

Chapter



INTRODUCTION

The metropolitan transportation plan (MTP) is a blueprint to guide the development and implementation of needed transportation system improvements. This MTP looks more than 20 years into the future to recommend improvements in the transportation system from today to 2035.

This MTP update considers the visions of community comprehensive plans and the context of unique subareas within the Anchorage metropolitan area, which encompasses the Anchorage Bowl and Chugiak-Eagle River. As directed by federal guidance, this MTP serves the entire Anchorage metropolitan area with one integrated plan.

The previous plans for the Anchorage Bowl and Chugiak-Eagle River areas were founded on extensive public involvement and a long-term vision for each area. It is now time to update each of these plans to ensure that they are indeed helping to implement those long-term visions, as well as make sure that those visions are still compatible with the views of current residents. Adjustments have also been made to reflect changing economic and environmental conditions that affect the planned transportation system improvements.

What topics does the MTP cover?

- Public involvement
- Forecasts of population, households, and employment anticipated in 2035
- Assessment of the current transportation system and identification of its problems
- Evaluation of needs and opportunities for transportation elements:
 - Roads
 - Public transportation
 - Non-motorized transportation (pedestrians and bicycle system)
 - Congestion management
 - Freight distribution
 - Regional connections—air, rail, port, and highway
- Funding sources
- Recommendations
- Implementation plan

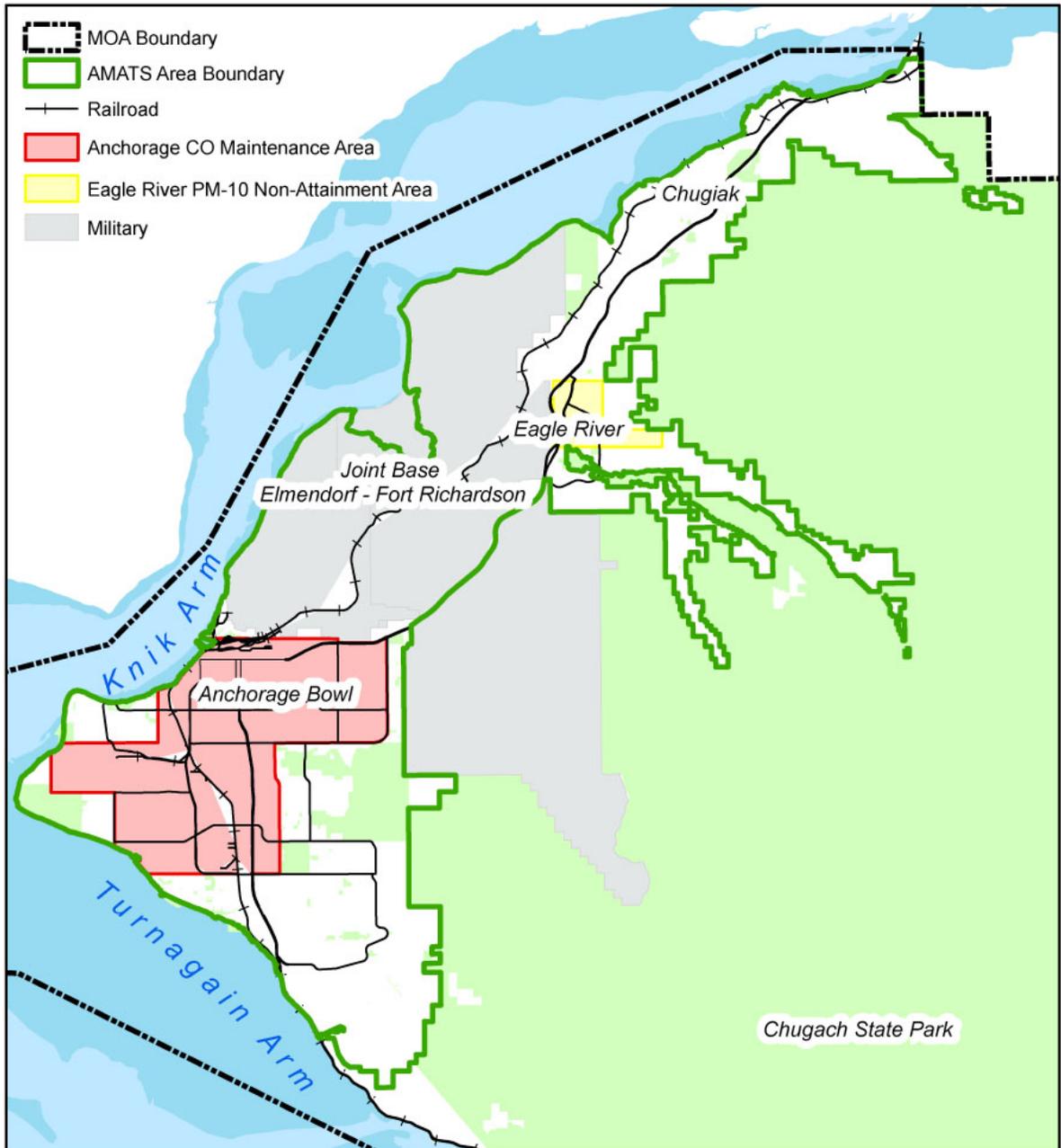
SHAPING THE PLAN CHARACTER

The year 2011 marks 96 years since the Anchorage area emerged as the headquarters for railroad construction in Alaska. Like any major center of commerce, the area relies heavily on transportation infrastructure and services for mobility, economic activity, and connectivity to deliver goods and services. The progress of transportation, specifically its evolution in serving the population and traffic growth, is integral to the character and function of the area. The land within the Anchorage Metropolitan Area Transportation Solutions (AMATS) boundaries contains nearly 40 percent of the population of Alaska. **Figure 1-1** shows the shape and extent of the land that makes up the AMATS planning area.

Transportation is a vital part of the daily lives of Anchorage metropolitan area residents as well as the activities of the business community, service organizations and institutions, government agencies, and the military. The region's transportation infrastructure of roads, airports, port, railroad, transit services, and bicycle and pedestrian facilities is extensive. This infrastructure is the product of decades of policies, decisions, and investments. It is the starting point for the future.

In 2010, approximately 1.2 million personal and business trips were made every weekday; with each trip, the transportation system moved persons and goods

Figure 1-1 AMATS Boundaries



Source: Municipality of Anchorage GIS and Mapping Services

from one point to another. According to the most recent (2004-05) consumer expenditure surveys from the U.S. Bureau of Labor Statistics, the typical area household spends more than 21 percent of its disposable income on transportation. That is more than a combined \$1.3 billion expended annually for transportation by all area households.

This document plans for transportation facilities and services to ensure mobility and accessibility throughout the AMATS region.

The MTP addresses all modes and components of a fully integrated and comprehensive transportation system for the region. It is founded on a proactive, open, continuing dialog with community members. This communication process and the resulting MTP will guide and shape transportation decisions in the Anchorage metropolitan area for decades to come.

UNDERSTANDING THE ORGANIZATIONAL STRUCTURE OF TRANSPORTATION PLANNING IN THE AMATS REGION

AMATS is the federally designated Metropolitan Planning Organization (MPO) responsible for transportation planning for the Anchorage Bowl, Chugiak, and Eagle

River. One of the most important roles of AMATS is the preparation and adoption of the MTP. Five primary groups participate in AMATS planning and decision-making activities:

- AMATS Policy Committee
- AMATS Technical Advisory Committee
- Municipal Assembly
- Municipal Planning and Zoning Commission
- Air Quality Advisory Committee

Policy Committee

The AMATS Policy Committee has the authority to act on all matters relating to the continuing, comprehensive, and cooperative transportation and air quality planning process for the area. The committee consists of five equal voting members: Commissioner of the Alaska Department of Transportation and Public Facilities (DOT&PF) or a designee, Commissioner of the Alaska Department of Environmental Conservation or a designee, Municipal Mayor, and two Municipal Assembly Members. The Chair of the Policy Committee is the DOT&PF member. Responsibilities of the AMATS Policy Committee are as follows:

- Establish the needs and priorities of transportation

- Direct the preparation and implementation of transportation plans, programs, and studies
- Secure and manage funding to implement the Transportation Improvement Program (TIP)
- Provide overall direction to the AMATS Technical Advisory Committee and staff
- Ensure public involvement throughout the AMATS planning and decision-making process

Technical Advisory Committee

The AMATS Technical Advisory Committee consists of these members: (1) DOT&PF Central Region Chief of Planning, (2) DOT&PF Regional Pre Construction Engineer, (3) representative from the Alaska Department of Environmental Conservation, (4) Municipal Planning Division Director, (5) Municipal Traffic Engineer, (6) Municipal Public Transportation Director, (7) representative from the Municipal Department of Health and Human Services, (8) a member of the Air Quality Advisory Committee, (9) Municipal Project Management & Engineering Division Director, (10) representative from the Port of Anchorage, and (11) representative from the Alaska Railroad Corporation.

The Chair of the Technical Advisory Committee is the Municipal Traffic

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Division Engineer. The committee duties include the following:

- Prepare and maintain the AMATS transportation plans, technical studies, and programs
- Provide recommendations to the Policy Committee about the effects of transportation and air quality plans and programs on the plans of other agencies
- Provide recommendations to the Policy Committee in its review of transportation projects and programs funded by the state and federal governments
- Receive public comments through the MOA Planning and Zoning Commission (acting as the AMATS Citizens' Advisory Committee) and the AMATS Air Quality Advisory Committee

Municipal Assembly

The Municipal Assembly provides local government review and recommendations on the AMATS plans and programs to the AMATS Policy Committee. The Municipal Assembly's duties are as follows:

- Adopt by ordinance the MTP as the transportation plan element of the comprehensive plan
- Adopt by ordinance the Transportation Improvement Program (TIP)



- Adopt an official streets and highways plan
- Adopt the local area component of the State Implementation Plan for air quality
- Assist in securing adequate funding to implement the transportation program
- Designate two assembly members to serve as two of the three local

government representatives on the AMATS Policy Committee

Municipal Planning and Zoning Commission

In its capacity as the AMATS Citizens' Advisory Committee, the Planning and Zoning Commission reviews transportation plans and programs. In another capacity, the Planning and Zoning Commission, whose members are appointed by the Mayor, reviews locations and site plans for roadway improvement projects. Responsibilities of the Planning and Zoning Commission are identified below:

- Review transportation plans and programs and prepare recommendations to both the Municipal Assembly and the AMATS Policy Committee
- Review and prepare recommendations on the transportation elements of the comprehensive plan and the Official Streets and Highways Plan (OS&HP) to the Municipal Assembly for adoption

Air Quality Advisory Committee

The AMATS Air Quality Advisory Committee is the citizens' forum for air quality issues affecting the AMATS area. Specific functions of this group are to assist in promoting public participation in the air quality planning process and to comment

on air quality planning issues. Members of this group are appointed by the AMATS Policy Committee. Department of Health and Human Services is the coordinating agency for the Air Quality Advisory Committee. The committee's duties are as follows:

- Provide review and comment on air quality planning issues
- Assist in promoting public participation in the air quality planning process

MEETING REGULATORY REQUIREMENTS

National Transportation Program

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was signed into law by the President in August 2005, replacing the expiring transportation funding bill known as the Transportation Equity Act for the 21st Century (TEA-21). SAFETEA-LU requires the MPO transportation planning process to explicitly provide for consideration of projects and strategies that accomplish the following eight planning factors:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency

2. Increase the safety of the transportation system for motorized and non-motorized users
3. Increase the security of the transportation system for motorized and non-motorized users
4. Increase the accessibility and mobility options available to people and for freight
5. Protect and enhance the environment, promote energy conservation, and improve quality of life; and promote consistency between transportation improvements and state and local planned growth and economic development patterns
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
7. Promote efficient system management and operation
8. Emphasize the preservation of the existing transportation system

The AMATS MTP is consistent with the national transportation program, addresses priority issues, and leverages funding opportunities and initiatives incorporated in the national program. This update was prepared in accordance with federal requirements that AMATS update its MTP every 4 years.

Air Quality

Federal funding for local transportation projects is statutorily tied to achieving and maintaining minimum National Ambient Air Quality Standards. The AMATS region currently meets requirements for all six air pollutants for which there are standards. However, levels of particulate matter less than 10 microns in diameter (PM-10) and carbon monoxide (CO) sometimes approach or exceed standards. Although a standard has not been established for benzene, it is also a concern to area residents.

The Anchorage Bowl urbanized area is designated as a CO Maintenance Area. The Eagle River area is designated as a PM-10 non-attainment area. Because motor vehicles are primary sources of air pollution, AMATS must demonstrate that this MTP will not cause the region to fail to meet standards. Particular attention must be paid to PM-10, CO emissions, and compliance with the Anchorage CO Maintenance Plan prepared by the MOA for the CO Maintenance Area. This process is known as an air quality conformity determination and is discussed in detail in Chapter 9.

Environmental Justice

The U.S. Department of Transportation has issued a final order on environmental justice. This final order requires that MPOs, like AMATS, identify and address disproportionately high and adverse pub-

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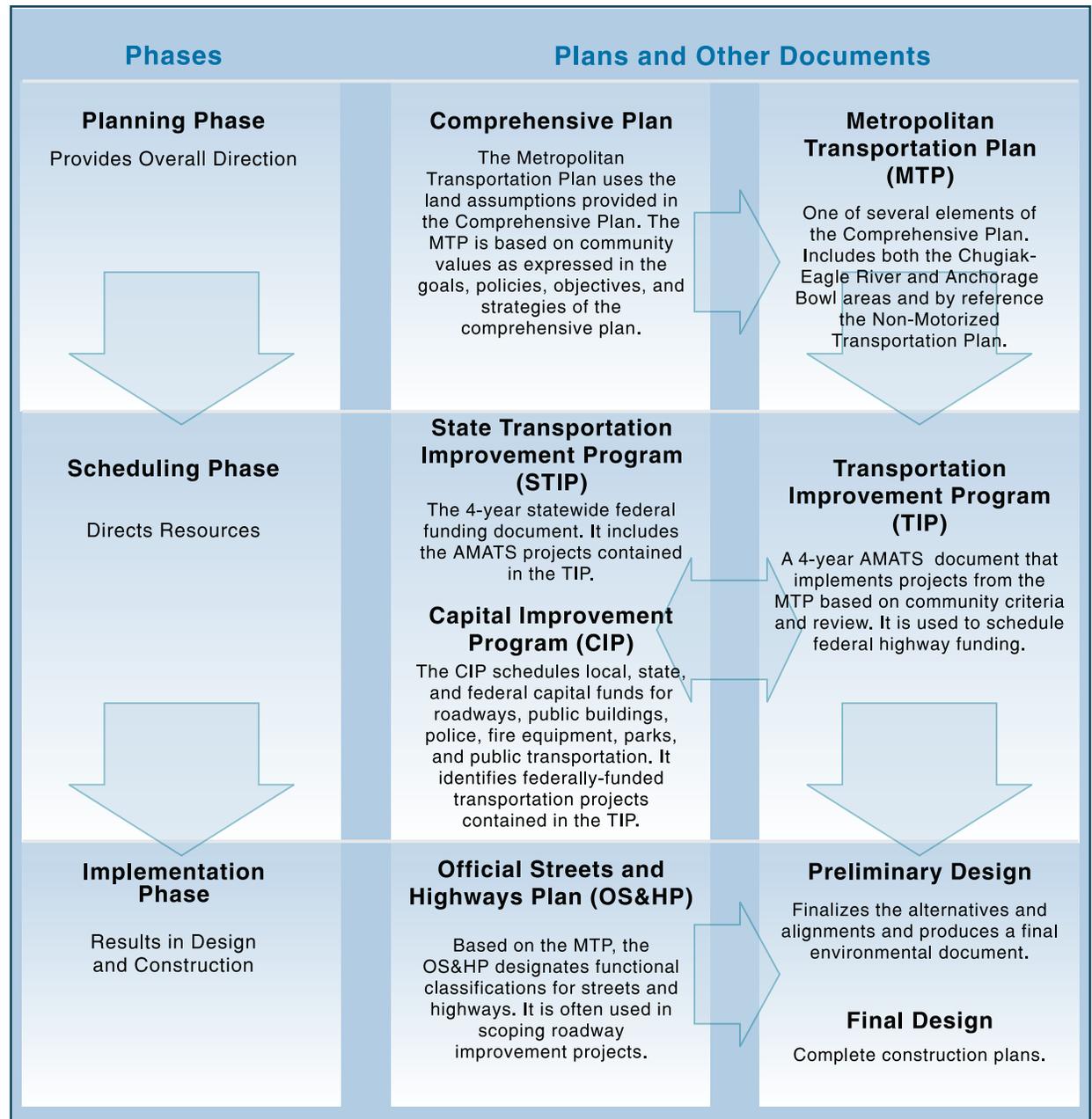
lic health and environmental effects of transportation policies, programs, and activities on minority and low-income populations. How these issues are addressed by this plan is discussed in Appendix B.

COORDINATING THE TRANSPORTATION PLANNING PROCESS

The MTP is the key planning document used by AMATS to plan the development and implementation of transportation system improvements more than 20 years into the future. This 2035 planning horizon provides a long-term view. The MTP frames a plan for transportation facilities and services to ensure mobility and accessibility throughout the municipality and serves to both complement and act as an element of comprehensive plans, which includes the Anchorage Bowl and Chugiak-Eagle River comprehensive plans. In addition to the comprehensive plans, adopted subarea plans such as the Hillside District Plan, Destination Downtown: Anchorage Downtown Comprehensive Plan, and Eagle River Central Business District and Residential Core Circulation Study provided findings and recommendations that are incorporated into this document.

Figure 1-2 shows the phases of the transportation planning process and the related documents that are developed to present findings and recommendations.

Figure 1-2 Transportation Planning Process Phases



A significant role of the MTP is identifying uses and scheduling the spending of federal transportation funds. Federal funds contribute a large share of the financial resources for transportation improvements within the AMATS boundary. With that funding comes a responsibility for meeting certain requirements. Federal regulations guide transportation planning, as well as the monitoring and maintenance of requirements for air quality standards. Preparation of the MTP is a requirement for compliance with federal regulations and funding eligibility.

The TIP is the short-range implementation plan used by AMATS to commit federal funding for transportation improvements. The TIP schedules the recommendations contained in the MTP for a short-term (4-year) time frame.

The OS&HP is based on the MTP, and establishes the location, classification, and minimum rights-of-way for streets needed to accommodate future transportation needs.

POLICY COMMITTEE GUIDANCE FOR PLAN DEVELOPMENT

A team consisting of transportation planning consultants, AMATS staff, and representatives of the MOA and DOT&PF was assembled to prepare this 2035 MTP. AMATS provided the MTP team with the following planning assumptions to share

with the public and guide the plan development:

- AMATS must review and update the existing MTP at least every 4 years in air quality nonattainment areas; and an update of the air quality conformity analysis for the 2027 Anchorage Bowl and Chugiak-Eagle River LRTPs is required by June 14, 2011.
- The 2035 MTP for the Anchorage metropolitan area will build on the major amendment undertaken (but not approved) on the Anchorage Bowl Long Range Transportation Plan (LRTP) in 2009 and reflected in an unpublished draft 2027 LRTP Chapter 13 to make it compliant with the SAFETEA-LU requirements.
- The 2027 Anchorage Bowl and Chugiak-Eagle River LRTPs will be reviewed for SAFETEA-LU compliance, and those elements not in compliance will be addressed and updated as needed.
- The Seward Highway to Glenn Highway connection project enhancements to the AMATS travel demand model will be used for preparation of the 2035 MTP.
- The regional socioeconomic forecast used in the model and for the 2035 MTP will be provided by the December 2009 report titled Economic and Demographic Projections for Alaska and Greater

Anchorage 2010-2035 developed by the Institute for Social and Economic Research (ISER) at the University of Alaska Anchorage (UAA).

- The transportation demand model will be used to confirm the need for the projects that were included in the 2027 LRTPs for the Anchorage Bowl and Chugiak-Eagle River, and to identify whether additional projects are required to meet the transportation needs in 2035.
- The goals and objectives in the adopted Anchorage Bowl and Chugiak-Eagle River LRTPs will be confirmed as still relevant and consistent with existing land use plans and, where possible, objectives will be revised to be specifically quantifiable.
- The 2035 MTP will recognize the completion of projects, strategies, and planning efforts identified in the 2027 LRTPs.
- The Knik Arm Crossing Project will remain in the 2035 MTP as a short-term project, unless the financial analysis determines that projects must be removed to meet fiscal constraints; if projects must be removed to meet fiscal constraints, the Knik Arm Crossing Project may be reconsidered along with other projects.
- The public participation activities will be consistent with those stated

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in the adopted AMATS Public Participation Plan and will focus on the achievements since the unpublished draft Chapter 13 for the 2027 Anchorage Bowl LRTP.

- The 2035 MTP will evaluate fiscal constraints to ensure that the proposed improvements can be funded.
- Only the road, bicycle, pedestrian, and public transportation projects included in plans or studies that have been completed and adopted after the approval of the 2027 Anchorage Bowl and Chugiak-Eagle River LRTPs will be considered for incorporation into the 2035 MTP.
- All relevant recommendations and corrective actions from the 2010 AMATS Certification Review will be addressed and incorporated into the 2035 MTP as applicable.
- The next transportation plan update and major plan development will occur when one or more of the following conditions are met: no more than 4 years have passed, a new Anchorage land use plan (comprehensive plan) is adopted, and substantive changes in population are documented.

GATHERING INFORMATION FOR PLAN DEVELOPMENT

This plan identifies transportation improvements and investments to meet the needs of the metropolitan area in 2035. Two important steps are necessary to identify future needs: (1) characterizing the current transportation system, especially what factors most strongly influence the status quo; and (2) projecting the demands that will be placed on the transportation system in 2035.

Data required to develop the MTP include future land use development and locations of new households and employment—where the growing number of AMATS area residents will live and where regional workers, including commuters from the Matanuska-Susitna (Mat-Su) Borough, will travel to jobs. Another clue to future demand is understanding the patterns and types of trips into, within, and out of the AMATS boundary. The 2035 MTP is based on the most recent land use, population, housing, and employment information made available.

MOVING THE VISION FORWARD

As was previously mentioned, this MTP is a combination and update of the previous plans for the Anchorage Bowl and Chugiak-Eagle River areas. These plans were last updated in 2007 with horizon years of 2027. The successes from the

Sources of Information for Transportation Planning

The statistics in this chapter are supported by socioeconomic information from the U.S. Census, demographic and economic forecasts by ISER in 2009 for the Seward Highway to Glenn Highway connection project, and previous planning efforts. These up-to-date statistical and behavioral resources provide a sound, quantitative understanding of the demographic and economic composition of the community and the daily travel needs and patterns of its residents. The AMATS travel forecasting model has been updated to reflect this new information. The model, which is used to forecast future (2035) travel demand, is used as the primary tool for identifying and evaluating roadway improvement projects to be included in the MTP.

implementation of these plans during the last few years speak to the importance of continuing forward with planning and implementation. These successes are summarized here and described in greater detail in Chapter 4.

Fourteen roadway projects contained within the last plans have been constructed since 2007. Twelve roadway projects have been completed in the Anchorage Bowl and two in Eagle River. These improvements have reduced intersection

delay and corridor travel time, allowing area residents to reach their destinations more efficiently.

Transit ridership has increased since 2007, despite People Mover service levels remaining relatively unchanged.

People Mover has been able to implement a number of Intelligent Transportation System (ITS) improvements, such as electronic message boards and a real-time bus tracker application. The number of vanpools operating has increased from 42 to 55, with 52 of those originating from the Mat-Su Valley.

The non-motorized transportation system has also been expanded in the last few years. Several new trail, sidewalk, and bicycle lane sections have been completed. These new facilities provide key connections to schools, parks, neighborhoods, and commercial destinations. In total, 35 miles of new sidewalks, 11 miles of bicycle lanes, 20 miles of multi-use paths, and 4 trail sections have been constructed since 2007.

Although these improvements have improved transportation in the AMATS area, needs remain for projects to remedy existing deficiencies and for planning to manage future issues.

Many points of stress are visible in the transportation system of the AMATS region:

- Almost all major arterials serving as commuter routes experience

congestion at multiple intersections during the afternoon peak period. Delay at the top three intersections alone results in approximately 182,000 lost hours, or \$3.1 million dollars based on median wage rates, for region residents on an annual basis.

- More than 7,300 traffic crashes occur annually in the MOA.
- Transit service per capita has declined steadily since the 1980s.
- Although air travel and the movement of goods to and from the airport and port are critical to the state and Anchorage economies, neither the airport nor the port is accessible by roads specifically designed for access to such distribution hubs.

In 2010 the AMATS area's population reached approximately 285,000 people, having grown steadily from 30,500 people in 1950 and 144,000 people in 1972, when the first Anchorage MTP (formerly called the LRTP) was prepared.

The AMATS area will continue to grow, which will increase overall travel demand and the locations of the growth will bring about different traffic patterns. By 2035, when the population of the Anchorage metropolitan area is expected to have increased to approximately 350,000 residents, available and developable land will be substantially occupied. Additionally more than 500,000 people will reside in the Southcentral Alaska region (AMATS

region and the Mat-Su Valley). The interaction between these areas will be far greater than it is today.

At the current rate, households in the AMATS region will expend in excess of \$30 billion for transportation during the next 24 years. Judicious and effective allocation of federal, state and local transportation funding dollars will dramatically affect the character and quality of life of the community. The blueprint outlined in this MTP will enhance community benefit from transportation spending for the AMATS area.

