ANCHORAGE, ALASKA
AR NO. 2023-295

A RESOLUTION ADOPTING RECOMMENDATIONS TO BE FORWARDED TO THE ANCHORAGE METROPOLITAN AREA TRANSPORTATION SOLUTIONS (AMATS) POLICY COMMITTEE REGARDING THE 2050 METROPOLITAN TRANSPORTATION PLAN (MTP) PUBLIC REVIEW DRAFT.

WHEREAS, the Anchorage Metropolitan Area Transportation Solutions (AMATS) is the federally designated Metropolitan Planning Organization (MPO) responsible for transportation planning for the Anchorage Bowl, Chugiak, and Eagle River, and in coordination with the Native Village of Eklutna, the federally recognized tribe within the AMATS planning area; and

WHEREAS, the 2050 Metropolitan Transportation Plan (MTP) for the Anchorage Bowl, Chugiak, and Eagle River is a federally required document that enables continued eligibility to receive and program federal Highway Trust Fund dollars used to guide the development and implementation of needed transportation improvements for the AMATS planning area; and

WHEREAS, federal planning regulations require the AMATS MTP to address a long-term planning horizon at least twenty years into the future (to 2050) and be reviewed and updated every four years based on the latest available land use, population, employment, and housing data, to avoid a lapse in the MTP Air Quality Conformity Determination (AQCD) approved by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA); and

WHEREAS, the current FHWA/FTA-approved AQCD for the AMATS 2040 MTP expires on August 25, 2024, and

WHEREAS, per Anchorage Municipal Code 2.10.070, the Assembly shall review and, by resolution, adopt any recommendations on the 2050 MTP within 45 days and is required to hold at least one public hearing on its recommendations prior to adopting the resolution and

WHEREAS, the 2050 MTP should reflect our community goals as expressed in our various adopted plans, such as the Climate Action Plan, the Comprehensive Plan, Vision Zero, and the Anchorage 2040 Land Use Plan, and

WHEREAS, the 2050 MTP in its entirety should also take into consideration the local impacts from all its goals, policies, projects, and actions given the current fiscal situation at the state and municipal levels and
WHEREAS, the Assembly shall transmit its recommendations to the AMATS Policy Committee prior to final approval of the 2050 MTP and transmission to FHWA and FTA; now, therefore,

THE ANCHORAGE ASSEMBLY RESOLVES:

Section 1. The recommendations of the Anchorage Assembly, if any, related to the 2050 MTP Public Review Draft (August 2023) are hereby recommended for review and consideration by the AMATS Policy Committee prior to final action.

Section 2. This resolution shall be effective immediately upon passage and approval by the Assembly.

PASSED AND APPROVED by the Anchorage Assembly this ______ day of ________________, 2023.

____________________________
Chair of the Assembly

ATTEST:

____________________________
Municipal Clerk
FROM: MAYOR

SUBJECT: A RESOLUTION ADOPTING RECOMMENDATIONS TO BE FORWARDED TO THE ANCHORAGE METROPOLITAN AREA TRANSPORTATION SOLUTIONS (AMATS) POLICY COMMITTEE REGARDING THE 2050 METROPOLITAN TRANSPORTATION PLAN (MTP) PUBLIC REVIEW DRAFT.

The Anchorage Assembly is asked to adopt recommendations regarding the AMATS draft 2050 MTP and forward that resolution to the AMATS Policy Committee. In accordance with AO No. 97-139(S), the Anchorage Assembly shall review and, by resolution, adopt recommendations on the MTP within 45 days after it is introduced for action unless the AMATS Policy Committee and Assembly otherwise agree to a longer period.

On August 10, 2023, the AMATS draft 2050 MTP was released for a 60-day public comment period, which closes on October 9, 2023.

The draft 2050 MTP (attached as Exhibit A) outlines anticipated transportation projects within the AMATS planning area to be started or constructed within a minimum of 20 years. These projects are funded with federal, state, or local dollars and represent a coordinated effort among the Municipality of Anchorage, the Alaska Department of Transportation & Public Facilities, and AMATS to improve the transportation system.

THE ADMINISTRATION RECOMMENDS APPROVAL.

Prepared by: Aaron Jongenelen, Transportation Planning Manager
Planning Department

Approved by: Craig H. Lyon, Planning Director
Concur: Lance Wilber, Community Development Director
Concur: Kent Kohlhase, P.E., Municipal Manager

Respectfully submitted: Dave Bronson, Mayor

Attachment: Exhibit A, AMATS 2050 MTP Public Review Draft
METROPOLITAN TRANSPORTATION PLAN
For the Anchorage Bowl and Chugiak–Eagle River

AUGUST 2023
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Above photos left to right: Biking group enjoys Anchorage trail network – courtesy of AMATS/Municipality of Anchorage; Multi-use path along Campbell Airstrip Road = courtesy of AMATS/Municipality of Anchorage; Pictured on previous page left to right: Alaska Railroad Passenger Train heads south along Turnagain Arm; Russian Jack Springs Park and surrounding developments; Port of Alaska, Anchorage.

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1. Technical Memorandum: MTP 2040 Goals & Objectives Review, 2050 MTP Goals & Objectives Recommendations
2. Socioeconomic Methodology
3. Existing Conditions Report / Deficiencies Analysis
4. AMATS Safety Plan Existing Conditions Memorandum (2023)
5. VisionEval Memo and Presentation
6. Travel Demand Model Update Report
7. Alternatives Analysis Forecast
which is a collaborative, interdisciplinary decision-making process and design approach that involves all stakeholders to develop a transportation facility that fits its physical setting. Effective Use – The degree to which the transportation system can be successful in producing desired or intended result. Equity – Equity in transportation seeks fairness in mobility, accessiblity, and distribution of impacts to meet the needs of all community members. A central goal of transportation is to facilitate social and economic opportunities by providing equitable levels of access to affordable and reliable transportation options based on the needs of the populations being served, particularly populations that are traditionally underserved. FHWA – Federal Highway Administration FRA – Federal Railroad Administration Freight Generators – Facilities housing businesses that individually or collectively produce and attract a large number of daily truck trips. Examples include Ted Stevens Anchorage International Airport, Port of Alaska, or University of Alaska Anchorage. FTA – Federal Transit Administration GIS – geographic information system GO – general obligation HSIP – Highway Safety Improvement Program Infrastructure – Infrastructure refers to the physical system that enables or facilitates the movement of people and goods. Intermodal Capabilities – Intermodal describes an approach to planning, building, and operating the transportation system that emphasizes optimal use of transportation resources and connections between freight modes (trucks, ships, aircraft, trains, etc.). ITS – Intelligent Transportation System: technologies that are integrated with the built transportation infrastructure to improve overall transportation system operations and safety. JBER – Joint Base Elmendorf-Richardson LRSA – limited road service area LRTP – long-range transportation plan Mat-Su – Matanuska-Susitna Borough Above photos left to right: People Mover provides bike racks for commuters year-round – courtesy the Public Transportation Department; Alaska Railroad passenger train – courtesy of AMATS/Municipality of Anchorage; Winter fat bike trail riding – courtesy of AMATS/Municipality of Anchorage.
Abbreviations and Glossary (Continued)

MOA – Municipality of Anchorage

Mode share – Mode share refers to the type of transportation an individual traveler uses to reach their destinations. Most modes are self-explanatory; “drive alone” signifies a passenger car with only one occupant while “shared ride” designates a passenger car with more than one occupant.

MTP – metropolitan transportation plan

NHS – National Highway System

O&M – Operations and Maintenance

PC – Policy Committee

PM10 – particulate matter less than 10 microns in diameter

PM2.5 – particulate matter less than 2.5 microns in diameter

PM&E – Project Management and Engineering

POA – Port of Alaska

PTD – Public Transportation Department

Security – Security is defined as the protection of the condition and value of transportation assets from external threats, such as major weather events (discrete), adverse effects of climate change (non-discrete), and deliberate sabotage vulnerabilities.

State of Good Repair – A condition in which the existing physical assets, both individually and as a system, are functioning as designed within their useful service life. (a) are sustained through regular maintenance and replacement programs. State of Good Repair represents just one element of a comprehensive capital investment program that also addresses system capacity and performance.

STOP – Statewide Transportation Improvement Program

TAC – Technical Advisory Committee

TAZ – Traffic Analysis Zone: A unit of geography commonly used in transportation planning models to represent trip origins and destinations, as well as the population, employment and other attributes that influence travel demand. TAZ boundaries are drawn so that their trip origins and destinations lead onto the transportation network’s roads, transit routes, and active transportation infrastructure in realistic ways. The urban area is divided into a set of contiguous zones.

TDM – Transportation Demand Management: a set of strategies aimed at maximizing traveler choices. Managing demand is about providing travelers, regardless of whether they drive alone, with travel choices, such as work location, route, time of travel and mode. Demand management is broadly defined as providing travelers with effective choices to improve travel reliability.

TIP – Transportation Improvement Program: A 3-year capital program of transportation projects, focused on federal funding for roadway, trail, and transit capital projects for the urbanized area. The TIP covers federal, state, and local funding for roadway, transit, trails, and enhancement projects. The document includes new projects, as well as previously funded projects that require additional effort.

Timely Emergency Response – Part of a comprehensive congestion management plan after an incident on a roadway, timely response refers to clearing the scene of an incident through multiple strategies including quick reporting, information to travelers to avoid the area such as the 5-1-1 system, cameras and websites and to provide space and access for first responders.

Travel Demand Model – a computer model used to estimate travel behavior and travel demand for a specific time frame. The travel demand model simulates road and transit performance within the region based on traffic analysis zones.

TSAIA – Ted Stevens Anchorage International Airport

TSMO – Transportation System Management and Operations: a set of strategies that focus on operational improvements that can maintain and even restore the performance of the existing transportation system before extra capacity is needed.

Underrepresented groups – are groups, neighborhoods, or populations, often including vulnerable populations that have additional barriers to access, which may include economic and geographic barriers.

VHD – Vehicle Hours of Delay – refers to a

VMT – vehicle miles traveled. This metric is calculated by multiplying the vehicle volume on a roadway segment by the length of the segment. To estimate vehicles miles traveled for a geographic area, the road segments results are summed for all the segments within that area.

Vehicle Revenue Miles – The miles traveled by a transit provider when a vehicle is in revenue service (i.e., the time when a transit vehicle is available to the general public and there is an expectation of carrying passengers).

Vulnerable Populations – refers to a broad category that includes minority and low-income populations but may also include many other demographic categories that face challenges engaging with the transportation process and reaping equitable benefits, such as children, the elderly, and the disabled.

Above photos left to right: Spenard Road – courtesy of AMATS/Municipality of Anchorage; Winter driving hazards; Road construction on East 15th Ave – courtesy of AMATS/Municipality of Anchorage.
Transportation Planning is critical to ensure that Anchorage can meet current and future transportation needs for all users through a comprehensive, continuous, and cooperative process. Anchorage Metropolitan Area Transportation Solutions (AMATS) is the designated metropolitan planning organization (MPO) that has overseen planning and programming of the Federal Highway Trust Fund dollars designated for the Anchorage Bowl, Chugiak, and Eagle River since 1976. The Metropolitan Transportation Plan (MTP) is the primary tool used by AMATS to plan for long-range transportation needs and recommend solutions based on anticipated funding availability over a minimum 20-year horizon. The MTP includes the whole transportation system: streets, sidewalks and pathways, trails, public transit, freeways, highways, and freight mobility. It is also required to address congestion management for a multimodal system and air quality standards and be based on land uses described in the current Comprehensive Plan and Land Use Plans for Anchorage and Chugiak-Eagle River.

Since the 2040 MTP was written and approved by the AMATS Policy Committee in 2020, several significant world and regional events have occurred including the COVID-19 pandemic, which changed how people used transportation networks, and the 2020 Census, which updated socio-economic data to inform population and employment data.

Chapter 1

Introduction

This chapter sets the background and foundation for the purpose, need and intent of the metropolitan transportation plan. This first chapter also provides federal planning requirements for plan development.

Anchorage and Chugiak-Eagle River are vibrant winter communities with an adaptable & efficient multimodal transportation network that is equitable, safe, accessible, and reliable, which supports a sustainable economy, enhances and protects the natural and built environment, and fosters healthy, connected neighborhoods.
FHWA Planning Regulations
The 2050 MTP must comply with the applicable metropolitan planning and programming requirements described in 23 CFR 450, Subpart C regarding 2050 MTP development and content.

MTP Update Requirement
AMATS must review and update the MTP at least every four years in air quality maintenance areas to avoid a lapse in the MTP Air Quality Conformity Determination. This requires effective and timely coordination with stakeholders and the public to meaningfully incorporate feedback while meeting federal deadlines.

Planning Horizon
The 2050 MTP must encompass a minimum 20-year planning horizon.

Planning Factors
The 2050 MTP will address the following ten 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 accessibility and mobility of people and freight.
5. Protect and enhance the environment, promote energy conservation, improve the 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.
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
10. Enhance travel and tourism.

National Goals
Congress has established seven national Federal-aid Highway Program performance goals in 23 USC 150(b) that the 2050 MTP will incorporate:
1. Safety. To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
2. Infrastructure Condition. To maintain the highway infrastructure asset system in a state of good repair.
3. Congestion Reduction. To achieve a significant reduction in congestion on the National Highway System.
4. System Reliability. To improve the efficiency of the surface transportation system.
5. Freight Movement and Economic Vitality. To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. Environmental Sustainability. To enhance the performance of the transportation system while protecting and enhancing the natural environment.
7. Reduced Project Delivery Delays. To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies’ work practices.

Performance-Based Approach
2050 MTP recommendations and project decisions will be determined based on the goals, objectives, and performance measures and targets established by the MPO to address federal performance standards.

Equity
The 2050 MTP will incorporate equity throughout its development. Both the process and final products should equitably prioritize the needs of the MPO population, regardless of their preferred mode of transportation. This can be achieved through the development of the goals and objectives, project criteria, project selection, and by ensuring that public participation activities recognize the barriers to participation that vulnerable populations face and provide solutions to minimize these barriers and successfully engage with these communities throughout all phases of project planning and development.
Community Impact Assessment and Environmental Justice
The Environmental Protection Agency’s (EPA) environmental justice screening and mapping tool, ESCREEN, was used to ensure a comprehensive approach when determining whether MTP recommendations would have disproportionate adverse effects on minority or low-income populations.

EPA Regulations
The 2050 MTP will follow Environmental Protection Agency (EPA) regulations stated in 40 CFR 93, Subpart C.

A Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects.

Air Quality Conformity
The EPA designated the Anchorage Bowl as a limited maintenance area for carbon monoxide (CO) and Eagle River as a limited maintenance area for particulate matter less than 10 microns in diameter (PM10). While air quality modeling is no longer required to estimate emissions, AMATS will prepare design concept and scope descriptions of all existing and proposed facilities for air quality conformity determinations. The 2050 Plan includes a discussion of potential environmental mitigation activities.

Fiscal Constraint
All recommended projects and programs in the 2050 MTP must be matched with reasonably anticipated funding. Unconstructed projects listed in the 2040 MTP were nominated and re-evaluated for consistency with 2050 MTP goals and objectives, local and state planning documents, funding availability and restrictions, etc. 23 CFR 450.324(f)(11) specifies the required elements and processes for an MTP’s financial plan. Financial plan elements include estimated costs and reasonably expected revenue sources, additional funding strategies, and transportation control measures for air-quality non-attainment and maintenance areas. Anticipated funding is determined using historical trends and specific appropriations. Funding amounts, source eligibility, and timing must be considered when matching costs with revenues over the planning horizon.

Aside from the federal requirement, fiscal constraint has the primary benefit of making the MTP more implementable. A key change to better maintain fiscal constraint in the 2050 MTP is to account for the full range of project costs over their useful life (e.g., higher snow maintenance costs following new road construction requires increasing the maintenance budget to cover those costs).

Organization of this MTP Document

1. CHAPTER 1 INTRODUCTION – Chapter 1 sets the background and foundation for the purpose, need and intent of the metropolitan transportation plan. The first chapter also provides federal planning requirements for plan development.

2. CHAPTER 2 PLAN DEVELOPMENT AND COMMUNITY INVOLVEMENT – This section provides an overview of the plan development process including data collection through an iterative community engagement program to establish goals, objectives, project nominations, project screening and prioritization tools.

3. CHAPTER 3 GOALS, OBJECTIVES, AND PRIORITIZATION CRITERIA – The goals and objectives presented in this planning framework chapter help to achieve the vision for the AMATS transportation system. The prioritization criteria developed during the planning public involvement process ensures that projects recommended will continue to achieve the MTP’s goals.

4. CHAPTER 4 COMMUNITY AND TRANSPORTATION PROFILE – This section provides in depth information on the regional context of the AMATS area including the current demographic and socioeconomic conditions and trends. In addition, regional transportation and land use connections are detailed to identify the deficiencies and gaps in the current multimodal system including active transportation (walking and bicycling), public transportation, vehicle travel, and freight, setting the stage for the next chapter.

5. CHAPTER 5 FUTURE TRANSPORTATION SYSTEM – This chapter documents the forecasted or projected future transportation system including trends, scenario development, and analysis to ensure deficiencies are addressed.

6. CHAPTER 6 RECOMMENDATIONS AND FINANCIAL PLAN – Chapter 6 combines project recommendations developed from the community and public engagement process and the fiscally constrained financial plan that will fund and program projects for implementation.

7. CHAPTER 7 IMPLEMENTATION STRATEGIES – This section provides the step by step actions needed to implement the plan recommendations and includes partnerships required to fully realize the community’s vision for the transportation system. The performance measures established in this chapter will help to track how well progress will be made in the future to achieve the vision, goals, and objectives.

8. CHAPTER 8 AIR QUALITY AND THE MTP – This section details the federally required air quality conformity to ensure that future transportation project recommendations do not adversely impact the natural environment and especially air quality from vehicle carbon emissions.
Chapter 2
Plan Development Process and Community Involvement

This section provides an overview of the plan development process including data collection through an iterative community engagement program to establish goals, objectives, project nominations, project screening and prioritization tools.

Overview

The long-term success of the MTP is rooted in the plan development process and is guided by the existing conditions and deficiency analysis, community input, and desires for a future transportation network that serves all users and modes. Community involvement also informs and educates the public on the MTP’s transportation planning process and involves them in recommendations and outcomes, resulting in a plan that follows best practices for safe and accessible transportation.

The MTP provides a 20-year outlook and vision that identifies current conditions and future needs. The MTP also provides guidance and a policy framework for transportation system improvements development through funding. Public Participation is central to MTP development. In addition to fulfilling federal planning requirements, effective public involvement improves decision making and ensures the MTP meets public needs and values. Development of the 2050 MTP followed public involvement guidelines described in AMATS’ current Public Participation Plan. The 2050 MTP was developed through a four-phase process that occurred over three years. Figure 1a below shows the phases in an MTP plan. Figure 1b on the following page summarizes AMATS’ plan development process and primary products, or actions taken.

Project Management Team

The plan was developed through an iterative process involving a multi-agency and multi-department Project Management Team including staff from AMATS, Alaska Department of Transportation and Public Facilities (Alaska DOT&PF) Planning, and the Municipality of Anchorage (MOA) Public Transportation Department and Planning Department. Along with a multi-disciplinary consultant team of transportation and land use planners, travel demand modelers, economists, and safety planning experts, the project team met regularly from...
Plan update inception in 2021 through the Plan’s final approvals and adoption. Workshops and work sessions were key to developing the framework of the plan during goals, objectives, performance measures, project screening and prioritization criteria, future scenario development and fiscal analysis of nominated projects.

**Data Gathering and Background Research**

Existing conditions analysis, travel demand modeling, scenario planning, and alternatives analysis incorporate socioeconomic, land-use, and Traffic Analysis Zone (TAZ) data. Socioeconomic data sources include the Alaska Department of Labor and Workforce Development (ADOLWD) and the U.S. Census. 2019 is the base year for transportation projections. 2020 data are considered less reliable as an indicator of future travel demand due to COVID-19’s short-term effects on travel. 2022 is the base fiscal year for financial projections.

**Phase 1**

**DEFINE OUR VISION**

**Guiding Principles:** How we approach the process

**Vision Statement:** Where we want to be

**Goals & Objectives:** What we want

**Performance Measures & Targets:** How we know if we got to where we want to be

**Phase 2**

**EVALUATE TODAY’S SYSTEM**

**Data Collection, Issues & Opportunities Identification**

**Status of the System:** What we have

**System Deficiency Summary:** What needs to improve

**Transportation Network Evaluation:** How it performs

**Phase 3**

**ANALYZE TOMORROW’S NETWORK**

**Modeling, Scenario Planning, Recommendations**

**2050 Model Runs:** What 2050 will be like based on today’s trends

**Performance Based Scenarios:** Our possible futures

**Alternatives Analysis:** Responses to current and anticipated needs

**Project, Strategy, & Phasing Considerations:** How to work towards getting the network we want.

**Phase 4**

**BUILD OUR ROADMAP**

**Implementation Plan, Financial Plan, 2050 MTP**

**Project & Strategy Recommendations:** What we need to build the desired network

**Phasing & Implementation Plan:** Specific steps to build the desired network and implement policy recommendations

**Financial Plan:** How it will be funded, matching costs with anticipated revenue

**Draft 2050 MTP:** Put it all together.

**Other Plans**

Several new plans developed since the 2040 MTP have guided the 2050 MTP development. These include:

1. The Spenard Corridor Plan (2021)
2. Transit on the Move Transit Plan (2020)
3. AMATS Non-Motorized Plan (2021)

These plans, in addition to existing plans such as the Anchorage 2040 Land Use Plan, helped refine 2050 MTP goals and objectives and influence what projects are included in the MTP. These plans served as sources of strategies or project recommendations that were scored and ranked during 2050 MTP development and also provide a broader context to inform decision making, such as the land use and climate context.

**Outreach and Community Involvement**

All stakeholders need a transportation system that works for them, whether they walk, bike, roll, drive, or ride a bus. The 2050 MTP update focused on ensuring broad-based, inclusive involvement and input that reflects community priorities and shared values and complies with Title VI and environmental justice regulations. The community involvement process was integral to developing the MTP and shaping the policies and recommendations through an iterative process. The following tools were used to educate stakeholders and gather community input and feedback to inform the MTP.

**Project Website**

The MTP website is a central location for the public and stakeholders to access information on the planning process, from the timeline to planning documents and technical reports.
Fact Sheet
An AMATS 2050 Fact Sheet was shared throughout the plan development process to communicate the purpose and need, the schedule and planning area.

Community Survey
An online community survey was designed and made available to the public to develop the goals and objectives to help achieve the plan’s vision for the 2050 MTP.

Interactive Project Nominations Map
Use of an interactive online platform helped to collect detailed, usable, and timely data from the public. Digital storytelling with maps, images, text, and other exhibits on the Esri StoryMaps and similar platforms is an effective way to express and collect information, both qualitative and quantitative. The interactive map served as a primary communication tool to identify transportation system issues and opportunities during the project nomination process (see Figure 3 and Appendix 7).

AMATS Communications and Social Media
The existing AMATS communications protocol was used throughout the MTP process to share information, meetings, documents for review, and to notify interested residents of upcoming involvement opportunities including AMATS committee meetings and project specific workshops and work sessions. AMATS social media platforms were used to augment direct communications with the project and stakeholder list.

Public Workshops
Workshops 1 & 2 (Virtual & In Person) May 2022
Workshops 1 and 2 provided an overview of the MTP, including purpose of the plan and why it is being updated (see Figure 4). The goals from the public survey were also reviewed. Common themes from the workshop and online survey included:

- Transportation equity and fairness
- Winter maintenance of sidewalks
- Active transportation & transit accessibility, design
- Transportation & land use connection
- Walkable, connected places
- Environmental sustainability
- Reduce greenhouse gas emissions
- Reduce driving (vehicle miles traveled)

Attendees discussed in small groups at tables to identify aspects of the transportation system that answer the following questions and wrote their responses on corresponding colored post-it notes.

- What is working? (Green post-it)
- What would you change? (Pink post-it)
- Everything bagel (aka not sure which category it belongs to but needs to be stated) (Yellow post-it)

Workshops 3, 4, and 5
Workshops 3, 4, and 5 held August 2023 (virtual and in person) in Anchorage and Eagle River presented the draft plan for public feedback during a 60-day public comment period (see Appendix 7).

Transportation Fair
AMATS participated in the 2023 Transportation Fair at the University of Alaska Anchorage to inform the community of the project’s status update and opportunities to participate in the future.

Figure 2: AMATS Boundary Map

Figure 3: Interactive platform used to collect data from the public.
AMATS Committees

The AMATS Committees reviewed the technical documents throughout the plan development process. Work sessions were held for:

- Goals, objectives, and performance measures and prioritization criteria
- Scenario development
- Recommended project list based on fiscal analysis
- Plan draft and public comment summary – [to be completed fall 2023]

Advisory Committees Responsibilities

Policy Committee (PC)
The PC has final authority to approve the MTP and supplemental materials. The PC provides overall direction and guidance and will address stakeholder and public input when making decisions. Key approvals during MTP development include:

- Public Involvement Plan
- Guiding Principles
- Goals, Objectives, and Performance Measures and Targets
- Financial Plan
- Project Scoring Criteria
- Recommended Projects and Strategies
- Air Quality
- Conformity Determination

AMATS has three additional advisory committees that bring suggestions to the Policy Committee through the Technical Advisory Committee:

Community Advisory Committee (CAC)
The CAC provides community comments and views on the metropolitan planning process.

Freight Advisory Committee (FAC)
The FAC serves as an information resource on freight issues and concerns.

Technical Advisory Committee (TAC)
The TAC provides technical direction and guidance to help the PC make more informed decisions.

Bicycle and Pedestrian Advisory Committee (BPAC)
The BPAC provides review and comment on bicycle and pedestrian planning specific elements of the MTP.

Municipality of Anchorage Assembly
While the Assembly does not have authority to approve the MTP or its components, they are a valuable resource in determining public sentiment. The Assembly has the opportunity to review and provide comments on the draft MTP and hold a public hearing to solicit public comments.

Figure 4: Overview of the MTP from Workshops 1 and 2, May 2022

AMATS Committees

Policy Committee (PC)

1. Goals, objectives, and performance measures and prioritization criteria
2. Scenario development
3. Recommended project list based on fiscal analysis
4. Plan draft and public comment summary – [to be completed fall 2023]

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Chapter 3

Goals, Objectives and Prioritization Criteria

The goals and objectives presented in this planning framework chapter help to achieve the vision for the AMATS transportation system. The prioritization criteria developed during the planning public involvement process ensures that projects recommended will continue to achieve the MTP’s goals.

Goals and Objectives

Goals and objectives for the 2050 MTP were based on the 10 planning factors described in Chapter 1 and further developed and refined based on public input. Public comment submitted during the MTP planning process showed that the public wanted to be able to see performance measures and targets.

GOAL 1
Maintain Existing Infrastructure

Objective 1A. Maintain and rehabilitate existing infrastructure to achieve a state of good repair with effective use for all modes of travel year-round.

Objective 1B. Increase transportation infrastructure resiliency to natural hazards.

GOAL 2
Improve Safety & Security

Objective 2A. Reduce the number and severity of vehicle, pedestrian, bicycle, motorcycle and commercial vehicle crashes and fatalities.

Objective 2B. Improve ability to achieve timely emergency response.

Objective 2C. Minimize conflicts between different modes of travel, reduce unsafe behaviors, and increase attentiveness and awareness.

GOAL 3
Improve Access & Mobility Options

Objective 3A. Improve the existing transportation system efficiency through the implementation of effective and innovative strategies and technologies, such as: Transportation System Management and Operations (TSMO), Transportation Demand Management (TDM), and Intelligent Transportation Systems (ITS).

Objective 3B. Provide facilities to encourage transit use and improve pedestrian and bicycle travel.

Objective 3C. Implement transportation facilities that are appropriate for the intended adjacent land use.

Chapter 3

This section contains the goals and objectives developed for the 2050 MTP update. The goals are broad statements about what we want to achieve with the transportation system. Objectives are specific and measurable statements about how we will achieve the goals. Performance measures – which are included in Chapter 7 – provide a way to measure the success of how objectives and goals are being met.
Objective 3D. Enhance the connectivity of the existing transportation network, minimizing barriers and disconnections, and improving multimodal access to activity centers.

Objective 3E. Manage congestion to support land use goals and facility efficiency while avoiding unwanted induced demand impacts.

Objective 3F. Support the operation of safe and efficient scheduled transit services that minimize travel times and distances.

Objective 3G. Design and maintain multimodal facilities to accommodate winter mobility.

Support the Economy
Develop a transportation system that supports a thriving, sustainable, broad-based economy, while maintaining or enhancing the surrounding area’s land use character.

Objective 4A. Enhance intermodal capabilities of the transportation system to meet the needs of freight generators, the military bases, and other employment centers and industrial and commercial areas, while maintaining compatibility with the current adopted Land Use Plans.1

Objective 4B. Attract community investment and tourism through improved transportation system accessibility, aesthetics, and wayfinding.

Objective 4C. Promote an adaptable transportation system that supports the local and regional economy and job growth.

Objective 4D. Plan and facilitate regional policy development for new technology.

Objective 4E. Coordinate street design standards to match current land use as well as future land use goals and policies by applying Context Sensitive Solutions and Complete Streets policies, and street typologies.

Promote a Healthy Environment
Protect, preserve, and enhance the natural environment to promote sustainability and public health.

Objective 5A. Improve air quality and reduce greenhouse gas emissions.

Objective 5B. Increase community resiliency to climate change.

Objective 5C. Coordinate transportation and land use planning to support connections that reduce reliance on auto trips and encourage active transportation.

Objective 5D. Minimize and mitigate negative impacts on the natural environment by implementing the Context Sensitive Solutions process during transportation project development.

Objective 5E. Promote healthy lifestyles by connecting everyday destinations through increased active transportation.

Advance Equity
Promote equitable transportation options, improvements, and maintenance activities for vulnerable populations.

Objective 5A. Improve multimodal access to employment, education, recreation, and essential services for underserved neighborhoods.

Objective 5B. Plan and facilitate regional policy development for new technology.

Objective 5C. Coordinate street design standards to match current land use as well as future land use goals and policies by applying Context Sensitive Solutions and Complete Streets policies, and street typologies.

Objective 5D. Minimize and mitigate negative impacts on the natural environment by implementing the Context Sensitive Solutions process during transportation project development.

Objective 5E. Promote healthy lifestyles by connecting everyday destinations through increased active transportation.

Objective 6A. Improve adverse impacts on existing neighborhoods resulting from transportation projects; when impacts are unavoidable, equitably distribute them to avoid disproportionate impacts to vulnerable populations.

Objective 6B. Improve the ability of underrepresented groups to participate in the transportation decision making process.

Objective 6C. Promote the anticipated ability of a proposed project to meet the 2050 Goals & Objectives.

Objective 6D. Plan and facilitate regional policy development for new technology.

Objective 6E. Coordinate street design standards to match current land use as well as future land use goals and policies by applying Context Sensitive Solutions and Complete Streets policies, and street typologies.

Objective 7A. Minimize and mitigate negative impacts on the natural environment by implementing the Context Sensitive Solutions process during transportation project development.

Objective 7B. Promote healthy lifestyles by connecting everyday destinations through increased active transportation.

Objective 7C. Support the economy of the existing transportation network, minimizing barriers and disconnections, and improving multimodal access to activity centers.

Objective 7D. Manage congestion to support land use goals and facility efficiency while avoiding unwanted induced demand impacts.

Objective 7E. Support the operation of safe and efficient scheduled transit services that minimize travel times and distances.

Objective 7F. Design and maintain multimodal facilities to accommodate winter mobility.

Project Prioritization Criteria
The 2050 MTP is required to include a fiscally constrained list of recommended transportation projects for the AMATS area. To develop that final list, projects must be identified, analyzed, and prioritized based on need, anticipated outcome, and fiscal constraints. The public and agency stakeholders provided AMATS with conceptual projects they would like to see in the AMATS planning area between now and 2050. Those projects were evaluated using the Project Prioritization Criteria (see Appendix 5).

Project Prioritization Criteria were used to inform decision makers on the anticipated ability of a proposed project to meet the 2050 Goals & Objectives.

Project Scoring
The following steps were used to score a project using the criteria:

1. Determine the general project type.
   - Only use the corresponding column to score the project. The other project-type columns will remain blank, as they are not applicable.

2. Review the criteria, and select points based on point descriptions.

3. If “select one” is stated in the description, choose the description that best fits the recommended project, adjusting the point value for any applicable bonuses and penalties. A project may receive negative points for multiple criteria.

4. If “select all that apply” is stated in the description, add the point values of all applicable statements, adjusting for any applicable penalties. A project may receive negative points for multiple criteria.

5. Add the total points for each MTP goal.

6. Combine the point totals for each MTP goal to receive the final project score.

High scoring projects were consistent with the goals and objectives; low scoring projects were inconsistent or only partly consistent with the goals and objectives. After scores were developed by staff, the Technical Advisory Committee and Policy Committee reviewed the scoring outcomes and applied fiscal constraints on the project list. Additional analysis included transportation demand modeling, a community impact assessment, and scenario planning that incorporated population and job growth projections for the AMATS area also informed decision makers’ final project selections. Public input and review occurred throughout this process.

### Project Scoring Example

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>Maintain existing infrastructure</th>
<th>Improve safety &amp; security</th>
<th>Improve access &amp; mobility options</th>
<th>Support the economy</th>
<th>Healthy environment</th>
<th>Equity</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upgrade example road to Complete Street</td>
<td>8</td>
<td>11</td>
<td>14</td>
<td>12</td>
<td>15</td>
<td>20</td>
<td><strong>80</strong></td>
</tr>
</tbody>
</table>
Chapter 4
Community and Transportation Profile

This section provides in-depth information on the regional context of the AMATS area including the current demographic and socioeconomic conditions and trends. In addition, regional transportation and land use connections are detailed to identify the deficiencies and gaps in the current multimodal system including active transportation (walking and bicycling), public transportation, vehicle travel, and freight, setting the stage for the next chapter.

The community and transportation profile sets the context and existing conditions for planning the 2050 transportation system in Anchorage and Chugiak-Eagle River. This includes:

- applicable plans and studies,
- demographic, economic, and land use information,
- geography, environmental resources, and constraints,
- existing assets and condition of the transportation system, and
- trends, factors, forecasts, and risks that may affect future needs.

More details on the community and transportation profile can be found in the Existing Conditions Assessment & System Deficiencies Analysis and AMATS Socioeconomics Methodology technical reports.

Plans and Studies

The following documents contribute to the existing conditions assessment: (1) the current 2040 MTP; (2) the Transit On the Move 2020 Transit Plan; (3) the current AMATS Non-Motorized Plan; (4) the Port of Alaska Enterprise Activities Budget which contains the Port of Alaska Modernization Plan; (5) the Ted Stevens International Airport Master Plan, and (6) the region’s vision, goals, and objectives chosen as part of the 2050 MTP update. This chapter uses observed data where possible and synthetic data from the updated AMATS Travel Demand Model (TDM) that was developed to support the 2050 MTP update. System elements for which no data of any kind exists are also identified.

Demographic, Economic, and Land Use Information

Population and Employment

Over one-third of Alaska’s population lives in the AMATS planning area. Anchorage is among the most ethnically diverse communities in the United States. Over 100 languages are spoken in the city’s streets and schools, representing cultures from around the globe and from across the Arctic.

In 2019, the population of the Municipality of Anchorage (MOA) within the AMATS planning area was just over 304,700 in 2019. Over the last decade, the population in the MOA has slightly decreased; however, there was growth from 2010 to 2013, followed by a general pattern of decline from 2013 to 2020. The MOA population decline was driven primarily by net migration (i.e., in-migration minus out-migration), rather than natural increase (i.e., births minus deaths). All the population growth from natural increase was negated by out-migration, with some of that population relocating to the Mat-Su Borough.

The population in the AMATS planning area is projected to grow somewhat over 4%, while over the same time employment would grow about 25%, given Anchorage’s role as the economic center of Alaska (see Table 1) 1.

The modeled total population for the AMATS planning area (including Joint Base Elmendorf-Richardson) is about 318,000 in 2050.

---

1 Anchorage Metropolitan Area Transportation Solutions. MTP2040. 2020. Available at: Transportation Planning/AMATS Metropolitan Transportation Plan (muni.org)
6 McKinley Group. AMATS Socioeconomics Methodology. 2022.
While population change has affected travel patterns within the AMATS boundary, the most significant travel changes in the last few years occurred during the COVID-19 pandemic. An Alaska DOT&PF study of traffic counts within Anchorage shows that volumes dropped by almost 19% in 2020 and were still over 6% below 2019 as of 2022. Long-term impacts of shifting travel patterns remain uncertain.

### Race, Ethnicity, and Language

Within Anchorage, the population of people of color has grown 22% between 2010 and 2020. The 2020 U.S. Census reports that 46% of residents within the AMATS boundary identify as people of color, which is defined as any race or ethnicity besides “white non-Hispanic/Latino”. The breakdown by race among people of color is: 11% multiracial, 9% Asian, 9% Hispanic/Latino”. The breakdown by race among people of color is: 11% multiracial, 9% Asian, 9% Hispanic/Latino”. The breakdown by race among people of color is: 11% multiracial, 9% Asian, 9% Hispanic/Latino”. The breakdown by race among people of color is: 11% multiracial, 9% Asian, 9% Hispanic/Latino”. The breakdown by race among people of color is: 11% multiracial, 9% Asian, 9% Hispanic/Latino”. The breakdown by race among people of color is: 11% multiracial, 9% Asian, 9% Hispanic/Latino”. The breakdown by race among people of color is: 11% multiracial, 9% Asian, 9% Hispanic/Latino”. The breakdown by race among people of color is: 11% multiracial, 9% Asian, 9% Hispanic/Latino”.

<table>
<thead>
<tr>
<th>AREA</th>
<th>2019</th>
<th>2050</th>
<th>2019 TO 2050 CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchorage Bowl Total Population</td>
<td>265,290</td>
<td>277,403</td>
<td>5%</td>
</tr>
<tr>
<td>Anchorage Bowl Total Employment</td>
<td>193,547</td>
<td>241,561</td>
<td>25%</td>
</tr>
<tr>
<td>Chugach-Eagle River Total Population</td>
<td>39,444</td>
<td>40,652</td>
<td>3%</td>
</tr>
<tr>
<td>Chugach-Eagle River Total Employment</td>
<td>10,497</td>
<td>13,374</td>
<td>27%</td>
</tr>
<tr>
<td>Total Population within AMATSBoundary</td>
<td>234,734</td>
<td>238,055</td>
<td>4%</td>
</tr>
<tr>
<td>Total Employment within AMATSBoundary</td>
<td>204,043</td>
<td>254,935</td>
<td>25%</td>
</tr>
</tbody>
</table>


### Housing Costs

Housing costs commonly serve as an important economic indicator. According to the ACS, nearly half of households (44%) within the AMATS region are considered cost-burdened renters, meaning that they spend 30% or more of their income on rent. Additionally, 19% of renters reported that they spend more than 50% of their income on rent.

### Health and Equity

The health and equity analysis of the Anchorage Non-Motorized Plan used a combination of six socioeconomic characteristics (age, race, income, educational attainment, Limited English Proficiency, and access to a vehicle) and seven health indicators (prevalence of obesity, coronary heart disease, cancer, diabetes, poor mental health, and asthma, and leisure-time physical activity) to identify vulnerable populations. In general, census tracts with more adverse health outcomes and behaviors also have high composite equity scores. Areas in the northern, central, and southern part of the Anchorage Bowl are not only experiencing the worst health outcomes in the areas, but they also represent communities with high numbers of disadvantaged and minority populations (see Figures 6, 7, and 8).8

### Land Use

Transportation infrastructure is a type of land use that influences what choices people make to travel and how they access destinations. How transportation land uses align with other types of land uses such as housing, can also have significant impacts on quality of life and cost of living. According to US DOT:

By facilitating the provision of more efficient forms of transportation, AMATS can help support conditions for more diverse forms of land use and help reduce living costs throughout its area.

The Anchorage 2040 Land Use Plan is the general land use plan for the Anchorage Bowl and sets the stage for future growth and development in the area. It recognizes a need to maximize land use efficiencies while accommodating and enhancing neighborhood characteristics and natural resources. Goal 6 of the Anchorage 2040 land use plan states specifically: “Anchorage coordinates transportation and land use to provide safe, efficient, and affordable travel choices.” Actions within this goal which might relate to MTP activities include:

- 6-1 Update the Metropolitan Transportation Plan’s (MTP) growth allocation model to reflect the 2040 LUP land use designations.

- 6-2 Adopt a policy and municipal street design criteria for “Complete Streets” and urban and mixed-use Street Typologies to serve all users and reflect adjacent land use patterns. Apply these in priority Reinvestment Focus Areas.

- 6-7 Facilitate one or a series of Targeted Area Rezonings in housing opportunity areas along public transportation corridors.

- 6-8 Develop a phasing and prioritization program for additional local and collector street connections, intersection and access improvements, right-of-way widths, and pedestrian connections that are needed to support infill and redevelopment in neighborhoods, centers, and corridors targeted to experience growth and change, including in Special Study Areas identified along Lake Otis and Tudor near the UMD District, along northern Muldoon Road, and other areas shown on the Actions Map.

- 6-9 Establish a Framework Agreement between the Municipality and DOT&PF regarding the designation and improvement of streets or street segments where greater emphasis will be placed on multimodal, “Complete Street” design. Potential ways to achieve these streets will be identified, which may include ownership transfers and other case-by-case solutions.

Other relevant goals or actions from the 2040 Land Use Plan include:

- Goal 5: Coordinated and targeted infrastructure investments catalyze new growth, provide an acceptable return on investment, and equitably improve safety and quality of life.

- Action 5-1 Refine the criteria used for the review of capital projects to be included in the CIP to promote implementation of the capital priorities identified in the 2040 LUP, functional plans, and neighborhood and district plans.

Overall, the 2040 Land Use Plan calls for increased housing density over time, more mixing of uses, more travel choices, and promoting the use of public transportation. The "Transit-Supportive Development" overlay feature is intended to facilitate the growth of conditions over time which would lead to a more robust public transit system.

Elsewhere in the AMATS planning area, the 2006 Eagle River Comprehensive Plan update has a stated transportation goal to “Ensure development of a transportation network that provides an acceptable level of service, maximizes safety, minimizes environmental impacts, provides alternate transportation types and is compatible with planned land use patterns.” Objectives within this goal include:

a. Increase transportation system efficiency during peak-hour periods.

b. Increase public transit ridership by improving service frequency and coverage.

c. Encourage transit access in the urban zoning districts by providing maintained sidewalks, pathways or trails.

d. Periodically re-evaluate the feasibility of rail, air and other transportation alternatives as options for commuters.

e. Minimize residential and business relocations resulting from transportation projects.

f. Improve, as necessary, expressway, arterial and collector roads to safely and efficiently handle projected traffic.

g. Provide connectivity to and between subdivisions where important to accommodate normal as well as emergency traffic, recognizing physical environmental constraints and the need to minimize cut-through traffic within residential neighborhoods.

h. Review the existing road system to identify essential local road connections.

More recently adopted plans within the Anchorage Bowl also discuss transportation system investments and changes at length, including the 2020 Spenard Corridor plan (“Policy 2.12: Efficient multi-modal transportation systems in the Spenard Corridor (bicycle, pedestrian, transit, freight and motor vehicles) should enhance Anchorage’s regional circulation network.”) and the 2023 Our Downtown District Plan (Policy 7-1: “Safe, convenient, and reliable transportation is the bedrock of a functioning city; therefore, this plan supports upgrades to the transportation system to achieve multimodal projects and efficiencies integral to the revitalization of Downtown Anchorage.” Policy 7-3: “Reducing single-occupant vehicles traveling to and from Downtown will provide environmental and economic benefits.”).

Geography, Environmental Resources and Constraints

Anchorage sits on the traditional homelands of the Dena’ina Athabascans in Southcentral Alaska along the Cook Inlet. It is constrained by Turnagain Arm to the south, Knik Arm to the north, the Chugach Mountains to the east, and Joint Base Elmendorf-Richardson (JBER) to the northeast. The AMATS planning area includes the “Anchorage Bowl”, which covers approximately 100 square miles and is the urban core area, as well as the communities of Chugiak and Eagle River to the north. The planning area is all within the MDA, which is almost 2000 square miles. The area has a subarctic climate with an average annual snowfall of 78 inches. The Anchorage Bowl is within the Campbell Creek, Chester Creek, and Ship Creek watersheds with a prevalence of lowland wetlands.

Climate Change Impacts

“Alaska’s climate is changing faster than the rest of the United States. The scientific community agrees that the world is warming due to the human emissions of greenhouse gases. Over the last 50 years, Alaska has warmed twice as fast as the global average. The impacts of climate change are felt throughout the state. Thawing permafrost and receding sea ice threaten communities in the western, northern and interior regions of the state. In Southcentral Alaska, the impacts include increased wildfire risk, threats to human health and infrastructure, and less predictable freeze-thaw patterns. Communities and Alaska Native tribes throughout Alaska are creating climate action plans to cut emissions and adapt to these environmental changes.

In the absence of adaptation efforts, damage to public infrastructure caused by climate change could cost Alaska $142 to $181 million per year and a
cumulative $4.2 to $5.5 billion by the end of the century. This burden will be heavily shouldered by the Municipality of Anchorage, which serves as the commercial hub of the state. Much of the economic activity and supply chain infrastructure that serves the state is based in Anchorage.”

— Anchorage Climate Action Plan, p.12, 2019

Transportation System: Existing Conditions, Deficiencies, and Forecast Results

The AMATS area transportation system includes active, public, vehicle, and freight transportation. Over the last 50 years, the transportation system has been significantly built up for vehicle and freight transportation. More recently, public input and policy guidance have shifted priority to improving and increasing active transportation infrastructure and transit use in the planning area.

Table 2: Challenges and successes of AMATS transportation system.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>CHALLENGES</th>
<th>SUCCESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVE</td>
<td>• Gaps in the system</td>
<td>• Extensive multilevel trail system</td>
</tr>
<tr>
<td>PUBLIC</td>
<td>• Funding</td>
<td>• Rideshare</td>
</tr>
<tr>
<td>VEHICLE</td>
<td>• Reliance on vehicle transportation</td>
<td>• Managed congestion</td>
</tr>
<tr>
<td>FREIGHT</td>
<td>• Aging infrastructure</td>
<td>• Managed congestion</td>
</tr>
</tbody>
</table>

Modeling Methodology

To analyze the existing conditions and deficiencies and forecast results, AMATS uses a travel demand model that simulates road and transit performance within the AMATS planning boundary, plus most of the Matanuska-Susitna Borough (Mat-Su), as shown by districts in Figure 9. The Mat-Su is included in the model due to the significant influence on the AMATS area transportation system. This report focuses on findings for the Anchorage Bowl, Chugiak-Eagle River, and the total AMATS planning area (the Bowl and Chugiak-Eagle River taken together).

The model is calibrated to a base year of 2019, the last pre-pandemic year, and it estimates all travel for all households within its defined geography for a typical autumn or spring weekday when school is in session. In addition to analyzing existing conditions and deficiencies, the model was used to evaluate the different metropolitan transportation plan alternatives (see Chapter 5). To serve as a comparison point for the potential 2050 MTP alternatives and to help indicate possible deficiencies, AMATS used the model to forecast a “2050 Reference Alternative.” This included the projected 2050 population and employment plus all transportation system investments completed or completely funded for 2019 through the end of 2050.

Active Transportation

The existing conditions for the active transportation (walking and biking) elements of the AMATS transportation system appear below mostly in the form of supply measures (e.g., the amount of infrastructure in the present and planned). The maps and facilities data are taken from the AMATS Non-Motorized Plan, which was adopted in 2021 by the AMATS Policy Committee. For bicycle infrastructure, the Plan focuses on “…closing gaps in the existing network, providing an on-street network and connecting the existing and planned shared use pathway network to increase the use of existing facilities.” For people walking, the Plan’s goals are to “…provide flexibility in network implementation over time and improve the focus on safety and connectivity of the network.”

Mode share refers to the proportion of all travelers on the modeled weekday who use a particular type of transportation (transit, walk, bike, drive alone, shared ride, or school bus) to make a trip. The travel demand model shows 2019 conditions and forecasts 2050 conditions without new investments or policy changes (Table 3a and 3b). The 2050 Reference Alternative demonstrates no significant differences in mode shares from the 2019 base year estimates. This is likely due to the modest population growth and the fact that the 2050 Reference Alternative transportation system is not greatly different than that of the base year.

Table 3a: Estimated 2019 base year mode shares for all daily trips

<table>
<thead>
<tr>
<th>Mode Type</th>
<th>Anchorage Bowl</th>
<th>Chugiak-Eagle River</th>
<th>AMATS Planning Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>45.02%</td>
<td>42.76%</td>
<td>45.34%</td>
</tr>
<tr>
<td>Shared Ride</td>
<td>40.52%</td>
<td>48.88%</td>
<td>41.05%</td>
</tr>
<tr>
<td>Walking</td>
<td>9.07%</td>
<td>9.43%</td>
<td>9.12%</td>
</tr>
<tr>
<td>Bike</td>
<td>1.99%</td>
<td>0.99%</td>
<td>1.87%</td>
</tr>
<tr>
<td>TRANSIT</td>
<td>1.04%</td>
<td>0.02%</td>
<td>0.92%</td>
</tr>
<tr>
<td>SCHOOL BUS</td>
<td>1.68%</td>
<td>1.92%</td>
<td>1.71%</td>
</tr>
</tbody>
</table>

Table 3b: 2050 Reference alternative mode shares for all daily trips

<table>
<thead>
<tr>
<th>Mode Type</th>
<th>Anchorage Bowl</th>
<th>Chugiak-Eagle River</th>
<th>AMATS Planning Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>45.92%</td>
<td>43.82%</td>
<td>45.47%</td>
</tr>
<tr>
<td>Shared Ride</td>
<td>40.49%</td>
<td>44.10%</td>
<td>40.93%</td>
</tr>
<tr>
<td>Walking</td>
<td>8.99%</td>
<td>9.25%</td>
<td>8.99%</td>
</tr>
<tr>
<td>Bike</td>
<td>1.96%</td>
<td>0.96%</td>
<td>1.84%</td>
</tr>
<tr>
<td>TRANSIT</td>
<td>1.01%</td>
<td>0.02%</td>
<td>0.89%</td>
</tr>
<tr>
<td>SCHOOL BUS</td>
<td>1.67%</td>
<td>1.69%</td>
<td>1.69%</td>
</tr>
</tbody>
</table>

Source: RSG, AMATS 2019 Travel Demand Model

Pedestrian Network
Assessing the current state of the pedestrian network is challenging because, as the Non-Motorized Plan remarks: “Sidewalk data was unavailable for roadways maintained by other entities (other than the MOA and Alaska DOT&P) at the time of plan development.” The map of pedestrian infrastructure in Figures 11 and 12 were taken directly from the Non-Motorized Plan, but omits sidewalks in places where they in fact exist, such as the Anchorage central business district (where sidewalks are maintained by a neighborhood association).

The Non-Motorized Plan recommends making improvements to the region’s pedestrian infrastructure by identifying Primary and Secondary corridors that should be prioritized rather than recommending individual projects. The corridor selection was based on criteria including the location of high injury locations from the region’s Vision Zero planning process, the Alaska Highway Safety Improvement Program, a pedestrian demand analysis carried out during the non-motorized planning process, a parallel equity analysis, and the proximity to transit stops.

Bicycle Network
The Non-Motorized Plan was able to inventory existing bicycle facilities in three categories: bicycle lanes, bikeways (roads with paved shoulders), and shared use pathways (off-road facilities open to pedestrians and cyclists) (Table 4, Figure 13, and Figure 14). The regional AMATS Non-Motorized Plan proposes to add a considerable amount of new bicycle facilities: over 36 miles of shared use paths and over 100 miles of Separated Bikeways (the latter defined to be buffered or protected on-road bicycle lanes). In addition, the MOA revised its zoning code to require increased minimums for bicycle parking for new non-residential construction, which will provide added incentives to bicycle as these amenities come on line.

Active Transportation Safety
Over the five-year time period from 2017-2021, pedestrians were involved in 3% of all crashes, but 30% of all pedestrian crashes resulted in a serious injury or death. There have been 42 pedestrian fatalities and 104 serious injuries over the past 5 years (see Figure 15).

Table 4: Anchorage Bowl and Chugiak-Eagle River Region Bicycle Facility Mileage 2021

12 Anchorage Metropolitan Area Transportation Solutions. “Non-Motorized Plan.” 2021. Available at: https://www.muni.org/Departments/OCPD/Planning/AMATS/Pages/1_non-motorized.aspx
13 Ibid. p. 19
in a serious injury or death. There have been 4 bicycle fatalities and 37 serious injuries over the last 5 years (see Figure 16).

See AMATS Safety Plan Existing Conditions Memorandum (2023) for additional details.

Active Transportation Discussion

The Non-Motorized Plan further identifies several programmatic activities that should support existing and new active transportation infrastructure. These include the vital need to develop a complete, comprehensive, and geo-located pedestrian infrastructure inventory and a winter maintenance approach that prioritizes maintenance in primary pedestrian corridors, critical bicycle corridors, and areas where residents are most dependent on access to transit facilities.

Since not all desired investments have been completed since the Non-Motorized Plan was adopted in 2021 and the key programs cited above have not yet been implemented, by the standards of the Non-Motorized Plan itself the region would be considered deficient in several regards for active transportation:

- Locks significant new pedestrian corridors and bicycle infrastructure, including critical crossings and gaps in the network (see Figure 17), both for on street and off-street facilities
- Pedestrian infrastructure inventory data has not been updated
- The recommended winter maintenance program is not yet operational

Public Transportation

The MOA Public Transportation Department provides three services for community members: fixed route bus service (People Mover), paratransit service (AnchorRIDES), and a carpooling program (RideShare).15

The Public Transportation Department worked closely with members of the public in 2020 to create Transit On the Move (TOTM), which clearly sets forth the agency’s goals and objectives. The objectives identified in that plan16, reported on in the annual “Report Card,” and most relevant to the regional scale of the AMATS plan update include:

- Increase access to the number of jobs by 5% & residents by 10% within 1/4 mile of bus stops
- Ensure that all fixed routes have 30 minutes or less peak frequency
- Increase vehicle revenue hours by 5% by adding trips or expanding span of service
- Achieve a Transit / Single-occupant-vehicle travel time ratio less than or equal to 1.5
- Operate so that all fixed routes are on-time at least 90% of the time
- Increase vanpool participants by 5%

In addition, the Public Transportation Department reports productivity in the form of system-wide and route-specific average riders per time-table revenue hour, which provides a useful means of integrating data about ridership with the quantity of transit service hours (service hours being a key driver of costs – pun intended) in a productivity measure.

People Mover

Table 5 shows historical operating and passenger statistics describing People Mover’s multi-year service history in terms of vehicle revenue hours and total annual boardings. Vehicle revenue hours describe the sum of hours that transit vehicles are operating to serve passengers. If a route has one bus run per day and that run takes one hour from the first stop to the last stop, that route provides one vehicle revenue hour.

The Public Transportation Department’s performance measures show that from 2019 to 2021 the number of jobs within one-quarter mile of a bus stop increased 3% from 55% to 58%, while the number of...
residents meeting the same criterion also increased 3% from 39% to 42%. While short of the Public Transportation Department’s 5% increase target for jobs and 10% for residents meeting the same criterion also increased 3% from 39% to 42%. While short of the Public Transportation Department’s 5% increase target for jobs and 10% for residents meeting the same criterion also increased 3% from 39% to 42%. While short of the Public Transportation Department’s 5% increase target for jobs and 10%

Table 7: Anchorage Public Transit Department Vanpool Utilization Data, 2017–2021

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NUMBER OF VANPOOLS</th>
<th>VEHICLE REVENUE MILES</th>
<th>ANNUAL PASSENGER MILES</th>
<th>VEHICLE MILES SAVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>72</td>
<td>1,396,775</td>
<td>6,083,006</td>
<td>4,684,231</td>
</tr>
<tr>
<td>2018</td>
<td>73</td>
<td>1,469,214</td>
<td>8,110,752</td>
<td>6,641,518</td>
</tr>
<tr>
<td>2019</td>
<td>82</td>
<td>1,474,126</td>
<td>8,524,142</td>
<td>7,050,016</td>
</tr>
<tr>
<td>2020</td>
<td>69</td>
<td>1,273,666</td>
<td>5,906,859</td>
<td>4,633,173</td>
</tr>
<tr>
<td>2021</td>
<td>70</td>
<td>1,302,578</td>
<td>6,278,401</td>
<td>4,975,823</td>
</tr>
</tbody>
</table>

The nature of vanpool ridership mostly serves large employers like hospitals, government offices, military bases, and the airport. These organizations are able to use vanpool successfully because they have many employees commuting to the same location. During the pandemic, vanpool riders were largely considered “essential” and thus returned to work in-person earlier than most commuters. While total passenger trips are still down in 2021 relative to 2019, there are signs of recovery.

Table 7 shows the number of reported vanpools and vehicle miles saved (annual passenger miles minus vehicle revenue miles) in the Municipality of Anchorage’s formal RideShare vanpool program between 2017 and 2021. Over the past several years to 2021 the number of vanpools has remained relatively steady, varying between 69 and 82 vans. In 2020 vanpool travel was temporarily suspended for a few months and several vanpools ceased to exist.

As of early 2022, the number of active vanpools was 70. Of those, 68 travel between the Mat-Su Borough to Joint Base Elmendorf Richardson (JBER); the other two vanpools travel between Anchorage and Girdwood. Public Transportation Discussion People Mover achieved many of the goals of the MOA.

The primary ride-sharing program in the MOA is through the RideShare program. The MOA provides vanpool group subsidies and contracts with Commute with Enterprise to oversize the vanpool program. The program provides a vehicle and matches a group of five or more riders with similar schedules and destinations within the MOA. The number of passengers per van is generally between five and fifteen passengers.

According to U.S. Census Bureau data, nearly 12% of people traveling to work in the MOA reported using carpools in the five years ending in 2021; the majority of these were two-person carpools, with 3-person and 4-or-more persons less common. This is consistent with the 2040 Metropolitan Transportation Plan data on RideShare and private carpools.

The vanpool ridership is provided many benefits to travelers and is an alternative to driving alone (i.e., single-occupancy vehicles).

The primary ride-sharing program in the MOA is through the RideShare program. The MOA provides vanpool group subsidies and contracts with Commute with Enterprise to oversize the vanpool program. The program provides a vehicle and matches a group of five or more riders with similar schedules and destinations within the MOA. The number of passengers per van is generally between five and fifteen passengers.

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The vanpool ridership is provided many benefits to travelers and is an alternative to driving alone (i.e., single-occupancy vehicles).
fixed route revenue hours increased 3.5% from 2019 to 2021,

3% growth in accessible jobs and residents located within ¼ mile of a bus stop

within one percentage point of achieving its bus 90% on-time goal

a bus-to-car travel time ratio less than or equal to 1.5 on all but two routes

The Public Transportation Department’s complete redesign of the People Mover routes and timetables in 2017 reversed a historic downward trend in ridership, including Saturdays. Although productivity for all days of the week declined during the pandemic, the success of the Saturday redesign kept productivity on that day higher than in 2019 (although paratransit somewhat lower for paratransit as well). Ridership on the other days of the week declined about half of what it was in 2019 (although paratransit showed an increase in 2021). During the pandemic, the Public Transportation Department made a conscious decision to not reduce service frequency or span, even with lower ridership, because of the essential service transit provides. Productivity is not a performance measure for transit, so lower productivity was sacrificed for quality service. There is still progress to be made for People Mover and the MOA to meet the goal of growing 1/4 mile access to a bus stop by 10% for residents and by 5% for jobs, achieving frequency targets systemwide, and recovering from the pandemic disruption of productivity.

The AnchorRIDES paratransit system is showing signs of post-pandemic recovery, with productivity rebounding to about 1.9 passengers per revenue hour in 2021 but still down from the 2019 figure of about 2.1.

The Rideshare vanpool program consistently saves four to seven million vehicle miles annually. Improved winter maintenance for active transportation would also support public transportation ridership through the winter. All transit riders begin as active transportation users, either by walking or biking to a stop. In TOTM, project priority number 14 identifies a “Winter City Maintenance Plan.” Additionally, as reported in several rider surveys, winter maintenance deficiencies are routinely identified as significant barriers to accessing the transit system.

Vehicle Transportation

The AMATS region’s road system moves people via passenger vehicles, transit, walking, and biking and freight by truck. This section includes observed data about crashes, historic vehicle-miles traveled, and region-to-region comparisons of congestion, in 2019 and 2050 forecast data from the AMATS regional travel demand model. These data illustrate how the roads perform currently and are likely to perform in a future without major changes to the system. Vehicle miles traveled are used as an indicator of overall road usage and a proxy for mobile source air pollutant emissions. Road users’ experience of roadway performance is measured by Vehicle Hours of Delay (VHD) at the system and key corridors level, travel times through those key corridors, and congestion in the Anchorage region relative to that of other regions in the U.S.

Vehicle Miles Traveled

Figure 19 shows total annual vehicles miles traveled, and per-capita annual vehicles traveled in the MOA for 2019 and 2020 to illustrate the recent response to the COVID-19 pandemic. The MOA total vehicles miles traveled decreased almost 260 million miles between 2019 and 2020 – an 18.12% change. Even accounting for the population decrease, per-capita annual vehicles miles traveled decreased by 830 miles (-17.07%) from 2019 to 2020. Going forward, in the absence of new societal disruptions or project and policy interventions, the travel model forecasting assumes a return to pre-pandemic traveler behavior.

Pivoting to the model data, the 2019 base year travel demand model reports about 4,465,900 daily total vehicles miles traveled for the AMATS planning area on a typical weekday. The 2050 reference scenario forecasts an increase to about 4,972,800 vehicle miles traveled (11% change - see Table 8).

Vehicle Hours of Delay

Table 9 on the following page illustrates the forecast amount of delay by roadway type for the base year and 2050 Reference Alternative. The AMATS planning area estimates show 1,227 vehicle hours of delay in the base year, projected to increase to about 1,854 vehicle hours of delay in the 2050 Reference scenario. The higher percentage change in total delay relative to miles traveled indicates that congestion for drivers will increase absent any investments or policy changes. However, the forecast indicates that 2050 congestion would be most focused in the highway type roads (a 154% delay increase) rather than the arterials and local streets (forecast to range from 34% to 50% increases in delay).

The AMATS travel demand model summarizes vehicle hours of delay for all vehicles under analysis for a typical weekday as mentioned in the previous section (see Technical Report). In all corridors the forecast per-vehicle delay is low compared to other cities in the U.S. in both the base year and 2050 Reference Alternative. The highest delays occur on the Glenn Highway and Tudor Road corridors, but at 32 seconds of
Table 9: 2019 and 2050 Reference Scenario Model Vehicle Hours of Delay by Facility Type

<table>
<thead>
<tr>
<th>FACILITY TYPE</th>
<th>BASE ANCHORAGE BOWL</th>
<th>2050 REFERENCE ANCHORAGE BOWL</th>
<th>BASE CHUGUAK-EAGLE RIVER</th>
<th>2050 REFERENCE CHUGUAK-EAGLE RIVER</th>
<th>BASE TOTAL AMATS PLANNING AREA</th>
<th>2050 REFERENCE TOTAL AMATS PLANNING AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>VHD</td>
<td>VHD</td>
<td>DIFF FROM BASE</td>
<td>VHD</td>
<td>DIFF FROM BASE</td>
<td>VHD</td>
<td>DIFF FROM BASE</td>
</tr>
<tr>
<td>Highway</td>
<td>111</td>
<td>191</td>
<td>172</td>
<td>60</td>
<td>244</td>
<td>307</td>
</tr>
<tr>
<td>Major Arterial</td>
<td>756</td>
<td>1,023</td>
<td>12</td>
<td>15</td>
<td>25%</td>
<td>768</td>
</tr>
<tr>
<td>Minor Arterial</td>
<td>83</td>
<td>117</td>
<td>12</td>
<td>2</td>
<td>100%</td>
<td>84</td>
</tr>
<tr>
<td>Collector</td>
<td>40</td>
<td>58</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>40</td>
</tr>
<tr>
<td>Local</td>
<td>20</td>
<td>30</td>
<td>50</td>
<td>0</td>
<td>0%</td>
<td>20</td>
</tr>
<tr>
<td>On-Ramp</td>
<td>5</td>
<td>8</td>
<td>60</td>
<td>1</td>
<td>1%</td>
<td>6</td>
</tr>
<tr>
<td>Off-Ramp</td>
<td>50</td>
<td>68</td>
<td>36</td>
<td>3</td>
<td>0%</td>
<td>53</td>
</tr>
<tr>
<td>Frontage Road</td>
<td>85</td>
<td>93</td>
<td>9</td>
<td>0</td>
<td>0%</td>
<td>85</td>
</tr>
<tr>
<td>Total</td>
<td>1,150</td>
<td>1,588</td>
<td>38%</td>
<td>77</td>
<td>264</td>
<td>245%</td>
</tr>
</tbody>
</table>

Source: RSG, AMATS 2019 Travel Demand Model

Figure 21: Vehicle Crash Trends

Figure 22: Primary Fatality and Serious Injury Vehicle Crash Trends

Figure 23: Motorcycle Crash Trends

Primary Vehicle Trends: 42 Fatalities

- Top Impact: Angle, Front-to-Rear, Sideswipe

- Top Human Circumstance: Failure to Yield, Collides to Avoid Object, Red Light Violation

Primary Motorcycle Trends: 11 Fatalities

- Top Impact: Angle, Front-to-Rear, Sideswipe

- Top Human Circumstance: Unsafe Speed, Erratic Operation, Sideswipe

Alaska has an abundance of natural resources, which are typically exported to both domestic and international markets. The state produces few of the consumer goods that its population demands, however. As a result, Alaska is heavily dependent on imports and relies on a safe, efficient, and reliable freight transportation system. The goods delay or less. Given these small numbers the percent change must be examined with care, but the percent changes repeat patterns from the cumulative delay statistics previously mentioned: the Glenn and Seward highways are projected to have the most increase in delay from 2019 to 2050, with Minnesota Drive and Spenard Road showing the next highest increases.

Vehicle Transportation Safety

Over the five-year time period from 2017-2021, motor vehicles were involved in 94% of all crashes, and 2% of all vehicle crashes resulted in a serious injury or death. There have been 42 vehicle fatalities and 270 serious injuries over the last 5 years, including Passenger Cars and Trucks as vehicles (see Figures 21 and 22).

Over the five-year time period from 2017-2021, motorists were involved in 1% of all crashes, but 28% of all motorcycle crashes resulted in a serious injury or death. There have been 11 motorcycle fatalities and 63 serious injuries over the last 5 years (see Figure 23).

See AMATS Safety Plan Existing Conditions Memorandum (2023) for additional details.

Vehicle Transportation Discussion

If the AMATS planning area, as forecast in the 2050 Reference scenario, has an 11% overall vehicle miles traveled increase, then — absent changes to the vehicle fleet — greenhouse gases and other air pollutant emissions would increase proportionally. While an increase in electric vehicle use by 2050 could reduce consumption of gasoline and therefore air pollutant emissions, electric vehicles are associated with other impacts from the batteries and breaks to increased wear and tear on the roads due to the heavier vehicle weights.

In terms of road user experience, while travelers in vehicles in Anchorage experience congestion, the base year system is not heavily congested across multi-hour time periods nor is it very congested compared to other U.S. cities. It is noteworthy that the off-peak periods such as midday experience as much delay as the morning commute period given the travel usage patterns in the AMATS planning area. This has implications for road system management (e.g., signal timing adapted to the daily traffic pattern) and transit service provision (e.g., supporting the Public Transportation Department’s goal of increasing the frequency of service on all routes and all time periods).

The forecasted increase in driver delay falls mostly on the highways which are forecast to have a delay increase of 154%, with all other road types increasing by 50% or less. This is logical given that the region has three main highways with no alternative routes.
movement system in Anchorage is extensive, multimodal, and interconnected; and consists of one of the world’s largest international cargo airports, a deep-water seaport, and supporting highway and rail links.

Airport
Currently, Ted Stevens Anchorage International Airport is the second largest cargo airport in the U.S. and the fourth largest in the world, in terms of volume, handling more than 3.5M metric tons in 2021, a 12.6 percent increase from 2020 volumes.22 As the largest airport in Alaska, Ted Stevens Anchorage International Airport is a regional and statewide economic driver and supports one in ten jobs in Anchorage. Ted Stevens Anchorage International Airport is actively investing in cargo projects at the airport, including the extension of taxiways, expansion and redevelopment of airparks, and various roadway access and apron improvements. Figure 24 depicts the total number of passenger enplanements annually at the airport over the past decade, as well as the total cargo landed (in pounds).23 As the largest airport in the world, Ted Stevens Anchorage International Airport serves as Alaska’s primary cargo terminal for inbound freight. The Port of Alaska (POA) in Anchorage plays three primary roles in the regional supply chain: as a multimodal intermodal complex, supporting the roadways annually (assuming roughly half a million rail passengers/year). The Corporation estimates that its 2022 hopper and tanker operations (carrying gravel, coal, and petroleum) replaced the need for over 200,000 truck trips while its rail trailer and container carriage supplied goods movements that would have required about 47,000 truck trips. Motor Freight Trucking carries most of the freight in Anchorage and plays three primary roles in the regional supply and distribution chain:

Figure 24: TSAIA Passenger and Cargo Volumes, 2011–2020

According to the current airport Master Plan, the airport will require near-term upgrades to the airfield and supporting facilities to remain compliant with FAA design standards. For freight it anticipates adding cargo aprons, buildings, and support facilities within its mid-term planning horizon (7 to 15 years). On its landside, it anticipates passenger parking, rental car, and access facilities to reach capacity within its long-term planning horizon (20 years).24

Port
The Port of Alaska (POA) in Anchorage serves as Alaska’s primary cargo terminal for inbound freight. The Port of Alaska operates over 2,000 miles of rail lines carrying over 150 million tons of cargo annually.25 The Port’s Enterprise Activities Budget indicates that the next phase of modernization will be updating two of its general cargo docks, funding permitting. This is critical because corrosion on the pilings of the older facilities could create weight limits that constrain on-dock operations.26

Railroad
The Alaska Railroad Corporation (ARRC) is a regional (class II) railroad that provides year-round rail transportation services — both freight and passenger — in Anchorage and throughout Southeastern and Interior Alaska. The Alaska Railroad Corporation’s mainline extends south from Anchorage to Whittier and Seward and north to Fairbanks. Freight movement is the Alaska Railroad Corporation’s “bread-and-butter,” typically generating more than half of its operating revenues.27 That value accrues to about 3.7 million tons of cargo moved annually by over 680 railcars along 556 miles of track. The Corporation’s Anchorage yard is a vital depot for the carrier and is located close to the Port of Alaska. Key commodities include petroleum, barge/interline services, trailers/containers on flat cars, coal, gravel, and other miscellaneous freight movement such as project cargo (large, indivisible items such as mining and construction equipment) or scrap.

The COVID-19 pandemic heavily impacted the Alaska Railroad Corporation’s passenger and freight business, but these volumes rebounded in 2022. Seasonal tourism rail passenger ridership between Anchorage and Fairbanks (traveling through Denali National Park and Preserve) helps to eliminate the number of motor coaches traveling from Anchorage northward. The Alaska Railroad Corporation indicates this represents about 14,000 motor coaches being removed from the roadways annually (assuming roughly half a million rail passengers/year).28 The Corporation estimates that its 2022 hopper and tanker operations (carrying gravel, coal, and petroleum) replaced the need for over 200,000 truck trips while its rail trailer and container carriage supplied goods movements that would have required about 47,000 truck trips.29
Source: Alaska Department of Transportation & Public Facilities Annual Traffic Volume Report, 2021

Table 10: Truck Volumes on Key Freight Corridors

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>TRUCK AADT</th>
<th>TRUCK PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota Dr @ International Airport Rd</td>
<td>1,089</td>
<td>3.0</td>
</tr>
<tr>
<td>Glenn Hwy @ Bluffa Falls</td>
<td>2,035</td>
<td>6.3</td>
</tr>
<tr>
<td>Seward Hwy, south of 76th Ave</td>
<td>1,782</td>
<td>3.8</td>
</tr>
<tr>
<td>Tudor Rd, west of Patterson</td>
<td>636</td>
<td>3.0</td>
</tr>
<tr>
<td>Ocean Dock Rd, Port of Alaska</td>
<td>922</td>
<td>46.8</td>
</tr>
<tr>
<td>Minnesota Dr @ Chester Creek</td>
<td>1,100</td>
<td>4.0</td>
</tr>
<tr>
<td>Seward Hwy @ Potter Marsh</td>
<td>721</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Figure 25: Truck Volumes on Key Freight Corridors, 2020-2021

Active Transportation Needs

- The Anchorage Bowl – especially to the east, south, and southeast – needs a larger, but as yet unquantified, amount of new sidewalks and sidepaths, with priority for the Pedestrian Corridors identified in the AMATS Non-motorized Plan.
- Chugach-Eagle River area needs added sidewalks or sidepaths.
- More protected pedestrian crossings, quantity not yet set.
- Fill gaps in the existing pedestrian sidewalk and sidepath system, quantity not yet determined.
- Fill gaps and connections in the existing bicycle network by adding 800 miles of shared use pathways.
- The AMATS Non-motorized Plan proposes 25.1 miles of bicycle lanes and 70.7 miles of bikeways (paved shoulders) to build out a comprehensive on-street bicycle network in the planning area.
- Cyclists and pedestrians need facilities to have a continuous maintenance program to ensure that they are safe to use year-round (especially in the winter).
- More nighttime lighting would improve safety, especially on the shared use path system.
- A comprehensive bicycle and pedestrian data acquisition, management, and analysis program that sustains both an up-to-date infrastructure inventory and performance measures that capture utilization and maintenance status.

Vehicle Transportation System Needs

- The base year system is not heavily congested across multi-hour time periods nor is it very congested compared to other U.S. cities.
- People Mover needs to increase revenue-hours by 1-5% to meet its 5% growth target.

Freight Transportation System Needs

- Port of Alaska needs to complete modernization of its two general cargo terminals.
- Ted Stevens Anchorage International Airport needs to complete near-term airport upgrades to FAA standards.
- Ted Stevens Anchorage International Airport needs to complete near-term cargo apron and cargo support facility upgrades.
- Ted Stevens Anchorage International Airport needs to plan for and fund long-term landside passenger parking, rental car parking, and access improvements.

System Deficiency Summary

As shown in Figure 25, truck volumes in each of these locations has grown since 2020.

The Anchorage highway system also provides critical connectivity to markets and population centers across the state through two primary corridors: the Glenn Highway and Seward Highway. As with most highways, this is a shared system that provides connectivity and mobility for both passengers and freight.

Table 10 provides truck volumes at selected locations in Anchorage that were identified by the Alaska DOT&PF as high volume or critical truck routes.

Quality and efficient winter maintenance is critical to supporting freight movement. Improvements to winter maintenance for all modes of transportation support improved freight movement in the winter by increasing safety and reducing conflicts.

System Deficiency Summary

Active Transportation Needs

- The Anchorage Bowl – especially to the east, south, and southeast – needs a larger, but as yet unquantified, number of new sidewalks and sidepaths, with priority for the Pedestrian Corridors identified in the AMATS Non-motorized Plan.
- Chugach-Eagle River area needs added sidewalks or sidepaths.
- More protected pedestrian crossings, quantity not yet set.
- Fill gaps in the existing pedestrian sidewalk and sidepath system, quantity not yet determined.
- Fill gaps and connections in the existing bicycle network by adding 800 miles of shared use pathways.
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- Cyclists and pedestrians need facilities to have a continuous maintenance program to ensure that they are safe to use year-round (especially in the winter).
- More nighttime lighting would improve safety, especially on the shared use path system.
- A comprehensive bicycle and pedestrian data acquisition, management, and analysis program that sustains both an up-to-date infrastructure inventory and performance measures that capture utilization and maintenance status.

Public Transportation Needs

- Bus system needs service upgrades to five of its fifteen existing routes to 30-minute headways to meet the frequency target.
- Bus service planning and/or land use policies need to allow an increase in the percent of residents within 1/4 mile of a bus stop by about 7% to reach the goal of a 10% increase each planning cycle.
- Bus service planning and/or land use policies need to allow an increase in the percent of jobs within 1/4 mile of a bus stop by about 2% to reach the goal of a 5% increase each planning cycle.
- People Mover needs to increase revenue-hours by 1-5% to meet its 5% growth target.

Vehicle Transportation System Needs

- The base year system is not heavily congested across multi-hour time periods nor is it very congested compared to other U.S. cities.
- People Mover needs to increase revenue-hours by 1-5% to meet its 5% growth target.

Freight Transportation System Needs

- Port of Alaska needs to complete modernization of its two general cargo terminals.
- Ted Stevens Anchorage International Airport needs to complete near-term airfield upgrades to FAA standards.
- Ted Stevens Anchorage International Airport needs to complete near-term cargo apron and cargo support facility upgrades.
- Ted Stevens Anchorage International Airport needs to plan for and fund long-term landside passenger parking, rental car parking, and access improvements.
Safety Summary

During the 2017-2021 timeframe, 18,437 crashes occurred. A total of 573 crashes resulted in a Fatal or Serious (KSI) Injury and 99 crashes resulted in a fatality (see Figure 26). The following trends were observed through a crash data review within the analysis period:

• Total crashes have decreased, but the proportion of KSI crashes has stayed relatively steady. 2018 and 2021 had the highest number of fatal crashes during the analysis period.
• Pedestrians, cyclists, and motorcyclists are over-represented in high-severity crashes.
• The highest crash concentrations for all crashes and bicycle and pedestrian crashes are in downtown and midtown Anchorage. These areas align with bicycle and pedestrian network priorities identified in the 2021 Anchorage Non-Motorized Plan.
• Most total crashes are multi-vehicle crashes, but most fatal crashes are pedestrian-involved crashes. Multi-vehicle and fixed object crashes are frequent and are second and third to pedestrian crashes as the prevalent crash types in fatal collisions, and combined account for 81.8 percent of all fatal crashes.
• The most common collision manner is angle crashes, suggesting intersection-related crashes.
• More total crashes occur during winter months when days are shorter, but more fatal and serious injury crashes occur between August and October, with January experiencing a peak as well.
• More fatal and serious injury vehicular crashes occur when roads are dry, which may be attributable to driver behaviors. More serious and a higher proportion of pedestrian crashes occur during fall and winter months, which may be attributable to less daylight/dark conditions. Roadway condition does not appear to influence pedestrian crash severity though there are more pedestrian crashes when roadways are dry — pedestrians that are able may be avoiding inclement weather and thus increase exposure during dry conditions.
• The most cited human circumstances for crashes are failure to yield, aggressive erratic operation, and red-light violation.

See AMATS Safety Plan Existing Conditions Memorandum (2023) for additional details.

The heat map shows all 573 fatal and serious injury crashes over the five-year period from 2017-2021 in the AMATS planning area. The most severe crashes were in highest concentration inside the Anchorage Bowl, particularly in Downtown and Midtown Anchorage with a secondary concentration of crashes along Glenn Highway.
The 2050 transportation scenarios and alternatives are based on the vision, goals, objectives, and recommended project list. More details about the 2050 transportation scenarios and alternatives can be found in the MTP Alternative Analysis Travel Forecast Findings technical report.

The first step in determining the 2050 scenarios was a strategic planning model. AMATS used the VisionEval strategic planning model to quickly test hundreds of possible combinations of future transportation policies, capital investments, and operational tactics (see VisionEval technical reports).

Using the strategic planning results, the proposed project list, and with feedback from stakeholders and the AMATS Technical Advisory and Policy Committees, the project team identified several scenarios to analyze with the travel demand model.

As described in Chapter 4, the 2050 Reference Alternative provides a comparison to these alternatives. The 2050 Reference Alternative includes the Trend Land Use, no additional pricing, and only transportation projects.

Travel Demand Model Scenarios

1. “ALL PROJECTS” (AP) – includes all candidate projects in the cost-constrained list (see Chapter 5).
2. “INCREASED TRANSIT” (IT) – excludes roadway expansion projects while including a 54% increase in transit service hours by increasing frequency on all current routes beyond the cost-constrained list. This scenario also includes all the roadway operations, complete streets, and new transit route investments present in the “All Projects” scenario. The increased service hours constitute a hypothetical test of what could happen; how such an approach would be funded is covered in the financial analysis for the MTP.
3. “TREND” LAND USE (Trend LU) – projects current and historic housing and employment growth patterns to 2050 (within the constraints of the Anchorage 2040 Land Use Plan).
4. “DENSE” LAND USE (Dense LU) – assumes a higher-than-trend concentration of growth in housing and employment in the areas the Land Use Plan designates as high-density. Areas that received higher density in this scenario were those the Land Use Plan designates as “City Center,” “Urban Residential-High Density,” “Compact Mixed Residential - Medium Density,” “Town Center,” “Regional Commercial Center,” “Commercial Corridor,” and “General Industrial.”
5. “MEDIUM PRICING” (MP) – increase in the form of an additional 10-cent-per-gallon fuel tax. For analysis purposes the same future fleet mix as in 2019 was assumed.
6. “HIGH PRICING” (HP) – increase that includes the 10-cent fuel tax, increases both the cost and the geographic extent of parking charges by 50%, and applies a 3 cents per mile road use charge that could be applied as a global vehicle-miles traveled fee or an equivalent fuel tax.

Chapter 5
2050 Transportation Scenarios

This chapter documents the forecasted or projected future transportation system including trends, scenario development, and analysis to ensure deficiencies are addressed.
The analysis assumed that the region will in all alternatives make investments in travel demand management (TDM) and transportation system management and operations (TSMO) improvements. Along with the timing of the 2050 MTP planning process, AMATS worked on a Destination UMed TDM study and the area’s first TSMO Plan. Recommendations from both plans will be incorporated into future MTP revisions and Transportation Improvement Programs.

Alternatives Analysis Findings

Across all alternatives the variations in the outcomes are small in magnitude. Table 11 shows in broad strokes the direction (plus or minus) and magnitude (more or fewer symbols) of the outcomes that each individual scenario produced.

For example, the High Pricing scenario by itself produces among the highest increases in walking of all the scenarios at about the same order of magnitude that the Dense Land Use scenario would achieve by itself. Table 12 breaks down mode share by alternative.

Table 11: Summary of Investment, Land Use, and Pricing Scenario Effects.

More “plus” signs indicate more supportive of goal; more “minus” signs indicate less supportive; n/c indicates “no change”.

<table>
<thead>
<tr>
<th>OUTCOMES BY ACTION</th>
<th>VEHICLE TRAVEL</th>
<th>ACTIVE MODE USAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VMT</td>
<td>VHD</td>
</tr>
<tr>
<td>All Projects (AP) Investments</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Increased Transit (IT) Investments</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>Dense Land Use</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Medium Pricing</td>
<td>+</td>
<td>n/c</td>
</tr>
<tr>
<td>High Pricing</td>
<td>+</td>
<td>++</td>
</tr>
</tbody>
</table>

Table 12: Forecast Base Year and 2050 Daily Mode Share for the AMATS Planning Area (Anchorage Bowl plus Chugiak-Eagle River)

<table>
<thead>
<tr>
<th>Travel Mode</th>
<th>Base</th>
<th>2050 Reference</th>
<th>2050 Trend Land Use All Projects</th>
<th>2050 Dense Land Use All Projects</th>
<th>2050 Dense Land Use Increased Transit</th>
<th>2050 Trend Land Use Increased Transit Medium Pricing</th>
<th>2050 Dense Land Use All Projects High Pricing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>45.34%</td>
<td>45.67%</td>
<td>45.65%</td>
<td>45.61%</td>
<td>45.51%</td>
<td>45.47%</td>
<td>45.60%</td>
</tr>
<tr>
<td>Shared Ride</td>
<td>41.05%</td>
<td>40.93%</td>
<td>40.83%</td>
<td>40.87%</td>
<td>40.78%</td>
<td>40.82%</td>
<td>40.87%</td>
</tr>
<tr>
<td>Walk</td>
<td>9.12%</td>
<td>8.99%</td>
<td>9.06%</td>
<td>8.98%</td>
<td>9.16%</td>
<td>9.07%</td>
<td>8.98%</td>
</tr>
<tr>
<td>Bike</td>
<td>1.87%</td>
<td>1.84%</td>
<td>1.83%</td>
<td>1.82%</td>
<td>1.89%</td>
<td>1.89%</td>
<td>1.82%</td>
</tr>
<tr>
<td>Transit</td>
<td>0.92%</td>
<td>0.89%</td>
<td>0.94%</td>
<td>1.03%</td>
<td>0.96%</td>
<td>1.06%</td>
<td>1.03%</td>
</tr>
<tr>
<td>School Bus</td>
<td>1.71%</td>
<td>1.69%</td>
<td>1.69%</td>
<td>1.69%</td>
<td>1.70%</td>
<td>1.70%</td>
<td>1.69%</td>
</tr>
</tbody>
</table>

Source: RSG, AMATS 2019 Travel Demand Model

Chester Creek culvert replacement on Northern Lights Boulevard – courtesy of AMATS/Municipality of Anchorage.
Both the All Projects and Increase Transit alternatives would increase travel times for motor vehicles on several road corridors. This should be interpreted as a direct result of intentional speed limit reductions and other Complete Streets approaches designed to achieve better safety outcomes in the form of both fewer crashes and less injurious or costly crashes. While the model does not measure crashes, these safety benefits should be factored into any decisions made based on this report. The findings show that the transportation investments in both the All Projects and Increased Transit scenarios achieve outcomes independent of each other and could be combined to greater effect if desired and if funding becomes available.

Increasing transit service frequency by about 54% increases transit trip-making (as measured by change in linked transit trips) by about 10% regardless of the land use configuration (and adds to the increased transit usage that would result from concentrating future growth more densely). This higher transit usage lowers VMT somewhat and would thus have modest effects reducing air pollutant emissions and congestion, serving the MTP’s equity, mobility, economic, and environmental goals.

The specific new Complete Streets projects proposed in the recommended project list create shorter routes for drivers to desirable destinations in ways that slightly decrease system vehicle-miles traveled and slightly decrease roadway congestion. The forecast data indicate that these specific investments taken together increase mobility without increasing vehicle-miles traveled. Conversely, the scenarios without these projects would thus be beneficial to both the MTP mobility and environmental goals.

The recommended new transit route projects have modest effects at the system scale that benefit the mobility and environmental goals.

While AMATS does not control land use decisions nor the cost of fuel or transportation facilities, the analysis shows that concentrating future population and employment growth in the high-density designations of the Anchorage 2040 Land Use Plan has noticeable effects on lowering vehicle-miles traveled; shifting travel to transit, walk and bike; and lowering congestion. These are all outcomes supportive of the MTP goals. Additionally, all the pricing tactics—if properly implemented—would have beneficial outcomes for the MTP goals by lowering congestion and shifting some travel to transit and active modes. Such tactics would also produce increased revenues to help fund MTP investments.

Preferred Alternative

The preferred alternative includes the cost constrained “All Projects” list described in Chapter 6. This alternative was chosen because the projects identified are under the purview of AMATS and within the federally required fiscal constraint. The additional alternatives findings help to guide policy and program implementation strategies (see Chapter 7) that support the vision, goals, and objectives of this plan. In addition, there are community needs such as maintenance and operations that are not directly included in the preferred alternative that should be addressed to support the goals and objectives.

The preferred alternative prioritizes active transportation, public transportation, and Complete Streets throughout the AMATS planning area. The travel demand model analysis shows that this alternative addresses system deficiencies identified by previous plans, public input, and generally supports the goals and objectives of this plan. The “All Projects” preferred alternative lowers vehicle-miles traveled within the AMATS planning area and, to a lesser amount, lowers congestion measured by vehicle-hours of delay (see Figure 27, noting that alternatives with All Projects investments show delay lower relative to vehicle miles traveled than Alternatives with the Increase Transit investments); increases transit utilization slightly, as measured by boardings; and, has minimal effects on biking while increasing walking slightly (see Table 12).

If funding changes and/or this alternative is not implemented, a significant increase in VMT, a reduction in active transportation infrastructure, and reduction in the transits system could occur.
Chapter 6

Financial Plan and Recommended Project List

This chapter combines project recommendations developed from the community and public engagement process and the fiscally constrained financial plan that will fund and program projects for implementation.

Financial Plan

Federal regulations require the Metropolitan Transportation Plan (MTP) financial plan demonstrate fiscal constraint. Table 13 on the following page provides a summary of the project financial analysis, Table 14 on the following page provides a summary of operations and maintenance financial analysis, and detailed financial analyses are included in Appendix 4. These tables show that the MTP is fiscally constrained in the short term and long term. In the mid-term, there are costs that will be carried over to the long term.

MTP Revenue Sources and Assumptions

There are three main funding sources identified to implement the MTP recommendations:

1. MUNICIPAL
   - Municipality of Anchorage (MOA) Capital Improvement Program (CIP) bonds for roadway and non-motorized projects
   - MOA local funds for transit
   - General obligation bond proceeds for transit

2. STATE
   - Legislative grants for roads and non-motorized
   - State general obligation bonds for roads
   - Alaska Mental Health Trust Authority

3. FEDERAL
   - Federal Other reflects possible grants such as Connecting Communities, Strengthening Mobility and Revolutionizing Transportation (SMART), and Infrastructure for Rebuilding America (INFRA). This funding has not historically been available, but the Infrastructure Investment and Jobs Act presents more opportunities.
   - FHWA National Highway System (NHS)
   - FHWA Non-NHS
   - Highway Safety Improvement Program (HSIP)
   - Carbon Reduction Program (CRP)
   - Alaska Railroad Corporation (ARRC)
   - AMATS Marketing & RideShare (CMAQ)
   - Congestion Mitigation and Air Quality Program (pass through 5307)
   - State of Alaska Department of Health Nutrition Transportation Seniors (this is a federal grant with a state pass-thru)
   - FTA allocations and discretionary funding (this funding includes increases based on service expansions and future projects such as the Muldoon Hub and Downtown Transit Center)
Metropolitan Transportation Plan

Inflation Assumptions: Revenues and Costs in Year of Expenditure Dollars

Capital Revenues: An inflation rate of 2.5% per year is used, which was calculated by averaging the historical Urban Consumer Price Index (CPI) for the State of Alaska for 2003 to 2022, and the U.S. Western Urban CPI for 2017-2022. The year in which the CPI is applied varies by funding source. 1

Capital Project Costs: An inflation rate of 4.5% per year is applied to the short-term (2023-2034) road, bicycle, pedestrian, transit, and trails projects to reflect significantly higher inflation anticipated to continue in the short term. This inflation is based on the National Highway Construction Cost Index (NHCCI) from the Federal Highway Administration (FHWA). The inflation rate is decreased to 3.5% per year for long-term (2035-2050) road, bicycle, pedestrian, transit, and trails projects in recognition of changing oil prices and construction materials cost over time.

Methodology for Determining Year of Expenditure for Projects

The financial plan does not establish the specific year in which each project will be constructed. Rather, it updates and rallies the total estimated capital cost for all projects in 2022 dollars, then applies the inflation rate of 4.5% per year applied to the short term (2023-2034), and 3.5% per year for long-term (2035-2050), to identify the program costs in year of expenditure dollars. The projected revenue is then reduced from that total amount, and the balance is then increased by 2.5% and carried over to the next year. This methodology is applied to each mode. By the year 2050, the projected revenues must be sufficient to cover the cost of recommended improvements to meet the federal requirements for a fiscally constrained MTP.

Cost Estimates for Projects

Cost estimates for projects are developed cooperatively by the MOA and Alaska DOT&PF. The 2050 MTP will show costs in 2022 dollars and inflated where described above.

Operations and Maintenance

Operations and maintenance activities are critical to ensure a transportation system that meets the needs of all area residents. Revenue for operations and maintenance comes from the MOA, Alaska DOT&PF, and some federal funding for public transportation. This work includes signing, marking, lighting, street sweeping, traffic signal operation, snow clearing, sanding, pothole repair, landscaping, and sidewalk maintenance.

Ongoing costs to operate and maintain the transportation system are part of the annual operating budgets for the Municipality of Anchorage and State of Alaska. Transportation system construction, rehabilitation, and preservation is costly. As shown by the best estimate for funding in the financial constraint analysis, AMATS estimates there will be sufficient revenues to cover project implementation and maintenance through 2050.

If funding is reduced from this estimate, less projects will be implemented, operations and maintenance would be reduced, and the goals and objectives of this plan may not be attained.

Table 13: Project Costs (in million dollars)

<table>
<thead>
<tr>
<th>2023-2050 PROJECTS</th>
<th>SHORT TERM (2023-2026)</th>
<th>MID-TERM (2027-2034)</th>
<th>LONG TERM (2035-2050)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO-MODELED STREETS AND ACTIVE TRANSPORTATION</td>
<td>$355.4</td>
<td>$944.4</td>
<td>$1,564.2</td>
</tr>
<tr>
<td>TRANSIT AND RAILROAD</td>
<td>$64.7</td>
<td>$146.9</td>
<td>$221.3</td>
</tr>
<tr>
<td>CO-MERGED PROJECT COSTS</td>
<td>$420.1</td>
<td>$1,091.2</td>
<td>$1,865.5</td>
</tr>
<tr>
<td>INFLATION</td>
<td>Included</td>
<td>$233.1</td>
<td>$472.6</td>
</tr>
<tr>
<td>TOTAL COSTS (PROJECT COST + INFLATION)</td>
<td>$420.1</td>
<td>$1,324.3</td>
<td>$2,358.1</td>
</tr>
<tr>
<td>REVENUE</td>
<td>$420.1</td>
<td>$896.4</td>
<td>$2,557.7</td>
</tr>
<tr>
<td>REMAINING COSTS</td>
<td>$0</td>
<td>$427.9</td>
<td>$0.4</td>
</tr>
</tbody>
</table>

Table 14: Operations and Maintenance (O&M) (in million dollars)

<table>
<thead>
<tr>
<th>2023-2050 O&amp;M ESTIMATES</th>
<th>SHORT TERM (2023-2034)</th>
<th>LONG TERM (2035-2050)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road and Active Transportation Expenses</td>
<td>$1,214.0</td>
<td>$2,568.8</td>
</tr>
<tr>
<td>Public Transportation Expenses</td>
<td>$428.7</td>
<td>$633.6</td>
</tr>
<tr>
<td>Road and Active Transportation Revenue</td>
<td>$1,214.0</td>
<td>$2,568.8</td>
</tr>
<tr>
<td>Public Transportation Revenue</td>
<td>$428.7</td>
<td>$633.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Revenue funding shown in year of expenditure, millions of dollars. Detailed fiscal constraint analysis data shown in Appendix 4.
Recommended Project List

The project lists were developed by compiling previously nominated projects and projects nominated through the 2050 MTP public involvement process. This included nearly 200 Complete Streets projects and over 350 non-motorized projects. Staff then ranked these projects based on the 2050 MTP criteria, as approved by the Technical Advisory and Policy Committees in 2022. Cost estimates for projects were developed cooperatively with the MOA and Alaska DOT&PF.

Once the financial analysis was approved, staff identified the projects, in rank order, that fit within the financial constraints. Projects from the 2023-2026 Transportation Improvement Program (TIP) and 2023 Statewide Improvement Program (STIP) are included under short term funding. The financially constrained project list was used as an input to the travel demand model, which identified draft alternatives for the plan. Plans and studies are included in the project list. Highlighted/stared projects in Table 20 support the 2016 Congestion Management Process (CMP) results.

Table 17: Number of recommended projects by mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Short Term (2023-2034)</th>
<th>Long Term (2035-2050)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Streets</td>
<td>68</td>
<td>29</td>
<td>97</td>
</tr>
<tr>
<td>Non-Motorized</td>
<td>32</td>
<td>75</td>
<td>107</td>
</tr>
<tr>
<td>Transit</td>
<td>19</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Railroad</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 18: Number of recommended projects by MTP goal.

Some projects support multiple goals. See key for list of goals.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Goal 1</th>
<th>Goal 2</th>
<th>Goal 3</th>
<th>Goal 4</th>
<th>Goal 5</th>
<th>Goal 6</th>
<th>All Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Streets</td>
<td>68</td>
<td>80</td>
<td>80</td>
<td>54</td>
<td>54</td>
<td>51</td>
<td>40</td>
</tr>
<tr>
<td>Non-Motorized</td>
<td>35</td>
<td>105</td>
<td>37</td>
<td>106</td>
<td>107</td>
<td>107</td>
<td>35</td>
</tr>
<tr>
<td>Transit</td>
<td>16</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td>Railroad</td>
<td>12</td>
<td>12</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 19: Number of recommended projects by federal performance area.

Some projects support multiple performance areas.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Safety</th>
<th>Infrastructure Condition</th>
<th>Congestion Reduction</th>
<th>System Reliability</th>
<th>Freight Movement and Economic Vitality</th>
<th>Environmental Sustainability</th>
<th>Reduced Project Delivery Delays</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Streets</td>
<td>80</td>
<td>68</td>
<td>82</td>
<td>81</td>
<td>54</td>
<td>54</td>
<td>54</td>
<td>14</td>
</tr>
<tr>
<td>Non-Motorized</td>
<td>105</td>
<td>35</td>
<td>107</td>
<td>107</td>
<td>107</td>
<td>107</td>
<td>107</td>
<td>7</td>
</tr>
<tr>
<td>Transit</td>
<td>19</td>
<td>16</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>Railroad</td>
<td>12</td>
<td>12</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Goal 1: Maintain Existing Infrastructure  
Goal 2: Improve Safety and Security  
Goal 3: Improve Access & Mobility Options  
Goal 4: Support the Economy  
Goal 5: Promote a Healthy Environment  
Goal 6: Advance Equity
### Table 20: MTP Complete Streets Projects

<table>
<thead>
<tr>
<th>MTP Number</th>
<th>Project Description</th>
<th>2022 Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIP CS 18</td>
<td>O'Malley Road Reconstruction - improve safety and capacity at intersections and improve pedestrian facilities</td>
<td>$350,000</td>
</tr>
<tr>
<td>TIP CS 1</td>
<td>Fireweed Lane Rehabilitation (Spenard Road to Seward Highway) - include a road diet, changing Fireweed from 4 lanes to a maximum of 3 lanes (2 with a center turn lane), and non-motorized improvements.</td>
<td>$50,000,000</td>
</tr>
<tr>
<td>TIP CS 2</td>
<td>Spenard Road Rehabilitation (Benson Blvd to Minnesota Drive) - improve traffic flow and include non-motorized improvements.</td>
<td>$7,739,000</td>
</tr>
<tr>
<td>TIP CS 3</td>
<td>Rabbit Creek Road Rehabilitation (Seward Highway to Goldenview Drive) - look at left turn accommodations where possible and include non-motorized improvements.</td>
<td>$33,550,000</td>
</tr>
<tr>
<td>TIP CS 4</td>
<td>East 4th Avenue Signal and Lighting Upgrade (Cordova Street to Ingra Street) - reconstruct the traffic signal and street lighting system and replace sidewalk and curb ramps</td>
<td>$5,580,000</td>
</tr>
<tr>
<td>TIP CS 5</td>
<td>Potter Drive Rehabilitation (Arctic Blvd to Dowling Road) - rehabilitate the road and include non-motorized improvements</td>
<td>$7,850,000</td>
</tr>
<tr>
<td>TIP CS 6</td>
<td>Mountain Air Drive (Rabbit Creek Road to Sandpiper Drive) - Extend road and recommend separated pathways.</td>
<td>$15,000,000</td>
</tr>
<tr>
<td>TIP CS 7</td>
<td>Academy Drive/Vanguard Drive Area Traffic Circulation Improvements (Brayton Drive to Abbott Road) - Improve and align Academy Drive and Vanguard Drive west of Abbott Road, include non-motorized improvements and consider adjacent land use.</td>
<td>$18,700,000</td>
</tr>
<tr>
<td>TIP CS 8</td>
<td>Safety Improvement Program (Traffic Count Support) - Collect traffic data within the AMATS area completed by the ADOT&amp;PF Central Region Highway Data Section and MOA Traffic Department Data Section.</td>
<td>$17,640,000</td>
</tr>
<tr>
<td>TIP CS 9</td>
<td>Spenard Road Rehabilitation (Minnesota Drive to Northwood Drive) - rehabilitate road, include non-motorized improvements, and consider adjacent land use.</td>
<td>$18,000,000</td>
</tr>
<tr>
<td>TIP CS 10</td>
<td>Chugach Way Rehabilitation (Spenard Road to Arctic Blvd) - rehabilitate and include non-motorized improvements using the Chugach Way Area Transportation Elements Study for design development.</td>
<td>$11,600,000</td>
</tr>
<tr>
<td>TIP CS 11</td>
<td>Eagle River Road Rehabilitation (milepost 0.0 to 5.3, Old Glenn Highway to Oriender Road) - construct selected traffic, safety, drainage, intersection, roadside hardware, and ADA improvements; improve the non-motorized facilities; may also include work on signing, striping, signalization, ITS equipment, pavement, digouts, guardrail, lighting, utility adjustments, and/or utility relocations.</td>
<td>$60,000,000</td>
</tr>
<tr>
<td>TIP CS 12</td>
<td>3rd Avenue Signals and Lighting Upgrade (E Street to Cordova Street) - reconstruct the traffic signal and street lighting system and replace sidewalk and curb ramps</td>
<td>$11,000,000</td>
</tr>
<tr>
<td>TIP CS 13</td>
<td>Lois Drive &amp; 32nd Ave Upgrade (Benson Blvd to Minnesota Drive) - upgrade road to current collector standards, including lighting upgrades, addition of non-motorized facilities, and drainage upgrades were possible.</td>
<td>$16,800,000</td>
</tr>
<tr>
<td>TIP CS 14</td>
<td>Falker Street Upgrade (Tudor Road to 40th Ave) - upgrade to current local standards, including lighting upgrades, non-motorized facilities, and drainage upgrades were possible.</td>
<td>$7,400,000</td>
</tr>
<tr>
<td>TIP CS 15</td>
<td>Dale Street Upgrade (Tudor Road to 40th Ave) - upgrade to current local standards, including non-motorized facilities and lighting and drainage upgrades where possible.</td>
<td>$7,000,000</td>
</tr>
<tr>
<td>TIP CS 16*</td>
<td>5th Ave Signals and Lighting Upgrade (L to H St) - Replace traffic signals and lighting systems to meet current electrical safety standards and design criteria; replace sidewalks and pavement as necessary for electrical work and to meet ADA requirements.</td>
<td>$11,000,000</td>
</tr>
<tr>
<td>TIP CS 17*</td>
<td>5th Ave (H St to Cordova St) and 6th Ave (L St to Cordova St) Signals and Lighting Upgrade - Replace traffic signals and lighting systems to meet current electrical safety standards and design criteria; replace sidewalks and pavement as necessary for electrical work and to meet ADA requirements.</td>
<td>$11,000,000</td>
</tr>
<tr>
<td>TIP Plans 1</td>
<td>Port of Alaska Multimodal Improvements Study - study and make recommendations on how to improve the Ocean Dock Road connection to the Port of Alaska</td>
<td>$50,000</td>
</tr>
<tr>
<td>TIP Plans 2*</td>
<td>AMATS MTP Updates - Funding for the AMATS Metropolitan Transportation Plan Update and Interim updates.</td>
<td>$4,600,000</td>
</tr>
<tr>
<td>TIP Plans 2</td>
<td>AMATS Minnesota Drive and I/L Street Corridor Plan (International Airport Road to 3rd Ave) - a comprehensive analysis of the corridor’s current conditions, anticipated growth patterns and their impacts, likely outcomes and reasonable mitigation alternatives. Include recommended improvements based on identified needs and community input, a timeline for implementation, modeling analysis, and engineering work as needed. Evaluate the corridor for rehabilitation as a Complete Street.</td>
<td>$700,000</td>
</tr>
<tr>
<td>TIP Plans 3*</td>
<td>AMATS Tudor Road Corridor Plan (Muldoon Road to Minnesota Drive) - a comprehensive analysis of the corridor’s current conditions, anticipated growth patterns and their impacts, likely outcomes and reasonable mitigation alternatives. Include recommended improvements based on identified needs and community input, a timeline for implementation, modeling analysis, and engineering work as needed.</td>
<td>$700,000</td>
</tr>
<tr>
<td>TIP Plans 4</td>
<td>AMATS Northern Lights Boulevard and Benson Boulevard Corridor Plan (La-Touche Street to Minnesota Drive) - a comprehensive analysis of the corridor’s current conditions, anticipated growth patterns and their impacts, likely outcomes and reasonable mitigation alternatives. Include recommended improvements based on identified needs and community input, a timeline for implementation, modeling analysis, and engineering work as needed.</td>
<td>$700,000</td>
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<tr>
<td>TIP Plans 5</td>
<td>AMATS Complete Street Plan - provide planning guidance for street types, sidewalks, roadways, intersections, curbsides, and ADA accessibility as well as plan implementation. Develop multimodal street typologies and a corresponding map. These typologies may include recommendations for development review, streetscape design, traffic signal upgrades, recommended road reclassifications, and bicycle and pedestrian facilities design.</td>
<td>$450,000</td>
</tr>
<tr>
<td>TIP Plans 6</td>
<td>AMATS Regional Household Travel Survey - gather information on travel behaviors and patterns of the households in the region.</td>
<td>$600,000</td>
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<tr>
<td>TIP Plans 7</td>
<td>Downtown Streets Engineering Study - implement the Our Downtown Anchorage District Plan through a study that will address transportation &amp; circulation policies, action items, assess Right-Of-Way ownership and management, identify opportunities for complete streets, and include modeling as needed.</td>
<td>$550,000</td>
</tr>
<tr>
<td>TIP Plans 9</td>
<td>Non-Motorized Facilities Inventory and Mapping - inventory the non-motorized facilities within the AMATS area and create a GIS layer with this information.</td>
<td>$300,000</td>
</tr>
<tr>
<td>TIP Plans 10*</td>
<td>A/C Street Corridor Plan (Tudor Road to 3rd Ave) - a comprehensive analysis of the corridor’s current conditions, anticipated growth patterns and impacts, likely outcomes and reasonable mitigation alternatives. Include recommended improvements based on identified needs and community input, a timeline for implementation, modeling analysis, and engineering work as needed. Evaluate the corridor for rehabilitation as Complete Streets.</td>
<td>$700,000</td>
</tr>
<tr>
<td>TIP Plans 11</td>
<td>AMATS Climate Action Plan - build on the Anchorage Climate Action Plan (adopted May 2019). Inventory current and past Anchorage/Chugiak-Eagle River transportation system greenhouse gas (GHG) emissions (including carbon) in order to quantitatively evaluate strategies and actions to reduce future GHG emissions, including carbon reduction strategies, related to transportation. Focus on equity and include a strategic implementation plan.</td>
<td>$450,000</td>
</tr>
<tr>
<td>TIP Plans 12</td>
<td>Anchorage Human Services Coordinated Transportation Plan - Following federal transit law, identify the transportation needs of individuals with disabilities, older adults, and people with low incomes, provide strategies for meeting these needs, and prioritize transportation services for funding and implementation.</td>
<td>$600,000</td>
</tr>
<tr>
<td>TIP CMAQ 1</td>
<td>Anchorage Ridesharing/Transit Marketing - funding for the Municipal RideShare program which promotes, subsidizes, and contract manages an area-wide vanpool commuter service, and a comprehensive public transportation marketing effort.</td>
<td>$29,100,000</td>
</tr>
<tr>
<td>TIP CMAQ 2</td>
<td>Air Quality Public &amp; Business Awareness Education Campaign - inform the public about air quality issues and steps to reduce pollution.</td>
<td>$8,400,000</td>
</tr>
<tr>
<td>TIP CMAQ 3</td>
<td>Arterial Roadway Dust Control - Magnesium chloride (MgCl2) dust palliative applied to approximately 70 miles of high volume State and Municipal roadways prior to and after spring sweeping.</td>
<td>$2,800,000</td>
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<tr>
<td>TIP CMAQ 4</td>
<td>Traffic Control Signalization - provide proactive efficiencies with better/more updated signal timing plans to address intersection congestion and improve air quality. Funding supports development of Traffic Management Center and emergency vehicle and low priority transit signal preemption.</td>
<td>$11,200,000</td>
</tr>
<tr>
<td>TIP CMAQ 5</td>
<td>Non-Motorized Facility Maintenance Equipment - purchase maintenance equipment to plow and sweep non-motorized facilities during the winter and summer.</td>
<td>$3,300,000</td>
</tr>
<tr>
<td>TIP CMAQ 6</td>
<td>Non-Motorized Facility Maintenance Equipment for Winter Greenbelt Trails - purchase maintenance equipment to groom greenbelt trails during the winter months.</td>
<td>$658,000</td>
</tr>
<tr>
<td>TIP CMAQ 7</td>
<td>Bus Stop &amp; Facility Improvements - funds new and existing facilities and bus stop sites to meet both Americans with Disabilities Act (ADA) requirements and operational needs. Typical bus stop activities include design/engineering, bus shelters, benches, trash receptacles, landscaping, grading, paving, utility relocations, lighting, curb adjustments, drainage, constructing paths, and construction/reconstruction of turnouts. Typical facility activities include design/engineering, upgrades, rehabilitation, and construction/reconstruction not limited to safety, security, facility equipment, structures, underground storage tanks, parking lots, sidewalks, and drainage.</td>
<td>$25,500,000</td>
</tr>
<tr>
<td>TIP CMAQ 8</td>
<td>Capital Vehicles - funds the replacement and expansion of the Public Transportation Department fleet. The fleet consists of MV-1, 22’ and 40’ buses that provide service to Anchorage Rides and People Mover. Vehicles will be replaced based on the FTA defined useful life and the People Mover Transit Asset Management Plan.</td>
<td>$42,000,000</td>
</tr>
<tr>
<td>TIP CMAQ 9</td>
<td>Demo Operations/Expansion - operational assistance and/or operational service expansion for fixed route, demand response, and/or microtransit public transit service.</td>
<td>$458,000</td>
</tr>
<tr>
<td>TIP CMAQ 10</td>
<td>Seniors and Youth Ride Free - Provide transit trips for people 18 and under and 60 and over.</td>
<td>$1,000,000</td>
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<tr>
<td>TIP HSIP 1</td>
<td>Gambell Street Utility Pole Removal and Increased Lighting</td>
<td>$8,250,000</td>
</tr>
<tr>
<td>TIP HSIP 2</td>
<td>Gambell and Ingra Streets - Overhead Signal Indication Upgrades</td>
<td>$8,325,000</td>
</tr>
<tr>
<td>TIP HSIP 3*</td>
<td>5th Ave: Concrete Street to Karluk Street Pedestrian Improvements</td>
<td>$3,867,000</td>
</tr>
<tr>
<td>TIP HSIP 4</td>
<td>Anchorage Flashing Yellow Arrow and Signal Head Display Improvements</td>
<td>$22,326,000</td>
</tr>
<tr>
<td>TIP HSIP 5*</td>
<td>Tudor Road: Baxter Road to Patterson Street Channelization</td>
<td>$8,467,000</td>
</tr>
<tr>
<td>TIP HSIP 6</td>
<td>Old Seward Highway: Industry Way/120th Avenue Channelization</td>
<td>$2,077,000</td>
</tr>
<tr>
<td>TIP HSIP 7</td>
<td>Ocean Dock Road Railroad Crossing Device Upgrades</td>
<td>$1,280,000</td>
</tr>
<tr>
<td>TIP NHS 1</td>
<td>Seward Highway O’Malley Road to Dimond Boulevard Reconstruction Phase II - Includes an underpass to connect 92nd Avenue (west of the Seward Highway) with Academy Drive (east of the Seward Highway).</td>
<td>$105,000,000</td>
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<tr>
<td>TIP NHS 2*</td>
<td>Glenn Highway: Airport Heights to Parks Highway Rehabilitation - coordinated with HSIP safety improvements.</td>
<td>$66,500,000</td>
</tr>
<tr>
<td>TIP NHS 3</td>
<td>Seward Highway Mile Post 98.5 to 118 Bird Flats to Rabbit Creek - better accommodate traffic flow and address safety concerns.</td>
<td>$90,224,000</td>
</tr>
<tr>
<td>TIP NHS 4</td>
<td>Seward Highway and Tudor Road Interchange Reconstruction - interchange is at the end of its design life and has operational issues with the current traffic loads.</td>
<td>$36,000,000</td>
</tr>
<tr>
<td>TIP NHS 5*</td>
<td>Glenn Highway Incident Management Traffic Accommodations - Construct modifications and improvements to facilitate efficient through travel along the highway and nearby roads between Airport Heights and the Parks Highway so when lanes are blocked by crashes or other events, ensuing traffic congestion is mitigated and gridlock does not preclude travel between Anchorage, Eagle River, and the Matanuska Valley.</td>
<td>$19,900,000</td>
</tr>
<tr>
<td>TIP NHS 6*</td>
<td>Glenn Highway and Hilland Road Interchange Preservation and Operational Improvements - evaluate alternatives to make short term improvements utilizing the existing bridge over the highway.</td>
<td>$8,640,000</td>
</tr>
<tr>
<td>STIP 1</td>
<td>Seward Highway at 36th Avenue Interchange - Reconstruct as a controlled access interchange including frontage road connections, bike and pedestrian accommodations, safety related improvements, drainage, and other associated improvements.</td>
<td>$102,000,000</td>
</tr>
<tr>
<td>STIP 2</td>
<td>Seward Highway: Rabbit Creek Road to Girdwood Planning Environmental Linkage Study - further refine and analyze conceptual highway improvements to evaluate environmental challenges and improve the understanding of various design issues and anticipated project costs.</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>TIP Other 1</td>
<td>Campbell Tract Facility Alternate Entrance Alignment - Relocate the entrance road 250’ to align with East 68th Avenue.</td>
<td>$4,921,000</td>
</tr>
<tr>
<td>TIP Other 2</td>
<td>AK094 &amp; AK105 (Construction &amp; Road Improvements @ APU) - Upgrade and extend University Lake Drive approximately 1/4 mile eastward to a two lane urban road with accommodations for pedestrians.</td>
<td>$2,951,000</td>
</tr>
<tr>
<td>CIP1</td>
<td>48th Avenue Upgrade (Cordova Street to Old Seward Highway) - to urban collector standards.</td>
<td>$8,100,000</td>
</tr>
<tr>
<td>CIP2</td>
<td>Cordova Street Reconstruction (48th Avenue to International Airport Road) - to urban collector standards.</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>CIP3</td>
<td>68th Avenue Reconstruction (Bratton Drive to Lake Otis Parkway) - to urban collector standards.</td>
<td>$12,000,000</td>
</tr>
<tr>
<td>CIP4</td>
<td>120th Avenue Upgrade (Johns Road to Old Seward Highway) - to urban collector standards.</td>
<td>$8,000,000</td>
</tr>
<tr>
<td>CIP5</td>
<td>Canyon Road Improvements (Upper De Armoum Road to Chugach State Park) - upgrade and include a parking lot for trail users.</td>
<td>$5,000,000</td>
</tr>
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<tr>
<td>CIP6</td>
<td>Lore Road Reconstruction (Sandlewood Place to Lake Otis Parkway) - include installation of traffic calming measures.</td>
<td>$12,000,000</td>
</tr>
<tr>
<td>CIP7</td>
<td>Northwood Drive Extension (88th Avenue to Dimond Boulevard) - construct a missing link in the road network and enhance traffic circulation in the vicinity of Dimond High School.</td>
<td>$20,000,000</td>
</tr>
<tr>
<td>CIP8</td>
<td>Ocean Dock Road Upgrade (Port Entrance to Whitney Road)</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>CIP9</td>
<td>Spruce Street Upgrade/Extension (Dawling Road to 68th Avenue) - upgrade to urban collector standards and construct the collector from Dawling Road to 64th Avenue.</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>CIP10</td>
<td>West Dimond Boulevard Upgrade (Jodhpur Road to Westpark Drive) - to current collector standards including pedestrian facilities to provide access to Kincaid Park.</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>CIP11</td>
<td>Whitney Road Upgrade (North C Street to Post Road)</td>
<td>$12,000,000</td>
</tr>
<tr>
<td>CPS020</td>
<td>36th Avenue (Spenard Road to Lake Otis Parkway) - rehabilitate to remove a vehicle lane, install a separated bike lane through intersections, widen sidewalks, and slow speeds to 30 miles per hour.</td>
<td>$35,400,000</td>
</tr>
<tr>
<td>CPS026*</td>
<td>5th &amp; 6th Avenue Complete Streets (I to Reeve) - remove a lane of traffic, slow speeds, add protected bike lanes, and upgrade pedestrian infrastructure.</td>
<td>$55,800,000</td>
</tr>
<tr>
<td>CPS142</td>
<td>Muldoon Road (Tudor Road to Glenn Highway) - re-build and add additional non-motorized facilities and slow speeds.</td>
<td>$68,300,000</td>
</tr>
<tr>
<td>CPS006</td>
<td>15th Avenue (L Street to Gambell Street) - rehabilitate to a two lane roadway with protected bike lanes, reduce speed, raised medians, and single lane roundabouts at K Street, E Street, and Cordova Street. Remove telephone poles and add street lighting, crosswalks at intersections, ADA ramps, and signage.</td>
<td>$11,000,000</td>
</tr>
<tr>
<td>CPS008</td>
<td>15th Avenue Complete Street &amp; North-South crossing (Karluk Street to Orca Street) - reconstruct to remove a lane of traffic and add speed reduction, protected bike lanes, and pedestrian under/overpass crossings where possible.</td>
<td>$5,400,000</td>
</tr>
<tr>
<td>CPS014</td>
<td>32nd Avenue and 33rd Avenue Upgrade (Arctic Boulevard to Old Seward Highway) - Rebuild to collector standards, to include non-motorized improvements and consider adjacent land use.</td>
<td>$13,700,000</td>
</tr>
<tr>
<td>CPS037*</td>
<td>A and C Complete Streets Project (9th Avenue to 15th Avenue) - Reconstruct to reduce speeds and allow safe non-motorized travel, encourage high quality residential development, and reduce vehicle and noise pollution.</td>
<td>$12,800,000</td>
</tr>
<tr>
<td>CPS023</td>
<td>42nd Avenue Upgrade (Lake Otis Parkway to Florina Street) - to current urban standards including a new road base, storm drain installation, curb and gutters, pedestrian facilities, street lighting, and landscaping.</td>
<td>$6,640,000</td>
</tr>
<tr>
<td>CPS072</td>
<td>Denali Street Complete Street (Fireweed Lane to Tudor Road) - reconstruct and include non-motorized infrastructure.</td>
<td>$19,200,000</td>
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### Metropolitan Transportation Plan

**Canyon Road upgrade – courtesy of AMATS/Municipality of Anchorage.**

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<tr>
<td>CPS118</td>
<td>Ingra Street (3rd Avenue to 15th Avenue) - rehabilitate Ingra Street to a 3-lane Blvd and include separated non-motorized facilities.</td>
<td>$22,300,000</td>
</tr>
<tr>
<td>CPS117</td>
<td>Lagoon) I St &amp; L Street Reconstruction to Complete Streets (9th Avenue to Westchester Lagoon) - use a 25 mile per hour design speed and consider the following design elements: buffered bike lanes, enhanced vegetation, upgraded school zones, improved bus stops, improved pedestrian crossing at 12th Avenue, reduce lane widths, crosswalks on all 4 corners at 9th Avenue, transition L St to 2 traffic lanes, slow traffic platoons at 13th Avenue, remove L Street left turn lane at 13th Avenue for the buffered bike path. On I Street, add bulb outs and non-motorized connection signage, striping, enhanced transit stop.</td>
<td>$27,100,000</td>
</tr>
<tr>
<td>CPS114</td>
<td>North Lane Street (Ames Avenue to McPhoe Avenue) - rehabilitate to widen sidewalks, narrow travel lanes, and add bike infrastructure.</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>CPS118</td>
<td>Ingra Street (3rd Avenue to 15th Avenue) - rehabilitate Ingra Street to a 3-lane Blvd and include separated non-motorized facilities.</td>
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<td>$27,100,000</td>
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<td>CPS114</td>
<td>North Lane Street (Ames Avenue to McPhoe Avenue) - rehabilitate to widen sidewalks, narrow travel lanes, and add bike infrastructure.</td>
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<td>CPS118</td>
<td>Ingra Street (3rd Avenue to 15th Avenue) - rehabilitate Ingra Street to a 3-lane Blvd and include separated non-motorized facilities.</td>
<td>$22,300,000</td>
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### MTP Projects

- **CPS118**
  - Ingra Street (3rd Avenue to 15th Avenue) - rehabilitate Ingra Street to a 3-lane Blvd and include separated non-motorized facilities.
  - Cost: $22,300,000

- **CPS117**
  - Lagoon) I St & L Street Reconstruction to Complete Streets (9th Avenue to Westchester Lagoon) - use a 25 mile per hour design speed and consider the following design elements: buffered bike lanes, enhanced vegetation, upgraded school zones, improved bus stops, improved pedestrian crossing at 12th Avenue, reduce lane widths, crosswalks on all 4 corners at 9th Avenue, transition L St to 2 traffic lanes, slow traffic platoons at 13th Avenue, remove L Street left turn lane at 13th Avenue for the buffered bike path. On I Street, add bulb outs and non-motorized connection signage, striping, enhanced transit stop.
  - Cost: $27,100,000

- **CPS114**
  - North Lane Street (Ames Avenue to McPhoe Avenue) - rehabilitate to widen sidewalks, narrow travel lanes, and add bike infrastructure.
  - Cost: $4,000,000

### Additional Projects

- **CPS117**
  - Ingra Street (3rd Avenue to 15th Avenue) - rehabilitate Ingra Street to a 3-lane Blvd and include separated non-motorized facilities.
  - Cost: $22,300,000

- **CPS118**
  - Ingra Street (3rd Avenue to 15th Avenue) - rehabilitate Ingra Street to a 3-lane Blvd and include separated non-motorized facilities.
  - Cost: $22,300,000

### Metropolitan Transportation Plan

**2050 MTP**

**CPS146**
- North Lane Street (Ames Avenue to McPhoe Avenue) - rehabilitate to widen sidewalks, narrow travel lanes, and add bike infrastructure.
- Cost: $22,300,000

**CPS074**
- CPS021
  - 36th Avenue Corridor Study (Spenard Road to Denali Street) - a comprehensive analysis of the corridor’s current conditions, anticipated growth patterns and impacts, likely outcomes and reasonable mitigation alternatives. Include recommended improvements based on identified needs and community input, a timeline for implementation, modeling analysis, and engineering work as needed.
  - Cost: $250,000

**CPS092**
- Gambell Street (3rd Avenue to 15th Avenue) - rehabilitate to a 3-lane Blvd and include separated non-motorized facilities.
- Cost: $22,300,000

**CPS096**
- Glenn Highway Management Study (Airport Heights Drive to Knik River Bridge) - study tolling, including a review of federal and Alaska regulations/legislation and ways to dedicate toll funding for maintenance/transportation improvements. Explore High Occupancy Vehicle (HOV) lanes and Bus Rapid Transit (BRT) lanes as options.
- Cost: $500,000

**CPS077**
- Duben Avenue (Muldoon Road to Bolin Street) - add non-motorized infrastructure and traffic calming.
- Cost: $13,100,000

**CPS091**
- Forest Park Drive (Northern Lights Boulevard to Hillcrest Drive) - rehabilitate and add traffic calming infrastructure.
- Cost: $4,560,000

**CPS092**
- 100th Avenue/Victor Road Intersection Study - evaluate the options for enhancing safety.
- Cost: $100,000

**CPS043**
- Anchorage Winter Cross-Sections Study and Implementation Plan - document various snow conditions and existing wintertime cross sections on multiple complete street corridors and identify improved designs and maintenance to better accommodate snow storage needs while improving travel conditions for all users.
- Cost: $250,000

**CPS198**
- Lake Otis Parkway at 20th Avenue Channelization - this project would construct safety improvements to this intersection. Dedicated left-hand turn lanes on Lake Otis Parkway are anticipated. The curb bulb-out on the northeast side of the intersection may be removed to allow for an optional straight ahead/right-turn lane traveling north on Lake Otis Parkway. In addition, the traffic signals will be altered to match the new lane configuration.
- Cost: $3,000,000

**CPS165**
- Photo Avenue (Spenard Road to end of the road) - redesign to be a non-motorized only boulevard.
- Cost: $1,760,000

**CPS092**
- 100th Avenue/Victor Road Intersection Study - evaluate the options for enhancing safety.
- Cost: $100,000

**CPS151**
- Old Glenn Highway (Eagle River Loop Road to North Eagle River Access Road) - rehabilitate to reduce lanes, slow speeds, add additional non-motorized crossing options, and add bike infrastructure where possible.
- Cost: $15,000,000

**CPS089**
- Eyak Drive Pedestrian Street (15th Avenue to Cordova Street) - convert to pedestrian street.
- Cost: $2,300,000

**CPS075**
- Dimond Boulevard intersection with Victor Road and Northwood Drive - redesign the intersection to extend bike lanes through the intersection, add bike detection, and add the 4th leg crosswalk.
- Cost: $2,000,000

**CPS074**
- CPS021
  - 36th Avenue Corridor Study (Spenard Road to Denali Street) - a comprehensive analysis of the corridor’s current conditions, anticipated growth patterns and impacts, likely outcomes and reasonable mitigation alternatives. Include recommended improvements based on identified needs and community input, a timeline for implementation, modeling analysis, and engineering work as needed.
  - Cost: $250,000

**CPS096**
- Glenn Highway Management Study (Airport Heights Drive to Knik River Bridge) - study tolling, including a review of federal and Alaska regulations/legislation and ways to dedicate toll funding for maintenance/transportation improvements. Explore High Occupancy Vehicle (HOV) lanes and Bus Rapid Transit (BRT) lanes as options.
- Cost: $500,000

**CPS117**
- Ingra Street (15th Avenue to 20th Avenue) - install slower speed notification infrastructure.
- Cost: $150,000

**CPS077**
- Duben Avenue (Muldoon Road to Bolin Street) - add non-motorized infrastructure and traffic calming.
- Cost: $13,100,000

**CPS091**
- Forest Park Drive (Northern Lights Boulevard to Hillcrest Drive) - rehabilitate and add traffic calming infrastructure.
- Cost: $4,560,000

**CPS092**
- 100th Avenue/Victor Road Intersection Study - evaluate the options for enhancing safety.
- Cost: $100,000
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<td>TIP NMO 7</td>
<td>Multi-use Pathway from Tudor Road to Northern Lights Boulevard - Construct a multi-use pathway along the Alaska Railroad corridor and connect to the existing trail to the north and on Taft and Tudor Road.</td>
<td>$15,284,000</td>
</tr>
<tr>
<td>TIP NMO 8</td>
<td>AMATS Non-Motorized Safety Campaign - provide education and safety equipment. Campaign is based on analyses of data with a multi-media approach that could incorporate crash behavior patterns, MOA generated heat maps, public polling and focus group(s) results.</td>
<td>$2,800,000</td>
</tr>
<tr>
<td>TIP Plans 8</td>
<td>AMATS Recreational Trails Plan Update - A comprehensive update to include primary and secondary linkages to established multi-use pathways as well as recreational facilities such as single track bicycle trails, hiking networks, and bicycle parks. Study trail expansion opportunities and strengthening the connections between recreational trail development and fostering economic growth.</td>
<td>$450,000</td>
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<tr>
<td>TIP CMAQ 1</td>
<td>Anchorage Ridesharing/Transit Marketing - funding for the Municipal RideShare program which promotes, subsidizes, and contract manages an area-wide vanpool commuter service; and a comprehensive public transportation marketing effort.</td>
<td>$13,500,000</td>
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<tr>
<td>TIP CMAQ 6</td>
<td>Bus Stop &amp; Facility Improvements - funds new and existing facilities and bus stop sites to meet both Americans with Disabilities Act [ADA] requirements and operational needs. Typical bus stop activities include design/engineering, bus shelters, benches, trash receptacles, landscaping, grading, lighting, utility relocations, curb adjustments, drainage, constructing paths, and construction/reconstruction of turnouts. Typical facility activities include design/engineering, upgrades, rehabilitation, and construction/reconstruction not limited to safety, security, facility equipment, structures, underground storage tanks, parking lots, sidewalks, and drainage.</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>TIP CMAQ 9</td>
<td>Seniors and Youth Ride Free - Provide transit trips for people 18 and under and 60 and over.</td>
<td>$1,916,000</td>
</tr>
<tr>
<td>TIP CMAQ 10</td>
<td>Microtransit - Establish a new on-demand service, to be managed by the MOA Public Transportation Department. Includes professional services, software, equipment and/or other Microtransit technology. The primary goals of the project are to connect residents to jobs, activity centers, and existing fixed-route bus service while providing a low-cost transportation alternative to single-occupancy vehicles.</td>
<td>$225,000</td>
</tr>
<tr>
<td>TIP CMAQ 11</td>
<td>Muldoon Transit Hub Mixed Use Development - replace the existing collection of on-street bus stops at/near the intersection of Muldoon Road and Debbra Road. This project would include property acquisition or lease negotiation, final design, and construction.</td>
<td>$3,705,000</td>
</tr>
<tr>
<td>CIP NMO 1</td>
<td>E 20th Avenue Pedestrian Improvements (Tikhanka Park to Bragov Street) - construct a pedestrian facility.</td>
<td>$4,500,000</td>
</tr>
<tr>
<td>CIP NMO 2</td>
<td>East Northern Lights Boulevard Pedestrian Overpass - replace the existing overpass at Rogers Park Elementary with an ADA compliant structure.</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>NMO250</td>
<td>Mountain View Drive (Taylor Street to McCarrey Street - widen sidewalks.</td>
<td>$1,800,000</td>
</tr>
</tbody>
</table>
### METROPOLITAN TRANSPORTATION PLAN

#### MTP2050

#### 3rd Avenue (C Street to Post Road)
- Construct a separated bikeway and pedestrian infrastructure.
- $3,460,000

#### 6th Avenue (Bragaw Street to Cherry Street)
- Redesign to be a primarily non-motorized route, including new non-motorized infrastructure, intersection redesign, traffic calming, lighting, and wayfinding. Consider enhanced shared roadway as per the AMATS Non-Motorized Plan.
- $6,000,000

#### 3rd Avenue (C Street to Post Road)
- Construct pedestrian infrastructure, including adding non-motorized crossing infrastructure at A Street and Karluk Street.
- $1,880,000

#### Airport Heights Drive (Debarr Road to Glenn Highway)
- Construct non-motorized facilities on the west side of the road and non-motorized crossing infrastructure at Airport Heights Drive and Glenn Highway.
- $1,880,000

#### Seward Highway (East 20th Avenue to Energy Court)
- Construct pedestrian infrastructure.
- $2,300,000

#### Boundary Avenue (Homecrest Place to Boniface Parkway)
- Construct a separated bikeway as per the AMATS Non-Motorized Plan.
- $4,320,000

#### 5th and 6th Avenue (M Street to Reeve Boulevard)
- Rehabilitate to remove a lane of vehicular traffic on each road and add a separated bikeway, widen sidewalks, improve non-motorized crossing infrastructure.
- $13,600,000

#### 40th Avenue (Wellness Street to West of Lake Otis Parkway)
- Construct an enhanced shared roadway as per the AMATS Non-Motorized Plan.
- $1,620,000

#### Dimond Boulevard (Minnesota Drive to Arctic Boulevard)
- Rehabilitate to add non-motorized infrastructure and transit access.
- $17,500,000

#### 13th Avenue (Nelchina Street to C Street and E Street to S Street)
- Construct missing sidewalks, widen existing sidewalks, and construct an enhanced shared roadway as per the AMATS Non-Motorized Plan.
- $3,420,000

#### Mountain View Drive at McCarrey Street Non-motorized Wayfinding
- Install non-motorized wayfinding signage to the Ship Creek Trail and to the Glenn Highway Trail.
- $150,000

#### Bragaw Street (East Northern Lights Boulevard to Mountain View Drive)
- Construct a multi-use separated pathway including non-motorized crossing infrastructure at Bragaw and Penland Parkway.
- $3,500,000
<table>
<thead>
<tr>
<th>MTP Number</th>
<th>Project Description</th>
<th>2022 Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMO220</td>
<td>Hyde Pedestrian Boulevard (15th Avenue to 5th Avenue) - convert into a pedestrian boulevard that encourages multimodal transportation and blends pedestrian and vehicle space (&quot;Moosert&quot; techniques).</td>
<td>$1,380,000</td>
</tr>
<tr>
<td>NMO263</td>
<td>North Bunn Avenue (Peterkin Avenue to Mountain View Drive) - construct an enhanced shared roadway as per the AMATS Non-Motorized Plan.</td>
<td>$140,000</td>
</tr>
<tr>
<td>NMO64</td>
<td>A Street (Whitney Road to West Tudor Road) - construct non-motorized infrastructure on both sides, including bike lanes, pedestrian infrastructure, separated pathway, additional crossing infrastructure. Consider protected bike lanes.</td>
<td>$41,000,000</td>
</tr>
<tr>
<td>NMO006</td>
<td>15th Avenue (LaTouche St and Orca Street) - construct a non-motorized overcrossing.</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>NMO090</td>
<td>Blueberry Road (West Fireweed Lane to West Benson Boulevard) - construct an enhanced shared roadway as per the AMATS Non-Motorized Plan.</td>
<td>$520,000</td>
</tr>
<tr>
<td>NMO034</td>
<td>West 40th Avenue/Wilson Street (Harrison Street to Chugach Way) - construct an enhanced shared roadway as per the AMATS Non-Motorized Plan.</td>
<td>$320,000</td>
</tr>
<tr>
<td>NMO035</td>
<td>41st Avenue (Wilson Street to Minnesota Drive) - construct an enhanced shared roadway as per the AMATS Non-Motorized Plan.</td>
<td>$500,000</td>
</tr>
<tr>
<td>NMO290</td>
<td>Patterson Street Non-motorized Corridor (Boundary Ave to Tudor Road) - rehabilitate into a non-motorized primary corridor with signage, consider enhanced shared roadway.</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>NMO155</td>
<td>Dimond Center Transit Center Pedestrian Infrastructure - install additional non-motorized infrastructure.</td>
<td>$250,000</td>
</tr>
<tr>
<td>NMO294</td>
<td>Pine Street/McCarrey Street (8th Avenue to Chena Avenue) - rehabilitate to wide sidewalks.</td>
<td>$1,080,000</td>
</tr>
<tr>
<td>NMO139</td>
<td>Cordova Street (East 15th Avenue to East 3rd Avenue) - construct a separated bikeway as per the AMATS Non-Motorized Plan and include non-motorized crossing infrastructure at Cordova Street and 16th Ave intersection.</td>
<td>$1,660,000</td>
</tr>
<tr>
<td>NMO277</td>
<td>Old Seward Highway (East Dowling Road to East 36th Avenue) - construct a separated bikeway as per the AMATS Non-Motorized Plan.</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>NMO007</td>
<td>15th Avenue at Slikto Street Intersection - construct non-motorized crossing infrastructure.</td>
<td>$100,000</td>
</tr>
<tr>
<td>NMO010</td>
<td>16th Avenue (Lake Otis Parkway to Sunrise Drive/Airport Heights Drive) construct non-motorized facilities. Consider enhanced shared roadway.</td>
<td>$980,000</td>
</tr>
<tr>
<td>NMO054</td>
<td>8th Avenue at A Street and C Street Intersections - redesign and install non-motorized crossing infrastructure.</td>
<td>$500,000</td>
</tr>
<tr>
<td>NMO223</td>
<td>Jelinek/Zappa/Pauline/Valley Streets (Boundary Ave to DeBarr Road) safety study - study and identify non-motorized infrastructure for safety.</td>
<td>$250,000</td>
</tr>
<tr>
<td>NMO321</td>
<td>Seward Highway Pedestrian Tunnel (33rd Avenue/Old Seward Hwy to Energy Court) - construct a pedestrian tunnel.</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>NMO322</td>
<td>West 40th Avenue (Old Seward Highway to Arctic Boulevard) - construct an enhanced shared roadway as per the AMATS Non-Motorized Plan.</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>NMO84</td>
<td>Benson Boulevard Pathway Rehabilitation (Seward Highway to LaTouche Street) - rehabilitate to widen and replace pavements on the south side.</td>
<td>$300,000</td>
</tr>
<tr>
<td>NMO091</td>
<td>Boniface Parkway (DeBarr Road to 22nd Avenue) - construct pedestrian infrastructure.</td>
<td>$1,900,000</td>
</tr>
<tr>
<td>NMO160</td>
<td>E &amp; G Street Bike Infrastructure (2nd Avenue to 15th Avenue) - construct separated bikeways.</td>
<td>$1,780,000</td>
</tr>
<tr>
<td>NMO231</td>
<td>Lake Otis Parkway (68th Avenue to Abbott Road) - widen sidewalks.</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>NMO296</td>
<td>LaTouche Street (East 36th Avenue to Northern Lights Boulevard) - construct a separated bikeway as per the AMATS Non-Motorized Plan on the east side of the street, add crosswalk lights, and add crosswalk striping for non-motorized crossings at the intersections of LaTouche Street and Northern Lights Boulevard and Benson Boulevard.</td>
<td>$1,380,000</td>
</tr>
<tr>
<td>NMO259</td>
<td>Non-Motorized Pathway Connection from Trail at Patterson Street/Hunt Ave to Muldoon Road - construct a non-motorized pathway from the existing trail.</td>
<td>$1,080,000</td>
</tr>
<tr>
<td>NMO253</td>
<td>Multi-use path from West 40th Ave and Indiana Street to Arctic Boulevard - construct a multi-use pathway.</td>
<td>$120,000</td>
</tr>
<tr>
<td>NMO335</td>
<td>State Street study (Chanshtnu Muldoon Park Trail to East 20th Avenue) - study and identify non-motorized infrastructure for safety.</td>
<td>$100,000</td>
</tr>
<tr>
<td>NMO292</td>
<td>Petersburg Street to 56th Avenue Non-Motorized Pathway - construct a multi-use pathway connection.</td>
<td>$400,000</td>
</tr>
<tr>
<td>NMO092</td>
<td>Boniface Parkway at 6th Avenue Pedestrian Signal - add a pedestrian signal or beacon at the intersection.</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>NMO278</td>
<td>Old Seward Highway (Huffman Road to O'Malley Center Drive) - construct a separated bikeway as per the AMATS Non-Motorized Plan.</td>
<td>$2,300,000</td>
</tr>
<tr>
<td>NMO343</td>
<td>Tudor Road Pathway (MacInnes Street to Lake Otis Parkway Campbell Creek Bridge) - construct a pathway from Tudor Road/McInnes Street to the Lake Otis Parkway Campbell Creek Bridge shown in the 2023-2026 TIP.</td>
<td>$1,700,000</td>
</tr>
<tr>
<td>NMO211</td>
<td>Hartzell Road (Abbott Road to Lore Road) - construct a separated bikeway as per the AMATS Non-Motorized Plan.</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>NMO258</td>
<td>Non-motorized Pathway Connection from Creekside Center Drive to Creekside Street - construct a pathway connection.</td>
<td>$260,000</td>
</tr>
</tbody>
</table>
### 2050 Metropolitan Transportation Plan

#### MTP2050

- **Glenn Highway Non-motorized Overhead Crossing** (Boundary Avenue to pathway and regional commercial center) - construct a non-motorized overcrossing. **$10,000,000**

- **Glenn Highway Southside Pathway Extension** (Airport Heights Drive to Bragaw Street) - construct a non-motorized pathway connection to the existing pathway at Bragaw Street along the south side of the Glenn Highway. **$1,500,000**

- **36th Avenue at Patterson Street non-motorized pathway to Campbell Creek Trail** - construct a non-motorized pathway. **$11,040,000**

- **Wisconsin Street (Spenard Road to Northern Lights Boulevard)** - Install non-motorized crossing infrastructure, including redesigning the intersections at 35th Avenue, 40th Avenue, and Northern Lights Boulevard to carry the bike lanes through the intersections and adding bike detection. **$2,340,000**

- **Nunaka Valley Non-Motorized Infrastructure Study** - study and make recommendations for non-motorized infrastructure. **$200,000**

- **Chester Creek Trail at Seward Highway** - widen the Chester Creek Trail tunnel. **$15,000,000**

- **Spenard Road (Wisconsin Street to International Airport Road)** - Install non-motorized crossing infrastructure. **$860,000**

- **Turpin Street (East 16th Avenue to Boundary Avenue)** - add bike lanes and redesign intersections to continue bike lanes through entire road. **$2,320,000**

- **17th Avenue (Chester Creek to E Street at 15th Avenue)** - construct sidewalk on the north side, add a separated bikeway, and widen the existing sidewalk on the south side. **$440,000**

- **Northern Lights Boulevard (Lovejoy Drive to Wesleyan Drive)** - rehabilitate the pathway on the north side to provide a buffer and include non-motorized crossing infrastructure at Lovejoy Drive. **$3,440,000**

- **Eagle Street (East Fireweed Lane to Chester Creek Trail)** - construct an enhanced shared roadway as per the AMATS Non-Motorized Plan. **$660,000**

- **Pine Street and San Roberto Avenue Intersection** - Install pedestrian crossings and associated signals. **$250,000**

- **88th Avenue (Jewel Lake Road to Blackberry Street)** - construct a pedestrian facility on the south side. **$500,000**

- **Spenard Road at Hillcrest Drive Intersection** - redesign the intersection to accommodate non-motorized users. **$500,000**

- **Wayfinding study for Non-Motorized Users, including trail users** - Analyze and plan implementation of wayfinding signage, including paved and soft surface trails. **$400,000**

#### 2022 Cost Estimate

- **MTP0354** - Wayfinding for Non-Motorized Users, including trail users - funding to implement wayfinding signage, including on paved and soft surface trails. **$2,000,000**

- **MTP0140** - Creekside Center Drive at 10th Avenue - install crosswalks. **$100,000**

- **MTP0313** - Redwood Place/Zarvis Place/Wentworth Street/Stanford Drive/Campus Drive/ Mallard Lane (Alumni Drive to LaToche Street) enhanced shared roadways and wayfinding - construct enhanced shared roadways as per the AMATS Non-Motorized Plan, include wayfinding signage, and consider other non-motorized facilities to connect the neighborhood to the Campbell Creek and Chester Creek trails, such as a bike boulevard. **$3,540,000**

- **MTP0316** - Russian Jack School Park Pathway repaving and new connection from Pine Valley Court - widen and replace the pavement and add new non-motorized pathway connections from Pine Valley Court and E 20th Avenue at Wesleyan Drive to Russian Jack Park trails and elementary school. **$1,720,000**

- **MTP0306** - Railroad Non-Motorized Pathway and Crossing Study - study the feasibility of a non-motorized pathways along the Alaska Railroad Right of Way, including a railroad crossing in the Spenard area, to make recommendations for safety improvements and future projects. Consider pedestrian signal on Spenard Road at Alaska Railroad crossing. **$1,500,000**

- **MTP0355** - Wellness Avenue (Health Drive to East 40th Avenue) - construct an enhanced shared roadway as per the AMATS Non-Motorized Plan. **$360,000**

- **MTP0190** - Forest Park Drive (West Northern Lights Boulevard to Hillcrest Drive) - construct an enhanced shared roadway as per the AMATS Non-Motorized Plan. **$1,160,000**

- **MTP0027** - 36th Avenue (Woodland Park to Minnesota Drive) - extend the non-motorized pathway. **$1,060,000**

- **MTP0189** - Foothill Drive (Sherwood Avenue to Cheney Lake Park) and Sherwood Avenue (Foothill Drive to Patterson Street) - construct enhanced shared roadways as per the AMATS Non-Motorized Plan on Foothill Drive from Sherwood Avenue to Cheney Lake Park and on Sherwood Avenue from Foothill Drive to Patterson Street. **$960,000**

- **MTP0338** - Study to Convert Non-Through Streets into Pedestrian Streets - study converting not fully connected through streets into pedestrian streets. **$500,000**

- **MTP0002** - 12th Avenue (C Street to E Street) - construct an enhanced shared roadway as per the AMATS Non-Motorized Plan. **$280,000**

- **MTP0345** - Turnagain Blvd and Spenard Road Intersection - install non-motorized crossing infrastructure. **$100,000**

- **MTP0210** - Harrison Street (West 40th Avenue to Tudor Road) - construct an enhanced shared roadway as per the AMATS Non-Motorized Plan. **$500,000**
Table 22: MTP Transit Projects

<table>
<thead>
<tr>
<th>MTP Number</th>
<th>Project</th>
<th>2022 Cost Estimate</th>
<th>Estimated Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIP Transit 1</td>
<td>Preventative Maintenance/Capital Maintenance - the Federal Transit Administration (FTA) allows grantees to use capital funds for overhauls and preventative maintenance. FTA assistance for those items is based on a percentage of annual vehicle maintenance costs.</td>
<td>$18,000,000</td>
<td>$4,500,000</td>
</tr>
<tr>
<td>TIP Transit 2</td>
<td>Fleet Replacement/Expansion - funds the fleet expansion and replacement for the AnchorRIDES paratransit service and the fixed route fleet.</td>
<td>$100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>TIP Transit 3</td>
<td>ADA Complementary Paratransit Services - Costs associated with ADA paratransit programs are eligible for this funding for the ADA paratransit eligibility process, with a transportation skills assessment and a travel training program for people who could benefit from individualized instruction regarding how to independently ride People Mover buses. May also be used to purchase AnchorRIDES trips.</td>
<td>$300,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>TIP Transit 4</td>
<td>Bus Stop Improvements/1% Section 5307 Transit Improvements - funds the upgrade of bus stop sites to meet both the federally-mandated ADA requirements and the operational needs. Typical improvements include bus shelters, benches, trash receptacles, landscaping, grading, paving, utility relocations, lighting, curb adjustments, drainage, constructing paths, and construction/reconstruction of turnouts.</td>
<td>$600,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>TIP Transit 5</td>
<td>ITS/Automated Operating System/Management Information Systems - funds information systems necessary for efficient management of the public transportation system. Typical projects include: Geographical Information Systems (GIS) capabilities; upgrades to the automated maintenance system, refueling, and inventory system; a new computerized dispatch system; and upgrades to the scheduling/run-cutting process, customer information and telephone communications system, and desktop computers. Funds staff and capital resources to provide project oversight, capital, and day-to-day operational support for ITS for all public transportation services.</td>
<td>$200,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>TIP Transit 6</td>
<td>Fleet Improvement/Support Equipment/Support Vehicle - funds improvements to existing transit and paratransit fleets. Typical projects include a ticket reader and issue attachment; security systems; transit/ signal improvements for headway enhancements; mechanical equipment and other improvements for facilities; mobile display terminals and vehicle communications; radio and locations systems. Funds the purchase of replacement vehicles and equipment to support operation of the transit system. Typical purchases include pickup racks, maintenance trucks with special equipment, supervisor vehicles, shift change vehicles, forklifts, sweepers, and bus access snow removal equipment.</td>
<td>$2,700,000</td>
<td>$700,000</td>
</tr>
<tr>
<td>TIP Transit 7</td>
<td>Transit Centers/Support Facilities - supports an on-going effort to provide major transit facilities key areas of the city and major destinations. The Anchorage Comprehensive Plan and 2040 Land Use Plan (LUP) identified neighborhood, town, regional, commercial, and city centers that function as focal points for community activities with a mix of retail, residential, and public services and facilities. Anchorage Talks Transit coordinated with the LUP and implemented a frequent bus network along transit supportive development corridors. These corridors should provide pedestrian connections to surrounding neighborhoods and transit. Existing and future facility improvements along these corridors and in areas like Midtown, Downtown, U-Med, Dimond Center and Muldoon, are vital to the implementation of these community planning documents.</td>
<td>$3,000,000</td>
<td>$750,000</td>
</tr>
<tr>
<td>TIP Transit 8</td>
<td>Operating Assistance - Section 5307 operating assistance for fixed route, demand responsive, and/or microtransit public transit service.</td>
<td>$300,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>TIP Transit 9</td>
<td>Section 5310 Enhanced Mobility of Seniors &amp; Individuals with Disabilities - may include purchasing buses and vans; wheelchair lifts, ramps, and securement devices; transit-related information technology systems including scheduling/routing/one-call systems; mobility management programs; and acquisition of transportation services under a contract, lease, or other arrangement. Other activities may include travel training; volunteer driver programs; building an accessible path to a bus stop, including curb cuts, sidewalks, accessible pedestrian signals or other accessible features; improving signage or way-finding technology; providing same day service or door-to-door service; purchasing vehicles to support new accessible taxi, ride-sharing and/or vanpooling programs; and mobility management programs.</td>
<td>$960,000</td>
<td>$240,000</td>
</tr>
<tr>
<td>TIP Transit 10</td>
<td>Section 5339 Bus and Bus Facilities Program - includes capital projects to replace, rehabilitate and purchase buses, vans, and related equipment, and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities.</td>
<td>$2,880,000</td>
<td>$720,000</td>
</tr>
<tr>
<td>MTP Number</td>
<td>Project</td>
<td>2022 Cost Estimate</td>
<td>Estimated Annual Cost</td>
</tr>
<tr>
<td>------------</td>
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</tr>
<tr>
<td>TIP Transit 11</td>
<td>Section 5339(b) Bus and Bus Facilities Competitive Program - competitive program that addresses significant repair and maintenance needs, improves the safety of transit systems, and deploys connective projects that include advanced technologies. Examples include projects to replace, rehabilitate and purchase buses, vans, and related equipment; to replace, rehabilitate, and construct bus-related facilities; including technological changes or innovations to modify vehicles and/or facilities.</td>
<td>$2,250,000</td>
<td>$562,500</td>
</tr>
<tr>
<td>TIP CMAQ 11</td>
<td>Muldoon Transit Hub Mixed Use Development - replace the existing collection of on-street bus stops at/near the intersection of Muldoon Road and Debarr Road. This project would include property acquisition or lease negotiation, final design, and construction.</td>
<td>$14,155,000</td>
<td>$-</td>
</tr>
<tr>
<td>TRN100</td>
<td>30-Minute Frequencies - Increase all existing 60-minute frequency routes to 30 minutes. Transit on the Move (TOTM) Priority #7.</td>
<td>as funding available</td>
<td>$-</td>
</tr>
<tr>
<td>TRN101</td>
<td>New Route 36th Ave - Establish a new east/west connection between the airport and the Muldoon and Debarr Transit Hub with 30-minute frequency. Provide service on International Airport Road, 36th Avenue, C Street, and Boniface Parkway with direct access to the Loussac Library and the Anchorage Neighborhood Health Center (ANHC). TOTM Priority #4.</td>
<td>$3,500,000</td>
<td>$3,500,000</td>
</tr>
<tr>
<td>TRN102</td>
<td>Increase weekend Span of Service - Increase weekend service hours from 8 am – 8 pm to 8 am – 10 pm or 7 am – 9 pm. TOTM Priority #2</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>TRN103</td>
<td>Restore holiday service on 5 holidays - Martin Luther King Jr. Day, President’s Day, Seward’s Day, Veteran’s Day, and Day After Thanksgiving. TOTM Priority #9</td>
<td>$700,000</td>
<td>$700,000</td>
</tr>
<tr>
<td>TRN104</td>
<td>New Route Independence Park - Provide additional service in South Anchorage that connects the Dimond Transit Center with the Muldoon and Debarr Transit Hub via Independence Park, Elmoro Road and Baxter Road with 30-minute frequency. This route would provide direct access to the shopping center at C Street and 100th Avenue and the Alaska Native Medical Center. TOTM Priority #6.</td>
<td>$4,100,000</td>
<td>$4,100,000</td>
</tr>
<tr>
<td>TRN105</td>
<td>Permanent Restroom and Break Facilities - build facilities throughout the system to streamline operations and make the system more efficient.</td>
<td>$1,500,000</td>
<td>N/A</td>
</tr>
<tr>
<td>TRN106</td>
<td>Downtown Transit Center - build new transit center to better accommodate riders, increased routes, and frequencies, and allow for more operational efficiencies.</td>
<td>$8,850,000</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Community Impact Assessment and Environmental Justice

Through a Community Impact and Environmental Justice Analysis (CIA), a sample of projects recommended by the MTP prioritization and selection process were analyzed to ensure they will be beneficial without significant or mitigatable negative impacts on the immediate neighborhood, EJ populations or greater community, including the environment. Eight projects were selected with representation across project categories: five from Complete Streets, two Non-Motorized/Active Transportation, and one Transit. Projects assessed were selected to provide variation in geography across the AMATS boundary, scopes of work, and context to provide more representative testing of assumptions made during the selection process for project recommended in the MTP.

The high-level assessments consider categories identified in the FHWA’s Community Impact Assessment Guide (2018), as appropriate, given the generalities of the recommended projects’ scope of work. Impact categories considered include safety, mobility and access, physical aspects such as wetlands, drainage, barriers and shadowing, economic impacts, land use compatibility, effects on neighborhoods, displacement, and community cohesion. These preliminary assessments have been done not knowing full design recommendations, therefore some assumptions were made using professional judgment and are noted throughout the assessment.

While based on limited project scopes, this CIA provides valuable early insight to any anticipated significant negative impacts, which, if found, would result in reconsideration of a project’s inclusion as scoped in the MTP recommended project list. CIA conclusions may be taken into consideration during the next MTP and guide changes in plan objectives, nomination process, selection criteria, and final recommendations. As each project is funded, more in-depth analysis across impact categories will be conducted as part of the design, environmental assessment, and permitting processes. See Community Impact Assessment and Environmental Justice Appendix 6.

<table>
<thead>
<tr>
<th>MTP Number</th>
<th>Project Description</th>
<th>Estimated Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIP ARRC 8</td>
<td>Facility Rehab (5307) - replace, upgrade or improve ARRC buildings and related functional appurtenances within AMATS planning area.</td>
<td>$225,000</td>
</tr>
<tr>
<td>TIP ARRC 9</td>
<td>Track Rehabilitation (5337) - rail and tie rehabilitation within AMATS planning area.</td>
<td>$2,120,000</td>
</tr>
<tr>
<td>TIP ARRC 10</td>
<td>Preventative Maintenance (5337) - partially funds statewide maintenance costs of passenger vehicle railcars and locomotives. Preventive maintenance is defined as all activities, supplies, materials, labor, services and associated costs required to preserve or extend the functionality and serviceability of the asset.</td>
<td>$19,500,000</td>
</tr>
<tr>
<td>TIP ARRC 11</td>
<td>Bridge Rehabilitation (5337) - bridge engineering, preventive maintenance, rehabilitation, replacements, and other bridge improvements within AMATS planning area.</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>TIP ARRC 12</td>
<td>Radio and Communication System (5337) - replace, upgrade or improvements to radio and communication locations, equipment, systems or components.</td>
<td>$400,000</td>
</tr>
<tr>
<td>TIP ARRC 13</td>
<td>Signal and Detector System (5337) - replace, upgrade or improve in-track detector and at-grade signal systems equipment and communication components within AMATS planning area.</td>
<td>$200,000</td>
</tr>
<tr>
<td>TIP ARRC 14</td>
<td>Facility Rehab (5337) - replace, upgrade or improve ARRC buildings and related functional appurtenances within AMATS planning area</td>
<td>$200,000</td>
</tr>
</tbody>
</table>
Chapter 7
Implementation Strategies

This section provides the step by step actions needed to implement the plan recommendations and includes partnerships required to fully realize the community’s vision for the transportation system. The performance measures established in this chapter will help to track how well progress will be made in the future to achieve the vision, goals, and objectives.

Performance Measures

Performance measures are key to guiding implementation of the 2050 MTP. In addition to the fiscally constrained recommended project list, policies and actions will help AMATS meet the 2050 MTP goals and objectives. Consulting and coordinating with stakeholders, tribal governments, and resource agencies is critical throughout implementation.

Performance Measures should be based on actual data and have targets for a set time. AMATS has elected to support Alaska DOT&PF with their FHWA targets and the MOA Public Transportation Department with their FTA targets to provide quantifiable progress. As of May 2023, Alaska DOT&PF has met or made significant progress toward the 2021 targets. Updated targets were adopted by the AMATS Policy Committee in June 2023. A key action of this MTP, already in process, is to create a public dashboard for the performance measures that will be regularly updated. (See Table 24).

Implementation Strategies

Meeting the goals and objectives of the 2050 MTP will require more than adding cost-constrained projects to our transportation system. Policies, programs, and actions also support the transportation vision for the community. The interconnectivity of transportation with topics such as land use and public health requires efforts not solely reliant upon AMATS. This chapter includes some recommended implementation strategies outside of the AMATS purview. (See Table 25).

Strategic Planning Strategies

The following implementation strategies came from the strategic planning process of the MTP development. These actions strongly support the goals and objectives of the MTP; but many are outside AMATS purview. They are included here as recommendations to partner agencies and policymakers to support the goals of this plan.

The alternatives that included strategies from Table 26 were not selected as the preferred alternative because they are not fiscally constrained. These actions, however, would have a significant impact towards meeting the goals and objectives of this plan and should be pursued to meet the needs of our community.

Coordinated Efforts

The following regionally significant transportation projects have ongoing implementation and support the MTP goals and objectives.

• Port of Alaska: Modernizing the port (currently in process) is essential for safe, reliable, and cost-effective port operations. The modernization will improve the Port’s resiliency, improve operational efficiency, and accommodate modern shipping operations through changing statewide economic conditions and market needs.

• Ted Stevens Anchorage International Airport: Projects to upgrade the airport, such as the Alaska Cargo and Cold Storage, support an improved transportation system in Anchorage.

• Alaska Long Trail: This is a recreational and active transportation connected trail network from Seward to Fairbanks under initial phases of development. Existing trails in the AMATS planning area will be connected north and south.

• Alaska DOT&PF Carbon Reduction Strategy: This strategy is being developed to comply with the Bipartisan Infrastructure Law signed on November 15, 2021 (23 CFR 175) through a Carbon Reduction Program (CRP). The CRP encourages strategies to reduce transportation emissions, defined as CO2.

Coordinated Efforts
Federal Discretionary Grants: Under the Infrastructure Investment and Jobs Act (IIJA), a variety of competitive grant programs are available to many organizations and agencies to fund various types of transportation projects and activities.

### PERFORMANCE MEASURES

<table>
<thead>
<tr>
<th>Category</th>
<th>Index</th>
<th>2021 Target</th>
<th>2021 Actual</th>
<th>2022 Target</th>
<th>2022 Actual</th>
<th>2023 Target</th>
<th>2023 Actual</th>
<th>2024 Target</th>
<th>2024 Actual</th>
<th>2025 Target</th>
<th>2025 Actual</th>
<th>2026 Target</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A-1 (FHWA) Percentage of pavements of the Interstate System in Good condition</td>
<td>20%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>20%</td>
<td>N/A</td>
<td>20%</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A-2 (FHWA) Percentage of pavements of the Interstate System in Poor condition</td>
<td>10%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>5%</td>
<td>N/A</td>
<td>5%</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A-3 (FHWA) Percentage of pavements of the non- Interstate NHS in Good condition</td>
<td>15%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>15%</td>
<td>N/A</td>
<td>15%</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A-4 (FHWA) Percentage of pavements of the non- Interstate NHS in Poor condition</td>
<td>15%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>15%</td>
<td>N/A</td>
<td>15%</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A-5 (FHWA) Percentage of NHS bridges classified as in Good condition</td>
<td>40%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>40%</td>
<td>N/A</td>
<td>40%</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A-6 (FHWA) Percentage of NHS bridges classified as in Poor condition</td>
<td>10%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>10%</td>
<td>N/A</td>
<td>10%</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A-7 (FHWA) Infrastructure: Percentage of track segments under performance restriction</td>
<td>N/A</td>
<td>N/A</td>
<td>1.42%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A-10 (FTA) Rolling Stock: Percentage of revenue vehicles exceeding useful life benchmark</td>
<td>N/A</td>
<td>N/A</td>
<td>1.42%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3%</td>
<td>N/A</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A-11 (FTA) Equipment: Percentage of non-revenue vehicles exceeding useful life benchmark</td>
<td>N/A</td>
<td>N/A</td>
<td>1.42%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3%</td>
<td>N/A</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A-12 (FTA) Facilities: Percentage of facilities rated under 3.0 on the TERM scale</td>
<td>N/A</td>
<td>N/A</td>
<td>1.42%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3%</td>
<td>N/A</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2A-1 (FHWA) Number of fatalities</td>
<td>75</td>
<td>70</td>
<td>70</td>
<td>83</td>
<td>70</td>
<td>86</td>
<td>75</td>
<td>N/A</td>
<td>N/A</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 25: MTP Implementation Strategies with corresponding related goals.

<table>
<thead>
<tr>
<th>PERFORMANCE MEASURES IMPLEMENTATION STRATEGIES</th>
<th>CORRESPONDING GOALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set targets for and adopt new, local performance measures proposed through this MTP process (Appendix 3). Performance measure targets are set through a process between AMATS and Alaska DOT&amp;PF as required in an agreement between the parties. First data is gathered and provided for review by both parties. Then a meeting is held to discuss the data and establish a target that best fits the available data. AMATS targets are reviewed by the Technical Advisory Committee and approved by the Policy Committee.</td>
<td>Goal 4: Support the Economy</td>
</tr>
<tr>
<td>Continuously review and revise local performance measures to track data related to goals and objectives of the MTP.</td>
<td>Goal 5: Promote a Healthy Environment</td>
</tr>
<tr>
<td>Begin data collection for proposed local performance measures that currently lack baseline data.</td>
<td>Goal 6: Advance Equity</td>
</tr>
<tr>
<td>Incorporate performance measures and targets from related planning efforts.</td>
<td>Goal 1: Maintain Existing Infrastructure</td>
</tr>
<tr>
<td>Create checklist for projects that incorporate Complete Streets supportive elements.</td>
<td>Goal 2: Improve Safety and Security</td>
</tr>
<tr>
<td>Explore removing Right Turn on Red at select locations, with a focus on intersections with high crash rates.</td>
<td>Goal 3: Improve Access &amp; Mobility Options</td>
</tr>
<tr>
<td>Update and improve the AMATS regional travel demand model to include active transportation improvements and accommodate transportation system management/travel demand management strategies.</td>
<td>Goal 4: Support the Economy</td>
</tr>
<tr>
<td>Work with AMATS committees to define an achievable mode split target consistent with MTP goals.</td>
<td>Goal 5: Promote a Healthy Environment</td>
</tr>
<tr>
<td>Review the Congestion Management Process performance measures to develop a connectivity index for bike and pedestrian travel.</td>
<td>Goal 6: Advance Equity</td>
</tr>
<tr>
<td>Develop a plan to use the health and equity information from the non-motorized plan to enhance AMATS’ capability to address equity, environmental justice, and Title VI issues. Identify update cycle for the data.</td>
<td>Goal 1: Maintain Existing Infrastructure</td>
</tr>
<tr>
<td>Develop a plan to expand affordable and convenient transportation options to traditionally underserved populations, including children, elders, and people with disabilities.</td>
<td>Goal 2: Improve Safety and Security</td>
</tr>
</tbody>
</table>

Table 26: Strategic Planning Implementation Strategies

<table>
<thead>
<tr>
<th>STRATEGIC PLANNING IMPLEMENTATION STRATEGIES</th>
<th>CORRESPONDING GOALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinate efforts and encourage collaboration on winter maintenance priorities. Establish priorities to meet the needs of the community based on transit routes, active transportation needs, and equity considerations.</td>
<td>Goal 1: Maintain Existing Infrastructure</td>
</tr>
<tr>
<td>Work with the AMATS committees to identify funding for improved winter maintenance.</td>
<td>Goal 2: Improve Safety and Security</td>
</tr>
<tr>
<td>Evaluate adding a new MTP or TIP screening criteria that considers life cycle cost.</td>
<td>Goal 3: Improve Access &amp; Mobility Options</td>
</tr>
<tr>
<td>Develop a cost/benefit analysis tool for use with the MTP and TIP.</td>
<td>Goal 4: Support the Economy</td>
</tr>
<tr>
<td>Explore with planning partners the opportunities and tools available to establish dedicated funding sources for transit operations that will also support implementation of the 2040 Land Use Plan goals.</td>
<td>Goal 5: Promote a Healthy Environment</td>
</tr>
<tr>
<td>Increase in transit revenue miles by 50% to promote higher transit mode share, lower emissions, and promote walking and bicycling.</td>
<td>Goal 6: Advance Equity</td>
</tr>
<tr>
<td>Use pricing policy to better balance the impacts of driving with the costs to promote a shift to transit and active transport modes, with the effect of lowering congestion and emissions. Specific tactics found to produce such outcomes included a 10-cent-per-gallon real increase in fuel taxes, 50% higher parking fees at the destination ends of personal travel plus a 50% increase in the area subject to such fees, and the equivalent of a 3-cent-per-mile road usage charge. These tactics could also increase revenues to help fund MTP investments.</td>
<td>Goal 1: Maintain Existing Infrastructure</td>
</tr>
<tr>
<td>Increase road operations efficiencies for driving through a 10% higher investment in intelligent transportation system improvements within the planning geography to mitigate some congestion and lower emissions by making vehicle travel more efficient.</td>
<td>Goal 2: Improve Safety and Security</td>
</tr>
<tr>
<td>Allow for increased density of land uses (both residential and employment) per the policies in the Anchorage 2040 Land Use Plan for small but noticeable changes across multiple outcomes: lowering emissions, increasing transit and active transport usage, promoting walking and biking, and lowering roadway congestion. Increasing density of land uses would also increase the tax revenue from property owners moving into the area.</td>
<td>Goal 3: Improve Access &amp; Mobility Options</td>
</tr>
</tbody>
</table>
Chapter 8
Air Quality and the MTP

This section details the federally required air quality conformance to ensure that future transportation project recommendations do not adversely impact the natural environment and especially air quality from vehicle carbon emissions.

Air quality in Anchorage has remained in attainment of national ambient air quality standards (NAAQS) promulgated by the U.S. Environmental Protection Agency (EPA) for more than twenty years, except for uncontrolled wildfire smoke occasionally impacting large regions of Alaska during spring and mid-summer. The EPA has established standards for ground level ozone, sulfur oxides, nitrogen dioxide, airborne lead, and carbon monoxide (CO), as well as for particulate matter less than 2.5 microns in diameter (PM-2.5) and less than 10 microns in diameter (PM-10). These standards for criteria pollutants were established to protect the most sensitive individuals, including those with existing respiratory or other chronic health conditions, children, and the elderly. To ensure compliance with these standards, Anchorage maintains a network of air quality monitoring sites.

Background

Anchorage enjoys low levels of most types of air pollution. In 2014, the American Lung Association ranked Anchorage as one of the three cleanest cities in the United States with respect to annual average PM-2.5 and ozone pollution. Sulfur oxides and nitrogen dioxide also are not a significant concern locally. This is compared to almost half of the United States population that lives in areas that do not meet national air quality standards.

PM-10

Under specific meteorological conditions, large amounts of dust from the Matanuska, Knik, and Susitna River valleys north of the HOA can be transported to Anchorage, Eagle River, and Chugiak by wind (see Figure 28). This phenomenon has been responsible for many of the PM-10 exceedances that have occurred in Anchorage.
over the years. The EPA excludes violations resulting from volcanic eruptions or transport of glacial river dust if the exceedances can be classified as an exceptional event, not caused by human actions.

The Air Quality Conformity analysis performed for this MTP is in conformance with the Alaska State Implementation Plan for air quality and meets conformity requirements outlined in 40 CFR 93 for PM-10. The analysis concludes that the MTP will not undermine the ability of the Municipality of Anchorage (MOA) to maintain compliance with the NAAQS for PM-10.

Carbon Monoxide

During the past two decades, Anchorage has experienced a dramatic improvement in CO air quality (Figure 29). In the early 1980s, Anchorage violated the standard as many as 50 times per year. Since then, concentrations have dropped more than 70 percent. In addition, no violations of the federal standard, which is set at 9 parts per million (ppm) for an 8-hour average, have been measured since 1996. Continual advancements in technology to control air pollution on newer vehicles are largely responsible for this improvement.

In January 2012, the EPA approved a revised CO control plan for Anchorage that showed the vehicle inspection and maintenance program was no longer necessary to meet the federal CO standard. Effective May 2, 2014, Anchorage was reclassified as a Limited Maintenance area for CO. Anchorage continues to implement CO reduction measures such as the RideShare vanpool program to maintain compliance with the CO standard. Figure 29 illustrates the trend in CO concentrations.

The Air Quality Conformity Determination analysis performed for this MTP is in conformance with the Alaska State Implementation Plan for air quality and meets conformity requirements outlined in 40 CFR 93 for CO. The analysis concludes that the MTP will not undermine the ability of the MOA to maintain compliance with the NAAQS for CO.

Lead

In 2008, The EPA established a more stringent air quality standard for airborne lead based on current scientific evidence of health impacts. The new standard is about one-tenth its former level. Merrill Field was selected by the EPA as one of 15 airports nationwide for inclusion in a one-year study to determine whether airports serving large numbers of piston aircraft comply with the NAAQS for lead. Sampling completed by the Anchorage Health Department on the Merrill Field runway apron in October 2012 at the location of expected maximum impact determined that daily average concentrations of airborne lead were less than half the new federal standard.