PART II

METROPOLITAN DECISIONMAKING ISSUES

This part of the report compares the findings of separate assessments of transit planning and decisionmaking in nine metropolitan areas.&/ The following sections outline the assessment methodology and briefly describe each metropolitan area by way of providing-an introduction.

THE STUDY APPROACH

The Assessment of Community Planning for Mass Transit has been an inquiry into an evolving social process. The methodology for such an inquiry not only must be able to describe and analyze the many institutional, economic, political, and technical forces that shape the process but also must be capable of studying the 'changes that occur in these processes over time.

The study results, consequently, more closely resemble historical analysis than classical technology assessment. The information on which the assessment is based was drawn from interviews with major public and private participants in the planning process and from examination of key plans and documents.

The nature of this kind of investigation makes it difficult to develop explicit standards on which to base the evaluation of the experience of each metropolitan area. In examining planning for mass transit or any other type of transportation, the history of the setting in which the process occurs, the personalities of the different participants, and the interrelationships of local social and economic factors with happenings and trends in the national scene all come to play in different ways. General conclusions and trends can be drawn from a comparison of the metropolitan cases, but their experience is not susceptible to numerical evaluative measures.

1/ The findings of the case assessments are contained in detailed reports that have been prepared for each metropolitan area. These reports are contained in an appendix to this volume.

Nonetheless, the data collected in this study supported the formulation of alternative policies addressing major transit issues for Congress to consider. The findings yield guidance as to both the probable effectiveness of each policy option and the obstacles to its accomplishment.

This assessment employed a set of evaluation guidelines to orient the investigation in the nine metropolitan areas selected for study and to provide the basis for comparative judgments about them. The guidelines were developed following preliminary visits to the metropolitan areas that provided a general sense of the major issues affecting the transportation planning process. The guidelines were derived in light of these issues, a review of Federal requirements for transit planning, and an investigation via the literature into the state-of-the-art in the field.

The evaluation guidelines covered major topics for investigation during the case assessment process. They dealt with the character of the institutional arrangements, the conduct of the technical planning process, and the influence of financing policy on transit decisionmaking.

During visits to each of the nine metropolitan areas, the study team interviewed the principal representative of the transportation planning institutions and other main participants in the local planning process. The visits were supplemented by interviews with UMTA officials in Washington. Pertinent documents--official plans, reports, studies, and other material--were reviewed in each case.

The information thus collected was used in compiling a history of the transit planning process in each case area, organized around key decisions, such as the decisions to study transit, the selection of a particular transit system, and public ratification of the decision to pay for and build the system. The main political, institutional, financial, and technical characteristics affecting the conduct of the planning process were then assessed against the specific guidelines.

The same set of guidelines used in assessing each ‘case metropolitan area was employed in making a comparative evaluation of the metropolitan experience. The comparative evaluation allowed insight into lessons learned from the metropolitan case assessments. These findings are compiled in the three chapters in this part of the report. Each chapter corresponds to one of the three categories of evaluation guidelines: Institutional Context, Technical Planning Process, and Financing for Public Transportation.

DESCRIPTIONS OF THE NINE METROPOLITAN CASES

Special care was taken in choosing the metropolitan areas to be studied. As explained earlier? the nine cities were selected because they are characteristic of different stages in the long process of planning, engineering, building, operating, and modernizing a rail transit system. These stages are: (1) planning new extensions to long-established rail rapid transit systems (Boston and Chicago) or a recently completed transit system (San Francisco); (2) constructing new rapid transit systems (Washington, D.C., Atlanta), or awaiting Federal approval to begin final design (Denver); (3) conducting a transit system planning effort with no system selection decision to date (Minneapolis-St. Paul) or after repeated setbacks at the polls (Seattle, Los Angeles).

Although the entire history of transit planning in each case was examined, the fact that they represented different stages in the planning process offered two distinct advantages. First, at each stage different issues arise and different decisions have to be taken by policymakers. By selecting metropolitan areas whose current or recent status of transit planning fell into different stages, the study team could be assured of the opportunity to interview key participants in each case whose memories of the events under study were still fresh and who often might still be active in the process. Second, the approach allowed the team to study how the same kind of decision was made at different points in history and thus to better understand how changes in Federal policy and the planning state-of-the-art affected the decisionmaking process.

The following descriptions summarize the status and focus of transit planning in each of the cases and briefly describe their population and transportation characteristics. The accompanying tables (See Table 4, Table 5) show contrasts and similarities among the metropolitan characteristics and place the nine cases in the broader context of the nation's 33 largest SMSAs.

TABLE 4: COMPARATIVE METROPOLITAN CHARACTERISTICS NINE SMSA's

	Population (000s) 1970	Density (people per square mile) 1970	% Change Population 1960-1970	Land Area (square miles) 1970
Atlanta SMSA	1,390 20	804 18	36.7% 7	1,720 24
Center City	496	3,779 26	1.8%	131.5
Suburban Ring	894	560	68.7%	1,596.5
Boston SMSA	2,754 8	2,791 3	6.1% 31	987 30
Center City	641	13,936 5	-8 .1%	46
Suburban Ring	2,113	2,245	11.3%	941
Chicago SMSA	6,979 3	1,077 6	12.2% 23	3,719 10
Center City	3,369	15,136 4	-5.1%	222.6
Suburban Ring	3,609	1,032.3	35. 2%	3,496.4
Denver SMSA	l,228 27	335 29	32.1% 9	3,660 8
Center City	515	5,406 23	4.2%	95.2
Suburban Ring	713	200	63.7%	3,564.8
Los Angeles SMSA	7,037 2	1,729 8	16.5% 17	4,069 7
Los Angeles	2,810	7,364 20	13.3%	463.7
Long Beach	359	6,059 16	4 .2%	48.7
Suburban Ring	3,869	1,088	20.3%	3,556.6
San Francisco SMSA	3,108 6	1,253 11	17.3% 16	2,480 15
Center City	716	15,764 2	-3 .3%	45.4
Suburban Ring	3,392	983	25. 4%	2,434.6
Seattle SMSA	1,422 17	336 28	28.4% 12	4,226 5
Center City	531	6,350 19	-4.7%	83.6
Suburban Ring	891	216	63.0%	4,142.4
Twin Cities SMSA	1,814 15	860 15	22.4% 14	2,108 20
Minneapolis	434	8,135 14	-l0.0%	53.4
St. Paul	310	5,935 21	-1.1%	52.2
Suburban Ring	1,070	534	56.0%	2,002.4
Washington, D.C. SMSA	2,862 7	1,216 12	37.8% 6	2,353 16
Center City	756	12,321 6	-1.0%	61.4
Suburban	2,106	919	60.4%	2,291.6

[ ] Rank among 33 most populous SMSAS.

[1]There figure reflect the annexation of 27 miles by Denver City between 1960-1970.

-Source: Urban Transportation Fact Book, American Institute of Planners and Motor Vehicle Manufacturers of the U.S., Inc., March 1974.

A Standard Metropolitan Statistical Area (SMSA) includes a center city (or cities) , usually with a population of at least 50,000, plus adjacent counties or other political divisions that are economically and socially integrated with the central area.

TABLE 5: COMPARATIVE METROPOLITAN TRAVEL CHARACTERISTICS 1960-1970

City	Work Trip Distribution 1970		% Change Work Trip Distribution 1960-1970		Work Trip Mode 1970		% Change Work Trip Mode 1960-1970	
	to city/to suburb		To city/to suburb		auto/transit		auto/transi	
Atlanta SMSA '							82%	-20%
City Residents (13)	27%	7%	-14%	171%	71%	21%	34%	-23%
Suburban Residents	28%	38%	64%	117%	92%	3%	113%	- 98
Boston SMSA							34%	- 9%
City Residents (12)	18%	5%	-18%	14%	44%	38%	13%	-14%
Suburban Residents	20%	57%	1%	21%	74%	14%	38%	5%
Chicago SMSA							46%	-13%
City Residents (6)	39%	8%	-20%	132%	53%	36%	18%	-17%
Suburban Residents	14%	39%	8%	61%	78%	11%	71%	4%
Denver SMSA							61%	-37%
City Residents (26)	36%	7%	0%	79%	80%	8%	28%	-43%
Suburban Residents	24%	34%	72%	83%	89%	2%	94%	2'
Los Angeles SMSA							32%	-21%
[1]/ City Residents (25)	34%	12%	1%	41%	82%	9%	30%	-21
Suburban Residents	17%	37%	6%	26%	89%	3%	34%	-24
San Francisco SMSA							33%	1
City Residents (8)	31%	5%	-12%	29%	56%	30%	18%	-9
Suburban Residents	19%	45%	32%	22%	84%	7%	37%	19
Seattle SMSA							50%	-19
City Residents (21)	35%	6%	- 2%	- 3%	74%	15%	11%	-21
Suburban Residents	21%	38%	7a%	64%	90%	2%	88%	- 4
Twin Cities SMSA							52%	-16
~/cit, Residents (8)	340	8%	-19%	180%	69%	17%	a%	-20
Suburban Residents	25%	33%	48%	114%	89%	3%	99%	-3
Washington, D.C. SMSA							84%	4
City Residents (5)	20%	5%	-18%	44%	49%	36%	22%	8
Suburban Residents	25%	50%	28%	129%	83%	8%	lo?%	34

[1]Los Angeles and Long Beach. [2]Minneapolis and St. Paul.

Source: Urban Transportation Fact Book, American Institute of Planners, Automobile Manufacturers Association of the U.S., Inc., 1974.

A Standard Metropolitan Statistical Area (SMSA) includes a center city (or cities) , usually with a population of at least 50,000, plus adjacent counties or other political divisions that are economically and socially integrated with the central area.

Boston

Boston is the nation's eighth largest metropolitan area and its third most densely settled. Its rapid transit system is one of the oldest and most extensive in the country and includes the first subway in the United States, built in 1897.

The Boston area developed an ambitious plan for a radial-circumferential expressway system and suburban rapid transit extensions in the 1950s and early 1960s. In the wake of an explosive reaction to these plans, a moratorium was called on most of the expressways in the early 1970s and, as a result of the Boston Transportation Planning Review, the first transfer of interstate highway funds to transit was achieved. A major new commitment to transit improvements has been made with more emphasis on improving inner-city services and reconstructing aging transit facilities.

Boston's center city lost population at an 8.1% rate between 1960 and 1970. Suburban population grew at a modest pace of 11.3%. Although it has a relatively high percentage of both suburban and city transit riders (14% and 38%, respectively), transit ridership declined by 9% in the Boston SMSA between 1960 and 1970.

Boston has received the second highest total amount of UMTA transit assistance among the nine case metropolitan areas.

Chicago

Like Boston, Chicago is a densely populated, large metropolitan area with a longstanding transit system. It ranks third in population and fourth in density in the nation.

The Chicago area has had a long history of master planning of transit and highway systems with successful implementation and competent management of operations. Most recently, emphasis has focused on (a) coordinated rail extensions within expressway corridors, (b) the successful establishment by referendum of a new Regional Transportation Authority, with taxing power, to coordinate all services and to provide new services where needed, and (c) efforts to plan, design, and finance a new subway to replace the elevated rapid rail line defining Chicago's downtown "loop." The new subway would serve as the rejuvated heart of the regional rail system and link all elevated, subway, and commuter rail lines with all of the hiqh-density central business district activities.

Chicago experienced a decline of over 5% in center city population between 1960 to 1970, while suburbs grew by 35%. The suburban growth was reflected in a more than doubling in the number of city-to-suburb "reverse" commutes. Intrasuburban trips also grew, by 61%. During the same period, transit ridership declined in the SMSA at a 13% rate. The level of UMTA support to Chicago transit programs is third highest among the nine metropolitan cases.

San Francisco

San Francisco, the nation's sixth largest metropolitan area, 'ranks eleventh in density. Its transit system is the first new regional system put into operation* in recent years.

The 1974 opening of the last link in the San Francisco Bay Area Rapid Transit system, the tube under the Bay, climaxes more than 20 years of system planning and implementation for the largest single urban transportation development project completed to date in U.S. history. More has been written about this process than almost any urban planning project, providing a wealth of lessons for other areas. Interesting planning issues include local versus regional control of transit development, the conduct of BART extension studies, coordination of BART with several other well established transit systems in the Bay Area, and the establishment of the Metropolitan Transportation Commission with authority to veto projects of regional consequence and to allocate transit development funds among the many transit operators of the region.

San Francisco's center city lost 3.3% of its population between 1960 and 1970, while its suburbs grew by more than 25%. Intra-suburban, suburb to city, and city to suburb work trips all increased. The fastest growth rate, 32% occurred in trips to the city from the suburbs. While auto use increased 33% in the SMSA, transit ridership barely held steady.

San Francisco has received more UMTA support than any other of the nine metropolitan cases.

Washington, D.C.

Washington follows immediately behind San Francisco in both population size and population density, ranking seventh in population and twelfth in density among the nation's largest metropolitan areas.

The Washington Metropolitan Area Transit Authority is within a few months of opening the first section of what may eventually be the largest single urban transportation development program in U.S. history, if the area can find a way to refinance the .$2 billion cost overrun. Almost 20 years of intensive technical planning studies have included highly sophisticated in-depth analytical work. Most of the serious consideration of alternative systems was carried on Within a complex Political and institutional framework peculiar to the capital, involvin$_g$ Congress and the various ad hoc and standing agencies of the Federal executive branch. A variety of interesting issues have been associated with implementation of the system: route locations, improved service to the inner city, joint development around stations, potential extensions, and the complexities of multistate and local financing.

Washington was among the nation's' fastest growing areas between 1960 and 1970, ranking in sixth place. The center city lost a bare 1% of its population, but suburbs grew by over 60%. This relatively high suburban growth rate led to an increase of 129% in intrasuburban work trips. The region showed the largest increase in transit ridership among the nine cases, although the figure was only 4%.

Atlanta

Atlanta has less population than any other area studied except Denver, and only the Denver and Seattle areas are lower in density. Even so, planning of its regional transit system was begun relatively early, in 1960.

Groundbreaking for Atlanta's 40-mile regional system took place in February. The planning history has been strongly influenced by two factors. First, a business-oriented power-elite with a mission to make Atlanta a focus of international business activity played the dominant role in Atlanta transit decisionmaking. Second, there was a close correspondence between the timing of the planning effort and the evolution of Federal transit programs, which meant that Atlanta always expected to be the first major recipient of UMTA funds for a new regional system.[1]/

1/ Construction had begun on BART before it received Federal assistance; Atlanta expected to have the first new system to be supported by UMTA funds from the start.

The recent activities in Atlanta have centered on whether or not the transit system would receive UMTA support, and how much.

The Atlanta region grew at a relatively fast pace between 1960 and 1970, second only to Washington among the nine cases. Changes in travel patterns reflect a 117% increase in intrasub-urban work trips and a 171% growth in work trips from the city to the suburbs. The percentage of suburban residents who drive to work--92%--is highest among the metropolitan cases. Transit use declined by 20% in the region between 1960-1970.

Denver

Denver ranks near the bottom of the large SMSAs in population and density and is the least densely populated area among the nine cases. It is served by a regional bus system and has requested UMTA support to begin final design and construction of a first link in a regional rapid transit system.

Denver took steps to become the first region in the nation to build an advanced technology rapid transit system. In 1973, voters approved a sales tax levy to permit further work on a tentatively defined personal rapid transit system. At that point, UMTA inter-vened to require a more thorough analysis of alternatives, and Denver responded 'with a proposal for an automated rapid transit system that could build in demand-responsive features. The entire process has been characterized by close cooperation between regional transit planners and land use planners.

Denver's population gained at a relatively fast pace (over 32% between 1960 and 1970. The number of work trips grew as well, and at a particularly rapid rate between suburban origins and destinations (83%) and from the city to the suburbs (79%). Relatively more workers commute by auto in Denver than in any of the cases except Los Angeles, and it has the lowest rate of transit use. The region lost transit riders at an overall rate of 37% between 1960 and 1970.

To date, Denver has received the smallest amount of UMTA financial support among the nine cases.

Seattle

Among the nine metropolitan areas only Denver is less densely settled than Seattle, and it ranks seventeenth in pop-ulation among the nation's largest SMSAs. It operates a regional bus transit system that includes several lines of trolley buses.

The double defeat of the proposed Seattle rail system in 1968 and 1970 was followed by a successful referendum in 1972, which provided new regional taxes and authority to take over the regional bus system and to implement the short-range bus transit improvement program. Cautious efforts are underway to initiate new long-range system planning for fixed guideway transit, considering a wider range of technologies and system configurations.

Seattle's center city declined in population between 1960 and 1970, while the suburbs grew by 63%--the third fastest rate among the nine cases. Work trips originating in the suburbs grew significantly, while city commuters declined in numbers. A high 'percentage of the area's workers drive, and their ranks doubled between 1960 and 1970. The number of transit commuters fell 19% over the same period.

Los Angeles

Los Angeles, second largest metropolitan area in the United States in terms of population, has a center city that is less densely populated than any of the case cities except Denver and Atlanta. Although it is a region known for sprawl and smog, Los Angeles once supported the nation's most extensive interurban streetcar system.

The Los Angeles area has experienced two defeats of very ambitious fixed-guideway system plans, in 1968 and 1974. Planning for the last of these two referenda brought to sharp focus the issues of local versus regional service and control, the incremental approach to implementation versus the grand long-range master plan, and the need to carefully evaluate a range of alternative technologies and system configurations. Los Angeles now wrestles with changes in its planning process and institutional structure as it moves toward a first-stage implementation of some type of fixed guideway system.

Between 1960 and 1970, both the suburban areas and the two cities in the Los Angeles SMSA (Los Angeles and Long Beach) gained population at a moderate pace. Changes in distribution of work trips saw relatively high growth in intrasuburban and city-to-suburb trips. Auto use grew both in the cities and in the suburbs, while transit ridership declined by 21%.

Minneapolis-St. Paul

Minneapolis-St. Paul/ or Twin Cities, falls midway down the list of large SMSAs in terms of population and density. The area has taken a strong interest in transit improvements over the past decade and a half, as is witnessed by the trend-setting Nicollet Mall transitway that was opened in Minneapolis in 1965.

Twin Cities is the only one of the nine cases that has not yet officially proposed a fixed guideway transit system. Planning bodies in the region have been engaged in system planning studies since 1967. At present there is debate among proponents of a conventional rapid rail transit system, supporters urging utilization of advanced technology such as a group rapid transit concept, and others who argue for placing emphasis on community-level service and policies to promote fewer and shorter trips.

Twin Cities suburbs gained in population between 1960 and 1970, but their two central cities both suffered losses. Significant gains occurred in work trips within the suburbs and from the two cities to suburban destinations. All the increased travel was accommodated by automobiles, whose users nearly doubled in number between 1960 and 1970. Meanwhile transit use declined at an overall rate for the region of 16%.

Next to Denver, Twin Cities has received the smallest portion of UMTA funds among the nine cases.

Summary

The nine case metropolitan areas vary widely in status of transit system planning and operation and illustrate a range of population and travel pattern characteristics. However, each of the case metropolitan areas experienced a more rapid rate of growth in their suburban areas than in their central cities between 1960 and 1970, and in six of the nine cases, central city population fell. The pattern of suburban growth was accompanied by a surge in auto work-trip travel--ranging from a low of 32% to 84%--and a corresponding decline in transit use in all case regions except Washington, D.C. and San Francisco.

These changes in population distribution and travel patterns can be correlated with the national decline in transit ridership and corresponding decrease in operating revenues. The situation underlines the difficulties the nine metropolitan area cases, and many other U.S. cities, have been facing in the course of planning new or improved transit systems--and it points to the urgency of the reasons for doing so.