



ARIZONA DEPARTMENT OF TRANSPORTATION



PB99-106619

REPORT NUMBER: FHWA-AZ98-469

WHAT ARE THE "BEST PRACTICES" OF RURAL SUBAREA PLANNING?

Final Report

Prepared by:

David King
6673 West Monona Dr.
Glendale, AZ 85308

October 1998

Prepared for:

Arizona Department of Transportation
206 South 17th Avenue
Phoenix, Arizona 85007
in cooperation with
U.S. Department of Transportation
Federal Highway Administration

The contents of this report reflect the views of the authors who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Arizona Department of Transportation or the Federal Highways Administration. This report does not constitute a standard, specification, or regulation. Trade or manufacturer's names which may appear herein are cited only because they are considered essential to the objectives of the report. The U.S. Government and the State of Arizona do not endorse products or manufacturers.

Technical Report Documentation Page

1. Report No. FHWA-AZ-98-469		 PB99-106619		3. Recipient's Catalog No.	
4. Title and Subtitle What are the "best practices" of rural subarea planning?				5. Report Date October 1998	
				6. Performing Organization Code	
7. Authors David King				8. Performing Organization Report No.	
9. Performing Organization Name and Address David King 6673 W. Monona Dr. Glendale, AZ 85308				10. Work Unit No.	
				11. Contract or Grant No. SPR-PL-1-(53) 469	
12. Sponsoring Agency Name and Address ARIZONA DEPARTMENT OF TRANSPORTATION 206 S. 17TH AVENUE PHOENIX, ARIZONA 85007 Project Manager: John Semmens				13. Type of Report & Period Covered	
				14. Sponsoring Agency Code	
15. Supplementary Notes Prepared in cooperation with the U.S. Department of Transportation, Federal Highway Administration					
16. Abstract The research and analysis emphasis is placed mainly on rural areas and subareas of a state. Rural areas in each state have different data needs and priorities than their urban counterparts. This study intends to ease the research process of determining the best planning practices for those rural areas. Results and Findings This section discusses the results and findings from a new survey. In January 1998, this project's Technical Advisory Committee developed a series of 12 specific questions designed to aid our research into the best planning practices for rural transportation planning. The analysis of the results begins with an aggregate view of their answers, on a overall nationwide basis. Suggested Steps to Create or Update a Rural Transportation Plan This section details the steps a rural transportation planning commission should follow to either create a new transportation plan or update an existing one. It is a 15 Step process that begins with the formulation of a committed planning commission to getting the plan adopted and setting parameters for future updates to the plan. This section carefully explains the need for each step, how to go about completing that step and real-life examples and references for follow up.					
17. Key Words transportation planning, rural transportation		18. Distribution Statement Document is available to the U.S. public through the National Technical Information Service, Springfield, Virginia 22161		23. Registrant's Seal	
19. Security Classification Unclassified	20. Security Classification Unclassified	21. No. of Pages 182	22. Price		

SI* (MODERN METRIC) CONVERSION FACTORS

APPROXIMATE CONVERSIONS TO SI UNITS				APPROXIMATE CONVERSIONS FROM SI UNITS			
Symbol	When You Know	Multiply By	To Find	Symbol	When You Know	Multiply By	To Find
LENGTH				LENGTH			
in	inches	25.4	millimeters	mm	millimeters	0.039	inches
ft	feet	0.305	meters	m	meters	3.28	feet
yd	yards	0.914	meters	m	meters	1.09	yards
mi	miles	1.61	kilometers	km	kilometers	0.621	miles
AREA				AREA			
in ²	square inches	645.2	millimeters squared	mm ²	millimeters squared	0.0016	square inches
ft ²	square feet	0.093	meters squared	m ²	meters squared	10.764	square feet
yd ²	square yards	0.836	meters squared	m ²	meters squared	1.19	square yards
ac	acres	0.405	hectares	ha	hectares	2.47	acres
mi ²	square miles	2.59	kilometers squared	km ²	kilometers squared	0.386	square miles
VOLUME				VOLUME			
ft oz	fluid ounces	29.57	milliliters	mL	milliliters	0.034	fluid ounces
gal	gallons	3.785	liters	L	liters	0.264	gallons
ft ³	cubic feet	0.028	meters cubed	m ³	meters cubed	35.315	cubic feet
yd ³	cubic yards	0.765	meters cubed	m ³	meters cubed	1.31	cubic yards
MASS				MASS			
oz	ounces	28.35	grams	g	grams	0.035	ounces
lb	pounds	0.454	kilograms	kg	kilograms	2.205	pounds
T	short tons (2000 lb)	0.907	megagrams	Mg	megagrams	1.102	short tons (2000 lb)
TEMPERATURE (exact)				TEMPERATURE (exact)			
Symbol	When You Know	Do The Following	To Find	Symbol	When You Know	Do The Following	To Find
°F	Fahrenheit temperature	°F - 32 ÷ 1.8	Celsius temperature	°C	Celsius temperature	°C x 1.8 + 32	Fahrenheit temperature
				°C -40 -20 0 20 37 60 80 100 °F -40 0 32 80 98.6 160 212 water freezes body temperature water boils			
NOTE: Volumes greater than 1000 L shall be shown in m³.				METER: a little longer than a yard (about 1.1 yards) LITER: a little larger than a quart (about 1.06 quarts) GRAM: a little more than the weight of a paper clip MILLIMETER: diameter of a paper clip wire KILOMETER: somewhat further than 1/2 mile (about 0.6 mile)			

*SI is the symbol for the International System of Measurement

TABLE OF CONTENTS

SECTION 1: EXECUTIVE SUMMARY.....	1
SECTION 2: INTRODUCTION	3
SECTION 3: ISTEA REVISITED.....	6
SECTION 4: LITERATURE REVIEW.....	9
KINGMAN AREA TRANSPORTATION STUDY.....	10
2020 SOUTHEAST MICHIGAN COUNCIL OF GOVERNMENTS (SEMCOG).....	12
THOROUGHFARE PLAN FOR MACON COUNTY	14
COLORADO RIVER REGIONAL TRANSPORTATION STUDY (CRRTS)	16
THOROUGHFARE PLAN FOR HYDE COUNTY	17
COLORADO CITY TRANSPORTATION STUDY	18
SMALL AREA TRANSPORTATION STUDY FOR SAN LUIS, ARIZONA	20
WINSLOW AREA TRANSPORTATION STUDY	21
COLORADO REGIONAL TRANSPORTATION PLANNING GUIDEBOOK	22
EVOLUTIONARY TRANSPORTATION PLANNING MODEL.....	25
RURAL ADVANCED TRAVELER INFORMATION SYSTEM.....	27
NETWORK FOCUSING FOR QUICK-RESPONSE SUBAREA ANALYSIS	29
COMPARING ALTERNATIVES IN MAJOR TRAVEL CORRIDORS	30
PUBLIC INVOLVEMENT IN A FOCUS GROUP SETTING.....	32
MASSACHUSETTS DATA GATHERING TECHNIQUES	33
SECTION 5: SURVEY RESULTS & FINDINGS	34
SECTION 6: CREATING OR UPDATING A RURAL TRANSPORTATION PLAN.....	53
STEP 1 – ESTABLISH THE PLANNING COMMITTEE	53
STEP 2 – ESTABLISH THE VISION, GOALS AND STRATEGIES.....	54
STEP 3 – INITIAL PUBLIC PARTICIPATION.....	58
STEP 4 – UPDATE THE VISION AND GOALS OF THE NEW PLAN.....	60
STEP 5 – DETERMINATION OF CURRENT SITUATION AND NEEDS	60
STEP 6 – MORE PUBLIC INVOLVEMENT.....	63
STEP 7 – DETERMINATION OF FUTURE DEMAND AND TRENDS.....	63
STEP 8 – RANK POTENTIAL PLANS, WITHOUT REGARD TO FUNDING	66
STEP 9 – PUBLIC INVOLVEMENT (CONTINUOUS).....	68
STEP 10 – DEVELOP THE FINANCIALLY CONSTRAINED PLAN.....	69
STEP 11 – ALTERNATIVES ANALYSIS	70
STEP 12 – ENSURE REGIONAL PLAN CONSISTENCY WITH STATE AND FEDERAL REQUIREMENTS	70
STEP 13 – GET THE TRANSPORTATION PLAN ADOPTED	70
STEP 14 – MONITOR AND RE-EVALUATE THE PLAN (AS NECESSARY)	71
APPENDIX A - PERSONAL CONTACT AND INTERVIEW LIST	73
TECHNICAL ADVISORY COMMITTEE:	73
OTHER ARIZONA COUNCILS OF GOVERNMENT:	74
OTHER CONTACTS AND INTERVIEWS:.....	75
ADDITIONAL CONTACTS:.....	76
INTERVIEW NOTES	77

APPENDIX B - BIBLIOGRAPHY OF REFERENCE MATERIALS.....	94
BIBLIOGRAPHY OF REFERENCE ARTICLES/BOOKS.....	94
BIBLIOGRAPHY OF TRANSPORTATION PLANS:.....	96
<i>Arizona</i>	96
<i>Connecticut</i>	96
<i>Colorado</i>	96
<i>Florida</i>	96
<i>Idaho</i>	97
<i>Indiana</i>	97
<i>Iowa</i>	97
<i>Louisiana</i>	97
<i>Maine</i>	97
<i>Michigan</i>	97
<i>Missouri</i>	98
<i>Nebraska</i>	98
<i>Nevada</i>	98
<i>New Jersey</i>	98
<i>New York</i>	98
<i>North Carolina</i>	98
<i>North Dakota</i>	99
<i>Oklahoma</i>	99
<i>Washington</i>	99
<i>West Virginia</i>	99
APPENDIX C: INDIVIDUAL SURVEY RESPONDENT ANSWERS	100
ALASKA.....	100
ALABAMA	101
ARKANSAS	102
ARIZONA	103
CALIFORNIA	104
COLORADO	108
CONNECTICUT	111
DELAWARE.....	113
FLORIDA	114
HAWAII.....	115
IOWA	117
IDAHO.....	119
ILLINOIS	122
INDIANA	123
KANSAS.....	124
KENTUCKY	126
LOUISIANA	128
MARYLAND	129
MAINE	130
MICHIGAN	132
MINNESOTA.....	137
MISSOURI	141
MONTANA	147
NORTH CAROLINA.....	150
NORTH DAKOTA.....	152
NEBRASKA	153
NEW HAMPSHIRE.....	154
NEW JERSEY	155

NEVADA	157
NEW YORK	159
OKLAHOMA	160
OREGON	162
PENNSYLVANIA	163
SOUTH CAROLINA	165
SOUTH DAKOTA	167
TENNESSEE	168
TEXAS	169
UTAH	170
VIRGINIA	174
WASHINGTON	175
WISCONSIN	176
WEST VIRGINIA	177
WYOMING	178

Section 1: EXECUTIVE SUMMARY

Introduction

This study was prepared for the Arizona Department of Transportation (ADOT) in response to the query, "What are the best practices of rural subarea planning? What do other agencies do to coordinate statewide and local planning?" The research and analysis emphasis is placed mainly on rural areas and subareas of a state. Rural areas in each state have different data needs and priorities than their urban counterparts. This study intends to ease the research process of determining the best planning practices for those rural areas in your area or state. It intends to outline the "best of the best", identifying the most commonly used practices, as well as new and innovative ones.

ISTEA Revisited

Many of the initial deadlines have passed for implementing the new planning processes of the ISTEA into the structures of the state Departments of Transportation and Metropolitan Planning Organizations. We are now in position to move forward with air quality concerns walking hand in hand with transportation improvement projects. This section discusses the major programs mandated by the ISTEA enactment, with further analysis of its pros and cons since implementation in the real world.

Literature Review

This section of the report contains a detailed review of available literature on the subject of rural subarea planning practices. Individual sections of each summary plan or method highlight specific planning practices implemented in that project under discussion. This section is intended for use by planning organizations to see how other plans implemented their "best practices". Part I discusses several individual transportation plans, both from within the state of Arizona and without. Part II discusses some available test studies done on rural areas that proved to be significantly effective.

Survey Results and Findings

This section discusses the results and findings from a new survey. In January 1998, this project's Technical Advisory Committee developed a series of 12 specific questions designed to aid our research into the best planning practices for rural transportation planning. The analysis of the results begins with an aggregate view of their answers, on a overall nationwide basis. Of the 80 respondents throughout the nation (including Hawaii and Alaska), 5 distinct geographical regions were identified to further analyze the survey responses. A discussion of each region's answers appears after each question (or set of related questions, such as air quality).

Suggested Steps to Create or Update a Rural Transportation Plan

This section details the steps a rural transportation planning commission should follow to either create a new transportation plan or update an existing one. It is a 15 Step process that begins with the formulation of a committed planning commission to getting the plan adopted and setting parameters for future updates to the plan.

This section carefully explains the need for each step, how to go about completing that step and real-life examples and references for follow up.

Section 2: INTRODUCTION

Background

This study was prepared for the Arizona Department of Transportation (ADOT) in response to the query, "What are the best practices of rural subarea planning? What do other agencies do to coordinate statewide and local planning?" A high number of published plans and studies have focused, to date, on the urban metropolitan areas within a state. The emphasis of this study, however, is placed mainly on rural areas of a state. Rural areas in each state have different data needs and priorities than their urban counterparts.

What planning needs do these areas have that are not considered in standard urban plans? What information or data is currently lacking when attempting to do a transportation plan in either a rural area or small municipality? How do we know for sure if we are following the mandates of Intermodal Surface Transportation Efficiency Act (ISTEA) properly? Am I receiving all of the benefits my area is allowed? How can our plan effectively be "rolled up" into the statewide plan?

How can this study help you?

This study attempts to answer the above questions in a readable, usable format. A literature review was completed as the first step of the process, enabling the author to outline the available plans and studies conducted by Arizona as well as other states on their rural areas.

Next, a national survey was distributed to establish contacts and gain current information on planning practices from Alaska to Wyoming. The surveys were sent to Departments of Transportation and regional planning organizations in each state. The responses were analyzed, on both a national and regional level, to determine the most commonly-used rural planning techniques.

The results were then compared to the findings in the literature review on the same subject. At that point, recommendations were made regarding the "best practices" of rural subarea planning. These were put forth in the Suggestions and Recommendations Section of this report.

Who can use this study?

This study intends to ease the research process of determining what might be the best planning practices for your area or state. It outlines the "best of the best", explaining their individual merits, benefits and limitations. From this study, you should be able to make a rational, educated decision regarding which planning practices would best suit your particular planning area.

The primary customers of this report include, but are not limited to:

- state DOT transportation planners,
- small urban locale planners, and

- planners in several types of regional transportation planning offices (councils of government, associations of cities and counties, federal lands offices, etc.).

What is the current situation in Arizona?

The next question you ask: "Haven't the local planning organizations devised an effective planning process to follow each time they update?" The answer is both yes and no. While each organization has previously done at least one transportation plan in the past (on some level), ISTEA has forced each of them to re-invent their planning practices.

Readers will see in the following section entitled "ISTEA Revisited" that each organization must justify each improvement project in several ways before the project can embark, using criteria such as funding, prioritization, proper authorization and air quality to name a few.

For this study, the transportation planners at each regional Council of Government (COG), Metropolitan Planning Organization (MPO) and ADOT were personally interviewed to determine their practices, including remaining needs and wants, in rural subarea transportation planning. At the time of the interviews (February 1998), each COG had recently completed its long-range Policy Plan and was embarking on its Project-Specific Plan this year -- to be completed in late 1998 or early 1999. The planning horizons of each project will range from 5 to 20 years ahead, and each project must follow the adopted policy on road improvements in order to be included in the plan. While the Policy Plan might be updated each 5 years, the project-specific plan would be updated on an annual basis, in concert with the Transportation Improvement Plan (TIP) requirements in ISTEA.

The responsibility of obtaining significant public involvement is not an issue at the state or COG level. Each planner stated their view that meaningful involvement by the public was happening at the local level before projects were brought to their attention. They further explained that the local leaders would elicit public response to proposed road improvements through their own methods (town meetings, forums, flyers, etc.) before the plans were forwarded to the COG or DOT office for funding approval.

The primary concern for the COGs and ADOT in developing project plans is the staffing limitations at the local level to collect adequate traffic count data to justify a project. Traffic counts are an important part of planning on roads, at intersections and on stretches of highway. Accurate traffic counts, in conjunction with the land use policy, allow planners to create credible traffic and population projections years ahead. Without these projections, planning practices can only be short-sighted and often uneducated.

Discussion of the main parts of this study

This study explores the needs and current practices of the planning organizations in Arizona as well as other states, in an attempt to determine the "best practices" of subarea planning in rural areas of the state.

Section 3 of this project refreshes our memory on the ISTEA requirements and benefits that each organization must consider in their plans.

Section 4 studies several recently-completed transportation plans to derive their particular planning practices and successes. This section also explores some innovative tests and studies recently done by consultants and planning organizations in an attempt to devise new, more effective planning methods.

Section 5 reviews the results of a national survey conducted in February/March 1998 of various Departments of Transportation, Councils of Government and other regional planning organizations. This section also analyzes and discusses the above findings in a meaningful, readable manner.

Section 6 contains recommendations and suggestions on the best practices, with explanation of features and benefits.

Finally, the *appendices* show in detail actual survey results and a full list of contacts and references used in the report. Also included are transcripts of interviews with each contact made during the research for this report.

Section 3: ISTEA REVISITED

Introduction

The enactment of the Clean Air Act Amendments (CAAA) have been in effect since 1990, followed by the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991, and the Interim Final Rule on the ISTEA in 1993. Many of the initial deadlines have passed for implementing the new planning processes into the structures of the state Departments of Transportation and Metropolitan Planning Organizations. We are now in position to move forward with air quality concerns walking hand in hand with transportation improvement projects. The right hand must now know what the left hand is doing at all times, or the dollars will dry up.

Following is a brief recap of what state and local government transportation agencies have been asked to do since 1991 to incorporate the mindsets (transportation and the environment) into all transportation improvement plans and long-range visions.

The ISTEA, the implementation and funding arm of the CAAA, was first enacted in October 1991 without many of the necessary regulations for acting out the requirements (to come later in the Interim Final Rule, 1993). This act greatly increases funding for highways and mass transit throughout the country, increases transferability of funds, allows broader eligibility of projects (explained later), funds congestion and air quality improvements, and establishes a much greater involvement by local officials in the planning process from “day one”.

The major programs in the ISTEA

A list of the most important programs enacted by the ISTEA:

- The National Highway System (NHS) that effectively disaggregated the old state-to-state highway system, to establish one final 155,000 mile NHS in 1994.
- Surface Transportation Program (STP) for funding highway construction and rehabilitation, mass transit, car pool projects and bicycle programs
- Bridge program
- Interstate Construction & Interstate Substitution program
- Congestion & Air Quality program
- Toll Reimbursement
- Federal Land funding for highway improvements in national parks, Indian reservations, and other federal facilities and landmarks (mandating the preservation of wetlands, parklands, scenic views and historically or architecturally valuable buildings)

Each state is required to implement an entirely new planning management system for each major program required by the ISTEA, some asset-based and some performance-based. While they are separate, independent management systems, they are required to coordinate with each other and work together for the state’s transportation improvement plans and long-range vision.

The Management Systems

Asset/facility based MS:

Public Transportation MS

Pavement MS

Bridge MS

Performance-based MS:

Intermodal MS

Congestion MS

Safety MS

As you can logically guess by the names of these MS's, they overlap each other, and in many ways are inter-dependent. The Intermodal MS, in fact, overlaps every other MS in one way or another, hence the requirement for the Intermodal Management System (IMS) to be the guiding process for the state's 3-year Transportation Improvement Plan.

Intermodal means many things, but strictly speaking, it pertains to the transfer and flow of people and/or goods from one mode (method of transportation) to another, or among several modes. A mode can be any of the following, generally accepted: highway-truck or -bus, rail, air, water, pipeline, bicycle and pedestrian.

Therefore, an IMS would incorporate the ideas of public transportation, pavement and bridges, as well as congestion and safety issues.

Attainment in Air Quality in ISTEA

So, with the ISTEA, you can't just build roads anymore, where it looks like they should go – you must have a long-range plan that incorporates the control of consequences to our air and water (pollution) and the way we use land. This solidified and enforced the need for air quality issues to be considered before any transportation improvement project could begin.

The Clean Air Act Amendment (CAAA) of 1990 identifies the rules for the difference between Attainment and "Non-Attainment" areas within each state. "Non-Attainment" refers to areas that exceed the maximum required levels of pollution and emissions for identified pollutants. For each non-attainment area, there has to be a short-range plan in place for improving that area to reach clear levels of attainment within a certain time frame.

The ISTEA (1991) includes the muscle to implement and enforce those requirements. Non-attainment areas are now required to provide concrete plans to reduce emissions within 3 years in order to receive *any* federal funding for projects in those areas. These plans are intended to be one part of the new Transportation Improvement Plans (TIP). The Interim Final Rule (1993) set deadline dates to these and the other ISTEA mandates.

Good News and Bad News

Good news about the ISTEA is that it requires more comprehensive planning and adequate funding *before* the project is approved. It also helps to stifle the bigger or more-questionable jobs (if justification cannot be documented, i.e. the proposed project raises emissions, mars the land, or alternate paths are not considered, etc.).

New participants are not only encouraged, but their recruitment is required by the ISTEA. Public interest groups are expected to be involved since the beginning of the planning process. There are rules to this involvement, however. The involved groups cannot simply oppose a new project to be heard. They must either get actively involved in the planning process from the beginning and/or propose other viable solutions to the transportation issue at hand.

The only negatives include the fact that planning is more laborious and time-consuming than before the ISTEA. For example, in the past, the planning departments would begin on a new project right away. Now, justification to the public, involvement by private groups in the planning process, and full funding are all required before a project can begin at all.

Another obstacle is the fact that, when ISTEA was enacted at the federal level in 1991, many state laws and established practices directly or indirectly conflicted with the new mandates. States had to juggle the deadlines for implementation while dealing with their state lawmakers to enable them to work together.

Conclusion

The ISTEA required major changes in the entire corporate culture of every state DOT and MPO in the country. Some of them had already formed similar planning groups that could be adapted to ISTEA requirements without much trouble (i.e. the bridge or pavement MS), but many of the MS's and long-range planning mandates had to undergo major overhaul to comply with the new rules.

This created great upheaval in the structure of every transportation planning office in the country, certainly for the better but not without some growing pains. Transportation planning went from "We've got to have this road, lets go ahead", to involving the new ISTEA philosophy in every project: (1) decentralized decision-making, (2) environmentally friendly consideration, and (3) to be more responsive to the needs of an increasingly diverse population and set of businesses.

In conclusion, while ISTEA brought a major change in planning methods, it provides excellent new avenues for funding of road improvements throughout the country. The mandates ensure that all road improvement plans have the environment in mind and funding in place, long before the first stretch of concrete is poured.

Section 4: LITERATURE REVIEW

The following is a detailed review of available literature on the subject of rural subarea planning practices. The sections of each summary plan or method highlight specific planning practices implemented in that project under discussion. This section is intended for use by planning organizations to see how other agencies implemented their plans.

This section discusses several individual transportation plans, both from within the state of Arizona and without. Each plan was written for either a small urban locale or a larger region that includes rural roads as well as a city or town. These recently completed studies are discussed in detail, including specific “best practices” of choice by the respective planning organizations – how they were agreed upon and used.

This section also discusses some available test studies done on rural areas that proved to be significantly effective. The intention of this section is to provide the reader with some innovative alternatives for planning that may apply to their particular coverage area. Highlighting this section is recently finished draft of a suggested process for creating quality rural transportation plans, authored by the Colorado Department of Transportation for its 15 regions.

Kingman Area Transportation Study
Kingman, Arizona
November 1997

Introduction

The study, beginning in 1996, consists of a multimodal 25-year transportation plan for the entire Kingman region. The plan focuses on a small urban area (Kingman and its surrounding land) with a total population of 32,000 people -- 15,000 of which live outside the city limits. The Kingman area is typical of the subareas we are discussing in this report, with both rural and urban areas in the plan, and so we will detail the planning methodology below. While the study encompasses a 25-year vision, it also includes shorter time horizons in its projections. The Work Program component consists of a 5-year TIP and a 10-year Action Plan, in addition to the 25-year long-range plan. Included in this summary, the main discussion sections consist of identification of *existing population and traffic conditions*, projections of *future conditions*, *planning methods* based on those results, and *prioritization criteria* for project proposals. Also discussed in this summary are *funding alternatives* and methods for getting *public involvement*.

Existing Conditions, Future Projections and Planning Methods

To establish the existing conditions in the area in terms of population and traffic flow, the planners first established a database of functional classifications, traffic volumes and controls as well as existing facilities and services. They then summarized the current situation based on Level of Service (LOS) results.

From there, they projected future roadway and traffic conditions to the years 2000, 2005 and 2020, again based on LOS levels. To get the traffic volume forecasts, they updated the TRANPLAN forecasting model used in the 1987 Kingman study, then comparing those projections to estimated roadway capacities in those same years to establish LOS levels. For those same years, they projected intersection LOS levels in much the same way.

With the data gathered above, the project team needed to use that data and projections to establish some planning objectives. First, they had to rate each roadway and intersection by some comparable criteria. Evaluation of traffic conditions on each roadway or intersection was treated as different LOS levels, using a rating system of A-F. On surface (city, non-highway) streets and intersections, a level of C or better was acceptable, while on highways a level of D or better was necessary.

To determine LOS for roadway segments, "typical capacities" were determined, based on functional classification and number of lanes. The LOS at intersections was evaluated based on the procedures detailed in the 1994 Highway Capacity Manual (HCM). The TAC first determined the current situation on each road and intersection in terms of LOS, then projected the figures over time through 2020.

Project Prioritization Criteria

Once the LOS's had been established, both for today's conditions as well as projections for future conditions, the team had to list a set of recommendations for roadway improvement that could ensure a 'C' or better LOS in the year 2020. Since the potential recommendations were so numerous, priorities had to be set for implementation of the recommended projects.

The project team utilized the following evaluation criteria, rating them based on a 1-2-3 system (3 being the highest priority), and totaling the values of each project for ranking:

- Traffic safety
- Congestion reduction
- Cost-effectiveness
- Design standard conformity
- Economic development impact

Recommendations

The final, recommended roadway plan included short to long range deficiencies and potential new roadway alignments to better serve the projected traffic volume. The plan became very project-specific in orientation, with proposed projects based on cost-effectiveness as well as other priorities. The projects were divided into short-, medium- and long-range categories based on priority and timeframe needs.

Alternative Funding Ideas

In addition to the traditional funding sources (HURF, Local Transportation Assistance Fund, federal aid, etc.), the project team identified several other potential funding sources, including sales tax revenues, private contributions, and money from developers to name a few. It was determined that some sort of alternative funding must be secured in order to adequately implement the necessary road improvements by 2020.

Public Involvement

Kingman saw the strong needs and benefits of getting significant public involvement incorporated into this plan. The study included feedback from "two project newsletters, two sets of public forums and a series of community interviews" to ascertain needs and issues from the perspective of the members of the community.

Contacts for additional information:

Dennis Roberts
City of Kingman
310 N. Fourth Street
Kingman, AZ 86401
Phone: (520) 753-8132
Fax: (520) 753-8118

Dan Marum
BRW, Inc. (consulting firm)
3003 N. Central Ave., Suite 700
Phoenix, AZ 85012
Phone: (602) 234-1591
Fax: (602) 230-9189

**2020 Southeast Michigan Council of Governments (SEMCOG)
Regional Transportation Plan
March 1997**

Introduction

This regional transportation plan involved input from the seven county road commissions, the City of Detroit, the Michigan Dept. of Transportation and the five local transit service providers.

The plan has a horizon to 2020, encompassing 25 years of transportation changes and growth. The planning commission embarked on an intensive update on their traffic, land use, and population projections to make more accurate decisions on prioritization of road improvement projects in the near and far future.

Traffic Volume Projections

SEMCOG updated its formal future traffic volume forecasts with an extensive Household Travel Survey for about 7,000 households in 1994. It incorporated the aggregate responses as a refinement to the formal traffic volume model produced by historical figures.

Deficiency Analyses

The planning commission also completed an deficiency analysis of major transportation elements: congestion, safety and bridges. This material was used as reference for future refinement of the modeling process. The methods are further explained below.

Congestion: Congestion deficiencies, present and future, were identified by determining volume-to-capacity ratios for all non-local roadways using travel demand models for the volume. The commission then determined a limit to acceptable service level (0.8 in this case, in 5 year increments), beyond which a roadway segment was considered "capacity deficient". They compared the results of different alternatives, including build versus no-build, to determine the long-term savings of each option considered.

Safety: Recent accident data was used to determine safety deficiencies, comparing data from intersection crashes and/or injuries to regional norms. Levels of safety deficiency were then established to easily "rank" the intersections and road segments accordingly.

Bridges: The results of bridge deficiency split the needy ones into two distinct categories, structurally deficient and functionally obsolete.

Public Involvement

Key elements in the effort to improve significantly useful public input and availability for review of the plan for comments on a wide area basis:

- Surveys reaching in excess of 10,000 people
- Telephone opinion survey that reached 2,400
- Review by transportation committees

- Promotion using a newsletter, Regional Update
- Media interviews
- Internet publication
- Informational videos on public TV

Regional Development Forecast Modeling

The 2020 Regional Development Forecast provides projections of growth and change (population and land use) for the total Southeast Michigan region -- from counties to small municipalities to rural areas—in 5-year increments from 1995 to 2020. This data was used as input for all of the traffic projections for the report, including travel demand and congestion modeling.

The Regional Development Forecast was completed over three stages by three different models: Regional Forecast Totals (RTF), the DRAM/EMPAL model (Disaggregated Residential Allocation Model/Employment Allocation), and ZAP (zonal allocation program).

To direct the allocation of growth in households and jobs at the small area level for the RTF, SEMCOG used data on six different land coverages to calculate current vacant holding capacities for households and jobs as the basis for the projections.

The EMPAL model was used to project the future distribution of jobs, by eight industrial classes, by forecast district. The DRAM predicted the future distribution of households by income quartile and presence/absence of children using EMPAL outputs, as well as land data, travel time data, and the household RFTs already projected.

The Regional Development Forecast output includes household totals and households by income quartile and life cycle, population projections (total, household, and group quartiles), and employment projections (total and by industrial class) with all numbers at 5-year intervals until 2020.

These projections were then reviewed in a series of public forums to obtain feedback on the numbers. This feedback was valuable, and the numbers were adjusted as necessary. The final numbers, after these adjustments were made, became the adopted RDF in 1996.

Thoroughfare Plan for Macon County
Macon County, North Carolina
January 1997

Introduction

North Carolina Department of Transportation has a *Statewide Planning Branch* that manages and coordinates every transportation plan in the state, from rural to urban planning, from state to county to city. While the county has jurisdiction over all rural areas in within its county lines for planning, it works closely with the Statewide Planning Branch to create its long-range plans. By planning in this way (at a central location), NCDOT is assured that all plans work in concert with each other, at every planning level. Included in this summary are main sections including determination of *existing conditions*, *future projections* and *planning methods*, *project prioritization*, and *alternative funding ideas*.

Existing Conditions, Future Projections and Planning Methods

Macon County involves 2 urban cities, but is mostly a rural county. It was necessary to categorize each road by type (see reference at end of this summary) and to factor in the capacity of each road type, to determine the necessary improvements. They then used Level of Service (LOS) to rate the current traffic flow volume on each road and to forecast future volumes.

To determine location of problem areas on roads, they analyzed updated accident data. Many of the accidents in rural Macon County involved rear-end and left-turn problems. Most of the thoroughfares are 2-lane, 2-way roads with sudden turns onto local roads in each populated area.

Different types of land use promote varying degrees of increased traffic flow. They trended the development rates and types of land use development over the past 20 years to predict future traffic needs in the next 31 years.

To forecast population growth, the project team used the past 24 years of raw data, and other logical factors, to determine future population growth in the county. They factored in the expansion of residential development, increase in employment opportunities, and the increased popularity of the county as a resort and retirement community. No data disputes the prediction that this trend will continue.

Project Prioritization

Environmental factors can be broken down into three categories: physical (air quality, water resources, wildlife and vegetation), social (housing, people, health, etc.), and economic (businesses, employment, costs). The relative impact is largely subjective depending on the pros and cons of each factor.

Analysis of the benefits is based on the projected cost savings to the users, in relation to the cost outlay for the improvement. The total benefit comes from three categories: vehicle operating costs, travel time costs and accident costs. How much these costs reduce due to the "project" improvements is the total benefit of the project.

Alternative Funding Ideas

In addition to the funds provided by the ISTEA for each state TIP, secondary funding is traditionally provided by the County Construction Account within each county. When needed road improvements are not covered by TIP funds, this secondary account usually covers paving and stabilizing unimproved roads among other small improvement projects.

For reference...

North Carolina Rural Classification of Roads:

Principal Arterial System - continuous routes that serve corridor movements having substantial statewide or interstate travel characteristics.

Minor Arterial System - an intrastate, inter-county network that links cities, larger towns and other places such as resorts.

Collector Road System -

Major Collector: provide service to larger towns, that does not have higher classification, can link these towns and places to the higher class roads.

Minor Collector: local traffic from local roads, short distances

Local Road System: streets and roads providing direct access to property; ex: residential streets

Colorado River Regional Transportation Study (CRRTS)
September 1993

Introduction

This study is a cooperative effort by several states (Arizona, California, Nevada), counties (Mohave/AZ, San Bernardino/CA, Clark/NV) and cities (Bullhead City, Needles, Laughlin), as well as the San Bernardino Assoc. Governments and the Fort Mohave Indian Tribe. The following summary of this report discusses the project team's determination of existing conditions and future projections, its chosen planning practices, and its recommendations regarding road improvements and future planning coordination.

Existing Conditions, Future Projections and Planning Practices

For research purposes, the team employed representatives from the University of Nevada at Las Vegas (UNLV) graduate studies program to develop land use data (using GIS software). This group also prepared the traffic forecasting model (using TRANPLAN software) for the study area. Copies of these packages and models were distributed to equipped jurisdictions within the planning area. These offices would maintain the databases to aid in future planning efforts. Then, the team decided that the NDOT would be the "regional caretaker" of the entire system. The responsibility of each jurisdiction would be to adequately update their portion of the model, then forwarding the data and results to NDOT for inclusion in the regional planning model.

The project team used the results of the 1990 US Census for current population figures. They then employed the GIS software for land use projections to ultimately forecast population and traffic figures over the next 15 to 20 years.

Recommendations -- Long-Range Project Plan

Using the population and traffic forecasting results as discussed above, the project team developed a project-specific plan for the next fifteen to twenty years. More than ten specific projects were detailed at this point that would allow the region to handle the future traffic flows.

Recommendation for future planning efforts -- Joint Powers Agency

Because this study involved several different states, counties and cities, the project team suggested the formation of a Joint Powers Agency to preside over the entire region. It was determined that existing legislation would allow for adequate power to the JPA. Potential membership suggestions were made in the report.

Thoroughfare Plan for Hyde County
Hyde County, North Carolina
April 1993

Introduction

The makeup of this study is very similar to the Macon County study, done by the same Statewide Planning Branch of NCDOT. Again, the county has jurisdiction over the planning process, but the SPB worked closely with the county, as evidenced by the similarity between studies. This summary focuses on new or different planning aspects of this report, compared to the previous Macon County report, including population trends, traffic counting and travel demand.

Population Trends

The population in Hyde County has actually dropped in the last 30 years, but most of it was in from 1980 to 1990 (7.9% decline). It has the lowest population density in the state and the second smallest total population overall in the state. New recreational and residential development, though, suggests that population may grow in the next planning period. It looks as if the growth may be seasonal in nature rather than year-round. The road system must be able to handle the peak seasonal population. Other factors considered in population growth and traffic flow included economy and employment trends.

Traffic Counting/Travel Demand

Most traffic in Hyde County is rural. Traffic counts are regularly taken by NCDOT, and traffic trends over the past 20 years were studied in order to predict travel demand. They also determined Average Daily Traffic (ADT) volumes on the state highways in the county. These volume counts were compared to the capacity of the roadway in each case, in terms of Levels of Service (LOS) rating.

Colorado City Transportation Study
Colorado City, Arizona
March 1993

Introduction

This study was prepared for Colorado City by an independent consultant, JHK & Associates, as the transportation component of a much larger project, called the General Plan. Colorado City, in effect, has a twin city (Hildale, Utah) that is separated only by the state line between Arizona and Utah. In this summary of the final report, several planning issues are discussed, such as *existing conditions, future traffic projections, planning methods, project prioritization, the adopted plan and alternative funding opportunities.*

Existing Conditions, Future Projections and Planning Methods

The recent high growth rates in Colorado City and Hildale, UT were discussed in the final report. Rather than forecasting population with some specialize method, population projections used in this report, going up to the year 2020, were provided by the Western Arizona COG and the State of Utah Planning and Budget Office.

Traffic counts were taken by ADOT on two different days of the week while this project was underway. Using that data, the project team plotted a 24-hour distribution pattern, determining the peak traffic periods on each road and intersection. Also considered was the relevant number and types of traffic accidents, but no pattern could be culled from this data to locate particular problem areas.

Even though WACOG and the Utah Planning office provided estimates that the traffic volume in 2020 would increase by more than 125%, no road would yet reach 50% capacity in any area. Hence, no computerized traffic forecasts were prepared for this report.

Project Prioritization

The project team needed to prioritize their many potential projects in some quantitative, yet fairly subjective, manner. Final prioritization for these projects included factors such as "pipeline" projects (already underway), immediate needs, availability of funding, and future development potential.

Adopted Land Use Plan

The land-use plan calls for expansion of residential areas (including housing, schools, churches, etc.) which will require new roads. There will also be new recreational facilities (community park and hiking trails) and highway commercial areas. The new plan has more than adequate capacity to accommodate the projected population in 2020.

Adopted Transportation Plan

Most of the projects in the adopted plan include an increase in full intersections to accommodate past and future growth. Some recommendations included new street cross-sections on roads to be built, including wider roads and bicycle lanes.

As far as rural planning was concerned, with the development of a new park (Arizona State Park in Rosy Canyon), special road improvements would need to be effected.

Alternative Funding Suggestions

Traditionally, roadway improvements not covered by ISTEA funds have been funded through Community Development Block Grants (CDBG). Another identified source was HURF funding, whenever it is applicable. If a new housing or commercial development is the cause of the project, partial or entire funding by the contractor is pursued. Finally, sales tax hikes were considered.

Small Area Transportation Study For San Luis, Arizona
May 1992

Introduction

This study was completed in 1992 for a small, urban area in Arizona. The most important issues that required a new transportation plan for the San Luis area included, among others, (1) the relatively fast rate of population growth and (2) the increasing travel demand. This summary discusses, as its main sections, *existing conditions* and *future projections*, *planning methods* and the *final adopted transportation improvement plan*.

Existing Conditions, Future Projections and Planning Methods

For the short-term plan, the project team determined and analyzed existing traffic volumes in the San Luis area, using methods such as traffic counting, a field survey of the existing conditions, and feedback from the city and state staff. The team then prepared and analyzed the projected 1996 traffic and pedestrian volumes for the area. Throughout the project, the team regularly received guidance from the project's Technical Advisory Committee.

The only projection technique mentioned was that they took the annual population percentage increase in the city from 1980 to 1990, and used those percentages to project population in the coming years. For the long-range plan, they used relatively the same inputs.

The Transportation Plan

The transportation plan included 2 main components: the five-year plan and the twenty-year plan. The short-range five-year plan was very project-specific in orientation, identifying more than a dozen major needs for road and intersection improvements to handle the current traffic flow. As more evidence that this plan was project specific, rather than simply policy-based, a full cost analysis for each and all projects was outlined. The long-range (20-year) plan was also project-specific in nature, rather than policy-based.

Winslow Area Transportation Study
Winslow, Arizona
February 1992

Introduction

This study was conducted by BRW, Inc., an independent consulting firm, for incorporation into the Capital Improvement Program for the City of Winslow. The primary objective was to prepare the transportation element of the CIP. It identifies both current and future projected traffic problems for a 20-year period (until 2012), while recommending improvement projects for the same time frame.

Existing Conditions, Future Projections and Planning Practices

ADOT provided the traffic counts for this project, gathered in 1991. In addition, ADOT supplied traffic accident data from 1988-1990. Furthermore, the independent consulting firm determined high accident locations, roadway capacities and intersection capacities with further data analysis. Current population and traffic levels were determined using the 1990 Census results (locally provided by the City of Winslow's 1990 Census Consultant).

To determine relatively accurate traffic forecasts, the consulting firm prepared projections of population, employment and dwelling units. All of these factors, individually as well as collectively, contribute to the traffic flows in a particular region or area. Once these socio-economic conditions were determined and forecast, the firm then used manual techniques (rather than a GIS) to predict traffic conditions in the future, up to 2011. The technique used for these projections was garnered from a report covering quick-response urban travel estimations.

Recommendations

The firm then made recommendations for specific project completion to assure adequate road conditions into the next twenty years. These recommendations were made in stages - five-year project plan and twenty five year project plan. The short-range plan consisted of seven specific projects to be completed by 1997 in order to handle immediate and impending traffic flow problems. The long-range plan consisted of several scope-oriented general road and intersection improvement suggestions, aimed at ensuring the long-range policy.

Other projects recommended were:

- *Bicycle/Pedestrian Circulation Plan*, in hopes of easing the burden on the traffic flow through town
- *Roadway Design Standards* (right-of-way and lane width)
- *Traffic Impact Policy* (requiring the consideration of traffic impact with every land development project proposal)
- *Access Control Guidelines* (access to the highway regulated to improve congestion problems)

Colorado Regional Transportation Planning Guidebook
Colorado Department of Transportation
January 1998

Introduction

Colorado has 15 Regional Planning Commissions (RPC) within its boundaries. All of these Commissions must regularly update their regional/rural transportation plans (9 of the 15 areas do not contain a major metropolitan area), which are rolled up into the state plan. To insure that each commission's plan is adaptable to each of the others for integration, the Colorado Department of Transportation created a "guidebook" and an extensive database software to aid the regions in their planning efforts.

The Process

CDOT developed an 11-step process to follow that will assure each RPC creates a quality update to their regional transportation plan. The document describes what is expected and provides supporting documentation as well to assist the RPC in completing each of the steps.

Step 1 – Transportation Planning Commission/Regional Planning Commission

This step requires the establishment and/or official membership list of the planning commission responsible for updating the regional plan.

Step 2 – Public Participation Process

CDOT created a separate "Guidelines for Public Involvement in Statewide Transportation Planning and Programming" to detail the expectations of the state for public input. The expectations are high and aggressive, while using the traditional channels of outreach – mailings, public meetings, mass media, videotapes, etc.

This step requires written compilation of significant issues and responses to those issues in the final regional updated plan.

Step 3 – Regional Values, Vision, Goals and Strategies

This step requires the RPC to determine the desired quality of life throughout its region. It forces the RPC to define common interests and expectations for the region, providing a unified focus in creating the rest of the plan.

Step 4 – Inventory of Existing Transportation System

The extensive data requirements of the RPC to adequately establish current and future transportation needs in its region prompted CDOT to create a comprehensive, computerized Transportation Planning Data Set (a standard database integrated with geographical information system/GIS). It provides the RPC with the latest and most accurate data available for planning purposes.

The data set includes programs that help the RPC complete all 11 steps of the plan, including current situations (i.e. current highway capacities, deficiencies of transportation modes, existing or planned projects, defined corridors, transportation features, geographic and socioeconomic data) and future projections (i.e. future traffic volumes, identification of trends, creation of prioritized and financially constrained project lists).

Step 5 – Socioeconomic and Environmental Regional Profile

This step establishes an overview of the region’s population, economic conditions and tourism profile. An environmental analysis (how prospective projects affect the environment – positive and/or negative) is also expected in this step. An projects shown to adversely affect the environment in any way are no longer considered viable projects and cannot be included in the regional plan.

The RPC should add to and update the information provided in the Dataset provided by CDOT. To project future conditions and levels of growth, the RPC should this updated data and factor it with the data supplied CDOT to make an adequate projections.

Step 6 – Mobility Demand Analysis

This step is the most significant, in that accurate estimation of travel demand for transportation facilities is necessary to make proper decisions in the plan. Poor estimates result in worse decision-making, which can be costly and frustrating for both CDOT and the public.

For rural areas, CDOT recommends the traditional historical trend method to determine future demands of travel. In some cases, more detail is required. Simplified versions of more complex planning techniques are now made available as needed from CDOT.

Step 7 – Alternatives Analysis

In this step a list viable options is developed and rated. The lower-cost TSM (Transportation Systems Management) and “No Build” options are considered along with the proposed project options. Rules for justification of proposed projects is included in the Guidebook, which can change depending on the situation and project.

Step 8 – Preferred Plan

At this point, the RPC develops a “perfect world” list of viable, necessary projects, with no regard to funding availability. This list contains all of the projects that survived the first screening process and fill a justifiable need.

Step 9 – Prioritization Process

In the real world, long range transportation needs generally exceed expected revenues. So, it is necessary to prioritize projects to decide which ones will be done first, or at all.

CDOT suggests a list of criteria, scored based on a weighted scale depending on the vision and goals of that particular RPC.

Some criteria to consider for inclusion on the list include public support, congestion level (current or future), safety, environment, system continuity, preservation of system, economic

impact, inter/multi-modal and ability to implement. The actual weight given to each criterion should be determined by the RPC, again with consideration to their vision and goals.

Step 10 – Financially Constrained Plan

Once the prioritization is completed, estimated costs and available funding (provided by CDOT) are considered to determine the logical “cut-off” point of financially feasible projects to be included in the final regional plan. It is suggested that the final list of projects be somewhat longer than the “cut off” in case additional funding arises or projects are completed under budget.

This step also requires an aggregate assessment of the total social, environmental, energy and economic impact of the constrained project list on the region, as well as an assessment of the list’s consistency with the vision and goals of the region (as determined earlier in the process).

Step 11 – Regional Plan Consistency with State and Federal Requirements

Finally, in order to actually receive federal and state funds for projects, the plan must follow all of the rules and regulations set forth by the state and federal governments for transportation plans, including ISTEA requirements.

Conclusion

This process provides all of the rural planning organizations in the state with a usable, stable set of rules, procedures and data for updating their transportation plans in a consistent manner. This allows the state DOT to “roll up” these plans easily into the statewide plan. While this idea seems simple and logical, rarely is this synergy established at any level, let alone statewide!

Evolutionary Transportation Planning Model

(Taken from: "Evolutionary Transportation Planning Model: Structure and Application", Transportation Research Record, No. 1493, July 1995)

Evolving the demand from year to year in Data Modeling (Dynamic Data Modeling)

This planning model determines the demand in a given year based on the demand in the previous year. The model takes into account redistribution of a fraction of the work trips each year associated with the relocation or job changes of families currently in the area, plus changes in distribution associated with growth (or decline) in population.

Advantages of Dynamic Data Modeling

This approach to data modeling provides more specific data for the planner and gives a more accurate reflection of benefits and costs. By factoring in the above data changes to last year's demand (rather than using the aggregate demand of the past 10 years without any changes), traffic flow projections can be more accurate than previously modeled.

This system also provides the ability to incorporate an observed data set (such as a trip table) into the model. The traditional modeling technique (equilibrium/static) does not allow for a new trip table to be incorporated into the model, but the evolutionary model asks for new data to more accurately reflect traffic trends.

Finally, this model that "updates" the traffic projections adds more realism to the model in that planners can know that current trends have been adequately incorporated into the model when making their new long-range plans.

Disadvantages of this model

Certainly, by incorporating fresh, new trip tables and traffic data into a model, and then factoring in predictable population changes, the requirements for manpower and money increase significantly with this new model. Also, last year's traffic flows cannot be completely indicative of next years traffic flows, without exception to the rule. There may have been mitigating circumstances that created unusual traffic flows in the past year (recreational events, weather conditions, etc.). Finally, the data requirements for efficient production of this model are much higher than traditional data models.

Suggested Planning Alternatives including the evolutionary model

Hybrid: equilibrium for day-to-day forecasting, evolution for year-to-year forecasting.

Evolutionary: evolution for both day-to-day and year-to-year forecasting

Alternative Hybrid: evolution for day-to-day, equilibrium for year-to-year forecasting

It is discouraged that the evolutionary model (day-to-day and year-to-year) be utilized due to the computational requirements, even by the creators of this model. However, the first hybrid option would probably be best implemented for planning offices, requiring the data and manpower demands only on a yearly basis, rather than day to day.

Conclusion

This new evolutionary data modeling concept can best be used in special circumstances when land use, population and/or employment opportunities will or have recently dramatically changed the traditional traffic flows in the planning area. In those cases, using 10-year or 20-year history for traffic flow data projections can be misleading and inaccurate. The new model would be more appropriate in that case.

Rural Advanced Traveler Information System

(From: "A Cost-Benefit Analysis of a Rural Advanced Traveled Information System", located in Transportation Research Record, no. 1450, December 1993)

The Concept

This test was a variation on the Advanced Traveler Information System (ATIS) that has been used for urban traffic forecasting and maintenance in the past. The computer model of ATIS was customized to fit the planning needs of the rural areas of a state, and was called the Rural ATIS. The computerized system would warn motorists of impending problems on certain roads, including accident delays and weather conditions.

The Model

The working system would be designed for a regional application, incorporating a network of rural roads. Improved traffic safety was the primary concern of the project, with the reduction of accidents on rural highways the main focus of the test. This Rural ATIS focuses on single corridors of travel with high accident rates or other operational problems. In this case (Wyoming), weather conditions played havoc with the traffic safety, and so a computerized model that warned motorists of danger would be very useful.

Specifically, it monitors roadway conditions (weather, closures, etc.) and uses dynamic mapping techniques to communicate the information to the public. This information, if distributed correctly, could dramatically reduce further accidents in a temporarily dangerous stretch of road.

How does it gather information? The following lists explains the main working functions of the Rural ATIS:

- Records weather information in a central location for processing
- Collects data from road service personnel (towing, salting vehicles, etc) regarding the location of accidents, delays, off-road vehicles in need of tow, etc. and transmits the information to the central location
- The central location then distributes the integrated data to remote sites (i.e. hotel lobbies, car rental locations, shopping centers and private, specially-equipped vehicles)

The roadway environment, as well as weather conditions, will influence the design parameters for each individual system.

Cost-Benefit Analysis Results

While the potential benefits of a Rural ATIS are numerous, this particular test considered only the cost savings in the reduction of highway accidents. Even with this limited cost-benefit window, the cost savings outweighed the investment in equipment and expected maintenance costs of the system. In other words, the Rural ATIS pays for itself in savings of costs related to highway accidents.

Other potential benefits of the system include: decreased traffic congestion, less pollution and energy consumption. These benefits, however, were not monetarily verified in this study.

Network Focusing for Quick-Response Subarea Analysis

(Taken from: "Network Focusing: A Tool for Quick-Response Subarea Planning", ITE Journal, 1991)

The Concept

In this method, rather than getting ground transportation counts for the entire Subarea in question for planning, the data collection effort focuses on one or more particular smaller areas, and then the data model fills in the rest of the space – like a ripple effect in water.

The Model

The regional highway network is retained either in its entirety or in some skeleton form. Outside the focus area, zones are aggregated into progressively larger zones as distance from the study area increases. The model uses the computer modeling program called SAF, which uses a microcomputer to analyze and project data sets.

This method has many advantages over "windowing", briefly discussed later, including the flexibility to allow for changes in traffic flow. By focusing on smaller, strategically-placed, traffic areas and projecting around them to fill in the space allows for faster response to inquiries regarding the Subarea, rather than waiting for the full ground traffic count.

Best Time to Use This Model

The principal use of this model is that it can be used to quickly model the effects of land use and policy changes, as well as network changes, because the entire travel model chain can be run with the focused data set. The data set can originate from one or more sites within the entire subarea, generally those with the largest effect on the larger subarea if a significant change occurs.

Conclusion

The challenge of this test was to accurately project actual full traffic flow from focused areas and data sets to the entire subarea. While the model could project the actual traffic flows within 10% difference compared to the actual ground counts, this is a significant deficiency. It should not be used entirely as the only planning method for the subarea, but rather to get an initial prediction of the changes in traffic flow due to a major change in land use or policy, as mentioned earlier.

Comparing Alternatives in Major Travel Corridors

(Taken from: "Comparing Multimodal Alternatives in Major Travel Corridors", Transportation Research Record. No. 1429, 1994)

General

Since comparisons between modeling alternatives are now required by the ISTEA (there must be several alternatives considered before a planning method can be chosen), some common measure of effectiveness across modes of each of the alternatives must be used. There must some type of rating system between these methods in order to appropriately compare them.

Identification of the "Full Costs" of Each Alternative

For a valid comparison, the challenge of identifying "full cost" of each alternative is discussed in this report. Full cost includes not only the traditional implementation costs, but also less monetarily-definable social and environmental costs. While this is difficult to do, the first measure of comparison is logically the cost issue, both tangible and intangible.

Advantages

Advantages of this approach include:

- Cross-modal comparison
- Comparison of investment as well as policy alternatives
- Comparison of alternative scenarios or policies that could affect rates of future aggregate regional growth, with respect to their cost impacts

Differences with Traditional Approaches

There are many differences between this new method of comparison vs. the traditional attempts at comparison between multiple planning methods. The most obvious differences are listed below.

- The Base: In this comparison method, the costs analysis of the alternative is weighed against the *full cost of the status quo* (the base), rather than against the traditional "do-nothing"
- Costs: This method calls for comprehensive cost of the base and all of its alternatives (including intrinsic, priceless costs)
- Effectiveness: Measured as "person trips sold", it measures the ability to accommodate the increment in demand for trips above the base existing demand
- Management Strategies: This approach can be used to compare incremental costs of alternatives that involve little or no differences in public investment (only policy differences such as zoning changes, parking surcharges, etc.). This might eliminate some methods that are much higher in cost outlay for the same result.

Suggested methods for calculating the "full costs" are outlined in this paper. This is a very labor-intensive and subjective process, especially considering that intangible costs must be estimated. Hence, the "full cost" may not be entirely accurate.

Conclusion

The concept and logic are legitimate, but the process is very subjective. This method of cost analysis can be helpful if used properly, but it has many limitations as it stands (i.e. that it attempts to put a face value on intrinsic and/or intangible costs such as social and environmental costs). Also, according to the researchers themselves, it needs further refinement in the areas of the spreadsheet, cost estimations, and demand forecasts for more accuracy in the produced results.

Public Involvement in a Focus Group Setting

(Taken from: "Developing a Customer Focus in the Statewide Transportation Planning Process", Transportation Research Record, no. 1499, 1994)

Overview

This study, performed for the Colorado DOT, by the Graduate College of Business at the University of Colorado at Denver, explored the potential for phone contacts and personal focus groups to enhance the public involvement in the statewide planning process. After an initial telephone survey was conducted on a large number of respondents, the research group conducted focus groups to enhance the responses. The focus groups involved 8-12 residents at a time, with at least 3 researchers present to ensure objectivity.

The state of Colorado has 15 individual planning regions with the state, each of which was used as a venue for a focus group, consisting of open discussion of several transportation planning subjects. Respondents were shown the results of the telephone survey done in their region, and asked for personal explanation and feedback. This technique resulted in spontaneous, truthful responses and reactions to the results in a face-to-face environment. The main purpose of the focus groups (following the telephone survey of a larger group of people) was to determine if the survey results were valid and to discover why residents from a given region placed more emphasis on one issue over another.

General Findings from the Focus Groups

It was clear from these focus groups that residents rarely considered the transportation process to be satisfactory. They often mentioned the need for fast decisions and implementation of projects that were approved and necessary. Addressing the same issues year after year due to stop-gap measures by the DOT was very frustrating to the residents. But, by the same token, they were generally surprised with the true costs of road improvement projects and how much money was being spent.

Recommendation as a Post-Survey Research Tool

It was clear that the focus groups not only provided context to survey responses, but they many times gave different answers to the questions than the surveys initially indicated.

Overall, in light of the common perception (which is normally proven true) that the public feels uninvolved in the transportation planning process, at least in a meaningful way, the prospect of focus groups offers an excellent forum for increased involvement and decision-making on the part of the public. If the public feels more involved, that they had a say in the improvement projects that are underway in their city, or that they at least had the opportunity to be involved, the public will offer more "buy in" to the entire process.

Massachusetts Data Gathering Techniques

(Taken from: "Planning and Managing Intermodal Transportation Systems: A Guide to ISTEA Requirements", USDOT, No. DOT-T-95-03, November 1994)

Needs-based Data Gathering Concept

Massachusetts has a particular philosophy regarding data gathering by the entire state. It was recognized that data needs were increasing every year, and that all data could never be collected as desired.

MA adopted a needs-based data gathering philosophy – that data would only be collected for specific intermodal transportation needs. Data would no longer be collected simply because it was available, but rather only when truly needed.

Advantages to Needs-based Data Gathering

The overall data gathering needs were limited to requests regarding particular plans or projects that require the data. Since data collectors had a more narrow focus on their work, it seems plausible that future data gathering would be more timely, efficient and accurate than in the past.

Section 5: SURVEY RESULTS & FINDINGS

Introduction

In January 1998, this project's Technical Advisory Committee developed a series of 12 specific questions designed to aid our research into the best planning practices for rural transportation planning. See Appendix A for a complete list of the TAC on this project.

In February 1998, the first group of surveys was mailed to the Planning Divisions of the Departments of Transportation throughout the country, including Alaska and Hawaii. Another "wave" of surveys was mailed in March 1998 to regional and rural planning offices, bringing the total mailings for the project to 220. Between the two mailings, there were a total of 80 respondents. The survey questions themselves have been presented in the next section, including detail and analysis of the respondents' answers. The analysis begins with an aggregate view of their answers, on a overall nationwide basis.

Of the 80 respondents throughout the nation (including Hawaii and Alaska), 5 distinct geographical regions were identified to further analyze the survey responses. A discussion of each region's answers appears after each question (or set of related questions, such as air quality).

The regions were split as follows (all states, including Alaska and Hawaii):

Northeast Region (21 Respondents): *Pennsylvania, New York, Connecticut, Rhode Island, Massachusetts, New Jersey, Vermont, New Hampshire, Maine, Ohio, Michigan, Indiana, West Virginia, Virginia, Washington D.C., Delaware, Maryland*

Southeast Region (10 Respondents): *Kentucky, Arkansas, Mississippi, Alabama, Florida, Georgia, South Carolina, North Carolina, Tennessee*

Central States Region (19 Respondents): *North Dakota, South Dakota, Nebraska, Minnesota, Kansas, Missouri, Wisconsin, Illinois, Iowa*

Northwest Region (10 Respondents): *Washington, Oregon, Idaho, Montana, Wyoming, Alaska*

Southwest Region (20 respondents): *California, Utah, Nevada, Colorado, Arizona, New Mexico, Texas, Oklahoma, Louisiana, Hawaii*

In general, the survey questions were answered in a concise manner, as was expected. When answers were explained or justified, those data were also included to further "flesh out" the analysis. We appreciated the effort put forth by the respondents.

Finally, at the end of each survey, we requested any available copies of *recently completed* transportation plans for the rural areas in their state or region. In addition, several personal telephone interviews were completed between January and April 1998. Where applicable, insights gained from the plans and interviews were included in the analysis. See Appendix A for transcript from the interviews, and Appendix B for a complete list of submitted plans, which have been saved and bundled for future reference.

1.) Is your transportation plan basically a *POLICY* plan (which is defined as a general description of the type of improvements to be made), or a *PROJECT-SPECIFIC* plan (in which definite projects at specified locations are included in the plan)?

Overall Response:

38%	<i>Policy Plan Only</i>
27%	<i>Project-Specific Only</i>
35%	<i>Some Combination of Both</i>

2.) If your plan is project-specific (or "both"), is it fiscally constrained (forced to fit within a particular budget) or is it based on "needs" (outlining the projected needed improvements without regard to the projected revenues that may be required for those improvements)?

Overall Response:

65%	<i>Fiscally Constrained</i>
16%	<i>Needs-Based</i>
19%	<i>Some Combination of Both</i>

Overall Analysis (80 respondents):

Policy (38%)

When respondents checked that their plans were policy-oriented, many of them did mention that they do fiscally-constrained projects outside of the main master policy plan, as long as the projects follow policy guidelines set forth.

Some others mentioned that they include a special separate plan that handles the short-term projects (i.e. 2-5 year Construction Plan or Capital Improvement Plan). This allows them to maintain a policy-oriented plan for visionary reasons, giving them a strong basis upon which to accept or reject individual project proposals

Yet others commented that their plans for rural areas are strictly policy, with which they can prioritize the needs of those areas based on strict guidelines. This makes it easier to determine whether a specific project can be funded by with government funds, or whether it must be privately-funded (i.e. doesn't fit with the policy set forth). Respondents mentioned that the STIP is short-term and fiscally constrained, so the main plan for their area or state can be policy-oriented.

Project (27%)

When respondents checked that their plans were project-specific only, the reasons were made quite clear: funds are limited, and projects are only started if the funds have been located and guaranteed.

Usually, they come up with a list of needs in their subarea or region, and then prioritize them. Next, they determine the amount of available funding they will have in some preset planning time period (i.e. 1-2-3-5 years). Finally, they re-prioritize their projects based on estimated costs in relation to the available funding. From that, they create their short-term project-specific transportation plan.

Most, however, just work "by the seat of their pants" at this point. Rural areas just haven't gotten the attention afforded urban areas in the past, and so most organizations have yet to create a special transportation improvement plan that specifically includes or focuses on the rural areas in their region. It has been basically project to project, getting the approved projects programmed into the TIP when possible for funding. Most of these organizations did make note that they are now currently or will soon begin creating their first rural/regional transportation plans (sometime in 1998).

Both (35%) (*Combination of project-specific and policy-oriented plan*)

Most respondents chose to say that their region or state's plan was a combination of both policy and projects. It contains some combination of long-term policy goals and short-term project that fit with those parameters.

Their entire plan contains a long-term 20-25 year visionary component, with another component covering the 2-5 year short-term period. The shorter component handles all the projects that fit within the long-term vision. The project component is fiscally constrained, while the policy component is needs-based.

Some respondents even cited that their plan has more than 2 time-sensitive components (i.e. 20,10,5, getting more project specific at each level; and 20,5,2, getting even more time specific).

Some also mention that there is a state policy plan, with project-specific regional plans that have fed off of the state policy plan (to get their funding).

So, whether the breakdown includes writing different plans that work together, or separating distinct components within one plan, most states believe that a combination of both policy and projects is most effective, if managed and coordinated efficiently.

Finally, 84% of respondents that include projects in their plans claim that fiscal constraints play a big part in their prioritization of plans. Hence, only 16% of those respondents claimed that needs were the only determining factor in project prioritization.

Regional Analysis of Responses to Question 1 (Plan Type):

Northeast Region (21 Respondents)

The respondents from the regional/subarea organizations (8 of 21 in this area) all stated that their plan was either project-specific or a combination of both. Of the 4 respondents from the state of

Michigan, and they stated clearly that the funding must be in place before a project can even be considered. One respondent even stated that entire plans are rarely created due to the funding problems - they just do projects as they can afford them. 2 of the remaining 4 stated that the projects were chosen solely on needs (from CT and ME), while the other 2 (from NJ and PA) indicated that their projects were fiscally constrained. None of the above gave any further detail than provided above.

Of the statewide plan respondents, 4 stated that their plans were both project/policy documents (ME, NH, DE, VA), while the other 9 chose policy only (IL, IN, MD, MI, WV, CT, NJ, NY, PA). However, nearly all of them stated with additional comments that, in some form, their long-range component was policy and the short-range component project-specific (2-6 year range). The NJ respondent did mention that they did no special planning for their rural areas, separate from the urban plan. PA stated clearly that all of their plans are strictly policy oriented, with some level of fiscal constraint, even for the rural areas of the state. Even the combo plan from Delaware listed needs as the primary basis of the plan. Indiana mentioned that their policy plan does maintain a long-term expansion projects list in the plan to be updated as necessary. The Michigan DOT stated that its long-range policy plan not only outlines statewide policy, but regional policy as well (explaining why the regional MI respondents almost all listed project-specific plans on their level).

Southeast Region (10 Respondents)

Of the 11 respondents in this area, 3 of them were from regional/subarea organizations. All three cited either a project-specific plan or combination including some policy as well. All of them were fiscally constrained on some level. North Carolina cited "fiscally constrained within a visionary plan format". The regional Kentucky respondent stated their plan was entirely project-specific, prioritizing projects based special process that considers needs vs. funding and feasibility of the project. Even the state KY respondent (DOT) said that the current plan was policy-oriented, but that the next one will be project-specific as well and fiscally constrained, even on the state level.

The remaining statewide respondents (SC, AL, AR, FL, NC, TN) cited that their plan was policy-oriented and needs-based, with little additional comment. North Carolina mentioned that the detailed studies for individual rural counties were project-specific in nature and fiscally constrained.

Central States Region (19 Respondents)

When the type of plan was listed as a COG or regional/subarea (not the State DOT), all plans were declared as either project-specific or some combination of both projects and policy in one document. Minnesota respondents each declared a project-specific plan that included some prioritization based on needs assessment of some kind. Missouri respondents cited primarily policy plans that contain specific projects in cooperation with the state. Nebraska and Kansas both stated that they used project-specific plans entirely.

Of the statewide organizational respondents (DOTs mostly), all cited clearly that the statewide plan was policy-oriented in nature. They further explained that either the regional or district (Minnesota) plans will be project-specific and fiscally constrained, rather than the statewide plan itself. Other states mentioned that specific projects at the state level are programmed into the STIP per federal regulations.

Northwest Region (10 respondents)

Of the 10 respondents, 6 were from regional/subarea planning organizations (from states of MT, OR, ID, AK). Each of them stated their plan was either project specific or a combination of both, with the exception of one respondent (East Central Idaho Planning & Development Organization.) who cited a policy-only plan that was based on needs. The other five plans contained specific projects and were fiscally constrained in some way.

The statewide planning respondents (ID, MT, WA, WY) responded in the following manner: ID claimed a combination plan - mostly policy (20 year), with a 5-year project plan included; the remainder claimed policy-only plans that were entirely needs-based. Washington said the state plan was policy, but the highway system plan was project-specific and fiscally constrained.

Southwest Region (20 respondents)

Of the 20 respondents in this area, 14 were from regional/subarea organizations. All 15 respondents labeled their plan as either project-specific (8) or some combination of policy and projects (7) in one plan. A CA respondent stated that while his plan was mostly fiscally constrained, some projects were begun out of necessity, with or without proper funding in place. All but one organization (UT, Mountainland Assoc. of Govts.) claimed fiscal constraints of their project plans in some fashion. Generally, the projects were subject to state/federal funding sources and were put into the TIP or long-range plan to facilitate that need. The projects are prioritized with consideration given to a weighted needs/funding formula, and then submitted to the state for funding approval.

Of the 6 statewide respondents, only 2 of them claimed a policy-only long-range plan (LA, TX). The other respondents cited some combination of policy and projects in one plan. NV stated that the statewide plan was based on needs, while the STIP was fiscally constrained. OK said that the state plan was mostly policy-oriented, but it identified some specific corridor improvements. Utah lists projects and available funding, but is mostly a needs-based document.

3.) What additional data do you need at the rural subarea planning level that you do not currently have?

Overall Response List:

Land use

Traffic counts - more volume, more often

Freight/goods-movement - more volume, more detail

Funding alternatives

Population levels

Economy/Socioeconomic data

Coordinated data methods between rural areas (traffic counts, etc.)

Inventory of transportation modes conditions

Trip lengths

Travel demand

Origin-destination survey

Accidents

Air quality

Alternative modes and services demand (latent)

Better corridor studies

Enhanced and updated transit and bike master plans

Roadway capacity as it relates to population and employment growth

Vehicle occupancy levels

*(**above dotted line – 4 or more respondents included this data need on the survey)*

Overall Analysis:

As one can see above, the range of answers to this question was vast and varied. Each respondent seemed to have a different need, depending on his/her personal demographics and data-availability situation. No significant trends could be detected from the responses as to what one data item may be lacking throughout the country, but the most common needs seemed to be for updated and more-frequent land-use projections and traffic counts in the rural areas.

Regional Analysis of Responses to Question 3 (Additional Data Needs):

Northeast Region

Responses included the need for detailed data on roadway capacity as it relates to projected population and employment growth (CT), and the need for freight data and weight-in-motion data for truck loads over longer periods of time (NY). MI cited the need for digital land use updates (VA as well), road conditions, traffic counts (MD, VA as well), accident data, etc. One respondent from MI stated that the current data was insufficient and uncoordinated from place to place, which makes it difficult to use data from another region for trending purposes. DE would

like to see market research regarding latent demand for alternative modes and services. The other respondents (12 of 21) cited no need for additional data at all.

Southeast Region

The types of data needed in this region varied to great degree. The data from respondent to respondent rarely echoed each other. Needs included: better electronic maps, truck O & D, vehicle occupancy data (KY); freight and tourism, origin/destination data (SC); inventory of transportation modes conditions (NC), traffic counts, economic data (TN); and rural traffic models, demographic projections (AL).

Central States Region

Responses to this question included: community/population levels, land use, good movement and funding formula data. Some organizations cited no needs for more data at all, including respondents from IL, MN, MO, and ND, but others from those same states listed several of above answers. The implications are that the response to this question was very subjective, a result of the particular respondent and their immediate situational needs at the time of response to this questionnaire.

Northwest Region

Again, as with other areas, the answers varied greatly in terms of needed data, including: higher volume and frequency of traffic counts, air quality data/especially on dust (MT); socio-economic data with traffic modeling capabilities (WY); modal integration information (WA); latent travel demand (AK); and trip lengths, origination/destination, multi-county trips (ID).

Southwest Region

Most additional data needs were uniquely identified by each respondent, including: additional ADT and turn movements in urbanized areas (NV); updated origin/destination survey, project costs (NV); better corridor studies (OK), available funding vs. alternatives (UT), enhanced and updated bike and transit master plans (HI); truck and farm-to-market data (CA); and, population and land-use by TAZ's, traffic counts (AZ). Of the 21 respondents, 12 gave no answer, needing no additional data.

4.) How do you get voter/taxpayer input (i.e. public involvement) in formulating your rural transportation plans?

Overall Response:

52%...public hearings/meetings
21%...standing advisory councils including local-area elected officials
18%...mailed surveys
16%...radio/TV/newspaper media
14%...citizen-member committees
workshops
12%...organizational newsletters/brochures
8%.....open houses
6%.....public presentations
hired outside consultants
focus groups
5%.....toll-free access number/hotline
3%.....one-to-one citizen meetings/interviews
internet
regional clearinghouse
1.5%...telephone surveys

****Totals do not add to 100% since respondents may have cited more than one of the above methods in their survey answer.***

Regional Analysis of Responses to Question 4 (Public Input):

Northeast Region

Most respondents included some or all of the following practices to ensure proper public input into their transportation plans: public meetings/hearings, surveys, newsletters, toll-free hotlines, workshops, Public access TV.

Several respondents mentioned more interactive methods, such as advisory committees or citizen committees (CT, PA, NY, and ME). The Northeast MI COG uses a formal Northeast Michigan Interagency Forum which handles the input into plans and networks all involved agencies and organizations to gather input into the plans in progress. A respondent from PA did mention that they have developed a partnership the Penn State Univ. to develop more effective public input methods. There were other methods employed as well. Indiana conducts annual meetings in all 6 districts. IN cited use of the internet for feedback as well. DE uses a toll-free 800 number for feedback. Maryland uses focus groups to develop sections of the draft of a plan, including professionals and experts in the field from that geographic region.

Southeast Region

The common answers from state to state included: workshops, public meetings, newsletters, mailings, and public forums. North Carolina mentioned citizen action committees, and Kentucky mentioned bimonthly meetings of a policy committee. Tennessee cited public location and design hearings at the project level. Florida made it clear that no special rural plans are developed, and so public input not applicable.

Central States Region

Many responses to this question contained the common, popular answers: focus groups, public meetings, public formal hearings, surveys, public TV, media advertisements and fliers. Some states (Missouri, Minnesota) employ special advisory committees to facilitate this process - either including the public in them or facilitating sessions with the public.

Northwest Region

Common answers from the respondents included: public meetings, newsletters, mailing lists, public notices, newspaper articles and radio/TV ads and open houses. Some uncommon or interesting responses included outreach at public events/county fairs, telephone surveys and web site (AK); one-to-one interviews, statewide focus group meetings (MT); and task forces (ID).

Southwest Region

Common answers from respondents included: open houses, public meetings, workshops, newsletters, brochures, print media (newspapers), regional clearinghouse, public hearings and surveys. Additional responses included public involvement activities (UT), citizens advisory committees (HI, OK), one-to-one presentations (CA), local officials requested to form ad-hoc committees to obtain involvement before project submittal (NV), and hiring a consultant PR firm to help (CA).

5.) How do you coordinate your plans with those of other agencies and jurisdictions whose roads connect or intersect with yours?

Overall Response:

- 33%...open, informal communication between involved agencies
- 22%...regular meetings between involved agencies to review plans
- 19%...handled only by the state DOT, regional office takes no responsibility
- 10%...standing advisory committee
- 5%.....interactive, joint planning efforts
 - exchange copies of proposed plans by mail for feedback when needed
 - special state planning process includes this need
- 10%...no response given...

Regional Analysis of Responses to Question 5 (Coordinate Planning):

Northeast Region

Most respondents listed formal measures taken to ensure that communication remain open and productive, including special task forces involving interested parties, regular meetings between adjacent organizations, work groups. Also listed were many informal means, such as regular correspondence and open phone lines. Michigan respondents cited that, in reference to their rural areas, they create some type of rural task force to ensure coordination among plans. These task forces generally include representatives from affected areas and organizations when formulating the rural plans. Other states cited open, informal communication between the planning agencies and engineers (IN, IL, DE). NH mentioned they established a comprehensive planning process in its rural areas that actively encourages participation and feedback from interested parties. PA included that they have joint studies, therefore ensuring coordination between agencies. Others stated that the state DOT or Div. of Highways handles the coordination exclusively/not their responsibility (WV, MD, IL). Finally, NJ saw no need to formally coordinate their plans.

Southeast Region

Some respondents stated that coordination is handled on a regional committee level (KY, AR, FL) to allow for input and feedback on proposed plans as they are formulated. Others stated that any necessary coordination is handled at the state DOT level - as the plans are submitted for inclusion into the statewide LANs (NC, SC, KY). Notice that this coordination is different within the state of Kentucky depending on the organization.

Central States Region

Almost unanimously, the respondents cited an excellent repertoire of avenues to ensure the adequate coordination of plans between organizations. Most answers included some reference to high, open communication amongst staff members of each organization, regular meetings and open houses to receive feedback on plans in progress. As a general rule, this coordination is handled at the rural organizational level, not interfered with by the state DOT, as long the local plans do not adversely affect a state policy.

Kansas cited a new corridor overlay concept within the corridor management activities to address jurisdictional problems. North Dakota stated that coordination occurs between the district and regional engineers as the plans were formulated. Generally, the respondents cited the desire to allow the regional organizations and local communities to do what they feel necessary in terms of improvements, within reason.

Northwest Region

Formal coordination was reported through several, unspecified means, including: constant communication and conferences (ID), MPO meetings (WY), interagency meetings (MT), and committees (AK). Montana uses a formal 3-C transportation planning process that incorporates interagency coordination. Others simply stated that coordination is handled either at the state level or through submittal process of plans (WA, OR, ID).

Southwest Region

Coordination is handled in many different ways, depending on the state or states involved in this respondent area. The common responses include: memos of understanding, informal communication, collaborations, exchange of plans for review, regular meetings with involved parties, and public hearings. Some respondents stated that they establish advisory committees for this very problem (HI, CA, CO, OK, NV) and others leave it for the state to handle (UT). Ca also engages in joint planning efforts to coordinate planning efforts.

6.) How often do you update your transportation plan?

Overall Response:

20%	<i>Every Year (16)</i>
22%	<i>Every 2 Years (18)</i>
19%	<i>Every 3 Years (15)</i>
25%	<i>Every 5 Years (20)</i>
4%	<i>Every 10 Years (3)</i>
10%	<i>Other/not planning one yet (8)</i>

Overall Analysis:

The responses on frequency of formally updating any part of their transportation plans varied greatly, ranging mainly from 1-5 years (85% of total) and showing almost equal distribution: every year at 24%, every 2 years at 27%, every 3 years at 22%, and every 5 years at 30% of the total answers. This indicates the best time frame for formally updating your transportation plan is still in the experimental stage, with the preference to be within 5 years of the last update.

A full 10% of respondents stated that either they have not planned for any updates at this time, that they have just completed their first plan and so could give no update timeframe, or that they do not create formal plans at all.

Finally, the last 5% of respondents stated that 10 year intervals was a good update timeframe (probably referring only to their long-range state plan).

7.) What timeframe (planning horizon) does your plan cover?

Overall Response:

6%	<i>Up to 1 Year Only</i>
8%	<i>Up to 5 Years</i>
5%	<i>Up to 10 Years</i>
66%	<i>Up to 20 Years</i>
5%	<i>Up to 25 years</i>
6%	<i>Other (did not answer)</i>

Overall Analysis:

While update timelines varied greatly in responses, the converse is true for long-range planning horizons.

A full 71% of respondents claimed at least a 20-year planning horizon in their latest transportation plan (66% at 20-years, 5% at 25 years). They cited that ISTEA requires a timeline at least that long for all new plans. This time horizon is almost exclusively policy-oriented in nature.

Of the remaining respondents, 19% stated shorter planning horizons, mostly in 1-5 year range. These organizations are the ones who "fly by the seat of their pants", working independently of the state plan in terms of improvement projects. They work specifically with projects over a short amount of time and with a tight budget.

Regional Analysis of Responses to Questions 6-7 (Timeframes):

Northeast Region

The update timeframes listed by the 21 respondents ranged from 0-5 years in length. The "0" length timeframe (IL, MI(2)) was explained that projects and plans are prioritized and begun solely on available funding, so no formal updating is done to any plan. The 5-year update responses (from IN, MI, VA) seemed to have a formal update process in place - i.e. under a formal 5-year construction program. Note that one of these 5-year respondents is from a regional MI organization (Tri-County Regional Planning Commission/MI), but the other MI respondents all listed informal update methods.

Southeast Region

All 10 respondents listed an actual, formal timeframe for updating their plans, ranging from 2-10 years in length between updates. In addition, they exclusively listed a 20-year planning horizon. South Carolina (5/20 years) mentioned that the main plan is a policy one updated every 5 years, but that they are developing a project-specific component that is fiscally constrained and will be updated more often in the future.

Central States Region

The timeframes for updating the transportation plans for the regional/subarea organizations varied greatly in response, ranging from 0-5 years. The planning horizons for these organizations varied as well, ranging from 0-20 years in length. Even respondents from the same state gave completely different answers for their respective organizations. While 2 respondents from Missouri cited NO update timeframe or planning horizon (they work project-to-project), 2 others from the same state cited the most common answer - annual updating with a 20-year planning horizon. Yet, 2 more from Missouri cited a narrower 5-year update cycle with no planning horizon at all beyond that cycle. Many others from different states gave the same 5-year update/No horizon response, including regional organizations from KS, MN, ND, SD, and WI. One organization from MN cited a 3-year update/5-year horizon. While the responses varied greatly, a common theme arose that implies on the regional level "anything goes" depending on your personal situation (economics, geography, etc.).

Northwest Region

Of the 10 respondents, all gave specific update timeframes for their plans, ranging from 2-10 years (9 were 5 years or less, 10-year was AK). Interesting, though, was that 4 of 10 gave a short 5-year long-term planning horizon, rather than the standard 20 years (given by respondents from ID, OR, MT, WY, AK). Of these 4 respondents, 2 were state planning organizations (MT, WA)

and 2 were regional planning organizations (ID, and another MT). ID mentioned that the policy plan was 20-year horizon, but the project plan was a 5-year horizon.

Southwest Region

All respondents cited an update timeframe of 1-5 years, and planning horizons from 20-25 years into the future. LA commented that while the main statewide plan is updated annually, rural plans are policy-only and updated less frequently. The breakdown of update timeframes: 1-year (4 respondents from the states of LA, NV, UT), 2-year (6 respondents from CA/4, CO, OK), 3-year (4 respondents from HI, TX, UT), and 5-year update cycle (6 respondents from AZ, CO, HI, NV, OK). Notice that organizations from the same state can have different update cycles (i.e. OK, NV, HI, CO, UT). Of the 20 respondents in this area, 4 claimed a 25-year planning horizon (LA, NV, UT), while the remainder cited 20 year horizons.

8.) How do you include short-range needs in your Transportation Plan?

Overall Response:

Included in the state TIP, Regional TIP (15)

Special section or action component of the state plan (13)

Separate from the main plan (outside, special funding) (8)

Separate from the main plan (federal, standard funding) (7)

Not specially distinguished beyond project listing in main plan (5)

As need arises and funding available (2)

Overall Analysis:

Depending on the circumstances of the project and/or funding alternatives, there were several different methods cited for short-term planning.

The basic breakdown was whether the short-term plans (specific projects or agendas) are included in the same plan as the long-range policy plan. While 36% of respondents cited that they indeed are in the same document as the long-range plan, the remaining 64% said otherwise.

Of the respondent organizations that included their short-term and long-range plans as one, they generally followed one of 2 methods: (1) simply listed them as priority projects within the plan, or (2) created a special, designated section just for the short-term projects, as an action plan or construction plan component.

The remaining 64% of respondents stated that their short-term goals and projects were treated separately from the main policy-oriented plan, in several different ways however.

Some projects require special funding (not federal or state funds), and so cannot be part of the state plan. These projects are on a first-funded, first-served basis, outlined in a special action plan, completely project-specific and fiscally constrained.

Other projects can still get federal and state funding, but remain separate from the main plan, again totally project-specific and fiscally constrained. In the words of one respondent, "if the money is not there, neither is the project". They have their own action plan.

Another way to separate short-term planning (1-5 years) from long-range policy planning is to program specific projects in the statewide or regional TIP, allowing them to use federal and state funding as well as ensuring that the project follows the basic guidelines of state policy.

Finally, some respondents stated that their regional area does not create a formal transportation plan at all. They simply do projects as the need arises and the funding is available.

Regional Analysis of Responses to Question 8 (Short-Range Needs):

Northeast Region

Many of the regional organization respondents cited that short-range planning is all they do - their entire plan is short-range. The most common response from the statewide planning offices

was that short-range needs are addressed in the Master/Long-Range plan as a special section or component, listed with high priority in some manner. NH mentioned that short-term projects are handled on the regional level in their plan. MD stated that no short-range plans are handled at all in the state plan.

Southeast Region

The responses to this question were very similar in nature. Although under different names, short-range projects are generally listed in the state plan as special component of the plan (i.e. 5-year Construction Plan/AL, Cabinet Capital Improvement Plan/KY, also FL, SC). North Carolina includes top priority projects in their county thoroughfare plans, and others stated that these needs are outlined in the STIP (SC, TN, and another NC respondent). Only KY mentioned that some short-range projects are handled separate from the state plans through discretionary funding methods.

Central States Region

In response to the question of where they document their short-range needs, the all of the Central Area states gave very similar answers. Generally, a 5-year action plan of some type has been created either separate from the state plan or as a special component. With few exceptions, the short-range needs of each organization are listed as part of the STIP, RTIP or some special construction plan. Minnesota cites a new process for creating District plans that break down the 20-year planning horizon very specifically: *future studies (11-20 years ahead)*, *project studies (7-10 years ahead)*, *project work plan (4-6 years ahead)*, and *the STIP (1-3 years)*.

Northwest Region

Most of the 10 respondents cited a special 1-5 year project/needs plan separate from or as a component to the state plan. Many simply include it as part of that TIP or STIP (WY, MT). Idaho uses a Co Fund/Innovative Finance techniques to finance immediate needs, while MT sets aside a lump sum of federal money for short-term projects. Another Idaho organization (Ada Planning Association) handles all projects that need to be begun or completed with a 3-year timeframe, rather than including the project in the TIP.

Southwest Region

The responses to this question were very similar in nature. Although under different names, short-range projects are generally listed in the state plan as special component of the plan (NV, CA, OK, HI, CO, UT, AZ). Other states include the short-range needs in the TIP, STIP or RTP (OK, CO, CA, UT). Note that many of these overlap by state designation, depending on the answers given by multiple respondents from the same state. HI designates short-range projects into 5, 10, 20 year increments for prioritization. One TX organization states that short-range planning is done only at the regional level, rather than state level. California sets aside a lump sum each year for funding small projects.

9.) Are there any rural non-attainment areas in your state?

21% (17 of 80) responded YES

63% (50 of 80) responded NO

16% (13 of 80) gave no answer

10.) If you do have any rural non-attainment areas, what is the major cause for non-attainment status in those areas?

(note: several respondents cited more than one cause on their survey)

59% OZONE (10)

53% DUST (9)

41% CARBON MONOXIDE (7)

Others:

PM 2.5 (smaller particulates)

Wood burning

Factory emissions

11.) If you do have any rural non-attainment areas, how did you satisfy the requirements for initiating the transportation conformity consultation process? How well is it working?

Overall Response:

--State DOT works closely with EPA and the state air quality department

--Rural conformity analysis done through a defined subarea for impact analysis (ozone and carbon monoxide causes)

--Special air quality committee with DOT, air quality dept., FHWA and EPA (Utah, major cause - dust)

--TCM (transportation control measures), clean air programs, signal coordination, reduction of traffic levels: bicycle facilities, van pools, car pools (major causes: dust, ozone)

--Developed consultation procedures and adopted by all 8 impacted MPOs in the region

--Each MPO does its own conformity analysis and plans for it (works terribly)

12.) If you do not have any rural non-attainment areas, do you currently engage in any air quality planning activities aimed at assuring continued attainment?

Overall Response:

Constant review of policy in attainment areas

Developed special organization (i.e. Air Quality Program for Treasure Valley)

Action groups (ozone)

Public alerts (ozone)

Regional Analysis of Responses to Questions 9-12 (Air Quality):

Northeast Region

The main cause of non-attainment status in this area was Ozone (MI, WV, MD, CT, ME, NH, NY, and PA). Another from ME stated that carbon monoxide was the major cause for non-attainment in their area of responsibility. One respondent from MI listed Dust as a cause for non-attainment, but that the state working to change that status. Hence, no action was being taken to improve dust conditions in MI.

Southeast Region

Only North Carolina cited an attainment problem, due to ozone and carbon monoxide. Consultation with the state "air quality" agency is accomplished through monthly meetings. Rural conformity is being done through a defined region of impact.

Central States Region

Only one of the respondents from the Central States area cited an air quality problem. Wisconsin listed its major cause as transportation pollution, and explained that their improvement methods are included in the STIP to satisfy the requirements of the transportation conformity consultation process.

Northwest Region

Dust and carbon monoxide were the causes of non-attainment in the states with air quality problems among respondents (ID, MT/ 5 respondents of 10). Within Montana, the regional organization coordinates with the MT DOT and MT Dept. Of Environmental Quality for consultation and performance of conformity analyses.

Southwest Region

The main cause for non-attainment status among the respondents was dust/PM10 (CA, CO, AZ, UT, NV), included on 11 of 13 responses with an air quality problem (7 respondents did not have non-attainment areas in their jurisdiction). Some respondents listed more than one problem on their survey, including ozone (CA, LA, UT) and carbon monoxide (NV, CA).

As far as the consultation process, in CA each MPO does its own conformity analysis for its area, and ozone organization stated that it is difficult and unproductive at present. LA adopted a statewide planning public involvement procedure, with the conformity analysis included in the conforming transportation plan for that area. An AZ respondent prepares an annual PM 10 conformity report, signed off on by FHWA, FTA and reviewed by the EPA. In CO, the process is handled by the Regional Planning Commissions. In UT, the MPO does the conformity analysis for county, urban and rural as well. they sit on an air quality committee including UDOT, UDAQ, FHWA and the EPA.

Section 6: CREATING OR UPDATING A RURAL TRANSPORTATION PLAN

Step 1 – Establish the Planning Committee

The first important step in the creation of a new or updated transportation plan is to create the planning committee that will be involved in this project from the first day to the last. The leaders of this committee need to be stable and committed, ensuring that the vision and goals of the plan are consistent throughout the planning process. The Colorado Regional Transportation Planning Guidebook (page 21 of this report) emphasizes this step as very important to the success of the overall plan for their regional planning agencies.

This commission would consist primarily of people within the organization responsible for transportation planning in that area. The commission should also include interested citizen representatives from the community and involved, outlying areas. Finally, each commission should include at least one state DOT representative.

Following are examples of execution of the above step. Please see the table of contents for the appropriate page number in this report to further research these references

Several methods have been employed in formulating this commission. Some of these methods were mentioned during the research for this study, and have been summarized in the following paragraphs. Please see the table of contents for the appropriate page number to further research these references.

The 2020 SEMCOG regional transportation plan involved input from the seven county road commissions, the City of Detroit, the Michigan Dept. of Transportation and the five local transit service providers. These separate agencies provided valuable and consistent feedback to SEMCOG during the planning process.

An interview with Ron Poole, from North Carolina DOT, revealed that their rural transportation planning is done “hand-in-hand”. All the leaders of the different organizations deal directly with the leaders for the state and plan their improvements in concert with each other. It could not be called top-down or bottom-up planning, rather it is “very balanced, full of compromise”.

To support these statements, the Macon County (NC) Rural Transportation Plan cited that the NCDOT has a *Statewide Planning Branch* which manages and coordinates every transportation plan in the state, from rural to urban planning, from state to county to city. While each county itself has jurisdiction over all rural areas within its county lines for transportation planning, it works closely with the Statewide Planning Branch to create its long-range plans. By planning in this way (at a central location), NCDOT is assured that all plans work in concert with each other, at every planning level.

The Colorado River Regional Transportation study was a cooperative effort by several states (Arizona, California, Nevada), counties (Mohave/AZ, San Bernardino/CA, Clark/NV) and cities (Bullhead City, Needles, Laughlin), as well as the San Bernardino Assoc. Governments and the Fort Mohave Indian Tribe. Since the plan covered multiple state lines, this commission was very diverse and extensive.

Also, several plans reported the use of consultants to complete part or all of their transportation plan. The Colorado City (AZ) Transportation Plan was prepared by an independent consultant, JHK & Associates, as the transportation component of a much larger project, called the General Plan. The Winslow, AZ study was conducted by BRW, Inc., an independent consulting firm, for incorporation into the CIP for the City of Winslow. Also, while interviewing Chris Fetzer (NACOG/AZ), he mentioned that they will employ consultants to help with their plan over the next calendar year (1998).

Finally, literature regarding other suggestions for transportation plans for Arizona communities can be found at the Department of Commerce in Phoenix, AZ, per Deb Sydenham (in her interview). They have a full booklet on doing an entire community long-range plan, of which there is a transportation component. She suggested I stop by their office some day to peruse it, along with copies of other plans she has in their library.

Step 2 – Establish the Vision, Goals and Strategies

Identify the vision and goals of the commission, considering all aspects of planning and needs of the area, not only consisting of road improvements, but improvements in air quality, standard of living, economy and development opportunities.

This step ultimately results in identification of common interests and definition of expectations for the region for the determined time period of the plan. Each member of the planning commission has his/her own ideas for the future of the area. This step provides a facilitated way for the commission to find “common ground”, and agree to that vision formally as a group.

This planning step should include the definition of a specific vision or direction for the subarea in question, determined by the planning commission and refined through public input (Step 3). It should also include specific goals for the future, such as determination of the planning horizons (short-term and long-term), type of plan to create (policy, project-oriented or a combination of both) and expected strategies for achieving the vision and goals. Finally, each decision should include some consideration of the air quality issues that may arise, for better or worse.

With agreement at the beginning of the planning process, the commission has a framework and direction on which they can focus throughout the process, reducing deviation into tangent areas that do not serve the overall purpose of the plan. Generally, funding availability does not ultimately allow each individual member of the commission to attain 100% of his or her personal transportation improvement goals for the plan.

Following are specific examples of the execution of the above step. Please see the table of contents for the appropriate page number to further research these references.

Examples:

The Colorado Regional Transportation Planning Guidebook (page 21 of this report) emphasizes this step in its 11-step process, citing that a fragmented or nonexistent formal establishment of vision and goals can result in an ineffective transportation plan.

A survey was mailed to 220 planning agencies throughout the country, part of which dealt with planning horizons, type of plan used (policy-oriented v. project-specific, or combination of both), whether it is needs-based only or limited by some fiscal constraint, and the short-term planning methods used.

Planning Horizons

Responses as to the planning horizons leaned in the long-term (20+ year) direction, with as many as 71% of respondents to the survey citing the long horizon (66% at 20-years, 5% at 25 years). They stated that ISTEA requires a timeline at least that long for all new plans. This length of horizon is almost exclusively policy-oriented in nature.

The actual numbers in response to this question follow.

6%	<i>Up to 1 Year Only</i>
8%	<i>Up to 5 Years</i>
5%	<i>Up to 10 Years</i>
66%	<i>Up to 20 Years</i>
5%	<i>Up to 25 years</i>
6%	<i>Other (did not answer)</i>

The Kingman (AZ) study emphasized a 25-year vision, in addition to shorter time horizons in its projections. The Work Program component consisted of a 5-year TIP and a 10-year Action Plan, in addition to the 25-year long-range plan.

The 2020 SEMCOG plan had a horizon to 2020, encompassing 25 years of transportation changes and growth.

The San Luis (AZ) Transportation Plan included 2 main components: the five-year plan and the twenty-year plan. The short-range five-year plan was very project-specific in orientation, identifying more than a dozen major needs for road and intersection improvements to handle the current traffic flow. As more evidence that this plan was project specific, rather than simply policy-based, a full cost analysis for each and all projects was outlined. The long-range (20-year) plan was also project-specific in nature, rather than policy-based.

The City of Winslow (AZ) Transportation Plan identified both current and future projected traffic problems for a 20-year period (until 2012), while recommending improvement projects for the same time frame.

For further detailed analysis of the responses on this subject, refer to “Survey Responses and Findings” in this report.

Type of Plan and Constraints

The 80 respondents to the survey answered as follows. When the rural planning agency was the DOT, a great majority of them cited the use of a policy-oriented plan, while the rest cited some combination of policy and projects. Conversely, when the planning agency was a rural/subarea type, they almost exclusively cited the use of a project-specific transportation plan or some combination of both.

The overall statistics (for the 80 respondents) for the type of plan were as follows:

38%	<i>Policy Plan Only</i>
27%	<i>Project-Specific Only</i>
35%	<i>Some Combination of Both</i>

The overall statistics (for the 80 respondents) for the constraints on the plan:

65%	<i>Fiscally Constrained</i>
16%	<i>Needs-Based</i>
19%	<i>Some Combination of Both</i>

When respondents checked that their plans were policy-oriented, many of them did mention that they do fiscally-constrained projects outside of the main master policy plan, as long as the projects follow policy guidelines set forth. When respondents checked that their plans were project-specific only, the reasons were made quite clear: funds are limited, and projects are only started if the funds have been located and guaranteed. Most respondents chose to say that their region or state's plan was a combination of both policy and projects. It contains some combination of long-term policy goals and short-term project that fit with those parameters.

Some respondents even cited that their plan has more than 2 time-sensitive components (i.e. 20,10,5 years, getting more project specific at each level; or 20,10,5,2 years, getting even more specific).

Some also mentioned that there is a state policy plan, with project-specific regional plans that have fed off of the state policy (to get their funding).

So, whether the breakdown includes writing different plans that work together, or separating distinct components within one plan, most states believe that a combination of both policy and projects is most effective, if managed and coordinated efficiently.

Finally, 84% of respondents that include some specific projects in their plans claimed that fiscal constraints played a big part in the prioritization of projects.

Not all planning horizons are well-defined until later in the planning process. As of March 1998, the transportation plan for CAAG (AZ) was strictly policy, containing no specific projects at all. The planning horizons were still unclear, as of the interview (see Appendix B for further details).

For further detailed analysis of the responses on this subject, refer to “Survey Responses and Findings” in this report.

Short-Range Planning Methods:

Some examples and survey responses to each respondent’s methods for short-range planning follow, beginning with aggregate overall responses to this query.

- Included in the state TIP or Regional TIP (15)*
- Special section or action component of the state plan (13)*
- Separate from the main plan (outside, special funding) (8)*
- Separate from the main plan (federal, standard funding) (7)*
- Not specially distinguished beyond project listing in main plan (5)*
- As need arises and funding available (2)*

Depending on the circumstances of the project and/or funding alternatives, several different methods were cited for short-term planning.

The basic breakdown was whether the short-term plans (specific projects or agendas) are included in the same plan as the long-range policy plan. While 36% of respondents cited that they indeed are in the same document as the long-range plan, the remaining 64% said otherwise.

Of the respondent organizations that included their short-term and long-range plans as one, they generally followed one of 2 methods: (1) simply listed them as priority projects within the plan, or (2) created a special, designated section just for the short-term projects, as an action plan or construction plan component.

The remaining 64% of respondents stated that their short-term goals and projects were treated separately from the main policy-oriented plan, in several different ways however.

Some projects require special funding (not federal or state funds), and so cannot be part of the state plan. These projects are on a first-funded, first-served basis, outlined in a special action plan, completely project-specific and fiscally constrained.

Other projects can still get federal and state funding, but remain separate from the main plan, again totally project-specific and fiscally constrained. In the words of one respondent, “if the money is not there, neither is the project”. They have their own action plan.

Another way to separate short-term planning (1-5 years) from long-range policy planning is to program specific projects in the statewide or regional TIP, allowing them to use federal and state funding as well as ensuring that the project follows the basic guidelines of state policy.

Finally, some respondents stated that their regional area does not create a formal transportation plan at all. They simply do projects as the need arises and the funding is available.

For further detailed analysis on this subject, refer to “Survey Responses and Findings” in this report.

Air Quality:

A major consideration in any transportation plan is the effect it (each individual project within it as well as the whole) has on the environment, in terms of safety and air pollution. The commission must determine its area’s specific needs in relation to air quality (attainment v. non-attainment areas, and how each project will affect the status in a positive or negative way.

The survey queried respondents in several ways regarding the status of their rural area and how they manage the situation. Actual answers follow as to how they handle conformity to the air quality standards set forth by the CAAA (see more information on ISTE and CAAA requirements in Section 3)

Overall Responses:

- State DOT works closely with EPA and the state air quality department*
- Rural conformity analysis done through a defined subarea for impact analysis (ozone and carbon monoxide causes)*
- Special air quality committee with DOT, air quality dept., FHWA and EPA (Utah, major cause - dust)*
- TCM (transportation control measures), clean air programs, signal coordination, reduction of traffic levels: bicycle facilities, van pools, car pools (major causes: dust, ozone)*
- Developed consultation procedures and adopted by all 8 impacted MPOs in the region*
- Each MPO does its own conformity analysis and plans for it (works terribly)*

If their region/subarea has reached attainment, they were asked to respond if they actively pursued any methods to assure continued attainment. They answered as follows:

Constant review of policy in attainment areas

Developed special organization (i.e. Air Quality Program for Treasure Valley)

Action groups (ozone)

Public alerts (ozone)

For detailed analysis of the responses on this subject, refer to “Survey Responses and Findings” in this report.

Step 3 – Initial Public Participation

The public participation process should be continual throughout the planning, development and implementation phases of the plan. The first foray into getting public feedback should occur at this point, in the very beginning of the planning process. Once the commission has been formed, and the vision and goals have been set, the commission needs to verify that they are truly acting in the best interests of the public for whom they work.

The commission could never adequately assume the opinion of the public on needs for improvements on specific areas. This early feedback would help shape the development effort of the plan into a direction that is not only approved by the commission, but also approved by the public.

Channels of outreach at this stage should include all of the following, to some degree: public opinion surveys (mailing and telephone), public meetings, and advertisement of the meetings through public access TV, radio and/or newspaper.

In addition, an advisory council could be formed that includes a contingent of interested citizens and/or elected officials unaffiliated with the overall plan. This council's sole objective would be to collect public feedback and deliver constructive ideas to the planning commission.

The feedback at this stage is on a very conceptual level. Discussions and advertisements should include the general parameters of the decided vision and goals of the commission for the subarea. Responses should be tabulated and analyzed. All significant feedback (constructive suggestions voiced by a significant set of respondents) should cause the commission to consider incorporating those thoughts into the vision and goals.

Following are specific examples of the execution of the above step. Please see the table of contents for the appropriate page number to further research these references.

The survey included a query as to each respondent's methods for getting public involvement throughout the planning process. The overall methods follow:

52%...public hearings/meetings
21%...standing advisory councils including local-area elected officials
18%...mailed surveys
16%...radio/TV/newspaper media
14%...citizen-member committees workshops
12%...organizational newsletters/brochures

The methods used in some the plans researched are mentioned below.

The Kingman study included feedback from "two project newsletters, two sets of public forums and a series of community interviews" to ascertain needs and issues within the public sector.

Listed are the key elements utilized in the effort to improve significantly useful public input and availability for review of the 2020 SEMCOG plan for comments on a wide area basis:

- Surveys reaching in excess of 10,000 people
- Telephone opinion survey that reached 2,400 people
- Review by transportation committees
- Promotion using a newsletter, Regional Update

- Media interviews
- Internet publication
- Informational videos on public TV

Bill Stringfellow (interview, Appendix B) stated that Colorado is very active in ensuring adequate public involvement before a project is approved. First, they set minimum requirements of their Regional Planning Commissions for documentation of public involvement opportunities to be managed at the regional level. The state also offers to handle any mailings and maintain any mailing list needed by each region.

Interview/Chris Fetzer/NACOG/AZ:

It is not always possible to get quality public feedback at the regional planning level. Chris Fetzer (interview, Appendix B) said that public involvement is mainly effected before any improvement projects are brought to NACOG's attention for funding. The small towns, cities or areas will put together their proposal for improvement that already includes public feedback and suggestions. Dave Barber (interview, Appendix B) said that most of the feedback on projects presented to WACOG (AZ) is from elected officials speaking on behalf of their constituents, rather than the public itself.

Step 4 – Update the Vision and Goals of the new plan

Once the vision and goals of the plan have been presented to the public for feedback, and the responses have been recorded and analyzed, then the commission has the responsibility consider any constructive feedback and alter the vision and goals accordingly.

Step 5 – Determination of Current Situation and Needs

Once the vision and goals of the plan have been finalized, with the help of public input the commission needs to establish the parameters of the current situation in its area, identifying its needs from that point. This step identifies exactly where the subarea stands in terms of roadway capacity, safety and environmental conditions at the present time.

This step requires the compilation of data, and the determination and analysis of the efficiency of the current road system. Methods for this step include analysis of traffic counts, road safety issues, and population, economic and land use levels compared to current capacity, etc.

An environmental analysis (how prospective projects affect the environment – positive and/or negative) should also be done at this time, consistent with earlier goals for environmental issues and standards. When considering specific projects, the commission must be able to consider the status of the environment. Any projects shown to adversely affect the environment in any way are no longer considered viable projects and cannot be included in the regional plan.

This step is extremely important to the overall success of the transportation plan. Inaccurate assessment of current conditions could lead the planning commission in the wrong direction in terms of roadway improvements and the environment.

Methods for gathering of traffic and congestion data vary from subarea to subarea, state to state. The following paragraphs illustrate some specific examples of data gathering techniques used in transportation plans and other literature researched for this study. *Please see the table of contents for the appropriate page number to further research these references.*

Massachusetts cited a particular philosophy regarding data gathering, which is utilized by the entire state. It was recognized that data needs were increasing every year, and that all data could never be collected as desired. So, the state planning division adopted a *needs-based* data gathering philosophy – that data would only be collected for specific intermodal transportation needs. Data would no longer be collected simply because it was available, but rather only when truly needed. It established specific data request processes for approval by the state planning department for proof of necessity. This process allowed the state to focus on gathering more accurate and usable data, rather than sheer volume.

The interview with Bill Stringfellow (CO) revealed that Colorado has taken a huge step in the area of data gathering and availability. They have put together a customized GIS application that contains every piece of gathered data, such as traffic counts, so that the data can be modeled by each region. Each regional planning department will have a copy of this GIS for their own planning purposes.

In the Kingman plan, to establish the existing conditions in the area in terms of population and traffic flow, the planners first established a database of functional classifications, traffic volumes and controls as well as existing facilities and services. They then summarized the current situation based on LOS results.

The 2020 SEMCOG study divided the current traffic situation into separate functional classifications: congestion and safety.

Congestion: Congestion deficiencies, present and future, were identified by determining volume-to-capacity ratios for all non-local roadways using travel demand models for the volume. The commission then determined a limit to acceptable service level (0.8 in this case, in 5 year increments), beyond which a roadway segment was considered “capacity deficient”. They compared the results of different alternatives, including build versus no-build, to determine the long-term savings of each option considered.

Safety: Recent accident data was used to determine safety deficiencies, comparing data from intersection crashes and/or injuries to regional norms. Levels of safety deficiency were then established to easily “rank” the intersections and road segments accordingly.

The Colorado City/Hilldale plan utilized a common data gathering method for small planning areas. Traffic counts were taken in the area by Arizona Department of Transportation (ADOT) on two different days of the week while this project was underway. Using that data, the project team plotted a 24-hour distribution pattern, determining the peak traffic periods on each road and intersection. Also considered was the relevant number and types of traffic accidents, but no pattern could be culled from this data to locate particular problem areas.

Similarly, the San Luis (AZ) plan established the current situation using traditional, economical methods. For the short-term plan, the project team determined and analyzed existing traffic volumes in the San Luis area, using methods such as traffic counting, a field survey of the existing conditions, and feedback from the city and state staff. The team then prepared and analyzed the projected 1996 traffic and pedestrian volumes for the area.

The Arizona Department of Transportation (ADOT) provided the traffic counts for the 1992 Winslow (AZ) project as well, gathered in 1991. In addition, ADOT supplied traffic accident data from 1988-1990. Furthermore, an independent consulting firm determined high accident locations, roadway capacities and intersection capacities with further data analysis. Current population and traffic levels were determined using the 1990 Census results (locally provided by the City of Winslow's 1990 Census Consultant).

Survey responses established some additional data needs, not available in that area or currently not provided to that planning office. The answers included:

Overall Response List:

Land use data

Traffic counts - more volume, more often

Freight/goods-movement - more volume, more detail

Funding alternatives (other than state or federal sources)

Population levels

Economy/Socioeconomic data

Dave Barber (interview, WACOG/Az) further established the need for better traffic counts. He explained that traffic counting is very necessary, but inconsistent across the regions. Each area collects different types of data, so that data cannot always correlate to other adjacent regions. For their new project plan, they are going to have traffic counting done across the entire area in order to gather the best, most accurate data they can get. Also, in the new project plan, they will factor in seasonal traffic as well as year-round or residential traffic.

Planning departments then can take this data and perform some analysis to help summarize the results of the data gathering effort. The Kingman study emphasized this point, stating that the project team used its data and projections to establish some planning objectives. First, they rated each roadway and intersection by some comparable criteria. Evaluation of traffic conditions on each roadway or intersection was treated as different Levels of Service (LOS), using a rating

system of A-F. On surface (city, non-highway) streets and intersections, a level of C or better was acceptable, while on highways a level of D or better was necessary.

To determine LOS for roadway segments, "typical capacities" were determined, based on functional classification and number of lanes. The LOS at intersections was evaluated based on the procedures detailed in the 1994 Highway Capacity Manual (HCM). The TAC first determined the current situation on each road and intersection in terms of LOS, then projected the figures over time through 2020.

Step 6 – More Public Involvement

Now that the commission has determined the current traffic situation, it is time to go back to the public for more feedback.

Alert the public as to outcome of the previous step – let them know the status of the plan and how the roads are at present time. Get their feedback to determine the overall accuracy of the assessment made by the commission.

Following are examples of execution of the above step. Please see the table of contents for the appropriate page number in this report to further research these references

One method of obtaining quality public feedback at this stage might include facilitated focus groups. These groups, discussed in "Focus Groups...", can offer specialized feedback to enhance general survey responses. They can "flesh out" some answers about which the commission wants more detailed information. The study "Focus Groups..." explored the potential for phone contacts and personal focus groups to enhance the public involvement in the statewide planning process. After an initial telephone survey was conducted on a large number of respondents, the research group conducted focus groups to enhance the responses. The focus groups involved 8-12 residents at a time, with at least 3 researchers present to ensure objectivity.

In addition to these focus groups, the commission can again use the traditional mailings that include feedback questionnaires, newspaper and public TV ads – any medium that offers the respondent time to peruse the findings regarding the current situation and respond with constructive feedback.

Constructive feedback at this stage should still be very welcome. If a strong case is presented to contest the status given a particular road, and the commission agrees that the road status should be changed, little additional effort will have been wasted, while a potential mistake or oversight may be have avoided.

Step 7 – Determination of future demand and trends

This step is the most significant in this entire process, in that accurate estimation of tomorrow's travel demand for transportation facilities is absolutely necessary to make proper project decisions. Poor estimates result in worse decision-making, which can be costly and frustrating for both planners and the public.

For rural areas, due to funding constraint assumptions, the traditional historical trend method is suggested – trending population levels and land use development efforts based on past levels and increase/decrease per year, using the census reports for population trending, etc. - to determine future demands of travel. In some cases, more detail is required.

Some specific examples and methods follow, as taken from recently completed transportation plans, literature reviews and personal interviews. *Please see the table of contents for the appropriate page number to further research these references.*

Using the data previously gathered, the planners on the Kingman study projected future roadway and traffic conditions to the years 2000, 2005 and 2020, based on LOS levels. To get the traffic volume forecasts, they updated the TRANPLAN forecasting model used in the 1987 Kingman study, then comparing those projections to estimated roadway capacities in those same years to establish LOS levels. For those same years, they projected intersection LOS levels in much the same way.

The 2020 SEMCOG Plan updated its formal future traffic volume forecasts with an extensive Household Travel Survey for about 7,000 households in 1994. It incorporated the aggregate responses as a refinement to the formal traffic volume model produced by historical figures.

The Regional Development Forecast for the 2020 SEMCOG Plan was completed over three stages using three different models: Regional Forecast Totals (RTF), the DRAM/EMPAL model (Disaggregated Residential Allocation Model/Employment Allocation), and ZAP (zonal allocation program).

To direct the allocation of growth in households and jobs at the small area level for the RTF, SEMCOG used data on six different land coverages to calculate current vacant holding capacities for households and jobs as the basis for the projections.

The EMPAL model was used to project the future distribution of jobs, by eight industrial classes, by forecast district. The DRAM predicted the future distribution of households by income quartile and presence/absence of children using EMPAL outputs, as well as land data, travel time data, and the household RFTs already projected.

The Regional Development Forecast output includes household totals and households by income quartile and life cycle, population projections (total, household, and group quartiles), and employment projections (total and by industrial class) with all numbers at 5-year intervals until 2020.

To forecast population growth for the Macon County (NC) Plan, the project team used the past 24 years of raw data, and other logical factors, to determine future population growth in the county. They factored in the expansion of residential development, increase in employment opportunities, and the increased popularity of the county as a resort and retirement community.

The Colorado Regional Plan used a different technique for trending future traffic needs. For research purposes, the planning team employed representatives from the University of Nevada at Las Vegas (UNLV) graduate studies program to develop land use data (using GIS software). This group also prepared the traffic forecasting model (using TRANPLAN software) for the study area. Copies of these packages and models were distributed to equipped jurisdictions within the planning area. These offices would maintain the databases to aid in future planning efforts. Then, the planning team decided that the Nevada Dept. of Transportation (NDOT) would be the "regional caretaker" of the entire system. The responsibility of each jurisdiction would be to adequately update their portion of the model, then forwarding the data and results to NDOT for inclusion in the regional planning model.

The project team used the results of the 1990 US Census for current population figures. They then employed the GIS software for land use projections to ultimately forecast population and traffic figures over the next 15 to 20 years.

Most traffic in Hyde County (NC) is rural. Traffic counts are regularly taken by North Carolina Dept. of Transportation (NCDOT), and traffic trends over the past 20 years were studied in order to predict travel demand. Also, the planning team determined Average Daily Traffic (ADT) volumes on the state highways in the county. These volume counts were compared to the capacity of the roadway in each case, in terms of Levels of Service (LOS) rating.

In the Colorado City/Hilldale (AZ) plan, rather than forecasting population with some specialized method, population projections used in this report, going up to the year 2020, were provided by the Western Arizona COG and the State of Utah Planning and Budget Office. Even though WACOG and the Utah Planning office provided estimates that the traffic volume in 2020 would increase by more than 125%, no road would yet reach 50% capacity in any area. Hence, no computerized traffic forecasts were prepared for this report.

The Winslow planning team utilized an outside consulting firm to help with projections. To determine relatively accurate traffic forecasts, the consulting firm prepared projections of population, employment and dwelling units. All of these factors, individually as well as collectively, contribute to the traffic flows in a particular region or area. Once these socio-economic conditions were determined and forecast, the firm then used manual techniques (rather than a GIS) to predict traffic conditions in the future, up to 2011. The technique used for these projections was garnered from a report covering quick-response urban travel estimations.

Traffic modeling, trending and projections have also been researched in several independent articles and studies in recent years. Summaries of these studies can be found in section 4.2 of this report.

The Evolutionary Transportation Planning Model determines the demand in a given year based on the demand in the previous year, with adjustments. The model takes into account redistribution of a fraction of the work trips each year associated with the relocation or job changes of families currently in the area, plus changes in distribution associated with growth (or

decline) in population. This new evolutionary data modeling concept can best be used in special circumstances when land use, population and/or employment opportunities will or have recently dramatically changed the traditional traffic flows in the planning area. In those cases, using 10-year or 20-year history for traffic flow data projections can be misleading and inaccurate.

Another article discussed the value of a Rural-based Advanced Traveler Information System (Rural ATIS). This test was a variation on the Advanced Traveler Information System (ATIS) that has been used for urban traffic forecasting and maintenance in the past. The computer model of ATIS was customized to fit the planning needs of the rural areas of a state, and was called the Rural ATIS. The computerized system would warn motorists of impending problems on certain roads, including accident delays and weather conditions.

The working system would be designed for a regional application, incorporating a network of rural roads. Improved traffic safety was the primary concern of the project, with the reduction of accidents on rural highways the main focus of the test.

The Rural ATIS pays for itself in savings of costs related to highway accidents, without even consideration to other cost savings other than accident levels.

With “Network focusing for quick-response subarea analysis”, rather than getting ground transportation counts for the entire Subarea in question for planning, the data collection effort focuses on one or more particular smaller areas, and then the data model fills in the rest of the space – like a ripple effect in water.

The principal use of this model is that it can be used to quickly model the effects of land use and policy changes, as well as network changes, because the entire travel model chain can be run with the focused data set. The data set can originate from one or more sites within the entire subarea, generally those with the largest effect on the larger subarea if a significant change occurs.

Step 8 – Rank potential plans, without regard to funding

At this point, specific projects can be considered for inclusion into the plan. If the commission’s plan is intended to be entirely policy-oriented, this step would include the establishment of guidelines for future project acceptance on a case-by-case basis – either at the local/community level or state level.

If, however, the plan is to include specific projects for federal funding, then this step includes the consideration of all potential projects and should culminate in a qualified ranking of projects in terms of need and safety.

Develop a list of projects that are determined to be necessary and viable, while fitting all requirements of the vision and goals of the planning commission for that subarea. Do not consider funding constraints at this point – just organize them based on a “power ranking” of each project.

Some ranking criteria to consider for inclusion on the list include public support, congestion level (current or future), safety, environment, system continuity, preservation of system, economic impact, inter/multi-modal and ability to implement. The actual weight given to each criterion should be determined by the planning commission, with consideration given to the vision and goals of the plan.

Following are examples of execution of the above step. Please see the table of contents for the appropriate page number in this report to further research these references.

The Kingman Transportation Plan used a specialized, weighted ranking of the projects before them for consideration. Since the potential recommendations were so numerous, priorities had to be set for implementation of the recommended projects.

The project team utilized the following evaluation criteria, rating them based on a 1-2-3 system (3 being the highest priority), and totaling the values of each project for ranking:

- Traffic safety
- Congestion reduction
- Cost-effectiveness
- Design standard conformity
- Economic development impact

The Macon County (NC) plan classified its criteria in a different, yet similar fashion. According to the plan, environmental factors can be broken down into three categories: physical (air quality, water resources, wildlife and vegetation), social (housing, people, health, etc.), and economic (businesses, employment, costs). The relative impact is largely subjective depending on the pros and cons of each factor.

Analysis of the benefits is based on the projected cost savings to the users, in relation to the cost outlay for the improvement. The total benefit comes from three categories: vehicle operating costs, travel time costs and accident costs. How much these costs reduce due to the "project" improvements is the total benefit of the project.

The Colorado City/Hilldale (AZ) plan addressed prioritization as well. The project team needed to prioritize their many potential projects in some quantitative, yet fairly subjective, manner. Final prioritization for these projects included factors such as "pipeline" projects (already underway), immediate needs, availability of funding, and future development potential.

While considering different projects for inclusion into the plan, the commission must communicate with planning leaders and/or planning committees in adjacent areas – so that any projects for intersecting roads could be coordinated with those agencies. This ensures that projects are not in conflict in the future when an intersecting road is involved.

The survey addressed this concern, and the following responses discuss the varied methods employed by planning agencies to ensure adequate communication.

Overall Responses:

33%...open, informal communication between involved agencies

22%...regular meetings between involved agencies to review plans

19%...handled only by the state DOT, regional office takes no responsibility

10%...standing advisory committee

5%.....interactive, joint planning efforts

exchange copies of proposed plans by mail for feedback when needed

special state planning process includes this need

Dave Barber from WACOG/AZ (interview, Appendix B) mentioned that the regular regional Technical Advisory Committee (TAC) meetings include all of the leaders from interested organizations, and they approve all plans together. This way, it is ensured that the plans coordinate with each other, especially with intersecting roads.

Step 9 – Public Involvement (Continuous)

Now that projects have been identified and ranked based on needs, some type of public feedback is necessary to ensure that the determinations of the committee adequately reflect the overall opinions and needs of the public.

The commission needs to get adequate feedback from the public on some of the most important proposed projects to help the commission finalize the rankings of these projects.

Suggested methods for involvement now include more face to face feedback, like public meetings, one-to-one interviews with elected officials and concerned citizens, and additional focus groups with a random sampling of the public.

Following are examples of execution of the above step. Please see the table of contents for the appropriate page number in this report to further research these references.

This study, performed for the Colorado DOT, by the Graduate College of Business at the University of Colorado at Denver, explored the potential for phone contacts and personal focus groups to enhance the public involvement in the statewide planning process. After an initial telephone survey was conducted on a large number of respondents, the research group conducted focus groups to enhance the responses. The focus groups involved 8-12 residents at a time, with at least 3 researchers present to ensure objectivity.

It was clear that the focus groups not only provided context to survey responses, but they many times gave different answers to the questions than the surveys initially indicated.

Example:

The 2020 SEMCOG Regional Transportation Plan reviewed their projections and proposed projects in a series of public forums to obtain feedback on the numbers. This feedback was valuable, and the numbers were adjusted as necessary. The final numbers, after these adjustments were made, became the adopted RDF in 1996.

Step 10 – Develop the Financially Constrained Plan

Once the prioritization is completed, based solely on needs, then estimated costs and available funding are considered to determine the logical “cut-off” point of financially feasible projects to be included in the final regional plan. It is suggested that the actual list of projects be somewhat longer than the “cut off” in case additional funding arises or projects are completed under budget.

This step also requires an aggregate assessment of the total social, environmental, energy and economic impact of the constrained project list on the region, as well as an assessment of the list’s consistency with the vision and goals of the region (as determined earlier in the process).

A large part of this step is the consideration of alternative funding avenues for important projects that, for various reasons, could not or would not receive funding from the state or federal government.

Several states have specific sources of funding designated specifically for this situation, while others use several varying sources, depending on the timing and/or type of improvement project.

Following are examples of execution of the above step. Please see the table of contents for the appropriate page number in this report to further research these references.

The Kingman (AZ) Plan discussed the issue as follows. In addition to the traditional funding sources (HURF, Local Transportation Assistance Fund, ISTEA, etc.), the project team identified several other potential funding sources, including sales tax revenues, private contributions, and money from developers to name a few. It was determined that some sort of alternative funding must be secured in order to adequately implement the necessary road improvements by 2020.

The Macon County (NC) Plan discussed the issue as well. In addition to the funds provided by the ISTEA for each state TIP, secondary funding is traditionally provided by the County Construction Account within each county. When needed road improvements are not covered by TIP funds, this secondary account usually covers paving and stabilizing unimproved roads among other small improvement projects.

The Colorado City/Hilldale (AZ) Plan stated that traditionally, roadway improvements not covered by ISTEA funds have been alternatively funded through Community Development Block Grants (CDBG). Another identified source was HURF funding, whenever it is applicable. If a new housing or commercial development is the cause of the project, partial or entire funding by the contractor is always desirable. Finally, sales tax hikes were considered.

Dave Barber of WACOG/Az (interview, Appendix B) mentioned that if the proposed road cannot be functionally classified by the federal government (i.e. due to the length of road), WACOG has established a regional functional classification. This allows them to use HURF money in place of ISTEA money to fund the project. It also allows for a lot less paperwork and hassle, as well, providing “more bang for the buck”.

The WACOG Policy Plan also details the Five-Year Local Construction Program. This program provides for a structured forum in which local governments and interest groups can submit project proposals. A submittal form asks for the sponsor name, route ID, type of improvement and estimated cost. Based on many factors (such as overall need, cost/benefit analysis, and the proposed road's functional classification), each proposal is ranked by priority and placed in the 5th year of the current plan. This plan is updated every year.

Step 11 – Alternatives Analysis

As required by law, in this step a list viable alternative options is developed and rated. The lower-cost TSM (Transportation Systems Management) and “No Build” options should be considered in place of each of the proposed project options. The commission needs to identify the benefits of each alternative, including current costs and future cost savings based on the implementation of each alternative for each project.

Following are examples of execution of the above step. Please see the table of contents for the appropriate page number in this report to further research these references.

The study in section 4 “Comparing alternatives in major travel corridors” discussed this step. Since comparisons between modeling alternatives are now required by the ISTEA (there must be several alternatives considered before a planning method can be chosen), some common measure of effectiveness across modes of each of the alternatives must be used. It discussed the need for some type of rating system between these methods in order to appropriately compare them.

Another study in Section 4, “Identification of the Full Costs of Each Alternative” discussed the challenge of identifying “full cost” of each alternative. In this method, full cost included not only the traditional implementation costs, but also less monetarily-definable social and environmental costs. While this is difficult to do, the first measure of comparison is logically the cost issue, both tangible and intangible.

Step 12 – Ensure Regional Plan Consistency with State and Federal Requirements

Finally, in order to actually receive federal and state funds for projects, the plan must follow all of the rules and regulations set forth by the state and federal governments for transportation plans, including ISTEA requirements.

Step 13 – Get the Transportation Plan Adopted

Each planning commission has official steps to follow when having their new plan approved and adopted by the leaders of the involved parties/land in the area. Usually, a general Executive Board is created, either for the sole purpose of adopting the new plan or for a more general reason as a standing committee for that area.

The “board” should consist of leaders of every interested party in the plan, whose jurisdiction overlaps the plan’s roads either partially or entirely. The members of this board should not include the members of this planning commission.

Following is a specific example of execution of the above step. Please see the table of contents for the appropriate page number in this report to further research these references.

Robert Vaughan (of the Yuma MPO/Az) gives the example of his Executive Board, consisting of elected officials from the cities of Yuma, San Luis and Somerton, Yuma County, Town of Wellton and the AZ State Transportation Board (member appointed by the Governor).

Step 14 – Monitor and Re-evaluate the Plan (as necessary)

Once the plan has been adopted and begun to be implemented, it needs to be periodically evaluated for updates and changes. The frequency of these reviews depends entirely on the circumstances of that situation.

Following are examples of execution of the above step. Please see the table of contents for the appropriate page number in this report to further research these references.

A survey question directly asked the question of how often to update the existing transportation plan. The following are the answers and analysis in summary.

Overall Response:

24%	<i>Every Year (16)</i>
27%	<i>Every 2 Years (18)</i>
22%	<i>Every 3 Years (15)</i>
30%	<i>Every 5 Years (20)</i>
5%	<i>Every 10 Years (3)</i>
10%	<i>Other/not planning one yet</i>

The responses on frequency of formally updating any part of their transportation plans varied greatly, ranging mainly from 1-5 years (85% of total) and showing almost equal distribution: every year at 24%, every 2 years at 27%, every 3 years at 22%, and every 5 years at 30% of the total answers. This indicates the best time frame for formally updating your transportation plan is still in the experimental stage, with the preference to be within 5 years of the last update.

A full 10% of respondents stated that either they have not planned for any updates at this time, that they have just completed their first plan and so could give no update timeframe, or that they do not create formal plans at all.

Finally, the last 5% of respondents stated that 10 year intervals was a good update timeframe (probably referring only to their long-range state plan).

Some recently-completed plans and personal interviews discussed this step.

The Colorado River Regional plan involved several different states, counties and cities, and so the project team suggested the formation of a Joint Powers Agency to preside over the entire region. It was determined that existing legislation would allow for adequate power to the JPA.

Interview/Dave Barber/WACOG/AZ:

The interview with Dave Barber (WACOG/Az) revealed that the TIP, or 5-year Local Construction Plan, will be updated annually. The Policy Plan as a whole will be updated in 3-5 years. Longer range planning in rural areas is more speculation than anything, and so is not done by WACOG at this time.

Another consideration for revisiting of the plan is the air quality status of the area, or any part thereof. While any change to the attainment status of the area in question guarantees some change in the existing plan, however minimal, some survey responses discussed their methods of ensuring continued attainment in a "clean" area.

Overall Response:

Constant review of policy in attainment areas

Developed special organization (i.e. Air Quality Program for Treasure Valley)

Action groups (ozone)

Public alerts (ozone)

APPENDIX A - PERSONAL CONTACT AND INTERVIEW LIST

Technical Advisory Committee:

John Semmens
Research Project Manager
ATRC, ADOT
(602) 407-3137
Fax: (602) 256-6367
Email: jsemmens@dot.state.az.us

Jess Jarvis
Leader
MPOs/COGs Team
Intermodal Transportation Division, ADOT
(602) 255-8144
Fax: (602) 407-3046
Email: jjarvis@dot.state.az.us

C. Pat Cupell
Senior Transportation/Air Quality Planner
MPOs/COGs Team
Intermodal Transportation Division, ADOT
(602) 255-6732
Fax: (602) 407-3046
Email: ccupell@dot.state.az.us

Chris Fetzer
Transportation Planner
NACOG
119 E. Aspen Ave., Flagstaff, AZ 86001-5296
(520) 774-1895 x142
Fax: (520) 773-1135
Email:

Alan Hansen
Transportation Engineer
FHWA - Arizona Division
(602) 379-3646
Fax: (602) 379-3608
Email: ahansen@fhwa.dot.state.az.us

Robert Vaughan
Executive Director, Yuma MPO
200 West 1st Street
Yuma, AZ 85364
(520) 783-8911
Fax: (520) 329-1674
Email: bobympo@juno.com

Mike Sabatini
Transportation Planner
Maricopa County
(602) 506-8628
Fax: (602) 506-4882
Email: mikesabatini@mail.maricopa.gov

Harry Reed
(602) 279-1234
Fax: (602) 279-1411

Dale Buskirk
Manager, State Planning Team
ADOT, Intermodal Transportation Division
Email: dbuskirk@dot.state.az.us

Other Arizona Councils of Government:

Dave Barber
Deputy Director, Kingman
Western Arizona COG
224 S. 3rd Ave., Yuma, AZ 85364
208 N. 4th St., Kingman, AZ 86401
(520) 753-6247
Fax: (520) 753-7038

Dean Giles
Transportation Program Director
Central Arizona Association of Governments
271 Main Street
Superior, AZ 85273
1-800-782-1445
Fax: (602) 253-7941

Rich Gaar
Transportation Planner
Southeastern Arizona Gov. Assn.
118 Arizona St.
Bisbee, AZ 85603
(520) 432-5301
Fax: (520) 432-5858

Dave Wessel
Transportation Planner
Flagstaff MPO
211 W. Aspen Ave., Flagstaff, AZ 86001
(520) 779-7685 x230
Fax: (520) 779-7693

Other Contacts and interviews:

Fred Shupla
Hopi Tribe
Transportation Planning
(520) 734-2441
FAX (520) 734-2435

Vernon Palmer
Bureau of Indian Affairs
Branch of Roads
Phoenix, AZ
(602) 379-6782

Tom Belshe
League of Arizona Cities
(602) 258-5786

Deb Sydenham
Department of Commerce
Community Planning Manager
Planning Assistance Division
3800 N. Central, Suite 1400
Phoenix, AZ
(602) 280-1350

Ron Poole
North Carolina DOT
Statewide Planning Branch
P.O. Box 25201
Raleigh, NC 27611
(919) 733-4705

Morey Byington
Planning Director
Southeast Idaho COG
(208) 233-9322

Judy Harmon
Transportation Planner
Idaho DOT
(208) 239-3369

Don Sneed
Transportation Planner, State Planning Team
Intermodal Transportation Division, ADOT
Phoenix, Arizona
(602) 255-8140
Fax: (602) 407-3046

Jeff Mielbeck
Pine Country Transit
Transportation Planner/Director

Flagstaff, Arizona
(520) 779-6624

David Mann
Transportation Planner
Planning & Zoning
Coconino County, Arizona
(520) 774-5011

Samuel Johns
Navajo DOT
P.O. Box 4620
Window Rock, AZ 86515
(520) 871-6498

Additional Contacts:

Anthony Giancola
NACE (national assn. of county engineers)
Email: nace@naco.org

Arizona Dept. of Environmental Quality
1-800-234-5677

John Bell
Forest Engineer
Kaibab National Forest
Williams, AZ

INTERVIEW NOTES

Chris Fetzer
Transportation Planner
NACOG
119 E. Aspen Ave., Flagstaff, AZ 86001-5296
(520) 774-1895 x142
Fax: (520) 773-1135

2/10/98

Notes:

The area that NACOG covers include the Apache, Navajo, Yavapai and Coconino counties (with the exception of Flagstaff MPO area).

Level of communication with other organizations:

ADOT: very good relationship, NACOG gathers feedback data from the public regarding road improvements, and provides this to ADOT

FMPO: excellent communication since they work in the same city and plan for many of the same roads

Planning:

NACOG is now in the midst of creating their project-specific plan for the first time. They expect to have the plan completed within the next year. This plan will include particular improvement projects with horizons ranging from 5, 10 and 20 years ahead.

Each new project must follow the new Policy Plan just finished. They will employ consultants to help with this plan over the next year.

Follow-up questions:

Where does the funding come from, how many different avenues?

Can I get a copy of the recently-finished Policy Plan?

Tribal issues:

NACOG offers its services to the tribes in its area, but the tribes show lack of interest in dealing with the state on this level. Chris provided me with contact names for the Hopi and Navajo tribes, and suggested contacting the BIA for further information on the tribes.

Contacts:

Fred Shupla - Hopi Tribe (520) 734-2441

Paulson Chaco - Navajo Tribe (520) 871-6498

Attainment issues:

NACOG currently has no areas that are non-attainment at this time. The biggest concern is the potential new PM2.5 particulates standard that may be mandated in the near future. Preliminary studies have suggested that many areas would be in danger of non-attainment at that point. They would have 3 years to adjust, though, if this does happen, before the government would impose any penalties.

Public Involvement:

This is mainly effected before any improvement projects are brought to NACOG's attention for funding. The small towns, cities or areas will put together their proposal for improvement that includes public feedback and suggestions.

General:

Their regional TIP only deals with non-federal roads statewide. For those highways, they only collect feedback and data for ADOT use.

The Small Area Transportation Studies program gets ADOT to help the small cities do their own planning for long-range issues. Good example of small-city planning provided by Chris were Cottonwood, Sedona and Fredonia.

FMPO is now kicking off on a long-range plan.

Data Needs/Issues:

When asked what he would like in a perfect world, Chris mentioned a systematic, uniform process for each town when collecting their traffic counts. He realizes that each town has different resources and needs, and so has different priorities, but it is difficult to compare similar towns to each other for additional data modeling potential.

Finally, Chris agreed to try to provide me with contact names and numbers in Cottonwood, Sedona and Fredonia to interview them on their planning practices.

Interview ended @ 7:50am

2/16 follow-up questions on traffic counting and copy of report
emailed him at 5:15pm

2/24 8:30am... Chris called to offer answers to more questions...

Notes (second interview):

Specific Planning Practices

Population projections and traffic projections are very closely tied together – they go hand-in-hand in terms of trending future volume.

Traffic counting is very necessary, but inconsistent across the regions. Each area collects different types of data, so it cannot always correlate to each other. For the new project plan, they are going to have it done across the entire area in order to gather the best, most accurate data they can get. Also, in the project plan, they will factor in seasonal traffic as well as year-round or residential traffic.

NACOG does not really engage in serious land-use projections across the area. All of it has pretty much been decided by now in terms of zoning.

Population projections will be provided by Dept. of Economic Security.

Good example with specific data modeling techniques used, including

-Traffic analysis zones (TAZ's), number of housing units, major trip generators, links representing roadways, etc....

Prescott Valley/Chino Valley/Yavapai County

1995

Contacts: Larry Tarkowski, Public Works Director
(520) 775-4022

Mike Rozyski, Planning and Zoning, Yavapai County
(520) 771-3214

Dave Barber
Deputy Director
Western Arizona COG
224 S. 3rd Ave., Yuma, AZ 85364 / 208 N. 4th St., Kingman, AZ 86401
(520) 753-6247
Fax: (520) 753-7038

2/13/98

Notes:

The area that WACOG plans for covers Mohave and La Paz, even though the COG is bigger than that.

Planning:

They just finished their Policy Plan – turned in to the Executive on 2/12 – and this plan incorporates not only Policy but specific projects as well. While the plan documents their long-range improvement policy, it also contains specific projects on subjects such as pavement preservation, drainage, bridges, and alternate methods of financing, plus population projections.

The Policy Plan also details the Five-Year Local Construction Program. This program provides for a structured forum in which local governments and interest groups can submit project proposals. A submittal form asks for the sponsor name, route ID, type of improvement and estimated cost. Based on many factors (such as overall need, cost/benefit analysis, and the proposed road's functional classification), each proposal is ranked by priority and placed in the 5th year of the current plan. This plan is updated every year.

If the proposed road cannot be functionally classified by the federal government (i.e. due to the length of road), WACOG has established a regional functional classification. This allows them to use HURF money in place of ISTEA money to fund the project. It also allows for a lot less paperwork and hassle, as well, providing "more bang for the buck".

Dave agreed to send me a draft copy of the policy plan by 2/19.

Planning Timeline:

The TIP, or 5-year Local Construction Plan, will be updated annually. The Policy Plan as a whole will be updated in 3-5 years. Longer range planning in rural areas is more speculation than anything, and so is not done by WACOG at this time.

Needs:

Like NACOG, the staffing patterns in local cities to handle traffic counting leaves a lot to be desired. The cities just cannot afford the manpower required to do consistent and timely traffic counting, which significantly damages planning efforts.

HPMS data requirements are too difficult to provide as required – the cities cannot afford to use certified engineers to provide the type of data they want (such as grade, radius of curves, the 20th highest hour of traffic volume, etc.).

Finally, funding needs outweigh the data needs by far. There are just too many viable and deserving improvement projects that simply cannot be funded adequately.

Public Input:

Same as NACOG

Note: most of the feedback is from elected officials speaking on behalf of their constituents, rather than the public itself.

Intersecting Roads:

The regular regional TAC meetings include all of the leaders from interested organizations, and they approve all plans together. This way, it is ensured that the plans coordinate with each other, especially with intersecting roads.

Air Quality:

He has one non-attainment area – Bullhead City. This was just recently determined, and he feels it is due to the amount of recent construction (airport and casinos in Laughlin) and agriculture on the reservation lands.

Currently, Lima & Assoc. is working on an Updated Bullhead City Area and Air Quality Conformity study. I will research this project.

General:

Regarding funding on a project, if the funds are from ISTEA, ADOT administers the bidding and awarding of the contract, and handles the inspections and payment as well. If the funds are from HURF, the project managers handle the bidding, awarding, inspections (certified) and payment themselves.

Dean Giles
Transportation Program Director
Central Arizona Assn. Of Gov. (CAAG)
271 Main Street, Superior, AZ 85273
1-800-782-1445
Fax: (602) 253-7941

2/17/98

Notes:

Planning

They are just now finishing the Policy Plan. It should be done and approved by late March of 1998. The plan is strictly policy, containing no specific projects at all. The planning horizons are still unclear, not yet determined.

Data Gathering

They have some "loaner" state employees at their disposal for the purpose of traffic counting - where and when necessary. Still, traffic counts are difficult to gather on a timely and relevant basis.

Project Prioritization

They are currently trying to put together selection criteria for prioritizing submitted projects, including factors such as environmental issues, safety and performance standards.

Air Quality

They currently have three non-attainment rural areas: Payson, Hayden/Miami and Apache Junction. All are for PM-10 reasons (dust). At least Payson and Hayden/Miami have approved state implementation plans. For further discussion, Dean referred me to the people that handle the entire air quality issue:

Arizona Dept. of Environmental Quality
1-800-234-5677

Tribal Issues

Mainly, this is a one-way communication. CAAG send them information and newsletters, but the tribes really do not participate in any planning with CAAG.

Public Involvement

As the other COG's have maintained, little is done at the CAAG level in terms of eliciting public involvement. This is usually done at the local level before the proposed project ever gets to CAAG.

Dean mentioned a specific effort they planned - to be finished with their regional TIP at least one month prior to its "submittal" date and make it available to the public for feedback, probably through the newspapers.

Samuel Johns
Navajo DOT
P.O. Box 4620
Window Rock, AZ 86515
(520) 871-6498

contact number provided by: Chris Fetzer, NACOG

2/17/98

Notes:

Planning:

They generally do not deal with ADOT because their roads are not eligible for ISTEA funding through normal methods. They base their planning practices on Section 204 of ISTEA – Federal Lands Program, new section J.

Planning Horizons:

They try to keep the plan updated annually. They are now finalizing their long-range plan, and will send ADOT a copy upon approval by the Tribal Council.

Road Construction issues:

They get some funding from ADOT through the Indian Reservation Roads program.. The set of priorities for road improvements are determined by the Tribal Council.

Due to sovereignty issues in Arizona, they have no contracts with the state, which are required to receive HURF funding. They have more success working with New Mexico and Utah DOTs than with ADOT, because of this problem.

Road Maintenance issues:

The department of interior funding is getting less and less, but they are currently working with ADOT through Larry Bonine (? – follow up needed).

Current Improvement Plans:

Airport development was highest on the list of improvement projects.

Vernon Palmer
Bureau of Indian Affairs
Branch of Roads, Arizona
(602) 379-6782

2/25/98

Notes:

Branch of Roads DOES help the reservations create their transportation plans, all but the Navajos use them or a consultant.

Most reservations have a 5-year plan they update annually, and many of them are updating right now...

While the tribes hire consultants to do the planning, BIA provides "contract requirements" to each consultant to sign and follow – to make sure all the basics are done and guaranteed.

Suggested I meet Bob Maxwell, and come by the department to see some of the recent plans completed for different tribes by consultants, as well as the BIA plans...

Called Bob, need to schedule a meeting next time come to Phoenix (not 2/27)

Suggestion of good, recent plan:

Kaibab Plan

By: Presnell & Assoc., Kentucky

Not quite finished yet, but will get me copy when done...

Tom Belshe
League of Arizona Cities
(602) 258-5786

2/18/98

Notes:

Tom made it clear from the outset that his office no longer assists small cities with their planning, especially transportation.

Tom referred me to the **Department of Commerce, Community Planning Assistance Division. Phone: (602) 280-1350.**

Deb Sydenham
Community Planning Manager
Planning Assistance Division
Department of Commerce
3800 N. Central, Suite 1400
Phoenix, AZ
(602) 280-1350

2/18/98

Notes:

They have not created a manual or instruction guide to assist the communities in their transportation planning. Rather, they help each community on a one-to-one basis as needed.

They do, however, have a **full booklet** on doing an entire community long-range plan, of which there is a transportation component. She suggested I stop by their office some day to peruse it, along with copies of other plans she has in their library.

Bill Stringfellow
Colorado RTA
(303) 757-9266
(303) 757-9757

contact provided by: Alan Hansen, FHWA

Note: per Dale Buskirk, ADOT, Colorado just finished a bottom-up plan, rolling regional TIPs into the statewide TIP

2/19/98

Notes::

Regions

They have split the state into 15 regions (5 MPO, 10 rural), and each region is responsible for their own transportation plan. This was unorganized in the past, and created countless hours of work for the state in order to make sense of the plans in some orderly fashion.

Planning

While each region can make their own plan, the state is now able to help them so that when they submits plans or projects to the state, there is some uniformity to the process. They distribute to each region a Planning Guide Book, and every 5-6 years they distribute sums of money to each region specifically to finance their planning process.

Each region's plans are entirely project-specific. The last time this was done, the 15 regions totaled more than 3500 projects, all of which became part of the state-wide plan.

The next regional plan kick-off is set for July 1998.

Data Modeling

CO has taken a huge step in data gathering and availability. They have put together a GIS application that contains every piece of gathered data, such as traffic counts, in the past, so that the data can be modeled by each region. Each region will have a copy of this GIS for their own planning purposes.

Each region is responsible to do their own land-use projections. Many of the rural regions leave the zoning as it is, unless necessary to change for a specific reason.

Project submission

Each region will also get a GIS application that provides them with a template and planning process for submitting their projects to the state. This ensures uniform submittal of projects, regardless of the region from which it originates. The software is intuitive, in that it questions projects that have not been adequately justified (i.e. why widen this road if there have been no recorded problems in past data - accidents, congestion, etc.?). When finished (hopefully in June 1998), this software will ease a great burden on all planning offices.

Bill promised to submit copies of "screen shots" of the system, and hard copies of printouts of the available parts of the system to date. This will be submitted when the survey is returned in March.

Public Involvement

CO is very active in ensuring adequate public involvement before a project is approved. First, they set minimum requirements for documentation of public involvement opportunities to be managed at the regional level. The state also offers to handle any mailings and maintain any mailing list needed by each region.

General

Finally, Bill mentioned that they are very concerned that the “little” non-federal roads of each region be included in their plans, not just the big highways and main roads.

Ron Poole
Statewide Planning Branch
North Carolina DOT
P.O. Box 25201
Raleigh, NC 27611
(919) 733-4705

contact provided by: Alan Hansen, FHA

2/12/98

Notes:

Ron immediately offered to send copies of several recent studies done for the rural areas of the state: a county study, town/community study, regional study (multi-county).

Suggested I look over these studies and call back to discuss. **Referred me to Wes Stafford, in the Small Urban Studies Unit, for my follow-up.**

Air Quality:

Currently, they have no dust problems in their state. They are most worried about the new ozone level standard. Early studies have shown that almost half the state will immediately fall into non-attainment status.

Planning:

Their planning is done hand-in-hand, per Ron. All the leaders of the different organizations deal directly with the leaders for the state and plan their improvements in concert with each other. It could not be called top-down or bottom-up planning, rather it is very balanced, full of compromise.

2/19/98 copies of 6 plans received 2/19/98...

Morey Byington
Planning Director
Southeast Idaho COG
(208) 233-9322

2/19/98

contact provided by: Alan Hansen, FHA

Notes:

Morey immediately admitted that he doubted he could help in a big way on this project, because Idaho currently does NO rural area planning at this time in any fashion.

They require new legislation to allow them to plan for those rural areas. Currently, it is just not legally possible in Idaho.

He did mention that they offer a brochure for small communities that outlines the planning process and suggestions for planning in their community, to help even the city clerk complete an effective transportation plan.

To get the brochure, I need to call **Judy Harmon at 208-239-3369, Transportation Planner in the Idaho DOT.** Judy not in until Monday, 2/23.

Judy Harmon
Transportation Planner
Idaho DOT
(208) 239-3369

2/26/98

Notes:

The "guide" to which Morey Byington alluded is not quite finished at this time. It is in fact very thick she said (50-60 pages). Expected completion date is end March, early April...will send copy when approved

Don Sneed
Intermodal Transportation Division
ADOT
(602) 255-8140
Fax: (602) 407-3046

Referred to me by Dale Buskirk in same office. Suggested Don could send me the copies of recent state plans I requested.

2/9/98 called Don, asked for copies of plans, said he would look into and call back later this week

2/12/98 Don called, sending me copies of several plans:

Colorado City	1993
Page	1991
Winslow	1992

And executive summaries of plans:

San Luis	1992
Coolidge	1989
Camp Verde	
Florence	
Bisbee	
Colorado River area	
Payson	1986
Kingman	1997

Also will make available in their office full plans for which they have no copies for mailing:

Kingman	1997
Douglas	1994
Colo. River	1993
Central Yavapai County	1995

Don also said that many more are being worked on as we speak. Suggested I speak to Dale for the names of the project managers on current plans.

2/14/98 Received all copies of plans.

Jeff Mielbeck
Pine Country Transit
Transportation Planner/Director
(520) 779-6624

2/26/98

Notes:

He deals strictly with the urban metropolitan areas, all transit specifically. He works more closely with Dave Wessel at Flagstaff MPO than anyone else. No help offered at this point.

David Mann
Transportation Planner
Planning & Zoning
Coconino County, Arizona
(520) 774-5011

2/26/98

Notes:

His jurisdiction covers all unincorporated areas of Northern Arizona, places like Doney Park, Kachina, Mountaineer...

He spends more time with current planning, land use and zoning, rather than actual transportation planning.

Suggestions:

The Public Works department does all the transportation planning in the rural areas of Northern Arizona around Flagstaff...they do some of their own traffic counts, five-year plans, updated annually, etc....

Good Project:

Doney Park planning committee just completed a community-wide plan of recommendations of transportation improvements in their area. It is now before the public officials for approval.

APPENDIX B - BIBLIOGRAPHY OF REFERENCE MATERIALS

Bibliography of Reference Articles/Books

1. "Survey and summaries of metropolitan organizations and state departments of transportation", American Assn. Of State Highway and Transportation Officials, AASHTO, 1992.
2. Capelle, Russell B., "Planning and managing intermodal transportation systems: a guide to ISTEA requirements", USDOT, Technology Sharing Program, Nov. 1994
3. Castleberry, Clay, "Manual: pavement management systems for ISTEA", Univ. of California, Nat. Assn. Of County Engineers (NACE), 1994.
4. Turnbull, Katherine F., et al., "Enhancing transit communication in Texas", Texas Transportation Institute, April 1995.
5. Howe, Stephen M., et al., "A transit trip distribution model for multimodal subarea focusing", North Central Texas Council of Governments (NCTCOG), Jan. 1981.
6. "Safety management system: a national status", Transportation Research Circular, 1996/02 (452), pp. 65.
7. Howe, Linda K., Brail, Richard K., "Intermodal surface transportation efficiency act and interactive transportation planning and decision support: a new conceptual model.", Transportation Research Record, 1994, n 1446, pp. 1.
8. "The intermodal surface transportation efficiency act", Constructor, Dec 1, 1991, v. 73, n. 12, pp. 9.
9. "Land use, transportation and air quality manual", Planning, March 1994, v. 60 n. 3, pp. 13.
10. McLeod, Douglas S., "Integrating transportation and environmental planning: extending applicability of corridor and subarea studies and decisions on design concept and scope", Transportation Research Record, 1996 n. 1552, pp. 1.
11. McConnell, Thomas H., "Transportation planning and trial: the clean air act and travel forecasting: Mark Garrett and Martin Wachs", Transportation Law Journal, 1997 v. 24 n. 2, pp. 237.
12. Horowitz, Alan J., "Integrating GIS concepts into transportation network data structures", Transportation Planning and Technology, 1997, v. 21 n. 1/2, pp. 139.
13. McCormack, Edward; Nyerges, Timothy, "What transportation modeling needs from a GIS: a conceptual framework", Transportation Planning and Technology, 1997, v. 21 n. 1/2, pp. 5.
14. "Refreshing ISTEA", Planning, Feb 1, 1993, v. 59 n. 2, pp. 9.
15. Fiore, David R.; Stafford, John M., "Intermodal transportation planning for the environment: social, cultural, and economic considerations for an interdisciplinary solution for change", Transportation Law Journal, 1995, v. 23 n. 2, pp. 237.
16. "Executive Summary: National Conference on Intermodalism: Making the Case, Making It Happen", Conference Proceedings 11, 1996, pp. 1-7.

17. Winslow, *et al*, "Introduction of information feedback loop to enhance urban transportation modeling system", Transportation Research Record, 1995 n. 1493, pp. 81-89.
18. DeCorla-Souza, *et al*, "Comparing multimodal alternatives in major travel corridors", Transportation Research Record, 1994 n. 1429, pp. 15-23.
19. McAdams, *et al*, "A geographic information system application to regional subarea transportation modeling", North Carolina Univ., Center for Interdisciplinary Transportation Studies, 1992/08, pp. 15.
20. Decorla-Souza, "Network focusing - tool for quick-response subarea analysis", Institute of Transportation Engineers (ITE) Journal, 1991/09. 61(9), pp. 33-38.
21. Nygard, *et al*, "Issues in GIS for transportation", Mountain-Plains Consortium, MPC report no. 95-43, 1995/01, pp. 239.
22. Lowe, Bloom, "Minnesota's ISTEA area transportation partnerships: a substate, multicounty geographic basis for making transportation investment decisions", Transportation Research Record, 1995 n. 1499, pp. 7-10.
23. Creasey, *et al*, "Development of a prototype integrated management system", Transportation Research Board, Methods Applications Vol. 1, 1995.
24. Markow, M.J., "Highway management systems: state of the art", Journal of Infrastructure Systems, 1995/09, n. 1(3), pp. 186-191.
25. Swauger, L.W., "Tracking the future: integrating IVHS technologies with the ISTEA management systems", Institute of Public Policy, George Mason Univ., 1994/06, pp. 365-368.

Bibliography of Transportation Plans:

Arizona

Kingman Area Transportation Study
Kingman, Arizona
November 1997

Page Area Transportation Study
Page, Arizona
May 1991

Small Area Transportation Study
For San Luis, Arizona
May 1992

Winslow Area Transportation Study
Winslow, Arizona
February 1992

Connecticut

Master Transportation Plan
Connecticut Department of Transportation
1997

1995 Long Range Transportation Plan
Connecticut Department of Transportation
1995

Colorado

Colorado: 2020 Mountains and Plains Regional Transportation Plan
Denver Regional Council of Governments
April 1997

Colorado City Transportation Study
Colorado City, Arizona
March 1993

Colorado Regional Transportation Planning Guidebook
Colorado Department of Transportation
January 1998

Colorado River Regional Transportation Study (CRRTS)
September 1993

Florida

Connections Bringing Florida Together: 2020 Florida Transportation Plan

Florida Department of Transportation
March 1995

Idaho

Destination 2015: Regional Transportation Plan for Northern Ada County
Ada Planning Association
Boise, Idaho
February 1996

Indiana

Transportation in Indiana: Multimodal Plan Development for the 1990s and Beyond
Indiana Department of Transportation
1995

Iowa

Iowa Transportation Improvement Program
Iowa Department of Transportation
1997

Louisiana

Statewide Intermodal Transportation Plan
State of Louisiana Department of Transportation and Development
March 1996

1996 Regional Transportation Plan
Tulare County Association of Governments
Transportation Planning Agency
November 1996

Maine

Keeping Maine Moving: Twenty Year Transportation Plan
Maine Department of Transportation
Draft
February 1998

RTAC 6: Regional Transportation Advisory Committee 6: Regional Advisory Report
Maine Department of Transportation
Draft
February 1998

Michigan

2020 Regional Transportation Plan (SEMCOG)
Southeast Michigan Council of Governments
March 1997

Missouri

Show-Me Transportation
Missouri Highway and Transportation Department

Nebraska

Future Transportation in Nebraska
Nebraska's Statewide Long-Range Transportation Plan
September 1995

Nebraska Highway Program
1997

State Highway Plan and Highway Needs Report
Nebraska Department of Roads
1997

Nevada

Multi-Modal Transportation Plan
Ely, Nevada
May 1997

New Jersey

1996 Annual Report
South Jersey Transportation Planning Organization

New York

21st Century Mobility
The Transportation Plan for the Hudson Valley
New York
June 1992

The Next Generation...Transportation Choices for the 21st Century
New York Department of Transportation
Summer 1996

North Carolina

Elizabeth City Thoroughfare Plan
Elizabeth City, North Carolina
January 1997

Thoroughfare Plan for Hyde County
Hyde County, North Carolina
April 1993

Thoroughfare Plan for Macon County
Macon County, North Carolina
January 1997

Thoroughfare Plan for Region D
North Carolina
September 1993

Statewide Transportation Plan for North Carolina
North Carolina
September 1995

North Dakota

TranSpirit
North Dakota Statewide Intermodal Transportation Plan
December 1995

Oklahoma

Planning for 2020: Oklahoma City Area Regional Transportation Study
June 1995

Washington

State Highway System Plan 1999-2018
Washington State Department of Transportation
January 1998

Washington's Transportation Plan 1997-2016
Washington State Department of Transportation
April 1996

West Virginia

Statewide Transportation Policy Plan
West Virginia Department of Transportation
1995

APPENDIX C: INDIVIDUAL SURVEY RESPONDENT ANSWERS

Alaska

Contact name	Jeff Otteson	Title	AICP, Statewide Planning Chief
Organization	Division of Statewide Planning, Alaska Dept. of Transportation		
Phone Number	(907) 465-6971	Fax Number	907-465-6984
E-mail address	jeff_otteson@dot.state.ak.us		
Address	3132 Channel Drive, Room 200, Juneau, AK 99801		
Type of Plan	regional	<i>(Statewide, Regional, MPO,</i>	
Policy/Project	project-specific		
\$\$/Needs-based?	fiscally constrained	<i>(Fiscally constrained or Needs-based?)</i>	
update timeframe	10 <i>(in years)</i>		
planning horizons	20 <i>(in years)</i>		
add'l comment	they develop regional plans that are project specific/constrained		

Comments Section:

short-range needs

additional data needed?	travel demand, especially latent demand
voter/taxpayer input?	meetings, newsletters, advisory committees, outreach at public events (count fairs), telephone surveys, web site, mailing lists
coordinate/intersecting roads	USFS rep part of their advisory committee

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	nothing yet, but prob will with PM 2.5
If not:	
methods to assure continued conformity?	Alaksa DOT deals with this directly

Alabama

Contact name George Ray ***Title*** Transportation Planning

Organization Alabama Dept of Transportation

Phone Number (334) 242-6438

Fax Number

E-mail address rayg@dot.state.al.us

Address

Type of Plan statewide

(Statewide, Regional, MPO,

Policy/Project policy

\$\$/Needs-based?

(Fiscally constrained or Needs-based?

update timeframe 5 ***(in years)***

planning horizons 20 ***(in years)***

add'l comment

Comments Section:

short-range needs 5-year Construction Plan is adopted and updated annually

additional data needed? rural traffic model;demographic projections;inventory and needs

voter/taxpayer input? no rural plan done

coordinate/intersecting roads each county transportation engineer keeps in contact with the others to ensure coordination

Air Quality Issues:

currently have any non-attainment areas? ***major cause***

transp. conformity consultation process

If not:

methods to assure continued conformity? none

Arkansas

Contact name	Paul Simms	Title	Staff Planning Engineer
Organization	Arkansas State Highway and Transportation Dept.		
Phone Number	(501) 569-2100	Fax Number	
E-mail address	pesp210@ahtd.state.ar.us		
Address			

Type of Plan	statewide	(Statewide, Regional, MPO,
Policy/Project	policy	
\$\$/Needs-based?		(Fiscally constrained or Needs-based?
update timeframe	5 (in years)	
planning horizons	0 (in years)	
add'l comment	INCOMPLETE - 7-13 unanswered	

Comments Section:***short-range needs***

additional data needed?	socioeconomic data
--------------------------------	--------------------

voter/taxpayer input?	public meetings
------------------------------	-----------------

coordinate/intersecting roads	this dept works with other agencies through the project development and environmental handling
--------------------------------------	--

Air Quality Issues:

currently have any non-attainment areas?	major cause
---	--------------------

transp. conformity consultation process

If not:

methods to assure continued conformity?

Arizona

Contact name	Robert A. Vaughan	Title
Organization	Yuma Metropolitan Planning Organization	
Phone Number	(520) 783-8911	Fax Number
E-mail address		
Address	200 West 1st Street, Yuma, AZ 85364	
Type of Plan	regional	(Statewide, Regional, MPO,
Policy/Project	project specific	
\$\$/Needs-based?	fiscally constrained	(Fiscally constrained or Needs-based?
update timeframe	5 (in years)	
planning horizons	20 (in years)	
add'l comment	included in the appendix unfunded projects that needed attention in the future	

Comments Section:

short-range needs	short-range element part of big plan
additional data needed?	population and land-use by TAZs, traffic counts
voter/taxpayer input?	newsletters; PSAs; newspaper articles; ads; public meetings and follow up
coordinate/intersecting roads	collaborations, regularly send plans and meeting agendas to intersted or involved agencies

Air Quality Issues:

currently have any non-attainment areas?	major cause PM 10
transp. conformity consultation process	prepares an annual PM 10 conformity report, signed off by FHWA, FTA and reviewed by EPA

If not:
methods to assure continued conformity?

California

Contact name Eddie Wendt **Title** Transportation Engineer

Organization Tulare County Association of Govt's

Phone Number (209) 733-6291

Fax Number

E-mail address

Address 5961 S. Mooney Blvd., Visalia, CA 93277

Type of Plan regional **(Statewide, Regional, MPO,**

Policy/Project project

\$\$/Needs-based? very fiscally constrained **(Fiscally constrained or Needs-based?**

update timeframe 2 **(in years)**

planning horizons 20 **(in years)**

add'l comment

Comments Section:

short-range needs in the RTP (regional transp. Plan)

additional data needed? none

voter/taxpayer input? public hearings, public workshops, ads on radio, hired a PR firm to handle meetings

coordinate/intersecting roads meet regularly with adjacent counties, memos of understanding are agreed upon

Air Quality Issues:

currently have any non-attainment areas? **major cause** PM 10 (dust), onzone

transp. conformity consultation process entire San Joaquin Valley - through TCM's (transportation control measures), clean air programs, signal coordination, bicycle facilities, van pools, car pools...

If not:

methods to assure continued conformity? no

California

Contact name	Bart Meays	Title	Executive Director
Organization	San Joaquin Council of Governments		
Phone Number	(209) 468-3913	Fax Number	
E-mail address	dmeays@cwws.net		
Address	Stockton, CALIFORNIA		
Type of Plan	MPO	<i>(Statewide, Regional, MPO,</i>	
Policy/Project	both		
\$\$/Needs-based?	fiscally-constrained	<i>(Fiscally constrained or Needs-based?</i>	
update timeframe	2 <i>(in years)</i>		
planning horizons	20 <i>(in years)</i>		
add'l comment	mostly \$\$-based, but some projects are based only on need - no funding required prior		

Comments Section:

short-range needs	as the action element of the plan
additional data needed?	good truck and farm-to-market data
voter/taxpayer input?	committees, workshops, open houses, one-to-one presentations, print media, etc
coordinate/intersecting roads	exchange plans, meet on regular basis, joint planning efforts

Air Quality Issues:

currently have any non-attainment areas?	major cause	dust, ozone, PM2.5 - 8 counties
transp. conformity consultation process	each MPO does their own conformity for their area, difficult and unproductive	
If not:		
methods to assure continued conformity?	n/a	

California

Contact name Tony Boren **Title**
Organization Council of Fresno County Governments
Phone Number (209) 237-2676 **Fax Number**
E-mail address tboren@fresnocog.org
Address

Type of Plan regional **(Statewide, Regional, MPO,**
Policy/Project both
\$\$/Needs-based? both **(Fiscally constrained or Needs-based?**
update timeframe 2 **(in years)**
planning horizons 20 **(in years)**
add'l comment mostly fiscally constrained, but other needs-based projects outlined in separate section

Comments Section:

short-range needs the RTP, prioritized

additional data needed?

voter/taxpayer input? public meetings within the rural cities, public mtg notices and local newpprs

coordinate/intersecting roads standing transportation technical committee meetings with its member agencies

Air Quality Issues:

currently have any non-attainment areas? **major cause** PM 10, CO, ozone

transp. conformity consultation process 8-county non-attainment air dist. Developed onsultation procedures and adopted by 8 MPOs

If not:

methods to assure continued conformity?

California

Contact name	Gary Dickson	Title	Executive Director
Organization	Stanislaus Area Association of Governments (SAAG)		
Phone Number	(209) 558-7830	Fax Number	
E-mail address	saag@sonnet.com		
Address			
Type of Plan	regional	<i>(Statewide, Regional, MPO,</i>	
Policy/Project	both		
\$\$/Needs-based?	fiscally constrained	<i>(Fiscally constrained or Needs-based?)</i>	
update timeframe	2 (in years)		
planning horizons	20 (in years)		
add'l comment	mostly project-specific due to air quality issues		

Comments Section:

short-range needs	set aside a lump sum generally for small projects
additional data needed?	
voter/taxpayer input?	citizens committee, RTP workshop, newsletter, SAAG brochure
coordinate/intersecting roads	communication (informal), MOU's

Air Quality Issues:

currently have any non-attainment areas?	major cause ozone, PM10 (dust)
transp. conformity consultation process	memos of understanding

If not:**methods to assure continued conformity?**

Colorado

Contact name Goerge Scheuernstuhl **Title** Director of Transportation

Organization Denver Regional Council of Governments

Phone Number (303) 480-6743 **Fax Number**

E-mail address

Address 2480 W. 26th Avenue, B-200, Denver, CO 80211

Type of Plan COG (Statewide, Regional, MPO,

Policy/Project project specific

\$\$/Needs-based? both (Fiscally constrained or Needs-based?

update timeframe 2 (in years)

planning horizons 20 (in years)

add'l comment

Comments Section:

short-range needs in the plan

additional data needed? none

voter/taxpayer input? public meetings

coordinate/intersecting roads state transportation advisory committee

Air Quality Issues:

currently have any non-attainment areas? major cause PM 10

transp. conformity consultation process

If not:

methods to assure continued conformity?

Colorado

Contact name	George William Ventura	Title	Planning/Grants Specialist
Organization	Regional Planning Unit, Div. Of Trans. Development, Co/DOT		
Phone Number	(303) 757-9495	Fax Number	
E-mail address			
Address			
Type of Plan	regional	(Statewide, Regional, MPO,	
Policy/Project	project-specific		
\$\$/Needs-based?	fiscally constrained	(Fiscally constrained or Needs-based?	
update timeframe	5 (in years)		
planning horizons	20 (in years)		
add'l comment	each region provides list of needs, prioritized, then the state applies avail funding to limit		

Comments Section:

short-range needs	in the constrained prortion of the Regional Transportation Plan, becoming the STIP
additional data needed?	none
voter/taxpayer input?	Guidelines for Public Involvement for each of the Regional Planning Commissions
coordinate/intersecting roads	CDOT has the regional commissions deal with eachother

Air Quality Issues:

currently have any non-attainment areas?	major cause PM 10
transp. conformity consultation process	Regional Planning Commissions are asked to identify the areas and measures undertaken to ensure attainment (Step V/Reg. Transp. Planning Guidelines)
If not:	
methods to assure continued conformity?	RPCs asked to identify any at-risk areas and the measures taken to keep attainment

Colorado

Contact name	Michael Braaten	Title	Community Development
Organization	Region 10 League for Economic Assistance & Planning, Inc.		
Phone Number	(970) 249-2436	Fax Number	970-249-2488
E-mail address	region10@rmii.com		
Address	P.O. Box 849, Montrose, Co 81402		
Type of Plan	regional	<i>(Statewide, Regional, MPO,</i>	
Policy/Project	project-specific		
\$\$/Needs-based?	fiscally constrained	<i>(Fiscally constrained or Needs-based?)</i>	
update timeframe	5 (in years)		
planning horizons	20 (in years)		
add'l comment	5-year short range Transit Plan, 20 yr Regional Plan		

Comments Section:

short-range needs	listed as priority to receive funding
additional data needed?	none, CDOT gives them everything
voter/taxpayer input?	public meetings, surveys, request comments, etc
coordinate/intersecting roads	hold joint meetings to coordinate plans

Air Quality Issues:

currently have any non-attainment areas?	major cause dust, wood-burning
transp. conformity consultation process	most re-classified recently as attainment, others are urban only
If not:	
methods to assure continued conformity?	none

Connecticut

Contact name	Charles Barone	Title	Transportation Assistant to the
Organization	Bureau of Policy and Planning, CT Dept. of Transportation		
Phone Number		Fax Number	
E-mail address			
Address	2800 Berlin Turnpike, P.O. Box 317546, Newington, CT 06131-7546		
Type of Plan	statewide	<i>(Statewide, Regional, MPO,</i>	
Policy/Project	policy		
\$\$/Needs-based?		<i>(Fiscally constrained or Needs-based?)</i>	
update timeframe	3	<i>(in years)</i>	
planning horizons	20	<i>(in years)</i>	
add'l comment	also has a state-mandated Master Trans. Plan, 2 yr update cycle, that includes projects		

Comments Section:

short-range needs	identified in the Master Trans. Plan
additional data needed?	none
voter/taxpayer input?	done at the regional level
coordinate/intersecting roads	case-by-case basis, no real process

Air Quality Issues:

currently have any non-attainment areas?	major cause ozone
transp. conformity consultation process	the CT/DOT handles the conformity analysis, the regional RPAs and MPOs handle the consultation process

If not:

methods to assure continued conformity?

Connecticut

Contact name Richard Lynn **Title** Planning Director

Organization Litchfield Hills Council of Elected Officials

Phone Number (860) 491-9884 **Fax Number**

E-mail address

Address LHCEO, P.O. Box 187, Goshen, Connecticut 06756

Type of Plan regional **(Statewide, Regional, MPO,**

Policy/Project both

\$\$/Needs-based? needs **(Fiscally constrained or Needs-based?**

update timeframe 4 **(in years)**

planning horizons 20 **(in years)**

add'l comment

Comments Section:

short-range needs roadway improvement transit priorities

additional data needed? detailed data on roadway capacity as it relates to projected population and employment growth

voter/taxpayer input? form advisory committees, public meetings

coordinate/intersecting roads through neighboring regional planning orgs and the state

Air Quality Issues:

currently have any non-attainment areas? **major cause** ozone

transp. conformity consultation process through Conn. DOT

If not:

methods to assure continued conformity?

Delaware

Contact name Ralph Reeb **Title** Assistant Director

Organization Delaware DOT, Planning

Phone Number (302) 739-2252

Fax Number 302-739-2251

E-mail address

Address

Type of Plan statewide **(Statewide, Regional, MPO,**

Policy/Project both

\$\$/Needs-based? fiscally constrained **(Fiscally constrained or Needs-based?**

update timeframe 3 **(in years)**

planning horizons 0 **(in years)**

add'l comment answers 7-12 not completed!

Comments Section:

short-range needs

additional data needed? market research regarding latent demand for alternative modes and services

voter/taxpayer input? public workshops, newsletters, 800 number, interviews with leaders, presentations

coordinate/intersecting roads involving them directly in formulating the plans

Air Quality Issues:

currently have any non-attainment areas? **major cause**

transp. conformity consultation process

If not:

methods to assure continued conformity?

Florida

Contact name Robert Magee **Title** Public Transportation Manager

Organization Florida Department of Transportation

Phone Number (850) 488-8006 **Fax Number**

E-mail address

Address

Type of Plan statewide **(Statewide, Regional, MPO,**

Policy/Project policy

\$\$/Needs-based? n/a **(Fiscally constrained or Needs-based?**

update timeframe 3 **(in years)**

planning horizons 20 **(in years)**

add'l comment

Comments Section:

short-range needs short-range component to the statewide plan

additional data needed? none

voter/taxpayer input? the process provides ample opportunity for public input, all state-level, no rural plans are done in Florida

coordinate/intersecting roads through the MPO planning process

Air Quality Issues:

currently have any non-attainment areas? **major cause**

transp. conformity consultation process

If not:

methods to assure continued conformity? not at this time

Hawaii

Contact name Nell Cammack **Title** Planning Program Coordinator

Organization Oahu MPO

Phone Number (808) 587-2015

Fax Number

E-mail address www.eng.hawaii.edu/csp/ompo

Address

Type of Plan MPO **(Statewide, Regional, MPO,**

Policy/Project project-specific

\$\$/Needs-based? fiscally constrained **(Fiscally constrained or Needs-based?**

update timeframe 3 **(in years)**

planning horizons 20 **(in years)**

add'l comment subarea rural transp plans not prepared

Comments Section:

short-range needs designated into 5,10, 20 year increments for projects

additional data needed? none

voter/taxpayer input?

coordinate/intersecting roads

Air Quality Issues:

currently have any non-attainment areas? **major cause**

transp. conformity consultation process

If not:

methods to assure continued conformity?

Hawaii

Contact name	Julia Tsumoto	Title	State Transportation Planner
Organization	Statewide Transportation Planning Office		
Phone Number	(808) 587-1845	Fax Number	
E-mail address			
Address			

Type of Plan	statewide	(Statewide, Regional, MPO,
Policy/Project	both	
\$\$/Needs-based?	fiscally constrained	(Fiscally constrained or Needs-based?
update timeframe	5 (in years)	
planning horizons	20 (in years)	
add'l comment	both long-term policy, short-tem projects	

Comments Section:

short-range needs	separate seciton of the long-range plan that deals with these needs
additional data needed?	enhanced and updated transit and bike master plans
voter/taxpayer input?	citizens advisory committees consisting of reps fro community orgs, stakeholders groups, and involve them in planning from the outset
coordinate/intersecting roads	standing committees consisting of leaders and planners from different areas

Air Quality Issues:

currently have any non-attainment areas?	major cause
---	--------------------

transp. conformity consultation process

If not:

methods to assure continued conformity?

Iowa

Contact name Dennis Tice **Title** Director

Organization Planning and Programming Div, Iowa DOT

Phone Number (515) 239-1661 **Fax Number**

E-mail address

Address

Type of Plan statewide **(Statewide, Regional, MPO,**

Policy/Project both

\$\$/Needs-based? needs-based **(Fiscally constrained or Needs-based?**

update timeframe 1 **(in years)**

planning horizons 25 **(in years)**

add'l comment policy and projects (33 investment actions) in one plan

Comments Section:

short-range needs covers these needs through the 5-years plan portion of the overall plan

additional data needed? lots more specific data in future

voter/taxpayer input? scientific surveys, opinion surveys, informational mailings, public meetings,
modal advisory committees, state plan advisory comm, videos, internet,

coordinate/intersecting roads all regions work very closely together to ensure consistency

Air Quality Issues:

currently have any non-attainment areas? **major cause**

transp. conformity consultation process

If not:

methods to assure continued conformity? very proactive, Iowa's Clean Air Attainment Program, do projects to reeduce emissions, reductions in vehicle miles traveled, car pooling...to improve air quality and reduce congestion

Iowa

Contact name	Thomas Kane	Title
Organization	Central IA Regional Transp. Planning Alliance	
Phone Number	(515) 237-1366	Fax Number
E-mail address	dmampo@netins.net	
Address		
Type of Plan	regional	(Statewide, Regional, MPO,
Policy/Project	project-specific	
\$\$/Needs-based?	fiscally constrained	(Fiscally constrained or Needs-based?
update timeframe	(in years)	
planning horizons	25 (in years)	
add'l comment		

Comments Section:

short-range needs	in the shortest planning period available, for immediate funding
additional data needed?	none aware of
voter/taxpayer input?	newsletters, public information meetings, reveiwed periodically for improvement of involvement
coordinate/intersecting roads	

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	CIRTPA no direct responsibility for this area
--	---

Idaho

Contact name	Mark McNeese	Title	Senior Transportation Planner
Organization	Idaho Transportation Dept.		
Phone Number	(208) 334-8272	Fax Number	
E-mail address	mmcneeses@itd.state.id.us		
Address			
Type of Plan	statewide	(Statewide, Regional, MPO,	
Policy/Project	both		
\$\$/Needs-based?		(Fiscally constrained or Needs-based?	
update timeframe	5 (in years)		
planning horizons	20 (in years)		
add'l comment	20-year policy plan, 5-year project plan		

Comments Section:

short-range needs	a 1-5 year strategic plan
additional data needed?	none
voter/taxpayer input?	public involvement sessions statewide, usually in the back of other issues
coordinate/intersecting roads	handled at the district level

Air Quality Issues:

currently have any non-attainment areas?	major cause dust
transp. conformity consultation process	allow them some use of CMAQ funds for studies and projects

If not:**methods to assure continued conformity?**

Idaho

Contact name	Kurt Hibbert	Title	Economic & Community
Organization	East Central Idaho Planning & Development Assoc.		
Phone Number	(208) 356-4524	Fax Number	208-356-4544
E-mail address	kurt.ecipda@nstep.net		
Address	310 North Second East, Rexburg, ID 83440		
Type of Plan	regional	<i>(Statewide, Regional, MPO,</i>	
Policy/Project	policy		
\$\$/Needs-based?	needs-based	<i>(Fiscally constrained or Needs-based?</i>	
update timeframe	2 (in years)		
planning horizons	5 (in years)		
add'l comment			

Comments Section:

short-range needs	Co Fund/Innovative Finance Techniques
additional data needed?	better data for corridor planning
voter/taxpayer input?	public hearings
coordinate/intersecting roads	constant communication, verbal and written, conferences

Air Quality Issues:

currently have any non-attainment areas?	major cause dust
transp. conformity consultation process	can give no further info from his agency

If not:***methods to assure continued conformity?***

Idaho

Contact name	Kaye Bean	Title	Public Involvement Specialist
Organization	Ada Planning Association		
Phone Number	(208) 345-5274	Fax Number	208-345-5279
E-mail address	www.kbean@planning.cog.id.us		
Address	413 W. Idaho, Suite 100, Boise, ID 83702		
Type of Plan	subarea	(Statewide, Regional, MPO,	
Policy/Project	both		
\$\$/Needs-based?	both	(Fiscally constrained or Needs-based?)	
update timeframe	3 (in years)		
planning horizons	20 (in years)		
add'l comment	there is a larger regional plan, but Ada makes a project specific Ada County Comprehensive Plan		

Comments Section:

short-range needs	within 3 yrs, generally implementation/ maintenance issues under the respons of Ada County Highway Distr or city/county entities
additional data needed?	trip lengths, origination/destination, multi-county trips (trying to help this prob with Remote Sensing Device (RSD)
voter/taxpayer input?	transportation task forces, workshops and open houses, studies, and facilitated workshops; visioning process
coordinate/intersecting roads	corrdination is done in the STIP and TIP

Air Quality Issues:

currently have any non-attainment areas?	major cause carbon monoxide and dust (PM10)
transp. conformity consultation process	great notes on the response! Use them in paper, gave good detail (included attachments)
If not:	
methods to assure continued conformity?	Air Quality Program for Treasure Valley (see attachment), very pro-active

Illinois

Contact name	Michael Williamson	Title
Organization	Illinois Dept of Transportation	
Phone Number	(217) 782-8080	Fax Number
E-mail address		
Address		
Type of Plan	statewide	(Statewide, Regional, MPO,
Policy/Project	policy	
\$\$/Needs-based?	n/a	(Fiscally constrained or Needs-based?
update timeframe	0 (in years)	
planning horizons	0 (in years)	
add'l comment	only stated "when necessary",	(ques. 7-12 not completed)

Comments Section:***short-range needs***

additional data needed?	none
voter/taxpayer input?	public information sessions; rather "extensive"
coordinate/intersecting roads	incorporate the plans together in the state plan; extensive interaction with all local agencies

Air Quality Issues:

currently have any non-attainment areas?	major cause
---	--------------------

transp. conformity consultation process

If not:

methods to assure continued conformity?

Indiana

Contact name	Clemenc Ligocki	Title
Organization	Indiana Dept. of Transportation, Division of Planning & Programming	
Phone Number	(317) 232-2380	Fax Number
E-mail address	cligocki@indot.state.in.us	
Address		
Type of Plan	statewide	<i>(Statewide, Regional, MPO,</i>
Policy/Project	policy	
\$\$/Needs-based?		<i>(Fiscally constrained or Needs-based?)</i>
update timeframe	5 (in years)	
planning horizons	20 (in years)	
add'l comment	maintain a project-specific listing of long-range plans expansion projects in their policy plan	

Comments Section:

short-range needs	in the 3-year STIP
additional data needed?	none
voter/taxpayer input?	annual meetings in all 6 districts for input; each district office carries on their projects as well; internet
coordinate/intersecting roads	district/MPO planning meetings each year, each planner keeps in touch with the other planners from district to district

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?

Kansas

Contact name	W.L. Stockwell	Title	Chief Planner
Organization	Wichita Metro Area Planning		
Phone Number	(316) 968-4490	Fax Number	
E-mail address			
Address			

Type of Plan	urban	(Statewide, Regional, MPO,
Policy/Project	project-specific	
\$\$/Needs-based?	fiscally constrained	(Fiscally constrained or Needs-based?
update timeframe	5 (in years)	
planning horizons	0 (in years)	
add'l comment	quest 7-12 not answered	

Comments Section:**short-range needs****additional data needed?**

voter/taxpayer input?	meet with elected officials, admin's and citizens of the rural communities while preparing the plan
------------------------------	---

coordinate/intersecting roads	regional cooperative organization that meets quarterly with the surrounding communities
--------------------------------------	---

Air Quality Issues:

currently have any non-attainment areas?	major cause
---	--------------------

transp. conformity consultation process**If not:****methods to assure continued conformity?**

Kansas

Contact name	Richard Miller	Title
Organization	Kansas Department of Transportation	
Phone Number	(785) 296-7441	Fax Number
E-mail address	rick@dtthpo.wpo.state.ks.us	
Address	217 SE Fourth Street, Topeka, KS 66603	
Type of Plan	statewide	(Statewide, Regional, MPO,
Policy/Project	policy	
\$\$/Needs-based?	n/a	(Fiscally constrained or Needs-based?
update timeframe	1	(in years)
planning horizons	20	(in years)
add'l comment	48 policy recommendations in long-range plan	

Comments Section:

short-range needs	5-year construction program contains the short-range project needs, consistent with long-range policy plan
additional data needed?	better, more stable land use plans; goods movement data
voter/taxpayer input?	public meetings, forums, fliers to interested parties, public forums (annual)
coordinate/intersecting roads	mostly consultation, new corridor overlay concept within the corridor mgmt activities addresses jurisdictional problems, generally go with local area plans when intersecting

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	none
--	------

Kentucky

Contact name	Timothy Pilgrim	Title	Transportation Planner
Organization	Kentuckiana Regional Planning & Development Agency		
Phone Number	(502) 266-6084	Fax Number	
E-mail address	kipoa@iglou.com attn pilgrim		
Address			

Type of Plan	subarea	(Statewide, Regional, MPO,
Policy/Project	project-specific	
\$\$/Needs-based?	fiscally constrained	(Fiscally constrained or Needs-based?
update timeframe	2 (in years)	
planning horizons	20 (in years)	
add'l comment	selected projects chosen thru a prioritization process, needs/funding and feasibility are considered	

Comments Section:

short-range needs	special line items in the statewide plan or through discretionary funding
additional data needed?	better electronic maps
voter/taxpayer input?	public involvement process and bimonthly meetings of a policy committee
coordinate/intersecting roads	through the state transportation cabinet

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	the planning area from the MPO overlaps the rural areas and conformity planning is met

If not:
methods to assure continued conformity?

Kentucky

Contact name	Bruce Siria	Title	Director
Organization	Division of Transportation Planning, Kentucky Transportation Cabinet		
Phone Number	(502) 564-7183	Fax Number	
E-mail address	bsiria@mail.kytc.state.ky.us		
Address	125 Holmes Street, Mail Code A-2, Frankfort, KY 40622		
Type of Plan	statewide	(Statewide, Regional, MPO,	
Policy/Project	policy		
\$\$/Needs-based?		(Fiscally constrained or Needs-based?	
update timeframe	4 (in years)		
planning horizons	20 (in years)		
add'l comment	currently policy, next update will be project-specific and fiscally constrained		

Comments Section:

short-range needs	addressed in the Cabinet Capital Improvement Program
additional data needed?	truck O & D; vehicle occupancy
voter/taxpayer input?	Regional Development Agency Transportation Committees
coordinate/intersecting roads	Regional Development Agency Transportation Committees

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	emission inventories and transportation conformity determinations are required on an annual basis for maintenance areas
--	---

Louisiana

Contact name Coan Bueche **Title** Chief

Organization LA Dept. of Transportation, Planning Division

Phone Number (504) 358-9131 **Fax Number**

E-mail address

Address

Type of Plan statewide (Statewide, Regional, MPO,

Policy/Project policy

\$\$/Needs-based? (Fiscally constrained or Needs-based?

update timeframe 1 (in years)

planning horizons 25 (in years)

add'l comment for rural areas, policy only

Comments Section:

short-range needs for rural, state-funded pavement preservation programs, federal bridge program, fed. Hazard Elim. Program, and sufficiency rating system for priority

additional data needed? none

voter/taxpayer input? public hearings

coordinate/intersecting roads through district offices and public hearings

Air Quality Issues:

currently have any non-attainment areas? **major cause** ozone

transp. conformity consultation process statewide planning public involvement procedure was adopted, conformity analyses included in the conforming trans. Plan for that area

If not:

methods to assure continued conformity?

Maryland

Contact name	Clyde Pyers	Title
Organization	Office of Policy and Technology Utilization	
Phone Number	(410) 545-0340	Fax Number
E-mail address	cpyers@sha.state.md.us	

Address

Type of Plan	statewide	(Statewide, Regional, MPO,
---------------------	-----------	-----------------------------------

Policy/Project	policy
-----------------------	--------

\$\$/Needs-based?	needs	(Fiscally constrained or Needs-based?
--------------------------	-------	--

update timeframe	1 (in years)
-------------------------	--------------

planning horizons	0 (in years)
--------------------------	--------------

add'l comment**Comments Section:**

short-range needs	n/a in state plan
--------------------------	-------------------

additional data needed?	sophisticated traffic models
--------------------------------	------------------------------

voter/taxpayer input?	series of public workshops, focus groups used to develop section drafts of the plan (professionals and experts)
------------------------------	---

coordinate/intersecting roads	distribution of drafts for review and comment, directly or via state clearing house
--------------------------------------	---

Air Quality Issues:

currently have any non-attainment areas?	major cause ozone, 4 areas
---	-----------------------------------

transp. conformity consultation process	most of the projects are system presentation type and are deemed neutral. WA DC MPO does 2, Dep of Env MD does 2 of them
--	--

If not:

methods to assure continued conformity?	n/a
--	-----

Maine

Contact name	John Duncan	Title	Director
Organization	PACTS		
Phone Number	(207) 774-9891	Fax Number	
E-mail address	jduncan@server.eddmaine.org		
Address	Portland, ME		
Type of Plan	regional	(Statewide, Regional, MPO,	
Policy/Project	project-specific		
\$\$/Needs-based?	needs	(Fiscally constrained or Needs-based?	
update timeframe	3 (in years)		
planning horizons	20 (in years)		
add'l comment			

Comments Section:

short-range needs list them as highest priority in plan

additional data needed?

voter/taxpayer input? videos on public access TV, public forums, participation on study advisory committees

coordinate/intersecting roads

Air Quality Issues:

currently have any non-attainment areas? **major cause** ozone

transp. conformity consultation process state organizes this, not PACTS

If not:
methods to assure continued conformity?

Maine

Contact name	Mike Danforth	Title	Transportation Planning
Organization	Maine Dept. of Transportation		
Phone Number	(207) 287-6815	Fax Number	
E-mail address	mike.danforth@state.me.us		
Address	MDOT, Statehouse Sta. #16, Augusta, Maine 04333		
Type of Plan	statewide	(Statewide, Regional, MPO,	
Policy/Project	both		
\$\$/Needs-based?	both	(Fiscally constrained or Needs-based?	
update timeframe	3 (in years)		
planning horizons	20 (in years)		
add'l comment	20-yr plan policy/needs; 6-yr Interim Plan project-specific/fiscally constr; 2-yr cap improv plan		

Comments Section:

short-range needs the 2-yr capital improvement program

additional data needed?

voter/taxpayer input? each of the 7 regional planning districts has a standing public advisory committee, meet monthly

coordinate/intersecting roads agencies meet on regular basis, web sites, correspondence

Air Quality Issues:

currently have any non-attainment areas? **major cause** carobon monoxide/emissions

transp. conformity consultation process MDOT air quality staff work closely with EPA and state dept envir protection; towns; working well

If not:

methods to assure continued conformity?

Michigan

<i>Contact name</i>	Tom Kellogg	<i>Title</i>	GIS Specialist, ext 13
<i>Organization</i>	Northeast MI Council of Governments		
<i>Phone Number</i>	(517) 732-3551	<i>Fax Number</i>	
<i>E-mail address</i>	nemcog@northland.lib.mi.us		
<i>Address</i>	P.O. Box 457, Gaylord, MI 49734		
<i>Type of Plan</i>	subarea	<i>(Statewide, Regional, MPO,</i>	
<i>Policy/Project</i>	project-specific		
<i>\$\$/Needs-based?</i>	both	<i>(Fiscally constrained or Needs-based?</i>	
<i>update timeframe</i>	0	<i>(in years)</i>	
<i>planning horizons</i>	0	<i>(in years)</i>	
<i>add'l comment</i>	needs-based, but funding must be available as well or a project won't be started, no full plan!		

Comments Section:

<i>short-range needs</i>	year to year funding, they make no transportation plans - what they can do, they do
<i>additional data needed?</i>	digital land use updates are critically needed to determine the direction of growth and development
<i>voter/taxpayer input?</i>	Northeast Michigan Interagency Forum - deals with input and networks all agencies and organizations; public hearings for community master plans
<i>coordinate/intersecting roads</i>	committee called "Rural Task Force", includes road commissions, transportation authorities, other organizations

Air Quality Issues:

<i>currently have any non-attainment areas?</i>	<i>major cause</i>
<i>transp. conformity consultation process</i>	

If not:

<i>methods to assure continued conformity?</i>	none
---	------

Michigan

Contact name	Steve Duke	Title	Principal Planner
Organization	Region 2 Planning Commission		
Phone Number	(517) 788-4426	Fax Number	
E-mail address	region2@dmci.net		
Address			
Type of Plan	regional	(Statewide, Regional, MPO,	
Policy/Project	project-specific		
\$\$/Needs-based?	fiscally constrained	(Fiscally constrained or Needs-based?	
update timeframe	1 (in years)		
planning horizons	20 (in years)		
add'l comment	the state has included some policy issues in their plan, but mostly projects only		

Comments Section:

short-range needs	in TIP, programmed in 3 time periods
additional data needed?	none
voter/taxpayer input?	public notices in newspapers; public mailings to all citizens, agencies, etc, interested in transp issues
coordinate/intersecting roads	3-county planning group locally; state reviews all area plans too to ensure coordination

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	state's responsibility
--	------------------------

Michigan

Contact name	Susan Richardson	Title	Supervisor, Sub-State Planning
Organization	Michigan Dept. of Transportation		
Phone Number	(517) 373-1881	Fax Number	
E-mail address	richardsons@mdot.state.mi.us		
Address	Susan Richardson, Sub-state Planning Unit, Bureau Trans Planning, MI/DOT, Box 30050,		
Type of Plan	statewide	(Statewide, Regional, MPO,	
Policy/Project	policy		
\$\$/Needs-based?	needs only	(Fiscally constrained or Needs-based?	
update timeframe	1 (in years)		
planning horizons	20 (in years)		
add'l comment	policy for not only state, but local and regional agencies as well - State Long-Range Plan;		

Comments Section:

short-range needs	the STIP covers all projects, and prioritizes, for 3 year period
additional data needed?	none reported
voter/taxpayer input?	done on specific projects, by the local agencies
coordinate/intersecting roads	rural task forces (2-8 counties each)

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	Ozone Action Program - voluntary awareness program for the public

If not:**methods to assure continued conformity?**

Michigan

Contact name Paji Hamilton **Title** Chief Planner

Organization Tri-County Regional Planning Commission

Phone Number (517) 393-0342 **Fax Number**

E-mail address tritrans@acd.net

Address

Type of Plan MPO (Statewide, Regional, MPO,

Policy/Project project-specific

\$\$/Needs-based? fiscally constrained (Fiscally constrained or Needs-based?

update timeframe 5 (in years)

planning horizons 20 (in years)

add'l comment rural areas in their juris are under the urban planning methods

Comments Section:

short-range needs yes

additional data needed?

voter/taxpayer input? variety of strategies

coordinate/intersecting roads technical/policy committee meetings

Air Quality Issues:

currently have any non-attainment areas? **major cause** ozone

transp. conformity consultation process interagency workgroup

If not:

methods to assure continued conformity?

Michigan

Contact name	Joyce Tuharsky	Title	Director
Organization	West Michigan Regional Planning Commission		
Phone Number	(616) 774-8400	Fax Number	
E-mail address	wmrpc@iserv.net		
Address			

Type of Plan	regional	(Statewide, Regional, MPO,
Policy/Project	both	
\$\$/Needs-based?	both	(Fiscally constrained or Needs-based?
update timeframe	0 (in years)	
planning horizons	5 (in years)	
add'l comment	rarely do entire plans due to lack of funding, rarely updated, just redone as needed	

Comments Section:

short-range needs	yes, all short-range
additional data needed?	everything; road conditions, counts, accident data, etc; very uncoordinated from place to place
voter/taxpayer input?	public meetings, workshops, surveys, etc
coordinate/intersecting roads	n/a

Air Quality Issues:

currently have any non-attainment areas?	major cause dust, carbon monoxide
transp. conformity consultation process	everything on hold, state seeking to change non-attain status
If not:	
methods to assure continued conformity?	very little, ozone action group, ozone alerts

Minnesota

Contact name	Wes Judkins	Title
Organization	Region 9 Development Commission	
Phone Number	(507) 387-5643	Fax Number
E-mail address	wes@rmdc.mankato.mn.us	
Address		
Type of Plan	regional	<i>(Statewide, Regional, MPO,</i>
Policy/Project	project-specific	
\$\$/Needs-based?	fiscally constrained	<i>(Fiscally constrained or Needs-based?)</i>
update timeframe	5 <i>(in years)</i>	
planning horizons	10 <i>(in years)</i>	
add'l comment		

Comments Section:

short-range needs	through the ATIP and STIP
additional data needed?	none
voter/taxpayer input?	public officials serving on the ATP, public open houses are held, in respondent's opinion public input very poor, done only at the end, not at the
coordinate/intersecting roads	sharing review copies for feedback

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	none
--	------

Minnesota

Contact name	Ronald Chicka	Title
Organization	Arrowhead Regional Development Commission	
Phone Number	(218) 722-5545	Fax Number
E-mail address		
Address		
Type of Plan	regional	(Statewide, Regional, MPO,
Policy/Project	project-specific	
\$\$/Needs-based?	needs	(Fiscally constrained or Needs-based?
update timeframe	3 (in years)	
planning horizons	5 (in years)	
add'l comment	needs-assessment based (prioritized?, maybe partially fiscally constrained then?)	

Comments Section:

short-range needs	a component of the plans, by consensus with local jurisdictions
additional data needed?	land-use data on parcel-level basis; financial capability data per jurisdiction
voter/taxpayer input?	usually with citizen advisory committees
coordinate/intersecting roads	county and state-level reps included in planning sessions

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	none
--	------

Minnesota

Contact name	Annette Bair	Title	Physical Development Director,
Organization	SRDC		
Phone Number	(507) 836-8547	Fax Number	
E-mail address	phydev@rconnect.com		
Address			
Type of Plan	statewide	(Statewide, Regional, MPO,	
Policy/Project	policy		
\$\$/Needs-based?	both	(Fiscally constrained or Needs-based?	
update timeframe	5 (in years)		
planning horizons	20 (in years)		
add'l comment	regional plan needs-based, district plans will then apply the fiscal constraints		

Comments Section:

short-range needs	a 5-year plan deals with short-range needs (component of the 20 yr plan)
additional data needed?	actual HCADT on county-state aid system, county road, city and township roads; right now it is just derived
voter/taxpayer input?	local elected officials review plans and provide input; public information meetings
coordinate/intersecting roads	direct contact via phone and personal visits

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	none
--	------

Minnesota

Contact name	Randall Halvorson	Title	Assistant TRIM Division Director
Organization	Minnesota Dept. of Transportation		
Phone Number	(612) 296-1614	Fax Number	
E-mail address			
Address			

Type of Plan	statewide	(Statewide, Regional, MPO,
---------------------	-----------	-----------------------------------

Policy/Project	policy
-----------------------	--------

\$\$/Needs-based?	(Fiscally constrained or Needs-based?)
--------------------------	---

update timeframe	6 (in years)
-------------------------	--------------

planning horizons	20 (in years)
--------------------------	---------------

add'l comment	state plan/policy. District plans are now being developed, project specific and fiscally constrained
----------------------	--

Comments Section:

short-range needs	district plans will include: future studies (11-20 yrs), project studies (7-10), project work plan (4-6) and the STIP (1-3)
--------------------------	---

additional data needed?	none
--------------------------------	------

voter/taxpayer input?	market research (surveys, focus groups, etc)
------------------------------	--

coordinate/intersecting roads	on the new district plans, will work with RDC's and MPO's to coordinate
--------------------------------------	---

Air Quality Issues:

currently have any non-attainment areas?	major cause
---	--------------------

transp. conformity consultation process
--

If not:

methods to assure continued conformity?	projects (when written) may include mitigating activities, but none yet
--	---

Missouri

Contact name	Dave Lexa	Title	Community Development
Organization	Meramec Regional Planning Commission		
Phone Number	(573) 364-2993	Fax Number	573-364-7235
E-mail address	mrpc@rollanet.org		
Address	101 W. 10th Street, Rolla, MO 65401		
Type of Plan	regional	<i>(Statewide, Regional, MPO,</i>	
Policy/Project	both		
\$\$/Needs-based?	needs	<i>(Fiscally constrained or Needs-based?</i>	
update timeframe	1 <i>(in years)</i>		
planning horizons	0 <i>(in years)</i>		
add'l comment	planning horizons undefined, no time constraint		

Comments Section:

short-range needs	given highest priority
additional data needed?	interaction and synthesis between them and other planning orgs around them, same data
voter/taxpayer input?	theorhg a plan scoping process which involves a series of public meetings across their region
coordinate/intersecting roads	not consistent, needs improvement

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	none
--	------

Missouri

Contact name	Frank Miller	Title	Associate Planner
Organization	Southwest Missouri Advisory Council of Govts		
Phone Number	(417) 836-6900	Fax Number	
E-mail address	fom277t@cnas.smsu.edu		
Address	900 S. National, Springfield, MO 65807		
Type of Plan	regional	<i>(Statewide, Regional, MPO,</i>	
Policy/Project	policy		
\$\$/Needs-based?		<i>(Fiscally constrained or Needs-based?</i>	
update timeframe	0 <i>(in years)</i>		
planning horizons	20 <i>(in years)</i>		
add'l comment	the projects they do are fiscally constrained, cooperate with the state		

Comments Section:

short-range needs	they have a 5-yr short range component
additional data needed?	better and more recent community data; data about shopping, travel, etc
voter/taxpayer input?	surveys; transportation advisory committee with citizen members
coordinate/intersecting roads	work closely, open communication (MODOT, RPOs and MPOs)

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	not yet
--	---------

Missouri

Contact name Michael Shea **Title** Assessment Engineer

Organization Preliminary Studies Division, Missouri Dept. of Transportation

Phone Number (573) 526-3851 **Fax Number** 573-526-2819

E-mail address sheam@mail.modot.state.mo.us

Address P.O. Box 270, Jefferson City, MO 65102

Type of Plan statewide **(Statewide, Regional, MPO,**

Policy/Project policy

\$\$/Needs-based? **(Fiscally constrained or Needs-based?**

update timeframe 5 **(in years)**

planning horizons 20 **(in years)**

add'l comment

Comments Section:

short-range needs DOT short-terms action plan

additional data needed? more public involvement at regional level, needs assessment process

voter/taxpayer input? RPO's, public meetings, transportation surveys, etc

coordinate/intersecting roads through 10 district offices

Air Quality Issues:

currently have any non-attainment areas? **major cause**

transp. conformity consultation process

If not:

methods to assure continued conformity? DOT works with the St. Louis and KC region to ensure transp. Conformity

Missouri

Contact name	Steve W. Etcher	Title	Executive Director
Organization	Boonslick Regional Planning Commission		
Phone Number	(314) 456-3473	Fax Number	
E-mail address	etcher@boonslick.org		
Address	P.O. Box 429, Warrenton, MO 63383		
Type of Plan	regional	<i>(Statewide, Regional, MPO,</i>	
Policy/Project	both		
\$\$/Needs-based?	fiscally constrained	<i>(Fiscally constrained or Needs-based?</i>	
update timeframe	1	<i>(in years)</i>	
planning horizons	10	<i>(in years)</i>	
add'l comment	mostly policy, but contains some projects		

Comments Section:

short-range needs	by using a priority rating system
additional data needed?	funding formula data
voter/taxpayer input?	public input meetings through a transp. Advisory committee (appointed by this org)
coordinate/intersecting roads	extensive communication at the staff level

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	none
--	------

Missouri

Contact name	Jim Dickerson	Title	Director
Organization	Lake of the Ozarks Council of Governments		
Phone Number	(573) 346-5616	Fax Number	
E-mail address	jdickerson@copic.ext.missouri.edu		
Address	P.O. Box 786, Candenton, MO 65020		
Type of Plan	COG	(Statewide, Regional, MPO,	
Policy/Project	both		
\$\$Needs-based?	needs	(Fiscally constrained or Needs-based?	
update timeframe	0	(in years)	
planning horizons	20	(in years)	
add'l comment			

Comments Section:

short-range needs	continuous review (for updating)
additional data needed?	none
voter/taxpayer input?	public hearings, public presentations to local civic groups, radio call-in programs
coordinate/intersecting roads	coordinate directly with the county and city govt's

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	none
--	------

Missouri

Contact name	Mark Fuqua	Title	Executive Director
Organization	Mark Twain Regional Council of Governments		
Phone Number	(573) 565-2203	Fax Number	573-565-2205
E-mail address	cog@NEMOnet.com		
Address	P.O. box 73, Perry, MO 63462		

Type of Plan	COG	(Statewide, Regional, MPO,
Policy/Project	project-specific	
\$\$/Needs-based?	fiscally constrained	(Fiscally constrained or Needs-based?
update timeframe	5 (in years)	
planning horizons	5 (in years)	
add'l comment		

Comments Section:**short-range needs****additional data needed?****voter/taxpayer input?** public meetings, transportation advisory council**coordinate/intersecting roads** quarterly meetings as needed among involved agencies**Air Quality Issues:****currently have any non-attainment areas?** major cause**transp. conformity consultation process****If not:****methods to assure continued conformity?**

Montana**Contact name** Pat Saindon**Title****Organization** Montana Dept. of Transportation**Phone Number** (406) 444-6100**Fax Number****E-mail address****Address****Type of Plan** statewide**(Statewide, Regional, MPO,****Policy/Project** policy**\$\$/Needs-based?****(Fiscally constrained or Needs-based?****update timeframe** 2 (in years)**planning horizons** 20 (in years)**add'l comment****Comments Section:****short-range needs** through the TIP's and SIP's**additional data needed?** none**voter/taxpayer input?** public open houses, statewide focus group meetings (bike/ped, state & local govts, freight, etc)**coordinate/intersecting roads** interagency meetings**Air Quality Issues:****currently have any non-attainment areas?** **major cause** PM 10**transp. conformity consultation process** not provided**If not:****methods to assure continued conformity?**

Montana

Contact name	Mark Landkammer	Title	Transportation Planner/Missoula
Organization	Office of Planning and Grants, Missoula County		
Phone Number	(406) 523-4651	Fax Number	
E-mail address	mlandkam@co.missoula.mt.us		
Address			

Type of Plan	regional	(Statewide, Regional, MPO,
Policy/Project	both	
\$\$/Needs-based?	fiscally constrained	(Fiscally constrained or Needs-based?
update timeframe	2 (in years)	
planning horizons	20 (in years)	
add'l comment	overriding policy plan, that includes projects	

Comments Section:

short-range needs	project-specific lists
additional data needed?	better traffic counts, more volume, more frequency, air quality data (especially PM 10)
voter/taxpayer input?	workgroups, media, public hearings, surveys
coordinate/intersecting roads	the state works with the intermediary groups

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	need to research this further

If not:**methods to assure continued conformity?**

Montana

Contact name Ben Rangel **Title** Transportation Planner, ext 433

Organization Great Falls City-County Planning Board

Phone Number (406) 771-1180

Fax Number

E-mail address

Address

Type of Plan MPO

(Statewide, Regional, MPO,

Policy/Project project-specific

\$\$/Needs-based? fiscally constrained

(Fiscally constrained or Needs-based?)

update timeframe 5 **(in years)**

planning horizons 20 **(in years)**

add'l comment

Comments Section:

short-range needs they set aside \$100,000 each year for these projects, through urban STP funds (federal)

additional data needed? none

voter/taxpayer input? public notices, informational meetings, one-to-one, newspaper articles, public hearings, public access TV channel

coordinate/intersecting roads formal 3-C transportation planning process is required

Air Quality Issues:

currently have any non-attainment areas? **major cause** carbon monoxide

transp. conformity consultation process coordinate with MT Dept of Transp and MT Dept of Environmental Quality, works quite well

If not:

methods to assure continued conformity? none

North Carolina

Contact name	Marion Poole, Ph.D., P.E.	Title	Manager, Statewide Planning
Organization	North Carolina Dept. of Transportation		
Phone Number	(919) 733-4705	Fax Number	
E-mail address	poole@swp.dot.state.nc.us		
Address			

Type of Plan	statewide	(Statewide, Regional, MPO,
Policy/Project	policy	
\$\$/Needs-based?	needs	(Fiscally constrained or Needs-based?)
update timeframe	10 (in years)	
planning horizons	25 (in years)	
add'l comment	detailed studies for individual counties are project-specific	

Comments Section:

short-range needs	top priority projects in county thoroughfare plans
additional data needed?	none
voter/taxpayer input?	the usual
coordinate/intersecting roads	NCDOT responsible for rural roads

Air Quality Issues:

currently have any non-attainment areas?	major cause ozone and carbon monoxide
transp. conformity consultation process	consultation with state air agency done through monthly staff meetings, rural conformity analysis is being done through a defined region of impact analysis (subarea)

If not:
methods to assure continued conformity?

North Carolina

Contact name	Dan Tew	Title
Organization	Capital Area MPO	
Phone Number	(919) 831-6785	Fax Number
E-mail address	corlpa@windspring.com	
Address		

Type of Plan	MPO	(Statewide, Regional, MPO,
Policy/Project	both	
\$\$/Needs-based?	fiscally constrained	(Fiscally constrained or Needs-based?
update timeframe	3 (in years)	
planning horizons	25 (in years)	
add'l comment	fiscally constrained within a visionary plan format, long range plna to year 2025	

Comments Section:

short-range needs	in their own TIP
additional data needed?	inventory of transportation modes conditions
voter/taxpayer input?	citizen committees, workshops, consultant
coordinate/intersecting roads	regional modeling & NCDOT coordinates

Air Quality Issues:

currently have any non-attainment areas?	major cause	new rules, due to factories
transp. conformity consultation process		

If not:

methods to assure continued conformity?	none
--	------

North Dakota

Contact name	Jack Olson	Title	Intermodal Transportation
Organization	North Dakota Dept. of Transportation		
Phone Number	(701) 328-1029	Fax Number	(701) 328-1404
E-mail address	jolson@ranch.state.nd.us		
Address	608 East Boulevard Avenue, Bismarck, ND 58505-0700		
Type of Plan	statewide	(Statewide, Regional, MPO,	
Policy/Project	policy		
\$\$/Needs-based?	needs	(Fiscally constrained or Needs-based?	
update timeframe	5 (in years)		
planning horizons	20 (in years)		
add'l comment	Statewide Intermodal Transp Plan is policy/needs; STIP is project/fiscally constrained		

Comments Section:

short-range needs	not specifically addresses in state plan
additional data needed?	none
voter/taxpayer input?	informational forums, district engineers conduct informal meetings with community leaders, broadcast via public TV
coordinate/intersecting roads	within state: between the district and regional engineers; between states/Canada: by the state Deputy Director of Engineering Policy

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:
methods to assure continued conformity?

Nebraska

Contact name	Stephen Anderson	Title
Organization	NE Dept of Roads/Strategic Planning Manager	
Phone Number	(402) 479-3862	Fax Number
E-mail address	dor5034@vmhost.cdp.state.ne.us	
Address		
Type of Plan	subarea	(Statewide, Regional, MPO,
Policy/Project	project-specific	
\$\$/Needs-based?	fiscally-constrained/1 yr plan	(Fiscally constrained or Needs-based?)
update timeframe	1 (in years)	
planning horizons	5 (in years)	
add'l comment		

Comments Section:

short-range needs	as projects arise, included in 5-year plan
additional data needed?	land-use information, economic development projects are sketchy at best
voter/taxpayer input?	public information meetings by Dept of Roads
coordinate/intersecting roads	public information meetings, public hearings and project open houses

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	none
--	------

New Hampshire

<i>Contact name</i>	Ansel Sanborn	<i>Title</i>	Administrator
<i>Organization</i>	NH Dept of Transportation, Bureau of Transportation Planning		
<i>Phone Number</i>	(603) 271-3344	<i>Fax Number</i>	
<i>E-mail address</i>	n46@dot.state.nh.us		
<i>Address</i>			

<i>Type of Plan</i>	statewide	<i>(Statewide, Regional, MPO,</i>
----------------------------	-----------	--

<i>Policy/Project</i>	both
------------------------------	------

<i>\$\$/Needs-based?</i>	<i>(Fiscally constrained or Needs-based?)</i>
---------------------------------	--

<i>update timeframe</i>	3 <i>(in years)</i>
--------------------------------	----------------------------

<i>planning horizons</i>	20 <i>(in years)</i>
---------------------------------	-----------------------------

<i>add'l comment</i>	state plan policy, regionals project-specific (regional planning commissions)
-----------------------------	---

Comments Section:

<i>short-range needs</i>	regional plans list projects or corrective measures to be taken
---------------------------------	---

additional data needed?

<i>voter/taxpayer input?</i>	public hearings, public info meetings,
-------------------------------------	--

<i>coordinate/intersecting roads</i>	established a comprehensive planning process in the rural areas which parallels the MPO process
---	---

Air Quality Issues:

<i>currently have any non-attainment areas?</i>	<i>major cause</i> ozone
--	---------------------------------

<i>transp. conformity consultation process</i>	rural areas covered by regional commissions taken care of by NDOT, rural areas covered by MPO handled by the MPO
---	--

If not:

methods to assure continued conformity?

New Jersey

Contact name William S. Beetle ***Title*** Director of Planning

Organization NJ Dept. of Transportation

Phone Number (609) 630-2866

Fax Number

E-mail address tppbeet@dot.state.nj.us

Address 1035 Parkway Ave., Trenton, NJ 08625

Type of Plan statewide ***(Statewide, Regional, MPO,***

Policy/Project policy

\$\$/Needs-based? ***(Fiscally constrained or Needs-based?)***

update timeframe 5 ***(in years)***

planning horizons 20 ***(in years)***

add'l comment no special approach to rural planning at state level

Comments Section:

short-range needs have immediate action/showcase action section

additional data needed?

voter/taxpayer input? not at state level

coordinate/intersecting roads direct coordination via work groups, task forces, etc.

Air Quality Issues:

currently have any non-attainment areas? ***major cause***

transp. conformity consultation process

If not:

methods to assure continued conformity? programs are statewide, nothing rural especially

New Jersey

Contact name Tim Chelius ***Title*** Executive Director

Organization South Jersey Transportation Planning Organization

Phone Number (609) 794-1941 ***Fax Number*** 609-794-2549

E-mail address

Address 18 N. East Avenue, Vineland, NJ 08360

Type of Plan regional ***(Statewide, Regional, MPO,***

Policy/Project both

\$\$/Needs-based? fiscally constrained ***(Fiscally constrained or Needs-based?)***

update timeframe 3 ***(in years)***

planning horizons 20 ***(in years)***

add'l comment

Comments Section:

short-range needs in the plan

additional data needed?

voter/taxpayer input?

coordinate/intersecting roads not necessary to formally coordinate

Air Quality Issues:

currently have any non-attainment areas? ***major cause*** not given

transp. conformity consultation process not given

If not:

methods to assure continued conformity?

Nevada

Contact name Jim Allison ***Title*** Associate Planner

Organization Tahoe Regional Planning Agency

Phone Number (702) 588-4547

Fax Number

E-mail address trpa@sierra.net

Address

Type of Plan regional ***(Statewide, Regional, MPO,***

Policy/Project project-specific

\$\$/Needs-based? both ***(Fiscally constrained or Needs-based?)***

update timeframe 5 ***(in years)***

planning horizons 20 ***(in years)***

add'l comment combo of needs and funding, trying to put together a financinh plan which can identify the mixture

Comments Section:

short-range needs as projects

additional data needed? an updated origin-destination survey, some project costs

voter/taxpayer input? public hearings

coordinate/intersecting roads regular communication with involved agencies, pretty simple (only 7 entry-exit points from their region)

Air Quality Issues:

currently have any non-attainment areas? ***major cause*** carbon monoxide

transp. conformity consultation process now only a maintenace area, carbon monoxide main cause

If not:

methods to assure continued conformity? very active, reviewing their RTP-AQP throught he state air quality control board and the EPA

Nevada

Contact name Keith Norberg **Title** Analyst

Organization Nevada Dept of Transportation

Phone Number (702) 888-7352

Fax Number

E-mail address

Address

Type of Plan statewide

(Statewide, Regional, MPO,

Policy/Project both

\$\$/Needs-based? both

(Fiscally constrained or Needs-based?

update timeframe 1 (in years)

planning horizons 20 (in years)

add'l comment both projects and policy included in state plan, state plan needs, STIP constrained

Comments Section:

short-range needs update done as often as requested, identifying and prioritizing the short-range needs in the plan

additional data needed? additional ADT and turn movements in urbanized areas would be beneficial

voter/taxpayer input? local officials are requested to form ad-hoc committees for public input; news advertisements

coordinate/intersecting roads try to include them on ad-hoc committees on a regional level

Air Quality Issues:

currently have any non-attainment areas? **major cause** PM 10 in some mining areas

transp. conformity consultation process

If not:

methods to assure continued conformity?

New York

Contact name	John Dana	Title	Senio Transportation Analyst
Organization	New York Dept of Transportation		
Phone Number	(518) 457-2064	Fax Number	
E-mail address	jdana@gw.dot.state.ny.us		
Address			
Type of Plan	statewide	(Statewide, Regional, MPO,	
Policy/Project	policy		
\$\$/Needs-based?		(Fiscally constrained or Needs-based?	
update timeframe	10 (in years)		
planning horizons	20 (in years)		
add'l comment	regional plans are project specific, not done much rural planning		

Comments Section:

short-range needs	included in 5-year capital programs list specific projects
additional data needed?	freight data and weight-in-motion data for truck loads, over longer periods of time
voter/taxpayer input?	some regions have created County Transportation Advisory Committees comprised of local reps; public meetings
coordinate/intersecting roads	frequent communication and eval of individual plans to ensure coordination

Air Quality Issues:

currently have any non-attainment areas?	major cause ozone
transp. conformity consultation process	any projects for non-attain areas are given top priority in the STIP whenever updated; NYSDOT's Environmental Analysis Bureau initiates the consult process.
If not:	
methods to assure continued conformity?	n/a

Oklahoma

Contact name Linda Koenig **Title** Division Director

Organization Association of Central Oklahoma Governments

Phone Number (405) 848-8961 **Fax Number**

E-mail address acog@acogok.org

Address

Type of Plan MPO (Statewide, Regional, MPO,

Policy/Project both

\$\$/Needs-based? fiscally constrained (Fiscally constrained or Needs-based?

update timeframe 2 (in years)

planning horizons 20 (in years)

add'l comment mostly project, some policy

Comments Section:

short-range needs broken into short-range and long-range, TIP addresses short term (3 year)

additional data needed?

voter/taxpayer input? press releases, monthly ACOG newsletter, Citizens Advisory Committee, regional clearinghouse, etc

coordinate/intersecting roads technical and policy committee meet every month, include reps from every community

Air Quality Issues:

currently have any non-attainment areas? major cause

transp. conformity consultation process

If not:

methods to assure continued conformity?

Oklahoma

Contact name	Sam Shehab	Title	Strategic Planning Branch
Organization			
Phone Number	(405) 521-6433	Fax Number	
E-mail address	sam.shehab/odot@fd9ns01.okladot.state.		
Address			
Type of Plan	statewide	<i>(Statewide, Regional, MPO,</i>	
Policy/Project	both		
\$\$/Needs-based?	fiscally constrained	<i>(Fiscally constrained or Needs-based?)</i>	
update timeframe	5 (in years)		
planning horizons	20 (in years)		
add'l comment	mostly policy, but identifies corridor improvements		

Comments Section:

short-range needs	at state level, no real time table on improvement of corridors
additional data needed?	better corridor studies
voter/taxpayer input?	public meetings
coordinate/intersecting roads	coordination with local officials and the public is ongoing

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:

methods to assure continued conformity?	only in metro areas
--	---------------------

Oregon

Contact name Tom Kloster **Title** RTP Manager

Organization Portland Metro

Phone Number (503) 797-1832

Fax Number

E-mail address kloster@metro.dst.or.us

Address 600 NE Grand Avenue, Portland, OR 97232

Type of Plan regional **(Statewide, Regional, MPO,**

Policy/Project both

\$\$/Needs-based? **(Fiscally constrained or Needs-based?)**

update timeframe 3 **(in years)**

planning horizons 20 **(in years)**

add'l comment

Comments Section:

short-range needs within a 0-5 yrs needs list

additional data needed? none

voter/taxpayer input? broad public involvement media programs

coordinate/intersecting roads through the RTP

Air Quality Issues:

currently have any non-attainment areas? **major cause**

transp. conformity consultation process

If not:

methods to assure continued conformity? the state DEQ operates an extensive maintenance program, and the RTP includes conformity issues

Pennsylvania

Contact name	Don Shanis	Title
Organization	Delaware Valley (PA/NJ) Regional Planning Commission	
Phone Number	(215) 592-1800	Fax Number
E-mail address	dshanis@durpc.org	
Address		
Type of Plan	regional	<i>(Statewide, Regional, MPO,</i>
Policy/Project	both	
\$\$/Needs-based?	fiscally-constrained	<i>(Fiscally constrained or Needs-based?)</i>
update timeframe	3 <i>(in years)</i>	
planning horizons	20 <i>(in years)</i>	
add'l comment		

Comments Section:

short-range needs	in the plan, major projects specified, minor projects grouped into categories
additional data needed?	none
voter/taxpayer input?	public meetings, surveys, regional citizens committee
coordinate/intersecting roads	joint studies, special meetings, correspondence

Air Quality Issues:

currently have any non-attainment areas?	major cause ozone - 1 area
transp. conformity consultation process	speak with Mike Baker, PA DOT 717-772-0796
If not:	
methods to assure continued conformity?	none

Pennsylvania

<i>Contact name</i>	Tom Kotay (report to Larry	<i>Title</i>
<i>Organization</i>	Pennsylvania Dept of Transportation, Office of Planning	
<i>Phone Number</i>	(717) 787-7335	<i>Fax Number</i>
<i>E-mail address</i>		
<i>Address</i>	9th Floor, Forum Place, Harrisburg, PA 17101	
<i>Type of Plan</i>	statewide	<i>(Statewide, Regional, MPO,</i>
<i>Policy/Project</i>	policy	
<i>\$\$/Needs-based?</i>		<i>(Fiscally constrained or Needs-based?</i>
<i>update timeframe</i>	2 (in years)	
<i>planning horizons</i>	20 (in years)	
<i>add'l comment</i>	rural plans policy-oriented as well; all fiscally-constrained at some level (not detrmnd)	

Comments Section:

<i>short-range needs</i>	trying to improve the link between long-range and short-range needs,
<i>additional data needed?</i>	none
<i>voter/taxpayer input?</i>	surveys, questionnaires, newsletters, toll-free hotlines, workshops, meetings - all for the public at various times (when devel. The statewide plan); partner
<i>coordinate/intersecting roads</i>	through MPOs and local development districts on local roads

Air Quality Issues:

<i>currently have any non-attainment areas?</i>	<i>major cause</i> ozone (until 3/17/98), then none
<i>transp. conformity consultation process</i>	

If not:

<i>methods to assure continued conformity?</i>	will continue air quality planning activities at the state level with the MPO's
---	---

South Carolina

Contact name	Ronald Althoff	Title	Assistant Director of Planning
Organization	SC Dept of Transportation		
Phone Number	(803) 737-1444	Fax Number	
E-mail address			
Address			
Type of Plan	statewide	(Statewide, Regional, MPO,	
Policy/Project	both		
\$\$/Needs-based?		(Fiscally constrained or Needs-based?	
update timeframe	5 (in years)		
planning horizons	20 (in years)		
add'l comment	the main plan poolicy, but developing a project-specific component that is fiscally constrained		

Comments Section:

short-range needs	through the STIP
additional data needed?	freight; tourism
voter/taxpayer input?	utilize the regional Council of Govts
coordinate/intersecting roads	state handles

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:
methods to assure continued conformity?

South Carolina

Contact name	Mark Hoeweler	Title
Organization	Waccamaw Regional Planning	
Phone Number	(843) 546-8502	Fax Number
E-mail address	wrpdc@aol.com	
Address		

Type of Plan	regional	(Statewide, Regional, MPO,
Policy/Project	project-specific	
\$\$/Needs-based?	fiscally constrained	(Fiscally constrained or Needs-based?)
update timeframe	2 (in years)	
planning horizons	10 (in years)	
add'l comment		

Comments Section:

short-range needs	budget dictates inclusion in the plan
additional data needed?	survey type data (origin-destination)
voter/taxpayer input?	pubic forums
coordinate/intersecting roads	all-inclusive per respondent

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:
methods to assure continued conformity?

South Dakota

Contact name	Jerry Ortbahn	Title
Organization	South Dakota Dept. of Transportation - Planning	
Phone Number	(605) 773-3155	Fax Number
E-mail address		
Address		
Type of Plan	statewide	(Statewide, Regional, MPO,
Policy/Project	policy	
\$\$/Needs-based?		(Fiscally constrained or Needs-based?
update timeframe	5 (in years)	
planning horizons	20 (in years)	
add'l comment	long-range is policy plan only	

Comments Section:

short-range needs	addresses in the STIP
additional data needed?	freight movements, regional and statewide
voter/taxpayer input?	public meetings held to gather input for the long range plan
coordinate/intersecting roads	meetings held with tribal govts and planning districts to discuss issues and seek solutions

Air Quality Issues:

currently have any non-attainment areas?	major cause
transp. conformity consultation process	

If not:**methods to assure continued conformity?**

Tennessee

<i>Contact name</i>	Glenn Beckwith	<i>Title</i>	Transportation Director
<i>Organization</i>	Tennessee Dept. of Transportation, Planning Div.		
<i>Phone Number</i>	(615) 741-3421	<i>Fax Number</i>	
<i>E-mail address</i>	gbeckwith@mail.state.tn.us		
<i>Address</i>	505 Deaderick Street, Suite 900, James K. Polk Building, Nashville, TN 37243-0334		
<i>Type of Plan</i>	statewide	<i>(Statewide, Regional, MPO,</i>	
<i>Policy/Project</i>	policy		
<i>\$\$/Needs-based?</i>	n/a	<i>(Fiscally constrained or Needs-based?</i>	
<i>update timeframe</i>	5	<i>(in years)</i>	
<i>planning horizons</i>	20	<i>(in years)</i>	
<i>add'l comment</i>	the STIP is constrained		

Comments Section:

<i>short-range needs</i>	these needs are covered in the STIP and TIP
<i>additional data needed?</i>	more current traffic counting data, economic data, inventory data
<i>voter/taxpayer input?</i>	public meetings, location and design hearings -- more at the project level, STIP presented for public comment
<i>coordinate/intersecting roads</i>	state clearinghouse review process allows for all response to the proposed plan; also a public involvement process allows for feedback

Air Quality Issues:

<i>currently have any non-attainment areas?</i>	<i>major cause</i>
<i>transp. conformity consultation process</i>	

If not:

<i>methods to assure continued conformity?</i>	3 maintenance areas in TN, including parts of several counties, but mostly urban metro areas
---	--

Texas

Contact name Jack Foster **Title** Statewide Planning Engineer

Organization Texas Dept. of Transportation

Phone Number (512) 486-5024

Fax Number

E-mail address jfoster@mailgw.dot.state.tx.us

Address

Type of Plan statewide

(Statewide, Regional, MPO,

Policy/Project policy

\$\$/Needs-based?

(Fiscally constrained or Needs-based?)

update timeframe 3 *(in years)*

planning horizons 20 *(in years)*

add'l comment

Comments Section:

short-range needs done at local level, not in statewide plan

additional data needed? none

voter/taxpayer input? done on a local level only; project to project

coordinate/intersecting roads done through each district and area office

Air Quality Issues:

currently have any non-attainment areas? **major cause**

transp. conformity consultation process n/a

If not:

methods to assure continued conformity? none

Utah

Contact name	Kathleen McMullen	Title	Director, Regional Planning
Organization	Mountainland Association of Governments		
Phone Number	(801) 377-2262	Fax Number	(801) 377-2317
E-mail address	main.kmcmullen@state.ut.us		
Address	2545 N. Canyon Road, Provo, UT 84604-5906		
Type of Plan	regional	<i>(Statewide, Regional, MPO,</i>	
Policy/Project	project-specific		
\$\$/Needs-based?	needs	<i>(Fiscally constrained or Needs-based?</i>	
update timeframe	3 (in years)		
planning horizons	20 (in years)		
add'l comment			

Comments Section:

short-range needs	prioritize projects, and have 2000-2010-2020 project horizons
additional data needed?	data regarding available funding vs. alternatives
voter/taxpayer input?	public meetings, open houses
coordinate/intersecting roads	rely on Utah DOT for rural to rural

Air Quality Issues:

currently have any non-attainment areas?	major cause PM 10
transp. conformity consultation process	this office does conformity analysis for county, urban and rural; air quality committee with UDOT, UDAQ, FHWA, and EPA
If not:	
methods to assure continued conformity?	

Utah

Contact name Darrell Cook
Organization Mountainland MPO
Phone Number (801) 377-2262
E-mail address main.dcook@state.ut.us
Address

Title**Fax Number**

Type of Plan MPO

(Statewide, Regional, MPO,

Policy/Project both

\$\$/Needs-based? fiscally constrained

(Fiscally constrained or Needs-based?

update timeframe 1 (in years)

planning horizons 0 (in years)

add'l comment TIP carries the projects, long-range plan is policy, only rural planning is contract work for UDOT

Comments Section:

short-range needs the annual TIP update contains short-range needs

additional data needed? none

voter/taxpayer input? none

coordinate/intersecting roads none, they are the regional planning office

Air Quality Issues:

currently have any non-attainment areas? **major cause**

transp. conformity consultation process

If not:

methods to assure continued conformity? only in the MPO

Utah

Contact name	Richard Manser	Title
Organization	Utah Dept. of Transportation	
Phone Number	(801) 965-3853	Fax Number
E-mail address	rmanser@state.ut.us	
Address		
Type of Plan	statewide	(Statewide, Regional, MPO,
Policy/Project	both	
\$\$/Needs-based?	needs	(Fiscally constrained or Needs-based?
update timeframe	3 (in years)	
planning horizons	20 (in years)	
add'l comment	while the state plan lists projects and money available over the 20-yr period, not limited to fiscal	

Comments Section:

short-range needs	short range needs are in the state plan in the discussion of committed programs, otherwise in specific corridor plans
additional data needed?	none
voter/taxpayer input?	annual public needs open houses and public involvement activities
coordinate/intersecting roads	meet annually or concurrently with specific corridor planning activities

Air Quality Issues:

currently have any non-attainment areas?	major cause PM 10 and Ozone
transp. conformity consultation process	MPOs include emissions estimates in their conformity determination for the Long Range Plan and their TIP

If not:
methods to assure continued conformity?

Utah

Contact name B. Curtis Dastrup **Title** Executive Director

Organization Uintah Basin Assoc. of Governments

Phone Number (435) 722-4518

Fax Number

E-mail address

Address

Type of Plan Regional **(Statewide, Regional, MPO,**

Policy/Project both

\$\$/Needs-based? fiscally constrained **(Fiscally constrained or Needs-based?**

update timeframe 1 **(in years)**

planning horizons 0 **(in years)**

add'l comment policy plan built from project list, prioritized (ques. 7-12 not answered!)

Comments Section:***short-range needs***

additional data needed? data is lacking in general

voter/taxpayer input? local planning meetings held throughout the region, generally well-attended

coordinate/intersecting roads meetings, communication

Air Quality Issues:

currently have any non-attainment areas? **major cause**

transp. conformity consultation process

If not:

methods to assure continued conformity?

Virginia

Contact name M. Frank Dunnur **Title**
Organization Transportation Planning Division, Virginia Dept. of Transportation
Phone Number (804) 371-0810 **Fax Number**
E-mail address
Address

Type of Plan statewide **(Statewide, Regional, MPO,**
Policy/Project both
\$\$/Needs-based? needs **(Fiscally constrained or Needs-based?**
update timeframe 5 **(in years)**
planning horizons 20 **(in years)**
add'l comment policy plan has a state-mandated project-specific 5-year highway needs assessment

Comments Section:

short-range needs Commonwealth Transp Board develops a 6-year plan for projects throughout the state
additional data needed? traffic data and existing and projected land use information
voter/taxpayer input? public information meetings held at 20 Planning District Commissions across the state
coordinate/intersecting roads rural plans and programs are coordinated through the affected local jurisdictions

Air Quality Issues:

currently have any non-attainment areas? **major cause**
transp. conformity consultation process

If not:
methods to assure continued conformity?

Washington

Contact name Gregory Selstead **Title** Systems Planning Manager

Organization WA State Dept of Transportation, Planning & Programming Center

Phone Number (360) 705-7970 **Fax Number** (360) 705-6813

E-mail address selsteg@wsdot.wa.gov

Address

Type of Plan statewide **(Statewide, Regional, MPO,**

Policy/Project policy

\$\$/Needs-based? n/a **(Fiscally constrained or Needs-based?**

update timeframe 2 **(in years)**

planning horizons 20 **(in years)**

add'l comment state plan policy-based; highway system plan project-based, and fiscally constrained

Comments Section:

short-range needs

additional data needed? more info regarding modal integration

voter/taxpayer input? through regional WSDOT planning offices and the 14 RTPO's

coordinate/intersecting roads through the regional plans

Air Quality Issues:

currently have any non-attainment areas? **major cause**

transp. conformity consultation process

If not:

methods to assure continued conformity? state works with those MPO's

Wisconsin

Contact name James van Sistine **Title**
Organization Division of Transportation Investment Management
Phone Number (608) 266-9860 **Fax Number**

E-mail address

Address

Type of Plan (Statewide, Regional, MPO,

Policy/Project policy

\$\$/Needs-based? (Fiscally constrained or Needs-based?)

update timeframe 5 (in years)

planning horizons 20 (in years)

add'l comment

Comments Section:

short-range needs separate 6-year improvement plan (project specific)

additional data needed?

voter/taxpayer input? focus groups, public meetings, public formal hearings

coordinate/intersecting roads work closely with the RPCs and MPOs - use their land use and planning/traffic projections

Air Quality Issues:

currently have any non-attainment areas? **major cause** transport (CO2?)

transp. conformity consultation process part of STIP

If not:

methods to assure continued conformity?

West Virginia

Contact name	Paul Wilkinson	Title	Director
Organization	WV Division of Transportation Planning		
Phone Number	(304) 558-3113	Fax Number	
E-mail address	pwilkinson@mail.dot.state.wv.us		
Address			

Type of Plan	statewide	(Statewide, Regional, MPO,
---------------------	-----------	-----------------------------------

Policy/Project	policy
-----------------------	--------

\$\$/Needs-based?	(Fiscally constrained or Needs-based?
--------------------------	--

update timeframe	2 (in years)
-------------------------	--------------

planning horizons	20 (in years)
--------------------------	---------------

add'l comment	updated as needs or required
----------------------	------------------------------

Comments Section:

short-range needs	STIP process
--------------------------	--------------

additional data needed?	none
--------------------------------	------

voter/taxpayer input?	newspapers, mailings, public meetings, etc for the STIP
------------------------------	---

coordinate/intersecting roads	coordination not required, Div. Of Highways responsible for rural roads
--------------------------------------	---

Air Quality Issues:

currently have any non-attainment areas?	major cause ozone
---	--------------------------

transp. conformity consultation process	contact Fred Durham, WV Office of Air Quality (see sheet for address)
--	---

If not:

methods to assure continued conformity?

Wyoming

Contact name	John Lane	Title	Statewide Planning Engineer
Organization	WyDOT		
Phone Number	(307) 777-4180	Fax Number	
E-mail address	jlane@missc.state.wy.us		
Address			
Type of Plan	statewide	(Statewide, Regional, MPO,	
Policy/Project	policy		
\$\$/Needs-based?	needs	(Fiscally constrained or Needs-based?	
update timeframe	5 (in years)		
planning horizons	20 (in years)		
add'l comment	statewide plan policy/needs; STIP project/fiscally constrained		

Comments Section:

short-range needs	in the STIP
additional data needed?	good socio-economic data with traffic modeling capabilities
voter/taxpayer input?	try to get it through the TransPlan process; available at public gatherings
coordinate/intersecting roads	formal processes: MPO meetings, FHWA and STIP planning requirements; and specific program requirements such as Forest Hwy, Scenic Byway, Public lands

Air Quality Issues:

currently have any non-attainment areas?	major cause
---	--------------------

transp. conformity consultation process

If not:

methods to assure continued conformity?	communicate closely with the Dept of Environmental Quality
--	--