

# CHAPTER 7 RECOMMENDATIONS

Informed decisions about transportation issues and about where and when to allocate limited infrastructure investments rely on two key knowledge areas: (1) understanding the shape, character, and extent of future land development in the MOA and surrounding region; and (2) the results of analyzing a range of possible future transportation plan options with the AMATS travel demand model.

As detailed in the previous chapter, federal, state, and local funds will be insufficient to build all projects identified in Chapter 5 to meet the 2035 travel demands. Recognizing the broad range of transportation modes used and the dispersed travel patterns, MTP investments need to expand the travel choices and be effectively spread across these priority areas:

- Increasing road safety, connectivity, and capacity
- Managing the transportation system better
- Deploying new technologies for traffic signal control
- Expanding transit service and infrastructure
- Providing improved and expanded pedestrian, bicycle, and trail facilities

- Facilitating efficient freight handling and movement
- Improving traveler choices and options
- Enhancing integration of transportation facilities and services with community planning and design

The 2035 MTP will guide more than \$2.37 billion in transportation capital project investments within the metropolitan area during the next 25 years.

Analyses identified the following transportation-related findings about current and future conditions:

- Travel from Chugiak-Eagle River and the Mat-Su Borough into the Anchorage Bowl is rapidly increasing.
- Travel is broadly dispersed, with at least six major activity centers in Anchorage that attract large numbers of trips. Contrary to common belief, the downtown Central Business District is not the primary destination of trips within the Anchorage Bowl. The Midtown District is the predominant destination of trips.
- Attaining the vision and goals of the Anchorage Bowl and Chugiak-Eagle River comprehensive plans will involve more effective system management, availability of and access to alternative travel options, freight network improvements, traveler behavior shifts, and reduced automobile dependence.
- Significant improvements to the road system will be required to meet future travel needs. The performance of the existing road network is significantly hindered because of missing route segments, bottlenecks, and limited major north-south and east-west through connections. (See Chapter 4.)
- Expanding and maintaining the sidewalks, bicycle facilities, and multi-use trail network are important to the community. These improvements encourage non-motorized and healthy travel and provide better public transportation access. The community highly values open space and the existing trail system. Filling in gaps will create better continuity, improve safety for pedestrians and bicyclists, and create a more integrated multimodal system.
- Improving public transportation is important to increase mobility for a broader spectrum of residents. Comprehensive public transportation service provides options for all users of the system, relieves congestion along freeways and arterials, and reinforces goals and objectives of the Anchorage Bowl and Chugiak-Eagle River comprehensive plans. Widely dispersed activity centers and travel patterns and the relatively low residential densities present challenges for providing effective public transportation. Reducing door-to-door travel times by public transportation is key to attracting new riders.

## A Call to Action

The cumulative investment in the existing transportation system is very large. A high priority is to obtain the best possible performance from the existing system. Continuous refinements must include the following:

- Regularly updating traffic signal timing plans
- Using technology to help manage and operate the transportation systems
- Running public transportation as efficiently as possible
- Responding quickly to resolve bottlenecks in the road network that hinder traffic and transit flow

## TRAFFIC SIGNAL TIMING

Managing traffic signals is arguably the most important traffic engineering function within a city. Few activities have an equivalent impact on the public. Optimizing traffic signal timing and coordination has the potential to significantly reduce driver delay and congestion. Simple things—like adjusting the length of the red-green-yellow cycle for different daytime hours, weekdays versus weekends, and seasonally—can reduce traveler delay by upwards of a million traveler hours annually.

More than 250 intersections have traffic signals in Anchorage. Getting the timing correct is critical for minimizing delay, improving safety, and protecting non-motorized modes of transportation. The MOA has a vigorous program to keep its signal system timing plan updated to reflect current travel patterns. Complete signal timing reviews and updates are scheduled to be done at least every 4 years.

## SIGNAL SYSTEM TECHNOLOGY UPGRADE

The importance of an efficient arterial street network operation is evident: currently two-thirds of congested hours of travel in the Anchorage metropolitan area occur on arterial and collector streets, and traffic signals are the principal instruments for managing the efficient flow of traffic.

Advanced technologies and systems for traffic signal control can enable Anchorage traffic engineers to more efficiently and more effectively manage the traffic signal system. The MOA needs to upgrade its traffic signal hardware, software, and management systems by leveraging ITS technologies. Core upgrade features include state-of-the-art signal controllers, management software for modern modular signal systems, automated data collection and camera surveillance, and real-time communication between field sites and a central traffic management center. Signal preemption for emergency vehicles and signal priority for buses needs to be part of the upgrade package.

The benefits of this technology upgrade investment will include significant MOA traffic staffing productivity gains and reduction in travel delay. These benefits are realized through automated data acquisition for timely decisions, real-time capability to monitor traffic operations, quick adaptations of signal-control strategies to traffic conditions, and adjustments of timing patterns by time of day, daily cycles, seasonal changes, emergencies, and special events.

## **PUBLIC TRANSPORTATION SYSTEM OPERATION**

In 2011, the MOA budget provides more than \$26 million per year to operate People Mover, AnchorRIDES, and Share-A-Ride programs. The cost is partially offset by operating revenues from passenger fares and advertising. People Mover is implementing its bus fixed-route-restructuring plan (documented in The People Mover Blueprint: A Plan to Restructure the Anchorage Transit System, by RLS and Associates, 2009; discussed in Chapter 5) to realign routes, coordinate bus schedules, increase service frequencies, and improve service availability and accessibility. People Mover's ability to deliver more service is directly tied to the level of operating funding.

### *Completion of the Route Restructuring Plan Implementation*

The restructuring plan calls for 30-minute service frequency all day on all routes. These frequency improvements need to be completed; they increase riders and improve productivity.

In parallel with the frequency improvements, continuous focus on service-delivery quality, on-time schedule performance, refinements in stop locations to optimize passenger access and bus travel times, and attention to details will help boost ridership. These efforts include listening to customers, monitoring performance, fine-tuning bus operations, and providing clean and safe vehicles, courteous drivers, and easy public access to route and schedule information.

### *New Buses*

No additional buses will be required to complete Service Expansion Priority 1. This top priority is reinstatement of previously cancelled nighttime and weekend bus service. Two additional buses will be required to provide 30-minute service frequency on all routes to accomplish Service Expansion Priority 2. An additional 12 buses will be required to accomplish Service Priority 3, which provides 15-minute headways on Routes 3 (Northern Lights), Route 36 (West Anchorage/U-Med district), and Route 45 (Mountain View).



By fall 2011, People Mover will have replaced 41 of its 52 buses with newer, low-floor, accessible buses. Also in 2011, People Mover will have expanded its Share-a-Ride program by 10 new vanpools and will have replaced 10 AnchorRIDES vehicles. The MTP supports the continued replacement of the People Mover vehicle fleet through the use of federal capital grant funding (80 percent of the capital cost), but the MOA will need to provide the additional 20 percent in matching funds. New buses and marketing promotions will further reinforce gains in riders.

### *Public Transportation Funding*

Funding is the critical issue for People Mover throughout the MTP planning horizon. Maintaining the momentum—increased riders and productivity—of the People Mover route-restructuring plan is crucial. Momentum cannot be sustained in the absence of committed and stable public funding support. Funding priorities are to complete the restructuring improvements, continue to expand service throughout the metropolitan area, and secure funding for new buses.

### **CONGESTION BOTTLENECK REPAIRS**

Transportation network performance is often hindered at critical locations that constrict travel flow and create network bottlenecks. Transitions from freeways to arterials and highly congested intersections are good examples of bottlenecks. A continuing program is recommended to resolve trouble spots as quickly as possible. Suggested strategies to fix, or at least mitigate, these bottlenecks are spot improvements employing a variety of traffic engineering and congestion management tools. The existing MOA right-turn program will be expanded, and reviews of intersections and pedestrian safety will continue. Remedying problem sites can make noticeable improvements in network performance.

## Roads

The roadway network is the backbone of the metropolitan area transportation system and will continue to be so during the next 25 years. Projected 2035 population and development are used in the travel model to identify future road traffic volumes indicating when and where road improvements will be needed. The recommended road projects are necessary to provide system connectivity and accommodate expected future traffic demand.

The majority of new-road and road-improvement projects occur on the freeway and arterial network, including both state highways and significant municipal streets. New and improved collector roads that provide network connectivity and capacity are included in the recommended projects. The collector upgrades include important non-motorized facilities for pedestrians, bicyclists, and persons with disabilities. If collectors need upgrades to meet current standards, but do not add new capacity, safety, or connectivity, they have not been included in the recommended MTP project list. For MOA-owned collectors, these road upgrades to meet standards likely will be included as MOA bond-funded improvements. (Projects to reconstruct roadways to meet urban standards, typically without adding lanes or capacity, will need to be implemented during the next 25 years.)

## INITIAL ROAD PROJECT SCREENING PROCESS

Because of the approximately \$525 million shortfall in road project funding identified in Chapter 6, it is necessary to strategically pare the list of roadway projects originally identified as needed to meet the 2035 travel needs. An initial project-screening process was approved by the TAC+ group representing diverse community interests to accomplish the almost 20 percent shortfall for road funding. Each future road project was scored by using the six criteria identified in Table 7-1.

Table 7-1 Initial Screening Criteria for Road Projects

Criterion	Scoring Points			
	0	1	3	5
Project readiness	No work started	Some preliminary design and/or environmental work complete	Final engineering completed or nearing completion	ROW purchased; ready to construct
Timing of need	Can wait until beyond 2035	Long-term need (2023-2035)	Needed in short term—helps to complete grid system or improves facility to standards	Needed in short term (2011-2023)—addresses major safety/capacity needs
Logical sequencing	N/A	New project	N/A	Next logical or final phase of an existing road
Functional classification	Local	Collector	Arterial/expressway	Freeway
Number of modes (automobile, pedestrian, bike, transit, freight or intermodal)	Single	Two	Three	Four or more
Cost/length/AADT	4th quartile	3rd quartile	2nd quartile	1st quartile (highest score)

N/A = not applicable

The results of the screening process for road projects are shown in Table 7-2. Following the ranking of the roadway projects by the total score for each project, the projects were grouped into short-term (2011-2023), long-term (2024-2035), and illustrative (beyond 2035) periods to ensure that the

annual capital cost outlays closely matched the expected annual funding revenue stream. Some projects that received high scores were moved into later time periods to balance the costs and revenues; other projects with lower scores were moved up because of their funding commitments

already made through the AMATS TIP process.

Although not part of the recommended 2035 MTP road projects, the illustrative projects have been identified in this MTP to assist local officials in identifying future projects if additional funds become available before the next regularly scheduled MTP is prepared and adopted. However, in order for any of the illustrative projects to become part of the MTP, a major amendment of the MTP would be necessary to officially include the project as a short- or long-term project.

Table 7-2 Initial Screening Scores for Road Projects

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Criterion Scoring Points						
				Project Readiness	Timing of Need	Logical Sequencing	Functional Classification	Cost/Length/AADT	Multi-modal Function	Total
101	Seward Hwy - Dimond Blvd to Dowling Rd	Dimond Blvd to Dowling Rd	\$88.8	3	5	5	5	5	3	26
102	Dowling Rd Extension - Phase II	C St to Minnesota Dr	\$63.4	3	5	5	3	1	5	22
103	100th Ave Extension - Minnesota Dr to C St	Minnesota Dr to C St	\$8.7	5	5	5	1	0	5	21
104	36th Ave/Seward Hwy Interchange	Tudor Rd to 33rd Ave	\$108.0	1	5	1	5	3	5	20
105	Glenn Hwy - Hiland Rd to Artillery Rd (Eagle River)	Hiland Rd to Artillery Rd	\$62.8	1	5	1	5	5	3	20
106	Muldoon Rd Interchange	Glenn Hwy at Muldoon Rd	\$70.0	1	5	1	3	5	5	20
107	Seward Hwy - O'Malley Rd to Dimond Blvd	O'Malley Rd to Dimond Blvd	\$42.1	1	3	5	5	3	3	20
108	36th Ave Access Management - Spenard Rd to Denali St	Spenard Rd to Denali St	\$1.5	0	5	1	3	5	5	19
109	Jewel Lake Rd - Dimond Blvd to International Airport Rd	Dimond Blvd to International Airport Rd	\$13.0	0	5	1	3	5	5	19
110	Arctic Blvd Rehabilitation - 36th Ave to Tudor Rd	36th Ave to Tudor Rd	\$8.5	0	3	5	3	3	5	19
111	Northern Lights Blvd - Lake Otis Pkwy to Bragaw St	Lake Otis Pkwy to Bragaw St	\$8.0	0	3	5	3	3	5	19
112	Spenard Rd Rehabilitation - Hillcrest Dr to Benson Blvd	Hillcrest Dr to Benson Blvd	\$16.6	3	5	1	3	1	5	18
113	O'Malley Rd - Seward Hwy to Hillside Dr	Seward Hwy to Hillside Dr	\$29.0	3	3	1	3	5	3	18
114	Seward Hwy Improvements (Midtown Congestion Relief)	33rd Ave to Chester Creek	\$178.0	1	5	1	5	1	5	18
115	Fireweed Ln Rehabilitation - Spenard Rd to Seward Hwy	Spenard Rd to Seward Hwy	\$10.4	1	5	1	3	5	3	18

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Criterion Scoring Points						
				Project Readiness	Timing of Need	Logical Sequencing	Functional Classification	Cost/Length/AADT	Multi-modal Function	Total
116	Seward Hwy - O'Malley Rd to Rabbit Creek Rd	O'Malley Rd to Rabbit Creek Rd	\$7.1	1	3	1	5	5	3	18
117	Seward Hwy/92nd Ave Grade Separation	Homer Dr to Brayton Dr	\$60.4	3	5	1	5	0	3	17
118	Lake Otis Pkwy - Northern Lights Blvd to Debarr Rd	Northern Lights Blvd to Debarr Rd	\$34.9	0	5	1	3	3	5	17
119	Northern Lights Blvd - Postmark Dr to Nathaniel Ct	Postmark Dr to Nathaniel Ct	\$14.9	0	5	1	3	5	3	17
120	DeArmoun Rd Reconstruction - Phase II	140th Ave to Hillside Dr	\$15.0	1	5	5	1	1	3	16
121	Spenard Rd Rehabilitation - Benson Blvd to Minnesota Dr	Benson Blvd to Minnesota Dr	\$50.2	1	5	1	3	0	5	15
122	Eagle River Rd Rehabilitation - MP 5.3 to MP 12.6 (Eagle River)	Eagle River Rd, MP 5.3 to MP 12.6	\$28.4	3	5	1	3	1	1	14
123	Eklutna River Bridge Rehabilitation/Replacement (Eagle River)	Old Glenn Hwy	\$6.8	1	5	1	3	1	3	14
124	Abbott Rd - Lake Otis Pkwy to Birch Rd	Lake Otis Pkwy to Birch Rd	\$39.0	1	3	1	3	3	3	14
125	North Access to U-Med District	Providence Dr to Northern Lights Blvd	\$17.5	1	3	1	3	1	5	14
126	Glenn Hwy/Farm Ave Partial Interchange (Eagle River)	Glenn Hwy at Farm Ave	\$50.0	0	3	1	5	0	5	14
127	Artillery Rd northbound off-ramp to Eagle River Rd (Eagle River)	Glenn Hwy to Eagle River Rd	\$13.5	0	5	1	5	1	1	13
128	Farm Ave Realignment at Old Glenn Hwy (Eagle River)	Winter Park Place to Old Glenn Hwy	\$6.5	0	5	1	3	1	3	13
129	Eagle River Rd Rehabilitation - MP 0.0 to MP 5.3 (Eagle River)	Eagle River Rd, MP 0 to Upper Terrace St (MP 5.3)	\$29.0	0	3	1	3	3	3	13

Table 7-2 Initial Screening Scores for Road Projects (cont.)

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Criterion Scoring Points						
				Project Readiness	Timing of Need	Logical Sequencing	Functional Classification	Cost/Length/AADT	Multi-modal Function	Total
130	92nd Ave/Academy Dr Extension - Brayton Dr to Abbott Rd	Brayton Dr to Abbott Rd	\$8.8	1	3	1	3	1	3	12
131	Mountain Air Dr - Rabbit Creek Rd to E 164th Ave	Rabbit Creek Rd to E 164th Ave	\$7.9	3	3	1	1	0	3	11
132	Northwood Dr Extension - Strawberry Rd to Dimond Blvd	Strawberry to Dimond Blvd	\$26.2	0	3	1	3	0	3	10
133	Business Blvd Extension (Eagle River)	Business Blvd to Eagle River Rd at Artillery Rd	\$10.0	0	3	1	1	0	5	10
134	Homestead Rd Improvements (Eagle River)	Oberg Rd to Voyles Blvd	\$7.1	0	3	1	1	0	3	8
135	Short-Term MTP Element Implementation Projects	AMATS area	\$6.0	N/A	N/A	N/A	N/A	N/A	N/A	0
136	3rd Ave, 6th Ave Couplet/E St Conversion Reconnaissance Study	L St to Ingra-Gambell Couplet/3rd Ave to 4th Ave	\$0.5	N/A	N/A	N/A	N/A	N/A	N/A	0
137	Glenn Hwy Operations Analysis - Muldoon Rd to Eklutna	Muldoon Rd to Eklutna	\$5.6	N/A	N/A	N/A	N/A	N/A	N/A	0
138	Midtown Subarea Transportation Plan	Midtown area	\$0.8	N/A	N/A	N/A	N/A	N/A	N/A	0
139	Seward Hwy/O'Malley Rd Interchanges Study	Old Seward Hwy to Seward Hwy	\$0.5	N/A	N/A	N/A	N/A	N/A	N/A	0
140	Knik Arm Crossing - Phase I	A-C Couplet to Point MacKenzie-Burma Rd Intersection	\$852.0	3	1	1	3	1	3	12
201	Seward Hwy/Glenn Hwy Connection – Phase III	Chester Creek to Airport Heights Dr	\$605.0	1	5	1	5	3	5	20
202	Huffman Rd Rehabilitation - Pintail St to Birch Rd	Pintail St to Birch Rd	\$8.0	0	3	5	1	3	3	15
203	Rabbit Creek Rd - Seward Hwy to Golden View Dr	Seward Hwy to Golden View Dr	\$11.7	0	3	1	3	3	3	13

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Criterion Scoring Points						
				Project Readiness	Timing of Need	Logical Sequencing	Functional Classification	Cost/Length/AADT	Multi-modal Function	Total
204	Glenn Hwy HOV Lane - Artillery Rd to Mile 21.5 (Eagle River)	Eagle River, Artillery Rd to Mile 21.5	\$55.0	0	1	1	5	5	1	13
205	Glenn Hwy HOV Lane - Boniface Pkwy to Artillery Rd Interchange	Boniface Pkwy to Eagle River Artillery Rd Interchange	\$71.7	0	1	1	5	5	1	13
206	Davis St and Santa Maria Dr Realignment at Old Glenn Hwy (Eagle River)	Old Glenn Hwy - Eagle River Loop and North Eagle River Access	\$5.5	0	3	1	3	0	5	12
207	Eleonora St and S Juanita Loop Realignment at Old Glenn Hwy (Eagle River)	Old Glenn Hwy - Eagle River Loop and North Eagle River Access	\$2.0	0	3	1	3	0	5	12
208	South Birchwood Loop Rd Improvements (Eagle River)	Old Glenn Hwy to Birchwood Loop Rd	\$38.0	0	3	1	1	3	3	11
209	A/C St Couplet Restripe - Tudor Rd to 9th Ave	Tudor Rd to 9th Ave	\$0.5	0	1	1	3	5	1	11
210	Birchwood Loop and Birchwood Spur Rd Improvements (Eagle River)	Old Glenn Hwy to Birchwood Airport	\$16.6	0	1	1	3	3	3	11
211	Seward Hwy/O'Malley Rd Interchange	Old Seward Hwy to Seward Hwy	\$75.0	0	1	1	5	3	1	11
212	C St/Ocean Dock Rd Access Ramp	C St Viaduct to Ocean Dock Rd	\$11.2	0	3	1	3	0	3	10
213	Ingra-Gambell Couplet Extension - 3rd Ave to Whitney Rd	3rd Ave to Whitney Rd	\$26.0	0	1	1	3	0	3	8
214	Boniface Pkwy to Muldoon Frontage Rd	Boniface Pkwy to Muldoon Rd	\$18.0	0	3	1	1	1	1	7
215	Eagle River CBD - Phase II, Study (Eagle River)	Downtown Eagle River & Residential Core	\$0.5	N/A	N/A	N/A	N/A	N/A	N/A	0
216	Long-Term MTP Element Implementation Projects	AMATS area	\$6.0	N/A	N/A	N/A	N/A	N/A	N/A	0

Table 7-2 Initial Screening Scores for Road Projects (cont.)

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Criterion Scoring Points						
				Project Readiness	Timing of Need	Logical Sequencing	Functional Classification	Cost/Length/AADT	Multi-modal Function	Total
217	North Eagle River Interchange Capacity Modifications Study (Eagle River)	Glenn Hwy at North Eagle River Access Rd	\$0.5	N/A	N/A	N/A	N/A	N/A	N/A	0
218	Knik Arm Crossing - Phase II	Ingra-Gambell Couplet Connection	\$230.0	1	1	1	3	0	5	11
301	Tudor Rd Access Management - Seward Hwy to Arctic Blvd	Seward Hwy to Arctic Blvd	\$14.0	0	5	1	3	5	5	19
302	Tudor Rd Access Management - Seward Hwy to Patterson St	Seward Hwy to Patterson St	\$41.6	0	5	1	3	5	5	19
303	Boniface Pkwy Access Management - Tudor Rd to Glenn Hwy	Tudor Rd to Glenn Hwy	\$22.5	0	1	1	3	5	3	13
304	Jewel Lake Rd/International Airport Rd Grade Separation	Jewel Lake Rd to Northwood St	\$50.6	0	0	1	3	3	5	12
305	Postmark Dr/International Airport Rd Grade Separation	Postmark Dr to International Airport Rd	\$23.6	0	0	1	3	3	5	12
306	Lake Otis Pkwy Extension - Debarr Rd to Glenn Hwy	Debarr Rd to Glenn Hwy	\$36.0	1	3	1	3	0	3	11
307	Elmore Rd Extension - O'Malley Rd to Abbott Rd	O'Malley Rd to Abbott Rd	\$35.2	0	3	1	1	3	3	11
308	Hiland Rd Improvements - MP 1.0 to MP 8.3 (Eagle River)	Hiland Rd - MP 1.0 to MP 8.3	\$31.7	0	3	1	1	5	1	11
309	Minnesota Dr Corridor/Tudor Rd Interchange	International Airport Rd to Northern Lights Blvd/Minnesota Dr at Tudor Rd	\$112.7	0	1	1	3	3	3	11
310	84th Ave - Hartzell Rd to Lake Otis Pkwy	Hartzell Rd to Lake Otis Pkwy	\$9.4	1	3	1	1	1	3	10
311	Seward Hwy - Potter Weigh Station to Rabbit Creek Rd	Potter Weigh Station to Rabbit Creek Rd	\$47.0	1	1	1	3	1	3	10



Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Criterion Scoring Points						
				Project Readiness	Timing of Need	Logical Sequencing	Functional Classification	Cost/Length/AADT	Multi-modal Function	Total
312	92nd Ave Extension - King St to Old Seward Hwy	King St to Old Seward Hwy	\$17.2	0	3	1	3	0	3	10
313	92nd Ave Extension- Minnesota Dr to King St	Minnesota Dr to King St	\$11.0	0	3	1	3	0	3	10
314	Birch Rd - Huffman Rd to O'Malley Rd	Huffman Rd to O'Malley Rd	\$9.0	0	3	1	1	1	3	9
315	Whitney Rd - North C St to Post Rd	North C St to Post Rd	\$15.0	0	3	1	1	1	3	9
316	Minnesota Dr (northbound) - 26th Ave to 15th Ave	26th Ave to 15th Ave	\$29.3	0	1	1	3	1	1	7
317	Minnesota Dr Frontage Rd	Dimond Blvd to Raspberry Rd	\$9.0	0	1	1	1	1	3	7
318	Golden View Dr Extension	Romania Dr to Potter Valley Rd	\$18.1	0	3	1	1	0	1	6
319	Elmore Rd Extension - Rabbit Creek Rd to DeArmoun Rd	Rabbit Creek Rd to DeArmoun Rd	\$19.0	0	1	1	1	0	3	6
320	Huffman Rd Extension - Birch Rd to Hillside Dr	Birch Rd to Hillside Dr	\$13.5	0	1	1	1	0	3	6
321	Railroad Grade Separation - C St	C St	\$91.5	0	0	1	3	1	1	6
322	Eklutna Lake Rd Rehabilitation (Eagle River)	Old Glenn Hwy to Eklutna Lake	\$39.0	0	1	1	1	1	1	5
323	Knik Arm Ferry Service - Anchorage Terminal	Ship Creek area		0	0	1	0	N/A	3	4
324	Seward Hwy/O'Malley Rd Interchanges	Old Seward Hwy to Seward Hwy	\$75.0	0	0	1	0	N/A	3	4

CBD = Central Business District

HOV = high-occupancy vehicle

MP = Milepost

N/A = not applicable

In Table 7-3, which provides a detailed list of 2035 MTP recommended road projects, the projects are grouped into their recommended time periods. Short-term projects are to be constructed between 2011 and 2023, and long-term projects are to be constructed between 2024 and 2035. The locations of recommended road projects are illustrated in Figure 7-1 (Anchorage Bowl) and Figure 7-2 (Chugiak-Eagle River) by geographic areas within the metropolitan area. Some projects provide for infrastructure preservation and rehabilitation; almost all add pedestrian, bicycle, and related enhancements (as components of projects that are building or rebuilding adjacent roads); and some add capacity to critical segments.

### ROAD IMPROVEMENT HIGHLIGHTS

The recommended road improvements accomplish the following:

- Complete missing segments to reduce the need to expand other streets
- Interconnect the upgraded Seward Highway with improved interchanges and a new freeway interchange connection to Minnesota Drive, and add three new east-west street connections across the Seward Highway to provide better circulation
- Connect the Glenn and Seward highways to provide needed capacity and more efficient freight distribution
- Improve the Glenn Highway interchanges at Hiland Road and Artillery Road and add a new partial interchange at Farm Avenue to provide safer and more efficient movements in the Eagle River area
- Add improvements to the Seward Highway south of Rabbit Creek Road to the AMATS boundary to address safety issues and provide bicycle facilities
- Improve surface streets over and around the Glenn and Seward highway corridors to calm traffic and create opportunities for modes of travel other than the automobile
- Expand access to TSAIA with Minnesota Drive and Jewell Lake Road projects
- Ease the Glenn Highway corridor commute with interchange improvements and additional high-occupancy vehicle (HOV) lanes
- Expand access to the Port of Anchorage and Port MacKenzie and provide a second major roadway connection from Anchorage to Interior Alaska with the Knik Arm Crossing project
- Improve circulation and accessibility in the Eagle River Central Business District and residential core with a number of improvements on the arterial and collector system
- Three especially important projects are the Seward-Glenn highways connection (in three phases), the Glenn Highway corridor project to the north, and the Knik Arm Crossing.

Table 7-3 Recommended 2035 MTP Road Projects

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Project Purpose and Description
<b>Short-Term Projects (2011–2023)</b>				
101	Seward Hwy - Dimond Blvd to Dowling Rd	Dimond Blvd to Dowling Rd	\$88.8	Reconstruct and widen from 4 to 6 lanes from Dimond to Dowling Rd with frontage road improvements, landscaping, and possible noise walls. Includes 68th and 76th avenues grade separation, reconstruction of Dowling Rd interchange and roundabouts. Does not include reconstruction of Dimond Blvd interchange. Recommend separated pathways on frontage roads. Purpose: Capacity and freight. Facility Class: Freeway. Length of Project: 2 miles. Length of new sidewalk: None. Length of new pathway: 2 miles. Linked project(s): None.
102	Dowling Rd Extension - Phase II	C St to Minnesota Dr	\$63.4	Add new facility - extend Dowling Rd from C St to Minnesota Dr. Recommend bicycle lanes and separated pathway. Purpose: Capacity, freight, circulation. Facility class: Major arterial. Length of project: 1.14 miles. Length of new sidewalk: 1.14 miles. Length of new pathway: 1.14 miles. Linked project(s): None.
103	100th Ave Extension - Minnesota Dr to C St	Minnesota Dr to C St	\$8.7	Add new facility—extend 100th Ave between Minnesota Dr. and C St. Recommend separated pathway. Purpose: Circulation, access, and freight. Facility class: Collector. Length of project: 0.7 mile. Length of new sidewalk: 0.7 mile. Length of new pathway: 0.7 mile. Linked project(s): None.
104	36th Ave/Seward Hwy Interchange (Seward Hwy/Glenn Hwy Connection Phase I)	Tudor Rd to 33rd Ave	\$108.0	Add new facility – interchange at 36th Ave and Seward Hwy, including braided ramps connecting to the Tudor Rd interchange. Phase I of Seward Hwy/Glenn Hwy Connection. Recommend separated pathway. Purpose: Capacity, freight, and circulation. Facility class: Freeway. Length of project: 1 mile. Length of new sidewalk: Replace existing on 36th Ave. Length of new pathway: 1 mile. Linked project(s): 114, 201.
105	Glenn Hwy - Hiland Rd to Artillery Rd (Eagle River)	Hiland Rd to Artillery Rd	\$62.8	Make necessary improvements at Hiland Rd and Artillery Rd interchanges and add a 3rd lane northbound and southbound between Hiland Rd and Artillery Rd; bridge improvements at Eagle River interchange, Hiland Rd interchange, and 2 Eagle River bridges. Purpose: Capacity, circulation, access, and freight. Facility class: Freeway. Length of project: 2 miles. Length of new sidewalk: N/A. Length of new pathway: 4 miles. Linked project(s): 204, 205.
106	Muldoon Rd Interchange	Glenn Hwy at Muldoon Rd	\$70.0	Reconstruct interchange to include ramps and Muldoon Rd bridge. Purpose: Circulation, access, and freight. Facility class: Major arterial. Length of project: 1 mile. Length of new sidewalk: 1 mile. Length of new pathway: N/A. Linked project(s): None.
107	Seward Hwy - O'Malley Rd to Dimond Blvd	O'Malley Rd to Dimond Blvd	\$42.1	Reconstruct and widen from 4 to 6 lanes. Landscaping and possible noise walls. Includes reconstruction of Dimond Blvd interchange. Recommend separated pathways on all frontage road improvements. Purpose: Capacity, circulation, and freight. Facility class: Freeway. Length of project: 1.03 miles. Length of new sidewalk: N/A. Length of new pathway: 1.03 miles. Linked project(s): None.
108	36th Ave Access Management - Spenard Rd to Denali St	Spenard Rd to Denali St	\$1.5	Access management treatments. Purpose: Circulation and access. Facility class: Minor arterial. Length of project: 1.06 miles. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): None.

Table 7-3 Recommended 2035 MTP Road Projects (cont.)

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Project Purpose and Description
109	Jewel Lake Rd - Dimond Blvd to International Airport Rd	Dimond Blvd to International Airport Rd	\$13.0	Reconstruct Jewel Lake to operate as a 2-lane with center turn lane. Recommend bicycle lanes and pedestrian facilities on the other side. Purpose: Maintenance and safety. Facility class: Major arterial. Length of project: 2.9 miles. Length of new sidewalk: 2.9 miles. Length of new pathway: 2.9 miles. Linked project(s): 304
110	Arctic Blvd Rehabilitation - 36th Ave to Tudor Rd	36th Ave to Tudor Rd	\$8.5	Rehabilitate Arctic Blvd from 4 to 3 lanes between 36th Ave and Tudor Rd. Recommend bicycle lanes and pedestrian facilities. Purpose: Circulation and access. Facility class: Minor arterial. Length of project: 0.5 mile. Length of new sidewalk: 0.5 mile. Length of new pathway: None. Linked project(s): None.
111	Northern Lights Blvd - Lake Otis Pkwy to Bragaw St	Lake Otis Pkwy to Bragaw St	\$8.0	Extend third eastbound lane from Lake Otis Pkwy to Bragaw St. May include intersection improvements at Lake Otis Pkwy. Purpose: Capacity. Facility class: Major arterial. Length of project: 1.1 miles. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 125.
112	Spenard Rd Rehabilitation - Hillcrest Dr to Benson Blvd	Hillcrest Dr to Benson Blvd	\$16.6	Rehabilitate from 4 to 2 lanes with a center turn lane. Recommend pedestrian facilities. Purpose: Circulation and access. Facility class: Minor arterial. Length of project: 0.51 mile. Length of new sidewalk: 0.51 mile. Length of new pathway: N/A. Linked project(s): None.
113	O'Malley Rd - Seward Hwy to Hillside Dr	Seward Hwy to Hillside Dr	\$29.0	Rehabilitate to improve safety and capacity. 3-lane section east of Lake Otis Pkwy and 5-lane section between Seward Hwy and Lake Otis Pkwy. Recommend separated pathway and pedestrian facilities. Purpose: Capacity and access. Facility class: Major/minor arterial. Length of project: 3.65 miles. Length of new sidewalk: 3.65 miles. Length of new pathway: 3.65 miles. Linked project(s): None.
114	Seward Hwy Improvements (Midtown Congestion Relief- Seward Hwy/Glenn Hwy Connection Phase II)	33rd Ave to Chester Creek	\$178.0	Reconstruct the Seward Hwy as a depressed freeway, includes interchanges at Northern Lights Blvd, and Benson Blvd and the reconstruction of Old Seward Hwy from 33rd Ave to 20th Ave, Phase II of Seward Hwy/Glenn Hwy Connection. Purpose: Capacity, freight, and circulation. Facility class: Freeway. Length of project: 0.69 mile. Length of new sidewalk: N/A. Length of new pathway: 0.69 mile. Linked project(s): 105, 201.
115	Fireweed Ln Rehabilitation - Spenard Rd to Seward Hwy	Spenard Rd to Seward Hwy	\$10.4	Rehabilitate roadway to improve surface and safety for automobiles. Recommend bicycle lanes and pedestrian facilities. Purpose: Circulation and access. Facility class: Minor arterial. Length of project: 1.25 miles. Length of new sidewalk: 1.25 miles. Length of new pathway: 1.25 miles. Linked project(s): 112, 209.
116	Seward Hwy - O'Malley Rd to Rabbit Creek Rd	O'Malley Rd to Rabbit Creek Rd	\$7.1	Construct ADA ramps for existing pedestrian overcrossing and extend pedestrian facilities from Rabbit Creek Rd to O'Malley Rd. Purpose: Capacity and freight. Facility class: Freeway. Length of project: 3 miles. Length of new sidewalk: N/A. Length of new pathway: 3 miles. Linked project(s): 107.

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Project Purpose and Description
117	Seward Hwy/92nd Ave Grade Separation	Homer Dr to Brayton Dr	\$60.4	Add new facility - grade separation and extension of 92 Ave from Homer Dr to Brayton Dr. Current project includes west side on- and off-ramps from Seward Hwy at 92nd Ave connecting via a newly constructed 92nd Ave to the Old Seward Hwy. New traffic signal at 92nd Ave and Old Seward Hwy. Pedestrian, storm drain, and lighting improvements. Recommend bicycle lanes. Purpose: Capacity, circulation, and freight. Facility class: Freeway. Length of project: 0.21 mile. Length of new sidewalk: 0.21 mile. Length of new pathway: 0.21 mile. Linked project(s): 116.
118	Lake Otis Pkwy - Northern Lights Blvd to Debarr Rd	Northern Lights Blvd to Debarr Rd	\$34.9	Reconstruct and increase capacity, bridge over Chester Creek, Lake Otis Pkwy/Northern Lights Blvd intersection. Recommend pedestrian facilities and bicycle lanes. Purpose: Capacity. Facility class: Major arterial. Length of project: 0.85 mile. Length of new sidewalk: 0.85 mile. Length of new pathway: 0.85 mile. Linked project(s): 105, 114, 201.
119	Northern Lights Blvd - Postmark Dr to Nathaniel Ct	Postmark Dr to Nathaniel Court	\$14.9	Rehabilitate pavement, add shoulders and turning pockets where needed. Recommend pedestrian facilities. Purpose: Circulation, access, and safety. Facility class: Minor arterial. Length of project: 1.2 miles. Length of new sidewalk: 1.2 miles. Length of new pathway: 1.2 miles. Linked project(s): None.
120	DeArmoun Rd Reconstruction - Phase II	140th Ave to Hillside Dr	\$15.0	Reconstruct the existing alignment, pavement, and pedestrian facilities; minimize impact on private property. Purpose: Safety and capacity. Facility class: Collector. Length of project: 2.4 miles. Length of new sidewalk: 2.4 miles. Length of new pathway: 2.4 miles. Linked project(s): None.
121	Spenard Rd Rehabilitation - Benson Blvd to Minnesota Dr	Benson Blvd to Minnesota Dr	\$50.2	Rehabilitate from 4 to 2 lanes with a center turn lane from Benson Blvd to Minnesota Dr, including Spenard Rd/36th Ave couplet. Recommend pedestrian and bicycle facilities. Purpose: Capacity and safety. Facility class: Minor arterial. Length of project: 0.63 mile. Length of new sidewalk: 0.63 mile. Length of new pathway: 0.63 mile. Linked project(s): 112.
122	Eagle River Rd Rehabilitation - MP 5.3 to MP 12.6 (Eagle River)	MP 5.3 to MP 12.6	\$28.4	Upgrade the road with widened shoulders, improved visibility, and repavement. Purpose: Capacity and safety. Facility class: Major arterial. Length of project: 7.3 miles. Length of new sidewalk: None. Length of new pathway: None. Linked project(s): None.
123	Eklutna River Bridge Rehabilitation/Replacement (Eagle River)	Old Glenn Hwy	\$6.8	Rehabilitate or replace the existing bridge. A new structure would have a design life of 50+ years and would include two travel lanes, shoulders, one pathway, and railing. . Purpose: Maintenance, safety, and freight. Facility class: Major arterial. Length of project: 0.88 mile. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): None.
124	Abbott Rd - Lake Otis Pkwy to Birch Rd	Lake Otis Pkwy to Birch Rd	\$39.0	5 lanes Lake Otis Pkwy to Elmore Rd, 3 lanes Elmore Rd to Birch Rd with intersection improvements. Recommend paved shoulder bikeway and pedestrian facilities. Purpose: Safety and capacity. Facility class: Minor arterial. Length of project: 2 miles. Length of new sidewalk: 2 miles. Length of new pathway: 2 miles. Linked project(s): None.

Table 7-3 Recommended 2035 MTP Road Projects (cont.)

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Project Purpose and Description
125	North Access to University-Medical District	Providence Dr to Northern Lights Blvd	\$17.5	Construct north access to University-Medical District, a 0.5-mile 2-lane facility with non-motorized facilities. Purpose: Circulation, capacity, and safety. Facility class: Major/Minor arterial. Length of project: 0.5 mile. Length of new sidewalk: 0.5 mile. Length of new pathway: 0.5 mile. Linked project(s): None.
126	Glenn Hwy/Farm Ave Partial Interchange (Eagle River)	Glenn Hwy at Farm Ave	\$50.0	Partial interchange to Farm Ave of the Glenn Hwy (could include an overcrossing to a north-south collector on the west side of the Glenn Hwy). Includes improvements to Farm Ave between Glenn Hwy and Business Blvd. Recommend pedestrian facilities. Purpose: Circulation, access, and freight. Facility class: Freeway. Length of project: 0.2 mile. Length of new sidewalk: 0.2 mile. Length of new pathway: 0.2 mile. Linked project(s): 105, 127, 133, 204, 217.
127	Artillery Rd northbound off-ramp to Eagle River Rd (Eagle River)	Glenn Hwy to Eagle River Rd	\$13.5	Eliminates existing weaving section between the existing Artillery Rd interchange northbound ramp terminal and the Eagle River Rd intersection on Old Glenn Hwy. Provides additional capacity to a heavy demand movement. Recommend separated pathway. Purpose: Capacity, safety, and freight. Facility class: Freeway. Length of project: 0.15 mile. Length of new sidewalk: 0.15 mile. Length of new pathway: 0.15 mile. Linked project(s): 126, 127, 133, 204, 217.
128	Farm Ave Realignment at Old Glenn Hwy (Eagle River)	Winter Park Place to Old Glenn Hwy	\$6.5	Realignment of Farm Ave to provide direct connection to Eagle River Loop Rd at Old Glenn Hwy. Improves safety and provides direct connection for new interchange for downtown area. Purpose: Capacity, circulation, and access. Facility class: Major arterial. Length of project: 0.35 mile. Length of new sidewalk: 0.35 mile. Length of new pathway: 0.35 mile. Linked project(s): 126, 127.
129	Eagle River Rd Rehabilitation - MP 0.0 to MP 5.3 (Eagle River)	MP 0 to Upper Terrace (MP 5.3)	\$29.0	Rehabilitate approximately 6 miles. Improvements may include turn lanes. Recommend paved shoulder bikeway. Purpose: Capacity and circulation. Facility class: Major arterial. Length of project: 6 miles. Length of new sidewalk: 6 miles. Length of new pathway: 6 miles. Linked project(s): 127.
130	92nd Ave/Academy Dr Extension - Brayton Dr to Abbott Rd	Brayton Dr to Abbott Rd	\$8.8	Add new facility—extend 92nd Ave from Brayton Dr to Abbott Rd. Recommend bicycle lanes and separated pathway. Purpose: Capacity and circulation. Facility class: Minor arterial. Length of project: 0.45 mile. Length of new sidewalk: 0.45 mile. Length of new pathway: 0.45 mile. Linked project(s): 117.
131	Mountain Air Dr - Rabbit Creek Rd to E 164th Ave	Rabbit Creek Rd to E 164th Ave	\$7.9	Add new facility—extend Mountain Air Dr from Rabbit Creek Rd to E 164th Ave. Recommend separated pathway. Purpose: Circulation, access, and safety. Facility class: Collector. Length of project: 1 mile. Length of new sidewalk: None. Length of new pathway: 1 mile. Linked project(s): None.
132	Northwood Dr Extension - Strawberry Rd to Dimond Blvd	Strawberry to Dimond Blvd	\$26.2	Calming measures will be added from 88th Ave to Strawberry Rd. Add new facility - extend Northwood Dr from Strawberry Rd to Dimond Blvd. Recommend bicycle lanes and pedestrian facilities. Purpose: Circulation, capacity, and access. Facility class: Minor arterial. Length of project: 1 mile. Length of new sidewalk: 1 mile. Length of new pathway: 1 mile. Linked project(s): None.
133	Business Blvd Extension (Eagle River)	Business Blvd to Eagle River Rd at Artillery Rd	\$10.0	Extension of Business Blvd south to Eagle River Rd to provide better circulation and connection to downtown Eagle River. Recommend pedestrian facilities. Purpose: Circulation, access, and safety. Facility class: Collector. Length of project: 0.3 mile. Length of new sidewalk: 0.3 mile. Length of new pathway: 0.3 mile. Linked project(s): 126, 127, 128.

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Project Purpose and Description
134	Homestead Rd Improvements (Eagle River)	Oberg Rd to Voyles Blvd	\$7.1	Construct new collector roadway. Purpose: Circulation and safety. Facility class: Collector. Length of project: 0.66 mile. Length of new sidewalk: 0.66 mile. Length of new pathway: 0.66 mile. Linked project(s): None.
135	Short-Term MTP Element Implementation Projects	AMATS area	\$6.0	Could include the following projects: Regional Travel Survey, Complete Streets Plan, Freeway Incident Management Plan, Traffic Signal Operations Plan, Intersection Operations and Safety Improvements Program, Travel Options Report Recommendations, South Anchorage Intersection Study, MTP Update, etc. Purpose: MTP Implementation. Facility class: N/A. Length of project: N/A. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): None.
136	3rd Ave, 6th Ave Couplet/E St Conversion Reconnaissance Study	L St to Ingra-Gambell Couplet	\$0.5	Evaluate the 5th/6th Couplet to a 3rd/6th Couplet. 3rd Ave to become one-way westbound traffic. 5th Ave to become two-way traffic contingent on the 3rd Ave conversion. Purpose: Circulation, access, and freight. Facility class: N/A. Length of project: N/A. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): None.
137	Glenn Hwy Operations Analysis - Muldoon Rd to Eklutna	Muldoon Rd to Eklutna	\$5.6	Include future interchanges. Old Glenn Hwy, Eklutna Village Rd, Thunderbird Falls, Mirror Lake, North Peters Creek/Settlers Dr, South Peters Creek/Ski Rd, Birchwood Loop Rd North, Birchwood Loop Rd South. Purpose: Capacity, freight, and safety. Facility class: Freeway. Length of project: N/A. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 105, 106, 126, 127, 128.
138	Midtown Subarea Transportation Plan	Midtown Anchorage area	\$0.8	Finish the study by identifying needs and multimodal/land use solutions. Purpose: Circulation, access, and safety. Facility class: N/A. Length of project: N/A. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 104, 108, 110, 112, 114, 115, 121.
139	Seward Hwy/O'Malley Rd Interchanges Study	Old Seward Hwy to Seward Hwy	\$0.5	Reconnaissance study to identify operations, functional design, and phasing of the freeway-to-freeway interchange at Seward Hwy and O'Malley Rd/Minnesota Dr and an interchange at Old Seward Rd and O'Malley Rd. Purpose: Capacity, circulation, and freight. Facility class: N/A. Length of project: N/A. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 107, 113, 116.
140	Knik Arm Crossing - Phase I	A-C Couplet to Point MacKenzie-Burma Rd Intersection	\$852.0	Add new bridge facility access across Knik Arm with associated roads connecting to the Anchorage roadway network. Purpose: Access, circulation, and freight. Facility class: National Highway System route—freeway/major arterial. Length of project: Phase I, 6.1 miles; Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 213.

Table 7-3 Recommended 2035 MTP Road Projects (cont.)

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Project Purpose and Description
Long-Term Projects (2024–2035)				
201	Seward Hwy/Glenn Hwy Connection – Phase III	Chester Creek to Airport Heights Dr	\$605.0	Construct freeway connection between Seward Hwy/20th Ave and Glenn Hwy/Airport Heights Dr; includes an interchange at Airport Heights Rd freeway access and egress ramps elsewhere along the alignment, depressed sections of freeway that include the construction of bridges and decking above the freeway for cross streets, community amenities, and redevelopment over highway airspace. Purpose: Circulation, access, and freight. Facility class: Freeway. Length of project: ?? Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 105, 114.
202	Huffman Rd Rehabilitation - Pintail St to Birch Rd	Pintail St to Birch Rd	\$8.0	Rehabilitate road. Improvements may include widening roadway, adding shoulders, improving visibility, reducing grades, and possibly trails, where practical and feasible. Recommend bicycle lanes and separated pathway. Purpose: Capacity, circulation, and access. Facility class: Collector. Length of project: 2.63 miles. Length of new sidewalk: 2.63 miles. Length of new pathway: 2.63 miles. Linked project(s): 307, 314.
203	Rabbit Creek Rd - Seward Hwy to Golden View Dr	Seward Hwy to Golden View Dr	\$11.7	Construct center turn lane, sidewalk, and pathway on Rabbit Creek Rd from Seward Hwy to Golden View Dr. Recommend bicycle lanes and separated pathway. Purpose: Capacity. Facility class: Minor arterial. Length of project: 1 mile. Length of new sidewalk: None. Length of new pathway: 1 mile. Linked project(s): 319.
204	Glenn Hwy HOV Lane - Artillery Rd to Mile 21.5 (Eagle River)	Eagle River, Artillery Rd to Mile 21.5	\$55.0	Widen Glenn Hwy to add an additional non-SOV lane in each direction, including interchange upgrades at Peters Creek bridge. Purpose: Capacity and freight. Facility class: Freeway. Length of project: 1 mile. Length of new sidewalk: 1 mile. Length of new pathway: 1 mile. Estimated cost: \$55M. Funding source: TIP. Linked project(s): 205.
205	Glenn Hwy HOV Lane - Boniface Pkwy to Artillery Rd Interchange	Boniface Pkwy to Eagle River Artillery Rd Interchange	\$71.7	Widen with lanes to the outside with 1 lane each direction designated non-SOV, includes Ship Creek bridge improvements. Purpose: Capacity and freight. Facility class: Freeway. Length of project: 8.1 miles. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 105, 204.
206	Davis St and Santa Maria Dr Realignment at Old Glenn Hwy (Eagle River)	Old Glenn Hwy - Eagle River Loop and North Eagle River Access	\$5.5	Extend Davis St east to Schroeder Dr and align with Santa Maria Dr as a 4-leg intersection on Old Glenn Hwy. Reduces number of offset intersections on Old Glenn Hwy and improves safety for pedestrian, bicycle, and vehicle crossings and emergency-response accessibility. Purpose: Circulation and safety. Facility class: Major arterial. Length of project: 0.35 mile. Length of new sidewalk: None. Length of new pathway: N/A. Linked project(s): 207.
207	Eleonora St and S Juanita Loop Realignment at Old Glenn Hwy (Eagle River)	Old Glenn Hwy - Eagle River Loop and North Eagle River Access	\$2.0	Align Eleonora St and S Juanita Loop as a 4-leg intersection on Old Glenn Hwy. Reduces number of offset intersections on Old Glenn Hwy and improves safety for pedestrian, bicycle, and vehicle crossings and emergency-response accessibility. Purpose: Circulation and safety. Facility class: Major arterial. Length of project: 0.35 mile. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 206.



Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Project Purpose and Description
208	South Birchwood Loop Rd Improvements (Eagle River)	Old Glenn Hwy to Birchwood Loop Rd	\$38.0	Rehabilitate 5.05 miles of roadway to address safety issues and add shoulders. Recommend bicycle lane from Old Glenn Hwy to Hillcrest Dr and separated pathway along the length of the project. Purpose: Capacity and safety. Facility class: Collector. Length of project: 0.33 mile. Length of new sidewalk: N/A. Length of new pathway: 0.33 mile. Linked project(s): None.
209	A/C St Couplet Restripe - Tudor Rd to 9th Ave	Tudor Rd to 9th Ave	\$0.5	Restripe to include 4 lanes in each direction. Purpose: Capacity. Facility class: Major arterial. Length of project: 5.05 miles. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): None.
210	Birchwood Loop and Birchwood Spur Rd Improvements (Eagle River)	Old Glenn Hwy to Birchwood Airport	\$16.6	Reconstruct 2.98 miles of roadway to current standards. Improvements may include widening roadway and adding shoulders. Purpose: Capacity and safety. Facility class: Major arterial. Length of project: 4.5 miles. Length of new sidewalk: N/A. Length of new pathway: 4.5 miles. Linked project(s): None.
211	Seward Hwy/O'Malley Rd Interchange	Old Seward Hwy to Seward Hwy	\$75.0	Add a freeway style interchange at Seward Hwy and O'Malley Rd/Minnesota Dr that provides unimpeded traffic flow between Seward Hwy and Minnesota Dr. Purpose: Capacity, safety, and freight. Facility class: Freeway. Length of project: 2.98 miles. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 116, 139.
212	C St/Ocean Dock Rd Access Ramp	C St Viaduct to Ocean Dock Rd	\$11.2	Reconstruct the ramp at Ship Creek. Purpose: Access, circulation, and freight. Facility class: Minor arterial. Length of project: 3.9 miles. Length of new sidewalk: 3.9 miles. Length of new pathway: 3.9 miles. Linked project(s): None.
213	Ingra-Gambell Couplet Extension - 3rd Ave to Whitney Rd	3rd Ave to Whitney Rd	\$26.0	Add new facility—extend Ingra St/Gambell St to Ship Creek Ave and Whitney Rd. Purpose: Access, circulation, and freight. Facility class: Major arterial. Length of project: 0.05 mile. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 201, 315.
214	Boniface Pkwy to Muldoon Frontage Rd	Boniface Pkwy to Muldoon Rd	\$18.0	Construct a frontage road between Boniface Pkwy and Muldoon Rd on the north side of the Glenn Hwy and a possible flyover to connect with Turpin St. Purpose: Circulation and Capacity. Facility class: Frontage. Length of project: 0.6 mile. Length of new sidewalk: 0.6 mile. Length of new pathway: 0.6 mile. Linked project(s): 106, 137, 205.
215	Eagle River CBD - Phase II, Study (Eagle River)	Downtown & Residential Core, Eagle River	\$0.5	Study to identify the recommended long-term solution for the CBD transportation system. Purpose: Circulation, capacity, and safety. Facility class: N/A. Length of project: 1.8 miles. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 105, 126, 127, 128.
216	Long-Term MTP Element Implementation Projects	AMATS area	\$6.0	Could include the following projects: Regional Travel Survey, Complete Streets Plan, Freeway Incident Management Plan, Traffic Signal Operations Plan, Intersection Operations and Safety Improvements Program, Travel Options Report Recommendations, South Anchorage Intersection Study, MTP Update, etc. Purpose: MTP Implementation Facility class: N/A. Length of project: N/A. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): None.

Table 7-3 Recommended 2035 MTP Road Projects (cont.)

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Project Purpose and Description
217	North Eagle River Interchange Capacity Modifications Study (Eagle River)	Glenn Hwy at North Eagle River Access Rd	\$0.5	Study the need for improvements at ramp terminals. Purpose: Capacity, safety, and freight. Facility class: N/A. Length of project: N/A. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 204, 205.
218	Knik Arm Crossing - Phase II	Ingra-Gambell Couplet Connection	\$230.0	Add new connection from Government Hill tunnel to Ingra-Gambell Couplet over Ship Creek. Purpose: Access, circulation, and freight. Facility class: National Highway System route—freeway/major arterial. Length of project: Phase II: 0.7 mile. Length of new sidewalk: N/A Length of new pathway: N/A. Linked project(s): 213.
Illustrative Projects (Not funded in MTP—after 2035)				
301	Tudor Rd Access Management - Seward Hwy to Arctic Blvd	Seward Hwy to Arctic Blvd	\$14.0	Add access management and turn restrictions; modify local connections to make adjacent property access to other roads; east-west or north-south access in lieu of direct access from Tudor Rd wherever practical. Purpose: Circulation, access, and safety. Facility class: Major arterial. Length of project: N/A. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): None.
302	Tudor Rd Access Management - Seward Hwy to Patterson St	Seward Hwy to Patterson St	\$41.6	Add access management and turn restrictions; modify local connections to make adjacent property access to other roads; east-west or north-south access in lieu of direct access from Tudor Rd wherever practical. Purpose: Circulation, access, and safety. Facility class: Major arterial. Length of project: N/A. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): None.
303	Boniface Pkwy Access Management - Tudor Rd to Glenn Hwy	Tudor Rd to Glenn Hwy	\$22.5	Add access management and related local circulation access to preserve capacity on Boniface Pkwy. Purpose: Circulation, access, and safety. Facility class: Major arterial. Length of project: N/A. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 604.
304	Jewel Lake Rd/International Airport Rd Grade Separation	Jewel Lake Rd to Northwood St	\$50.6	Construct interchange at International Airport Rd and Jewel Lake Rd incorporating a grade separation of the railroad and construct a grade separation of International Airport Rd near Northwood St with realignment of railroad to the south side of International Airport Rd. Purpose: Capacity, safety, and freight. Facility class: Expressway. Length of project: 1.25 miles. Length of new sidewalk: 1.25 miles. Length of new pathway: 1.25 miles. Linked project(s): None.
305	Postmark Dr/International Airport Rd Grade Separation	Postmark Dr to International Airport Rd	\$23.6	Add grade separation of International Airport Rd over Postmark Dr. Purpose: Capacity, safety, and freight. Facility class: N/A. Length of project: 3.7 miles. Length of new sidewalk: 3.7 miles. Length of new pathway: 3.7 miles. Linked project(s): None.
306	Lake Otis Pkwy Extension - Debarr Rd to Glenn Hwy	Debarr Rd to Glenn Hwy	\$36.0	Add new facility—extend Lake Otis Pkwy to Glenn Hwy interchange at Airport Heights Rd. Recommend pedestrian facilities. Purpose: Circulation and capacity. Facility class: Major arterial. Length of project: 3.1 miles. Length of new sidewalk: 3.1 miles. Length of new pathway: N/A. Linked project(s): 105, 114, 201, 306.
307	Elmore Rd Extension - O'Malley Rd to Abbott Rd	O'Malley Rd to Abbott Rd	\$35.2	1-mile road connection - completes north-south corridor between DeArmoun Rd and Providence Dr. Recommend bicycle lanes and separated pathway. Purpose: Circulation and capacity. Facility class: Collector. Length of project: 1 mile. Length of new sidewalk: None. Length of new pathway: None. Linked project(s): None.

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Project Purpose and Description
308	Hiland Rd Improvements - MP 1.0 to MP 8.3 (Eagle River)	MP 1.0 to MP 8.3	\$31.7	Rehabilitate 7.3 miles of the existing two-lane Hiland Rd to current standards. Improvements may include widening roadway, adding shoulders, improving visibility, reducing grades, and possibly trails, where practical and feasible. Recommend paved shoulder bikeway. Purpose: Capacity and safety. Facility class: Collector. Length of project: 1 mile. Length of new sidewalk: None. Length of new pathway: None. Linked project(s): None.
309	Minnesota Dr Corridor/Tudor Rd Interchange	International Airport Rd to Northern Lights Blvd/Minnesota Dr at Tudor Rd	\$112.7	Extend controlled access from International Airport Rd through a grade-separated interchange at Tudor Rd and widen the arterial to 8 lanes north of Tudor Rd to Northern Lights Blvd. Purpose: Capacity, safety, and freight. Facility class: Major arterial. Length of project: 0.7 mile. Length of new sidewalk: 0.7 mile. Length of new pathway: N/A. Linked project(s): 112, 121.
310	84th Ave - Hartzell Rd to Lake Otis Pkwy	Hartzell Rd to Lake Otis Pkwy	\$9.4	Reconstruct existing road and add new segment. Recommend pedestrian facilities. Purpose: Circulation and access. Facility class: Collector. Length of project: 1 mile. Length of new sidewalk: 1 mile. Length of new pathway: N/A. Linked project(s): None.
311	Seward Hwy - Potter Weigh Station to Rabbit Creek Rd	Potter Weigh Station to Rabbit Creek Rd	\$47.0	Reconstruct and widen Seward Hwy between Potter Weigh Station and Rabbit Creek Rd. Recommend paved shoulder bikeway. Purpose: Safety and freight. Facility class: Major arterial. Length of project: 7.3 miles. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): 303, 311.
312	92nd Ave Extension - King St to Old Seward Hwy	King St to Old Seward Hwy	\$17.2	Add new facility—extend 92nd Ave from King St to Old Seward Hwy and evaluate grade-separation crossing of railroad. Recommend bicycle lanes and pedestrian facilities. Purpose: Circulation, access, and freight. Facility class: Minor arterial. Length of project: 1 mile. Length of new sidewalk: 3.2 miles. Length of new pathway: N/A. Linked project(s): None.
313	92nd Ave Extension- Minnesota Dr to King St	Minnesota Dr to King St	\$11.0	Add new facility—extend 92nd Ave from Minnesota Dr to King St. Recommend bicycle lanes and pedestrian facilities. Purpose: Circulation, access, and freight. Facility class: Minor arterial. Length of project: 0.5 mile. Length of new sidewalk: 1 mile. Length of new pathway: None. Linked project(s): None.
314	Birch Rd - Huffman Rd to O'Malley Rd	Huffman Rd to O'Malley Rd	\$9.0	Reconstruct road. Recommend bicycle lanes. Purpose: Safety. Facility class: Collector. Length of project: 2.65 miles. Length of new sidewalk: 2.65 miles. Length of new pathway: 2.65 miles. Linked project(s): 202.
315	Whitney Rd - North C St to Post Rd	North C St to Post Rd	\$15.0	Upgrade Whitney Rd to urban industrial standards; may include relocation of Whitney Rd. Recommend pedestrian facilities. Purpose: Circulation, access, and freight. Facility class: Collector. Length of project: 0.49 mile. Length of new sidewalk: 1.05 miles. Length of new pathway: 1.05 miles. Linked project(s): 213.
316	Minnesota Dr (Northbound) - 26th Ave to 15th Ave	26th Ave to 15th Ave	\$29.3	Rehabilitate and add one lane to improve capacity northbound. Purpose: Capacity and freight. Facility class: Major arterial. Length of project: 0.25 mile. Length of new sidewalk: 0.7 mile. Length of new pathway: 0.7 mile. Linked project(s): None.

Table 7-3 Recommended 2035 MTP Road Projects (cont.)

Project Number	Project Name	Project Location	2010 Cost Estimate (\$ million)	Project Purpose and Description
317	Minnesota Dr Frontage Rd	Dimond Blvd to Raspberry Rd	\$9.0	Add a one-way northbound frontage road to the east side of Minnesota Dr between Dimond Blvd and Raspberry Rd. Purpose: Capacity and circulation. Facility class: Frontage. Length of project: 1 mile. Length of new sidewalk: None. Length of new pathway: 1 mile. Linked project(s): None.
318	Golden View Dr Extension	Romania Dr to Potter Valley Rd	\$18.1	Add new facility - Romania Dr to Potter Valley Rd. Recommend pedestrian facilities. Purpose: Capacity and circulation. Facility class: Collector. Length of project: 1.05 miles. Length of new sidewalk: 1.05 miles. Length of new pathway: 1.05 miles. Linked project(s): None.
319	Elmore Rd Extension - Rabbit Creek Rd to DeArmoun Rd	Rabbit Creek Rd to DeArmoun Rd	\$19.0	Add new facility—extend Elmore Rd from Rabbit Creek Rd to DeArmoun Rd. Recommend pedestrian facilities and separated pathway. Purpose: Circulation and access. Facility class: Collector. Length of project: 0.7 mile. Length of new sidewalk: 0.7 mile. Length of new pathway: 0.7 mile. Linked project(s): 202.
320	Huffman Rd Extension - Birch Rd to Hillside Dr	Birch Rd to Hillside Dr	\$13.5	1-mile road connection - completes east-west corridor between Hillside Dr and Seward Hwy. Recommend separated pathway. Purpose: Circulation and access. Facility class: Collector. Length of project: 3.1 miles. Length of new sidewalk: 3.1 miles. Length of new pathway: 3.1 miles. Linked project(s): None.
321	Railroad Grade Separation C St	C St	\$91.5	Add railroad grade separation at C St near Raspberry Rd. Purpose: Capacity, safety, and freight. Facility class: Major arterial. Length of project: 1 mile. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): None.
322	Eklutna Lake Rd Rehabilitation (Eagle River)	Old Glenn Hwy to Eklutna Lake	\$39.0	Rehabilitate 10 miles of roadway from the Old Glenn Hwy to Eklutna Lake to current standards. Improvements may include repaving, widening lanes and adding shoulders, improving visibility, and possibly trails, where practical and feasible. Purpose: Capacity and safety. Facility class: Collector. Length of project: 1 mile. Length of new sidewalk: N/A. Length of new pathway: 2 miles. Linked project(s): None.
323	Knik Arm Ferry Service - Anchorage Terminal	Ship Creek area		Access connection for Anchorage ferry terminal in Ship Creek area. Contingent upon Mat-Su Borough securing funding. Purpose: Access. Facility class: N/A. Length of project: 1 mile. Length of new sidewalk: N/A. Length of new pathway: N/A. Linked project(s): None.
324	Seward Hwy/O'Malley Rd Interchanges	Old Seward Hwy to Seward Hwy	\$75.0	Complete freeway system interchange at Seward Hwy and O'Malley Rd/Minnesota Dr and an interchange at Old Seward Hwy and O'Malley Rd - Phase 2. Purpose: Capacity and safety. Facility class: N/A. Length of project: 1 mile. Length of new sidewalk: To be determined. Length of new pathway: To be determined. Linked project(s): 113, 116, 139.

ADA = Americans with Disabilities Act

N/A = not applicable

CBD = Central Business District

SOV = single-occupancy vehicle

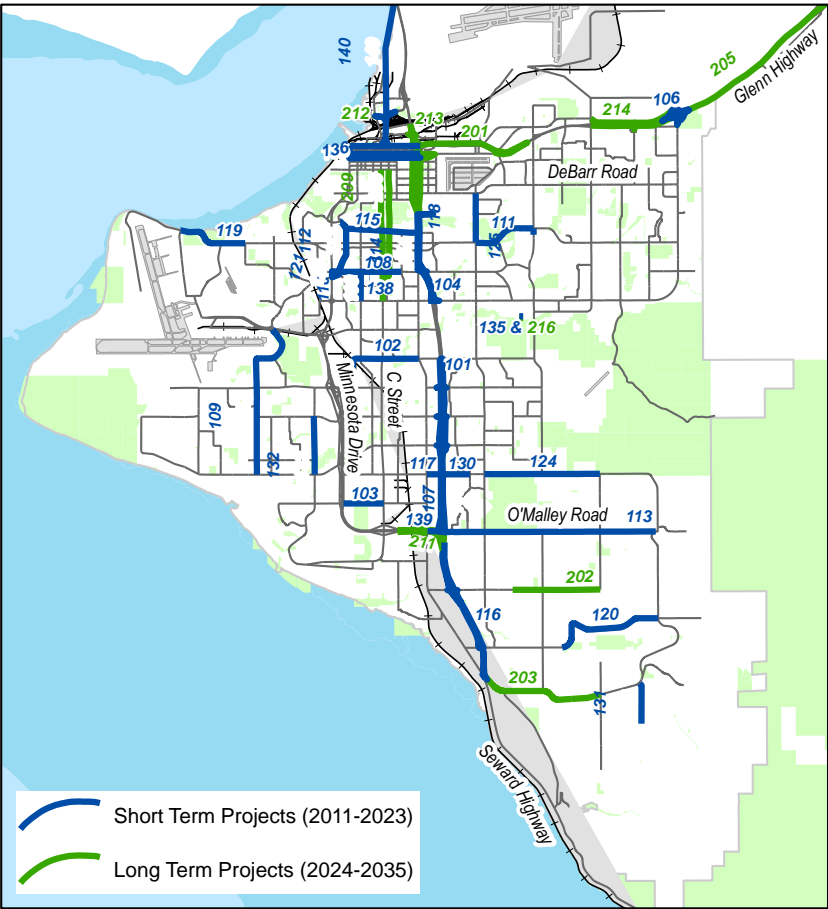
HOV = high-occupancy vehicle

TIP = Transportation Improvement Program

M = million

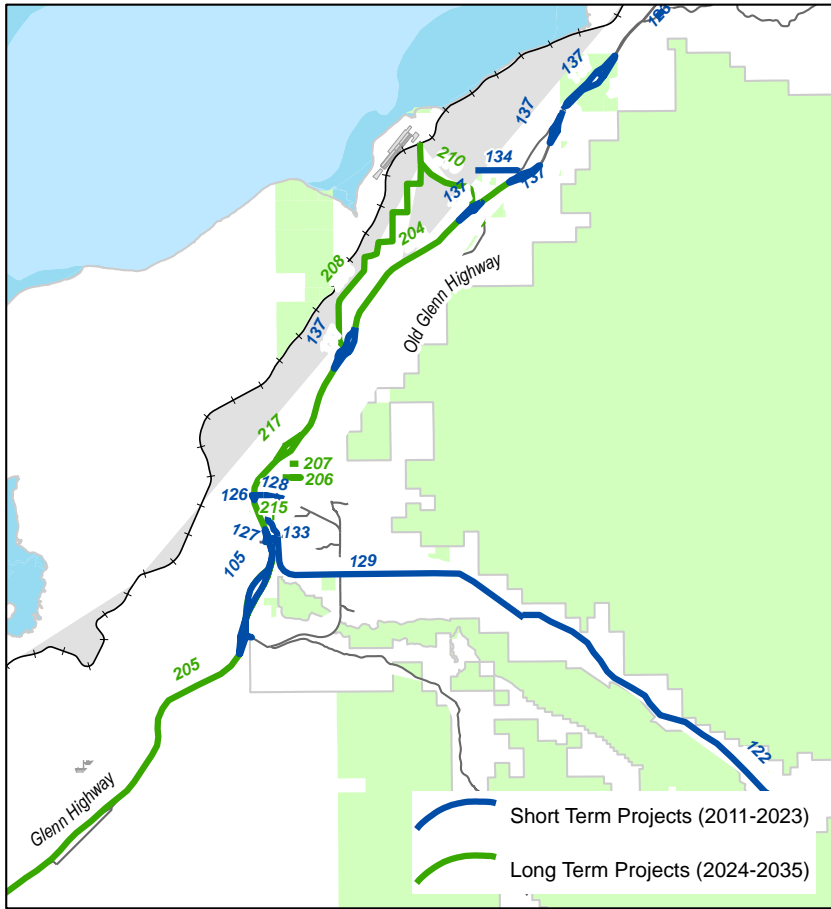
MP = Milepost

Figure 7-1 Recommended Road Projects-Anchorage Bowl



Source: MOA

Figure 7-2 Recommended Road Projects-Chugiak-Eagle River



Source: MOA

## **BUILDING THE SEWARD HIGHWAY TO GLENN HIGHWAY CONNECTION**

The Seward and Glenn highways together form Anchorage's longest and most multifaceted transportation corridor. Both highways are part of the NHS, the regional transportation network, the city street system, and the city and neighborhood landscape. Both highways provide critical links in support of state, regional, and local economies.

The MOA and Mat-Su Borough regional population will exceed one-half million people by 2035. That population figure exceeds by more than 150,000 the number of people who live in these areas today. In the Anchorage Bowl and Chugiak-Eagle River combined, the growth will add 65,200 more people and 400,000 more trips every day on the regional transportation system. The traffic at the junction of the Glenn and Seward highways is anticipated to exceed 100,000 vehicles per day, increasing faster than on other roads because of suburban growth and drivers' preference for higher-speed freeway travel. Finishing this highway connection is a top-priority to provide safety and mobility of people and goods within the metropolitan area and the rest of the state.

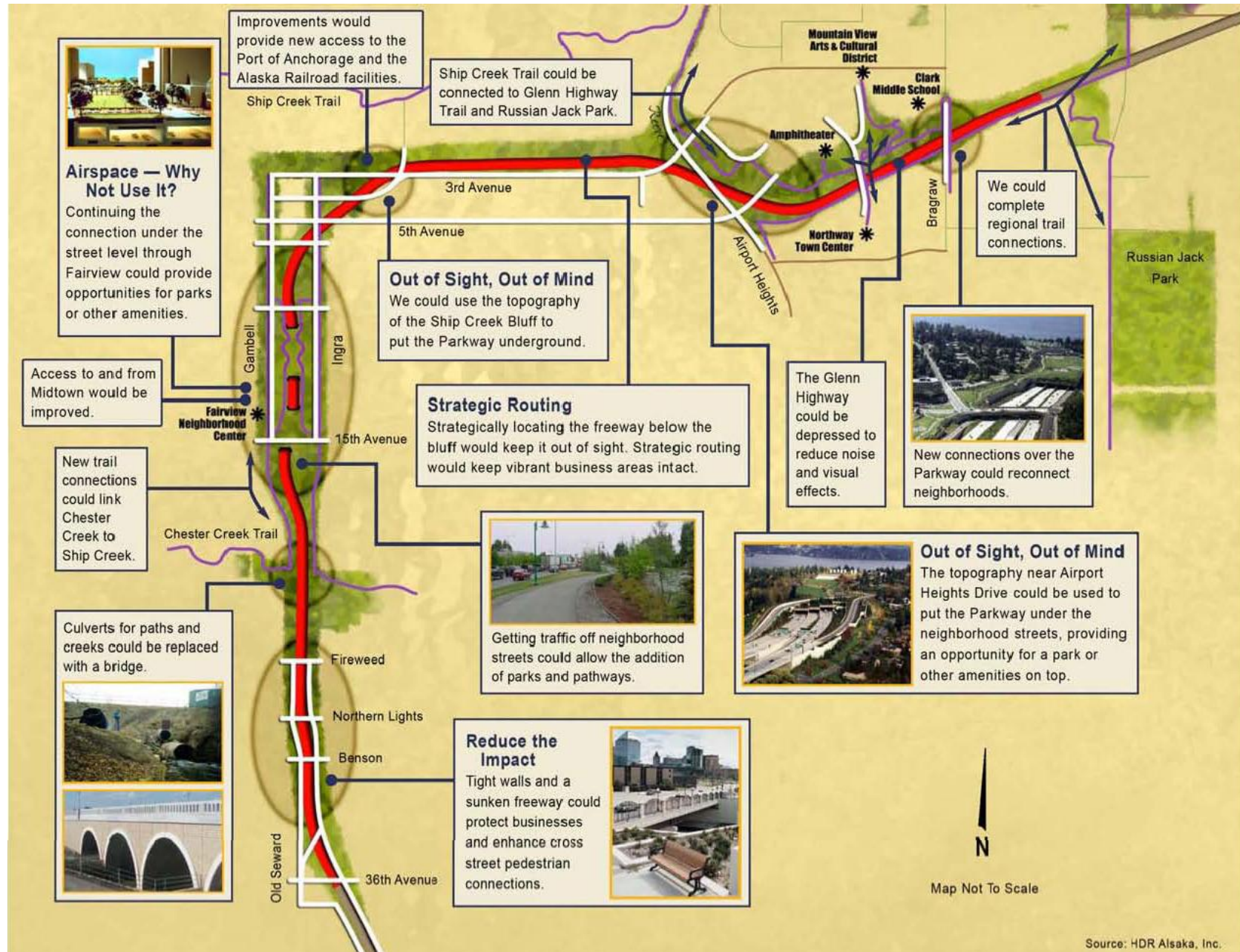
### *The Concept*

The connection concept uses topography to depress a new, high-capacity expressway designed to serve through trips—travel to major destinations within and across the MOA—and reduce traffic on the neighborhood streets while incorporating improved parks and trail connections to benefit neighborhoods. (See Figure 7-3.) Innovative community enhancements, well-landscaped roadways, and a series of ground-level connections would span the depressed highway connection and re-establish neighborhood connectivity. By depressing the highway through sensitive areas, new and real opportunities would be created for adjacent neighborhoods and surface streets to return primarily to serving local neighborhood traffic. Gambell and Ingra streets, 5th and 6th avenues, Mountain View Drive, and 15th Avenue/ Debarr Road would all serve local and business access. The list of associated benefits is long:

- Fewer new lanes are needed in the corridor because higher-speed, non-stop express lanes can accommodate more than twice the number of vehicles than lanes that also have to provide access to the abutting properties.
- Less time is spent in traffic—a wide range of users from commuters, to freight haulers, to emergency response personnel would realize this benefit.
- Traffic is no longer the major feature and concern of neighborhoods and communities. The highway's visibility and neighborhood impacts will be severely reduced.
- Traffic on local streets and in neighborhoods is reduced because cut-through traffic is eliminated and longer trips will bypass neighborhoods.
- The safety and ease of crossing the corridor (for cars and pedestrians) is significantly enhanced.
- Freight mobility improves with decreased congestion and improved travel times, which subsequently reduce the cost of doing business in and around the region.
- Freight haulers can move between the Port of Anchorage and distribution centers without traveling through Downtown or on surface streets in neighborhoods.



Figure 7-3 Benefits of the Connecting Corridor





- Previous surface arterials can be reclaimed to serve local and business needs. Existing multiple-lane corridors can be used as frontage roads, or some can be reclaimed for on-street parking, beautification projects, or pedestrian facilities.
- Transit improves through shortened travel times, made possible by new opportunities to implement high-speed express bus, HOV lanes, or both. Longer-distance commutes, typical of the corridor, are well served by good connections to various Anchorage activity centers and other attractions.
- Capacity is leveraged and safety is improved because of controlled access.
- Rebuilding of neighborhoods, housing, and public facilities is made possible.
- Neighborhoods and parks are reconnected with each other and Downtown.
- Communities are revitalized with transportation assistance.

Linking the highways is crucial to meet Anchorage transportation needs. But far more important is how the link is done. Context-sensitive design will be used to put the facility partly, or in some cases entirely, underground, getting the connection out of sight and off surface streets.

The Anchorage Bowl comprehensive plan and the 2005 draft Anchorage Bowl Land Use Plan Map depict portions of the eastern Downtown and western Fairview areas as providing much of the critical mass of housing units needed near Downtown. A well-designed, expedited project is essential to medium-term implementation of the comprehensive plan policies for infill, redevelopment, and an enhanced urban environment. Timely completion of the Seward and Glenn highways connection project is essential to spur other investments to regenerate eastern Downtown and western Fairview. The following characteristics of the project are essential to provide consistency with the Anchorage Bowl comprehensive plan and to emphasize the importance of the land use aspects:

- The project design should enhance east-west neighborhood street connectivity. The most important east-west street connections in Fairview are 9th, 13th, and 15th avenues. These streets are most central, but additional connections should be considered.
- Extensive decking over the freeway, particularly in the areas between 9th and 15th avenues, is important from a land-use perspective. The resulting open spaces would provide a neighborhood focus and integrate with abutting residential projects and the neighborhood commercial activity center.

- Land-use benefits will be realized if the freeway alignment allows (1) Gambell and Ingra streets to be a two-sided, north-south street (with housing on both sides) and (2) enough space for a block width of high-density residential and limited mixed-use between Gambell and Hyder streets. An alignment of the freeway centerline east of the Hyder Street centerline would maximize neighborhood space for redevelopment and infill in the area west of the freeway (and closer to Downtown).

### *Phasing of Construction*

The financial constraints of the 2035 MTP has created the need to examine logical and effective construction phasing of the Seward and Glenn highways connection project. The DOT&PF has developed a three-phase implementation plan consisting of the following segments:

- **Phase 1: 36th Avenue/Seward Highway interchange improvements from Tudor Road to 33rd Avenue (short term).** This phase would consist of a new interchange at 36th Avenue and include braided ramps connecting to the Tudor Road interchange and a separated multi-use pathway.
- **Phase 2: Seward Highway Midtown congestion relief between 33rd Avenue and Chester Creek (short term).** This phase would reconstruct Seward Highway between 33rd Avenue and 20th Avenue as a depressed freeway with new interchanges at Northern Lights Boulevard and Benson Boulevard. It would also include a separated multi-use pathway and connections to the Chester Creek trail.
- **Phase 3: Seward Highway to Glenn Highway connection between Chester Creek and Airport Heights Drive (long term).** This final phase would construct a depressed freeway connection with new interchanges at the Ingra-Gambell Couplet—to provide access to Downtown, the Port of Anchorage, JBER, and Knik Arm Crossing—and at Airport Heights Road. It also includes construction of bridges and decking above the freeway for cross streets, community amenities, and redevelopment over highway airspace plus a separated multi-use pathway.

## EASING THE GLENN HIGHWAY CORRIDOR COMMUTE

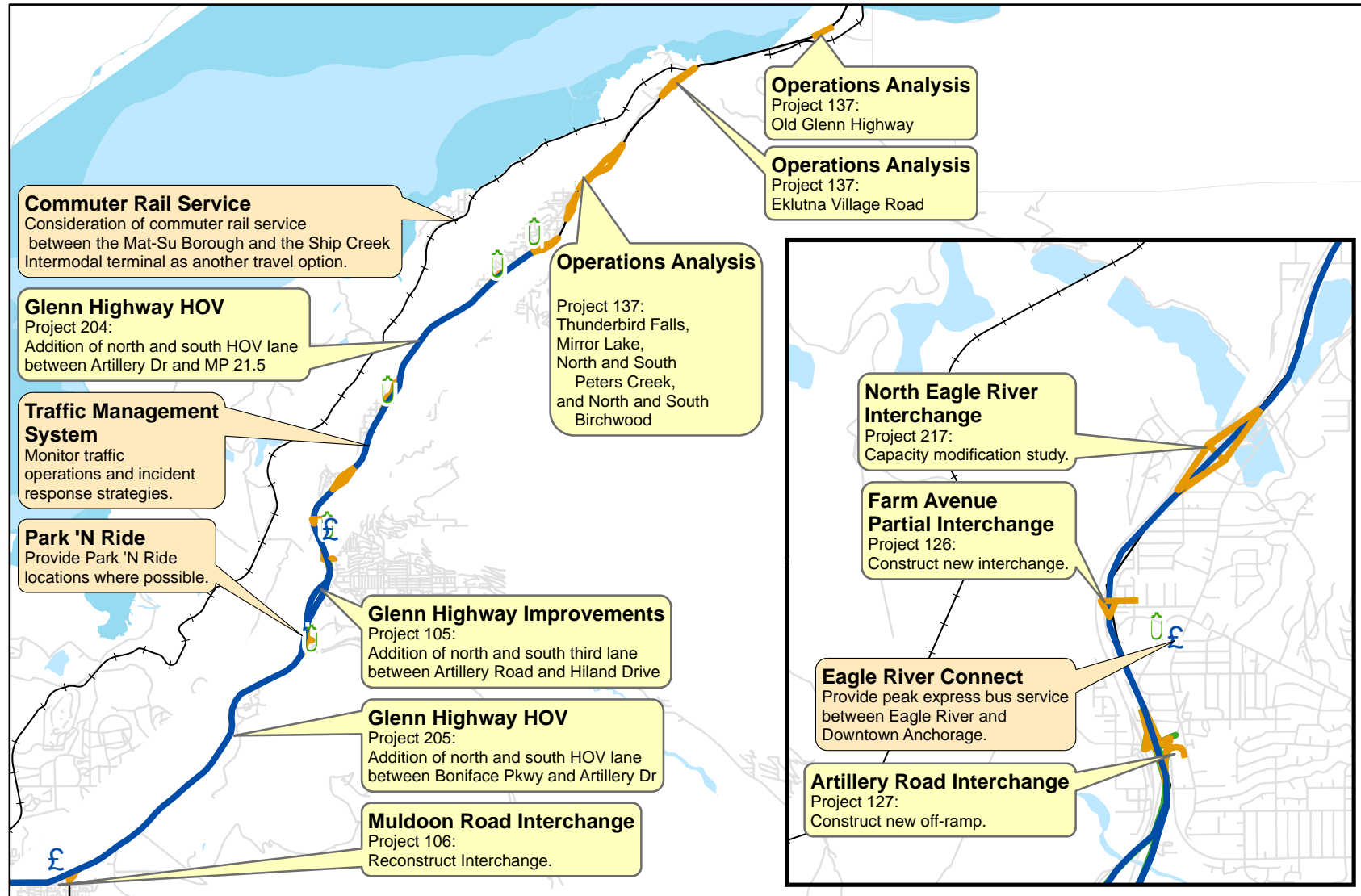
Travel in the Glenn Highway corridor between Chugiak-Eagle River and the Anchorage Bowl is projected to double during the next 25 years, as suburban development flourishes. The demand will exceed the capacity of the existing six-lane freeway by 1,600 vehicles in the afternoon peak hour.

A multi-pronged strategy to meet mobility needs in the corridor is recommended. It includes improving interchanges, ramp, and roadway bottlenecks along the corridor; implementing high-performance, express, commuter transit service together with aggressive incentives to shift commuters from single-occupancy vehicles (SOVs); providing (in phases) dedicated lanes for express buses and HOVs; and assessing the potential of commuter rail.

Figure 7-4 illustrates components of the Glenn Highway corridor plan. The components are also described below:

- **The Glenn Highway Corridor Study** will examine the functional design and traffic operational requirements for the Glenn Highway between Muldoon Road and Eklutna. The study will examine use of additional lanes (including HOV lanes), interchange modifications, and possible new interchange locations north of Chugiak-Eagle River to serve future developments.
- **Connect Eagle River express bus service**, a new high-frequency commuter transit service from the Eagle River transit center direct to Downtown Anchorage. This bus will run at 20-minute frequency during commute periods.
- **Park-and-ride lots** will be located at Hiland Road, the Eagle River Transit Center, South Birchwood, North Birchwood, South Peters Creek, and North Peters Creek to encourage alternative mode ridership between Chugiak-Eagle River and the Anchorage Bowl.
- **Regional mode choice options** available for Mat-Su area ridership, including a park-and-ride lot at Trunk Road and Valley Mover service connecting Wasilla and Palmer with Downtown Anchorage.
- **Commute options incentive program**, consisting of value rewards, commute shift incentives, and strong employer partnerships to foster flexible work hours, telecommuting, and other employee incentives to lessen solo-driver commutes.
- **Expanded vanpool and carpool programs** working in collaboration with major employers to provide viable options to drive-alone commuting.
- Facilitation of broad **implementation of federal tax-benefit credits** for vanpool and public transportation commuters to reinforce non-drive commuting.

FIGURE 7-4 Easing the Glenn Highway Commute



Source: CH2M HILL

- **Road improvements** that include a third highway lane in each direction between Hiland Road and Artillery Road, incorporating bridge widening, interchange and access improvements, ramp extensions, and related spot improvements to improve traffic capacity, flow, and safety.
- **Traffic management system** that monitors corridor traffic operation conditions and includes incident-response strategies (cameras, response coordination, public information dissemination, and traffic advisories).
- **Commercial Vehicle Intelligent System Network (CVISN)** that includes automated safety information exchange, electronic credentialing, and electronic screening upgrades to roadside weigh and inspection facilities.
- Reconsideration of the **Glenn Highway weigh station investments** for the long term because relocation appears to be necessary.
- **Phased implementation of HOV lanes, express bus lanes, or both** to reduce solo-driver automobile use and make commute alternatives more attractive.
- Creation of a **regional transit authority** to develop commuter service options and ultimately plan, operate, and maintain them in the future.
- Consideration of **commuter rail service** between the Mat-Su Borough and the Anchorage Bowl as another travel option

## KNIK ARM CROSSING

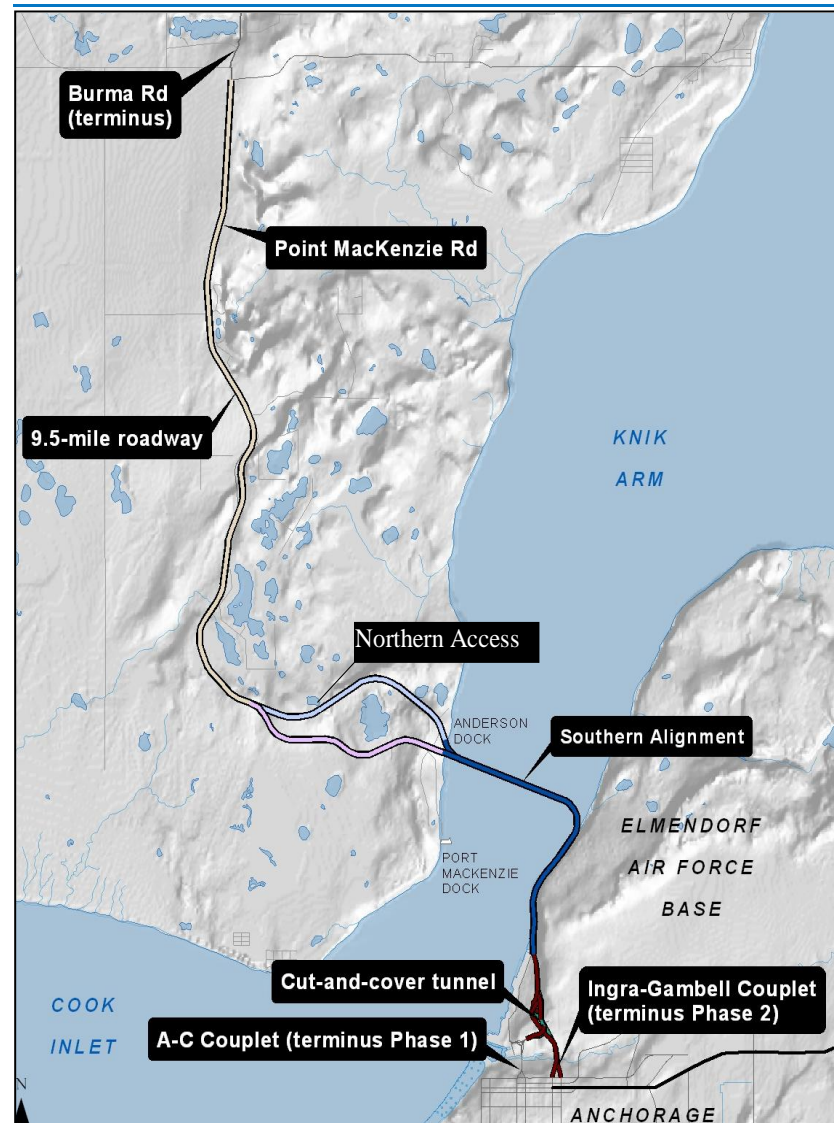
### Background

The Alaska Legislature established KABATA in 2003 as a public corporation and an instrumentality of the State of Alaska within the DOT&PF. The specific mission of KABATA is to “develop, stimulate, and advance the economic welfare of the state and further the development of public transportation systems in the vicinity of the Upper Cook Inlet with construction of a bridge to span Knik Arm and connect the Municipality of Anchorage (MOA) and the Mat-Su Borough” (Alaska Statute 19.75.011).

### Project Description

The Knik Arm Crossing project is a roadway and bridge crossing of Knik Arm connecting the MOA and the Mat-Su Borough, as shown in Figure 7-5. The total length of the project from the intersection of Point MacKenzie and Burma roads to the A-C Couplet and Ingra-Gambell Couplet is approximately 19 miles.

FIGURE 7-5 Knik Arm Crossing Project



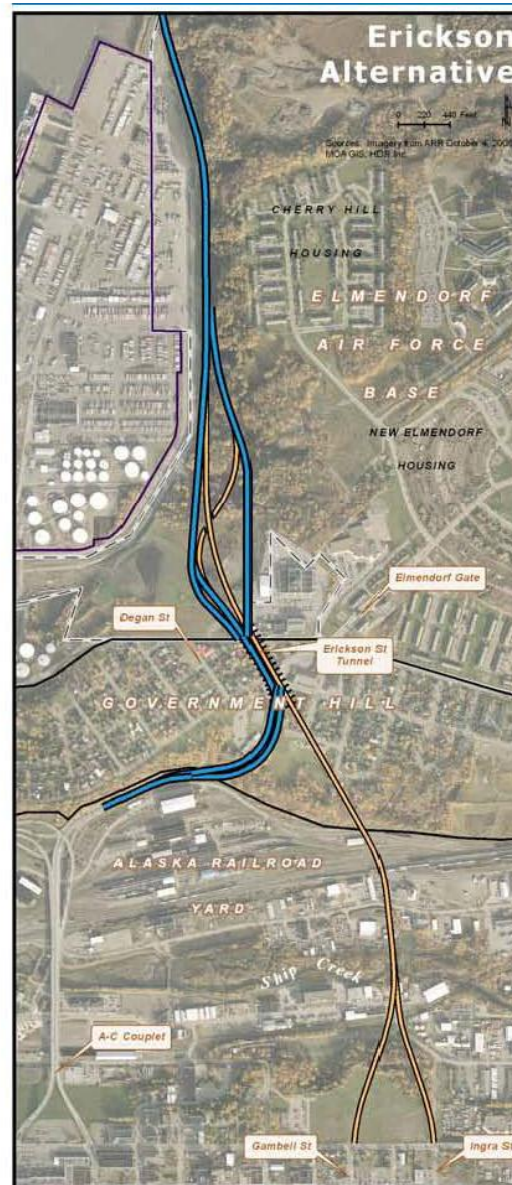
Source: HDR Alaska, Inc.



The selected alternative assumes construction of a minimum 8,200-foot, pier-supported bridge with causeway approaches that extend 2,000 feet from the western shore and 3,300 feet from the eastern shore of Knik Arm.

In Anchorage, the project follows the Anchorage shoreline and western perimeter of JBER at the bottom of the bluff to Cairn Point, and then continues south, closely following the natural curvature of the shoreline. The project includes a cut-and-cover tunnel under Government Hill along an Erickson Street-area alignment. Initial construction would include a connection to the existing A-C Couplet. Because of the impact of the future bridge traffic on downtown streets, work on the design of the connection to a new viaduct (elevated bridge) across the Ship Creek rail yard to connect with the Ingra-Gambell Couplet should begin as soon as possible after the bridge's expected opening in 2016. Figure 7-6 depicts the Knik Arm Crossing alignment and configuration in more detail.

FIGURE 7-6 Knik Arm Crossing Project Preferred Alignment



Source: HDR Alaska, Inc.

The project will be phase-constructed.

Phase I includes a minimum 2-lane roadway and bridge extending from Port Mackenzie District boundary in the Mat-Su Borough to the A-C Couplet in Anchorage. This phase also includes a 6-lane cut-and-cover tunnel under Government Hill. The bridge substructure and the in-water and Anchorage-side roadway subgrade must initially be built to accommodate the full future 4-lane roadway width. The expansion of the bridge and roadway from 2 lanes to 4 lanes within the Phase I construction limits will be the responsibility of the private developer, who has the option to construct these additional lanes at any time, provided they are in place at such time that traffic volumes warrant. Since the work is included in the initial contract, it is considered short term for the purposes of the MTP.

Phase II includes the 4-lane extension of the Ingra-Gambell couplet on a viaduct over Ship Creek to tie into the Government Hill tunnel. This phase is the responsibility of KABATA, and this portion of Phase II is considered a long term project in the MTP.

Phase II also includes the 4-lane upgrade between Burma Road and the Port of Mackenzie District boundary in the Mat-Su Borough, which is outside the consideration of the MTP.

The project is classified as a rural principal arterial in the Mat-Su Borough and across Knik Arm, transitioning to an urban principal arterial in Anchorage in the vicinity of the Port of Anchorage. It would eventually be classified as an NHS route.

### *Neighborhood Mitigation*

The communities served by the Government Hill Community Council as well as other neighborhood community councils, such as Downtown, South Addition, and Fairview, would be directly affected by the proposed Knik Arm Crossing, given the proposed alignment. Because of the potentially adverse effects of Phase 1 traffic from the Knik Arm Crossing on the revitalization of affected neighborhoods, the design for the Anchorage side of the bridge must include adequate mitigation to facilitate the efficient, safe, and neighborhood-

appropriate incorporation of bridge traffic through Downtown and onto roads that can handle the anticipated increase in traffic. Design considerations would include measures to reduce the impact of the Knik Arm Crossing traffic from Government Hill to Downtown, and would provide improved pedestrian connectivity along the A-C Couplet up to 6th Avenue.

The connection of the Knik Arm Crossing to the A-C Couplet and ultimately the Ingra-Gambell Couplet extension in concept would include the use of existing topography to trench and cover an expressway-type roadway on an alignment designed to serve through trips and reduce traffic on neighborhood streets. These components would be accomplished while incorporating improved parks and pedestrian connections to benefit the Government Hill neighborhood, including trail connections joining Downtown, Ship Creek, and Government Hill. Unique and innovative community and streetscape enhancements would be required as part of the Knik Arm Crossing project as it travels

through Government Hill. For example, a span over the depressed expressway could be used to reestablish neighborhood connectivity and minimize noise and air quality impacts to the neighborhood. The project would provide Government Hill with a balance of local road, trail, and pedestrian facilities, and would discourage the use of local roads by through traffic that might cut through the neighborhood.

The project would not result in a traditional freeway through a neighborhood that creates a barrier and separation of the neighborhood. The goal is for Government Hill and the project sponsors to use the opportunity to implement well-designed mitigation projects. Such mitigation projects would be developed in close cooperation with the neighborhood. They would use a best practices and context-sensitive design approach to enhance and revitalize the Government Hill community with a design that fits within the character of this unique and historic neighborhood.



## Public Transportation

Public transportation is expected to play an increasing role in meeting future transportation demand as the metropolitan area matures and the higher-density residential and employment goals of the Anchorage and Chugiak-Eagle River comprehensive plans are achieved.

Four core challenges guide scoping of the 2035 MTP public transportation element:

- Funding determines what level of public transportation service is possible.
- Public policy and public perceptions of the value of public transportation service define the willingness to support public funding.
- Improved operations and delivery of public transportation service can increase riders.
- Attracting more riders and sustaining or improving service productivity are the key performance benchmarks for public transportation.

## THE CRITICAL BALANCING ACT

Three criteria determine the critical balance for public transportation service: (1) the quantity of service operated, which defines cost; (2) the number of riders carried, which is the reason for providing transit; and the (3) revenue sources available to support service, some from riders and ancillary sources, but primarily from public funds.

Striving to achieve balance among these criteria is at the crux of policy about providing the minimum necessary service and identifying how much more public transportation service can be realistically provided. A core mission of public transportation is to ensure that all segments of the community have available transportation and access to community opportunities. The People Mover route restructuring plan with 30-minute frequency throughout the day accomplishes that mission. A second mission is to help reduce congestion by offering viable transportation alternatives to as many travelers as possible. Public transportation services must be more frequent and travel time must be more competitive with private vehicle travel to attract travelers who can choose either private vehicles or public transportation.

### **TRANSIT RIDERS CAN BE DOUBLED**

Many future scenarios have been analyzed with the Anchorage travel model and projections of 2035 development. Public transportation patronage can likely be doubled from existing levels, and perhaps tripled. But to get the higher number of riders, public funding will need to expand from an annual operating budget of \$26 million today (2011) to \$48.6 million (2035). More funding is required if even higher levels of public transportation service are desired. Within the constraints of available funding, there are opportunities to improve service, increase riders, and help alleviate traffic congestion.

What is the best public transportation service choice for Anchorage? The recommended MTP public transportation element reflects a pragmatic view that focuses on two priorities. First, the success of the restructuring plan is leveraged to gain more riders while retaining well-established standards for operating productivity of public transportation. Service frequency is increased on seven routes in corridors that have the highest ridership. Second, new high-frequency, high-performance, express bus service is introduced on the Glenn Highway. The service targets 5 to 7 percent of that corridor's peak-period commuters.

Success in executing these priorities to expand ridership can be the springboard for future service improvements.

### **RECOMMENDED PUBLIC TRANSPORTATION PROJECTS**

The expected funding shortfall for public transportation is estimated to be about \$15 million. It was necessary to pare down the list of projects from what was needed to what could be afforded. An initial project-screening process was approved by the TAC+ to accomplish the more than 7 percent public transportation funding shortfall. Each public transportation project was scored by using the six criteria illustrated in Table 7-4.

The process of grouping the public transportation projects into short-term (2011-2023), long-term (2024-2035), and illustrative (beyond 2035) periods to ensure that the annual capital cost outlays closely matched with the expected annual funding revenue stream was relatively simple. A single project (Bus Rapid Transit Full Build-Out) was moved to the illustrative group.

Table 7-4 Initial Screening Criteria for Public Transportation Projects

Criterion	Project Scoring Points
Timing of need	Short term—10 points Middle term—5 points Long term—0 point
Inclusion in plans	Blueprint, MTP, & CMP—2 points each ADA Paratransit & State Air Quality—4 points each 10 points maximum
Project effectiveness	Greater than 50 benefiting passengers—10 points 25 to 50 benefiting passengers—5 points Less than 25 benefiting passengers—0 point
Reliability of service	Decreased Service interruptions—10 points No change in service interruptions—5 points Increased service interruptions—0 point
Efficiency of service	Increase—10 points No change—5 points Decrease—0 point
Safety considerations	10 points maximum

ADA = Americans with Disabilities Act

CMP = Congestion Management Plan

Although not part of the recommended 2035 MTP public transportation projects, the illustrative project has been identified in this MTP to assist local officials in identifying future projects if additional funds become available before the next regularly scheduled MTP is prepared and adopted. However, in order for the illustrative project to become part of the MTP, a major amendment of the MTP would be necessary to officially include the project as a short- or long-term project.

Table 7-5 provides a detailed list of recommended public transportation projects grouped by time period. The project locations are illustrated in Figure 7-7 (Anchorage Bowl) and Figure 7-8 (Chugiak-Eagle River) by geographic areas within the metropolitan area.

Table 7-5 Recommended 2035 MTP Public Transportation Projects

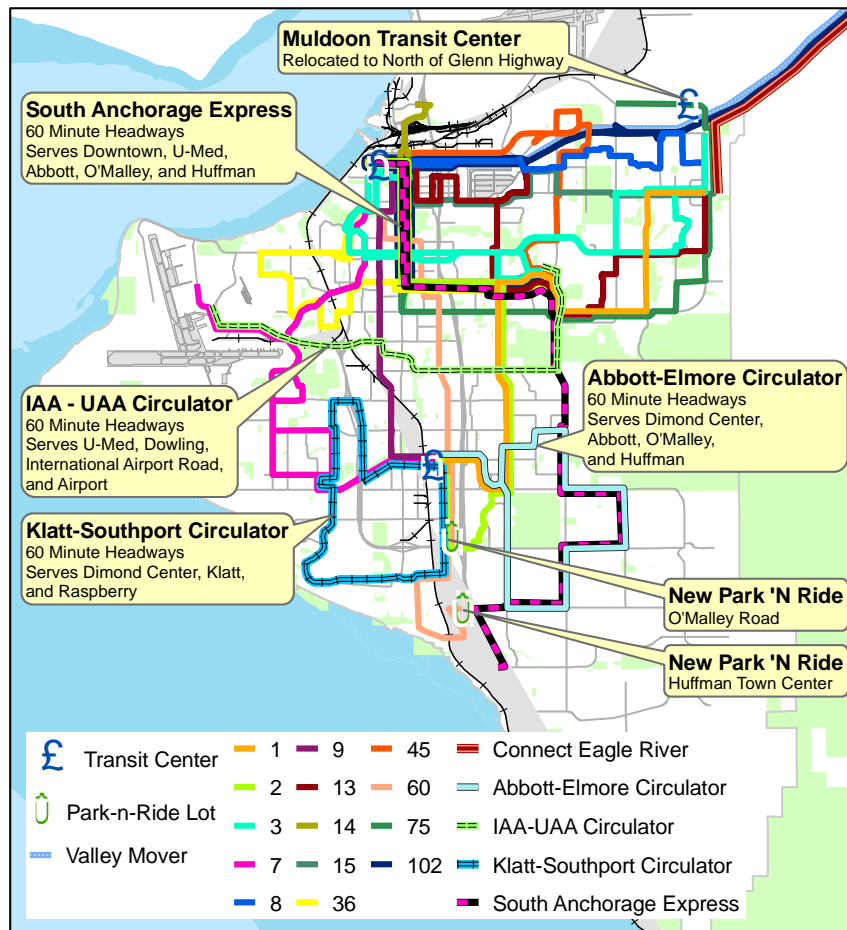
Project Number	Project Name	2010 Cost Estimate	Project Purpose and Description
Short-Term Projects (2011–2023)			
801	People Mover fleet replacement and expansion		This project funds the replacement and expansion of the People Mover bus fleet with a useful life cycle of 12 years. It is assumed that the bus system grows from a fleet of 52 buses to a fleet of 93 buses in phases over the planning horizon.
801A	Replacement of existing bus fleet	\$37,386,000	A total of 93 new bus purchases will be needed to replace the existing 52 bus fleet during the life of the MTP.
801B	Service Expansion Priority 1 – increase span of service Mon-Fri, & Sun; miscellaneous service improvements	\$0	No additional buses will be needed to expand the existing evening and Sunday service.
801C	Service Expansion Priority 2 – 30-minute headways on all routes	\$1,608,000	An additional two buses will be needed to increase the frequency of service to 30 minutes on all routes. These buses will need to be replaced once during the life of the MTP.
801D	Service Expansion Priority 3 – 15-minute headways on Routes 3, 36, & 45	\$9,648,000	An additional 12 buses will be needed to increase the frequency of service to 15 minutes on these three routes. These buses will need to be replaced once during the life of the MTP.
802	AnchorRIDES fleet replacement and expansion		These projects fund the replacement and expansion of the AnchorRIDES program.
802A	AnchorRIDES fleet replacement	\$14,900,000	This project funds the replacement of the AnchorRIDES fleet with a replacement cycle of 5 years. An additional 50 vehicles will be needed to replace the existing fleet.
802B	AnchorRIDES fleet expansion	\$5,106,000	This project funds the expansion of the AnchorRIDES fleet. The AnchorRIDES fleet is assumed to grow by 1 vehicle annually to keep up with demand.

Project Number	Project Name	2010 Cost Estimate	Project Purpose and Description
803	Share-a-ride (vanpool) fleet replacement and expansion		These projects fund the replacement and expansion of the vanpool vehicle fleet.
803A	Share-a-ride (vanpool) fleet replacement and expansion	\$15,120,000	This project funds the replacement of the vanpool vehicle fleet with a replacement life cycle of 5 years. It is assumed that the vanpool program doubles by 2031.
803B	Share-a-ride (vanpool) fleet replacement and expansion	\$13,188,000	This project funds the expansion of the vanpool vehicle fleet to double its current fleet by 2031. At this point, it is expected that the market for vanpool will be saturated.
804	Bus stop improvements	\$12,500,000	This program funds the upgrade of bus stop sites to meet requirements of the Americans with Disabilities Act (ADA) and operational needs. Typical improvements include bus shelters, benches, trash receptacles, landscaping, grading, paving, utility relocations, lighting, pathways, and turnouts.
805	Transit centers and facilities	\$ 2,000,000	This project supports an ongoing effort to provide major public transportation facilities at town centers and major destinations.
806	ITS/automated operating systems	\$ 2,500,000	Staff and capital resources provide project oversight and capital for ITS for all modes of public transportation services.
807	Fleet improvements/support equipment	\$6,250,000	Typical projects include ticket reader and issue attachment; security systems; transit/signal improvements for headway enhancements; mechanical and other improvements for facilities; mobile display terminals; and vehicle communications and location systems.
808	Management information systems	\$1,250,000	Typical projects include geographic information system (GIS) capabilities; upgrades to the automated maintenance, refueling, and inventory systems; a new computerized dispatch system; and upgrades to the scheduling/run-cutting process, customer information and telephone communications system; and desktop computers.
809	Support vehicles	\$2,500,000	Typical purchases include pickup trucks, maintenance trucks with special equipment, supervisor vehicles, shift change vehicles, forklifts, sweepers, and snow removal equipment for bus access.
810	Dimond Center Intermodal Facility	\$2,700,000	Design and construction provide revisions to the existing Dimond Transit Center with improved pedestrian connections.

Table 7-5 Recommended 2035 MTP Public Transportation Projects (cont.)

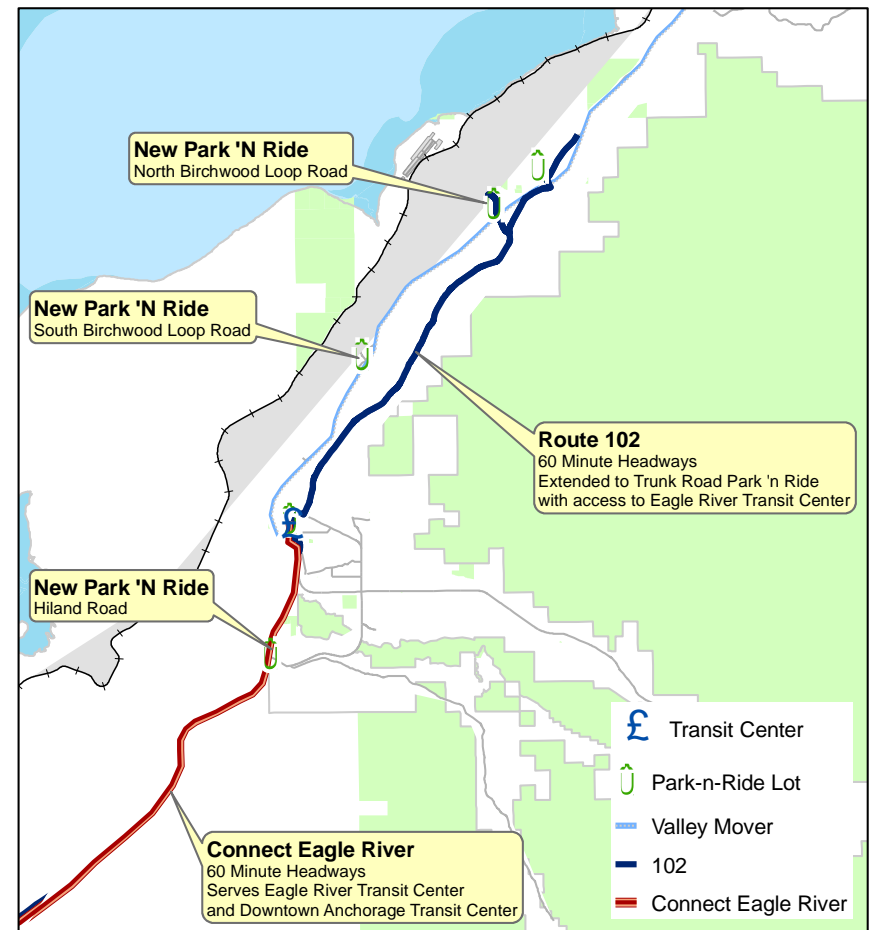
Project Number	Project Name	2010 Cost Estimate	Project Purpose and Description
811	Muldoon Transit Center relocation	\$3,000,000	Design and construction provide a new Muldoon Transit Center near the Tikahtnu Commons development.
812	Hillside park & ride facility	\$3,000,000	Project creates a park-and-ride lot in the Hillside District, as needed. Priority site is on the lower Hillside in the area between Huffman Rd and Rabbit Creek Rd, near the Seward Hwy.
813	Anchorage ride-sharing/transit marketing	\$18,000,000	This project funds the operation of the MOA Share-a-Ride program.
814	Transit warm storage expansion	\$3,000,000	Design and construction provide expansion of the warm storage building for public transportation vehicles and vehicle maintenance facilities.
Long-Term Projects (2024–2035)			
801E	Service Expansion Priority 4 – 15-minute headways on Routes 7, 9, & 15	\$4,020,000	Design and construction provide revisions to the existing Dimond Transit Center with improved pedestrian connections.
801F	Service Expansion Priority 5 – Glenn Hwy commute & Eagle River local service	\$3,618,000	Design and construction provide a new Muldoon Transit Center near the Tikahtnu Commons development.
801G	Service Expansion Priority 6 – South Anchorage park & ride facility	\$804,000	Project creates a park-and-ride lot in the Hillside District, as needed. Priority site is on the lower Hillside in the area between Huffman Rd and Rabbit Creek Rd, near the Seward Hwy.
801H	Service Expansion Priority 7 – new service (Klatt Rd/Southport, Abbott Rd/Elmore Rd & International Airport Rd)	\$2,412,000	This project funds the operation of the MOA Share-a-Ride program.
801I	Bus Rapid Transit – Downtown, Midtown, & University-Medical District core service	\$11,120,000	Design and construction provide expansion of the warm storage building for public transportation vehicles and vehicle maintenance facilities.
Illustrative Project (Not funded in MTP—after 2035)			
801K	Bus Rapid Transit – full build-out	\$22,000,000	The full Build-out bus rapid transit system will include segments from Peter’s Creek to Downtown Anchorage and from South Anchorage to Downtown Anchorage that will be integrated into the initial core route.

Figure 7-7 Recommended Public Transportation Projects – Anchorage Bowl



Source: AMATS, People Mover, Valley Mover

Figure 7-8 Recommended Public Transportation Projects – Chugiak-Eagle River



Source: AMATS, People Mover, Valley Mover

## Congestion Management

The crux of the transportation network congestion problem is coping with weekday surges that occur during morning and afternoon weekday commute hours. Congestion arises where there is more traffic than corresponding road capacity. For most hours of the day, the transportation network capacity in the metropolitan area is adequate and travel is relatively unrestricted.

A recommendation of this MTP is to continue to monitor the roadway segments and intersections in the metropolitan area that are identified in Chapters 4 and 5 as currently or projected to be (by 2035) performing over capacity. This work should be performed as part of the ongoing data collection and monitoring effort for the Congestion Management Program.

## ALTERNATIVES TO BUILDING MORE CAPACITY

Adding road and public transportation capacity cannot be the sole strategy for addressing transportation needs.

Management strategies can complement capacity expansion projects and offer other ways to make transportation more efficient, more flexible, and less intrusive. They include optimizing the operating performance of the transportation network, creating more travel options, carefully managing road work schedules to minimize travel disruption, increasing operations efficiency, and managing demand to conserve and influence traveler behavior. Collectively, these strategies can relieve stress on the available capacity in peak commute hours and can moderate travel impacts.

## MANAGING THE SYSTEM

Management and operation of the current transportation system should be made as efficient as possible. This step should be taken along with investments in new projects. Performance metrics and monitoring to make traffic and public transportation operations as efficient as possible should be a continuing function. Several initiatives that can promote efficiency are discussed below.

### *Traffic Performance Monitoring*

A system upgrade of signal control technology is needed by 2015. It should include updated control equipment, management software, real-time communications, and a traffic management center. Automatic collection of traffic volumes, surveillance monitoring, and adequate staff resources also will be needed to enable MOA traffic engineers to continuously be aware of actual traffic patterns and to quickly adapt to them.



### *Spot Geometric Improvements*

Focused geometric improvement (at intersections and on the freeways) is a proven tool for eliminating bottlenecks. In many cases, auxiliary lanes (between ramps) on freeways can eliminate or delay the need for expensive mainline widening. An additional turn bay at one approach to an intersection can reduce the delay for all movements, in all directions, at that intersection. Focused studies at key bottlenecks will reveal effective tactics and cost-efficient strategies.

### *Traffic Calming*

Cut-through traffic (drivers avoiding congested major thoroughfares) on neighborhood streets is a safety and quality-of-life concern for many Anchorage neighborhoods. Traffic-calming tools can eliminate some negative impacts of cut-through traffic and mitigate the issue. The MOA 2001 Traffic Calming Protocol Manual identifies a toolbox of strategies that can be used for traffic-calming applications. They are intended for neighborhood focus, as opposed to spot improvements, and are used to discourage use of neighborhood streets for through trips. These strategies require engineering judgment. Having implemented traffic-calming measures in many neighborhoods, the MOA has acquired an understanding of the effectiveness and costs for the options available.

### *Road Work Repair and Construction*

Road repair and construction work in Alaska is done primarily in a short summer window. The scale of repair and construction work can seriously affect ongoing traffic operations. Careful scheduling, management, and public communications are important to minimize impacts on the community and travelers.

### *Special Events*

Special events, such as Fur Rendezvous Festival, the Iditarod Ceremonial Start, and Sullivan Arena sports and concerts, can create large traffic impacts. Thoughtful planning and scheduling are needed to mitigate community and travel disruption.

## TRAVELER OPTIONS PROGRAM

Like many other regional transportation entities, AMATS recognizes the need to promote travel that reduces the use of SOVs. The Traveler Options Program is a collection of initiatives created to consider and apply appropriate means to provide travel choices and stimulate commuter demand for transportation options that offer alternatives to solo drivers and automobile travel. Efforts to increase use of alternative transportation modes may be targeted to specific locales of the MOA or areawide. The effectiveness of initiatives is assessed through public feedback and by observing commuting responses. The program must be guided by results and scientific research to produce the greatest return on investment.

Commuters need reasonable choices to get them to shift from driving. Better transit, employer-based incentives, and ride-share options will encourage employees to consider available alternatives for commuting. The primary initiatives of the Traveler Options Program are discussed below.

### *Support for Public Transportation Ridership*

Boosting the number of public transportation riders reduces traffic congestion and improves operating efficiencies. The Traveler Options Program will pursue incentives to build transit ridership. Examples include employer partnerships for commute programs, federal tax-free commuter benefits, bus pass sponsorships, and merchant partnering for rider reward incentives.

### *Employer Partnerships*

Proof is abundant that proactive efforts to encourage employer participation can successfully promote changes in commuter travel behavior. The program will develop ways to encourage individual and group employer efforts that can act as catalysts for commuter change and will implement incentives and supportive programs to influence change. Telecommuting and flexible schedules are two examples of employer programs that affect commuter travel.

### *Vanpool Promotion*

Vanpools are among the most cost-effective instruments for shifting commuting modes. They are particularly effective for military base workers for whom bus access is restricted. Vanpools serve groups of employees, eliminating multiple solo long-distance trips and their associated impacts. User participant fees cover vanpool operating and maintenance costs. (Users are eligible for federal commuter tax benefits, too.)

Forming vanpools is a particularly effective strategy to help address the Glenn Highway corridor traffic demand and relieve congestion. Therefore, funding vans and organizing travel pools will be a key activity in the Traveler Options Program.

### *Ride-Share Promotion*

Ride-share matching and promotion is a logical extension of the vanpool promotion activity and employer partnerships. Employers can reinforce this program with preferential carpooling parking for carpool participants and other incentives.

### *Guaranteed Ride Home Program*

Getting commuters to share rides share or use other means to travel to work is easier when they have back-up ways to deal with return trips in emergencies or other unanticipated circumstances. The “guaranteed ride home” program provides such transportation for carpool and vanpool participants. Many other metropolitan areas have implemented such programs. Costs are minimal, generally less than one dollar per enrolled participant annually.

### *Parking Management*

Parking availability and pricing influence travel behavior. Most employers provide free parking for employees; very few offer free or subsidized bus passes. Offering free parking without other options creates and reinforces built-in bias favoring automobile commuting. Experiments to change parking bias and driver behavior will address this problem.

### *School Access and Safety*

Parents chauffeuring students to and from school create potentially unnecessary trips, additional traffic, and air pollution as well as safety issues around schools. As many as 15,000 daily automobile trips could be eliminated by aggressive implementation of school travel demand initiatives.

A Walking School Bus program will be piloted to reduce school traffic. As a side benefit, this initiative provides healthy exercise. High school student parking is another potential area for reducing vehicle parking demand.

### *Value Pricing and Cash Incentives*

Pilot experiments that stimulate traveler behavior change with value pricing or cash incentive strategies to encourage travelers to use alternative modes of transportation will be designed and evaluated. Response levels, cost-effectiveness, and transportation system impacts will be assessed.

### *Travel Behavior Research*

Basic research and market surveys will inform strategies, assess markets, guide design pilot projects, and evaluate results of initiatives.

## **INTELLIGENT TRANSPORTATION SYSTEMS**

Responding to freeway incidents, weather and traffic reporting, CVISN, and automated data collection are examples of ITS deployment. This systemwide strategy supports commercial vehicle operation; assists in motor carrier operations; enhances communication, safety, and permit acquisition; and allows enforcement of rules and regulations. Current efforts should continue and implementation should be completed throughout the metropolitan area.

Travel delays caused by frequent occurrences of crashes and weather incidents on the Glenn and Seward highways are a major contributor to congestion. One form of an ITS, an incident management program, can help reduce recurring impacts of incidents through the systematic and coordinated use of human, institutional, and technical resources.

Among MTP recommendations is funding of an incident management program study for the Glenn and Seward highways.

The following are additional examples of ITS projects that have been scheduled for funding:

- High-priority transportation corridor prototype plan—an advanced ITS for public transportation, which may include transit signal priority testing and evaluation
- ITS automated operating system (public transportation), includes automated ticketing, smart fareboxes, Web-based interfaces, and automated telephone system for the paratransit system
- Anchorage Integrated GIS (Geographic Information System) Transportation Network (Roadnet)
- Public transportation fleet improvements and support equipment
- Traffic signal system upgrade
- 511 program for disseminating traveler information
- Road Conditions Acquisitions and Reporting System (CARS)
- Automatic vehicle location (AVL) systems
- Shared traveler information and traffic database
- Asset management system (for example, GIS-based sign inventory)

DOT&PF is creating an ITS implementation plan (Iways) specifically for the Glenn Highway corridor between Anchorage and the Mat-Su Valley. The ITS implementation plan will help deploy ITS in a coordinated and cost-effective fashion that will best meet the needs of improving traveler safety in this corridor. Potential Iways applications include road weather stations, bridge deicing systems, fog warning sensors, traffic monitoring system, variable message signs, and variable speed limit signs.

## Non-motorized Transportation (Pedestrian, Bicycle, and Trail Facilities)

Pedestrian, bicycle, and trail facilities contribute to a more attractive and livable city, enhance personal health, and help foster a sense of community. They are used by people to travel to and from the public transportation system, jobs, medical facilities, schools, parks, and other destinations. The primary thrusts of pedestrian, bicycle, and trail facility improvements is completing major missing links in the sidewalk and trail system, preserving and rehabilitating the built infrastructure, establishing several major trail corridors, and funding sidewalk and trail maintenance.

## RECOMMENDED NON-MOTORIZED TRANSPORTATION PROJECTS

Because the expected funding shortfall for the projects involving pedestrian, bicycle, and trail facilities is estimated to be about \$40 million, the list of projects needed to be pared to reflect what could be afforded.

TAC+ approved an initial project-screening approach to address the almost 33 percent funding shortfall for the non-motorized projects. Each future pedestrian, bicycle, and trail facility project was scored by using the four criteria identified in Table 7-6.

Table 7-6 Initial Screening Criteria for Non-Motorized Transportation Projects

Criterion	Scoring Points			
	0	1	3	5
Project readiness	Negative public comments	No known issues	Positive public support	Design work initiated
Project need	Upgrade of an existing facility versus no existing facility	Lower demand and non-safety-related project	Medium demand and safety-related project	Addresses major safety issue and/or high demand
Inclusion in plans	Not in an existing plan	In one plan	In two plans	In three plans
Primary purpose of project	Does not serve utilitarian users	Completes a gap in existing recreational trail network	Low to moderate utilitarian use	High utilitarian use

Following the ranking of the pedestrian, bicycle, and trail facility projects by the total score for each, the projects were grouped into short-term (2011–2023), long-term (2024–2035), and illustrative (beyond 2035) periods to ensure that the annual capital cost outlays closely matched the expected annual funding revenue stream. Some projects that received high scores were moved into later time periods to balance the revenues and costs; other projects with lower scores were moved up because their funding commitments already have been made through the AMATS TIP process.

Although not part of the pedestrian, bicycle, and trail facility projects recommended in the 2035 MTP, the illustrative projects have been identified in this MTP to assist local officials in identifying future projects if additional funds become available before the next regularly scheduled MTP is prepared and adopted. However, in order for any of the illustrative projects to become part of the MTP and funded with federal, state, or local transportation funds, a major amendment of the MTP would be necessary to officially include the project as a short-or long-term project. The use of private funds or volunteer labor to develop trails on the illustrative list would not require an amendment to the MTP.

The results of the screening process for the pedestrian, bicycle, and trail facility projects are shown in Table 7-7. Table 7-8 provides a detailed list of these projects, grouped by recommended time period. The locations of recommended projects for pedestrian, bicycle, and trail facilities are illustrated in Figure 7-9 (Anchorage Bowl) and Figure 7-10 (Chugiak-Eagle River) by geographic areas within the metropolitan area.

Table 7-7 Initial Screening Scores for Non-Motorized Transportation Projects

Project Number	Project Name	Project Location	2010 Cost Estimate	Project Readiness	Project Need	Inclusion in Plans	Primary Purpose	Total
501	Campbell Trail	Lake Otis Pkwy undercrossing	\$15,600,000	5	5	3	5	18
502	Coastal Trail at Fish Creek improvements	Fish Creek Estuary Improvements	\$100,000	5	5	3	5	18
503	Northern Lights Blvd	Path on south side, LaHonda Dr to Lois Dr	\$1,000,000	5	5	3	5	18
504	Checkmate Dr	Tudor Rd to Emmanuel Ave	\$800,000	5	5	3	5	18
505	Patterson St	Debarr Rd to Chester Creek	\$612,000	5	5	3	5	18
506	27th Ave	Blueberry Rd to Minnesota Dr	\$50,000	3	5	3	5	16
507	Debarr Rd	Orca Blvd to Turpin St	\$3,280,000	3	5	3	5	16
508	Lake Otis Pkwy	Huffman Rd to Chester Creek	\$100,000	3	5	3	5	16
509	Lake Otis Pkwy	DeArmoun Rd to Debarr Rd	-	3	5	3	5	16
510	Midtown east-west routes	Reconnaissance study	\$100,000	3	5	3	5	16
511	Muldoon Rd (reconnaissance study)	Northern Lights Blvd to Glenn Hwy	\$50,000	3	5	3	5	16
512	Debarr Rd	Boniface Pkwy to Muldoon Rd	\$1,710,000	3	5	3	5	16
513	10th Ave	P St to Medfra St	\$60,000	3	5	1	5	14
514	Arctic Blvd	Benson Blvd to Fireweed Ln	\$10,000	3	5	1	5	14
515	C St	O'Malley to 10th Ave	\$400,000	3	5	1	5	14
516	Campbell Trail lighting	Victor Rd to Seward Hwy	\$2,600,000	3	5	3	3	14
517	Coastal Trail	Connection to Ship Creek Trail	\$1,770,000	5	3	3	3	14
518	Dimond Blvd at Victor Rd	Reconnaissance study	\$50,000	3	5	3	3	14

Table 7-7 Initial Screening Scores for Non-Motorized Transportation Projects (cont.)

Project Number	Project Name	Project Location	2010 Cost Estimate	Project Readiness	Project Need	Inclusion in Plans	Primary Purpose	Total
519	Elmore Rd	48th Ave to Tudor Rd	\$20,000	3	5	3	3	14
520	Lake Otis Pkwy	Abbott Rd to DeArmoun Rd	\$520,000	3	5	1	5	14
521	Mountain View Dr	Pine St to Lane St	\$150,000	3	5	1	5	14
522	Old Seward Hwy	DeArmoun Rd to Seward Hwy	\$1,200,000	3	5	3	3	14
523	Glenn Hwy Trail	S Artillery Rd to Brooks Rd	\$800,000	3	5	1	5	14
524	Arctic Blvd Bike Lanes	Fireweed Ln to 10th Ave	\$100,000	3	5	1	5	14
525	Duben St, #14 crash location	to Muldoon Elementary School	\$900,000	3	5	1	5	14
526	Northern Lights Blvd	Seward Hwy to Minnesota Dr	\$1,240,000	3	3	3	5	14
527	32nd Ave	Lois Dr to Minnesota Dr	\$170,000	3	3	3	5	14
528	Coronado St	Old Glenn Hwy to Echo St to North Eagle River Loop Rd	\$1,000,000	3	5	1	5	14
529	Muldoon Rd	Boundary Ave to Bartlett High School, Oilwell Rd	\$650,000	3	3	3	5	14
530	East High School	Northeast entry, 20th Ave & Bragaw St	\$20,000	3	5	1	5	14
531	A St	Fireweed Ln north to 13th Ave	\$150,000	3	3	3	5	14
532	Business Blvd at Carrs to Regency Dr		\$300,000	3	3	5	3	14
533	Huffman Town Center walkways	Daryl Ave, Old Seward Hwy, from Post Office, Klatt Rd	\$300,000	3	3	3	5	14
534	Industry Way	Entire length	\$650,000	3	3	3	5	14
535	Huffman Park Dr	Entire length	\$370,000	3	3	3	5	14



Project Number	Project Name	Project Location	2010 Cost Estimate	Project Readiness	Project Need	Inclusion in Plans	Primary Purpose	Total
536	88th Ave	Jewel Lake Rd to Northwood St	\$100,000	1	5	1	5	12
537	Benson Blvd/Northern Lights Blvd	Arlington Dr to LaTouche St	\$-	1	5	1	5	12
538	Chester Creek Trail	Goose Lake to Westchester Lagoon widening	\$4,160,000	3	1	3	5	12
539	G St	3rd Ave to 10th St	\$20,000	3	3	1	5	12
540	Golden View Dr	Rabbit Creek Rd to Ransom Ridge Rd	\$60,000	3	5	1	3	12
541	Ingra-Gambell Couplet	Reconnaissance study	\$50,000	1	5	1	5	12
542	Old Seward Hwy	Rabbit Creek Rd to Potter Creek Rd	\$90,000	3	3	3	3	12
543	O'Malley Rd	Old Seward Hwy to C St	\$900,000	3	3	1	5	12
544	Wisconsin St	Spenard Rd to Northern Lights Blvd	\$85,000	3	3	1	5	12
545	27th Ave	Seward Hwy to Minnesota Dr	\$570,000	1	3	3	5	12
546	20th Ave	Bragaw St to Tikishla Park	\$600,000	3	3	1	5	12
547	McCarrey St	west side Chena Ave north to bus stop	\$50,000	3	3	1	5	12
548	Town Center walkways	Old Glenn Hwy and Business Blvd connections	\$340,000	3	3	3	3	12
549	Abbott Rd	Academy Rd to Lake Otis Pkwy	\$30,000	1	3	1	5	10
550	Baxter Rd	Tudor Rd to 21st Ave at Cheney Lake	\$100,000	3	3	1	3	10
551	Baxter Rd/Beaver Place	Cheney Lake to Debarr Rd	\$10,000	3	3	1	3	10
552	Coastal Trail	Westchester Lagoon to Earthquake Park widening	\$2,600,000	3	1	3	3	10

Table 7-7 Initial Screening Scores for Non-Motorized Transportation Projects (cont.)

Project Number	Project Name	Project Location	2010 Cost Estimate	Project Readiness	Project Need	Inclusion in Plans	Primary Purpose	Total
553	Elmore Rd	101st Ave to Lilleston Rd	\$940,000	3	3	1	3	10
554	Elmore Rd	DeArmoun Rd to O'Malley Rd	\$150,000	3	1	3	3	10
555	Hillside Dr	Clark's Rd to Abbott Rd	\$250,000	3	3	1	3	10
556	Huffman Rd	Pintail to Elmore Rd	\$100,000	3	3	1	3	10
557	Lore Rd	Lake Otis Pkwy to Elmore Rd	\$150,000	1	3	1	5	10
558	Lore Rd	Seward Hwy to Lake Otis Pkwy	\$30,000	3	3	1	3	10
559	McCarrey St	Klondike St to Mountain View Dr	\$10,000	1	3	1	5	10
560	Northern Lights Blvd	Maplewood to Lake Otis Pkwy	\$200,000	3	3	1	3	10
561	Peterkin St	Bunn St to McPhee St	\$50,000	1	3	1	5	10
562	Pine St	Debarr Rd to Klondike St	\$20,000	1	3	1	5	10
563	Rabbit Creek Rd	Evergreen Dr to Clark's Rd	\$80,000	3	3	1	3	10
564	Raspberry Rd	Kincaid Park entrance to Minnesota Dr	\$250,000	1	3	1	5	10
565	Seward Hwy	Tudor Rd to 36th Ave	\$800,000	3	3	1	3	10
566	Tudor Rd	Campbell Airstrip Rd to Pioneer Dr	\$1,650,000	3	3	1	3	10
567	Lake Hill Dr	Old Glenn Hwy to Mirror Lake Middle School	\$20,000	1	3	3	3	10
568	Reka Dr	Bragaw St to Pine St	\$850,000	1	3	1	5	10
569	Old Glenn Hwy, Monte Rd, Brooks Rd		\$600,000	3	3	1	3	10
570	Duben St	Muldoon Rd to Oklahoma St	\$560,000	3	3	1	3	10

Project Number	Project Name	Project Location	2010 Cost Estimate	Project Readiness	Project Need	Inclusion in Plans	Primary Purpose	Total
571	Molanary Dr	86th Ave to 88th Ave	\$200,000	3	3	1	3	10
572	Valley St	Muldoon Rd to 10th Ave	\$600,000	3	3	1	3	10
573	Boniface Pkwy	Glenn Hwy south to Northern Lights Blvd (west side)	\$3,150,000	3	3	1	3	10
574	Northern Lights Blvd	Wesleyan Blvd to Muldoon Rd upgrades	\$3,000,000	3	1	1	3	8
575	Northwood Dr	88th Ave to Raspberry Rd	\$80,000	1	3	1	3	8
601	32nd Ave Extended	North Star St to Arctic Blvd	\$200,000	0	3	3	3	9
602	Tudor Rd	Elmore Rd to Minnesota Dr	\$5,500,000	3	0	3	3	9
603	76th Ave	Alaska Railroad to Seward Hwy	\$20,000	1	3	1	3	8
604	76th Ave	Alaska Railroad to Taku Lake Park	\$5,000	1	3	1	3	8
605	Abbott Rd	Birch Rd to Hillside Dr	\$30,000	1	3	1	3	8
606	DeArmoun Rd	Seward Hwy to 140th Ave	\$160,000	3	1	1	3	8
607	Dimond Blvd	Sand Lake Rd to Jewel Lake Rd	\$75,000	3	1	1	3	8
608	Elmore Rd	101st Ave to Lilleston St	\$900,000	1	3	1	3	8
609	Old Seward Hwy	Rabbit Creek Rd to Huffman Rd	\$20,000	3	1	1	3	8
610	Turnagain Pkwy	Northern Lights Blvd to Illiamna Ave	\$10,000	1	3	1	3	8
611	Farm Ave	Old Glenn Hwy to Breckenridge Dr	\$20,000	1	3	1	3	8
612	Neighborhood northeast of Arctic Blvd & 32nd Ave		\$2,400,000	1	3	1	3	8

Table 7-7 Initial Screening Scores for Non-Motorized Transportation Projects (cont.)

Project Number	Project Name	Project Location	2010 Cost Estimate	Project Readiness	Project Need	Inclusion in Plans	Primary Purpose	Total
613	W 36th Ave	Minnesota Dr to Fish Creek	\$600,000	1	3	1	3	8
614	Crescent St at E 37th Ave		\$30,000	1	3	1	3	8
615	A St	west side, Fireweed Ln to Benson Blvd	\$400,000	1	3	1	3	8
616	A St	west side, Benson Blvd to 36th Ave	\$700,000	1	3	1	3	8
617	Lois Dr	Northern Lights Blvd & 36th Ave	\$700,000	1	3	1	3	8
618	Spirit Way	Piper St to Providence Dr	\$200,000	1	3	1	3	8
619	Johns Rd	High View Dr to Klatt Rd	\$600,000	1	3	1	3	8
620	4th Ave	Bunnell St to Boniface Pkwy	\$550,000	1	3	1	3	8
621	Potter Dr	Arctic Blvd to Dowling Rd	\$1,900,000	1	3	1	3	8
622	Debarr Rd	Muldoon Rd east to Cross Pointe Loop	\$250,000	0	3	1	3	7
623	Klatt Rd	west of Puma St	\$5,000	1	1	1	3	6
624	Tudor Rd	Minnesota Dr to Old Seward Hwy	\$50,000	1	1	1	3	6
625	Mirror Lake to Old Glenn Hwy		\$500,000	3	1	1	1	6
626	North Eagle River Access Rd	Old Glenn Hwy to Powder Ridge Dr	\$60,000	1	1	1	3	6
627	Old Glenn Hwy	Voyles Rd to end	\$80,000	1	1	1	3	6
628	West Parkview Terrace		\$50,000	1	1	1	3	6
629	Wilson St	40th Ave to Tudor Rd	\$380,000	1	1	1	3	6
630	Petersburg St	56th Ave to 57th Ave	\$60,000	1	1	1	3	6
631	Ship Creek Trail	Glenn Hwy to Tyson School	\$4,260,000	0	1	3	1	5

Project Number	Project Name	Project Location	2010 Cost Estimate	Project Readiness	Project Need	Inclusion in Plans	Primary Purpose	Total
632	Glenn Hwy Trail	Birchwood Loop to Eklutna	\$15,600,000	1	1	3	0	5
633	Elmore Path extension	Rabbit Creek Rd to DeArmoun Rd	\$1,500,000	1	3	1	3	8
634	6th Ave & 7th Ave at A St	to Museum	\$100,000	1	0	1	3	5
701	Eagle River Greenbelt Trail	Glenn Hwy to Eagle River Nature Center	\$20,130,000	5	3	1	1	10
702	Fire Creek	Glenn Hwy through Tract A Powder Reserve	\$6,330,000	1	1	1	3	6
703	Lake Otis Blvd	68th Ave to Abbott Rd	\$1,760,000	1	0	1	3	5
704	3rd Ave	Post Rd to E St	\$624,000	1	3	1	3	8
705	3rd Ave	A St to Hyder St	\$750,000	1	3	1	3	8
706	Glenn Hwy Trail	Eklutna to Mat-Su Borough	\$12,510,000	1	1	1	1	4

Table 7-8 Recommended 2035 MTP Projects for Non-Motorized Transportation Facilities

Project Number	Project Name	Project Location	Project Purpose and Description
<b>Short-Term Projects (2011–2023)</b>			
501	Campbell Trail	Lake Otis Pkwy undercrossing	Separated Campbell Creek Trail with connection across Lake Otis Blvd
502	Coastal Trail at Fish Creek improvements	Fish Creek Estuary Improvements	Paving improvements and relocation of a fence that is a safety issue because it creates a blind corner where there have been reported bicycle-vehicle and pedestrian-vehicle crashes. (No right-of-way acquisition involved.)
503	Northern Lights Blvd	Path on south side, LaHonda Dr to Lois Dr	Construction of missing sidewalk
504	Checkmate Dr	Tudor to Emmanuel	Construction of missing sidewalk
505	Patterson St	Debarr Rd to Chester Creek	Construction of missing sidewalk
506	27th Ave	Blueberry Rd to Minnesota Dr	Bicycle boulevard
507	Debarr Rd	Orca Blvd to Turpin St	Separated pathway on north side of street
508	Lake Otis Pkwy	Huffman to Chester Creek	Study (Area B)—investigate the feasibility of constructing improved bicycle facility
509	Lake Otis Pkwy	DeArmoun Rd to Debarr Rd	Bicycle lane (pending results of the Lake Otis Pkwy study, Project 508)
510	Midtown east-west routes	Reconnaissance study	Study (Area C)—investigate feasibility of constructing bicycle facility through Midtown
511	Muldoon Rd (reconnaissance study)	Northern Lights Blvd to Glenn Hwy	Study (Area D)—investigate feasibility of constructing bicycle facility along Muldoon Rd
512	Debarr Rd	Boniface Pkwy to Muldoon Rd	Upgrade existing sidewalk on south side of street
513	10th Ave	P St to Medfra St	Bicycle boulevard
514	Arctic Blvd	Benson Blvd to Fireweed Ln	Bicycle lanes
515	C St	O'Malley to 10th Ave	Bicycle lanes

Project Number	Project Name	Project Location	Project Purpose and Description
516	Campbell Trail lighting	Victor Rd to Seward Hwy	Installation of lighting along Campbell Creek Trail
517	Coastal Trail	Connection to Ship Creek Trail	Separated pathway linking Coastal Trail with Ship Creek Trail
518	Dimond Blvd at Victor Rd	Reconnaissance study	Study (Area G)—investigate feasibility of improving pedestrian crossing
519	Elmore Rd	48th Ave to Tudor Rd	Bicycle lanes
520	Lake Otis Pkwy	Abbott Rd to DeArmoun Rd	Upgrade sweeps at intersection of separated pathway and intersections
521	Mountain View Dr	Pine St to Lane St	Upgrade of existing separated trail
522	Old Seward Hwy	DeArmoun Rd to Seward Hwy	Separated pathway
523	Glenn Hwy Trail	S Artillery Rd to Brooks Rd	Construction of missing link in Glenn Hwy separated pathway
524	Arctic Blvd Bicycle lanes	Fireweed Ln to 10th Ave	Bicycle lane striping and signage
525	Duben St, #14 crash location	to Muldoon Elementary School	Construction of missing sidewalk, crossing
526	Northern Lights Blvd	Seward Hwy to Minnesota Dr	Sidewalk separation, upgrade
527	32nd Ave	Lois Dr to Minnesota Dr	Construction of missing sidewalk
528	Coronado St	Old Glenn to Echo St to North Eagle River Loop Rd	Sidewalk, lighting
529	Muldoon Rd	Boundary Ave to Bartlett High School, Oilwell Rd	Construction of missing sidewalk
530	East High	Northeast entry, 20th Ave & Bragaw St	Walkway or stairway needed to link Bragaw St with school entrance
531	A St	Fireweed Ln north to 13th Ave	Construction of missing sidewalk

Table 7-8 Recommended 2035 MTP Projects for Non-Motorized Transportation Facilities (cont.)

Project Number	Project Name	Project Location	Project Purpose and Description
532	Business Blvd at Carrs to Regency Dr		Construction of missing link walkway behind Carrs Store
533	Huffman Town Center walkways	Daryl Ave, Old Seward Hwy, from Post Office, Klatt Rd	Construction of missing sidewalk
534	Industry Way	Entire length	Construction of missing sidewalk
535	Huffman Park Dr	Entire Length	Construction of missing sidewalk
536	88th Ave	Jewel Lake Rd to Northwood St	Bicycle lanes
537	Benson Blvd/Northern Lights Blvd	Arlington Dr to LaTouche St	Bicycle lane (pending results of the Midtown east-west route study, Project 510)
538	Chester Creek Trail	Goose Lake to Westchester Lagoon widening	Expand existing separate greenbelt trail (12 feet wide)
539	G St	3rd Ave to 10th St	Shared-road bicycle facility
540	Golden View Dr	Rabbit Creek Rd to Ransom Ridge Rd	Paved shoulder bikeway
541	Ingra-Gambell Couplet	Reconnaissance study	Study (Area F)—investigate pedestrian safety study
542	Old Seward Hwy	Rabbit Creek Rd to Potter Creek Rd	Paved shoulder bikeway
543	O'Malley Rd	Old Seward Hwy to C St	Separated pathway (under railroad)
544	Wisconsin St	Spenard Rd to Northern Lights Blvd	Bicycle lanes
545	27th Ave	Seward Hwy to Minnesota Dr	Crossing, sidewalk upgrade
546	20th Ave	Bragaw St to Tikishla Park	Construction of missing sidewalk
547	McCarrey	west side Chena Ave north to bus stop	Construction of missing sidewalk



Project Number	Project Name	Project Location	Project Purpose and Description
548	Town Center walkways	Old Glenn and Business Blvd connections	Construction of missing link walkway
549	Abbott Rd	Academy Rd to Lake Otis Pkwy	Bicycle lanes
550	Baxter Rd	Tudor Rd to 21st Ave at Cheney Lake	Bicycle lanes
551	Baxter Rd/Beaver Place	Cheney Lake to Debarr Rd	Shared-road bicycle facility
552	Coastal Trail	Westchester Lagoon to Earthquake Park widening	Separated pathway
553	Elmore Rd	101st Ave to Lilleston St	Separated pathway
554	Elmore Rd	DeArmoun Rd to O'Malley Rd	Bicycle lanes
555	Hillside Dr	Clark's Rd to Abbott Rd	Paved shoulder bikeway
556	Huffman Rd	Pintail St to Elmore Rd	Bicycle lanes
557	Lore Rd	Lake Otis Pkwy to Elmore Rd	Shared-road bicycle facility and separated pathway to Elmore Rd
558	Lore Rd	Seward Hwy to Lake Otis Pkwy	Bicycle lanes
559	McCarrey St	Klondike St to Mountain View Dr	Shared-road bicycle facility
560	Northern Lights Blvd	Maplewood St to Lake Otis Pkwy	Upgrade separated pathway on south side of the street
561	Peterkin St	Bunn St to McPhee St	Bicycle boulevard
562	Pine St	Debarr Rd to Klondike St	Bicycle lanes
563	Rabbit Creek Rd	Evergreen Dr to Clark's Rd	Paved shoulder bikeway

Table 7-8 Recommended 2035 MTP Projects for Non-Motorized Transportation Facilities (cont.)

Project Number	Project Name	Project Location	Project Purpose and Description
564	Raspberry Rd	Kincaid Park entrance to Minnesota Dr	Bicycle lanes
565	Seward Hwy	Tudor Rd to 36th Ave	Separated pathway
566	Tudor Rd	Campbell Airstrip Rd to Pioneer Dr	Separated pathway
567	Lake Hill Dr	Old Glenn Hwy to Mirror Lake Middle School	Paved shoulder bikeway
568	Reka Dr	Bragaw St to Pine St	Construction of missing sidewalk
569	Old Glenn Hwy, Monte Rd, Brooks Rd		Sidewalk, crossing
570	Duben St	Muldoon Rd to Oklahoma St	Construction of missing sidewalk
571	Molanary Dr	86th Ave to 88th Ave	Construction of missing sidewalk
572	Valley St	Muldoon Rd to 10th Ave	Construction of missing link walkway
573	Boniface Pkwy	Glenn Hwy south to Northern Lights Blvd (west side)	Construction of missing sidewalk
574	Northern Lights Blvd	Wesleyan Blvd to Muldoon Rd upgrades	Separated pathway
575	Northwood Dr	88th Ave to Raspberry Rd	Bicycle lanes
Long-Term Projects (2024–2035)			
601	32nd Ave extension	North Star St to Arctic Blvd	Construction of missing pathway
602	Tudor Rd	Elmore Rd to Minnesota Dr	Upgrade separated pathway
603	76th Ave	Alaska Railroad to Seward Hwy	Bicycle lanes

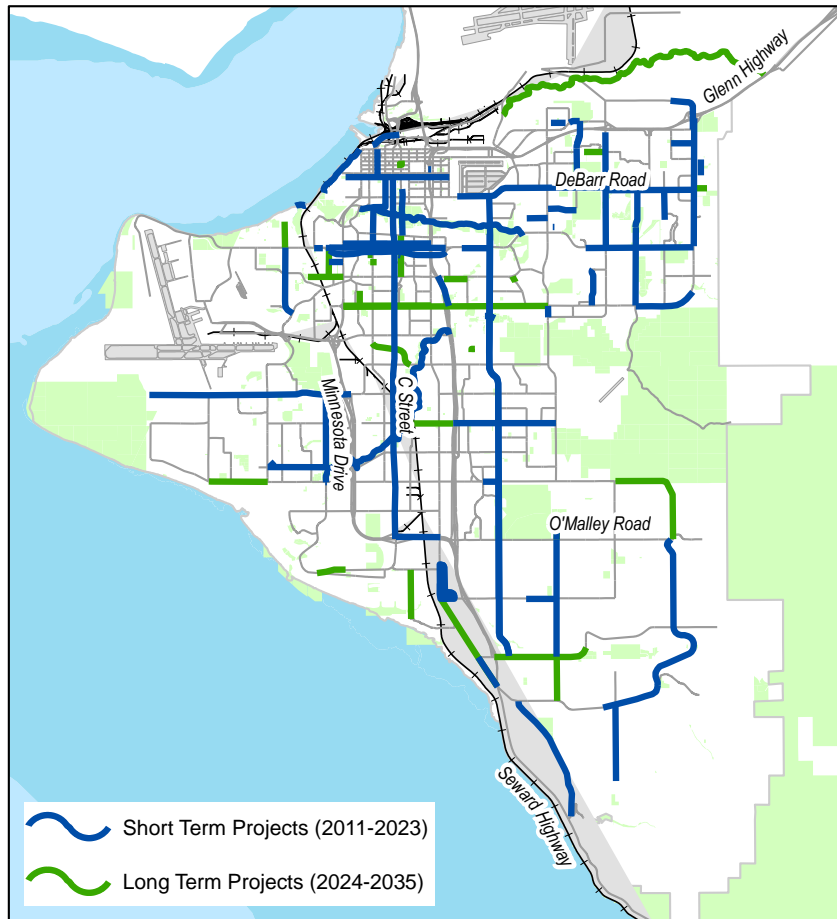
Project Number	Project Name	Project Location	Project Purpose and Description
604	76th Ave	Alaska Railroad to Taku Lake Park	Shared-road bicycle facility
605	Abbott Rd	Birch Rd to Hillside Dr	Paved shoulder bikeway
606	DeArmoun Rd	Seward Hwy to 140th Ave	Bicycle lanes
607	Dimond Blvd	Sand Lake Rd to Jewel Lake Rd	Bicycle lanes
608	Elmore Rd	101st Ave to Lilleston St	Bicycle lanes
609	Old Seward Hwy	Rabbit Creek Rd to Huffman Rd	Paved shoulder bikeway
610	Turnagain Pkwy	Northern Lights Blvd to Illiamna St	Shared-road bicycle facility
611	Farm Ave	Old Glenn Hwy to Breckenridge Dr	Shared-road bicycle facility
612	Neighborhood northeast of Arctic Blvd & 32nd Ave		Construction of missing sidewalks
613	West 36th	Minnesota Dr to Fish Creek	Construction of missing sidewalks
614	Crescent St at East 37th Ave		Construction of missing link walkway
615	A St	west side, Fireweed Ln to Benson Blvd	Construction of missing sidewalk
616	A St	west side, Benson Blvd to 36th Ave	Construction of missing sidewalk
617	Lois Dr	Northern Lights Blvd & 36th Ave	Construction of missing sidewalk
618	Spirit Way	Piper St to Providence Dr	Construction of missing sidewalk
619	Johns Rd	High View Dr to Klatt Rd	Construction of missing sidewalk

Table 7-8 Recommended 2035 MTP Projects for Non-Motorized Transportation Facilities (cont.)

Project Number	Project Name	Project Location	Project Purpose and Description
620	4th Ave	Bunnell St to Boniface Pkwy	Construction of missing sidewalk
621	Potter Dr	Arctic Blvd to Dowling Rd	Construction of missing link walkway
622	Debarr Rd	Muldoon Rd east to Cross Pointe Loop	Construction of missing sidewalk
623	Klatt Rd	west of Puma St	Shared-road bicycle facility
624	Tudor Rd	Minnesota Dr to Old Seward Hwy	Paved shoulder bikeway
625	Mirror Lake to Old Glenn Hwy		Separated pathway
626	North Eagle River Access Rd	Old Glenn Hwy to Powder Ridge Dr	Bicycle lanes
627	Old Glenn Hwy	Voyles Rd to end	Paved shoulder bikeway
628	West Parkview Terrace		Shared-road bicycle facility
629	Wilson St	40th Ave to Tudor Rd	Construction of missing sidewalk
630	Petersburg St	56th Ave to 57th Ave	Construction of missing link walkway, lighting
631	Ship Creek Trail	Glenn Hwy to Tyson School	Separated pathway
632	Glenn Hwy Trail	Birchwood Loop to Eklutna	Separated pathway
633	Elmore Path Extension	Rabbit Creek Rd to DeArmoun Rd	Separated pathway
634	6th Ave & 7th Ave at A St	to Museum	Crossing improvements

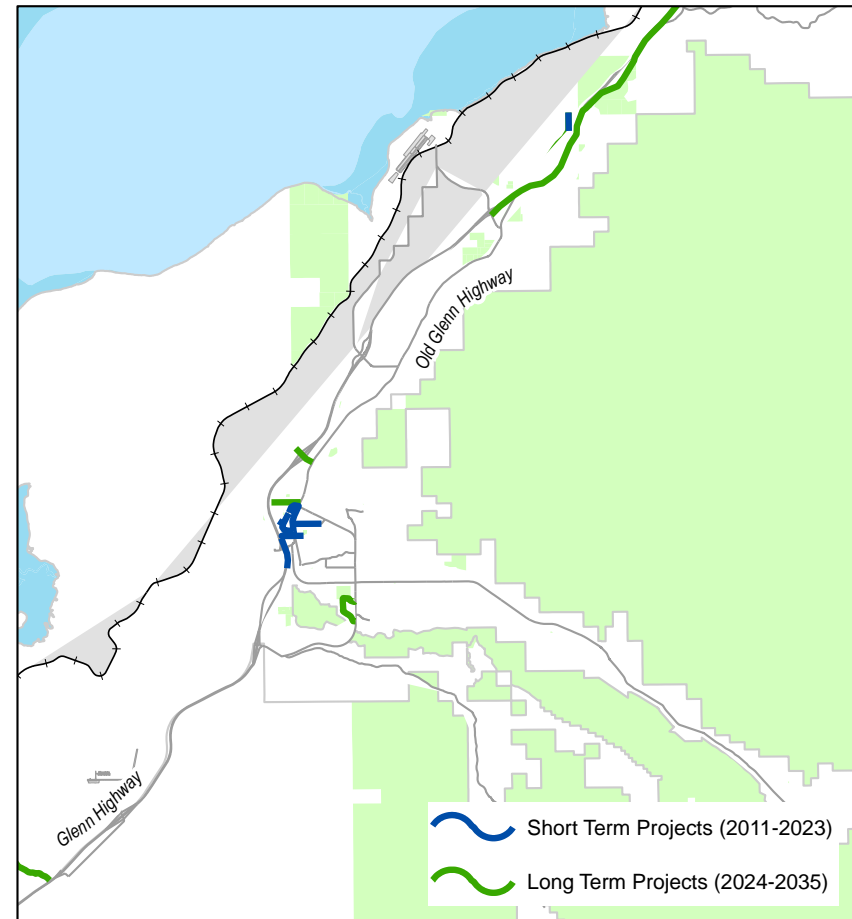
Project Number	Project Name	Project Location	Project Purpose and Description
<b>Illustrative Projects (Not funded in MTP—after 2035)</b>			
701	Eagle River Greenbelt Trail	Glenn Hwy to Eagle River Nature Center	15.3-mile paved pathway from Glenn Hwy to Eagle River Nature Center
702	Fire Creek	Glenn Hwy through Tract A Powder Reserve	Separated pathway
703	Lake Otis Blvd	68th Ave to Abbott Rd	Sidewalk upgrade
704	3rd Ave	Post Rd to E St	Paved shoulder bikeway
705	3rd Ave	A St to Hyder St	Separated pathway
706	Glenn Hwy Trail	Eklutna to Mat-Su	Separated pathway

Figure 7-9 Recommended Non-Motorized Transportation Projects – Anchorage Bowl



Source: AMATS Non-Motorized Transportation Plans

Figure 7-10 Recommended Non-Motorized Transportation Projects – Chugiak-Eagle River



Source: AMATS Non-Motorized Transportation Plans

This MTP recommends the following activities associated with non-motorized transportation projects:

- Funding of transportation enhancements that does not exceed 10 percent of the monies allotted to AMATS in the TIP
- Updates to the Anchorage Non-motorized Transportation Plan to establish the following as high priorities:
- Safe walking paths along major connections in areas without sidewalks
- Improved bicycle facilities to promote bicycle commute options
- Recreational trail corridors that are consistent with objectives of the pedestrian and bicycle plans
- Establishment of funding priorities for pedestrian, bicycle, and trail plan projects
- Enforcement of sidewalk clearing ordinances

- Creation of a youth education program (Street Smarts) for bicyclist and pedestrian safety

- Funding Priorities—Repair and Maintenance of Trails and Sidewalks

Anchorage has a world-class recreational trail system. These trails need to be preserved and rehabilitated. They need to be widened to meet current demand, resurfaced to address poor subsurface conditions, and lighted where appropriate. Additional needs include enhancement and maintenance of vegetation where there are not conflicts with personal property rights and maintenance of trail surfaces for summer and winter use. Maintaining the Anchorage network of sidewalks, particularly for winter pedestrian use, is also a priority. Additional equipment for both trail and sidewalk maintenance may be necessary to ensure year-round access for pedestrians and bicyclists. This MTP identifies the repair and maintenance of the existing trails and sidewalks as a funding priority that takes precedence over the addition of new trails when determining budget allocations.

## MISSING LINKS

Many missing links in the system of pedestrian, bicycle, and trail facilities are included in recommended road projects. These improvements will contribute over 160 miles of sidewalk and multi-use pathways in the metropolitan area. The road project trail and sidewalk improvements do not complete all missing links. The adopted pedestrian and bicycle plans and the upcoming update to the 1997 MOA Areawide Trails Plan will establish priorities for other missing link connections in sidewalks, bicycle routes, and recreational multi-use trails.

## ESTABLISHING AND CONNECTING MAJOR TRAIL CORRIDORS

Major cross-town greenbelt trail corridors provide utility transportation to destinations (schools, employment, and shopping) as well as recreational opportunities via bicycle, ski, and pedestrian commuters to reach employment centers.



Existing major trails to be improved include the north extension of the Coastal Trail, connecting the Coastal Trail to the Ship Creek Trail.

### **TRAIL AND PATHWAY EASEMENTS**

Easements are critical components for the connectivity of the recreational trail system in the metropolitan area. Easements through subdivisions need to be preserved, and trail easements should be established in new subdivisions, giving access to schools, shopping, employment, and recreational areas. Access (trailheads) to the existing Chugach State Park and the Coastal Trail is especially important.

### **Freight Distribution**

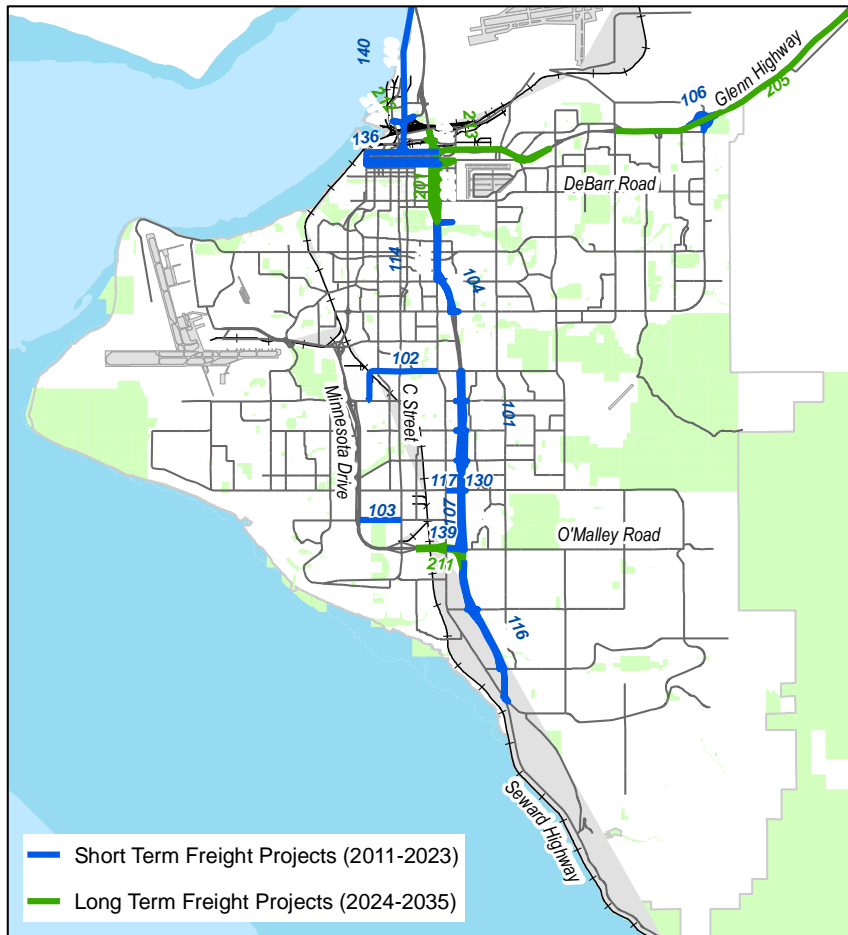
Anchorage is the gateway connection to the world for Alaska; freight shipments from elsewhere sustain the state and local economies. Updating and expanding the Port of Anchorage (currently in progress) is essential for accommodating larger vessels and adapting to changing requirements and technologies. The Port of Anchorage improvements are also required to strengthen Anchorage's role and position in global commerce. Companion MTP projects include improving access to the port, airport, and railroad terminals and connections to the NHS. The costs of moving goods directly affect end-user costs as well as economic vitality.

Design standards and connectivity through major arterial streets are important for distribution to freight destinations. The expected types and volume of truck traffic need to be reviewed as part of any roadway project. Identification of truck-related requirements would help to ensure that commercial vehicle movements (for which requirements include clearances and turning radii) are taken into consideration in the design of a project.

Efficiency of freight movements will be facilitated with expansion planned at the Port of Anchorage. Those improvements combined with road projects to provide better port access and relieve congestion on the road network will help motor carriers and other freight haulers. Figures 7-11 and 7-12 portray road improvement projects that are especially relevant to freight operations.

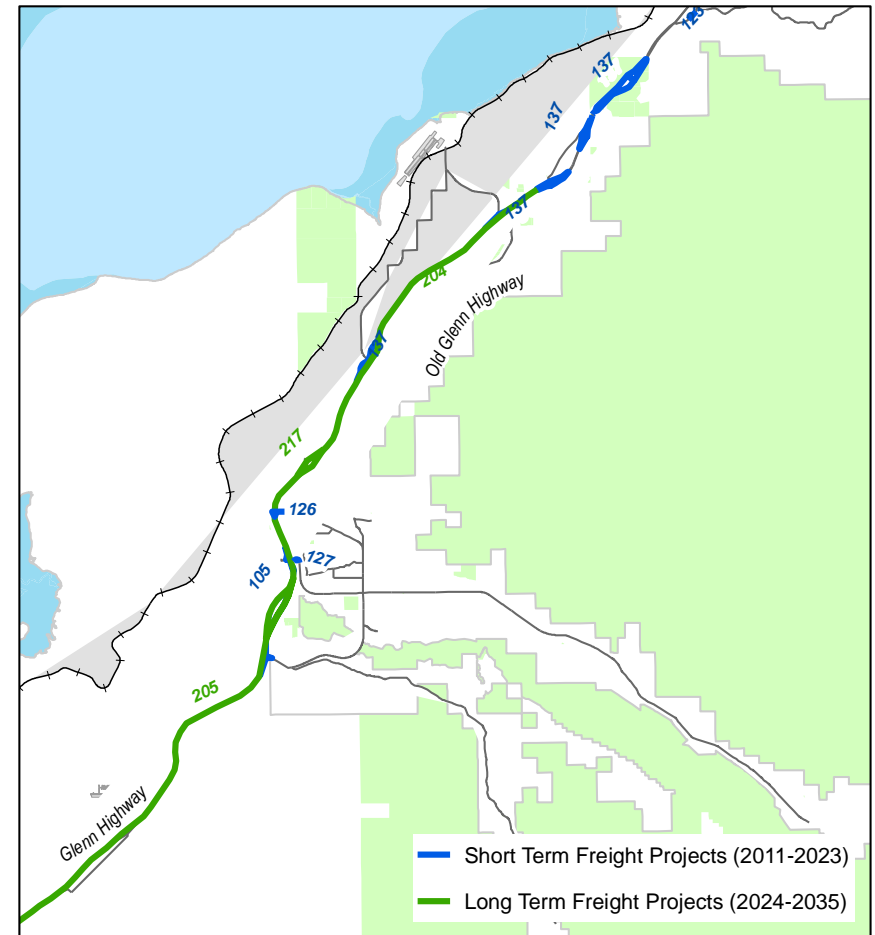
The AMATS Freight Advisory Committee provides a forum for continuing interaction with the freight community and dialog on issues and concerns affecting freight operations.

Figure 7-11 Road Projects That Enhance Freight Distribution – Anchorage Bowl



Source: MOA

Figure 7-12 Road Projects That Enhance Freight Distribution – Chugiak-Eagle River



Source: MOA

## Regional Connections

Several components of the transportation system in the metropolitan area contribute to travel and freight movement for the region—MOA, the Mat-Su Borough, and areas south of the MOA. keystones of the regional network are TSAIA, the Port of Anchorage, the NHS, the Knik Arm Crossing, public transportation, and joint planning efforts of affected entities.

### AIRPORT ACCESS IMPROVEMENTS

The MTP includes two road projects, connection of Dowling and Raspberry roads and improvements on Jewel Road, that will enhance TSAIA access from the south. The Knik Arm Crossing will provide faster travel to TSAIA from some locations in the Mat-Su Borough.

### PORT OF ANCHORAGE ACCESS IMPROVEMENTS

Truck access to and egress from the Port of Anchorage are significantly improved by projects linking the Port of Anchorage to the Knik Arm Crossing, the Glenn Highway, and the Seward Highway.

### NATIONAL HIGHWAY SYSTEM CONTINUITY AND IMPROVEMENTS

The MTP materially improves NHS connectivity and design consistency through Anchorage. The Seward and Glenn highways connection closes a long-standing continuity gap and establishes a limited-access corridor serving the entire metropolitan area and the surrounding region.

The Seward Highway upgrade to six lanes north of O'Malley Road will accommodate increasing demand. Additionally, a system interchange linking the Seward Highway and Minnesota Drive (for which study is funded in the MTP recommendations), further strengthens the NHS connectivity. All of these projects improve access and connections with the port and airport intermodal terminals.

### KNIK ARM CROSSING

Details of this roadway project, which would add a connection to the Mat-Su Borough, are provided earlier in this chapter.

### REGIONAL TRANSIT AUTHORITY AND SERVICES

Bus, express bus, and rail travel between the Mat-Su Borough and the Anchorage Bowl are additional potential options for commuter transportation. As recommended public transportation improvements are implemented, they will provide an efficient network to make connections that will enhance the viability of commuter rail. The MTP endorses future studies of the feasibility and funding of a regional transit authority in cooperation with the Mat-Su Borough and MOA.

## **MOA AND MAT-SU BOROUGH COLLABORATION ON COMMON INTERESTS**

Physical growth and common interests are jointly affecting the MOA and Mat-Su Borough. The two jurisdictions together house the majority of the population and employment in the state. Travel interactions and economic interest argue for collaboration on a number of fronts. As the urban region continues to grow, pressure will mount for urban infrastructure funding. Collaboration in regional planning and a unified voice on state funding issues should be supported by both jurisdictions.

## **Integration with Other Transportation and Land Use Plans**

Land use and travel are tightly intertwined. The geographical distribution of land uses, development densities, site designs, and proximity to complementary uses directly influence the number and length of trips, mode choice, viability of walking and cycling, attractiveness of transit service, and travel origin–destination patterns. The findings of this MTP will help the MOA Planning Department refine and implement the Anchorage Bowl and Chugiak-Eagle River comprehensive plans.

## Recommended Studies

More detailed transportation subarea and corridor studies are recommended as an integral part of the MTP. The purpose of the following studies is to provide more detailed recommendations for capital improvements and policies in the affected areas:

- **3rd and 6th Avenues Couplet Conversion Reconnaissance Study:** This study will evaluate the traffic operation needs and capital costs for conversion of the existing 5th and 6th avenue couplet to a 3rd and 6th avenue couplet in downtown Anchorage.
- **Glenn Highway Operations Study:** This study will explore the functional operations needs and capital costs for improvements on the Glenn Highway between Muldoon Road and Ekultna. One study component is examination of possible new interchange locations north of Chugiak-Eagle River to serve future developments.
- **Midtown Subarea Transportation Plan:** This study will complete the analysis of multimodal transportation and land-use solutions in the rapidly growing Midtown District of the Anchorage Bowl.
- **Seward Highway/O'Malley Road Interchange Study:** This study will update traffic operations and capital improvements required for a freeway-to-freeway connection between the Seward Highway and Minnesota Drive at O'Malley Road.
- **Eagle River Central Business District and Residential Core Study, Phase II:** This study will examine the land-use, economic, and transportation system impacts of the three recommended strategies from the Phase I study.
- **Glenn Highway-North Eagle River Road Interchange Capacity Study:** This study will examine options to improve the capacity of the interchange area in Eagle River.
- **An additional group of studies, referred to as AMATS MTP Element Implementation Projects, is recommended to supplement and enhance future MTP plans. The individual studies are as follows::**
  - **Regional Travel Survey**
  - **Complete Streets Plan**
  - **Freeway Incident Management Plan**
  - **Traffic Signal Operations Plan**
  - **Intersection Operations and Safety Improvement Studies**
  - **Travel Options Report Updates**
  - **Hillside Intersection Study**

## MTP System Performance

### 2035 MTP NETWORK

The 2035 MTP network consists of all the road, public transportation, and pedestrian, bicycle, and trail facility projects identified in the previous sections of this chapter.

Illustrations of how the recommended MTP network might perform throughout the day (Figures 7-13 and 7-14), morning peak period (Figures 7-15 and 7-16), and the afternoon peak period (Figures 7-17 and 7-18) show relatively few overloaded and congested conditions (orange and red segments) in 2035. Table 7-9 compares the recommended 2035 network to 2007 and other 2035 scenarios.

Table 7-9. Performance Comparison of Transportation Network Scenarios for 2007 and 2035

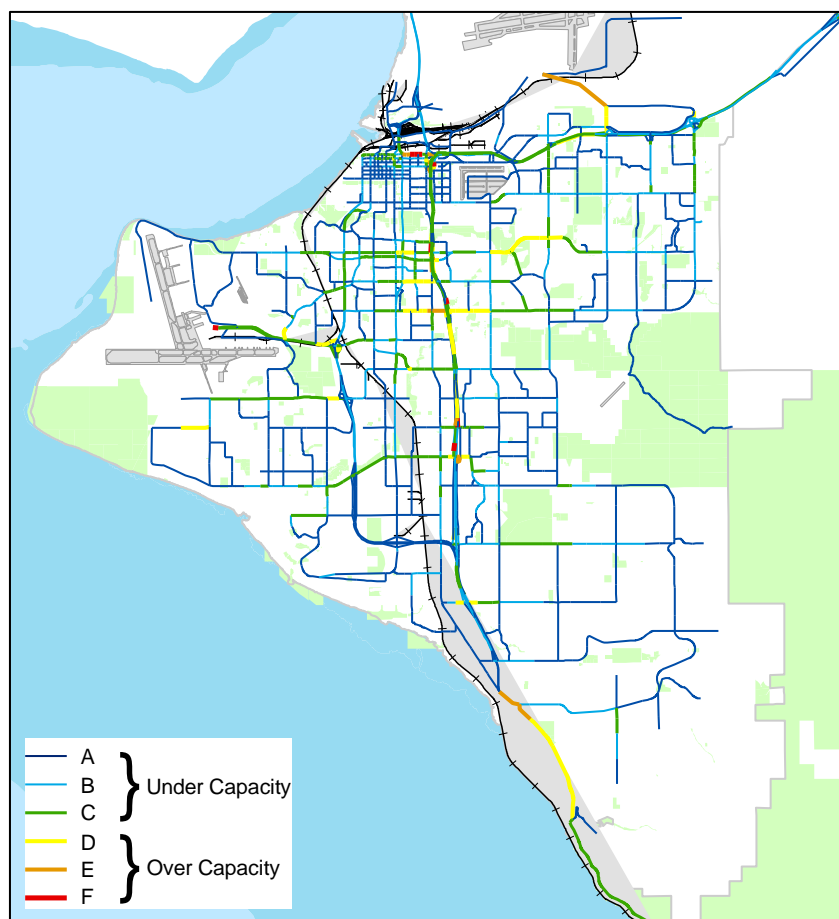
Feature	Scenario				
	2007 Road Network	2035 No Build Network	2035 Base Roadway Network	2035 Base Plus Roadway Network	2035 MTP Roadway Network
Daily vehicle miles of travel in severe congestion <sup>a</sup>	25,360	173,040	15,110	14,330	15,160
Traveler hours spent in severe congestion <sup>a</sup>	812	6,550	762	725	772
Congested <sup>b</sup> freeway miles					
Morning peak period	1%	39%	20%	20%	22%
Afternoon peak period	2%	57%	31%	30%	28%
Congested <sup>b</sup> arterial miles					
Morning peak period	2%	8%	6%	5%	6%
Afternoon peak period	9%	22%	16%	16%	18%

<sup>a</sup>Severe congestion is defined as having a volume-capacity ratio of 1.25 or greater.

<sup>b</sup>Congestion is defined as having a level of service of D or worse.

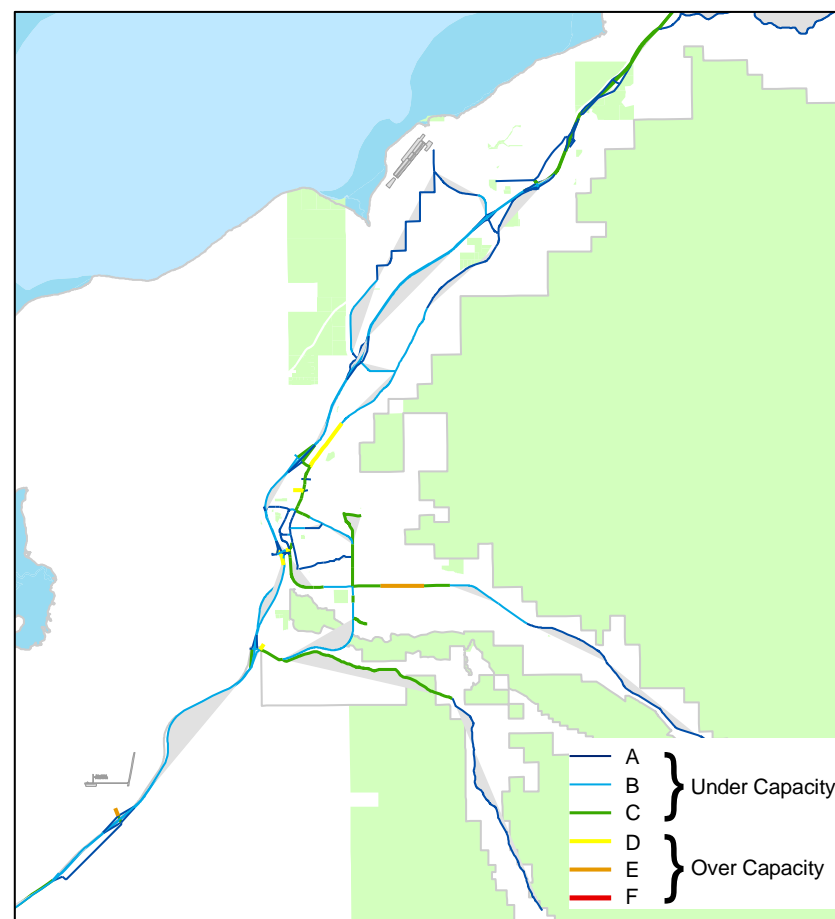
Source: CH2M HILL

Figure 7-13 Total Daily Performance of “2035 MTP Network” –  
Anchorage Bowl



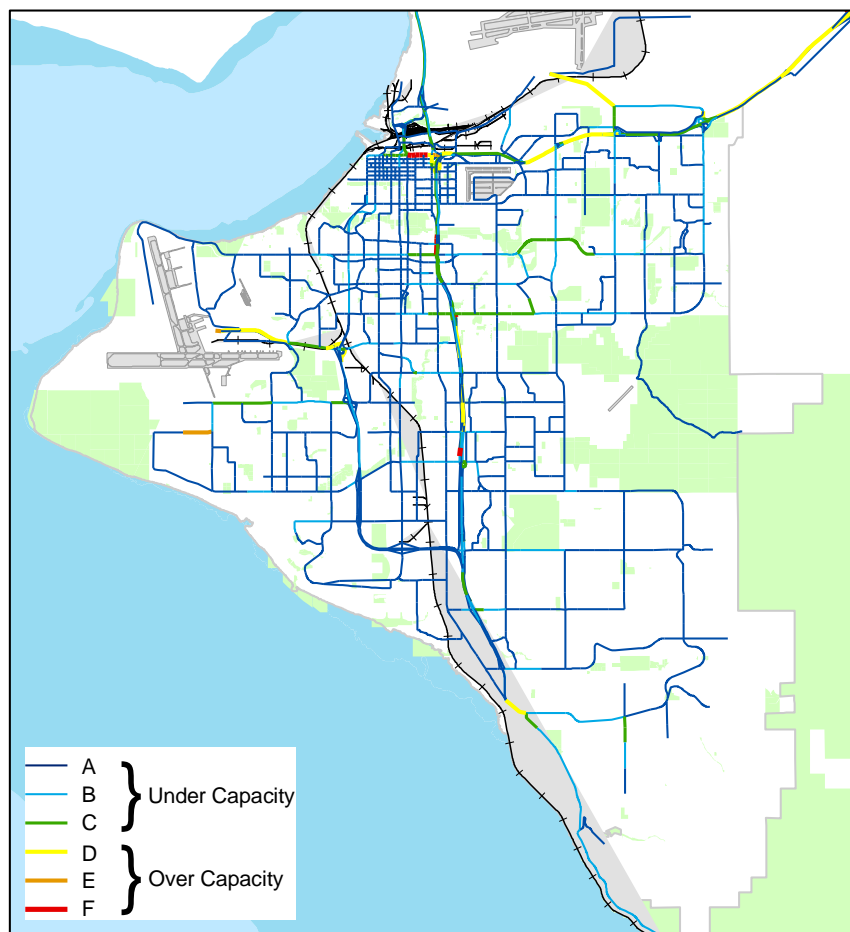
Source: CH2M HILL

Figure 7-14 Total Daily Performance of “2035 MTP Network” –  
Chugiak-Eagle River



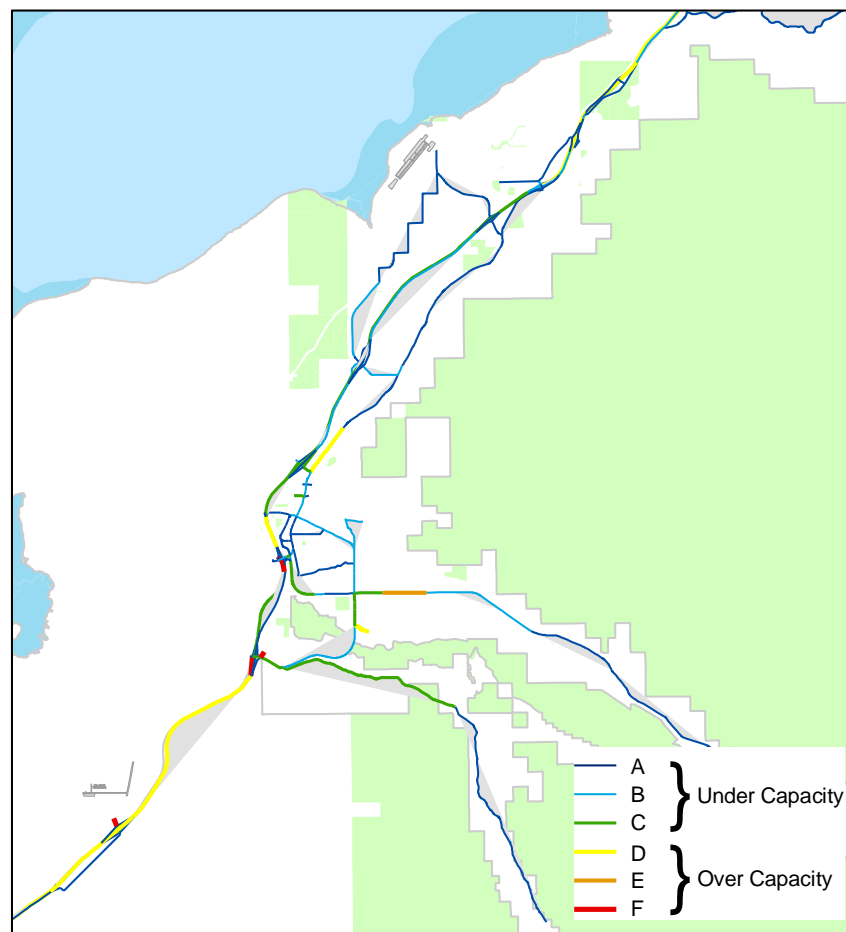
Source: CH2M HILL

Figure 7-15 Morning Peak Period Performance of 2035 MTP Network – Anchorage Bowl



Source: CH2M HILL

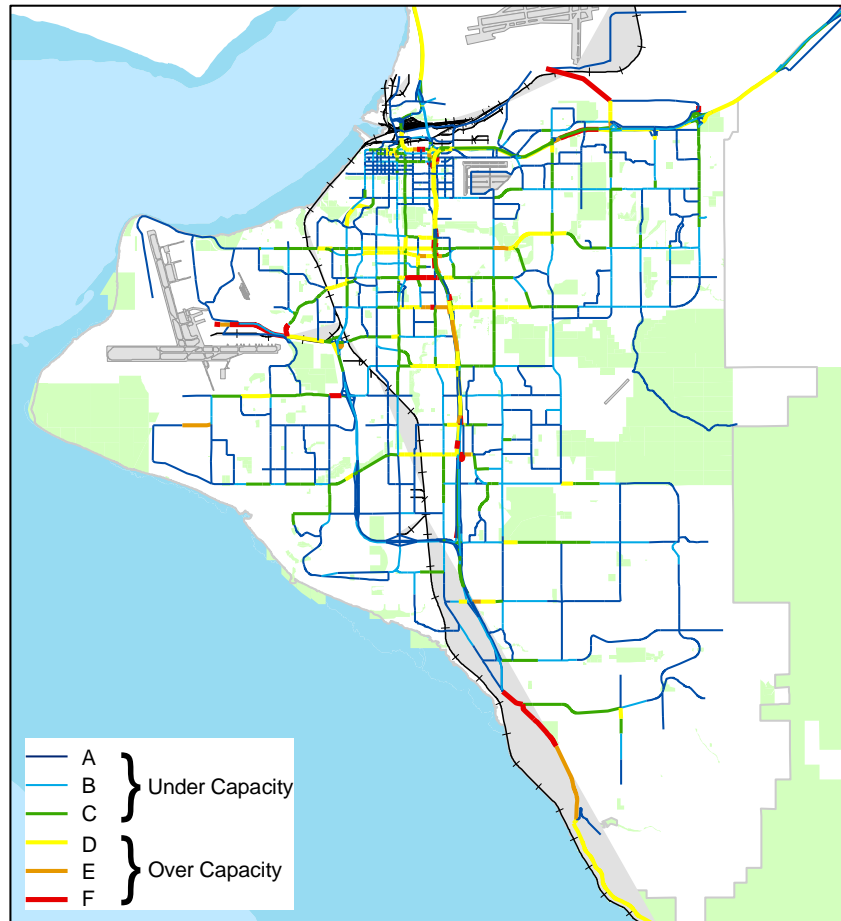
Figure 7-16 Morning Peak Period Performance of 2035 MTP Network – Chugiak-Eagle River



Source: CH2M HILL

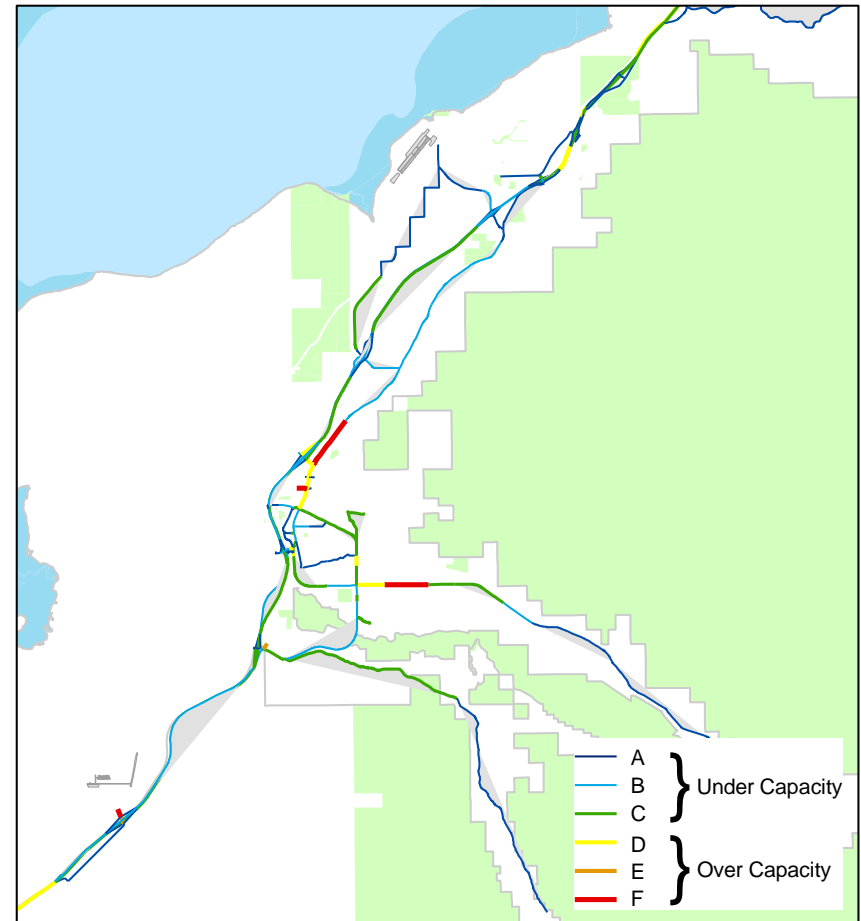


Figure 7-17 Afternoon Peak Period Performance of 2035 MTP  
Network – Anchorage Bowl



Source: CH2M HILL

Figure 7-18 Afternoon Peak Period Performance of 2035 MTP  
Network – Chugiak-Eagle River



Source: CH2M HILL

## RECOMMENDED PERFORMANCE MEASURES

Simply examining roadway capacity and automobile travel times as a means of monitoring the performance of the transportation system is no longer sufficient. Federal policies and local public opinion now place a greater emphasis on many criteria for monitoring MTP performance, including the following:

- Providing for the needs of multimodal travel
- Increasing the efficiency of the existing transportation system
- Maintaining the existing transportation system
- Reducing crashes
- Supporting economic health
- Reducing the environmental impact of the existing system and future construction

Increased competitiveness for transportation funding means that agencies need to be able to show they have a clear understanding of how the transportation system is performing, where it needs improvement to meet their goals, and how funding will allow them to implement projects to achieve those goals. Advances in data collection and analysis capabilities, as well as a better understanding of how to measure the aforementioned criteria, provides AMATS with the ability to holistically measure the performance of the transportation system in the Anchorage metropolitan area.

Performance measures have been developed for the metropolitan area transportation system as a part of this MTP. They are directly related to the goals and objectives outlined in Chapter 3 to provide a means to measure progress toward achieving the goals and objectives. The measures should be used by AMATS to regularly monitor the performance of the system and the effects of implementing this MTP. Table 7-10 lists the performance measures and the related goal or goals.

Table 7-10. Recommended Performance Measures

Number	Performance Measure	Goal(s)
1	VHT per capita and VMT per capita	1, 2, 6, 8
2	Expected VMT per capita and VHT per capita to be reduced by improvements	1, 6
3	Percentage of arterial-highway system managed with TSM and/or ITS	1, 6
4	Percentage of collector-and-above roadways with a V/C ratio of greater than 1.0 during peak period	1, 3, 6
5	Percentage of high-crash locations improved by MTP implementation	1, 2
6	Percentage of primary pedestrian and bicycle systems maintained for year-round use	2
7	Hours of vehicle delay per average daily traffic at crossing	2
8	Ratio of deferred maintenance to total annual maintenance cost	3
9	V/C ratios along high-priority freight routes (commercial and military) and/or along connectors from key destinations to major highways	4
10	Intersection density of all streets by area type	5
11	Percentage of pedestrian, bicycle, and trail facility projects from current plans funded in MTP	5
12	Percentage of schools connected to surrounding "attractions" by pedestrian, bicycle, and/or public transportation facilities (at least 2 of these modes)	5
13	Weekday transit trips per capita	6, 7
14	Percentage of traffic signals in coordinated system	6
15	Percentage of signal timing plans that have been updated within last 3 years	6
16	Intersection density of higher functional class by area type	6
17	Public transportation/automobile travel-time ratio to/from selected locations	7
18	Percentage of public transportation projects from People Mover route restructuring plan funded by MTP	7
19	Number of acres of identified wetlands, parks, and natural open spaces affected by new roadway links	8

ITS = Intelligent Transportation System

TSM = transportation system management

V/C = volume to capacity ratio

VHT = vehicle hours traveled

VMT = vehicle miles traveled

## Summary of MTP Recommendations

The recommended 2035 MTP provides the framework for the development, operations, and maintenance of a multimodal transportation system to meet the travel needs of the metropolitan area through the year 2035. The MTP meets the requirements set forth by the current federal legislation and regulations, but more important, it provides a harmonious mixture of road, public transportation, and non-motorized projects to match the funding challenges of the expected reduction of federal funding during the next 25 years.

The recommended projects described in this chapter and the implementation plan described in Chapter 8 will produce a sustainable, efficient, and safe transportation system that demonstrates how the various interests that characterize a community can work together as stewards of the surrounding built and natural environment. The MTP takes into account the vision and goals of the Anchorage Bowl and Chugiak-Eagle River comprehensive plans, the subarea and community plans and studies, and the open planning and design process for projects. This MTP was developed using a rigorous public involvement plan and recognizes the unique characteristics of the neighborhoods and subareas within the metropolitan area.