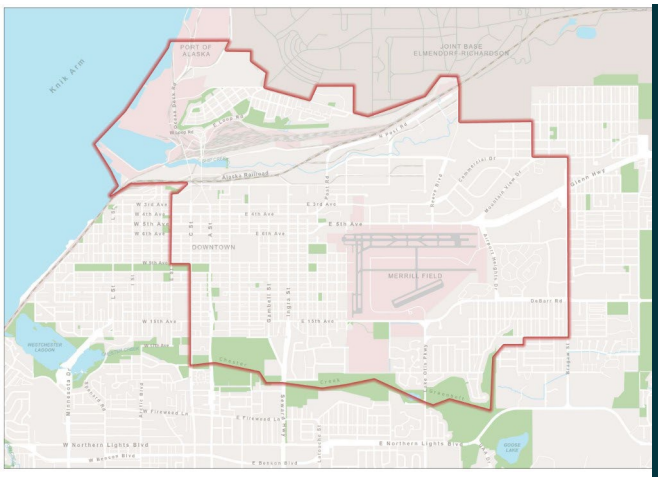

AMATS: Seward Highway to Glenn Highway Connection
Planning & Environmental Linkages Study
State Project No.: CFHWY00550
Federal Project No.: 0001653

Purpose and Need Statement

January 2023

This planning document may be adopted in a subsequent environmental review process in accordance with 23 USC 168 Integration of Planning and Environmental Review and 23 CFR 450 Planning Assistance and Standards.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by DOT&PF pursuant to 23 USC 327 and a Memorandum of Understanding dated November 3, 2017, and executed by FHWA and DOT&PF.

Prepared for:

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Acronyms and Abbreviations

2040 LUP	*Anchorage 2040 Land Use Plan*
AMATS	Anchorage Metropolitan Area Transportation Solutions
CFR	Code of Federal Regulations
DOT&PF	Alaska Department of Transportation and Public Facilities
EAST	*East Anchorage Study of Transportation*
EIS	Environmental Impact Statement
FMS	*Freight Mobility Study*
GHNP	*Government Hill Neighborhood Plan*
GSD	Greenway-Supported Development
H2H	Highway to Highway
HPMS	High Performance Monitoring System
HPP	*Anchorage Original Neighborhoods Historic Preservation Plan*
JBER	Joint Base Elmendorf-Richardson
LRTP	Long Range Transportation Plan
LTS	Level of Traffic Stress
LUP	Land Use Plan
MOA	Municipality of Anchorage
MTP	Metropolitan Transportation Plan
MVMT	Millions of Vehicle Miles Traveled
NEPA	National Environmental Policy Act
NHS	National Highway System
PEL	Planning and Environmental Linkages
POA	Port of Alaska
STRAHNET	Strategic Highway Network
USC	U.S. Code
WFRFA	West Fairview Reinvestment Focus Area

1. Introduction

The Central Region of the Alaska Department of Transportation and Public Facilities (DOT&PF), with funding provided by Anchorage Metropolitan Area Transportation Solutions (AMATS), is conducting a Planning and Environmental Linkages (PEL) Study to identify and evaluate options to improve transportation mobility, safety, access, and connectivity between the Seward Highway, near 20th Avenue, and the Glenn Highway, east of Airport Heights Drive. The project will also identify ways to improve access to and from the Port of Alaska (POA) to the highway network.

PEL studies represent a collaborative and integrated approach to transportation decision-making that considers environmental, community, and economic goals and impacts early in the transportation planning process and uses the information, analyses, and products developed during planning to inform the environmental review process. The PEL process reduces duplication, shortens the project delivery timeline, and refines the level of effort for future environmental review processes.

The DOT&PF have undertaken this Seward-Glenn Mobility PEL Study to examine transportation problems associated with the National Highway System (NHS) in the study area. This PEL Study is a multimodal subarea study. The planning products and decisions from this PEL Study may be used as part of the transportation project development process consistent with the National Environmental Policy Act (NEPA), 23 United States Code (USC) 168, and 23 Code of Federal Regulations (CFR) 450.212 and 450.318. Furthermore, this PEL study will be developed in accordance with the *DOT&PF Planning and Environmental Linkages (PEL) Guidebook* (DOT&PF 2020). Specifically, this PEL Study will generate the following planning products that can be used in subsequent NEPA processes:

- Purpose and need, and goals and objective statement(s);
- General travel corridor and/or general mode(s) definition (e.g., highway, transit, highway/transit combination);
- Preliminary screening of alternatives and elimination of unreasonable alternatives;
- Basic description of the environmental setting; and
- Preliminary identification of environmental impacts and environmental mitigation.

The purpose of this document is to present a purpose and need statement for the Seward-Glenn Mobility PEL Study that may be adopted or incorporated by reference by a relevant agency during a later environmental review process. The reader should note that this purpose and need document presents a summary of several relevant documents that provide the foundation upon which it is built. For additional information, the reader should consult the following technical reports prepared for this PEL Study, which are available on the project web site at http://sewardglennmobility.com/:

- *Draft Origin-Destination Study Report*, May 2022
- *Draft Travel Demand Modeling Report*, May 2022

- *Draft System Performance Memorandum*, May 2022
- *A Basic Description of the Environmental Setting Report*, March 2022

1.1 PEL Study Description

The Seward-Glenn Mobility PEL Study will identify and evaluate options to improve transportation mobility, safety, access, and connectivity between the Seward Highway, near 20th Avenue, and the Glenn Highway, east of Airport Heights Drive. This PEL Study will also identify ways to improve access to and from the POA to the highway network.

> I would like to believe that this time we can leverage the political will to create a piece of design and engineering that will be a source of pride instead of embarrassment for all Alaskans. This piece of highway is arguably the most important and yet probably the most neglected and undervalued in our state. Many like myself feel it is a vestige of the kind of engineering that puts the convenience and needs of stakeholders who pass through communities ahead of those of stakeholders living in the shadow of these pieces of infrastructure. Almost with a certainty causing harm to those most vulnerable - to the detriment to us all eventually.
>
> - Anchorage Resident

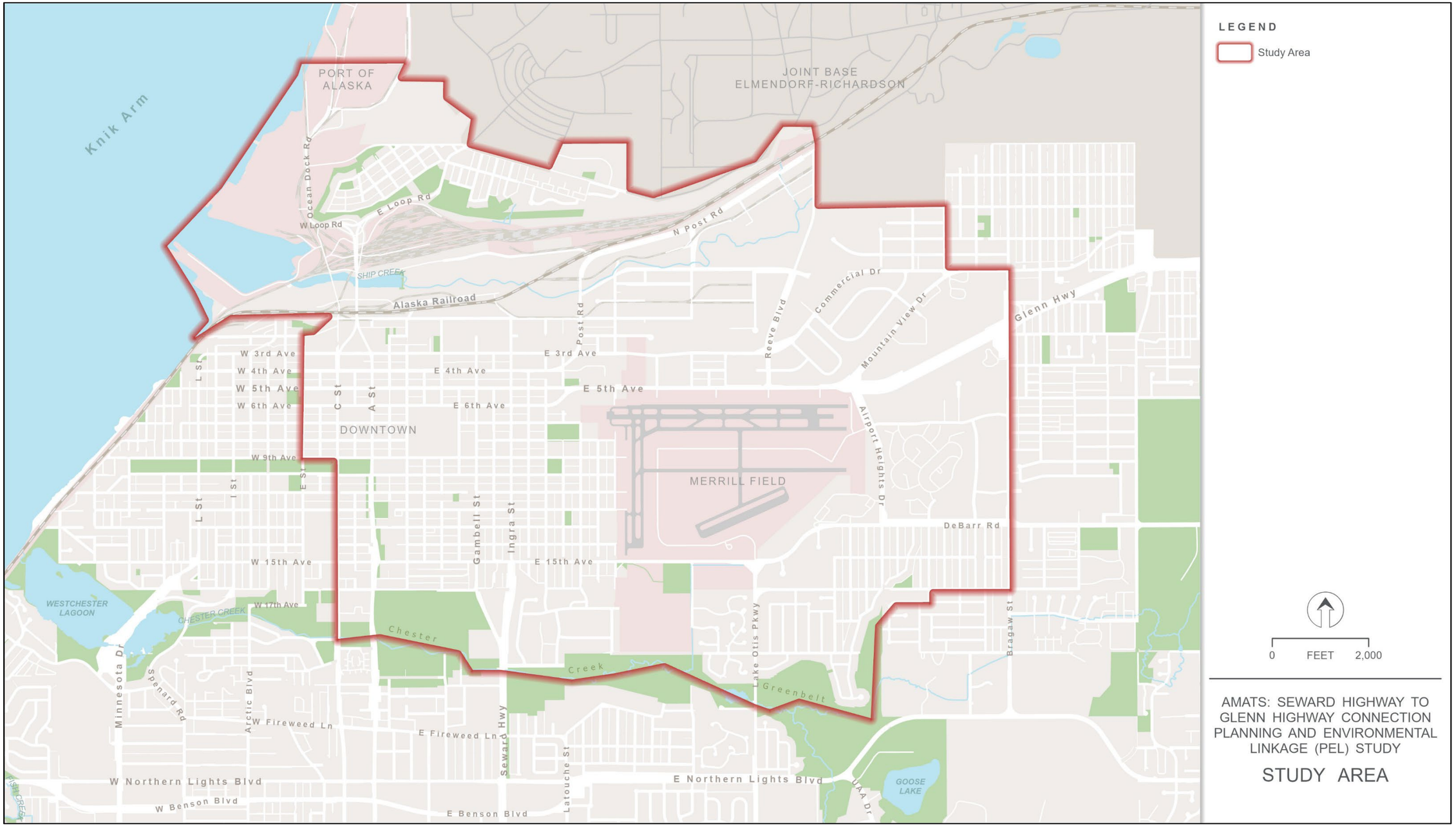
The PEL Study will build on past work in the area to develop long-term solutions to safety, access, connectivity, and freight needs. It will result in an implementation plan that describes how the study recommendations can be phased, funded, and implemented given competing statewide transportation priorities. Discrete projects with independent utility will be identified. Specific tasks include planning, environmental studies, traffic forecasting, travel demand modeling, Purpose and Need Statement development, alternatives development, cost estimating, implementation phasing, and public involvement.

Once the final PEL Study is complete, a project (or components of the overall plan) may move forward for additional environmental review and engineering design through the NEPA process should funding become available. The results of the study may also feed into a subsequent update of the AMATS *Metropolitan Transportation Plan (MTP) 2040*, potentially updating needed improvements, cost estimates, and timing and phasing of improvements.

1.2 Study Area

The study area generally follows Bragaw Street on the east, Chester Creek on the south, C Street on the west, and Joint Base Elmendorf-Richardson (JBER) on the north. It includes areas where potential transportation improvements could be developed between the Glenn and Seward Highways as well as to and from the POA. The study area is broad enough to also gauge how traffic levels on parallel routes may be affected. The study area is shown on Figure 1.

Figure 1. Study Area



1.3 Metropolitan Transportation Planning Factors

Any federal-aid-funded planning effort must show that it has adhered to the requirements in 23 CFR 450, Planning Assistance and Standards, with consideration of the federally required planning factors. To support this PEL Study process, DOT&PF proposes to use the federal metropolitan planning factors (23 CFR 450.306) as a framework to inform the study and guide decision-making. The PEL Study team will consider the following factors as goals in developing the project's Purpose and Need Statement, alternative screening criteria, alternatives, and recommendations:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and non-motorized users;
3. Increase the security of the transportation system for motorized and non-motorized users;
4. Increase accessibility and mobility of people and freight;
5. Protect and enhance the environment; promote energy conservation; improve the quality of life; and promote consistency between transportation improvements, and state and local planned growth and economic development patterns;
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7. Promote efficient system management and operation;
8. Emphasize the preservation of the existing transportation system;
9. Improve the resiliency and reliability of the transportation system, and reduce or mitigate stormwater impacts of surface transportation; and
10. Enhance travel and tourism.

As described in 23 CFR 450.306(c), the degree of consideration and analysis of these factors will be based on the scale and complexity of the issues and needs to be addressed in the study area but will include transportation system development, land use, employment, economic development, human and natural environment (including Section 4(f) properties as defined in 23 CFR 774.17), and housing and community development.

1.4 Project History

The Seward and Glenn Highways were constructed during the 1940s and terminated at the edges of developed Anchorage (approximately 15th Avenue to the south and Bragaw Street to the east). By the late 1960s, Anchorage's population had grown by expanding to the east and south, as had the population of the Matanuska-Susitna Valley communities to the north. These increases in local and regional population caused increased traffic on roads and highways in Anchorage that accessed major employment, commercial, and industrial centers. In response to the increasing travel demand and in order to improve travel efficiency to developing residential and industrial areas southward, the Seward Highway was upgraded to a four-lane freeway with frontage roads (AMATS 1976). Similarly, the Glenn Highway was upgraded to a six-lane freeway to accommodate growth to the north and east. The existing arterial connections

between the two highways (Gambell and Ingra Streets, and 5th and 6th Avenues) have not been upgraded to a freeway; they remain as arterial streets (see Figure 2).

As a result of the continued population growth and urban development patterns, congestion on the existing arterial connection continued to increase. To address the problem, the existing arterial streets were widened, and one-way couplets were built to handle the traffic shortly after the 1964 earthquake (Gambell-Ingra Street and 5th-6th Avenue couplets).

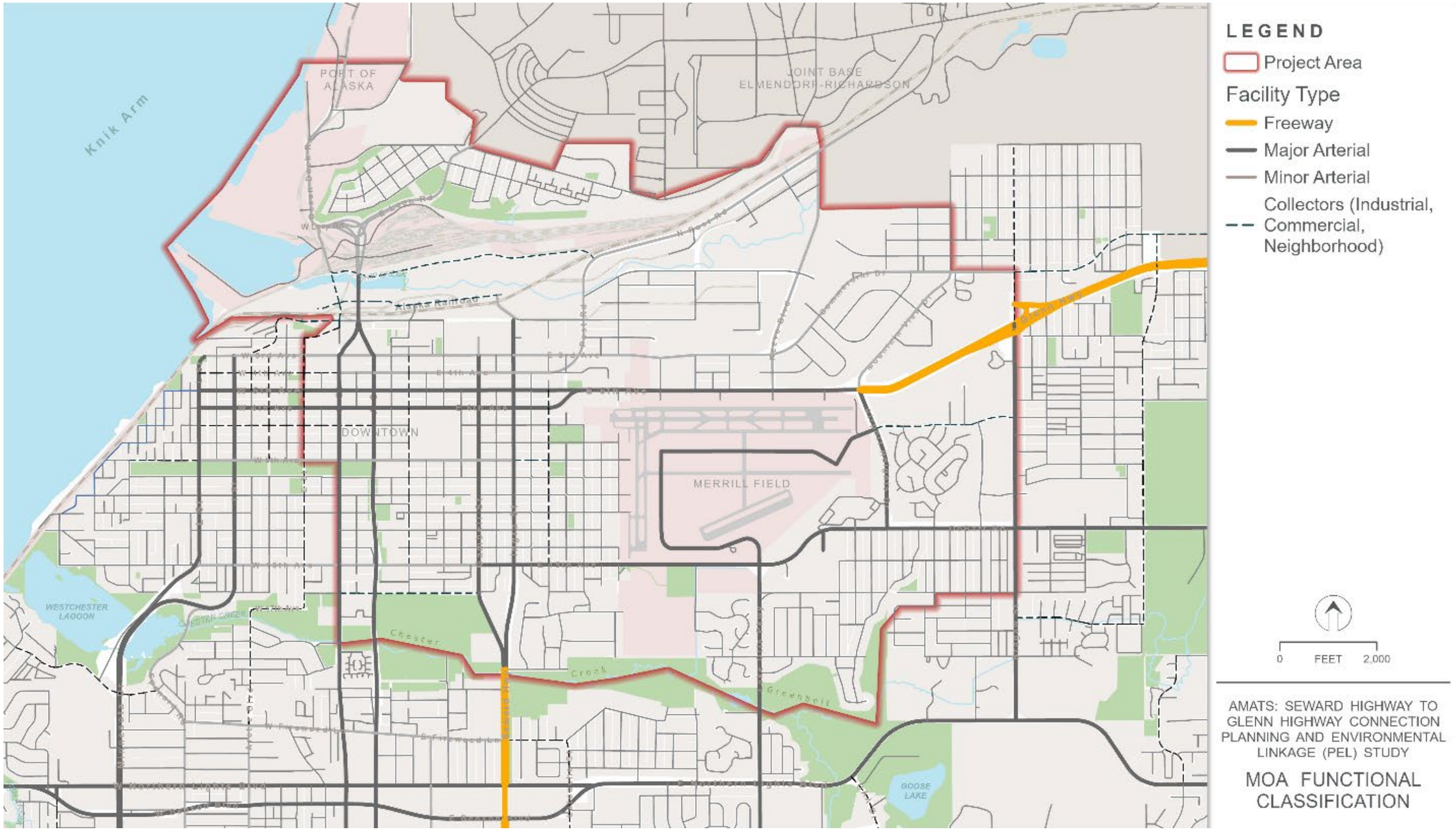
Connecting the Seward Highway to the Glenn Highway was discussed as early as 1972 in the *Anchorage Long Range Transportation Plan* (LRTP). In 2001, AMATS conducted the *East Anchorage Study of Transportation* (EAST) (HDR 2001). At that time, it was determined that connecting the Seward and Glenn Highways was important to solving traffic congestion in the Anchorage Bowl.[1]

In 2005, a Seward Highway to Glenn Highway Connection (Highway to Highway, or H2H) project was adopted as part of the *Anchorage Bowl 2025 LRTP* (AMATS 2007). DOT&PF started an environmental impact statement (EIS) process for the H2H project, but the EIS was canceled in 2010. In 2020, recognizing the continuing need to address transportation in this corridor, this PEL Study was included as part of the AMATS MTP 2040 (AMATS 2020).

When the project area was last studied in detail in 2010 during the H2H EIS, the Knik Arm Crossing project and a viaduct roadway connecting Gambell and Ingra Streets to the POA were still in the adopted transportation plan. Since then, economic conditions are vastly different, and growth and land use development patterns are now subject to a newly adopted land use plan map. For these reasons, traffic patterns and congestion levels are anticipated to be different than those identified in the H2H EIS that was canceled in 2010. This PEL Study is reexamining the transportation system needs in light of these changes to develop improvements that address existing needs.

[1] See Section 3 – Project Status of the *System Performance Memorandum* for a discussion of the transportation planning history of the study area and the concept of connecting the two highways.

Figure 2. Municipality of Anchorage Functional Classification



Source: MOA 2014a

1.5 Relationship to the Metropolitan Transportation Plan

The MTP 2040 includes this PEL Study as a short-term project (MTP #129) described as follows: “The intent of this PEL is to define a vision for the future of this connection, identify environmental and resource concerns and opportunities in the study area, and use the information to develop reasonable alternatives through consultation with the affected agencies and the public” (AMATS 2020). According to the MTP 2040, the purposes of the PEL Study are “Safety (Vision Zero High Injury Network Corridor), Congestion, Access, Connectivity, and Freight (Regional Truck Route)” (AMATS 2020). The MTP 2040 also identifies the following federal performance areas as being relevant: “Injuries & Fatalities, Performance of the National Highway System, Freight Movement/Economic Vitality, and Environmental Sustainability” (AMATS 2020).

Additionally, MTP 2040 includes longer-term projects (MTP #214 and #316), which are described as follows:

> Construct [a] freeway connection between Seward Highway/20th Avenue and 13th Avenue with freeway access and egress ramps onto Ingra/Gambell Streets near the northern termini of the project. Reconstruct Ingra Street/Gambell Street and construct separated grade crossings of the freeway to reconnect portions of the east-west street system. Construct an interchange at Airport Heights Drive and Glenn Highway Intersection. Project would include non-motorized improvements and consider adjacent land use (AMATS 2020).

Similar to the MTP project #129 describing the PEL Study, the MTP 2040 describes the following purposes for the Seward-Glenn connection projects: “Safety (Vision Zero High Injury Network Corridor), Congestion, Access, Connectivity, and Freight (Proposed Regional Truck Route)” (AMATS 2020). Additionally, the MTP 2040 reiterates that the projects are intended to address the following federal performance areas: “Injuries & Fatalities, Performance of the National Highway System, Freight Movement/Economic Vitality, and Environmental Sustainability” (AMATS 2020).

Based on these project descriptions from the MTP 2040, the following MTP 2040 goals and objectives are identified as particularly relevant to the purpose and needs of the study area:

- **5B:** Preserve and improve air quality to maintain the health and welfare of citizens.
- **5E:** Coordinate transportation and land use decisions to support livable northern communities.
- **5F:** Minimize adverse impacts on existing communities, such as neighborhood through-traffic movements, speeding, noise, and light pollution, etc.
- **5G:** Minimize and mitigate impacts on the natural environment, such as water resources, fish and wildlife habitat, watersheds and wetlands, and parklands.
- **5I:** Match street design to the use and character of the community/neighborhood through Complete Streets, recognizing that characters may vary from primarily commercial to primarily residential and from primarily urban to primarily rural.

Both the Federal Planning Factors and the relevant MTP Goals and Objectives are considered in the Purpose and Need Statement discussed in Section 2.

1.6 Relationship to Adopted Land Use Plans

In 2014, the Assembly adopted the *Fairview Neighborhood Plan* (MOA 2014b), and in 2017, they adopted the *Anchorage 2040 Land Use Plan* (2040 LUP; MOA 2017). Each of these planning efforts underwent a robust community input process. The *Fairview Neighborhood Plan* was a grassroots effort that specifically calls for a cut-and-cover approach, and that provides other planning information and guidelines relevant to this PEL Study's study area. According to the MOA Planning Department, a number of associated policies and actions support the cut-and-cover proposal. For instance, the MOA Planning Department indicated that the 2040 LUP aligns the proposed West Fairview Reinvestment Focus Area (WFRFA) "to catalyze infill and redevelopment in strategic areas" and indicates that a cut-and-cover design with developable land will support the WFRFA (Bunnell 2022). In comments on this PEL study, the MOA Planning Department indicates that housing and job growth in Downtown Anchorage and Fairview are contingent on the current Ingra and Gambell Street roadways being funded and redeveloped per the direction supported by the *Fairview Neighborhood Plan* and 2040 LUP, and no to very little economic recovery will occur in this area of Anchorage until the cut-and-cover is built (Bunnell 2022).

The MOA Planning Department identified the following goals, strategies and policies from the 2040 LUP and the *Fairview Neighborhood Plan*, which they indicated should be considered for any alternative evaluated in this PEL Study. As recommended by the MOA, the DOT&PF proposes that these goals, strategies, and polices will be used "as the guiding direction for which project alternatives should be funded, designed" (Bunnell 2022)

1.6.1 2040 LUP Policies

- **LUP 1.5:** Align Anchorage's land use, transportation, and infrastructure planning, design guidelines, and investments. Account for existing infrastructure and transportation system capacity and planned facility investments when determining areas of growth. Link capital improvement priorities with the elements of the Comprehensive Plan, including the 2040 LUP and area-specific plans.
- **LUP 1.8:** Engage Anchorage residents, businesses, and property owners in a predictable and transparent process leading to the adoption of plans that guide growth. Engage affected communities when making long-term land use decisions, with particular attention to communities that are historically underrepresented.
- **LUP 3.2:** Promote the development of main street, transit-oriented, and mixed-use corridors that help meet the city's needs for retail, services, jobs, and housing; and that support these uses and adjoining neighborhoods with access to multiple modes of travel and attractive pedestrian environments. LUP Policies 2.1, 2.2, 2.3, 5.2, 5.3, 5.4, 6.1, 6.2, 6.3, and 8.3 are also integral to this Goal.
- **LUP 4.1**: Provide sufficient land to meet the diverse housing needs of Anchorage's citizens, where the integrity of the residential neighborhood area is protected from expanding commercial corridors or non-neighborhood employment activities.

- **LUP 4.4:** Encourage property owners to preserve, rehabilitate, or redevelop properties in ways that minimize housing displacement and maintain affordability, health, and safety for residents.
- **LUP 4.5:** Consider actions that will affirmatively further fair housing and avoid having the effect of housing discrimination in decisions regarding land use, allocation of housing opportunities, and zoning map or land use regulation amendments. LUP Policies 1.5, 2.1, 2.3, 5.3, 6.1, 6.3, and 7.1 are also integral to this Goal.
- **LUP 5.3:** Accompany infill development with "placemaking" investments in infrastructure, such as walkable streets, enhanced streetscapes, parks and public spaces, and other services that improve the quality of life in targeted growth areas. Coordinate and prioritize capital improvements to upgrade neighborhoods that have capacity to accommodate infill housing near services, centers, public transit, with a walkable street grid and sidewalks.
- **LUP 6.1**: Provide sufficient transportation infrastructure to support the growth that the Comprehensive Plan anticipates in Centers, Corridors, other employment areas, and neighborhoods.
- **LUP 6.2:** Provide new or upgraded pedestrian and local/collector street connections in Centers and Commercial Corridors to improve access to and from surrounding neighborhoods.
- **LUP 6.3:** Adopt and execute a *Complete Streets* policy to design streets to serve all users, including pedestrians, transit riders, and bicyclists, and align the design and scale of streets to be compatible with compact, accessible, and walkable land use patterns. LUP Policies 1.5, 5.1, 5.2, and 5.7 are also integral to this Goal.

1.6.2 *Fairview Neighborhood Plan* Goals and Strategies

- **1.3:** Foster high-intensity mixed-use development for Gambell/Ingra Corridor and North Fairview (4th to 8th, Ingra to Orca).
- **2.1:** Focus on priority corridors for pedestrians and bikes on 9th, 13th, 15th Avenues; Cordova, Gambell, and Karluk Streets.
- **2.2:** Improve connections within Fairview and to Downtown, including the need and potential for improved People Mover service, a shuttle to downtown, and improved walking and biking options. Fairview is "East Downtown."
- **2.3:** Create better walking, driving and parking linkages to major public and commercial destination facilities – e.g., connections that would link people using Sullivan Arena with Fairview shops and restaurants.
- **2.4:** Implement the Gambell Street Redevelopment and Implementation Plan – reduce Gambell to three lanes, improve sidewalks, underground utilities, add street amenities, study and adjust zoning to allow for more pedestrian interaction, perhaps establishing maximum setbacks for commercial development.
- **2.5:** Fund and plan for the Seward to Glenn Highway connecting network. Maintain the integrity of Fairview, by following a cut and cover approach, creating a greenway connection between Ship and Chester Creek with a Hyder Street alignment or alternatives that reduce impact on the neighborhood, while providing needed

neighborhood street and pedestrian improvements that support mixed-use and other land-use redevelopment and development identified on the approved land use plan map.

- **2.8:** Fund, develop, and finalize the Seward to Glenn Highways transportation corridor plan, and potential Federally-required Environmental Impact Statement (EIS), in-lieu of segmented projects currently defined in the 2035 Regional Transportation Plan (Project #s 104, 114, 141, 136, etc.) to determine the appropriate mitigation for the full project. This will provide stability for investment in the neighborhood and business corridor along Ingra and Gambell in the face of the impacts created by large infrastructure projects. Mitigate fully the loss of housing, utilities, and other community assets to be defined during the EIS.

See more about adopted planning guidance in Section 2.2.3.

2. Purpose and Need

This section describes the purpose and need for improvements in the study area. The "purpose" states why the project is being proposed and articulates the positive outcomes that are intended. The "need" describes the key problems to be addressed and explains the underlying causes of those problems.

2.1 Purpose

The proposed purpose is to improve mobility,[2] accessibility,[3] safety, and livability[4] for people and goods traveling on or across the roadway system connecting the Seward Highway, Glenn Highway, and POA by all modes (including people on foot, bicycles, or buses) while improving community cohesion. The intent is to (1) maintain the functionality of the NHS while meeting the local travel needs of residents that live, play, and work in the area and must safely travel across or along those roadways;[5] and (2) improve neighborhood connections, quality of life, and accommodate adopted plans, as practicable.

2.2 Needs

The following needs are identified for this project:

Reduce Conflicting Travel Functions

Serving competing regional and local travel functions on the highway network in the study area leads to conflicts that reduce mobility, safety, and accessibility for all users.

Improve Safety

Crashes for vehicles and people walking and bicycling are elevated at several study area intersections.

[2] Mobility is defined as "The ability to move or be moved from place to place" (https://www.fhwa.dot.gov/planning/glossary/index.cfm).
[3] Accessibility is defined as "The ease of reaching valued destinations, such as jobs, shops, schools, entertainment, and recreation" (https://ops.fhwa.dot.gov/publications/fhwahop12004/glossary.htm).
[4] Livability is defined as "Using the quality, location, and type of transportation facilities and services available to help achieve broader community goals. Livability in transportation helps to achieve those goals by leveraging financial resources and using the transportation planning process to advance supportive projects, policies, or decisions. Livability directly benefits people who live in, work in, or visit an area – whether in an urban, suburban, or rural context" (https://ops.fhwa.dot.gov/publications/fhwahop12004/glossary.htm#fn77).
[5] The NHS includes the Interstate Highway System as well as other roads important to the nation's economy, defense, and mobility. These are highways in rural and urban areas that provide access between an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility (https://www.fhwa.dot.gov/planning/national_highway_system/).

Promote Social Equity and Economic Development

Current highway and arterial design on the Seward/Glenn Highway corridor in the study area is inconsistent with the vision expressed in recently adopted plans. Those plans envision improving neighborhood redevelopment, community cohesion, and quality of life.

The remainder of this section describes the needs (problems) proposed to be solved through the development of the PEL Study. Each subsection (2.2.1, 2.2.2, and 2.2.3) starts with a statement of the need followed by discussion and information supporting that need. Readers are reminded that these needs are derived and summarized from community input and supporting technical studies, which may provide additional information, mapping, and data analysis. These needs are neither presented in order of importance nor in order of priority.

2.2.1 Reduce Conflicting Travel Functions

Serving competing regional and local travel functions on the highway network in the study area leads to conflicts that reduce mobility, safety, and accessibility for all users.

The current highway system provides conflicting and competing travel functions in the Glenn and Seward Highway corridor within the study area. These roadways are classified and designed in a way that focuses on moving large volumes of traffic at higher speeds through the corridor. However, access is not controlled through the corridor, and there are numerous intersections and uncontrolled driveways. The "highways" are composed of arterial streets that traverse local neighborhoods and congested commercial areas, and they also serve important local travel functions, including property access and mobility for shorter, local trips.

What is the National Highway System?

According to the Federal Highway Administration, the National Highway System (NHS) consists of roadways important to the nation's economy, defense, and mobility. The NHS includes the following subsystems of roadways (note that a specific highway route may be on more than one subsystem):

- **Interstate:** The Eisenhower Interstate System of highways retains its separate identity within the NHS.
- **Other Principal Arterials:** These are highways in rural and urban areas that provide access between an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility.
- **Strategic Highway Network (STRAHNET):** This is a network of highways that are important to the United States' strategic defense policy and that provide defense access, continuity, and emergency capabilities for defense purposes.
- **Major Strategic Highway Network Connectors:** These are highways that provide access between major military installations and highways that are part of STRAHNET.
- **Intermodal Connectors:** These highways provide access between major intermodal facilities and the other four subsystems comprising the NHS.

Regional Travel Functions. The Seward and Glenn Highways in the study area provide important regional connecting links between major employment centers,[6] residential areas, and the POA.[7] As regionally important facilities that are part of the NHS[8] (see Figure 3), these roadways are intended to serve long-distance travel and are focused on mobility and travel efficiency. The NHS is an interconnected system of routes that serve important national functions: security, commerce, and travel. The NHS consists of interstate highways; principal arterial routes; the Strategic Highway Network (STRAHNET); major strategic highway connectors; and routes connecting to major intermodal facilities such as airports, ports, and ferry terminals. NHS routes in Alaska are typically managed and maintained by DOT&PF.

These facilities also carry a good portion of truck freight and are part of the Regional Truck Route (see Figure 4) identified in the *Anchorage*

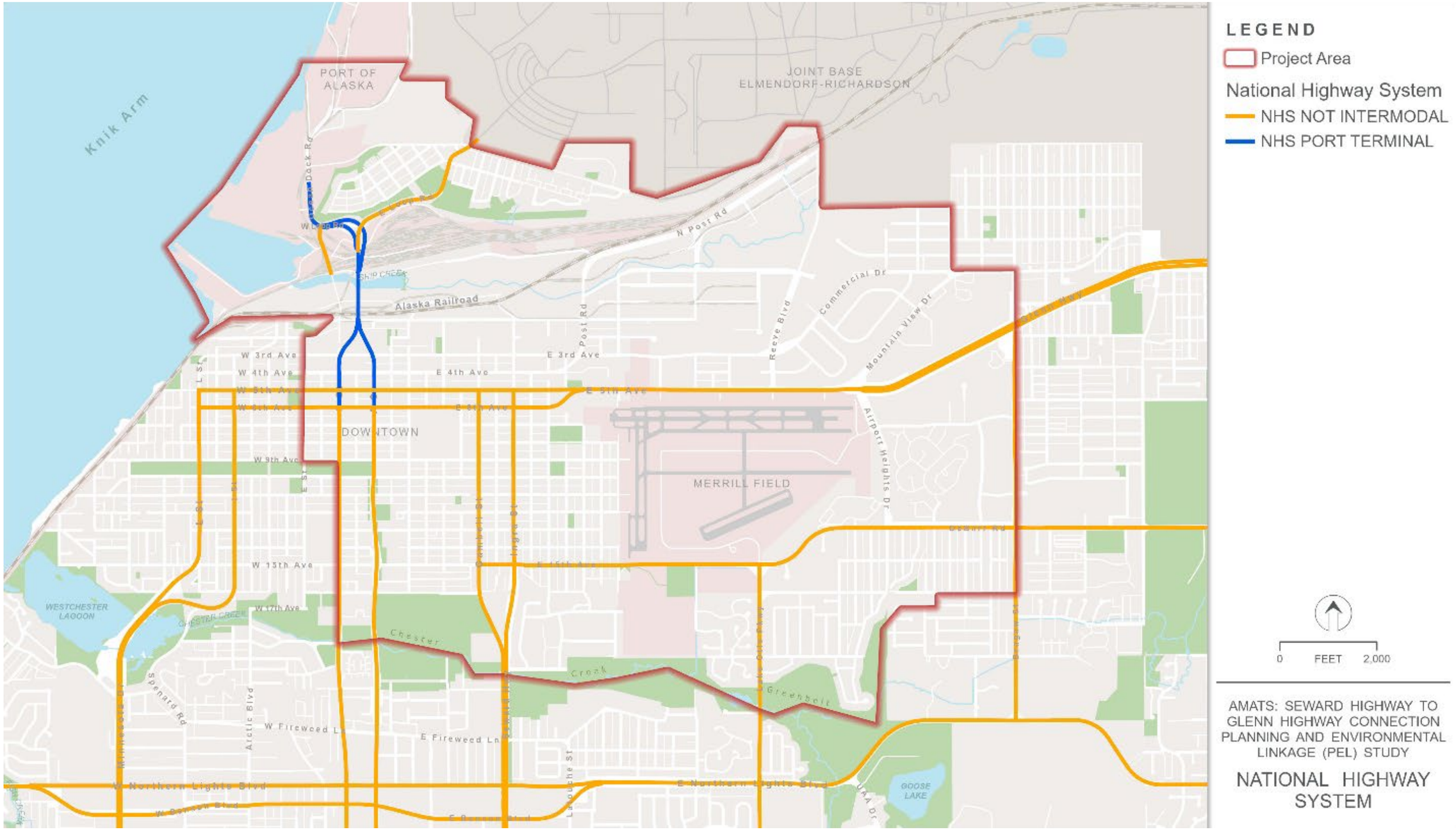
[6] For a description of Anchorage employment centers, see Sections 2.1.2 and 2.4.2 of *A Basic Description of the Environmental Setting Report*.
[7] POA activity is described in Section 2.4.2 of *A Basic Description of the Environmental Setting Report*.
[8] The NHS in Anchorage is described in Section 4 of the *System Performance Memorandum*.

Freight Mobility Study[9] (FMS; AMATS 2017). The FMS is particularly relevant to the study area is due to the POA and Ship Creek industrial area (including the Alaska Railroad yard).

The POA, located at the head of Cook Inlet directly north of Downtown Anchorage, is primarily a receiving port. Inbound cargo spans the full range of goods, materials, and equipment needed by consumers and businesses in the MOA and most of the rest of Alaska.

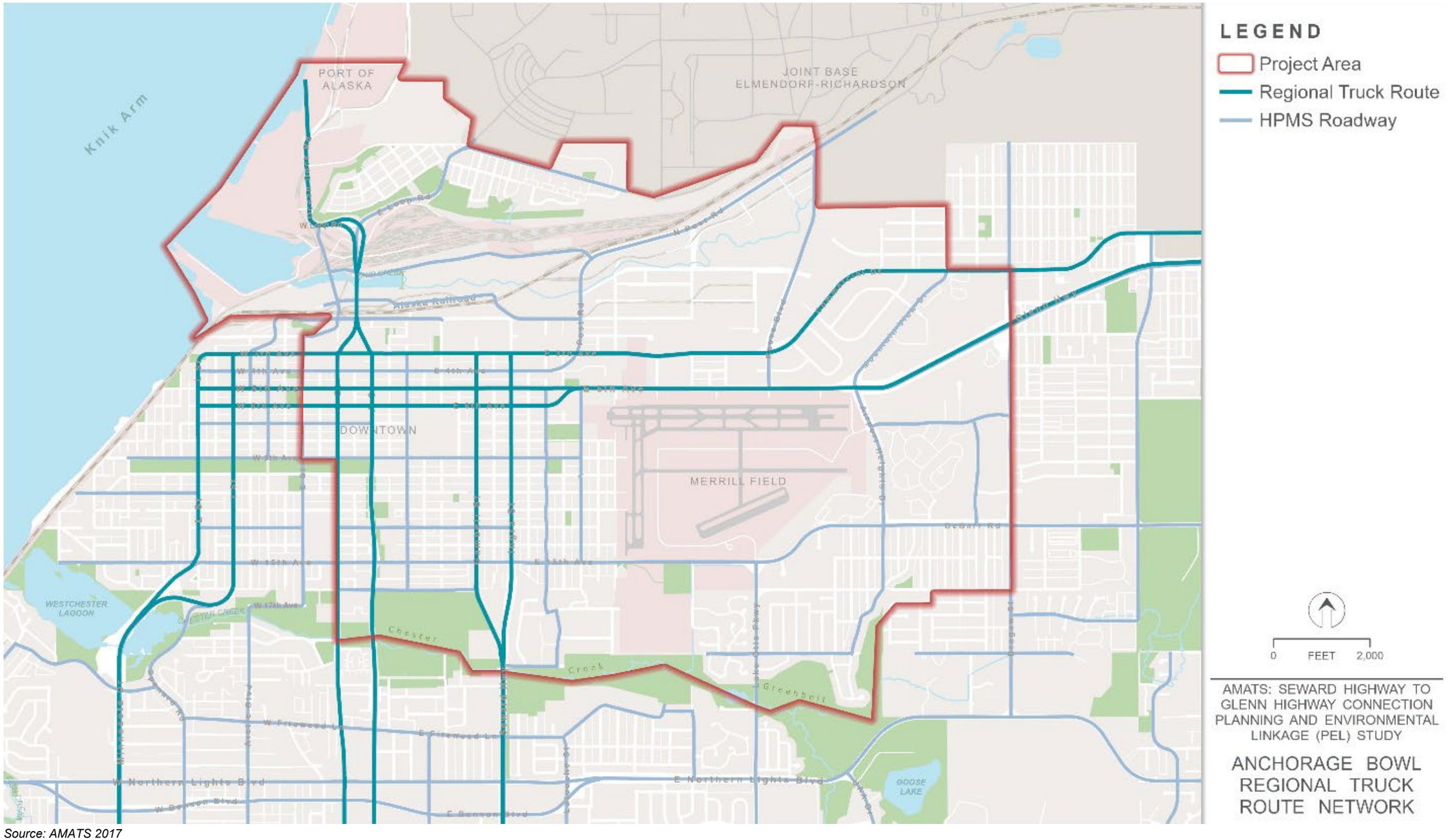
[9] See Section 8 of the *System Performance Memorandum* for a discussion of the regional truck route.

Figure 3. National Highway System



Source: DOT&PF n.d.

Figure 4. Anchorage Bowl Regional Truck Route Network



Source: AMATS 2017
Note: HPMS =Highway Performance Monitoring System

Port of Alaska. The POA is a major asset to the regional economy. Fifty percent of the waterborne freight and 90 percent of all refined petroleum products that enter the state arrive through the POA (AMATS 2017). While some of the freight and petroleum stays in the Anchorage area, much is destined for other parts of the state. In 2021, tonnage through the POA was 4,987,806 tons (POA 2022). Approximately 33 percent of that was composed of vans, flats, and containers (POA 2022).

Most freight is brought to the POA via container ship. Ships are off-loaded, and the containers may be hauled by truck tractor either to the destination of consumption or to a warehouse facility off port premises, where they are off-loaded and redistributed in smaller trucks or consolidated for tractor transport (AMATS 2017). A substantial number of trucking, transfer, and consolidating firms are located in the Ship Creek industrial area north of Downtown and within the study area. Additionally, the Alaska Railroad Corporation operates a trailer-on-flat-car facility at its main yard in the Ship Creek basin, which is used to load and unload container vans arriving from the port. The freight is then moved by rail, predominantly to Fairbanks and nearby military bases.

The Ship Creek area remains one of MOA's major warehousing and transportation-related industrial areas, and it continues to play a critical role in the shipment and distribution of goods to the MOA and the rest of the state. However, the bulk of outdoor storage facilities and warehousing, as well as manufacturing/processing plants and construction yards, has gravitated from the Downtown-Ship Creek basin area to the rail/highway industrial corridor between the New Seward Highway and Arctic Boulevard, south of International Airport Road. This places most truck traffic to or from the POA onto the New Seward Highway, Gambell-Ingra Streets, and A-C Streets. Some truck traffic also uses the L Street-Minnesota Drive connection.

According to the FMS, the POA generates significant amounts of freight traffic that uses downtown streets due to limited or lack of access to the highway system (AMATS 2017). The C Street/Port and Ocean Dock Road intersection is critical because it is the single, primary access point for trucks traveling to and from the POA. Other freight movement problem areas are shown on Figure 5.

Objective 1.1 of the FMS (AMATS 2017)

Minimize conflicts between freight, transit, and passenger vehicles and non-motorized travelers to reduce vehicle, pedestrian, and bicyclist crashes and reduce and/or eliminate road versus rail conflicts.

The FMS (AMATS 2017) identified the following potential improvements for regional roadway and intersection locations to potentially increase the efficiency for freight movements, improve safety, and reduce congestion on the transportation system in the study area:

- Address traffic signal/intersection geometry issues at C Street and Ocean Dock Road.
- Develop infrastructure that can accommodate a 53-foot-long trailer. Most of the existing roads are constructed and built to accommodate 40-foot-long trucks.

Figure 5. Freight Movement Problem Areas

Note: Problem areas with an X over the number indicate the problem is resolved since 2009.

Source: AMATS 2017: Figure 7-5

Stakeholders also indicated that the Ingra-Gambell Street/5th-6th Avenue intersections are problematic because they cannot accommodate double trailers.

Improved Port Access was identified in the FMS as an immediate (0–10 Years) high-priority project. Other recommendations in the study area included:

- 3rd Avenue Improvements
- Ingra/Gambell Street Improvements
- Whitney Road Upgrade
- Ocean Dock Road and Terminal Road Intersection
- C Street/Ocean Dock Road Access Ramp
- 3rd Avenue, 6th Avenue Couplet/E Street Conversion Reconnaissance Study
- Ocean Dock Road Alignment near POA Entrance
- Ingra-Gambell Couplet Extension – 3rd Avenue to Whitney Road
- Seward Highway to Glenn Highway Connection – Phase III
- Glenn Highway Alternative Facility

Because of the importance of the Seward and Glenn Highways for regional travel and freight distribution, traffic levels are among the highest in the state. Table 1 shows traffic on these routes at selected locations. Data for the years 2010 through 2019 are reported; traffic count data for 2020 are not included in this analysis because COVID-19-related conditions resulted in lower than typical traffic volumes.

Table 1. Historical Traffic Counts, 2010–2019

Location	Year[a]									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Glenn Highway (Airport Heights to Bragaw)	47,089	48,230	47,836	47,958	48,166	50,416	50,450	48,304	48,484	49,423
5th Avenue (just east of Medfra Street)	50,404	47,474	47,266	48,096	48,305	44,270	50,852	49,845	N/A	47,803
Ingra Street (between 12th and 14th Avenues)	22,150	N/A	N/A	N/A	N/A	22,656	22,918	20,475	20,193	21,306
Gambell Street (between 12th and 14th Avenues)	21,008	19,543	18,873	19,553	19,141	16,635	18,298	17,747	17,491	19,187

Location	Year[a]									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Seward Highway at Ingra and Gambell Streets	52,206	51,113	49,085	47,565	50,037	51,490	51,446	49,074	47,977	48,503

Source: DOT&PF n.d.
Notes: N/A = not applicable
[a] Data for 2020 are excluded due to the changes in traffic due to COVID-19-related conditions.

In summary, the NHS in the study area provides several critical regional linkages, including (1) connecting residential areas to employment centers for people on their daily commutes,[10] (2) connecting the POA[11] and the Ship Creek industrial area to the highway network for truckers distributing containers to communities throughout the Alaska road system, and (3) connecting JBER to the highway network to allow efficient deployment throughout Alaska should the need arise. These roadways have been designed as high-capacity roadways with relatively high travel speeds. In the study area, however, the "highways" are composed of arterial streets that traverse local neighborhoods and also serve important local travel functions, including property access and mobility for shorter, local trips. Conflicts with local traffic reduce the functionality of the NHS for regional travel.

Competing Local Travel Functions. One of the transportation issues in the study area is that the Seward and Glenn Highways are serving multiple uses and functions throughout the study area that conflict, given the original design and construction. Freight, NHS functions, transit, bicycles, and pedestrians are all using and crossing a wide, high-volume roadway facility. Figure 4 shows freight routes in the study area while Figure 8, Figure 9, and Figure 10 show the planned pedestrian system, planned bicycle system, and the existing transit routes in the study area, respectively. Figure 11 combines these functions with the existing road network to show how many functions each road is expected to support. The Glenn Highway/5th Avenue is expected to serve five different functions (regular vehicle traffic, transit, freight, pedestrians, and bicyclists). Ingra and Gambell Streets serve four functions (regular vehicle traffic, freight, pedestrians, and bicyclists). The variety and overlap of the varying multimodal functions make it more challenging to meet the transportation needs of any user group.

The current system experiences conflicting and competing travel functions in the Glenn and Seward Highway corridor within the study area. These roadways are classified in a way that focuses on moving large volumes of traffic through the corridor; however, access is not controlled through the corridor, and there are numerous stoplight-controlled intersections and uncontrolled driveways. The "highways" are composed of arterial streets that traverse local

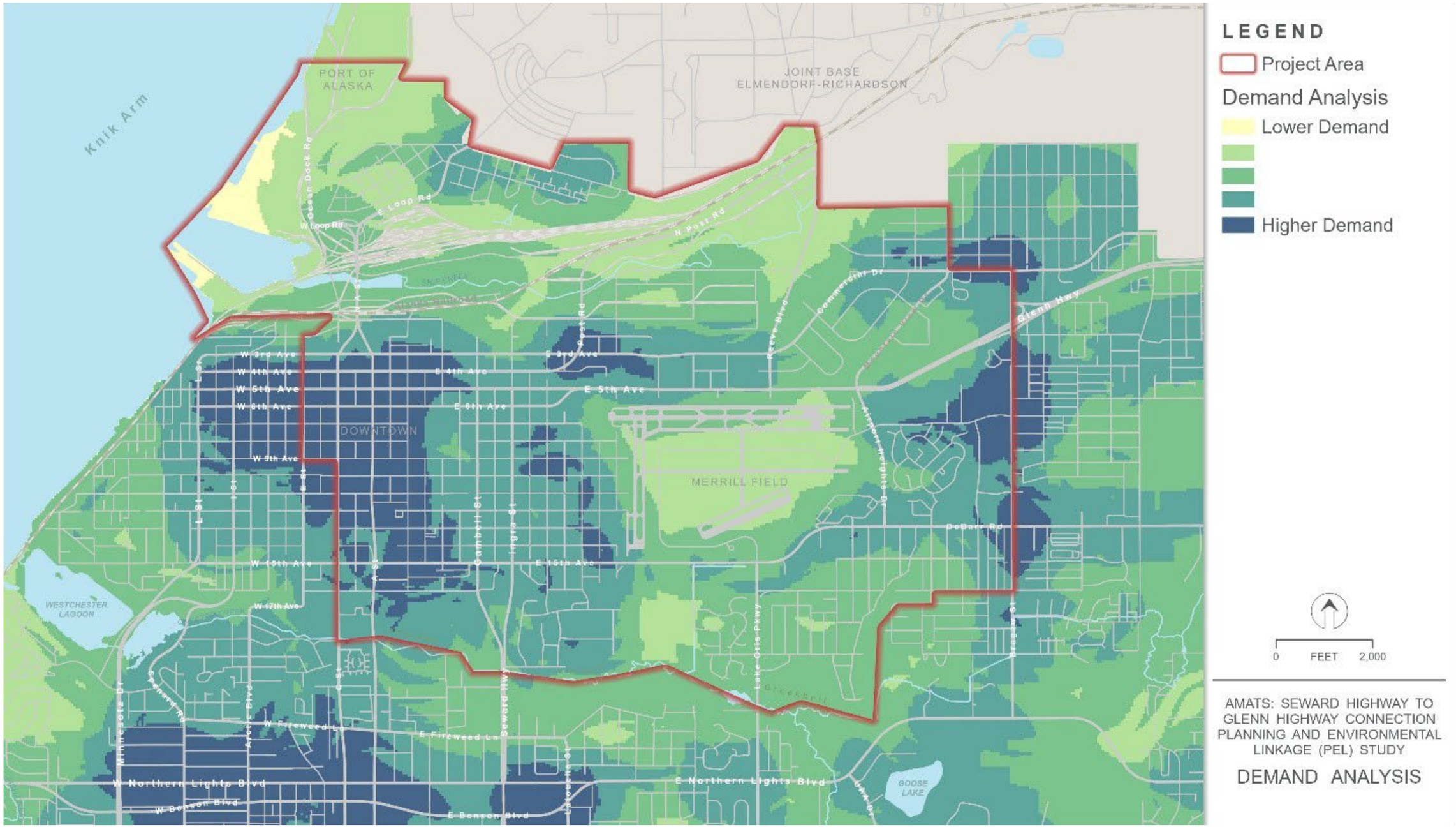
[10] The origin-destination report provided details on the origins and destinations of travelers using the Seward and Glenn Highways.
[11] The POA is a National Strategic Seaport. See Section 8 of the *System Performance Memo* for a discussion of the port's strategic importance. See Section 2.4.2 of *A Basic Description of the Environmental Setting Report* for a discussion of the importance of the POA to the economy and freight movement.

neighborhoods and also serve important local travel functions, including property access and mobility for shorter, local trips.

Non-motorized Travel Functions. Crosswalks are provided at signalized intersections, however, local travelers face barriers associated with wide streets, high vehicle travel speeds, and high traffic volumes in trying to get across the NHS facilities. This is a particular issue for people walking and bicycling, which are prevalent travel modes in the Fairview neighborhood.

The *Non-Motorized Plan* (AMATS 2021) assessed the potential demand for walking and bicycling through an evaluation of where people live, work, play, shop, access transit, and attend school. The results of this analysis are shown in Figure 6. A substantial portion of the study area, especially in the Fairview, Mountain View, and Downtown areas, have high non-motorized demand. According to the *Non-Motorized Plan* (AMATS 2021), many of the areas with highest demand are also areas with higher Levels of Transportation Stress (LTS).

Figure 6. Non-Motorized Demand Analysis



Source: MOA n.d.

Currently, sidewalks along Gambell and Ingra Streets are 4 feet to 6 feet wide, have no buffer from the roadway, and have utility poles placed in the travel way of the sidewalk. Current MOA standards require a 7-foot buffer from the road for snow storage and a minimum 5-foot sidewalk width. There are no existing bicycle accommodations on the corridor. While the Chester Creek multi-use trail intersects the Seward Highway near 20th Avenue, there are poor or nonexistent bicycle connections north into Fairview.

The *Gambell Street Redevelopment Plan* (CH2M HILL, Inc. 2013) evaluated pedestrian environment along Gambell Street and identified a number of issues. According to that plan, pedestrian level of service is a function of the width of the sidewalk; directional volume of motorized vehicles; number of through lanes of traffic; width of outside lane, shoulder, bicycle lane, and parking pavement; average running speed of motorized vehicle traffic; and right-turn-on-red and permitted left turns. The study found that there are several conditions that degrade the pedestrian level of service, including the following:

- The sidewalks are disrupted by electrical transmission lines and light poles and are generally in poor condition.
- There is no shoulder between the sidewalk and outside vehicle travel lanes.
- There are driveways along the corridor that interrupt the pedestrian traversing the existing sidewalk system.
- The majority of the sidewalks along the corridor are not up to Americans with Disabilities Act standards and in particular are difficult for pedestrians to navigate in winter conditions.

The *C Street/Ocean Dock Road Access Ramps Reconnaissance Study* (DOT&PF 2018) also noted several conditions that negatively impact non-motorized users in the POA area. The study noted that the C Street bridge is narrow enough to make passing others on the sidewalk uncomfortable (DOT&PF 2018). Other problems include vehicles failing to yield to pedestrians and bicyclists at crosswalks, lack of crosswalks at some locations, and non-motorized users traveling in areas where pedestrian and bicycle travel is prohibited (DOT&PF 2018).

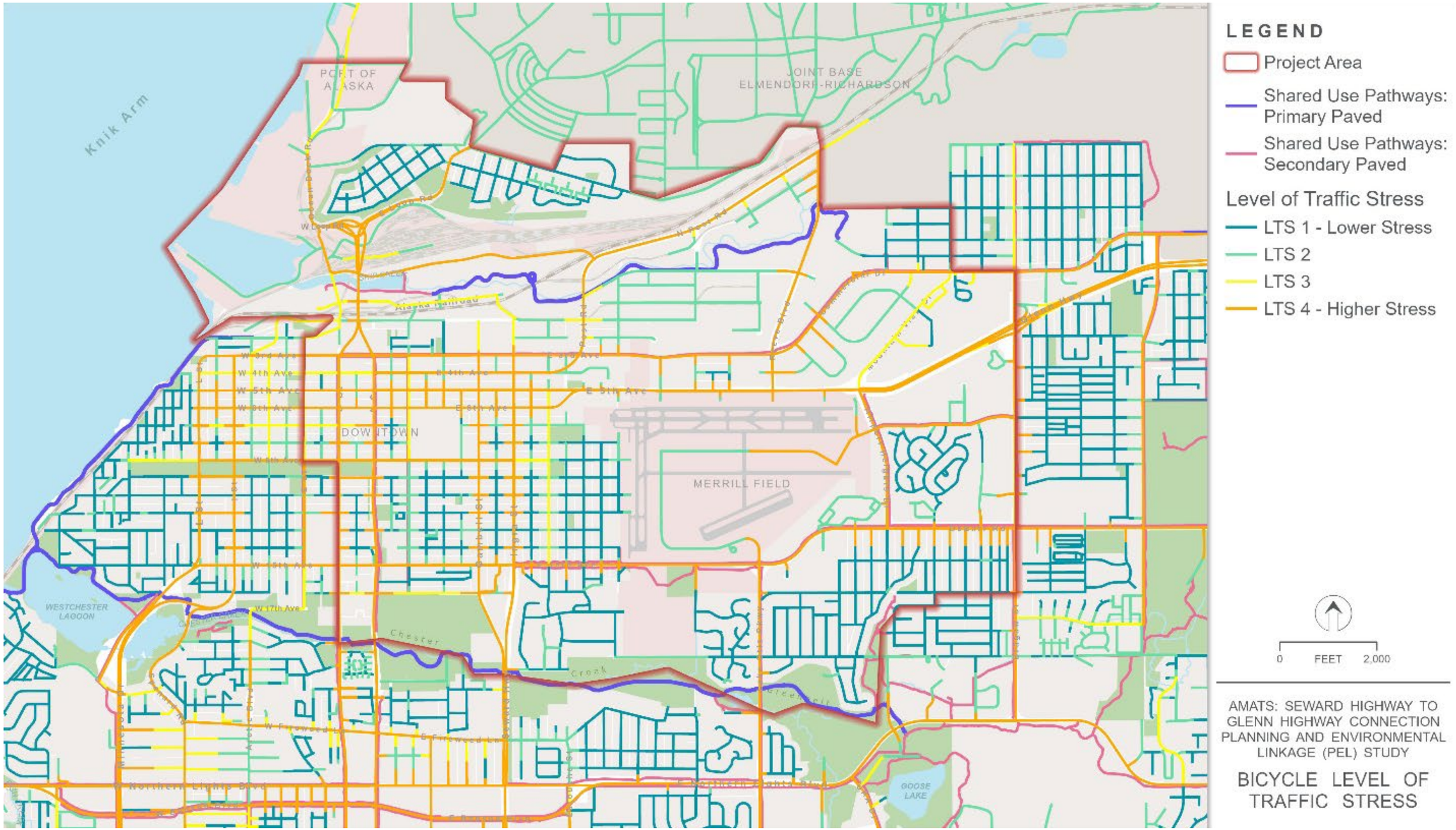
The Fairview neighborhood has one of the highest percentages of non-motorized travel in Anchorage. The neighborhood has a good street grid and a relatively complete sidewalk network. Key destinations for goods and services, like the neighborhood Carrs-Safeway grocery store, are located on Gambell Street. Despite narrow sidewalks with no buffer from the traffic, and light poles and streetlights located in the sidewalk, both Gambell and Ingra Streets are heavily used non-motorized corridors. Much of the eastern half of the neighborhood is separated from the commercial services by the eight-lane Gambell-Ingra Street couplet. These wide streets with fast moving traffic bisect the community, creating a barrier that adversely affects the mobility and accessibility for people walking and bicycling.

The *Non-Motorized Plan* (AMATS 2021) identifies bicycle LTS, which is a way to assess the comfort and connectivity of a bicycle network. It considers the impacts of posted speed limits, street width, and the presence and character of bicycle lanes. The *Non-Motorized Plan* (AMATS 2021) assessed LTS for the AMATS area; the results are shown on Figure 7. Roads in the study area that have higher LTS for bicycles include Gambell Street, Ingra Street, and 5th Avenue.

The current non-motorized LTS on Gambell and Ingra Streets is very high (see the *System Performance Memorandum*). LTS is a way to measure how the number of lanes, posted speed limit, functional classification of a road, and presence and quality of dedicated bicycle or pedestrian infrastructure (or lack thereof) affects the LTS for pedestrians or bicyclists. A high LTS adversely affects the mobility and accessibility of the corridor for pedestrians and bicyclists. A low LTS can encourage more people to choose walking and bicycling. Providing dedicated space for bicyclists helps keep pedestrians safer by creating more separation between pedestrians and motor vehicles. It also provides predictability to roadway users when there is dedicated space for people moving by varying modes.

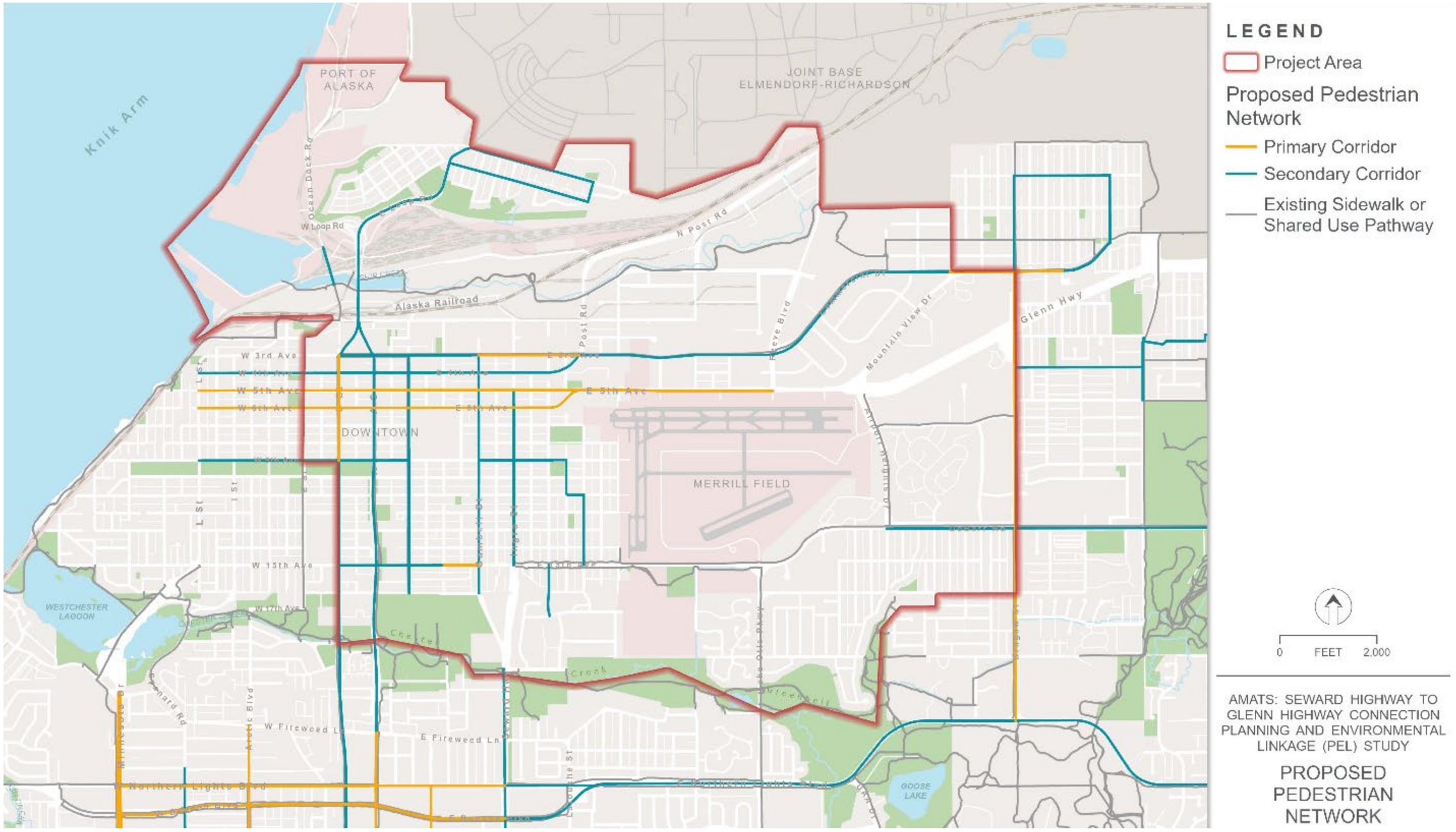
Connectivity of facilities for walking and bicycling—modes that are critical to the local neighborhoods—are deficient and not consistent with recently adopted development plans. The wide streets and heavy traffic volumes on the existing arterial streets that comprise the highways (see Figure 3) make travel across and along these roads difficult and uncomfortable for bicyclists, pedestrians, and vehicle users, adversely affecting travel within and between adjacent neighborhoods. The neighborhood most adversely affected is Fairview. Residents in Fairview tend to have lower incomes and make a greater percentage of their trips using non-motorized modes or transit than other areas of Anchorage. As some nearby roadways also have NHS and freight route designations, the regional needs and local needs are in conflict.

Figure 7. Bicycle Level of Traffic Stress



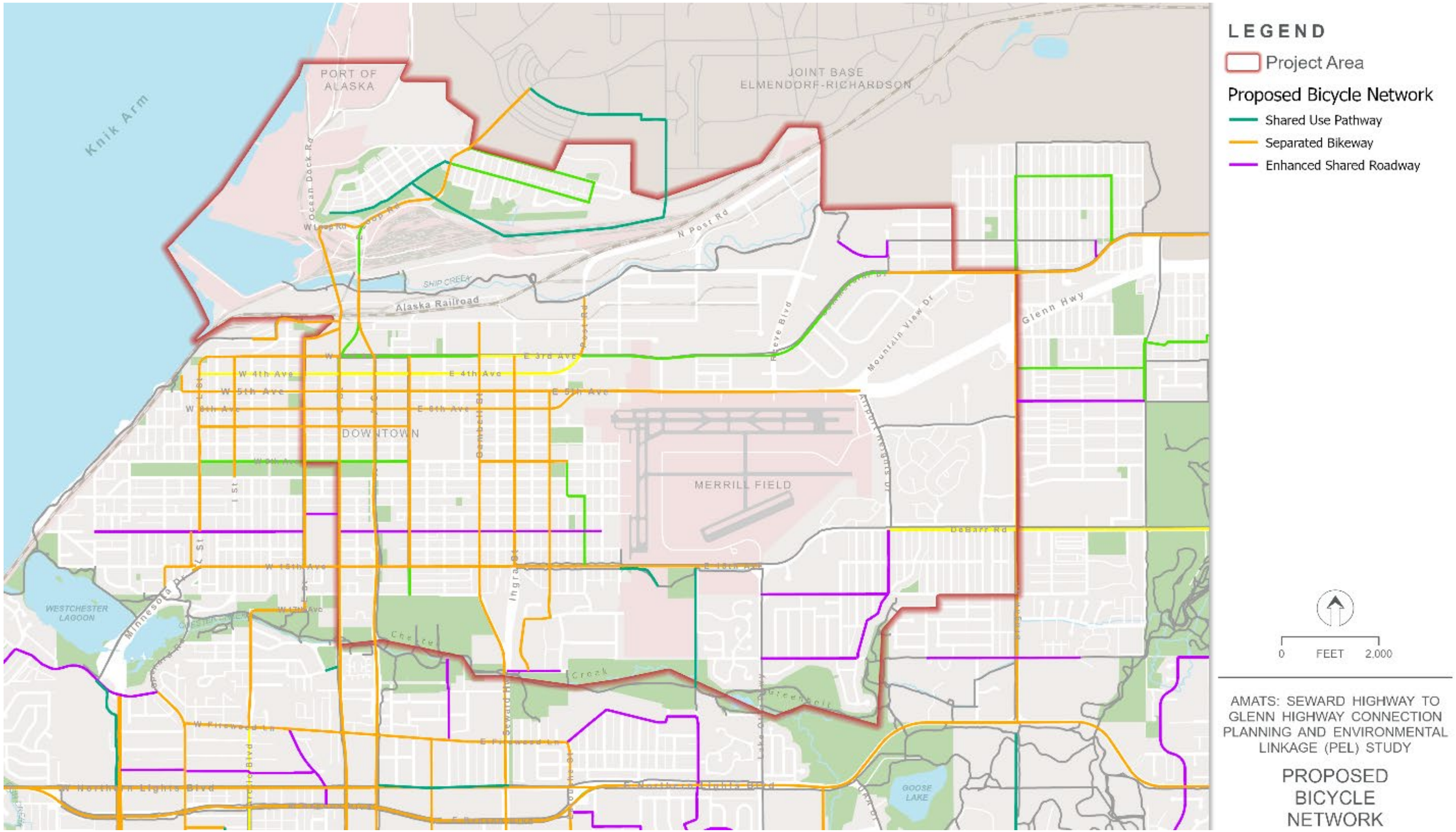
Source: MOA 2021

Figure 8. Anchorage's Planned Pedestrian Network



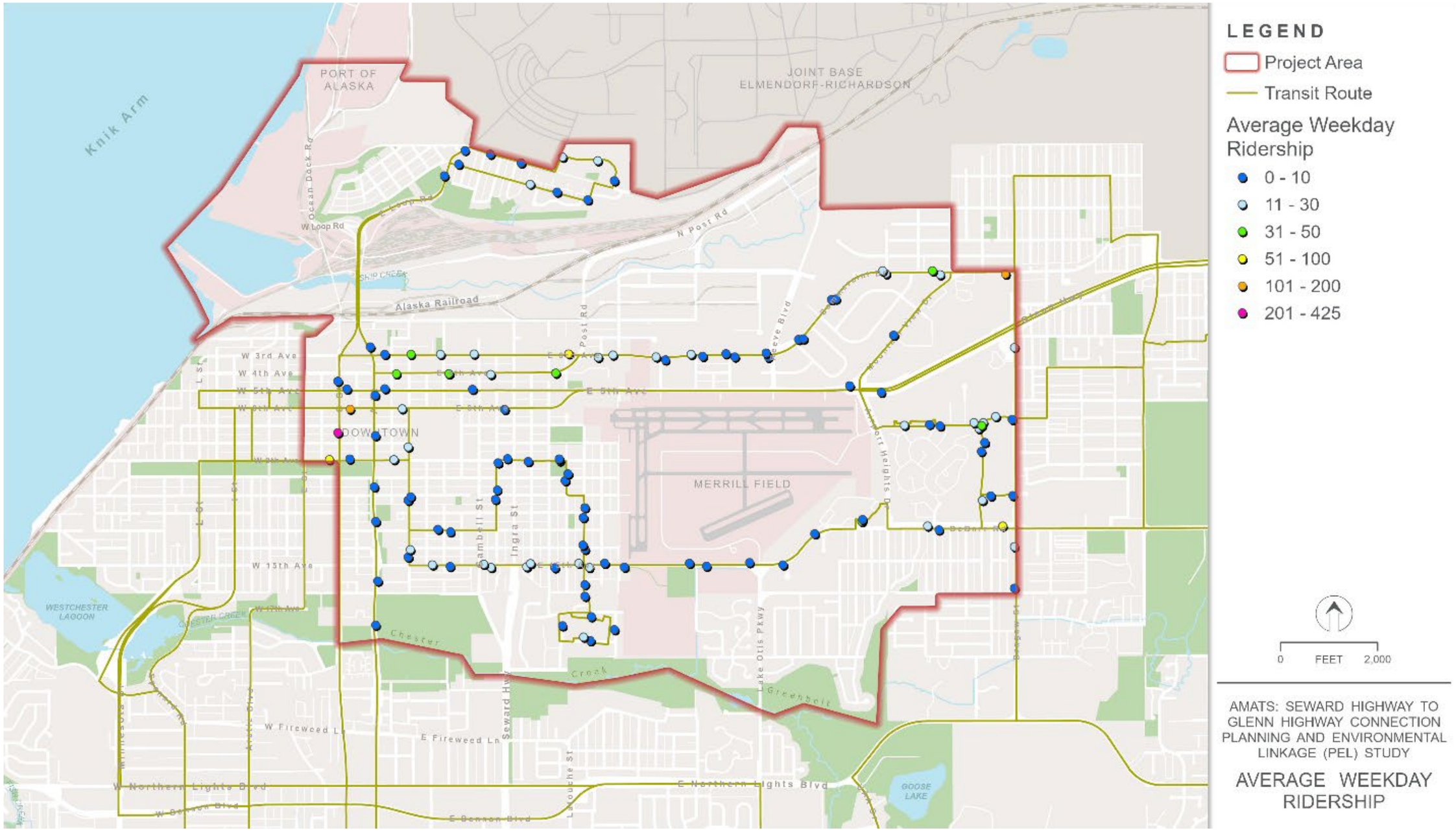
Source: AMATS 2021

Figure 9. Anchorage's Planned Bicycle Network



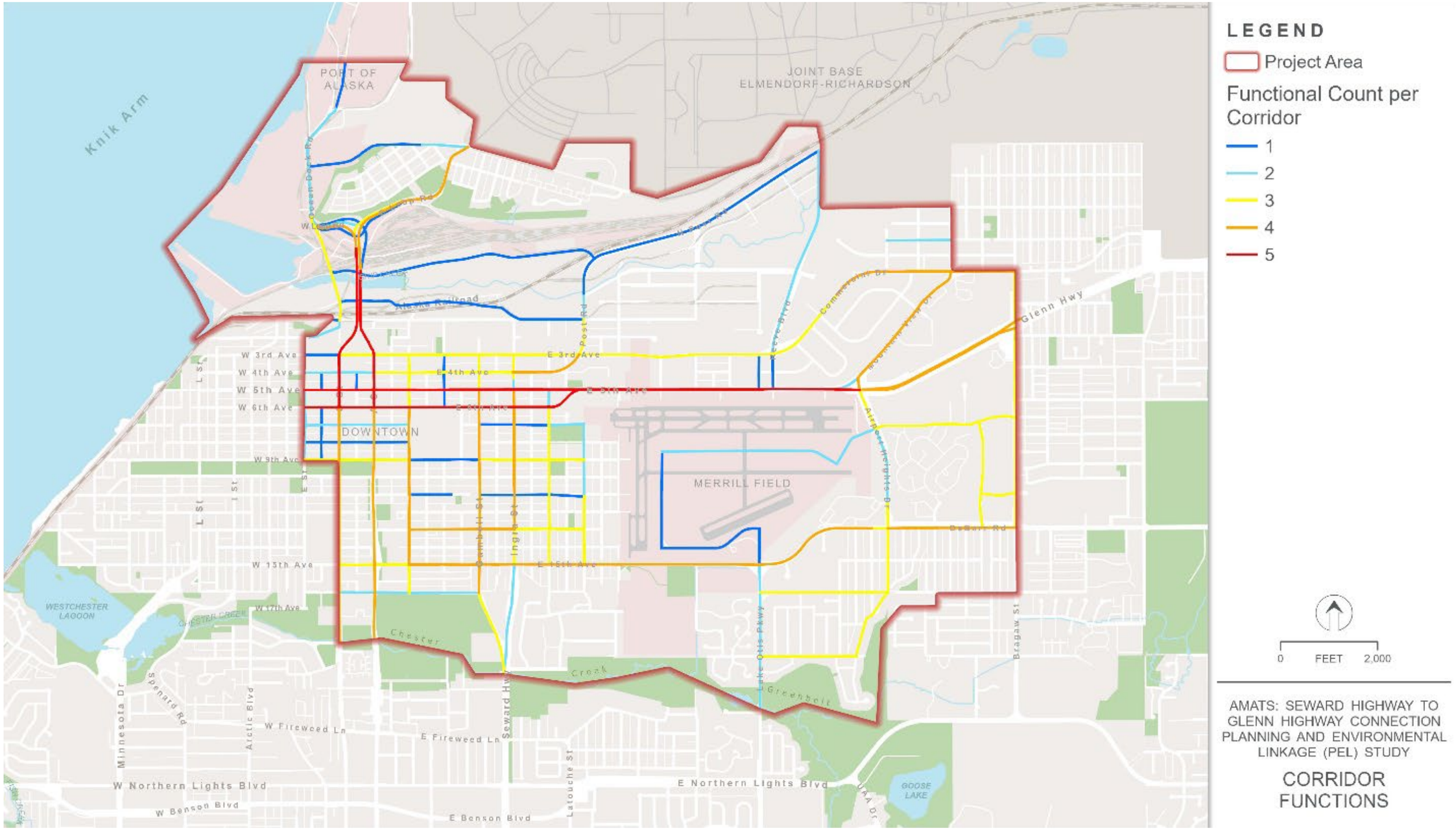
Source: AMATS 2021

Figure 10. Existing Transit Routes



Source: MOA 2022

Figure 11. Functions by Corridor



Source: MOA 2022

2.2.2 Improve Safety

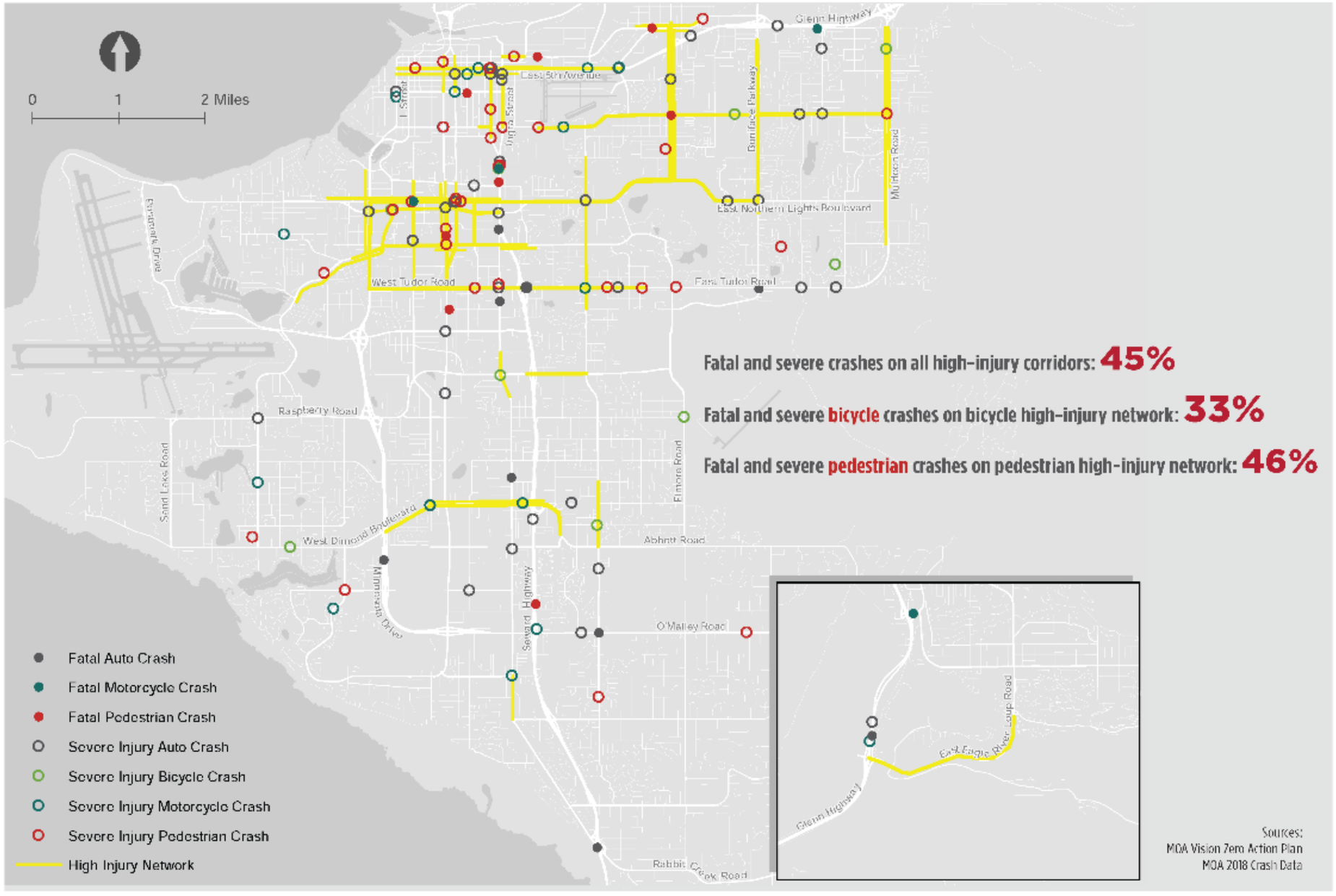
Crashes for vehicles and people walking and bicycling are elevated at several study area intersections.

Vehicle Crashes

The *2018 Vision Zero Action Plan* (MOA 2018) identified a high-injury network that shows where severe and fatal injury crashes are most concentrated within Anchorage (see Figure 12).

In the study area, 19 fatal and 136 major injury crashes occurred between 2008 and 2017. Of the combined 155 fatal and major injury crashes, 141 (91 percent) occurred at intersections, as shown on Figure 13. Based on this information, seven hotspot intersections were identified. A hotspot intersection was defined as an intersection with five or more fatal and major injury crashes occurring within the 10-year study period. The intersection with the highest number of fatal and major injury crashes (eight) is 15th Avenue and Gambell Street. The next highest are 6th Avenue and Ingra Street, and 5th Avenue and Concrete Street, each of which experienced seven crashes.

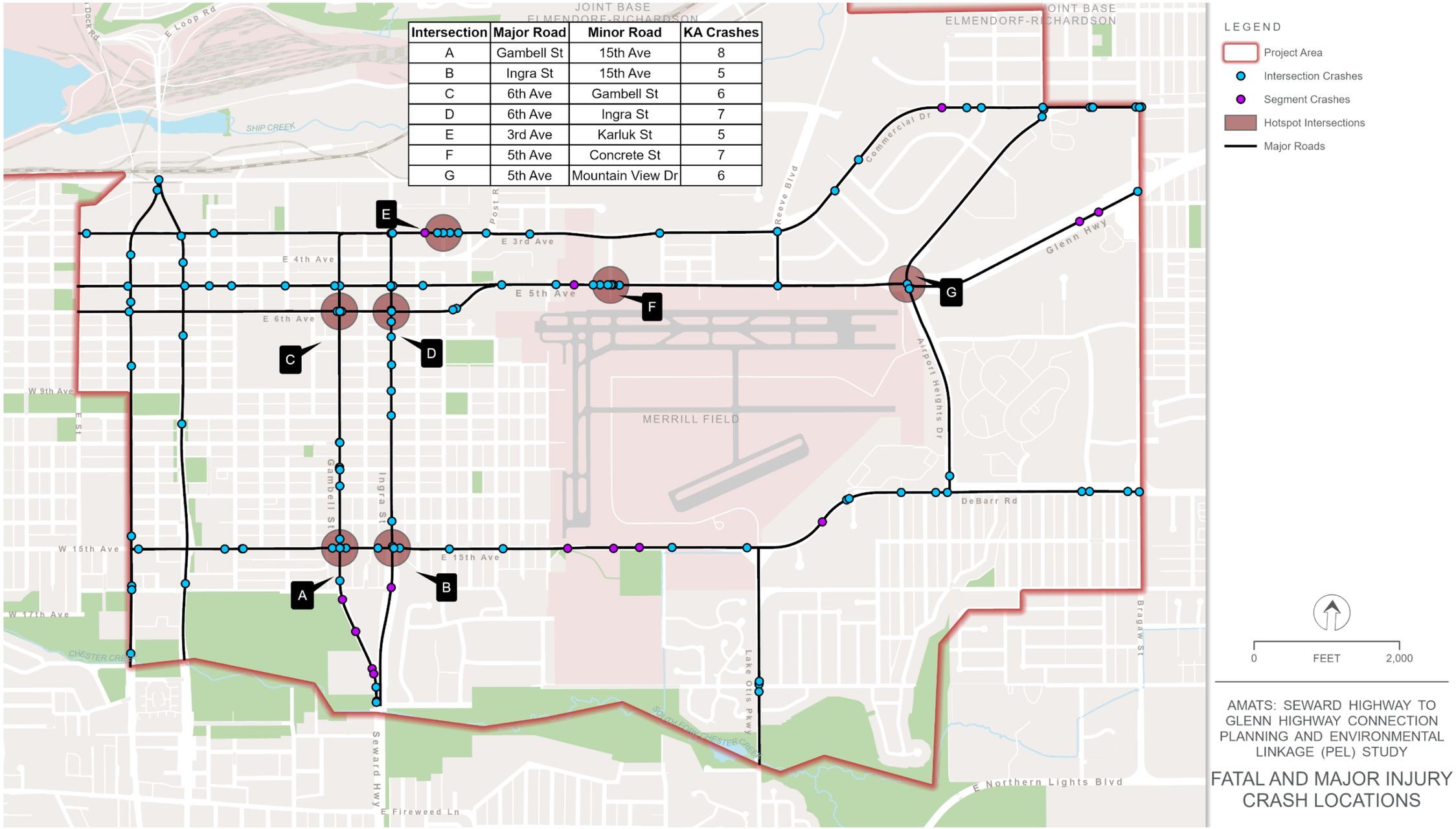
Figure 12. High Injury Network



Source: AMATS 2021 (adapted from the 2018 Vision Zero Action Plan *[MOA 2018])*

Figure 13. Fatal and Major Injury Crashes, 2008–2017

Intersection	Major Road	Minor Road	KA Crashes
A	Gambell St	15th Ave	8
B	Ingra St	15th Ave	5
C	6th Ave	Gambell St	6
D	6th Ave	Ingra St	7
E	3rd Ave	Karluk St	5
F	5th Ave	Concrete St	7
G	5th Ave	Mountain View Dr	6



Note: KA stands for fatal and serious injury crashes based on the KABCO scale for crash severity.

Fatal and major injury crash rates on road segments in the study area are shown on Figure 14. The segment with the highest crash rate is Ingra Street between 5th and 6th Avenues (145.7 fatal and major injury crashes per million vehicle miles traveled [MVMT]). The intersections at the start and end of this segment (Ingra Street/5th Avenue and Ingra Street/6th Avenue) have some of the highest numbers of crashes in the study area. The crash rate on this segment is more than double the next-highest segment (6th Avenue between Gambell and Ingra Streets) (see Table 2).

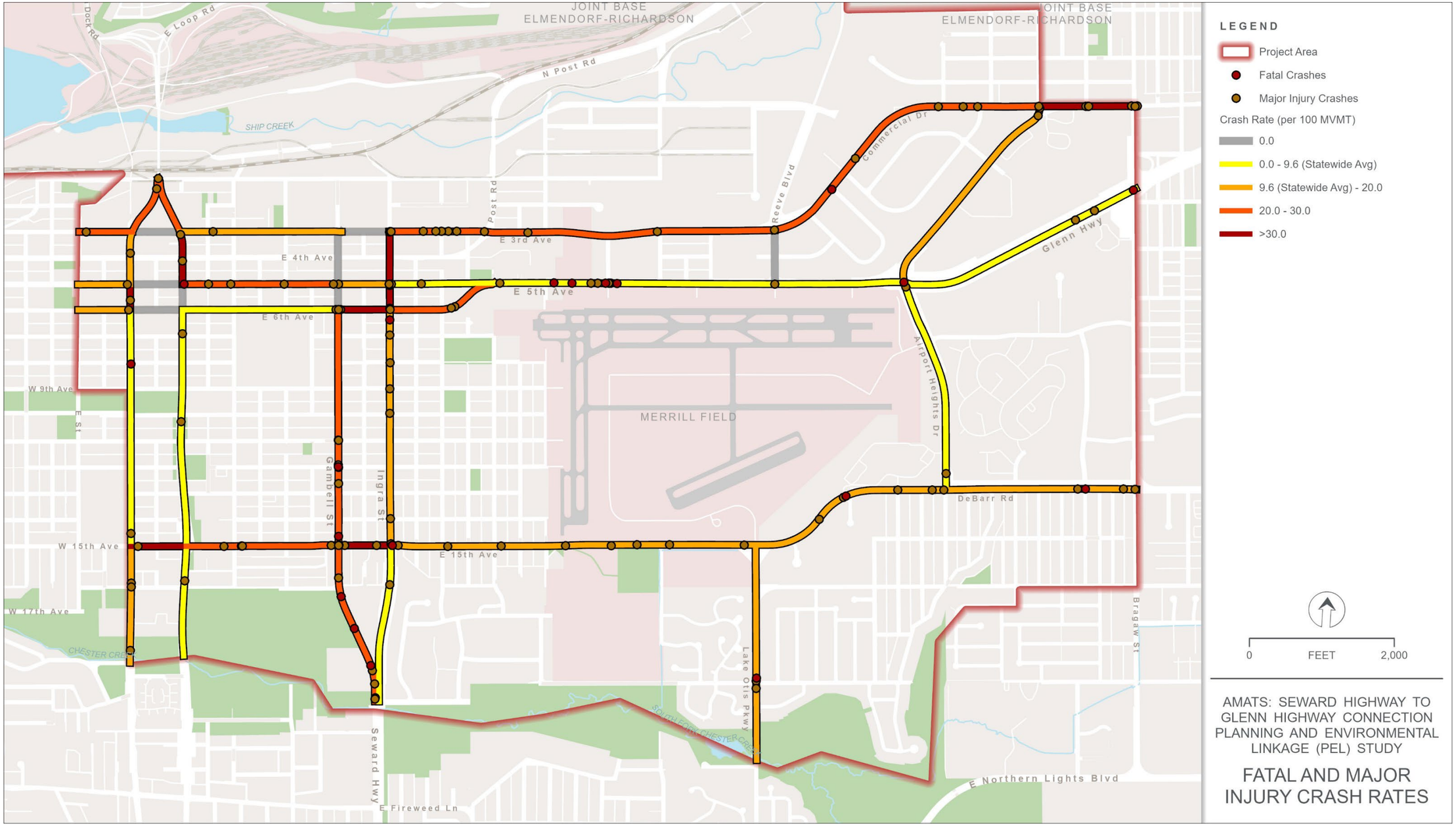
While two intersections on the Glenn Highway/5th Avenue have a high crash frequency, the crash rates along this corridor do not exceed the statewide average (9.6 MVMT). This is due to the high traffic volumes along this corridor.

Table 2. Segment Crash Rates on the Seward/Glenn Corridor

Segment	Crash Rate (per 100 MVMT)
5th Avenue (from E Street to C Street)	13.9
5th Avenue (from C Street to A Street)	0.0
5th Avenue (from A Street to Gambell Street)	20.4
5th Avenue (from Gambell Street to Ingra Street)	13.8
5th Avenue (from Ingra Street to 6th Avenue)	8.3
5th Avenue (from 6th Avenue to Reeve Boulevard)	8.6
5th Avenue (from Reeve Boulevard to Airport Heights Drive)	3.7
Glenn Highway (from Airport Heights Drive to Bragaw Street)	5.2
6th Avenue (from E Street to C Street)	16.5
6th Avenue (from C Street to A Street)	0.0
6th Avenue (from A Street to Gambell Street)	4.0
6th Avenue (from Gambell Street to Ingra Street)	67.8
6th Avenue (from Ingra Street to 5th Avenue)	20.1
Gambell Street (from 3rd Avenue to 5th Avenue)	0.0
Gambell Street (from 5th Avenue to 6th Avenue)	0.0
Gambell Street (from 6th Avenue to 15th Avenue)	20.3
Gambell Street (from 15th Avenue to Chester Creek)	25.0
Ingra Street (from 3rd Avenue to 5th Avenue)	59.9
Ingra Street (from 5th Avenue to 6th Avenue)	145.7
Ingra Street (from 6th Avenue to 15th Avenue)	15.8
Ingra Street (from 15th Avenue to Chester Creek)	2.4

Notes: The statewide crash rate is 9.6 MVMT. Cells highlighted in blue are above the statewide rate.

Figure 14. Fatal and Major Injury Segment Crash Rates, 2008–2017



Non-Motorized Crashes

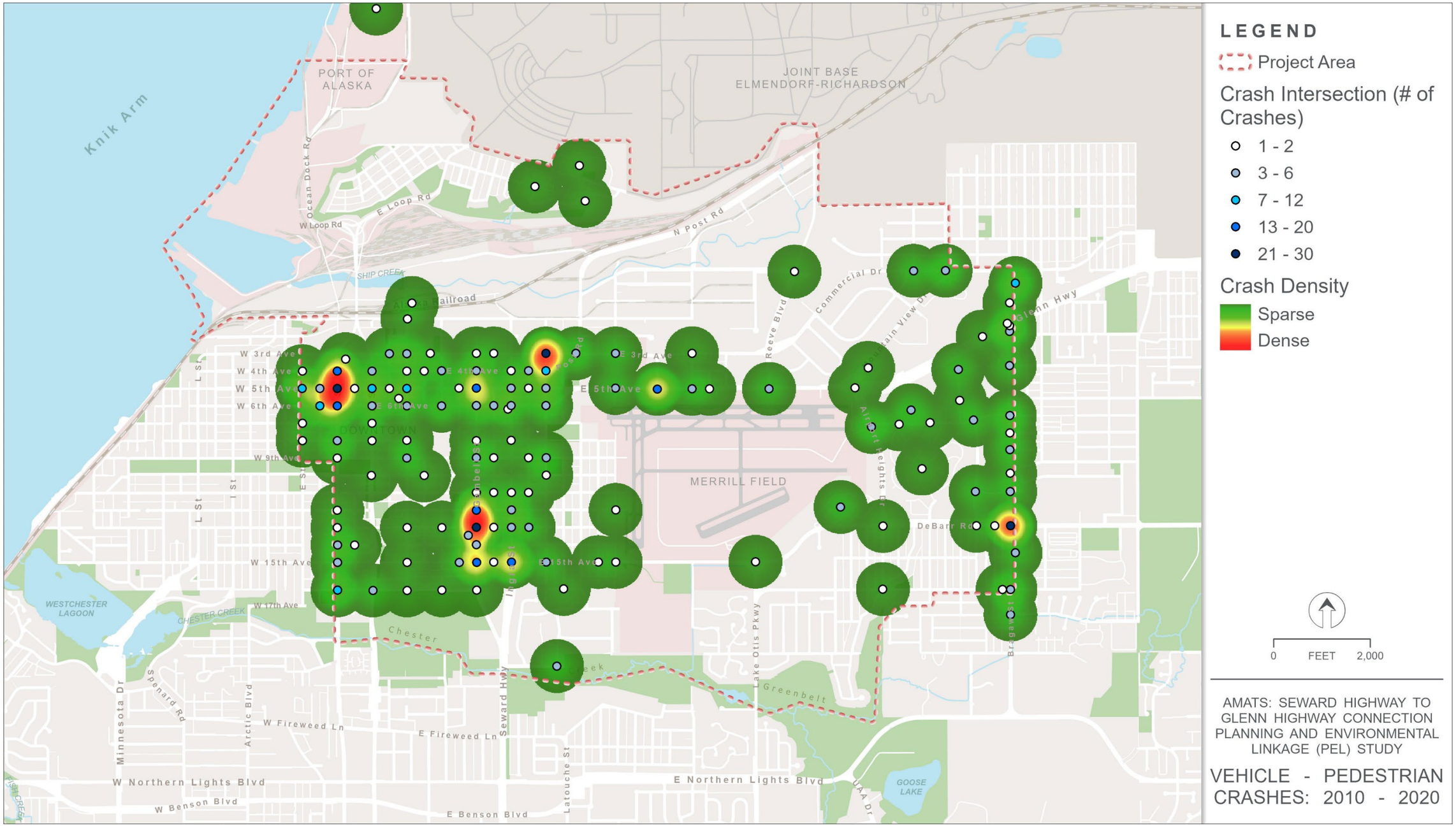
The MOA Traffic Department provided the project team with pedestrian and bicycle crash data from January 1, 2010, through 2020. The MOA crash data between 2010 and 2020 was analyzed to produce figures that show the vehicle/pedestrian crash volume and density (Figure 15) as well as vehicle/bicyclist crash volume and density (Figure 16).

Figure 15 shows the following high-density vehicle/pedestrian crash locations in the study area: 15th Avenue/Ingra Street; 12th–15th Avenues along Gambell Street; 5th Avenue/Gambell Street; 3rd–4th Avenues/Karluk Street; 3rd, 4th, and 5th Avenues/C Street; and Airport Heights Drive/DeBarr Road.

Figure 16 shows the following high-density vehicle/bicycle crash locations in the study area: 15th Avenue/Ingra Street, 15th Avenue/Gambell Street, 6th Avenue/Ingra Street, 6th Avenue/Karluk Street, 6th Avenue/Concrete Street, and Airport Heights Drive/DeBarr Road.

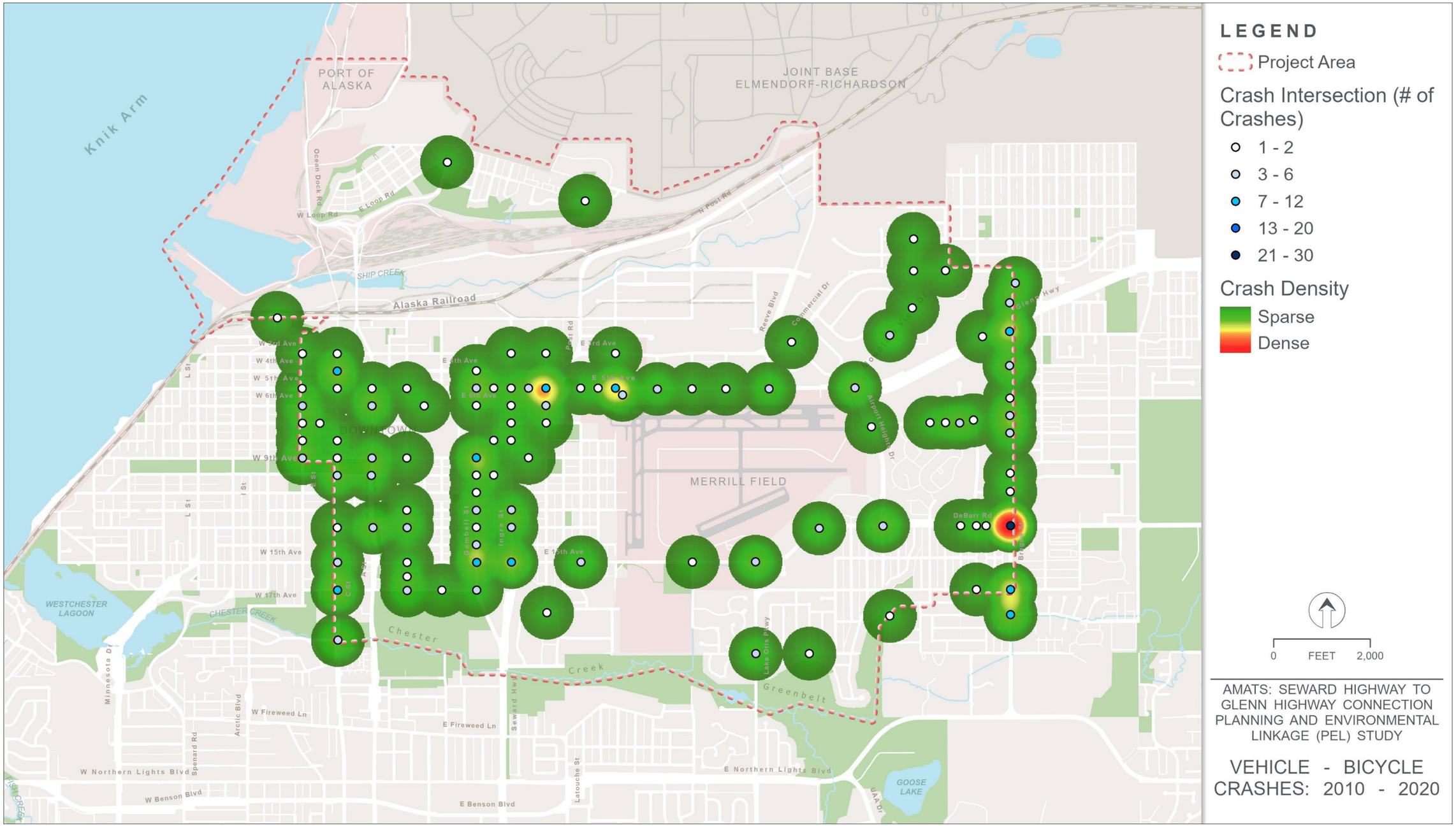
While these intersections had the highest crash density, the maps show that crashes along each of the NHS routes in the study area are more prevalent. This is likely due to the higher traffic volumes and speeds on these facilities. The crash data also closely align with public input related to the locations of non-motorized issues and concerns.

Figure 15. Vehicle/Pedestrian Crash Density, 2010 to 2020



Source: MOA 2022

Figure 16. Vehicle/Bicyclist Crash Density, 2010 to 2022



Source: MOA 2022

2.2.3 Promote Social Equity and Economic Development

Current highway and arterial design on the Seward/Glenn Highway corridor in the study area is inconsistent with the vision expressed in recently adopted plans. Those plans envision improving neighborhood redevelopment, community cohesion, and quality of life.

Federal Highway Administration guidance on purpose and need development indicates that social demands and economic development can be elements of the Purpose and Need Statement.[12] The guidance recognizes that roadway projects can foster new employment and development, and that they can benefit schools, land use plans, recreation facilities, and others. This need element is proposed to reflect that guidance, and it recognizes the social demands expressed during the first phase of the PEL Study in public comments received, and also residents' and elected officials' vision for the corridor as expressed in adopted land use and transportation plans.

Public Input: Public comments regarding this need topic indicated that past street design hampered economic development by creating isolated islands of development surrounded by high-speed streets and bisected neighborhoods. The commenters suggested that Improvements are critically needed given the demographic and economic make-up of the residents and the consequences that past roadway development has had on residents, and for these reasons, environmental justice and equity should be central to any future improvements.

The *A Basic Description of the Environmental Setting Report* for this PEL Study states that the neighborhoods affected by the Seward and Glenn Highway construction include high proportions of low-income and minority populations. The report found that the study area has a higher percentage of minority residents (56.6 percent) than the entire MOA (41.3 percent). More importantly, the census block groups that encompasses much of Fairview and Mountain View are 70 to 90 percent minority. The study area has a higher percentage of all racial/ethnicity categories, except Hispanic, compared to the entire MOA percentage. The report also documents several block groups in the study area with median household incomes below $30,000 per year.

As a result, there are a considerable number of facilities that provide meals, food bank, counseling, employment, or other social services for low-income and homeless persons who live within the study area. One service provider, NeighborWorks Alaska, reported the following in their comments on the PEL Study, which articulately captures the social conditions in the study area:

> For over 40 years, NeighborWorks Alaska has been dedicated to improving the quality of life for families and individuals by preserving homes, creating new housing opportunities, and strengthening neighborhoods. Since 1993, we have

[12] (https://www.environment.fhwa.dot.gov/nepa/trans_decisionmaking.aspx)

> offered 83 units of housing within our property Merrill Crossing at 1275 E 9th Avenue, located in the Fairview neighborhood. We offer 65 income-restricted apartment units, including 10 designated for residents who previously experienced homelessness. Based on recent data from our residents, within Merrill Crossing 62% of the residents we serve are people of color and 22% of them are over 60 years old. Our comments are not only to improve the neighborhood as a whole and to ensure the residents we serve have a safe and accessible neighborhood. These highways have disadvantaged the communities within Fairview, and going forward, solutions should preserve and restore the minority and low-income communities even if at greater costs to the project. Environmental justice should be centered on this project. Fairview is an area with approximately 8,000 residents in Anchorage, Alaska. According to census data, the area is demographically disadvantaged. Nearly half of the population (47%) is low-income and 15% of the population has less than a high school education--twice the state percentage. People of color comprise a majority of the population (62%) and 7% of the population is linguistically isolated. Eighty- four percent of occupied housing units are rentals (Geraty 2022).

Adopted plans covering the study area point out that development of the Gambell/Ingra Corridor has had a profoundly adverse effect on the neighborhood. According to the *Fairview Neighborhood Plan* (MOA 2014b), 5th Avenue was paved and widened from two to four lanes east to Airport Heights Drive in the late 1950s. In 1963, Glenn Highway construction began; in 1966, 6th Avenue was added to the system to create the 5th-6th Avenue couplet. According to the *Fairview Neighborhood Plan* (MOA 2014b), the couplet improved through-traffic flow and increased corridor capacity on the western end of the corridor. Later, in the late 1980s, the Glenn Highway segment between McCarrey Street and the Hiland Interchange near Eagle River was upgraded to six lanes, increasing capacity in the eastern section of the corridor and creating additional traffic volumes through Fairview (MOA 2014b). Gambell and Ingra Streets had a similar development pattern, leading to severe consequences on the neighborhood.

> The extension of Gambell Street southward to the New Seward Highway heralded the loss of the Fairview Main Street atmosphere. The transformation into a strip commercial corridor was strengthened when the one-way couplet was implemented. As traffic volumes increased on Ingra Street, adjoining properties began to feel the impact as families relocated to less congested and safer parts of town. Most dwellings transitioned into rental units with high turnover rates. In the early 2000s, the Fairview Community Council advocated for and succeeded in installing intersection barriers to discourage Downtown commuters from cutting through Fairview (MOA 2014b:36).

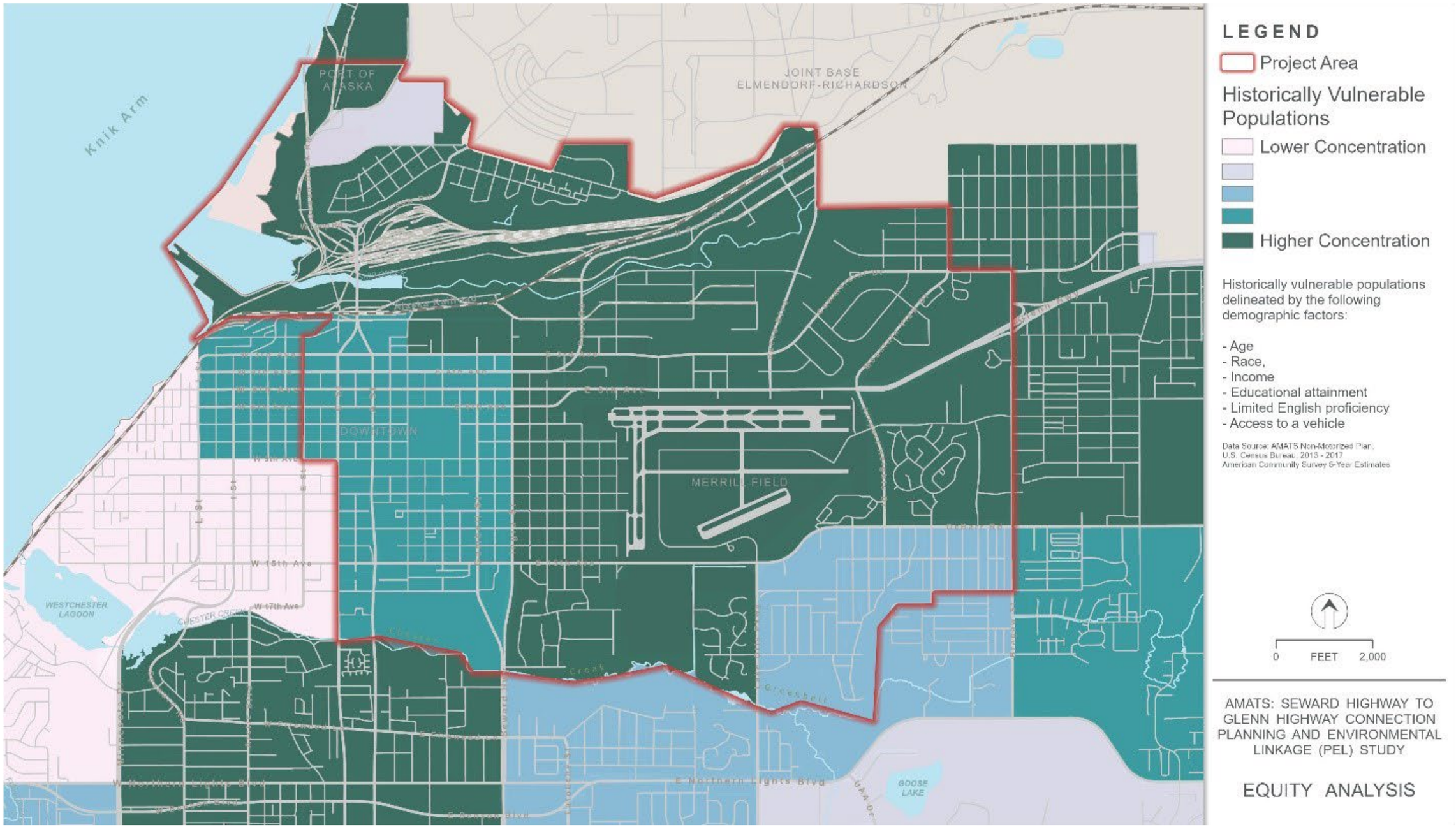
The Seward/Glenn Highway corridor exists in a densely populated residential neighborhood, and the facility currently limits comfortable access of residents to greenspace, businesses, services, and amenities. Improving access of residents to those amenities is an important need of the project. Neighborhood plans and public input to this PEL Study identify that the current street design, which includes wide streets with high speeds and high traffic volumes, and

uncertainty as to the transportation corridor's ultimate improvement plan have hampered neighborhood development. Moreover, noise, fast moving traffic, and heavy truck traffic adversely affect the quality of life in adjacent neighborhoods.

The *Non-Motorized Plan* (AMATS 2021) developed an equity analysis that considered demographic factors (age, race, income, educational attainment, limited English proficiency, access to a vehicle) that, when these factors were combined, indicated where concentrations of historically vulnerable populations occur. The results are shown in Figure 17. The areas around Merrill Field, Ship Creek, Mountain View, and Government Hill have some of the highest concentrations of historically vulnerable populations.

Adopted land use and neighborhood plans envision that corridor transportation improvements will benefit economic development and reduce the impacts that past transportation decisions have had on the Fairview neighborhood. Public input indicated that uncertainty with the Seward/Glenn Highway corridor's ultimate location and design have resulted in disinvestment in area residential and commercial development. The hope is that transportation improvements in the corridor will increase property values, land use infill, and development around the facility, thus increasing access to services and amenities along the corridor and improving livability for surrounding neighborhoods.

Figure 17. Equity Analysis



Source: MOA n.d.

Planning Vision

This section provides a review of adopted land use and transportation plans that express a vision for the development future along the Seward and Glenn Highways through the study area. The DOT&PF Long Range Transportation Policy Plan (LRTP; DOT&PF 2016) expresses the vision, policy, and actions for state-owned assets throughout the state, which may concur with local adopted land use and transportation plans. Each local plan reflects that roadway design changes are desired in the study area as a means of catalyzing redevelopment, reducing the barriers created by the current highway design (thereby improving community cohesion), and improving the quality of life of residents in the area by creating better bicycle and pedestrian connections; improving safety; and creating more livable, complete streets. The adopted plans envision that future land use development will likely alter trip patterns in the study area, meaning there will be a larger percentage of local origins and destinations and that land use policies will lead to modifications in how the movement of people, bicyclists, and vehicles co-exist within the urban core. In summary, the Seward and Glenn Highways through the study area, designed and constructed decades ago, are no longer consistent with the vision embodied in the adopted local plans. To be consistent with the vision expressed by these local plans and the anticipated land use changes, street designs need to be updated.

Alaska 2036 Long Range Transportation Policy Plan: Let's Keep Moving 2036. The LRTP establishes statewide transportation policies, goals, and implementing actions for the DOT&PF through 2036. This Plan sets overall policy and investment priorities, and it identifies policies and actions that may affect future planned improvements the Seward and Glenn Highways in the study area, including:

- Policy 1.A: Develop the multimodal transportation system to provide safe, cost-effective, and reliable accessibility for people and freight.
- Policy 1.C: Upgrade and modernize passenger and freight transportation systems to increase productivity and reliability, and to reduce safety risks.
- Action 1.1: Focus State surface transportation finance responsibilities on the Interstate, Non-Interstate National Highway System, Alaska Highway System, and other high-functional class routes. (Priority 1)
- Action 1.2: Establish an approach to better align needs analyses in area plans and other transportation plans with goals for surface transportation using a performance based approach to planning-level project evaluation. (Priority 1)
- Action 1.5: Address increasing pedestrian, bicycle, and transit travel demands in urban areas through the MPO, corridor and local planning process. (Priority 1)
- Action 1.7: Establish a general transparent methodology, applicable to rural and non-rural Alaska, to evaluate new construction and modernization projects based on their cost-effectiveness in meeting policy area goals. (Priority 1)
- Policy 5.A: Improve transportation system safety in Alaska.
- Policy 6.A: Address quality-of-life, livability, and community considerations in the Statewide Long-Range Transportation Plan, area and corridor plans, asset management, and other plans and project investment decisions.

Anchorage 2040 Land Use Plan. The 2040 LUP includes a "Greenway-Supported Development" (GSD) overlay along the Ingra Street corridor, from 3rd to 15th Avenue, and connecting the Chester Creek Greenbelt on the southern end. The plan describes a GSD as a location where new development will incorporate natural open spaces and pedestrian routes that focus on catalyzing new infill and redevelopment projects to enhance new construction and property values by attracting more uses, housing, businesses, and employment. A key element of the GSD feature in the 2040 LUP is redevelopment of existing built areas in designated Mixed-Use Centers and Main Street Corridors. For GSDs to most effectively catalyze redevelopment and alternative access modes, they should connect to existing pedestrian corridors and trails (MOA 2017).

The 2040 LUP identifies a Main Street Corridor designation along Gambell Street in the study area. The plan envisions that this land use designation will provide "for commercial and mixed-uses within urban neighborhoods that can evolve as pedestrian-oriented, transit-served 'main street' development" (MOA 2017). The plan includes specific corridors, such as along Gambell Street, that feature "transit access, wider sidewalks, pedestrian amenities, street tree landscaping, and relocation of utility poles and boxes and other impediments to a safe, comfortable pedestrian environment" (MOA 2017).

***Fairview Neighborhood Plan*.** One of the top five priorities identified for the *Fairview Neighborhood Plan* (MOA 2014b) is the resolution of long-standing transportation system impacts related to the effects that the Seward and Glenn Highways through Fairview have had on development and livability. The plan "calls for a resolution of the transportation, land use, and planning issues related to this corridor to enable the redevelopment of Gambell Street, amenities that would enhance the community and encourage investment, and provide clarity for property owners as to the future of their lands" (MOA 2014b:2).

The plan includes the Seward to Glenn Highway Connection project as one of its implementing actions, and indicates that the project should:

> Maintain the integrity of Fairview, by following a cut and cover approach, creating a greenway connection between Ship and Chester Creek with a Hyder Street alignment or alternatives that reduce impact on the neighborhood, while providing needed neighborhood street and pedestrian improvements that support mixed-use and other land-use redevelopment and development identified on the approved land-use plan map (MOA 2014b:58).

The plan also identifies a Gambell Street corridor overlay district that is intended to facilitate the restoration of small businesses, provide mixed-use development that promotes walkability, and integrate the proposed traffic-calming projects studied and supported by the recommendations found in the Gambell Street Redevelopment Project (MOA 2014b). The plan also calls for the implementation of the *Gambell Street Redevelopment and Implementation Plan* (CH2M HILL, Inc. 2013). The *Fairview Neighborhood Plan* (MOA 2014b) was adopted by the Anchorage Assembly in 2014.

Gambell Street Redevelopment and Implementation Plan. This plan was prepared for Gambell Street between 3rd and 20th Avenues to improve the efficiency, appearance, and business/pedestrian friendliness of the major thoroughfare (CH2M Hill, Inc. 2013). Related to livability, the plan has the following objectives:

- Provide an attractive environment for all users on the corridor
- Enhance the visual, aesthetic, and functional landscape of the corridor
- Promote economic development along the corridor that is in line with the community's vision
- Provide opportunities for recreation and open space

Metropolitan Transportation Plan 2040.[13] MTP 2040 describes the following purposes for the project: "Safety (Vision Zero High Injury Network Corridor), Congestion, Access, Connectivity, and Freight (Proposed Regional Truck Route)" (AMATS 2020). Additionally, the project is intended to address the following federal performance areas: "Injuries & Fatalities, Performance of the National Highway System, Freight Movement/Economic Vitality, and Environmental Sustainability" (AMATS 2020). The plan envisions separating regional traffic from local traffic by depressing the freeway as a means of reducing the conflicting travel functions. As envisioned, the depressed freeway would have lidded sections where parks or other community-enhancing features could be developed to help revitalize neighborhood development and provide improved connectivity and cohesion across the NHS facility. Gambell and Ingra Streets are also proposed to be reconstructed as part of the project to better facilitate local travel. See more about this plan in Section 1.5.

Government Hill Neighborhood Plan (GHNP). The *Government Hill Neighborhood Plan* (MOA 2013a), adopted in 2013, identifies an overarching goal to promote the orderly growth, improvement, and future development of the Government Hill neighborhood. Regarding the regional transportation aspects relative to this PEL Study, the plan identifies that freight movement from the POA and the industrial reserve in the Ship Creek Valley to the road system is a critical issue and that the Seward to Glenn Highway connection would have a substantial impact on the neighborhood. The industrial reserve is associated within the Alaska Railroad Terminal Reserve, where the predominant use is industrial establishments on Alaska Railroad lease lots. The GHNP assigns industrial land uses clustered along Post Road and Whitney Drive in a corridor north of Ship Creek. One of the goals of the plan for the railroad yard corridor is to "coordinate access improvements for pedestrians, bicyclists and motorists into the upper portion of the Government Hill neighborhood and to Ship Creek Trail" (MA 2013a). The plan calls for enhanced pedestrian and bicycle connectivity east-west along the northern side of the

[13] MTP 2040 (AMATS 2020) identifies the project as a freeway connection between Seward Highway/20th Avenue and 13th Avenue, with freeway access and egress ramps onto Ingra/Gambell Streets near the northern termini of the project. It would reconstruct Ingra/Gambell Streets and construct separated grade crossings of the freeway to reconnect portions of the east-west street system. It would construct an interchange at the Airport Heights Drive and Glenn Highway intersection. The project would include non-motorized improvements and consider adjacent land use. A major purpose of this PEL Study is to re-investigate the project's purpose and need, and determine if a highway connection is still the appropriate solution to the identified needs.

Alaska Railroad Terminal Reserve and also north-south from near the end of Ivy Street to Ship Creek (MOA 2013a).

Anchorage Original Neighborhoods Historic Preservation Plan. The *Anchorage Original Neighborhoods Historic Preservation Plan* (HPP) was adopted in 2013 (MOA 2013b). It is a community-based plan focused on preserving historic character while planning for a sustainable future in Anchorage's original neighborhoods, which includes the Government Hill, Downtown, South Addition, and Fairview Community Council areas. The Ship Creek area is also included in the HPP. A key policy of the plan states, "Mitigate to the greatest extent possible any transportation and infrastructure, redevelopment, and infill projects, whether large or small, that does not enhance and support the existing neighborhood character, or does not follow proposed and adopted preservation plans for that neighborhood. This includes projects such as the Knik Arm Crossing, Seward Highway to Glenn Highway Connection, Ingra/Gambell connector, and A/C couplet" (MOA 2013b).

Mountain View Targeted Neighborhood Plan. The *Mountain View Targeted Neighborhood Plan*, adopted in 2016, defines the guiding vision for community-driven investment in the safety, health, and happiness of those who live and work in Mountain View (MOA 2016). The vision for Mountain View focuses on the following six categories:

- Community and Resident Leadership and Engagement
- Community Safety
- Business Development and a Vibrant Business District
- Transportation and Green Spaces
- Real Estate Development and Housing
- Building Successful Family Resources

The plan calls for improving pedestrian amenities and transit service within Mountain View (MOA 2016).

Our Downtown. The *Our Downtown* plan (MOA 2021) is a targeted review and update of the 2007 *Anchorage Downtown Comprehensive Plan*. This plan is meant to guide development in Downtown Anchorage over the next 10 to 20 years. This plan supports the completion of the Glenn-to-Seward Highway project, which would take traffic off Downtown and Fairview Streets and increase the area's redevelopment potential. It also recognizes part of the study area is ripe for redevelopment, including the Fairview/East Downtown Economic Development Tax Abatement Zone, and is a federally designated Opportunity Zone. This plan was adopted by the Anchorage Assembly in April 2022.

3rd & Ingra/Former Alaska Native Service Hospital Master Plan. The purpose of *3rd & Ingra/Former Alaska Native Service Hospital Master Plan* (MOA 2019a) was to find an appropriate reuse alternative for the former Alaska Native Service Hospital site located on the northern side of 3rd Avenue between the projected right-of-way for Fairbanks and Ingra Streets. This plan identified two preferred alternatives: one for the site to be used as a mixed-use area with a commercial focus, and one is for the site to be used as a mixed-use area with a residential focus. Both alternatives include a new road that would connect 3rd Avenue/Hyder

Street to a new intersection on the western side of the parcel. The alternatives do not have any new road connections on the northern and eastern sides of the parcel (MOA 2019a).

Anchorage Climate Action Plan. The actions outlined in *Anchorage Climate Action Plan* (MOA 2019b) are intended to help prepare Anchorage for the impacts of a changing climate and to work to slow the effects of climate change by reducing greenhouse gas emissions produced in Anchorage. The land use and transportation section of the plan identifies a key solution to reducing vehicle emissions as using less gasoline and diesel fuel. To do this, the plan suggests shortening the distances people need to travel, reducing the number of vehicle trips, and increasing the use of non-motorized transportation and public transit. The plan recommends making it easier to walk, bike, and use transit and transforming urban areas to reduce sprawl. Key action items from the plan relevant to the Seward-Glenn Mobility PEL Study include the following (MOA 2019b):

- Prioritize and conserve green spaces in transportation, development, and planning projects equitably across Anchorage.
- Invest in safe and covered bus stops with benches.
- Encourage carpooling and transit use by improving coordination and developing strategies with other agencies (e.g., developing site design incentives, using Link AK, creating carpool lanes, developing workplace incentives, addressing logistical challenges such as finding people who have similar travel needs).
- Continue to expand and connect non-motorized transportation facilities. Fund and implement policies and projects recommended by the *Non-Motorized Plan* (AMATS 2021), such as secure and covered bicycle storage options.
- Explore opportunities for increasing public transit commuter options throughout the MOA, from Eklutna to Girdwood, also considering options for the Matanuska-Susitna Valley, including commuter rail.
- Make it easier for people to walk, bike, or use mobility aids by improving coordination and developing strategies with other agencies (e.g., lighting, winter maintenance of sidewalks, bicycle pathways and lanes). Prioritize safe routes to school to improve access and appeal of neighborhood schools.

Additionally, the plan indicates that achieving equity through land use and transportation planning is a central goal of the recommendations in the transportation and land use sector. The plan states that land use and transportation policies that address equity issues are essential for making Anchorage a more walkable, bikeable, and livable community for all residents (MOA 2019b).

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