks tailpipe	2,357	2,312	2,316	2,318	2,324	2,335	2,335	2,339	2,343
Trucks upstream	239	248	247	246	245	243	243	241	241
Total	4,733	4,662	4,667	4,670	4,677	4,692	4,694	4,703	4,706

Table D-5. Nationwide Toxic Air Pollutant Emissions (tons/year) in 2035 from Passenger Cars and Light Trucks, by Vehicle Type and Alternative

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Acetaldehyde									
Cars tailpipe	2,785	2,669	2,675	2,682	2,688	2,703	2,719	2,747	2,734
Cars upstream	25	27	27	27	27	26	26	25	26
Trucks tailpipe	2,944	2,766	2,782	2,795	2,821	2,871	2,883	2,916	2,911
Trucks upstream	31	33	33	33	33	32	32	32	32
Total	5,785	5,496	5,516	5,536	5,569	5,632	5,659	5,720	5,703
Acrolein									
Cars tailpipe	154	147	148	148	148	149	150	152	151
Cars upstream	3	4	4	4	4	4	4	3	4
Trucks tailpipe	141	132	133	134	135	137	138	140	139
Trucks upstream	4	5	5	5	4	4	4	4	4
Total	302	288	289	290	291	295	296	299	298
Benzene									
Cars tailpipe	5,508	5,269	5,280	5,295	5,308	5,338	5,370	5,427	5,403
Cars upstream	498	552	551	547	545	532	526	517	520
Trucks tailpipe	5,922	5,600	5,628	5,651	5,697	5,783	5,803	5,862	5,855
Trucks upstream	630	672	668	666	658	652	647	637	641
Total	12,559	12,093	12,126	12,158	12,207	12,305	12,345	12,444	12,419
1,3-Butadiene									
Cars tailpipe	914	877	878	881	882	887	892	901	897
Cars upstream	5	6	6	6	6	6	6	6	6
Trucks tailpipe	876	826	831	834	842	855	859	868	867
Trucks upstream	7	7	7	7	7	7	7	7	7
Total	1,803	1,716	1,722	1,728	1,737	1,755	1,764	1,782	1,777

Appendix D U.S. Passenger Car and Light Truck Results Reported Separately

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Diesel particulate matter (DPM)									
Cars tailpipe	2	2	2	2	2	2	2	2	2
Cars upstream	11,769	12,945	12,905	12,826	12,763	12,481	12,343	12,147	12,200
Trucks tailpipe	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Trucks upstream	14,724	15,685	15,580	15,535	15,356	15,228	15,097	14,876	14,973
Total	26,495	28,633	28,487	28,363	28,122	27,712	27,443	27,025	27,175
Formaldehyde									
Cars tailpipe	1,458	1,396	1,399	1,402	1,406	1,413	1,422	1,437	1,430
Cars upstream	184	204	204	203	202	197	195	191	192
Trucks tailpipe	1,503	1,417	1,425	1,431	1,444	1,467	1,472	1,488	1,486
Trucks upstream	235	251	249	249	246	244	242	238	240
Total	3,381	3,269	3,277	3,285	3,297	3,321	3,331	3,355	3,349

Table D-6. Nationwide Toxic Air Pollutant Emissions (tons/year) in 2050 from Passenger Cars and Light Trucks, by Vehicle Type and Alternative

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Acetaldehyde									
Cars tailpipe	2,586	2,575	2,574	2,573	2,567	2,557	2,563	2,567	2,561
Cars upstream	25	28	28	28	28	27	26	26	26
Trucks tailpipe	2,427	2,248	2,262	2,277	2,306	2,361	2,373	2,408	2,402
Trucks upstream	28	30	30	30	29	29	29	28	28
Total	5,065	4,881	4,894	4,907	4,930	4,973	4,991	5,029	5,017
Acrolein									
Cars tailpipe	145	144	144	144	144	143	143	144	143
Cars upstream	3	4	4	4	4	4	4	4	4
Trucks tailpipe	121	112	113	114	115	118	119	120	120
Trucks upstream	4	4	4	4	4	4	4	4	4
Total	273	265	265	266	267	269	270	271	271
Benzene									
Cars tailpipe	4,760	4,754	4,753	4,749	4,735	4,711	4,722	4,728	4,715
Cars upstream	498	573	570	565	560	543	534	521	526
Trucks tailpipe	3,981	3,687	3,710	3,735	3,782	3,872	3,891	3,949	3,940
Trucks upstream	558	601	596	594	586	580	574	564	569
Total	9,796	9,614	9,629	9,642	9,663	9,706	9,722	9,760	9,750
1,3-Butadiene									
Cars tailpipe	844	844	844	843	840	836	838	839	836
Cars upstream	5	6	6	6	6	6	6	6	6
Trucks tailpipe	689	638	642	646	655	670	673	683	682
Trucks upstream	6	7	6	6	6	6	6	6	6
Total	1,545	1,495	1,498	1,502	1,507	1,518	1,523	1,534	1,530

Appendix D U.S. Passenger Car and Light Truck Results Reported Separately

Vehicle Class	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Diesel particulate matter (DPM)									
Cars tailpipe	0	0	0	0	0	0	0	0	0
Cars upstream	11,796	13,426	13,364	13,240	13,134	12,731	12,538	12,237	12,355
Trucks tailpipe	0	0	0	0	0	0	0	0	0
Trucks upstream	13,041	14,023	13,912	13,869	13,671	13,547	13,403	13,162	13,294
Total	24,837	27,449	27,276	27,109	26,805	26,278	25,941	25,399	25,649
Formaldehyde									
Cars tailpipe	1,321	1,319	1,319	1,318	1,314	1,307	1,311	1,312	1,309
Cars upstream	184	212	211	209	207	201	198	193	195
Trucks tailpipe	1,126	1,043	1,049	1,057	1,070	1,095	1,101	1,117	1,114
Trucks upstream	208	224	223	222	219	217	214	211	213
Total	2,840	2,798	2,802	2,805	2,810	2,820	2,823	2,832	2,830

Table D-7. Carbon Dioxide Emissions and Emissions Increases (MMTCO₂) from All Passenger Cars, 2021–2100 by Alternative, Direct and Indirect Impacts^a

Alternative	Total Emissions	Emissions Increases Compared to No Action	Percent (%) Emissions Increases Compared to No Action Emissions
Alt. 0—No Action	36,100	--	--
Alt. 1	40,600	4,500	12%
Alt. 2	40,500	4,400	12%
Alt. 3	40,200	4,000	11%
Alt. 4	39,900	3,800	11%
Alt. 5	38,800	2,700	7%
Alt. 6	38,300	2,200	6%
Alt. 7	37,500	1,400	4%
Alt. 8	37,800	1,700	5%

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the reductions do not reflect the exact differences between the values.

MMTCO₂ = million metric tons of carbon dioxide.

Table D-8. Carbon Dioxide Emissions and Emissions Increases (MMTCO₂) from All Light Trucks, 2021–2100 by Alternative, Direct and Indirect Impacts^a

Alternative	Total Emissions	Emissions Increases Compared to No Action	Percent (%) Emissions Increases Compared to No Action Emissions
Alt. 0—No Action	41,600	--	--
Alt. 1	44,500	2,900	7%
Alt. 2	44,200	2,500	6%
Alt. 3	44,000	2,400	6%
Alt. 4	43,500	1,900	5%
Alt. 5	43,100	1,500	4%
Alt. 6	42,700	1,100	3%
Alt. 7	42,000	400	1%
Alt. 8	42,400	800	2%

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the reductions do not reflect the exact differences between the values.

MMTCO₂ = million metric tons of carbon dioxide.

Table D-9. Emissions of Greenhouse Gases (MMTCO₂e per year) from All Passenger Cars by Alternative, Direct and Indirect Impacts^a

Year	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Carbon dioxide (CO₂)									
2020	545	547	547	547	547	546	547	547	546
2040	447	504	502	498	495	481	474	465	468
2060	451	518	515	510	506	491	483	471	476
2080	448	514	512	507	503	487	479	468	472
2100	417	478	476	471	468	453	446	435	439
Methane (CH₄)									
2020	26	26	26	26	26	26	26	26	26
2040	20	22	22	22	22	21	21	21	21
2060	20	23	23	23	23	22	22	21	21
2080	20	23	23	23	22	22	21	21	21
2100	19	21	21	21	21	20	20	19	20
Nitrous oxide (N₂O)									
2020	9	9	9	9	9	9	9	9	9
2040	6	7	7	7	7	6	6	6	6
2060	6	7	7	7	7	7	7	7	7
2080	6	7	7	7	7	7	7	7	7
2100	6	6	6	6	6	6	6	6	6
Total (all GHGs)									
2020	580	582	582	582	582	581	582	582	581
2040	473	533	531	527	523	509	502	492	495
2060	478	548	545	540	536	519	511	499	503
2080	475	544	541	536	532	516	507	495	500
2100	442	506	504	499	495	480	472	460	465

Notes:

^a Emissions from 2051–2100 were scaled using the rate of change for the U.S. transportation fuel consumption from the GCAM Reference scenario. These assumptions project a slight decline over this period.

GHG = greenhouse gas; MMTCO₂e = million metric tons carbon dioxide equivalent.

Table D-10. Emissions of Greenhouse Gases (MMTCO₂e per year) from All Light Trucks by Alternative, Direct and Indirect Impacts^a

Year	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Carbon dioxide (CO₂)									
2020	556	561	560	560	559	558	558	558	557
2040	556	594	589	588	581	576	571	562	566
2060	507	546	541	540	532	527	522	512	517
2080	504	542	537	536	528	523	518	509	514
2100	468	504	500	498	491	487	482	473	478
Methane (CH₄)									
2020	26	27	27	27	27	27	27	26	26
2040	25	26	26	26	26	26	25	25	25
2060	23	24	24	24	24	24	23	23	23
2080	22	24	24	24	24	23	23	23	23
2100	21	22	22	22	22	22	21	21	21
Nitrous oxide (N₂O)									
2020	9	9	9	9	9	9	9	9	9
2040	7	7	7	7	7	7	7	7	7
2060	7	7	7	7	7	7	7	7	7
2080	7	7	7	7	7	7	7	7	7
2100	7	7	7	7	7	7	7	7	7
Total (all GHGs)									
2020	591	596	596	595	595	593	593	593	592
2040	588	627	623	621	614	609	603	594	599
2060	537	577	572	571	563	558	552	542	548
2080	533	573	568	567	559	554	548	538	544
2100	496	533	529	527	520	515	510	501	506

Notes:

^a Emissions from 2051–2100 were scaled using the rate of change for the U.S. transportation fuel consumption from the GCAM Reference scenario. These assumptions project a slight decline over this period.

GHG = greenhouse gas; MMTCO₂e = million metric tons carbon dioxide equivalent.

Table D-11. Carbon Dioxide Concentrations, Global Mean Surface Temperature Increase, Sea-Level Rise, and Ocean Acidification (GCAM Reference) from Passenger Cars by Alternative, Direct and Indirect Impacts^a

Alternative	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^{b, c}			Sea-Level Rise (cm) ^{b, d}			Ocean Acidification (pH) ^e		
	2040	2060	2100	2040	2060	2100	2040	2060	2100	2040	2060	2100
Totals by Alternative												
Alt. 0 No Action	479.04	565.44	789.11	1.287	2.008	3.484	22.87	36.56	76.28	8.4099	8.3476	8.2176
Alt. 1	479.10	565.61	789.51	1.287	2.009	3.486	22.87	36.57	76.32	8.4099	8.3475	8.2174
Alt. 2	479.09	565.61	789.49	1.287	2.009	3.486	22.87	36.57	76.31	8.4099	8.3475	8.2174
Alt. 3	479.09	565.59	789.46	1.287	2.009	3.486	22.87	36.57	76.31	8.4099	8.3475	8.2174
Alt. 4	479.09	565.59	789.44	1.287	2.009	3.485	22.87	36.57	76.31	8.4099	8.3475	8.2174
Alt. 5	479.07	565.55	789.35	1.287	2.009	3.485	22.87	36.57	76.30	8.4099	8.3475	8.2175
Alt. 6	479.07	565.53	789.30	1.287	2.009	3.485	22.87	36.57	76.30	8.4099	8.3475	8.2175
Alt. 7	479.06	565.50	789.23	1.287	2.008	3.485	22.87	36.56	76.29	8.4099	8.3475	8.2175
Alt. 8	479.06	565.51	789.25	1.287	2.009	3.485	22.87	36.57	76.29	8.4099	8.3475	8.2175
Increases Under Action Alternatives												
Alt. 1	0.06	0.17	0.40	0.000	0.001	0.002	0.00	0.01	0.03	0.0000	0.0001	0.0002
Alt. 2	0.06	0.17	0.39	0.000	0.001	0.002	0.00	0.01	0.03	0.0000	0.0001	0.0002
Alt. 3	0.05	0.15	0.36	0.000	0.001	0.001	0.00	0.01	0.03	0.0000	0.0001	0.0002
Alt. 4	0.05	0.14	0.33	0.000	0.001	0.001	0.00	0.01	0.03	0.0000	0.0001	0.0002
Alt. 5	0.04	0.10	0.24	0.000	0.001	0.001	0.00	0.00	0.02	0.0000	0.0001	0.0001
Alt. 6	0.03	0.09	0.19	0.000	0.000	0.001	0.00	0.00	0.02	0.0000	0.0001	0.0001
Alt. 7	0.02	0.06	0.12	0.000	0.000	0.001	0.00	0.00	0.01	0.0000	0.0000	0.0001
Alt. 8	0.02	0.06	0.15	0.000	0.000	0.001	0.00	0.00	0.01	0.0000	0.0000	0.0001

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the reductions might not reflect the exact difference of the values in all cases.

^b The values for global mean surface temperature and sea-level rise are relative to the average of the years 1986–2005.

^c Temperature changes reported as 0.000 are more than zero but less than 0.001.

^d Sea-level rise changes reported as 0.00 are more than zero but less than 0.01.

^e Ocean Acidification changes reported as 0.0000 are more than zero but less than 0.0001.

CO₂ = carbon dioxide; C = degrees Celsius; ppm = parts per million; cm = centimeters; GCAM = Global Change Assessment Model.

Table D-12. Carbon Dioxide Concentrations, Global Mean Surface Temperature Increase, Sea-Level Rise, and Ocean Acidification (GCAM Reference) from Light Trucks by Alternative, Direct and Indirect Impacts^a

Alternative	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^{b, c}			Sea-Level Rise (cm) ^{b, d}			Ocean Acidification (pH) ^e		
	2040	2060	2100	2040	2060	2100	2040	2060	2100	2040	2060	2100
Totals by Alternative												
Alt. 0 No Action	479.04	565.44	789.11	1.287	2.008	3.484	22.87	36.56	76.28	8.4099	8.3476	8.2176
Alt. 1	479.09	565.56	789.36	1.287	2.009	3.485	22.87	36.57	76.30	8.4099	8.3475	8.2175
Alt. 2	479.09	565.55	789.33	1.287	2.009	3.485	22.87	36.57	76.30	8.4099	8.3475	8.2175
Alt. 3	479.08	565.54	789.32	1.287	2.009	3.485	22.87	36.57	76.30	8.4099	8.3475	8.2175
Alt. 4	479.07	565.52	789.27	1.287	2.009	3.485	22.87	36.57	76.30	8.4099	8.3475	8.2175
Alt. 5	479.06	565.50	789.24	1.287	2.009	3.485	22.87	36.57	76.29	8.4099	8.3475	8.2175
Alt. 6	479.06	565.49	789.20	1.287	2.008	3.484	22.87	36.56	76.29	8.4099	8.3476	8.2175
Alt. 7	479.05	565.46	789.14	1.287	2.008	3.484	22.87	36.56	76.29	8.4099	8.3476	8.2176
Alt. 8	479.05	565.47	789.17	1.287	2.008	3.484	22.87	36.56	76.29	8.4099	8.3476	8.2176
Increases Under Alternatives												
Alt. 1	0.05	0.12	0.25	0.000	0.001	0.001	0.00	0.01	0.02	0.0000	0.0001	0.0001
Alt. 2	0.05	0.11	0.22	0.000	0.001	0.001	0.00	0.01	0.02	0.0000	0.0001	0.0001
Alt. 3	0.05	0.10	0.21	0.000	0.001	0.001	0.00	0.01	0.02	0.0000	0.0001	0.0001
Alt. 4	0.04	0.08	0.16	0.000	0.000	0.001	0.00	0.00	0.02	0.0000	0.0001	0.0001
Alt. 5	0.03	0.06	0.13	0.000	0.000	0.001	0.00	0.00	0.01	0.0000	0.0000	0.0001
Alt. 6	0.02	0.05	0.10	0.000	0.000	0.000	0.00	0.00	0.01	0.0000	0.0000	0.0000
Alt. 7	0.01	0.02	0.04	0.000	0.000	0.000	0.00	0.00	0.00	0.0000	0.0000	0.0000
Alt. 8	0.01	0.03	0.07	0.000	0.000	0.000	0.00	0.00	0.01	0.0000	0.0000	0.0000

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the reductions might not reflect the exact difference of the values in all cases.

^b The values for global mean surface temperature and sea-level rise are relative to the average of the years 1986–2005.

^c Temperature changes reported as 0.000 are more than zero but less than 0.001.

^d Sea-level rise changes reported as 0.00 are more than zero but less than 0.01.

^e Ocean Acidification changes reported as 0.0000 are more than zero but less than 0.0001.

CO₂ = carbon dioxide; °C = degrees Celsius; ppm = parts per million; cm = centimeters; GCAM = Global Change Assessment Model.

Table D-13. Carbon Dioxide Emissions and Emissions Increases (MMTCO₂) from All Passenger Cars, 2021–2100 by Alternative, Cumulative Impacts^a

Alternative	Total Emissions	Emissions Increases Compared to No Action	Percent (%) Emissions Increases Compared to No Action Emissions
Alt. 0—No Action	36,100	--	--
Alt. 1	40,600	4,500	12%
Alt. 2	40,500	4,400	12%
Alt. 3	40,200	4,000	11%
Alt. 4	39,900	3,800	11%
Alt. 5	38,800	2,700	7%
Alt. 6	38,300	2,200	6%
Alt. 7	37,500	1,400	4%
Alt. 8	37,800	1,700	5%

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the reductions do not reflect the exact differences between the values.

MMTCO₂ = million metric tons of carbon dioxide.

Table D-14. Carbon Dioxide Emissions and Emissions Increases (MMTCO₂) from All Light Trucks, 2021–2100 by Alternative, Cumulative Impacts^a

Alternative	Total Emissions	Emissions Increases Compared to No Action	Percent (%) Emissions Increases Compared to No Action Emissions
Alt. 0—No Action	41,600	--	--
Alt. 1	44,500	2,900	7%
Alt. 2	44,200	2,500	6%
Alt. 3	44,000	2,400	6%
Alt. 4	43,500	1,900	5%
Alt. 5	43,100	1,500	4%
Alt. 6	42,700	1,100	3%
Alt. 7	42,000	400	1%
Alt. 8	42,400	800	2%

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the reductions do not reflect the exact differences between the values.

MMTCO₂ = million metric tons of carbon dioxide.

Table D-15. Emissions of Greenhouse Gases (MMTCO₂e per year) from All Passenger Cars by Alternative, Cumulative Impacts^a

Year	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Carbon dioxide (CO₂)									
2020	545	547	547	547	547	546	547	547	546
2040	447	504	502	498	495	481	474	465	468
2060	451	518	515	510	506	491	483	471	476
2080	448	514	512	507	503	487	479	468	472
2100	417	478	476	471	468	453	446	435	439
Methane (CH₄)									
2020	26	26	26	26	26	26	26	26	26
2040	20	22	22	22	22	21	21	21	21
2060	20	23	23	23	23	22	22	21	21
2080	20	23	23	23	22	22	21	21	21
2100	19	21	21	21	21	20	20	19	20
Nitrous oxide (N₂O)									
2020	9	9	9	9	9	9	9	9	9
2040	6	7	7	7	7	6	6	6	6
2060	6	7	7	7	7	7	7	7	7
2080	6	7	7	7	7	7	7	7	7
2100	6	6	6	6	6	6	6	6	6
Total (all GHGs)									
2020	580	582	582	582	582	581	582	582	581
2040	473	533	531	527	523	509	502	492	495
2060	478	548	545	540	536	519	511	499	503
2080	475	544	541	536	532	516	507	495	500
2100	442	506	504	499	495	480	472	460	465

Notes:

^a Emissions from 2051–2100 were scaled using the rate of change for the U.S. transportation fuel consumption from the GCAM Reference scenario. These assumptions project a slight decline over this period.

GHG = greenhouse gas; MMTCO₂e = million metric tons carbon dioxide equivalent.

Table D-16. Emissions of Greenhouse Gases (MMTCO₂e per year) from All Light Trucks by Alternative, Cumulative Impacts^a

Year	Alt. 0 No Action	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Carbon dioxide (CO₂)									
2020	556	561	560	560	559	558	558	558	557
2040	556	594	589	588	581	576	571	562	566
2060	507	546	541	540	532	527	522	512	517
2080	504	542	537	536	528	523	518	509	514
2100	468	504	500	498	491	487	482	473	478
Methane (CH₄)									
2020	26	27	27	27	27	27	27	26	26
2040	25	26	26	26	26	26	25	25	25
2060	23	24	24	24	24	24	23	23	23
2080	22	24	24	24	24	23	23	23	23
2100	21	22	22	22	22	22	21	21	21
Nitrous oxide (N₂O)									
2020	9	9	9	9	9	9	9	9	9
2040	7	7	7	7	7	7	7	7	7
2060	7	7	7	7	7	7	7	7	7
2080	7	7	7	7	7	7	7	7	7
2100	7	7	7	7	7	7	7	7	7
Total (all GHGs)									
2020	591	596	596	595	595	593	593	593	592
2040	588	627	623	621	614	609	603	594	599
2060	537	577	572	571	563	558	552	542	548
2080	533	573	568	567	559	554	548	538	544
2100	496	533	529	527	520	515	510	501	506

Notes:

^a Emissions from 2051–2100 were scaled using the rate of change for the U.S. transportation fuel consumption from the GCAM Reference scenario. These assumptions project a slight decline over this period.

GHG = greenhouse gas; MMTCO₂e = million metric tons carbon dioxide equivalent.

Table D-17. Carbon Dioxide Concentrations, Global Mean Surface Temperature Increase, Sea-Level Rise, and Ocean Acidification (GCAM 6.0) from Passenger Cars by Alternative, Cumulative Impacts^a

Alternative	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^{b, c}			Sea-Level Rise (cm) ^{b, d}			Ocean Acidification (pH) ^e		
	2040	2060	2100	2040	2060	2100	2040	2060	2100	2040	2060	2100
Totals by Alternative												
Alt. 0 No Action	472.56	546.00	687.29	1.216	1.810	2.838	22.16	35.15	70.22	8.4099	8.3476	8.2176
Alt. 1	472.62	546.17	687.67	1.216	1.811	2.840	22.16	35.16	70.26	8.4099	8.3475	8.2174
Alt. 2	472.62	546.17	687.66	1.216	1.811	2.840	22.16	35.16	70.26	8.4099	8.3475	8.2174
Alt. 3	472.61	546.16	687.63	1.216	1.811	2.839	22.16	35.16	70.26	8.4099	8.3475	8.2174
Alt. 4	472.61	546.15	687.61	1.216	1.811	2.839	22.16	35.16	70.25	8.4099	8.3475	8.2174
Alt. 5	472.60	546.11	687.52	1.216	1.811	2.839	22.16	35.16	70.24	8.4099	8.3475	8.2175
Alt. 6	472.59	546.09	687.47	1.216	1.811	2.839	22.16	35.16	70.24	8.4099	8.3475	8.2175
Alt. 7	472.58	546.06	687.40	1.216	1.811	2.838	22.16	35.15	70.23	8.4099	8.3475	8.2175
Alt. 8	472.58	546.07	687.43	1.216	1.811	2.839	22.16	35.15	70.24	8.4099	8.3475	8.2175
Increases Under Alternatives												
Alt. 1	0.06	0.17	0.38	0.000	0.001	0.002	0.00	0.01	0.04	0.0000	0.0001	0.0002
Alt. 2	0.06	0.16	0.37	0.000	0.001	0.002	0.00	0.01	0.04	0.0000	0.0001	0.0002
Alt. 3	0.05	0.15	0.34	0.000	0.001	0.002	0.00	0.01	0.03	0.0000	0.0001	0.0002
Alt. 4	0.05	0.14	0.32	0.000	0.001	0.001	0.00	0.01	0.03	0.0000	0.0001	0.0002
Alt. 5	0.04	0.10	0.23	0.000	0.001	0.001	0.00	0.00	0.02	0.0000	0.0001	0.0001
Alt. 6	0.03	0.08	0.18	0.000	0.000	0.001	0.00	0.00	0.02	0.0000	0.0001	0.0001
Alt. 7	0.02	0.06	0.12	0.000	0.000	0.001	0.00	0.00	0.01	0.0000	0.0000	0.0001
Alt. 8	0.02	0.06	0.14	0.000	0.000	0.001	0.00	0.00	0.01	0.0000	0.0000	0.0001

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the reductions might not reflect the exact difference of the values in all cases.

^b The values for global mean surface temperature and sea-level rise are relative to the average of the years 1986–2005.

^c Temperature changes reported as 0.000 are more than zero but less than 0.001.

^d Sea-level rise changes reported as 0.00 are more than zero but less than 0.01.

^e Ocean acidification changes reported as 0.0000 are more than zero but less than 0.0001.

CO₂ = carbon dioxide; °C = degrees Celsius; ppm = parts per million; cm = centimeters; GCAM = Global Change Assessment Model.

Table D-18. Carbon Dioxide Concentrations, Global Mean Surface Temperature Increase, Sea-Level Rise, and Ocean Acidification (GCAM 6.0) from Light Trucks by Alternative, Cumulative Impacts^a

Alternative	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^{b, c}			Sea-Level Rise (cm) ^{b, d}			Ocean Acidification (pH) ^e		
	2040	2060	2100	2040	2060	2100	2040	2060	2100	2040	2060	2100
Totals by Alternative												
Alt. 0 No Action	472.56	546.00	687.29	1.216	1.810	2.838	22.16	35.15	70.22	8.4150	8.3609	8.2723
Alt. 1	472.61	546.12	687.53	1.216	1.811	2.839	22.16	35.16	70.25	8.4149	8.3608	8.2721
Alt. 2	472.61	546.11	687.50	1.216	1.811	2.839	22.16	35.16	70.24	8.4149	8.3608	8.2722
Alt. 3	472.60	546.10	687.49	1.216	1.811	2.839	22.16	35.16	70.24	8.4149	8.3608	8.2722
Alt. 4	472.59	546.08	687.44	1.216	1.811	2.839	22.16	35.16	70.24	8.4149	8.3608	8.2722
Alt. 5	472.59	546.07	687.41	1.216	1.811	2.838	22.16	35.15	70.24	8.4149	8.3608	8.2722
Alt. 6	472.58	546.05	687.38	1.216	1.811	2.838	22.16	35.15	70.23	8.4149	8.3608	8.2722
Alt. 7	472.57	546.02	687.32	1.216	1.811	2.838	22.16	35.15	70.23	8.4149	8.3608	8.2723
Alt. 8	472.57	546.04	687.35	1.216	1.811	2.838	22.16	35.15	70.23	8.4149	8.3608	8.2722
Increases Under Alternatives												
Alt. 1	0.05	0.12	0.24	0.000	0.001	0.001	0.00	0.01	0.03	0.0000	0.0001	0.0001
Alt. 2	0.05	0.10	0.21	0.000	0.001	0.001	0.00	0.01	0.02	0.0000	0.0001	0.0001
Alt. 3	0.05	0.10	0.20	0.000	0.001	0.001	0.00	0.01	0.02	0.0000	0.0001	0.0001
Alt. 4	0.04	0.08	0.16	0.000	0.000	0.001	0.00	0.00	0.02	0.0000	0.0001	0.0001
Alt. 5	0.03	0.06	0.12	0.000	0.000	0.001	0.00	0.00	0.01	0.0000	0.0000	0.0001
Alt. 6	0.02	0.05	0.09	0.000	0.000	0.000	0.00	0.00	0.01	0.0000	0.0000	0.0001
Alt. 7	0.01	0.02	0.04	0.000	0.000	0.000	0.00	0.00	0.00	0.0000	0.0000	0.0000
Alt. 8	0.01	0.03	0.06	0.000	0.000	0.000	0.00	0.00	0.01	0.0000	0.0000	0.0000

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the reductions might not reflect the exact difference of the values in all cases.

^b The values for global mean surface temperature and sea-level rise are relative to the average of the years 1986–2005.

^c Temperature changes reported as 0.000 are more than zero but less than 0.001.

^d Sea-level rise changes reported as 0.00 are more than zero but less than 0.01.

^e Ocean acidification changes reported as 0.0000 are more than zero but less than 0.0001.

CO₂ = carbon dioxide; °C = degrees Celsius; ppm = parts per million; cm = centimeters; GCAM = Global Change Assessment Model.

