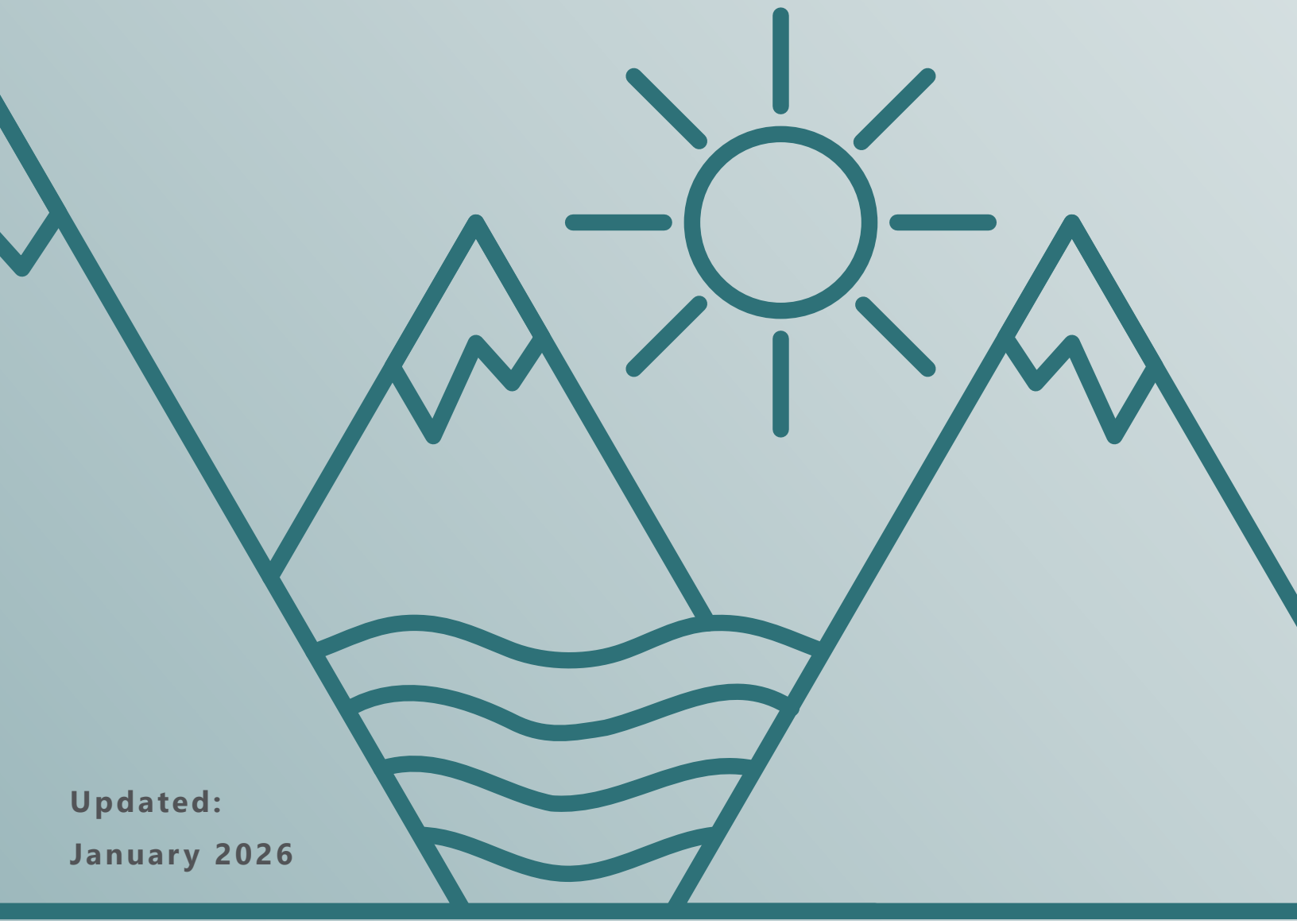
Whittier Moves

City of Whittier Transportation Master Plan

Existing Conditions Element



Updated:

January 2026

TABLE OF CONTENTS

Figures

Tables

ACRONYMS

AAC ..... Alaska Administrative Code
The Tunnel..... Anton Anderson Memorial Tunnel
AASHTO ..... American Association of State Highway and Transportation Officials
ACS ..... Alaska Communications
ADA ..... Americans with Disabilities Act
ADT ..... Average Daily Traffic
AMHS ..... Alaska Marine Highway System
AML ..... Alaska Marine Lines, LLC
ARRC ..... Alaska Railroad Corporation
AS..... Alaska Statute
CPV..... Commercial Passenger Vessel
DNR..... Department of Natural Resources
DOT&PF ..... Department of Transportation and Public Facilities
EMS ..... Emergency Medical Services
EMT ..... Emergency Medical Technician
FHWA ..... Federal Highway Administration
FLAP ..... Federal Land Access Program
GCI ..... General Communications, Inc
HAP ..... Holland America/Princess Alaska-Yukon Land Operations
HCM ..... Highway Capacity Manual
HMA ..... Harbor Management Area
HOB ..... Head of the Bay
LOS ..... Level of Service
NHS ..... National Highway System
RV ..... Recreational Vehicle
TCC ..... Tunnel Control Center
TCS ..... Tunnel Control System
TSS ..... Train Signal System
USACE ..... United States Army Corps of Engineers
USFS ..... United States Forest Service
UUI ..... United Utilities, Inc
WCST ..... Whittier Cruise Ship Terminal
WDA ..... Waterfront Development Area
WEDP ..... Waterfront and Economic Development Plan
WMC ..... Whittier Municipal Code of Ordinances
WTMP ..... Whittier Terminal Master Plan

1. Study Area Overview

This section provides an overview of Whittier's transportation context, geographic characteristics, and historical role in regional mobility. The City of Whittier Transportation Master Plan (Whittier Moves), led by the Alaska Department of Transportation and Public Facilities (DOT&PF), aims to coordinate transportation planning and project development in and around the City of Whittier (The City) to identify future transportation investments that support land use and movement patterns. The plan will be developed in close coordination with key stakeholders, including the City, to foster collaboration among various organizations, creating a cohesive and agile transportation planning document. This plan will serve as a tool for securing discretionary grant funding and will support other project development opportunities.

Whittier's location, infrastructure, and unique character (Figure 1) make it a central transportation hub for tourism, freight, and the Alaska Marine Highway System (AMHS). The community, accessed via the Anton Anderson Memorial Tunnel (The Tunnel), was originally established as a military base at the head of Passage Canal. It provides access to wildlife viewing and recreational opportunities, including two cruise ship terminals, extensive access to day cruises and other tourism activities, and an interwoven military history highlighted by the Buckner Building and the small population of residents who mostly live in the Begich Towers. The legacy of Whittier's military history is land ownership, which is predominantly held by the Alaska Railroad Corporation (ARRC) who also own the barge slip and freight uplands, The Tunnel, and have extensive track configurations to support freight and passenger trains as well as passenger and freight vehicles.

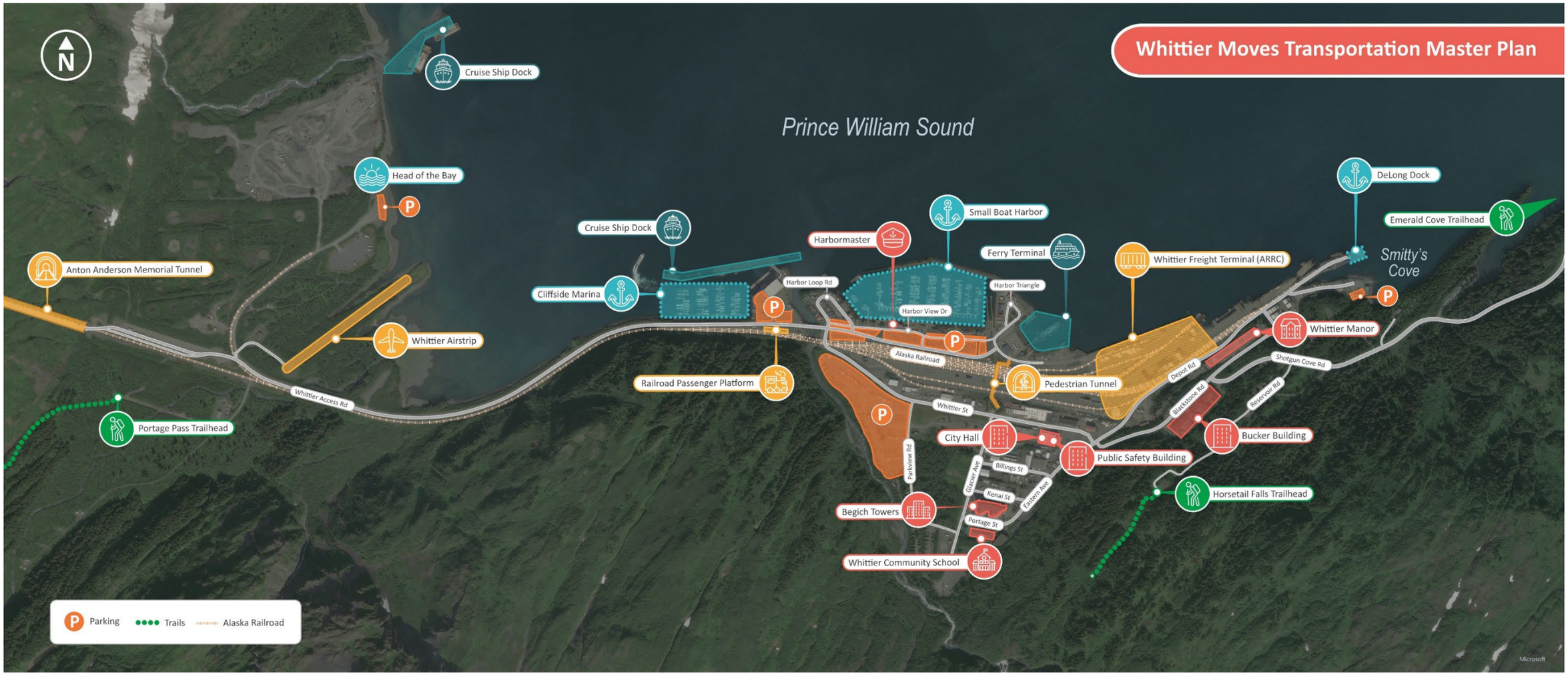


Figure 1. City of Whittier Study Area

2. Integrating State, Regional, and Local Plans

Relevant state, regional, and local plans were reviewed to align this document with broader transportation goals. This supports alignment with community goals, reduces conflicting policy recommendations, and supports efficient implementation of long-range strategies. Many of the plans reviewed identify challenges, successes, goals, and strategies that directly impact or are relevant to Whittier's transportation system. The plan review allows for the integration of projects and ideas that are already community-vetted, identifies gaps and overlaps to avoid redundancy, and ultimately produces an informed document that accurately reflects the current state of the region from a transportation perspective.

2.1 Whittier Terminal Master Plan (2025)

The ARRC Whittier Terminal Master Plan (WTMP) will serve as a roadmap for the development and operation of the Whittier Railroad Terminal. The WTMP considers applicable guiding factors including laws, regulations, executive orders, policies, practices, and procedures.

The ARRC land reserve in Whittier includes a busy railyard and marine facilities that serve as a key freight hub. Cargo from the Lower 48 arrives by vessels that dock at the railroad's rail-marine barge slip. Unloaded freight is then transported by rail or truck to points along the rail and highway corridors.

Situated on ARRC land and connected by rail, cruise company-owned facilities welcome thousands of passengers to Alaska each spring and summer. They add to a robust visitor industry as travelers venture into other areas of the state via motorcoach or train. In more recent years, the community and private sector companies have pursued developments to tap into Whittier's potential. Likewise, over the past three years, ARRC has invested more in infrastructure by funding projects including railyard paving, drainage improvements, track reconfiguration and modification, and barge ramp rehabilitation. ARRC also demolished the old marginal wharf to address safety concerns and is now designing a project to replace a portion of that structure.

The purpose of the WTMP is to ensure this regionally significant port:

- continues to meet current and future demands
- identifies efficiency and capacity improvements
- assesses facilities near the end of useful lives
- considers interaction/support of community and commercial infrastructure

The WTMP aims to complete a comprehensive master plan that will accomplish the following tasks:

- evaluate the condition, performance, safety, efficiency, state of good repair, reliability, resiliency, and sustainability of the terminal facilities
- establish an integrated plan for future modernization, considering the unique interests of diverse stakeholders

- identify areas for rehabilitation of marine, terminal and upland infrastructure, and supporting operations
- explore alternatives for infrastructure elements
- produce an inclusive approach to address the terminal's challenges and invest where public benefits are the highest
- generate a roadmap for phased investments
- reduce the duration of, or eliminate, trains occupying the at-grade road-rail crossing
- contribute to maintaining a secure facility

2.2 Shotgun Cove Road Extension Final Design Study Report (2022)

In the fall of 2018, the City completed construction on a two-mile segment of Shotgun Cove Road, from Blackstone Road to Second Salmon Run. This first segment of road created access points to Passage Canal at Lu Young Park and to uplands at Cove Creek and Second Salmon Run.

The proposed Shotgun Cove Road Extension project is focused on providing access to federal and state coastal lands and uplands along Passage Canal, on Trinity Point, and within Prince William Sound; and providing access to city land for commercial or residential development as required by the 1994 agreement with the State of Alaska. With this established purpose and the overarching goals of increasing access to federal and state lands, expanding opportunities for residential and commercial development, and alleviating pressure on the regional transportation systems, the City applied for and obtained funding from Federal Highway Administration (FHWA) Federal Land Access Program (FLAP) for permitting, design, and construction of the Shotgun Cove Road Extension (Mile 2.0 to 4.5) from the existing terminus to United States Forest Service (USFS) lands at Trinity Point.

The project proposed the construction of a new two-lane gravel road that extends approximately 2.5 miles from the existing Shotgun Cove Road terminus (Mile 2.0) to Trinity Point (Mile 4.5), running parallel to Passage Canal, as well as adjoining access roads and recreational facilities. The City of Whittier has signed contracts with CRW Engineering Group, Inc., to provide engineering and design services.

The final Design Study Report was published in October of 2022. The evaluation of alternatives included a comparison of road profile, length of steep cuts and fills, mass haul, stream crossings, and construction costs. Conceptual parcel layouts were developed to evaluate how each alignment option could provide public access to the surrounding State and federal lands, private access to developable properties, and where spur roads would be necessary. Funding has not been identified for construction.

At the time of writing, mile 2.0 to 3.0 of Shotgun Cove Road is under construction with anticipated completion in November 2026. Additionally, the City is continuing to seek funding for mile 3 to 3.5 which has an estimated project cost of ten million dollars[1].

2.3 City of Whittier Waterfront and Economic Development Plan (2024 Draft)

The City is creating a Waterfront and Economic Development Plan (WEDP) scheduled to be approved by the City Council in the fall of 2025. The current WEDP, which has been reviewed, is in draft stage and includes recommendations pertinent to transportation. The WEPD aims to:

- reflect the community's needs and values
- identify economic opportunities in Whittier
- maximize the use of City-owned or City-leased land
- protect tidelands within the City boundaries
- enhance public access and recreational opportunities on Whittier's waterfront and uplands

The project scope includes two geographic locations in Whittier: the Waterfront Development Area (WDA) and the Harbor Management Area (HMA).

The WDA is bound on the west by the proposed ARRC and City land transfer boundary and to the east by Smitty's Cove and the DeLong Dock, excluding the HMA, Whittier Cruise Ship Terminal (WCST), Cliffside Marina and Yacht Club, AMHS Ferry Terminal, and ARRC lands. The two focus areas for the WDA include the Head of the Bay (HOB) on the west side of the boundary, and Smitty's Cove and DeLong Dock on the eastern extent of the boundary. Transportation related goals for this area include:

- improve parking for vehicles and trucks with trailers
- develop a corridor that connects the tunnel and HOB to Smitty's Cove that considers bike and pedestrian pathways, wayfinding and interpretive signage, pocket parks, and other essential features
- develop a boat launch facility at HOB with the accompanying large-scale parking to alleviate congestion and transportation conflicts

The HMA is bound on the west by Whittier Creek and extends offshore to the north, where the boundary parallels the harbor breakwater and includes both the Harbor area and the Uplands. This area contains a continuous sidewalk connecting the harbor areas. Improving visual consistency and waterfront connectivity is identified as a goal to strengthen the harbor and waterfront character. Priorities identified for this area include:

- Improve parking options for harbor users and boat trailers

[1] Information received from the City of Whittier, November 2025

Additional Context: Parking in the Harborview area is south of the Small Boat Harbor and commercial uplands using a paved parking lot with a capacity for approximately 250 vehicles and 15 buses. During peak cruise ship operation, parking demand can increase to 40 buses, causing conflicts within existing facilities.

- Execute accessible and weather-resistant improvements to the sidewalk spanning the Harborview area

  Additional Context: South of the commercial lands and north of the parking area is a concrete sidewalk that spans the Harborview area, connecting from the east with the Harbor Loop sidewalk and to the west connecting with the Harbor Triangle sidewalk. From the launch ramp to the central Harborview area the boardwalk is a narrow wood boardwalk that is slippery, degrading, and in need of an Americans with Disabilities Act (ADA)-compliant replacement with more robust materials that can withstand Whittier's extreme weather.

- Reduce congestion and improve traffic flow during peak use times at the boat launch

Whittier is one of three Alaska communities (Anchorage and Seward being the others) that has direct rail, road, and ocean access. This provides an opportunity to serve more cruise passengers, move more cargo, and provide other logistical support, if necessary, as facilities are developed. Development of the HOB will expand Whittier's cruise-handling capacity, add moorage space to address the large waitlist of boats wanting a slip at the harbor, and provide additional land for maritime-related economic development and additional storage. The tunnel, while critical for access to Whittier, does create a constraint for passenger and cargo operations due to its schedule. Some businesses perceive the tunnel fee as a barrier to Whittier's competitiveness with Seward, though it likely costs visitors less than the associated cost of the additional travel time to Seward.

2.4 Prince William Sound Transportation Plan (2001)

While dated, the Prince William Sound Transportation Plan contains recommendations that may still be valid. Many of the recommendations focus on the AMHS due to the region's geography and fall into three main categories:

1. alternatives that rely entirely upon existing vessels owned and operated by the AMHS
2. alternatives that serve the area with new vessels
3. alternatives that rely upon a combination of existing AMHS vessels and new vessels

Along with the AMHS recommendations, the plan also explored surface transportation improvements including the Whittier Access Project, which has since been completed, and other plan recommendations, including:

- lengthen the airport runway to meet Federal Aviation Administration design standards
- conduct a study for a new "emergency use only" airport in Western Prince William Sound
- execute improvements to the Whittier Ferry Terminal

2.5 City of Whittier Comprehensive Plan (2020)

The 2020 Whittier Comprehensive Plan establishes community goals and objectives to guide development and investment from 2020 through 2025. It addresses short-, medium-, and long-term community needs to inform project planning, development, and funding decisions. Key focus areas include tourism, beautification, Harbor District, business development, and the HOB. The plan identified several goals within each of the five focus areas.

- **Tourism:** Create a Whittier Visitors Center to promote tourism within Whittier and retain visitors, improve overall visitor experience, and create recreational opportunities within Whittier that will increase tourism and attract both visitors and residents.
- **Beautification:** Improve the visual and sensory appeal of the Whittier experience, aligning with Whittier's vision as the gateway to the wonders of Prince William Sound, and improve enforcement of Whittier Code provisions and/or lease provisions to ensure regulations are uniform across the City.
- **Harbor District:** Establish new Harbor infrastructure to modernize the Harbor District and increase safety.
- **Head of the Bay:** Using the vision for the HOB, pursue fiscally sustainable development opportunities of industry, recreational opportunities, and businesses to create a HOB area that meets the needs of residents, businesses, and visitors.
- **Business Development:** Increase opportunity for business retention and new business development within Whittier.

Stakeholders identified two primary opportunity areas: infrastructure improvements and tourism development. While these build on Whittier's existing assets, participants also noted constraints such as limited developable land, transportation congestion, and seasonal economic activity. While there was general alignment on many themes, some stakeholders expressed concerns about the sustainability, management, funding, and feasibility of certain development efforts. Stakeholder perspectives varied regarding the extent to which Whittier should promote winter recreation and future development.

From a transportation perspective, the Comprehensive Plan:

- identifies Whittier's role as a regional gateway to Prince William Sound and emphasizes multimodal connectivity between land and marine access
- focuses on improving transportation infrastructure, such as sidewalks and parking in the Harbor and Triangle areas, to enhance business access and overall connectivity
- recognizes the one-way tunnel with controlled openings limits road access to Whittier, especially during winter months when opening times are more restricted
- realizes the Harbor District's attempt to accommodate various types of resources in a limited area leads to congestion issues

The Comprehensive Plan remains an essential reference for Whittier Moves, particularly in aligning transportation priorities with land use and economic development goals.

2.6 Tunnel Operations Study (2013)

The DOT&PF completed the conversion of the 2.5-mile The Tunnel into the world's only dual-use highway/rail tunnel with one-way reversible highway traffic in June 2000, this effort was aptly named the Whittier Access Project. This project included the construction of various infrastructure elements such as drainage systems, ventilation systems, vehicle-staging areas, and a Tunnel Control Center. Since its opening, there has been a significant increase in both highway and rail traffic, primarily due to increased freight passing through the Whittier port, cruise ships docking in the summer, and more recreational users and tourists during the summer months.

The objective of the Tunnel Operations Study was to determine the current and future needs of tunnel users, evaluate the current schedule, and develop the most efficient schedule to accommodate future highway and railroad needs. Considerations included:

- Physical components and features of the tunnel
- Highway and railroad user groups
- Schedule and regulations for the tunnel
- Railroad operations and highway operations
- Incidents that affect tunnel operations
- Possible methods to improve tunnel operations

The study noted that access to Whittier has greatly improved, with highway vehicle capacity now at approximately 3,500 equivalent cars per day compared to 240 equivalent cars per day parking at Portage prior to construction. Vehicles can travel through the Tunnel 18 hours per day during the summer and 15.5 hours during the winter. The Tunnel Operations Study identified in 2013 that since The Tunnel's opening in 2000 there had been six vehicle and 17 motorcycle crashes in The Tunnel[2]. The Study also identified occasional delays due to increased traffic, especially during the summer months. The ARRC has modified its rail operations to accommodate highway use, but some delays still occur, particularly for freight trains – sometimes resulting in delays of two to four tunnel highway openings. When tunnel openings are delayed, traffic can accumulate quickly and impact highway operations.

Recommendations to improve tunnel operations include allowing Class-A vehicles to enter the tunnel without being metered, using new backup emergency generators to power portal fans, reducing the duration of highway openings during the winter, and providing a communication system for the public in Bear Valley to help relieve drivers' frustration during delays.

[2] The Tunnel Operations Study reviewed crashes occurring between 2000 and 2013

3. Land Use

With direct road, rail, and ocean access and proximity to Anchorage, Whittier plays a critical role in Alaska for the transportation of passengers and goods. However, Whittier's geography creates development challenges and shapes a unique land use pattern for the City. This section provides an overview of current land use, including land ownership, zoning regulations, and future plans for development in the area.

3.1 Land Use and Ownership

3.1.1 Land Area

As shown in Figure 2, the City limits encompass a total of approximately 17 square miles, which includes most of Passage Canal, all of Shotgun Cove, and a small portion of Blackstone Bay.

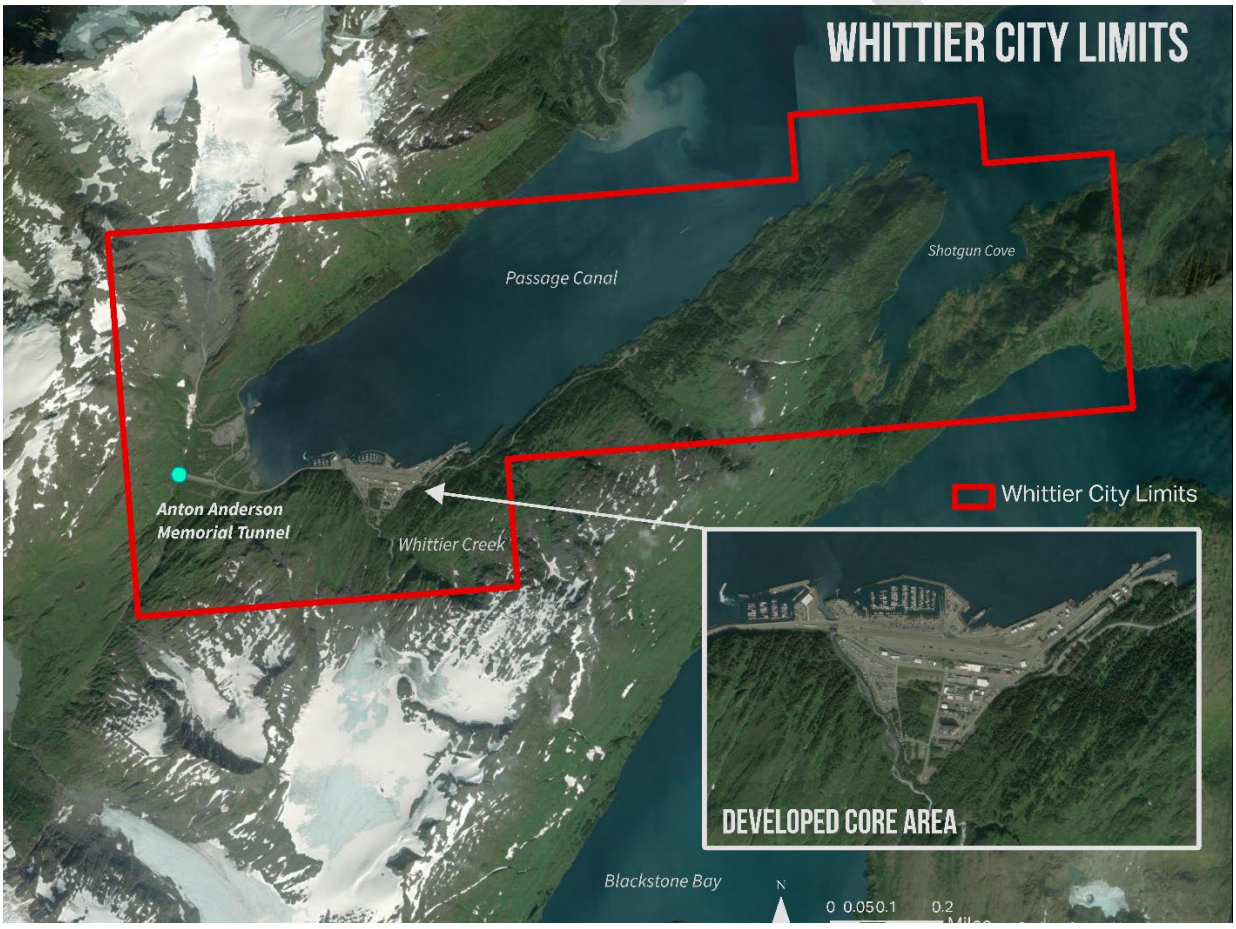


Figure 2. Whittier City Limits

Whittier's land area is around 12.3 square miles. The land is characterized by mountainous terrain with grades of 30 to 60 percent, Sitka Spruce and Hemlock forest, rocky areas with minimal topsoil, heavy run-off and streams, muskeg, and glaciers. Due to steep terrain and limited suitable soils, development

is concentrated along the south shore of Passage Canal. Based on one estimate on the City website, only approximately 0.2 square miles of the land within the City limits are suitable for development.

3.1.2 Existing Development

Existing development is located in a few primary areas in Whittier: the HOB, the downtown waterfront, and Core Area located upland, south of the railroad tracks. Limited new development has occurred along Shotgun Cove Road. Figure 3 identifies the primary development areas described in this section.

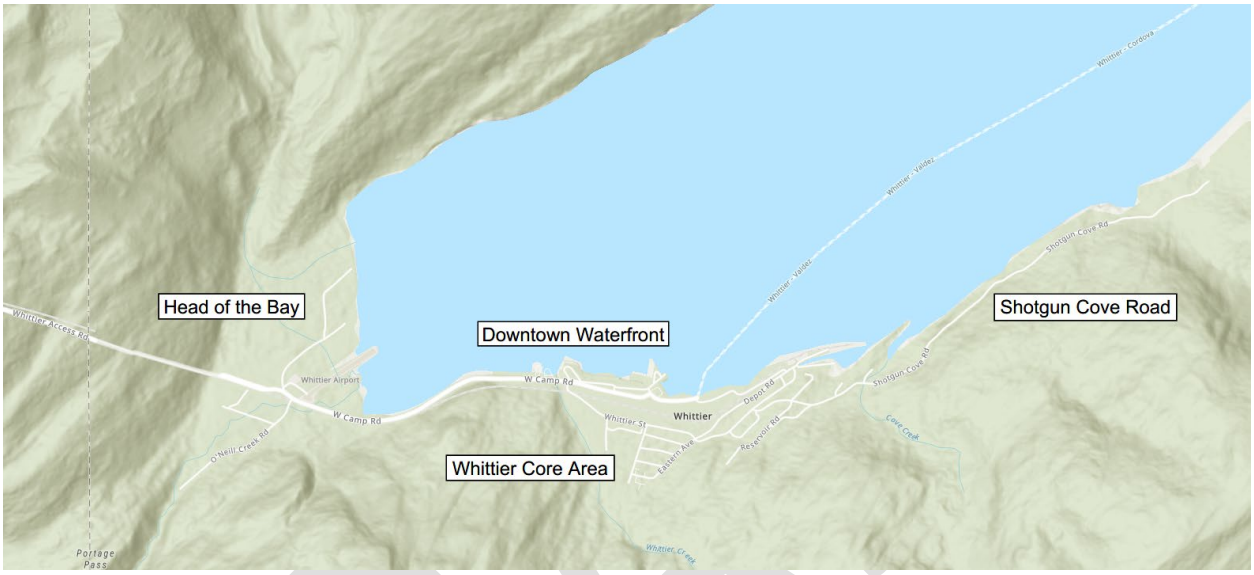


Figure 3. City of Whittier Points of Interest

The HOB area includes a tank farm (formally owned and operated by the military), the Whittier air strip, a quarry, the recently constructed Glacier Creek Cruise Ship Terminal, and recreational areas including the Whittier Bay Campground and access to the Portage Pass Trailhead. Additional development is planned in this area, as part of a development known as the HOB Project (see Section 3.3.1).

The Downtown Waterfront is home to the WCST, Cliffside Marina, ARRC passenger depot, Whittier Harbor, AMHS Ferry Terminal, and a major strip of commercial uses including lodging, retail, dining, recreation (such as boat charters and rentals), and parking. South of this area, the railroad tracks run parallel to the waterfront and extend to the east towards the freight terminal, waterfront industrial uses, and DeLong Dock. Past the freight terminal area, there is a boat ramp used primarily for commercial purposes and Smitty's Cove.

The Whittier Core Area is located upland, south of the railroad tracks. This area is less visitor-focused than the downtown waterfront and includes commercial, industrial, and public uses including City Park, Whittier Community School, City Hall, and the Public Safety Building. Most residents live in this area in the Begich Towers and Whittier Manor multifamily residential buildings.

Shotgun Cove Road extends out of town to the northeast and is a bench road following the Passage Canal shoreline below. This area is primarily undeveloped, with a small number of single-family lots close to town and the rest of the road being used to access recreation areas and trails. There are plans

to extend Shotgun Cove Road in the future, which will open access to additional land within the city limits.

3.1.3 Land Ownership

Much of the land in Whittier was controlled by the U.S. military starting in the 1940s. Much of the land remains in federal or state government ownership today – approximately 3,651 acres or 45 percent, and 2,776 acres or 35 percent of the land, respectively. Figure 4 shows additional details of the managing agencies, including the USFS, Alaska Department of Natural Resources (DNR) Division of Forestry, DOT&PF, state marine parks or recreation areas, and the ARRC, which is a state-owned corporation.

The City owns about 1,200 acres or 15 percent of the land within city limits, including parcels in the core, HOB, and Shotgun Cove areas. In the Core Area, the City owns only 15 percent of the length of the waterfront, whereas ARRC owns 70 percent, along with significant holdings in the HOB and Downtown Waterfront/Core Area.

There is limited privately-owned land in Whittier. Most of the private land is held by the Chugach Alaska Corporation, shown in Figure 4, while most other privately used parcels are leased rather than owned.

3.1.3.1 City of Whittier and ARRC

In 1998, ARRC and the City signed a Ground Lease and Management Agreement ("Master Lease"), granting the City the right to use, occupy, and manage approximately 250 acres of land. More recently, the City has been pursuing local ownership of some of the Master Lease properties to allow greater community control over how the land is managed and developed.

The City of Whittier successfully executed a land trade in 2018 which resulted in the DeLong Dock being deeded to the City. In the following year, 2019, the parcel, previously a leasehold parcel, boasting the Whittier Manor was sold to the Whittier Manor Condominium Association. Conversations have continued between the City and ARRC.

In November 2025, the Whittier City Council approved and passed a resolution accepting a land sale proposal from the ARRC dated September 23, 2025. The resolution approved and passed by the City Council authorizes the City Manager to "proceed with necessary due diligence, survey coordination, legal review, and negotiation of purchase agreements" consistent with conditions as laid out by the ARRC.

The land sale proposed by the ARRC includes three Areas of Interest totaling 47 acres and includes a portion of the HOB area, the harbor area, and the upland area west of Glacier Avenue

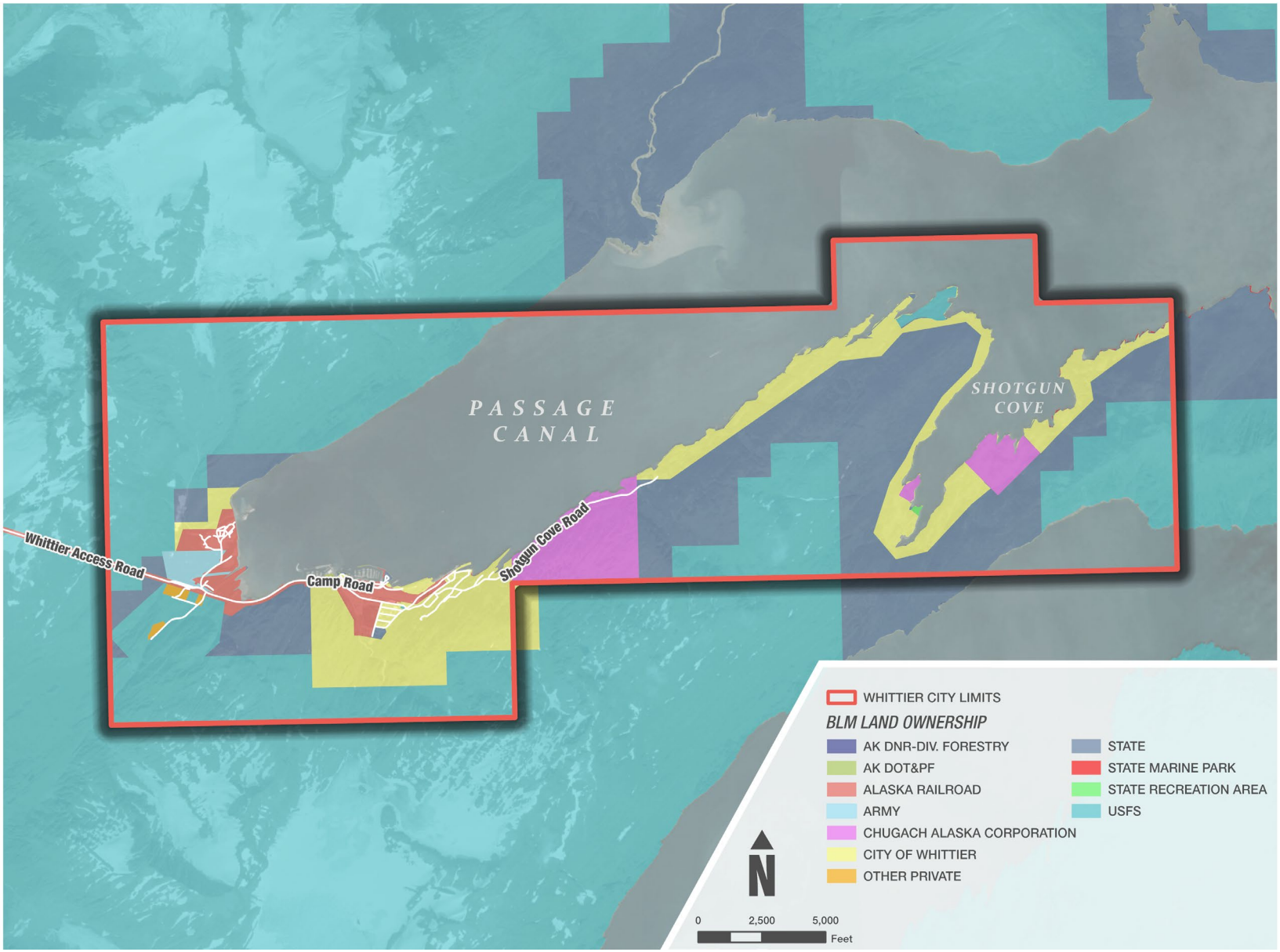


Figure 4. City of Whittier Land Ownership

Data is sourced from the Bureau of Land Management Alaska Administered Lands online map as of July 2025, and ownership may not have been updated for all recent changes.

3.2 Zoning

The City maintains a zoning map that divides the core development area into zoning districts. The map as of July 2025 is shown in Figure 6. The Whittier Municipal Code of Ordinances (WMC), Title 17 – Zoning, specifies the intent of zoning districts, permitted and conditional uses, and dimensional and other standards. Land that is proposed for new development or redevelopment must comply with the zoning requirements or be rezoned. The following is a summary of existing zoning[3]:

- **Industrial** *(teal):* This zone prohibits most residential and commercial uses, and requires additional review for recreation and open space, given "conflicts from vehicle traffic, noise, dust and danger". These conflicts affect the waterfront and railroad corridor, as they are shared between tourism/recreation and critical freight infrastructure. Approximately 395 of the City's 529 acres of zoned land, or 75 percent of the Core Area, is zoned Industrial.
- **Small Boat Harbor** *(yellow):* This zone is applied to the area around the harbor to protect the space primarily for recreational marine use, and secondarily for other commercial uses including commercial fishing.
- **Commercial** *(darker blue):* This zone is intended to encourage a concentrated area of shopping, entertainment, office facilities, and tourist-oriented development in a compact, convenient, and pleasant pedestrian-oriented community center. Currently, there is commercial zoning in the core upland area south of the railroad tracks, however the majority of tourist-oriented development (which aligns more formally with commercial zoning) is focused around the harbor (zoned as industrial).
- **Multifamily** *(red):* This zone is intended for multifamily residential uses like the Begich Towers or Whittier Manor. There are additional parcels zoned multifamily, including to the northeast along Shotgun Cove Road.
- **Single-Family Residential** *(light blue):* This zone is intended to provide low density single-family residential areas where public sewer and water are unlikely to be provided. A limited number of single-family residential zoned lots exist in Whittier and are generally located on Eastern Avenue or Shotgun Cove Road where utility extensions are challenging and costly due to the terrain.
- **Public Facility** *(lavender):* This zone is reserved for public facilities and is currently applied to Whittier School.
- **Open Space** *(pink):* This zone protects environmental resources such as watersheds and scenic areas. It can also be used to act as a holding area for lands which require infrastructure development. Currently, this zone is applied to the City's drinking water reservoir, Lu Young Park, and land adjacent to Whittier Manor.
- **Planned Unit Development** *(green):* This zone provides a process for development flexibility based on specific plans that are subject to a public hearing review process. It is currently applied

[3] Whittier, Alaska Code of Ordinances Chapter 17.16

to ARRC land to the west of Glacier Avenue, where the City Park and additional partially developed land used for seasonal parking and camping are located.

- **Tidelands and Marine Park** *(not shown in Figure 6):* This zone allows the City to regulate activities within tideland and marine areas, such as designating some areas for low-impact recreational uses and others for commercial marine uses.

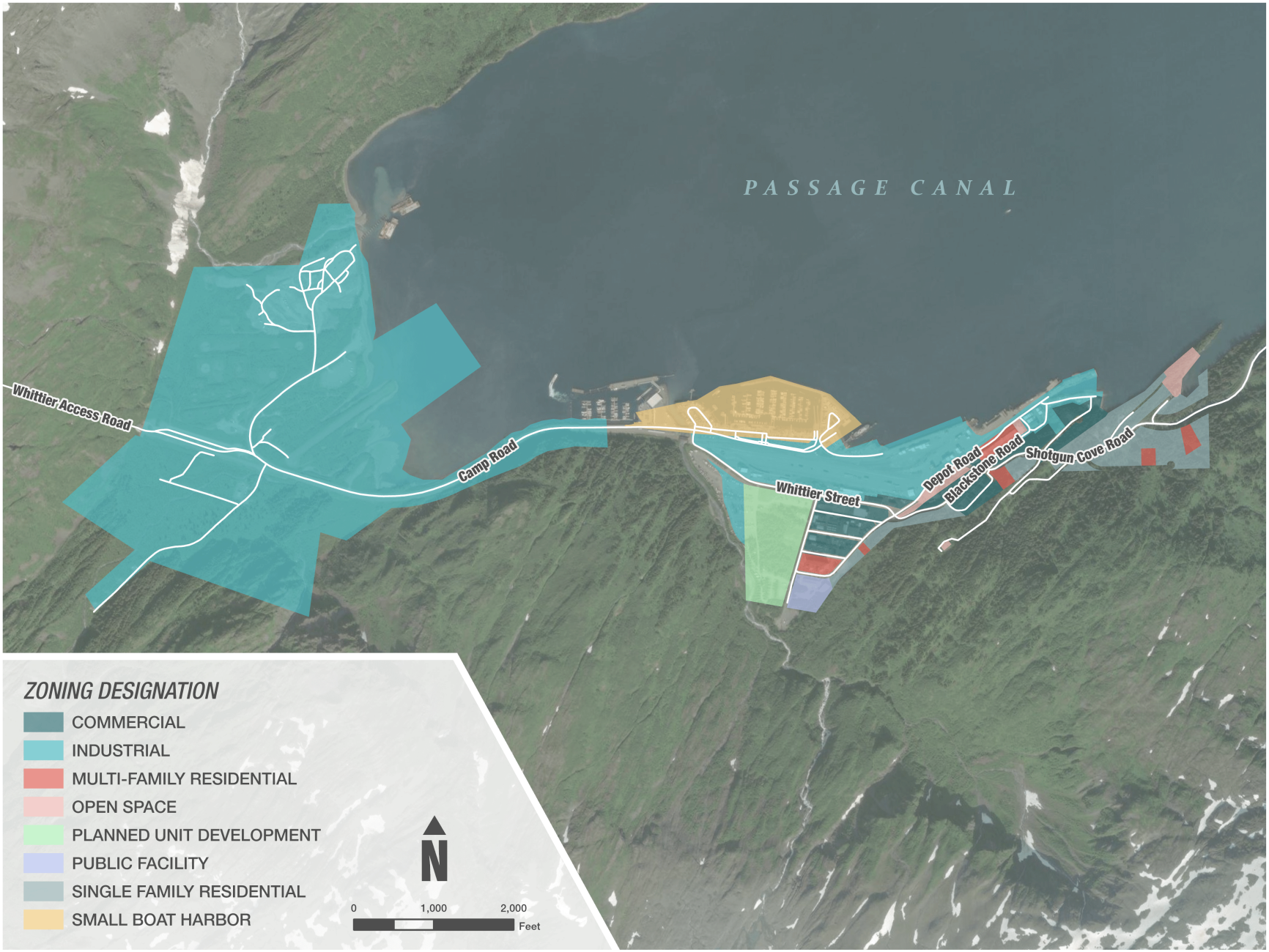


Figure 5. City of Whittier Zoning Map

3.3 Future Projects and Plans

While the population of Whittier has been relatively stable, the City has experienced an increase in economic activity, including freight and tourism (particularly cruises). The Whittier Comprehensive Plan 2020 recommends actions that focus on Tourism, Beautification, Harbor District, HOB, and Business Development. Many of these focus areas relate to land use and development opportunities to improve Whittier for residents and visitors. This section highlights several key private and public projects and plans that are expected to have an impact on future land use in the City.

3.3.1 Head of the Bay Project

The HOB is a major infrastructure and economic development project with both public and private investment, and focused on expanding maritime, tourism, and recreational capacities in Whittier. The proposed development will create a mixed-use district in the HOB area at the west end of Passage Canal, near The Tunnel. A conceptual layout is shown in Figure 7.

The first phase, a joint venture between Huna Totem Corporation, Norwegian Cruise Line, and the City, is a new cruise terminal and tour bus parking lot that was completed in 2024. Future development is proposed to include additional small boat harbor and launch space, a new retail/business district, expanded campground, fishing access at a restored Shakespeare Creek, and other space for industrial, commercial, and recreational use. Access improvements are also proposed, including a new rail spur to provide direct passenger rail access to the cruise terminal.

3.3.2 Shotgun Cove Road

Between 1984 and 1999, the state transferred ownership of over 3,500 acres of land along Passage Canal and in Shotgun Cove to the City, some with a patent restriction requiring the City to conduct a public land sale, otherwise it reverts to State ownership. As described in Section 2.2, the City has been planning a Shotgun Cove Road extension to USFS land at Trinity Point, including recommendations for future utilities and other public services.

While future development along the corridor is uncertain, the 2022 Design Study Report includes discussion of conceptual parcel layouts, with around 80 parcels and “a minimum parcel size of one acre with enough diversity of parcel sizes to allow for a range of developments from dry cabins, seasonal tourism accommodations, year-round single-family residences, rental properties, and high-value residences and vacation properties. Additionally, several properties could support larger tourism accommodations or other commercial development.” Despite the establishment of new private parcels, future development along Shotgun Cove Road will prioritize providing ample recreation access to both the shoreline and upland areas as shown in Figure 8.

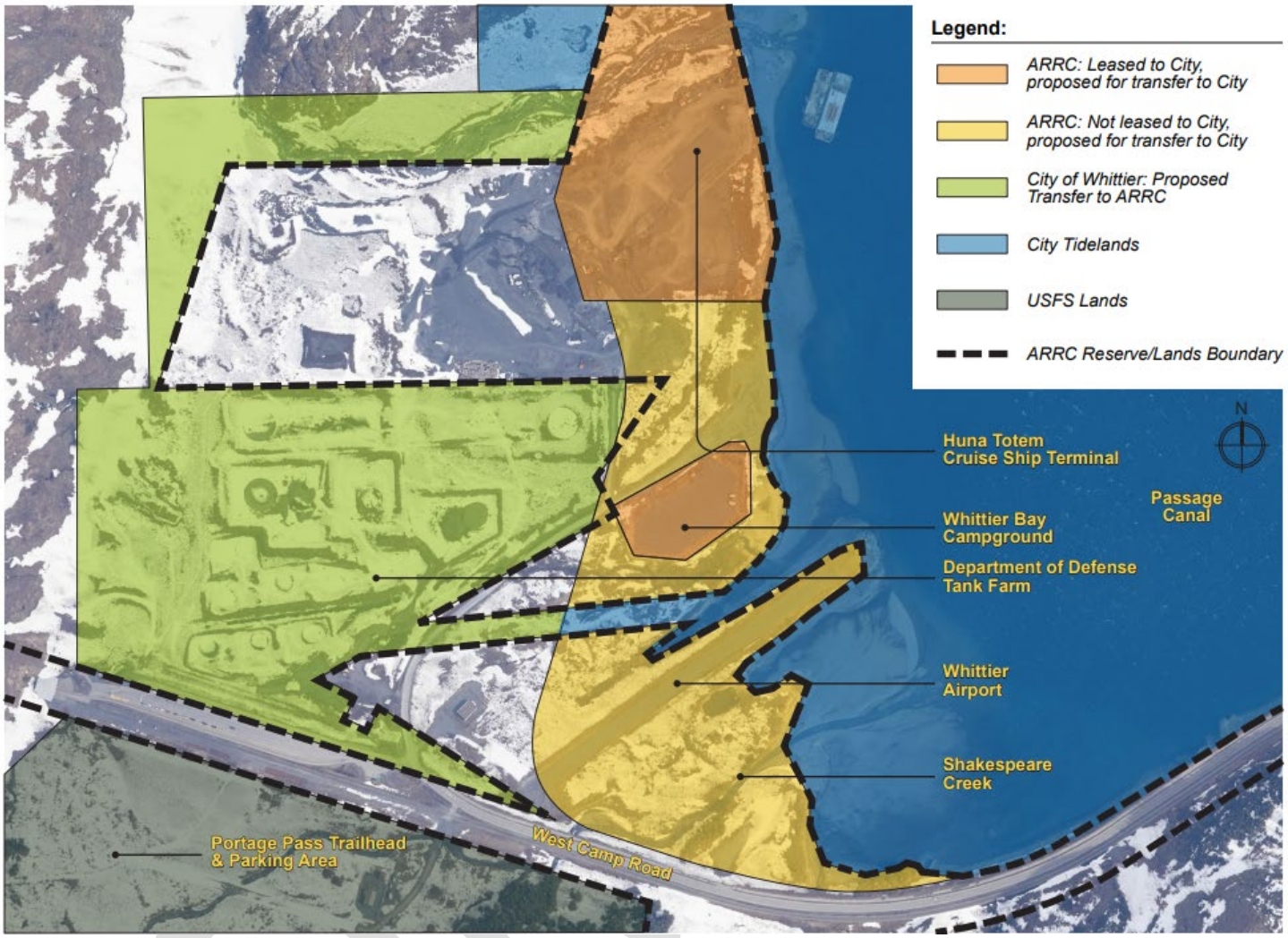
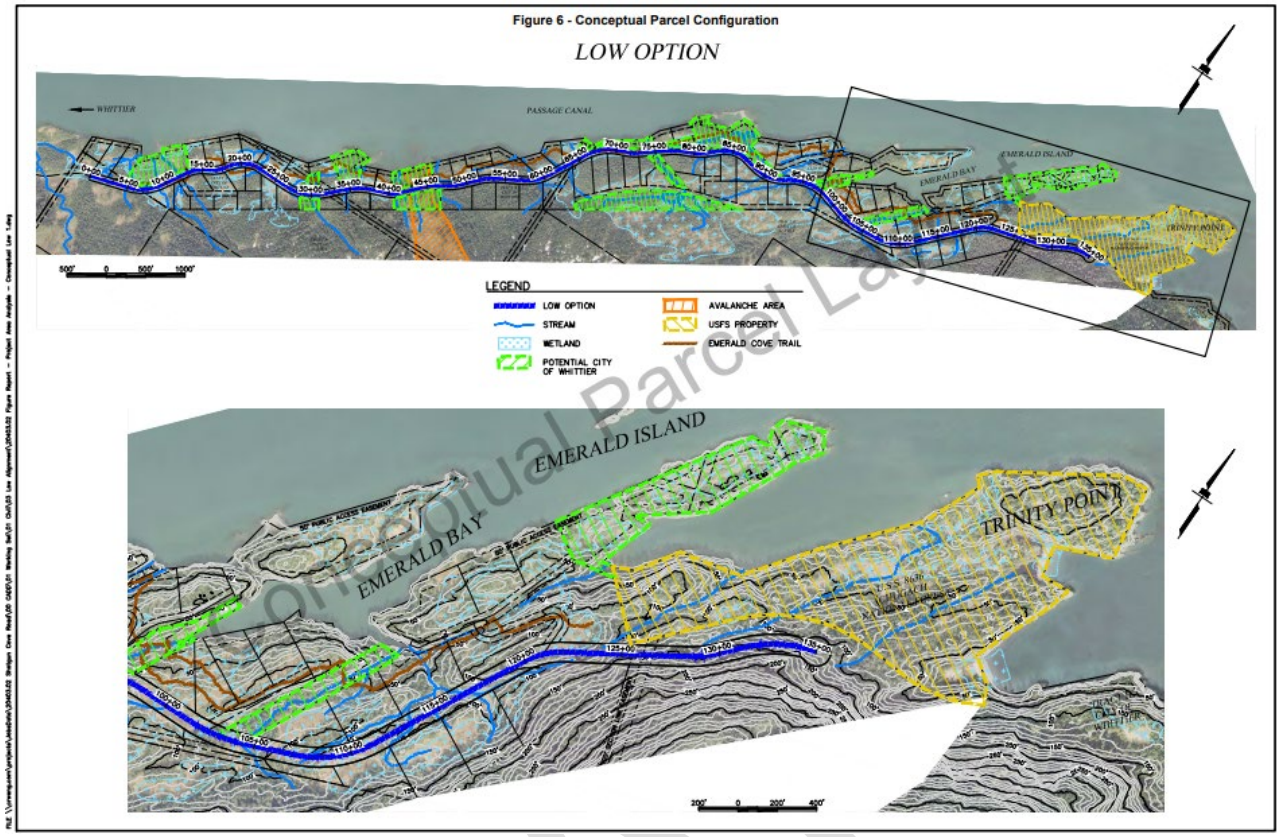


Figure 6. Head of the Bay Project Concept, Waterfront & Economic Development Plan January 2025 Inventory and Assessment



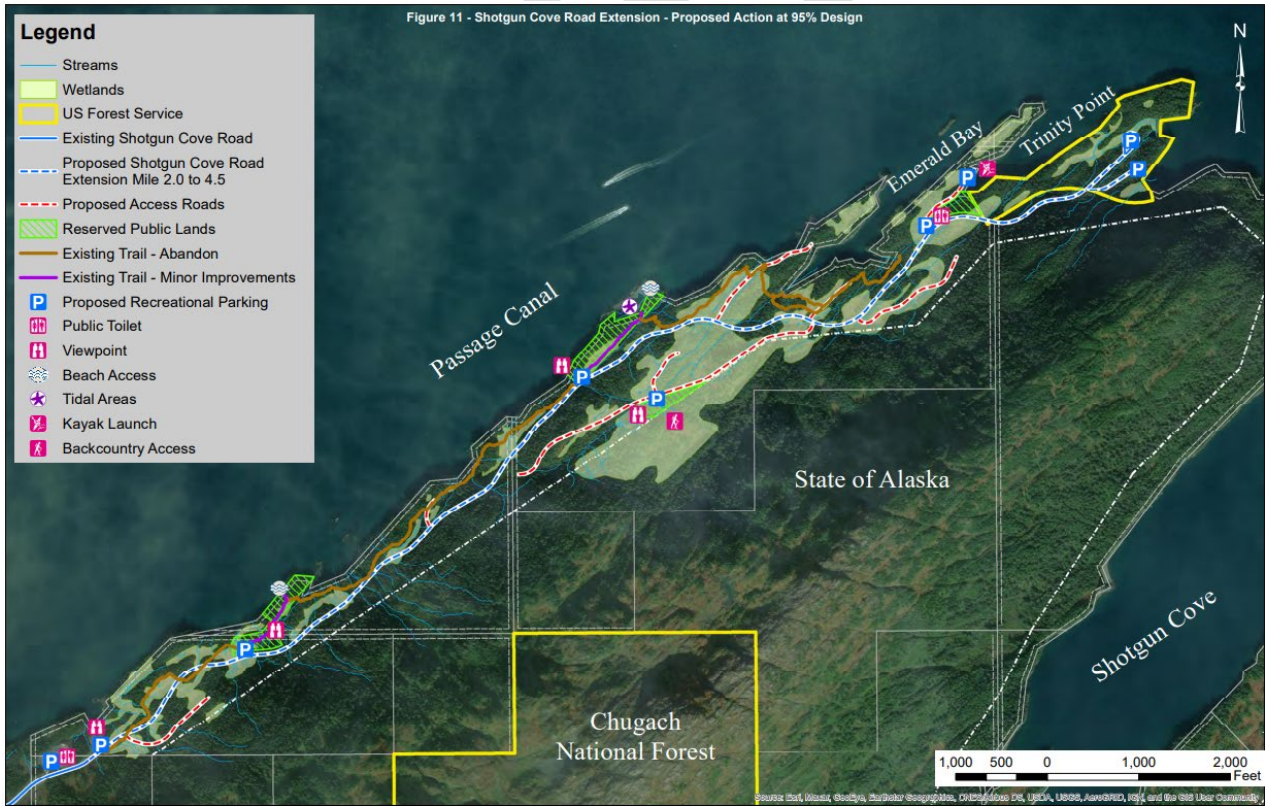


Figure 7. Shotgun Cove Road Extension with Conceptual Parcel Configuration

3.3.3 Other Points of Interest

Waterfront and Economic Development Plan

The City is currently working on the WEDP, which will provide focused recommendations for two areas identified as the WDA and HMA as shown in Figure 9. Key goals of the plan include maximizing the use of City-owned or City-leased land, protecting tidelands within City boundaries, and enhancing public access and recreational opportunities on Whittier's waterfront and uplands.

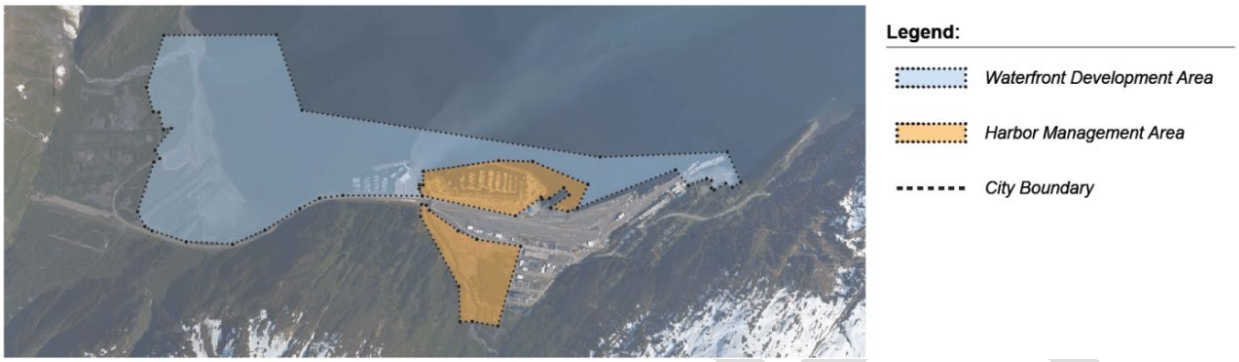


Figure 8. Waterfront and Economic Development Plan Focus Areas

The plan is expected to be finalized in late 2025. An initial Inventory & Assessment section, completed in January 2025, identifies the following opportunities and challenges related to transportation:

- **Modernize and expand harbor and upland areas:** Upgrading marine infrastructure and public amenities to support mixed-use development, retail, and workforce housing will enhance economic activity, recreation, and overall user experience
- **Physical and regulatory constraints:** Tsunami risk, steep bathymetry, limited shoreline, aging infrastructure, historical contamination, congestion, and master lease restrictions – complicate expansion.

Opportunities and challenges identified in the 2024 draft plan include:

- **Expand housing options.** Existing options are limited to primarily renter-occupied multifamily units in the Begich Towers. Of existing units across Whittier, 93 percent were constructed between 1940 and 1959 (including the Begich Towers), and the Whittier Manor was constructed in 1986. According to the draft plan, current trends indicate a variety of new housing will be needed, including multifamily and single-family options, to help encourage local resident employment. The WEDP suggests that identifying areas for potential residential development may help support economic growth.
- **Maximize land development and City revenue.** The draft WEDP identifies a need to promote development of limited and valuable commercial land, noting that existing lease rates, including harbor moorage rates, are currently below market rate and represent an opportunity for additional City revenue.

3.3.3.1 Potential Redevelopment Sites

According to the Whittier Comprehensive Plan 2020, "of the 212 acres of land in the Whittier Core Area, only about 30 acres are uncommitted land suitable for development." Given this very limited area of vacant and uncommitted land, redevelopment of run-down or underutilized parcels may become a necessity in the future. The most high-profile site in Whittier is summarized below.

- **The Buckner Building**, a former military facility, is currently vacant and presents structural and environmental challenges. The site's redevelopment potential will depend on future remediation efforts.

4. Transportation Infrastructure and Traffic Trends

Whittier serves as a vital transportation hub connecting land, sea, rail, and aviation systems. The Whittier transportation system supports tourism, freight, and local travel, making it an essential link for both residents and visitors.

4.1 Anton Anderson Memorial Tunnel

The Tunnel is a 13,300 foot long single-lane tunnel run by DOT&PF and owned by ARRC. The Tunnel boasts a unique design that allows for a single lane of vehicle traffic to drive on the railroad track when the track is not actively in use and on a directionally scheduled basis.

4.1.1 Operations

Tunnel operations are supported by two computer-based systems: the Tunnel Control System (TCS) and the Train Signal System (TSS), which support safe and efficient alternating use by vehicles and trains. When either of the systems are in operation, the other system is locked out until the tunnel is cleared of traffic.

The TCS handles all vehicle movements by tracking and metering vehicles through The Tunnel. Additionally, the TCS monitors the direction of vehicle movement by controlling the traffic signals and gates to allow for only one direction of travel at a time. While vehicle traffic is traveling through the tunnel, the TCS monitors for any abrupt stopping. If a vehicle stops for any reason, the vehicle detection equipment will automatically alert the tunnel control operator, direct the live cameras to view the proper location, and shut the proper gates. The TSS handles train movement through the tunnel, including control of train switches and signals to ensure that trains only move through the tunnel in one direction at a time and when there are no vehicles in the tunnel.

Vehicle release orders are governed by the Alaska Administrative Code (AAC), 17 AAC 38.015.

Schedule

The Tunnel runs on a scheduled basis depending on the season. Both the summer (May 1 – September 30) and the winter (October 1 – April 30) schedules are included in Table 1. Scheduled times have been implemented to minimize the impact of trains on traffic and vice versa. From time to time, there are scheduled or unscheduled trains that must use the tunnel, and scheduled times may be delayed. In addition to trains and their potential impact on the scheduled times, other influences such as emergency transportation (ambulances, fire, and police vehicles) may also have an impact on the timing of traffic through the tunnel. Tunnel operations staff recommends tunnel users be in the staging areas at least ten minutes prior to the scheduled opening of their expected thorough time to help ease their passage.

Table 1. Anton Anderson Memorial Tunnel Summer and Winter Passage Schedules

Summer May 1 through September 30		Winter October 1 through April 30	
Time	**Direction**	**Time**	**Direction**
5:30 - 5:45 am	Bear Valley to Whittier	7:00 - 7:15 am	Whittier to Bear Valley
6:00 - 6:15 am	Whittier to Bear Valley	7:30 - 7:45 am	Bear Valley to Whittier
6:30 - 6:45 am *	Bear Valley to Whittier	8:00 - 8:15 am	Whittier to Bear Valley
7:00 - 7:15 am	Whittier to Bear Valley	8:30 - 8:45 am	Bear Valley to Whittier
7:30 - 7:45 am	Bear Valley to Whittier	9:00 - 9:15 am	Whittier to Bear Valley
8:00 - 8:15 am *	Whittier to Bear Valley	9:30 - 9:45 am	Bear Valley to Whittier
8:30 - 8:45 am	Bear Valley to Whittier	10:00 - 10:15 am	Whittier to Bear Valley
9:00 - 9:15 am	Whittier to Bear Valley	10:30 - 10:45 am	Bear Valley to Whittier
9:30 - 9:45 am	Bear Valley to Whittier	11:00 - 11:15 am	Whittier to Bear Valley
10:00 - 10:15 am	Whittier to Bear Valley	11:30 - 11:45 am	Bear Valley to Whittier
10:30 - 10:45 am	Bear Valley to Whittier	12:00 - 12:15 pm	Whittier to Bear Valley
11:00 - 11:15 am	Whittier to Bear Valley	12:30 - 12:45 pm	Bear Valley to Whittier
11:30 - 11:45 am	Bear Valley to Whittier	1:00 - 1:15 pm	Whittier to Bear Valley
12:00 - 12:15 pm	Whittier to Bear Valley	1:30 - 1:45 pm	Bear Valley to Whittier
12:30 - 12:45 pm	Bear Valley to Whittier	2:00 - 2:15 pm	Whittier to Bear Valley
1:00 - 1:15 pm	Whittier to Bear Valley	2:30 - 2:45 pm	Bear Valley to Whittier
1:30 - 1:45 pm	Bear Valley to Whittier	3:00 - 3:15 pm	Whittier to Bear Valley
2:00 - 2:15 pm	Whittier to Bear Valley	3:30 - 3:45 pm	Bear Valley to Whittier
2:30 - 2:45 pm *	Bear Valley to Whittier	4:00 - 4:15 pm	Whittier to Bear Valley
3:00 - 3:15 pm	Whittier to Bear Valley	4:30 - 4:45 pm	Bear Valley to Whittier
3:30 - 3:45 pm	Bear Valley to Whittier	5:00 - 5:15 pm	Whittier to Bear Valley
4:00 - 4:15 pm *	Whittier to Bear Valley	5:30 - 5:45 pm	Bear Valley to Whittier
4:30 - 4:45 pm	Bear Valley to Whittier	6:00 - 6:15 pm	Whittier to Bear Valley
5:00 - 5:15 pm	Whittier to Bear Valley	6:30 - 6:45 pm	Bear Valley to Whittier
5:30 - 5:45 pm	Bear Valley to Whittier	7:00 - 7:15 pm	Whittier to Bear Valley
6:00 - 6:15 pm	Whittier to Bear Valley	7:30 - 7:45 pm	Bear Valley to Whittier
6:30 - 6:45 pm	Bear Valley to Whittier	8:00 - 8:15 pm	Whittier to Bear Valley
7:00 - 7:15 pm	Whittier to Bear Valley	8:30 - 8:45 pm	Bear Valley to Whittier
7:30 - 7:45 pm	Bear Valley to Whittier	9:00 - 9:15 pm	Whittier to Bear Valley
8:00 - 8:15 pm	Whittier to Bear Valley	9:30 - 9:45 pm	Bear Valley to Whittier
8:30 - 8:45 pm	Bear Valley to Whittier	10:00 - 10:15 pm	Whittier to Bear Valley
9:00 - 9:15 pm	Whittier to Bear Valley	10:30 - 10:45 pm	Bear Valley to Whittier
9:30 - 9:45 pm	Bear Valley to Whittier	**Times denoted with (*) indicate that oversize vehicles will be allowed through the tunnel only during these times Monday – Thursday.**	
10:00 - 10:15 pm	Whittier to Bear Valley		
10:30 - 10:45 pm	Bear Valley to Whittier		
11:00 - 11:15 pm	Whittier to Bear Valley		

Fees and Tolls

The Tunnel is the only toll road in Alaska. Each ticket is round-trip and the fees are dependent on vehicle class. The most up-to-date toll schedule can be found at dot.alaska.gov/creg/whittiertunnel/tolls.shtml.

Section 7 summarizes revenues from The Tunnel and other City sources, including parking and permits.

4.1.2 Vehicle Traffic Volumes

Vehicle traffic volumes through the tunnel are seasonally dependent, with a large increase in traffic during the summer months. Table 2 includes traffic volumes by month for the tunnel over a ten-year period (2014 to 2024).

Table 2. Anton Anderson Memorial Tunnel Traffic Volumes 2014 to 2024

Tunnel Traffic Volumes											
Month	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
January	6,148	6,362	5,308	4,700	5,424	6,336	6,048	4,960	4,786	5,450	5,358
February	5,180	5,816	5,742	4,868	5,472	6,694	6,420	5,416	5,294	5,134	4,244
March	8,254	9,502	9,192	7,614	8,478	11,356	7,926	8,694	7,548	8,074	6,758
April	11,636	12,242	13,602	14,484	12,836	14,898	10,738	16,060	14,100	13,224	10,618
May	28,756	30,960	32,308	28,940	28,380	29,420	22,038	29,310	33,688	27,114	25,580
June	39,494	39,276	41,254	42,086	44,574	47,324	26,340	45,018	49,204	41,692	48,564
July	46,626	49,178	51,016	53,888	53,126	56,174	36,664	54,120	52,346	54,430	52,718
August	40,394	43,054	40,098	41,228	43,584	52,860	35,480	52,054	41,086	44,164	43,204
September	20,562	23,522	23,556	24,098	27,978	27,492	21,986	30,160	26,430	26,466	26,466
October	8,798	9,438	9,382	11,078	10,294	12,070	12,252	11,324	11,638	12,278	7,926
November	5,810	5,778	5,936	5,832	6,424	7,504	6,632	6,110	60,014	6,300	4,212
December	5,036	5,204	5,428	5,498	5,608	6,250	5,222	6,698	5,128	4,530	N/A*

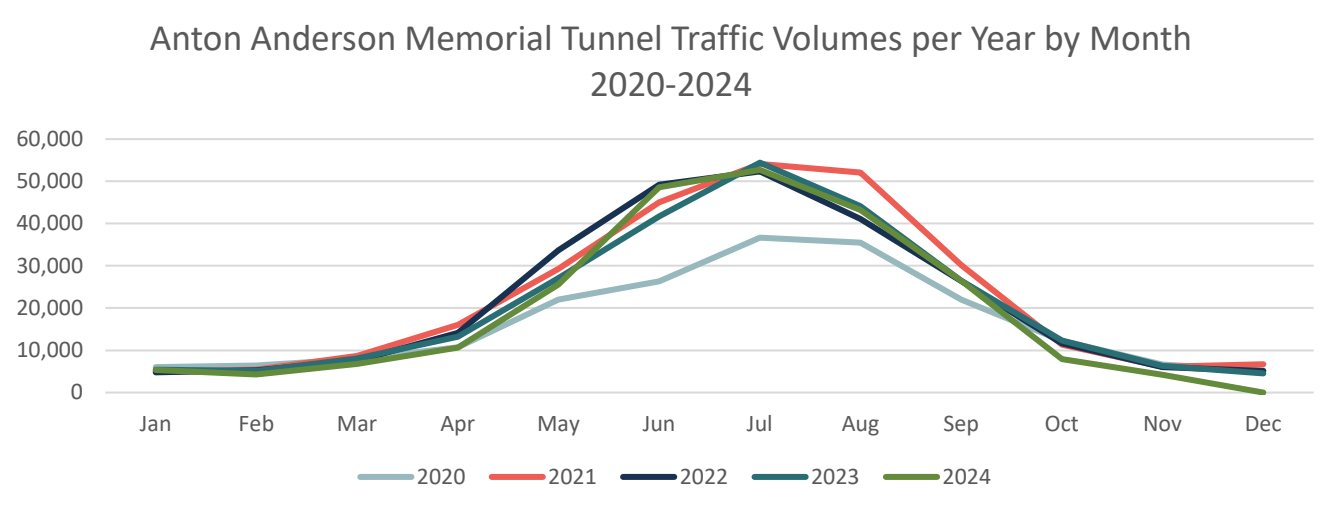


Figure 9. Anton Anderson Memorial Tunnel Traffic Volumes per Year by Month

Figure 10 visualizes traffic volumes for the tunnel, focusing on the last four years (2020 to 2024) and illustrating the higher volumes during the summer months. The volumes presented in both Table 2 and Figure 10 include all classes of vehicles that are allowed to use the tunnel and represent bidirectional/round trip counts.

Table 3 includes the percentage of each vehicle class in relation to the overall traffic volumes per year from 2014 to 2024, which helps to illustrate the composition of tunnel traffic. Most of the traffic is private passenger vehicles, followed by large Recreational Vehicles (RVs) or private passenger vehicles with trailers.

Table 3. Anton Anderson Memorial Tunnel Percent of Traffic Volume per Vehicle Class 2014 to 2024

Percent of Traffic Volume per Vehicle Class											
Vehicle Class	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Class A	81.56	82.30	83.37	82.40	82.26	82.66	81.89	82.82	76.75	77.76	78.47
Class B1	7.90	7.86	8.25	7.92	7.73	7.62	11.09	7.65	7.62	7.88	7.48
Class B2	4.24	4.22	3.70	4.00	4.48	4.48	3.52	3.09	3.78	4.49	4.49
Class C	2.23	1.73	1.59	1.64	1.93	1.85	0.01	0.17	1.84	2.39	2.36
Class D	2.93	3.02	1.93	2.32	1.84	1.96	2.32	4.73	4.18	1.69	1.56
Class E	0.07	0.06	0.05	0.05	0.06	0.05	0.05	0.07	0.05	0.08	0.05
Class F	0.65	0.48	0.76	1.26	1.26	1.04	0.90	1.28	5.58	5.52	5.42
Class G	0.42	0.33	0.34	0.42	0.45	0.35	0.22	0.19	0.21	0.20	0.23

Vehicle Class	**Types of Vehicles Included**	
Class A	**Without Trailer** - Passenger vehicles - Small RVs (under 28 feet) - Light Trucks (under 12,000 pounds)	**With or Without Trailer** - Motorcycles
Class B1	**Without Trailer** - Large RVs (28 feet or more)	**With Trailer** - Passenger vehicles - Small RVs - Light Trucks
Class B2	**Without Trailer** - Trucks ≥12,000 lbs, with up to 3 axles	**With Trailer/Boat** - Passenger Vehicles towing boats (8.5–10 ft wide, ≤15 ft high, ≤80 ft combined length) - RVs (8.5–10 ft wide, ≤15 ft high, ≤80 ft combined length) - Vans and buses carrying 10-29 people (including driver) - Trucks ≥12,000 lbs, with up to 2 axles
Class C	Buses designed to carry 30 or more people including driver	
Class D	- Trucks ≥12,000 lbs with 4+ axles, not towing - Trucks ≥12,000 lbs with 3+ axles, towing	- Truck-tractor combos - Vehicles (with or without trailers) over 8.5 ft wide (excluding mirrors)
Class E	Motor vehicles, including any trailer and any load more than 10 feet wide, excluding mirrors, but not more than 11 feet wide and between 14 and 15 feet high	
Class F	- Alaska Railroad Motor Vehicles - DOT&PF Motor Vehicles	- Emergency/Law Enforcement Vehicles - Other vehicles as determined to be appropriate by the commission for the best interest of the State
Class G	- Government agency owned or operated vehicles - School district owned or operated vehicles	- School buses under contract with a school district - Other motor vehicles as determined to be appropriate by the Commissioner for the best interest of the State

4.2 Roadways

The plan boundary for this Master Plan extends from The Tunnel to the far east corner of the town of Whittier. However, the Seward Highway provides a vital overland route connection to Whittier from both the north and the south. To reach Whittier, motorists exit the Seward Highway onto Portage Glacier Road (Rd) which is in total 8.1 miles from the entrance to the tunnel. Once motorists have navigated the 13,300 ft of tunnel to reach Whittier they may continue straight towards the heart of Whittier or veer left towards the HOB.

4.2.1 Facility Characteristics

Overall, Whittier is made up of approximately 14 miles of roadway, including The Tunnel. Of these 14 miles of roadway, 4.53 miles are gravel while the rest are paved. The DOT&PF maintains Whittier Access Rd, through the tunnel, and the length of Camp Rd to the Whittier Ferry Terminal, all of which are paved. The remaining roads in Whittier are the responsibility of the City's Public Works Department. Of the paved roads in Whittier, many need regular maintenance, which is exacerbated by the volume of large trucks and tour buses that frequently navigate the streets of Whittier.

4.2.2 Functional Classifications

Most of the roads in Whittier are classified as local roads while the rest are classified as minor collectors or minor arterials. The overland route from the Seward Highway to the Whittier Ferry Terminal, which includes Portage Glacier Rd, Whittier Access Rd, and Camp Rd is classified as an intermodal connector, which is responsible for providing access between major intermodal facilities and other facilities which make up the National Highway System (NHS). Table 4 identifies the roadways in Whittier, their length in miles, surface type, functional classification, and the agency responsible for maintenance.

Table 4. Roads within the Planning Area

Roadway	Length in Miles	Surface Type	Functional Classification	Maintenance Agency
Airstrip Access	0.099	Unpaved	Local	Alaska DOT&PF
Billings Street	0.132	Paved	Local	City of Whittier
Blackstone Road	0.398	Paved	Minor Collector	City of Whittier
Bunker Road	0.436	Unpaved	Local	City of Whittier
Camp Road	1.632	Paved	Minor Arterial	Alaska DOT&PF
Cove Creek Road/Reservoir Road	0.292	Unpaved	Local	City of Whittier
Depot Road	0.455	Paved	Minor Collector	City of Whittier
Eastern Avenue	0.209	Paved	Local	City of Whittier
Glacier Avenue	0.224	Paved	Local	City of Whittier
Harbor Loop Road	0.148	Paved	Local	City of Whittier
Harbor Triangle Road	0.145	Paved	Local	City of Whittier
Harbor View Drive	0.302	Paved	Local	City of Whittier
HOB Access/Gateway Road	0.365	Unpaved	Local	City of Whittier
Kenai Street	0.105	Paved	Local	City of Whittier
Kittiwake Court	0.151	Unpaved	Local	City of Whittier
Parkview	0.292	Unpaved	Local	City of Whittier
Portage Pass Access	0.312	Unpaved	Local	City of Whittier
Portage Street	0.089	Paved	Local	City of Whittier
Prince William Court	0.083	Unpaved	Local	City of Whittier
Reservoir Road	0.247	Unpaved	Local	City of Whittier
Reservoir Road	0.441	Unpaved	N/A	City of Whittier
Shotgun Cove Road	0.439	Paved	Local	City of Whittier
Shotgun Cove Road	1.525	Unpaved	Local	City of Whittier
Tank Farm Road	0.287	Unpaved	N/A	City of Whittier
Whittier Access Road	4.262	Paved	Minor Arterial	Alaska DOT&PF
Whittier Alley	0.113	Paved	Local	City of Whittier
Whittier Ferry Terminal Road	0.104	Paved	Local	Alaska DOT&PF
Whittier Street	0.551	Paved	Minor Collector	City of Whittier

4.3 Traffic

The planning team placed traffic cameras at high-activity areas throughout the City to identify existing traffic characteristics and conditions. These locations are provided in Table 5 , in addition to the date and length of recording.

Table 5. Whittier Intersections Analyzed

Intersection	Date(s) of Recording (2025)	Total Hours Studied
Harbor Road/West Camp Road & Whittier Street	July 15 - 16	16
West Camp Road/Harbor View Drive & Harbor Road	July 15 - 16	16
Whittier Street/Blackstone Road & Eastern Avenue/Depot Road	July 15 - 16	16
Shotgun Cove Road & Blackstone Road	July 15 - 16	16
Whittier Cruise Terminal on West Camp Road (Weekday)	July 15 - 16	16
Whittier Cruise Terminal on West Camp Road (Weekend)	July 12 - 13	48

4.3.1 Volumes

Traffic volumes in Whittier were counted during the above dates, at five intersections across town. There was found to be one peak hour during the weekdays, which was identified as 12:50-1:50 PM. Figure 11 shows peak hour turning movements at the intersections, with the 2024 Average Daily Traffic (ADT) along West Camp Road also displayed.

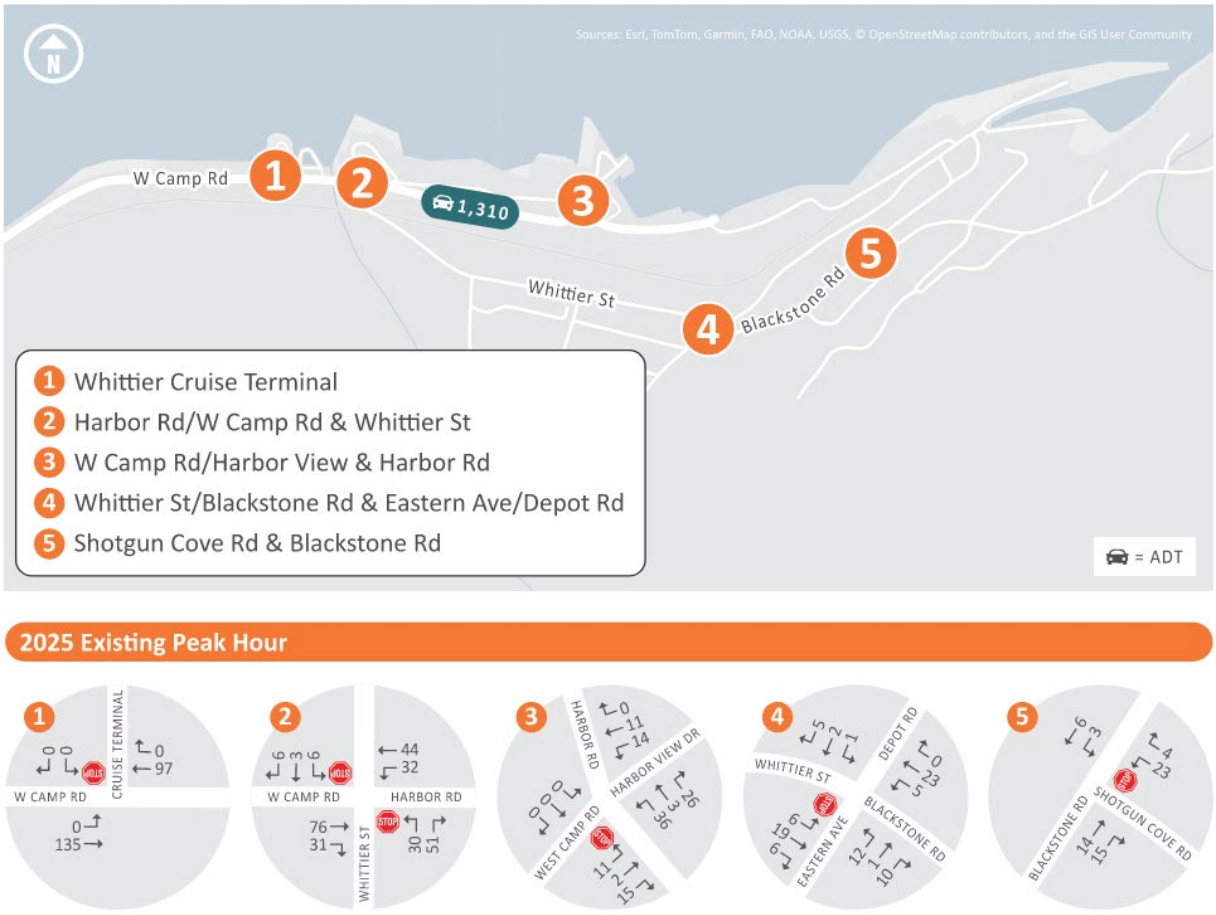


Figure 10. Peak Hour Turning Movement Counts in Whittier

4.3.2 Level of Service

Level-of-Service (LOS) is a commonly used performance metric that quantifies intersection operations by using a "report card" rating (A through F) based on average time delay (in seconds) experienced by vehicles at the intersection. A LOS of A, B, or C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay has become excessive, and demand has exceeded capacity. This condition is typically evident by the presence of long queues and delays.

The DOT&PF Highway Preconstruction Manual[4] adopts a minimum LOS standard from the American Association of State Highway and Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Streets, 7th Edition.[5] The LOS threshold is based on context of population density, land use development, and balance between needs and service levels for each transportation type. Based on the characteristics of the streets in Whittier (arterials and collectors in a rural town), the minimum LOS threshold for design is LOS D. Traffic

[4] Alaska Department of Transportation and Public Facilities, Alaska Highway Preconstruction Manual, January 2025

[5] American Association of State Highway and Transportation Officials, A Policy on Geometric Design of Highways and Streets, 7th Edition, 2018

operations in the study area will be assessed according to the Highway Capacity Manual (HCM) 6th edition[6] delay methodology, when possible. Table 6 includes the existing LOS and Intersection Delays at the five study intersections in Whittier.

Table 6. Existing Level of Service, Whittier Intersections

Intersection	Peak Hour (12:50 – 1:50 PM)	
	Delay (seconds)	LOS
Harbor Road/West Camp Road & Whittier Street	5.2	A
West Camp Road/Harbor View Drive & Harbor Road	7.7	A
Whittier Street/Blackstone Road & Eastern Avenue/Depot Road	7.7	A
Shotgun Cove Road & Blackstone Road	4.3	A
Whittier Cruise Terminal on West Camp Road	0.0	A

[6] Transportation Research Board, Highway Capacity Manual: A Guide for Multimodal Mobility Analysis, 6th Edition

4.3.4 Safety

Between 2019 and 2023, there were four reported vehicle crashes within the City. The DOT&PF provided the crash site data and the project team mapped and identified all sites on Figure 12.

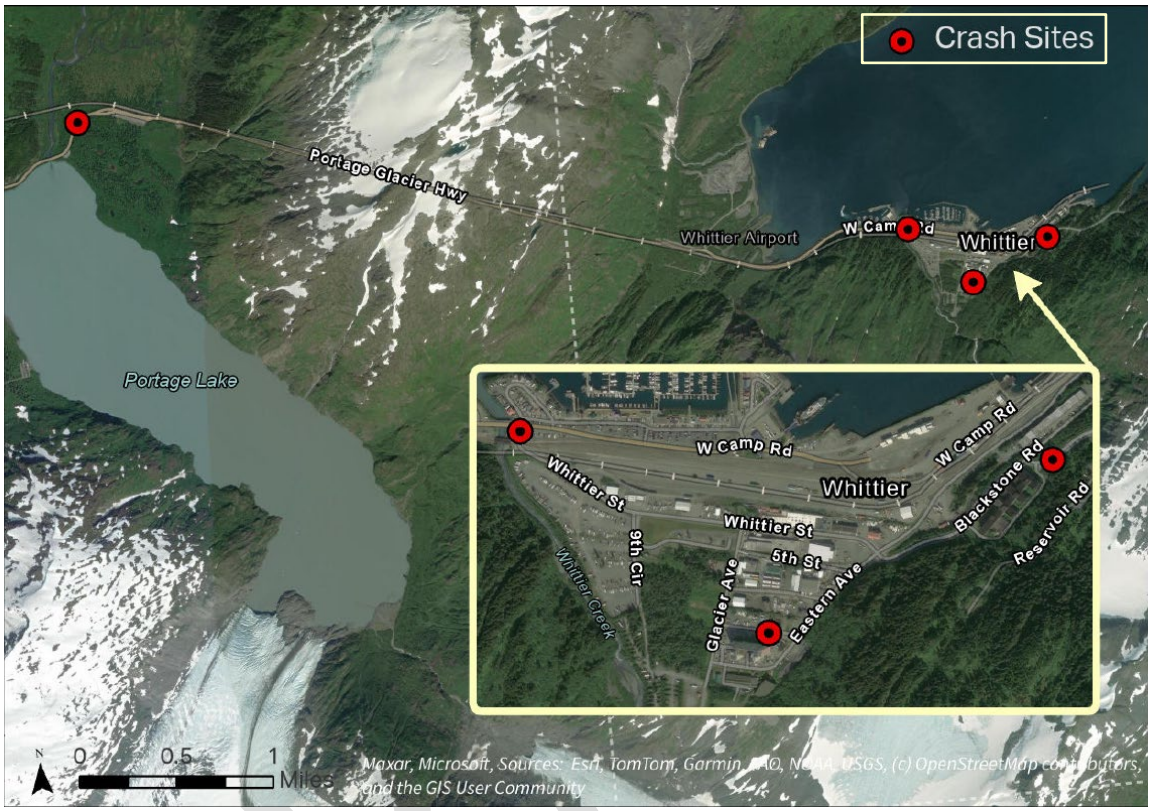


Figure 11. Crash Sites within the Planning Area 2019-2023

Table 7 includes the date of the crash, weather conditions, injury status, and manner of crash.

Table 7. Crashes within the Planning Area Between 2019 and 2023

Date	Reporting Agency	Lighting	Weather	Injury Status	Manner of Crash
August 2019	Whittier Police Department	Daylight	Ice/Frost	Possible Injury	Ran Off Roadway – Left (tree)
May 2020	Driver Report	Dark – Unknown Lighting	Snow	Possible Injury	Motor Vehicle In-Transport
April 2021	Whittier Police Department	Daylight	Snow	No Apparent Injury	Parked Motor Vehicle
July 2022	Whittier Police Department	Daylight	Dry	No Apparent Injury	Ran Off Roadway – Left (Overturn/Rollover)

The locations of the four crashes are spread evenly across town, showing no apparent pattern that would indicate a location of concern. The only common attribute among the recorded crashes is that three of them took place with snow or ice on the ground, a common issue in Alaska. One crash which occurred on Portage Glacier Highway near the Begich Boggs Visitor Center (outside the City of Whittier) is included in the data presented. Due to the Portage Glacier Highway crash occurring enroute to/from the City of Whittier on a DOT&PF facility it was determined prime for inclusion in this safety overview.

Beyond collecting official crash data provided by the DOT&PF, near-miss data was also collected for the recorded intersections throughout Whittier (Table 8). Each near-miss incident was categorized based on how much time elapsed between the paths of two objects crossing (vehicle and vehicle, vehicle and pedestrian, or vehicle and bicycle).

Table 8. Near-Miss Incidents, Whittier

Intersection	Total Hours Studied	Total Conflicts		
		0.0 – 1.5s	1.5 – 2.0s	2.0 – 3.0s
Harbor Road/West Camp Road & Whittier Street	16	0	1	4
West Camp Road/Harbor View Drive & Harbor Road	16	0	0	4
Whittier Street/Blackstone Road & Eastern Avenue/Depot Road	16	0	0	0
Shotgun Cove Road & Blackstone Road	16	0	0	0
Whittier Cruise Terminal on West Camp Road (Weekday)	16	0	0	2
Whittier Cruise Terminal on West Camp Road (Weekend)	48	6	8	21

The near-miss data collected shows that while there isn't a major problem with vehicle crashes occurring in Whittier, there are still safety concerns, especially for pedestrians.

4.4 Parking

Information from plans and studies, existing data, satellite imagery, and the Greater Whittier Chamber brochure were all used to document the approximate size, location, and volume of parking facilities within the City. Whittier Parking and Campground was contacted to verify the volume of parking spaces available on site, and a site visit in July 2025 provided on-the-ground counts.

Feedback from harbor users and residents during the July 2025 site visit indicated seasonal parking constraints, particularly during holiday weekends such as July 4. The primary issue identified was limited wayfinding and payment clarity for visitors. It is possible that not all day-use activity is reflected in the data due to visitors not paying because they didn't know how.

4.4.1 Facilities

Figure 13 visualizes nine distinct parking areas, including options for free public parking, paid parking, cruise ship parking, and waysides (fee and non-fee) adjacent to recreation areas. The boundaries contained in the map are

approximate and do not coincide with property ownership boundaries. Below are descriptions of the nine mapped parking areas:

1. **Whittier Creek:** This area is adjacent to Whittier Creek and the Whittier Creek Trail. The parking and adjacent campground are referred to as Whittier Parking and Campground. It is a paid parking area, accommodating oversized vehicles, RVs, short-term and long-term parking options. There are 383 total parking spots in the lot, including 44 standard vehicle spots, 298 standard trailer spots and 41 oversized spots. Payment is made to on-site staff or via self-check-in. This area is open, weather-depending, from mid-April until late October.
2. **Business District/Harbor Parking Lot:** This area contains both free and paid parking.
   - The strip of parking on the North side of Harbor View Dr contains approximately 70 nose-in parking spots facing local businesses and towards the pier. This parking area is free and is limited to two hours for business customers only.
   - The area on the south side of Harbor View Drive is paid for standard-sized cars only, with pay meters available at the Harbormasters Office and the Launch Ramp, east of the Harbormasters Office. Parking is $11 per day, or an annual permit can be purchased for $250 as of May 2025. There are 204 parking spaces in this area, while the east end, closest to the Launch Ramp, contains a staging areas made up of six oversized parking stalls for those actively using the boat launch. The west end has a strip of 14 parking spaces available for oversized vehicles. During the summer, vehicles with trailers or lone trailers are not allowed to park in the harbor lot.
3. **Rail:** The area adjacent to the railroad tracks on the South side of the highway is a strip of paid parking spaces for standard-sized cars only, with pay meters available at the Harbormasters Office and the Launch Ramp. There are 28 total parking spaces available here, four of which are parallel parking places along Harbor Road.
4. **Harbor View Dr.:** This area contains 30 parking spaces that are a mix of free and paid parking. The strip of parking on the North side adjacent to Harbor View Dr is free for two hours and for business customers only. The area on the south side, closest to W Camp Road, is paid parking for standard-sized cars only, with pay meters available at the Harbormasters Office and the Launch Ramp. Harbor Loop Road includes street parking on both sides of the loop.
5. **Cruise 1:** This parking area is reserved for cruise ship use only.
6. **Cruise 2:** This parking area is reserved for cruise ship use as well as for individuals who are visiting and/or have vessels docked at Cliffside Marina.
7. **Whittier Bay Campground:** The Whittier Bay Campground is situated on a 15-acre sub-lease from the ARRC. This lot contains oversized parking stalls able to accommodate oversized vehicles.
8. **Whittier Bay Campground – Beach Access Parking:** Adjacent to Whittier Bay Campground is a gravel lot that provides beach access. Parking here is free and limited to two hours and is generally used by those accessing the boat launch and storing trailers.

9. **Glacier Creek Terminal:** The Glacier Creek Terminal contains nine tour bus parking spots that include aisles for loading and unloading. A gravel lot is located to the right of the terminal building. This gravel lots provides parking for terminal employees and visitors. Additional street parking is available on Harbor Road across from the Terminal.

10. **Smitty's Cove:** This is a small parking area near Smitty's Cove, with approximately eight regular parking spots at the end of the east fork of Depot Road. Parking at this location is paid, however it is not a well-established parking area.

11. **Lu Young Park:** There is a small free parking area located in Lu Young Park. This area can accommodate oversize vehicles, RV's, short-term and long-term parking and has 14 regular spots, five parallel spots, and one ADA spot with an aisle.

12. **Glacier Avenue:** There is a small free parking area located at the south end of Glacier Avenue. The parking lot is gravel and adjacent to a designated camping area.

13. **Portage Pass Trailhead:** A large gravel parking lot was built by the U.S. Forest Service in 2024. The parking was built to enhance access to the Portage Pass Trail.

14. **Shakespeare Creek:** A small free parking lot with five standard parking spaces and one handicap parking space is located on Portage Glacier Road, near Shakespeare Creek and the turnoff of W Camp Road. The parking area also includes two bathroom facilities.

Figure 12. Free and Paid Parking Locations within Planning Area

4.5 Active Transportation

This subsection summarizes existing pedestrian and bicycle infrastructure within Whittier, including sidewalks, boardwalks, and multiuse pathways.

Sidewalks with rolled curbs were installed in the Core Area of Whittier by the United States Military during the City's initial design and construction. In 2002, a pedestrian tunnel was constructed to provide a safe connection from Whittier's core to the waterfront, avoiding the rail yard. Additional sidewalks were installed in 2004 that provide walkability within Whittier's waterfront business area from Harbor View Dr to Cliffside Marina. However, these sidewalks do not connect to the previously constructed pedestrian tunnel and have an unmarked crossing spanning Whittier's boat launch.

In addition to the sidewalks located near the waterfront, there is a narrow boardwalk for foot traffic from the boat launch to the far west end of the Small Boat Harbor.

There are two locations in Whittier that have separated multiuse pathways: one installed by the DOT&PF as a continuation of the sidewalk along the waterfront between West Camp Rd and Passage Canal, and the other, an unimproved gravel pathway, spanning from the base of Shotgun Cove Rd to the intersection of Cove Creek Rd.

4.6 Railroad

The ARRC owns most of the land within Whittier and leases land to the City through a Master Lease. This relationship between ARRC and the City is described in more detail in Section 3, Land Use. Whittier is an essential port of access and plays a vital role in connecting Alaska to the Lower 48.

The railroad into Whittier began construction in 1941, spearheaded by Anton Anderson, an Army engineer. The spur from Portage to Whittier was completed in 1942 and became a major supply link for the United States Military throughout World War II. As previously mentioned, The Tunnel is owned by ARRC and operated by DOT&PF[7]. ARRC provides both freight service and passenger service going into and from Whittier. In 2024, between May and September, the ARRC logged 817 trips, both eastbound and westbound, and including freight and passenger services.

4.7 Ports and Harbors

Whittier's location on the Prince William Sound makes it prime for marine transportation, ranging from private vessels and charters to ferries, freight, and cruise ships.

4.7.1 City of Whittier

The Small Boat Harbor (Whittier Harbor) was constructed in 1972 and expanded in 1980 and 2010. Originally owned and operated by DOT&PF, the harbor grew from 100 to 332 slips before ownership transferred to the City in 2004. A final expansion in 2010 added 26 slips, providing a total of 360 slips and space for approximately 60 "rafting" vessels.

[7] Day to day tunnel operations are carried out by a DOT&PF hired contractor under the guidance of DOT&PF staff

Figure 14, sourced from the Whittier Harbormaster, provides a visual of the layout of Whittier Harbor and slip size for each float. The Whittier Harbor berths both commercial and recreational vessels.

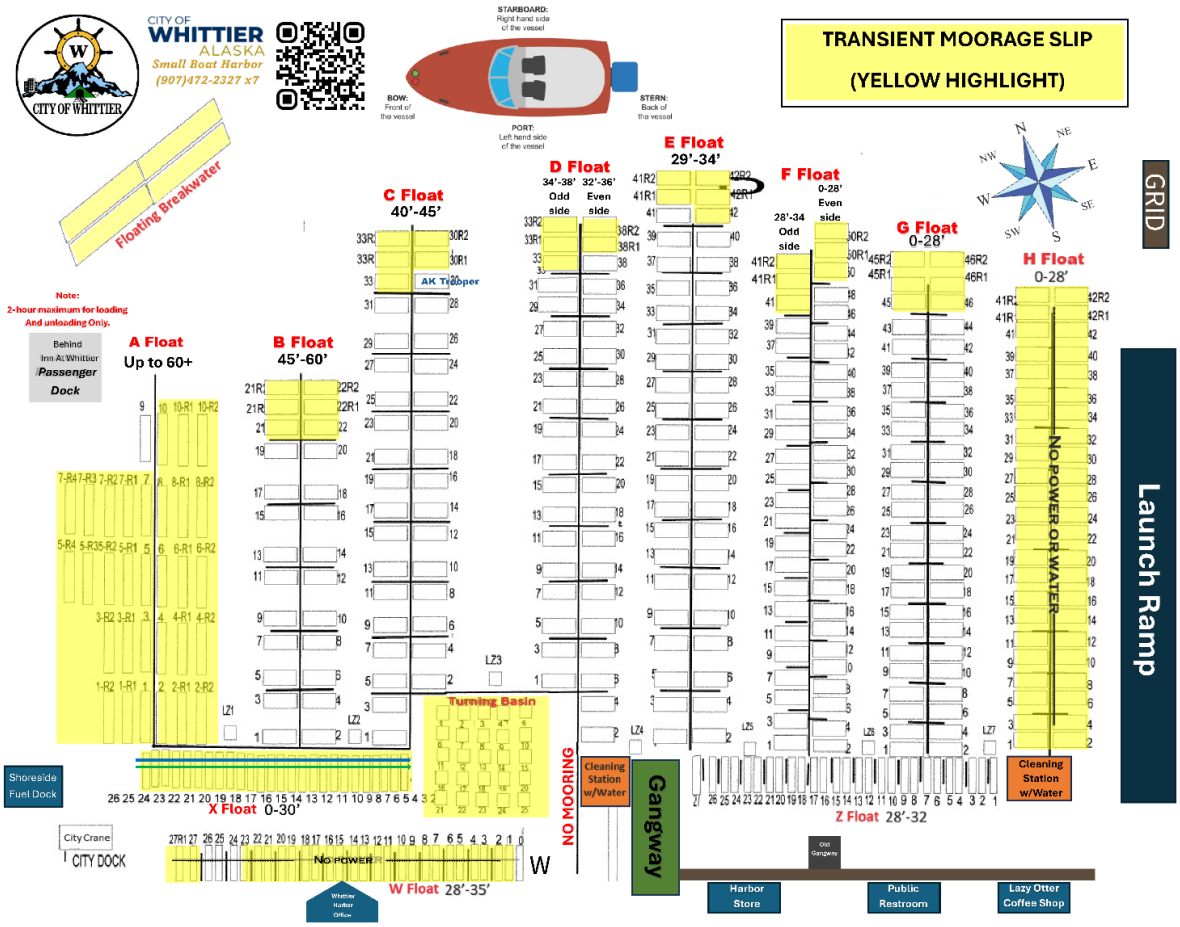


Figure 13. City of Whittier Harbor Slip Map

Harbor facilities include the harbormaster's office, two boat launch ramps , one boat maintenance grid, and a fuel service depot. Whittier Harbor also includes two major docks: the Ocean Dock, which serves large day-cruise vessels, and the City Dock, which is primarily used by commercial fishing vessels and is equipped with a crane, boom, and net for unloading seafood.

Whittier Harbor has remained at capacity since at least 1993, when there was a waiting list that contained 316 names. As of July 2025, there are 358 names on the waiting list, compared to 360 names in July 2019 (Table 9). The overall wait-times vary depending on the size of the slip needed. To join the waiting list, the Harbor imposes an initial 50-dollar fee upon receipt of the application and an annual 50-dollar fee to remain on the waiting list.

Table 9. Waitlist for Slips at Whittier Harbor

Slip Size (in feet)	Number on Waitlist (July 2025)
0-28	45
28-34	116
34-45	78
37-45	63
45-54	28
54-60	6
60+	22
Total	**358**

In addition to the use of the harbor by berthed vessels, the harbor is also used by transient vessels. This includes recreational vessel owners who dry dock in Whittier or travel to Whittier for the day use the harbor for short periods of time. Transient moorage is granted on a first come, first service, and space available basis and include options for daily, monthly, and winter (October 1 through March 31) periods. At large, moorage needs greatly exceed Whittier's current capacity.

4.7.2 Cliffside Marina and Yacht Club

The Cliffside Marina and Yacht Club is a privately owned and operated marina located on city-owned lands and tidelands west of Whittier Creek and the Whittier Harbor. The Marina was constructed in 2004 and has a 99-slip capacity, all of which are individually owned and range in size from 40 to 100 feet.

4.7.3 Alaska Marine Highway System

The AMHS provides ferry service to Whittier for people and vehicles. During the summer season, ferries arrive and depart daily. The most up-to-date AMHS information is available on their website at www.dot.alaska.gov/amhs/. The recently completed AMHS Long-Range Plan (2025) details overall system updates to advance AMHS operations within Alaska.

Table 10 includes the flow of traffic for the Whittier Ferry Terminal, including embarking and disembarking passenger and vehicle traffic for the years 2015 through 2024.

Table 10. AMHS Embarking and Disembarking Passengers and Vehicles at Whittier Ferry Terminal 2015 to 2024

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Number of Port Departures at Whittier	**320**	**303**	**300**	**283**	**211**	**39**	**201**	**268**	**258**	**242**
Embarking Passengers	16,851	13,954	12,590	12,648	9,881	1,811	8,928	11,165	10,370	10,807
Disembarking Passengers	19,488	14,662	13,111	13,479	10,289	2,162	10,370	12,250	11,951	12,353
Embarking Vehicles	7,082	6,712	6,382	6,122	4,969	1,686	5,213	5,412	4,633	4,680
Disembarking Vehicles	7,598	6,748	6,215	6,037	4,873	1,841	5,622	5,383	4,984	4,984

On a more granular level, Table 11 includes the monthly totals for passengers and vehicles embarking and disembarking in Whittier during 2024.

Table 11. AMHS Embarking and Disembarking Passengers and Vehicles at Whittier Ferry Terminal for 2024 by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Embarking Passengers	301	417	530	625	1,098	1,792	2,289	2,192	1,091	429	–	43
Disembarking Passengers	347	432	512	511	1,042	2,100	2,808	2,731	1,404	433	–	33
Embarking Vehicles	150	176	236	349	524	745	861	885	514	213	–	27
Disembarking Vehicles	155	185	233	250	491	847	962	980	634	222	–	25

From the data included in Tables 10 and 11, it can be inferred that ferry traffic for both passengers and vehicles reach their peak during the months of March through September. These peak months are aligned with the peak traffic volumes documented at The Tunnel.

Table 12 includes data detailing the origin and destination of passengers and vehicles using the Whittier Ferry Terminal in 2024. Based on this data, most passengers and vehicles arriving in Whittier depart from either Cordova or Valdez.

Table 12. AMHS Passenger Embarking and Disembarking per Location during 2024

Location Off / Location On	Whittier	Cordova	Tatitlek	Valdez	Chenega Bay
Passengers					
Whittier		5,713	30	4,939	125
Chenega Bay	107				
Cordova	5,425				
Tatitlek	28				
Valdez	6,793				
Vehicles					
Whittier		2,727	10	1,857	86
Chenega Bay	55				
Cordova	2,566				
Tatitlek	11				
Valdez	2,352				

4.7.4 Cruise Terminals

Whittier is considered a homeport or turn port, meaning it is the location in which a cruise itinerary begins and/or ends. Passengers departing from (and returning to) Whittier are required to start and end their Alaskan journey in Anchorage, about 60 miles north of Whittier[8]. Cruise passengers traveling between Whittier and Anchorage can arrange transportation through the cruise line or a private tour company, take the Alaska Railroad, or use third-party services such as rental cars, taxis, or ride-shares. Whittier is currently home to two cruise terminals and can provide service for up to three ships at a time; however, it is more common for there to be no more than two ships in port at once.

Whittier Cruise Ship Terminal

The WCST is located across from the Alaska Railroad Whittier Depot, on W Camp Road, east of Cliffside Marina. The main operator out of the WCST is Holland America/Princess Alaska-Yukon Land Operations (HAP). HAP allows passengers to book a train that departs from Ted Stevens Anchorage International Airport and arrives within walking distance of the WCST. The WCST's strategic location provides passengers with the opportunity to easily access the terminal whether they choose to travel to Whittier via train, shuttle, or a third-party service (including transportation applications such as Uber or Lyft, rental vehicles, or private bus/tour companies).

, When cruises return to WCST, passengers are offered excursions that provide the opportunity to explore the local area whilst returning to Anchorage.

The ships that are expected to frequent the WCST are included in Table 13, along with the ship size and capacity.

Table 13. Cruise Ships that Frequent Whittier Cruise Ship Terminal

Ship	Caribbean Princess	Coral Princess	Sapphire Princess	Discovery Princess	Island Princess	Royal Princess	Nieu Amsterdam	Noordam
Max Passenger Capacity	3,766	2,390	3,214	4,402	2,657	4,272	2,527	2,366
Max Crew Capacity	1,200	895	1,100	1,350	900	1,350	929	820
Length Meters	289	294	290	330	294	330	285	285
Length Feet	948	965	951	1,083	965	1,083	935	935
Width (Beam) Meters	48	32	48	47	32	47	32	32
Width (Beam) Feet	157	105	157	154	105	154	105	105
Gross Tonnage	112,894	91,627	115,875	145,281	92,822	142,714	86,273	82,897
Cruise ships included based on the 2025 and 2026 cruise ship schedules for Whittier, as of November 2025								

Glacier Creek Terminal – Head of the Bay

Construction for the Glacier Creek Terminal located at the HOB broke ground in October of 2022 and began welcoming cruise ships operated by Oceania, Regent, and Norwegian Cruise Lines during the latter part of the 2024 season. The Terminal is located off Gateway Access Rd northwest of the Whittier Bay Campground. The

[8] Based on distance from Ted Stevens Internation Airport to Whittier Cruise Ship Terminal

facility is approximately 1.5 miles away from the WCST and the Alaska Railroad Whittier Depot and has docking area for up to two ships at a time.

Most passengers embarking or disembarking at the Glacier Creek Terminal travel to and from Whittier via shuttles provided by the cruise company or booked through private entities. Passengers that choose to travel to or from Whittier via train must coordinate a ride or embark on an almost two mile (30 to 40 minute) walk to the Alaska Railroad Whittier Depot. The cruise ships that are primarily expected to dock at the Glacier Creek Terminal are included in Table 14, along with the ship size and capacity. Compared to the cruise ships that dock at the WCST, the ships at the Glacier Creek Terminal have a smaller passenger capacity and are smaller overall when comparing gross tonnage, length, and width.

Table 14. Cruise Ships that Frequent Head of the Bay Cruise Ship Terminal

Ship	Norwegian Jade	Seven Seas Explorer (Regent)	Oceania Riviera	Asuka 2	Azamara Pursuit
Max Passenger Capacity	2,882	829	1,447	960	774
Max Crew Capacity	1,037	552	800	545	400
Length Meters	294	224	251	241	181
Length Feet	965	735	823	791	594
Width (Beam) Meters	38	31	32	30	25
Width (Beam) Feet	125	102	105	98	82
Gross Tonnage	93,558	55,254	66,172	50,444	30,277
Cruise ships included based on the 2025 and 2026 cruise ship schedules for Whittier, as of November 2025					

4.7.5 Barge and Freight

Barge operations into and out of Whittier occur at the ARRC-owned barge slip, which functions as a rail link between the Lower 48 and Alaska. Barge service occurs on a year-round weekly basis. During the peak summer months, service to Whittier may occur up to twice a week[9].

From 1982 until April 16, 2021, the Canadian National Railway operated the AquaTrain, which provided year-round barge service from Prince Rupert, British Columbia, Canada to Whittier on a weekly basis before continuing to Prince Rupert, British Columbia. Operations conducted by the Canadian National Railway between Seattle and Whittier shifted operations to AML.

Further east at the edge of Whittier's waterfront is the DeLong Dock, which is owned by the City of Whittier and operated by a private business. Much of the activity at the DeLong Dock occurs during the summer months through off-loading seafood for local processors. Inspection reports from 2014 and 2018 identify the DeLong

[9] https://www.lynden.com/aml/wp-content/uploads/sites/16/2023/02/aml-sailing-schedule-central-alaska.pdf

Dock as being in serious need of replacement, this sentiment is reiterated in the Whittier Waterfront and Economic Development Plan.

4.7.5.1 Imports and Exports

The 2025 WTMP includes Figures 15 and 16, which draw on data from the United States Army Corps of Engineers (USACE) Institute for Water Resources Five-Year Cargo Reports for 2018 to 2022. The data displayed represents nearly 20 years of cargo tonnage moving through the Whittier terminal and are not solely related to ARRC operations. Data for 2023 and 2024 is not yet available.

The WTMP summarizes that between 2004 and 2022, imported goods arriving in Whittier saw an increase of around 276 percent. The main imports include manufactured equipment, machinery, products, food other than fish, as well as fish. Much of the imported fish arrived to Whittier from other Alaska-based harbors. Like many of the other industries in Alaska and across the nation, imports saw a decrease in 2020 due to the COVID-19 pandemic. Since then, imported cargo tonnage has regained momentum. The WTMP predicts that if the current growth rate were to hold steady, Whittier could see a doubling of import tonnage in the next 12 years.

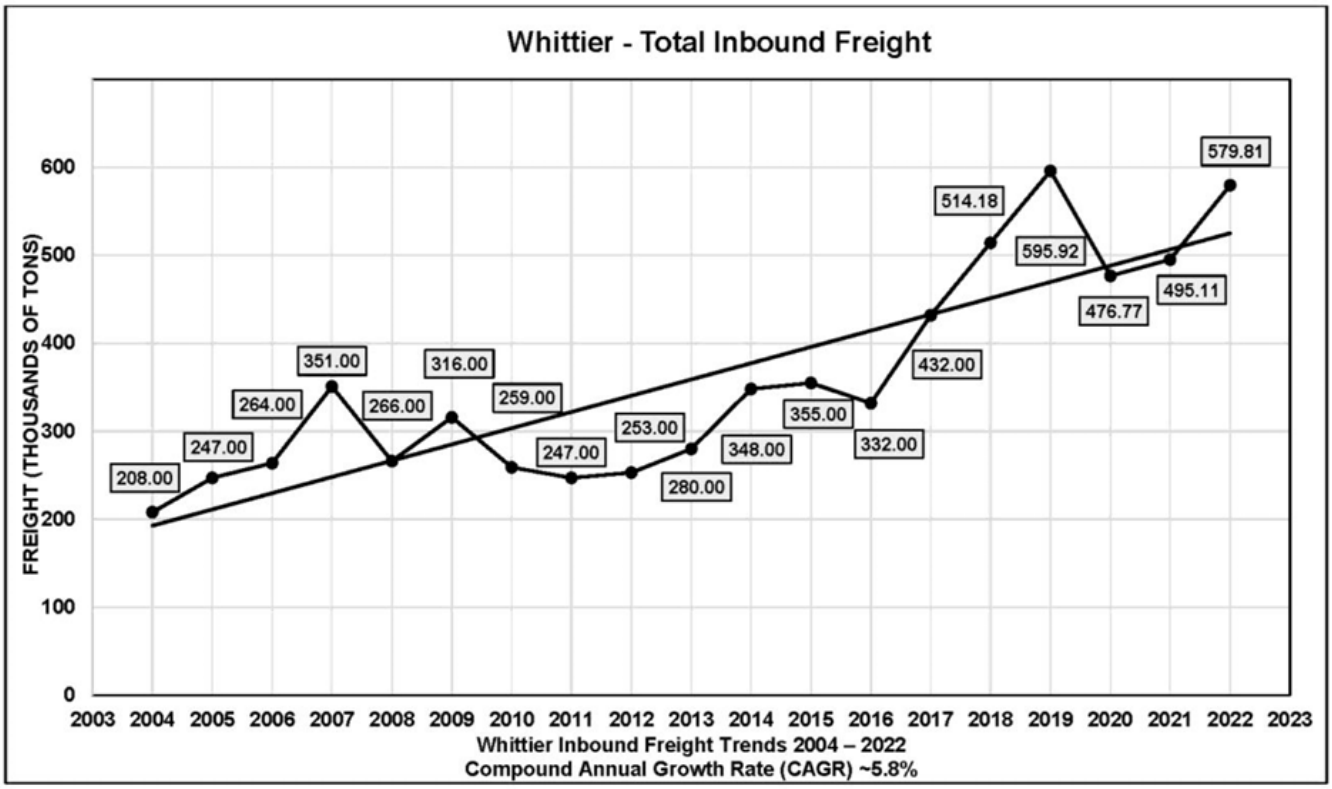


Figure 14. Whittier Total Inbound Freight, sourced from the 2025 Whittier Terminal Master Plan

The WTMP identifies that exports through Whittier hit a peak during 2019 with approximately 56,000 tons of outbound freight. The main export category is described as manufactured equipment, machinery, and manufactured wood products. Export tonnage accounts for only about ten percent of the import tonnage, meaning most containers or railcars return to the Lower 48 empty. This is often referred to as an empty backhaul, which is not as economically beneficial as returning to the Lower 48 with a full load.

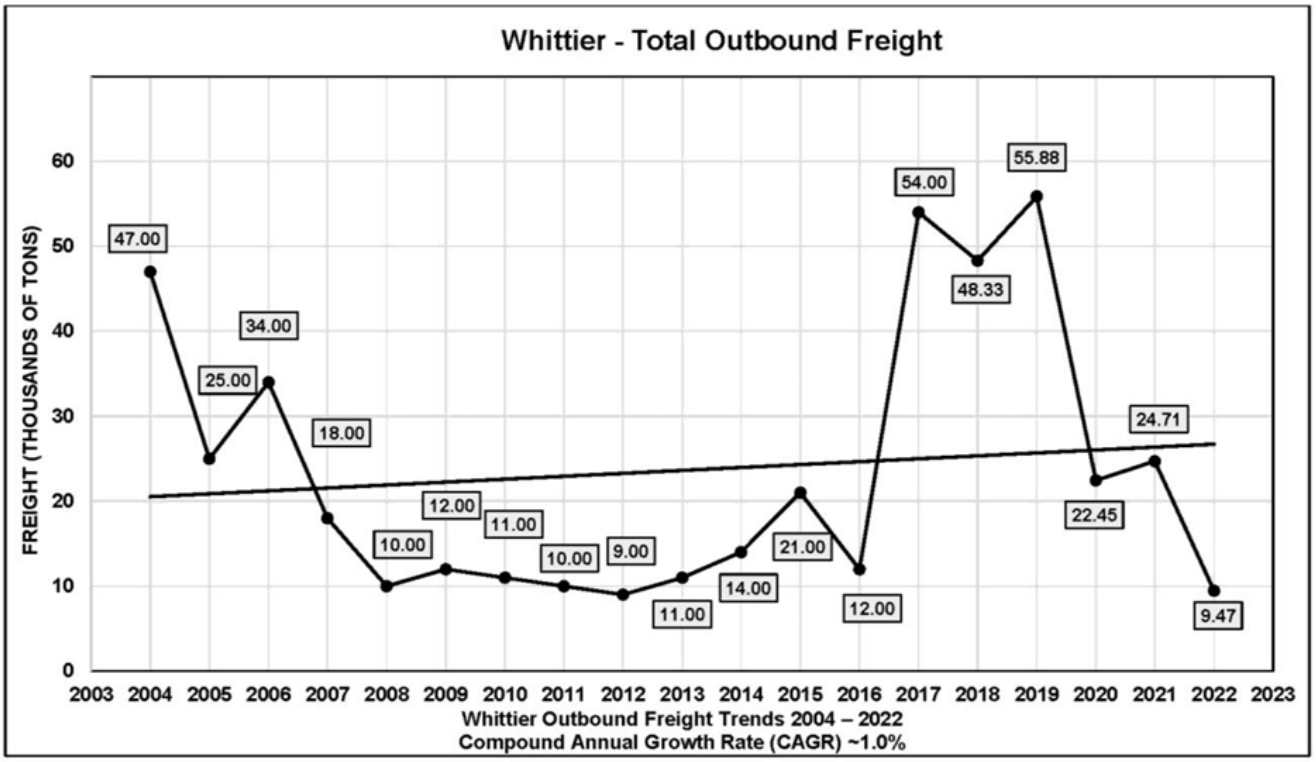


Figure 15. Whittier Total Outbound Freight, sourced from the 2025 Whittier Terminal Master Plan

4.8 Recreation

Whittier is regarded as being rich in recreation opportunities. City of Whittier residents and visitors have ample opportunity to enjoy various recreational activities throughout all seasons, with offerings that include hiking, foraging, kayaking, tide pooling, geocaching, biking, snowmachining, and cross-country skiing, among others.

4.8.1 Trails and Trailheads

There are four trails in Whittier varying in experience level, elevation gain, and accessibility.

Portage Pass Trail

The Portage Pass Trail is a two-mile-long trail located just past The Tunnel when coming into Whittier, turning right past the railroad tracks onto a gravel road marked “Forest Access.” The trail traverses land within the Chugach National Forest and is maintained by the USFS. Recently, the USFS made improvements including the construction of a formal trailhead and parking area.

Whittier Creek Trail

Whittier Creek Trail is a short one-mile trail that starts at Whittier Street (along the Whittier Parking and Camping lot) and follows the banks of Whittier Creek, ultimately endings by waterfalls south of the Begich Towers. Paid parking is available in the Whittier Parking and Camping lot or if choosing to start from the opposite direction, free parking is available at the south end of Glacier Ave.

Emerald Cove Trail[10]

The three-mile-long Emerald Cove Trail starts just beyond Second Salmon Run off Shotgun Cove Rd and ends at Emerald Bay. This trail has limited elevation gains and stays near the coastline of Passage Canal, offering scenic views of mountains, glaciers, rivers, and waterfalls.

Horsetail Falls Trail

Horsetail Falls Trail is located, off the first fork of Cove Creek Rd near the City's water reservoir and has limited parking available. The Whittier Comprehensive Plan 2020 indicates that advertisement of this trailhead is limited as there is community concern in relation to the proximity of the trailhead and parking area to the City's sole water supply. The trail extends one mile through alpine terrain and is retrofitted with boardwalks in wet areas to minimize the impact of foot traffic.

4.8.2 Camping

There are two formal camping areas located within Whittier, one which is owned and operated by the City and another that is privately owned and operated. Both camping areas provide campsites that are first-come, first-served.

Whittier Bay Campground

The Whittier Bay Campground is owned and operated by the City of Whittier and is Located near the HOB. The approximately 30 unserved sites at the Whittier Bay Campground are not maintained during the winter months and do not open until the snow in Whittier has melted to a manageable level. Fees and revenues for Whittier Bay Campground are included in Section 7.

Creekside Campground

The Creekside Campground is privately owned and offers over 50 unserved campsites. This campground is commonly referred to as Whittier Parking and Campground and operates from around Memorial Day through early October, and offers long-term rates on a monthly or seasonal basis.

[10] Due to recent construction efforts for Shotgun Cove Road, the Emerald Cove Trail has received little to no maintenance and is prone to experiencing muddy conditions

5. Utility Infrastructure

Whittier faces unique challenges and opportunities in delivering vital public utilities. This section provides an overview of the City's key utility systems, the agencies and partnerships involved in their management, and any of the efforts that are underway that may impact future transportation system development.

Currently, there are few locations within the City that are equipped with utility infrastructure that would benefit future development.

5.1 City of Whittier Public Works

The City's Public Works Department comprises a director and four full-time employees. The department is responsible for road maintenance, snow removal, and water and sewer services, ensuring essential infrastructure is reliably maintained throughout the community.

The department continuously evaluates the City's supply versus demand on their public utilities. This continual monitoring is essential due to the City's seasonal tourism influx and the resulting high-level demand on the system. It is assumed that if Whittier's base population grows to support seasonal high use, the current utility system could be strained and require substantial future infrastructure developments and improvements.

5.1.1 Road Maintenance and Snow Removal

The City is responsible for the routine maintenance of all roads within Whittier, except for the stretch of road from The Tunnel to the AMHS ferry terminal, which is maintained by the DOT&PF. Snow removal is a major expense for the City, with an average annual snowfall of approximately 241 inches (21 feet). For the most part, all major roadways within the City receive snow removal services provided by the City. However, limited services are implemented for Shotgun Cove Rd while roads fingering off Shotgun Cove Rd and the roads within the HOB area are unmaintained.

ARRC is responsible for maintaining and clearing snow from the pedestrian tunnel that connects Whittier's downtown to the waterfront. This requirement often faces some difficulties due to the equipment required to perform the task.

5.1.2 Water

The City provides water and sewer utility services to the Whittier Core Area, the Whittier Harbor, the Alaska Railroad Yard, and DeLong Dock. Cove Creek Road and Shotgun Cove Road (including dwellings) do not have access to City-provided water and sewer services. Extending services to these areas has been explored in the past but it has not been found to be cost-feasible to implement.[11]

Currently, water to the City is supplied by three wells found between Whittier Street and Fifth Street. These wells are between 70 and 80 feet deep and range in capacity from 220 - 530 gallons of water flow per minute. Table 15 includes the results of a 2023 water quality report for the three wells in Whittier.

[11]City of Whittier Comprehensive Plan

Table 15. 2023 City of Whittier Water Quality Report

Assessment Factors	Well 1	Well 2	Well 3
Wellhead/Surface Intake Susceptibility	Low	Low	Low
Aquifer Susceptibility	Medium	Medium	Medium
Vulnerability to Potential Contaminants:			
Bacteria and Viruses	Medium	Medium	Medium
Nitrates/Nitrites	Medium	Medium	Medium
Volatile Organix Chemicals	Medium	Very High	Medium
Inorganics/Heavy Metals	Low	Low	Low
Synthetic Organic Chemicals	Medium	Medium	Medium
Other Organic Chemicals	Medium	Medium	Medium

5.1.2.1 Water Challenges

Large cruise ships visiting Whittier at the WCST use the City's water supply to refill the ship's water tanks. During this time, the available water supply to the west area of the Whittier Harbor is reduced, posing a potential hazard for localized fire suppression. The City and the Harbor are examining potential alterations to the existing harbor piping to improve water flow capacity, increase water pressure, and reroute water during an emergency.[12]

5.1.3 Sewer

The current sewer system in Whittier is composed of a wastewater collection system and a primary treatment facility that is sized to meet the needs of approximately 1,150 users year-round. Water treatment starts near Depot Road in six 50,000-gallon concrete septic tanks. Treated effluent[13] is then discharged into Passage Canal.

5.2 Utility Services

The City supplements the utility services they do not provide through contracts and collaboration with utility service providers. These services include electricity, telecommunications, solid waste services, and natural gas.

5.2.1 Electricity

Chugach Electric Association, Inc provides electricity to the City and is the largest electric cooperative in Alaska. Electricity is supplied via a single 25 kilovolt, three-phase underground power line that extends from the Portage substation 11 miles away from the Core Area. An underground circuit then extends beneath the tunnel and into the City.

Power is supplied from both the Anchorage and Kenai transmission mains; if either source goes offline, local facilities may operate on backup generators. The power system serving Whittier can accommodate peak electric

[12] City of Whittier Comprehensive Plan

[13] Treated Effluent – Wastewater that has been cleaned and disinfected at a treatment facility prior to being released back into the environment

demand of approximately 10,000 kilowatts (kW). The typical peak electric demand currently is between 1,000 – 1,500 kW.

5.2.1.1 Emergency Power

City owned backup generators can supply a total of 850 kW of reserve power to support the City infrastructure, including the harbor, Public Safety Building, and the water/wastewater system. The privately operated Shoreside Petroleum Inc has a 200,000-gallon bulk-fuel storage facility which can supply the City's backup generators in the event of an emergency power outage.

5.2.2 Telecommunications

Residents in Whittier have their choice of telecommunication providers. These providers and their services are listed in Table 16.

Table 16. Telecommunication Services in Whittier

Provider	Services
United Utilities, Inc (UUI)	Cable, Telephone, Internet
Alaska Communications (ACS)	Internet
General Communication, Inc (GCI)	Internet
Dish Network	Cable

5.2.3 Solid Waste Service

Alaska Waste is contracted to haul the City's refuse from Whittier to the Anchorage landfill. Dumpsters are located at the Harbormaster's Office, Launch Ramp, and the Public Safety Building. An additional 40 yard dumpster is provided during the summer at the HOB for use by leaseholders located in the harbor area who generate substantial amounts of waste. Private leaseholders are permitted to use the City dumpsters or contract their own waste pick-up. Residents of Begich Towers and Whittier Manor coordinate waste services through their homeowners' association. Additional dumpsters may be located within Whittier that are not included in the contacted services with Alaska Waste.

Solid waste pick-up operates on a seasonal schedule, represented in Table 17, to ensure the City can meet the higher seasonal use.

Table 17. Solid Waste Collection Schedule for Whittier

Summer Solid Waste Collection	Winter Solid Waste Collection
Twice a week pick-up at the in area of the Harbor and once per week at other locations	Once every two weeks at all locations

5.2.4 Natural Gas

ENSTAR Natural Gas Company (ENSTAR) provides natural gas to Whittier. ENSTAR retrofitted the petroleum, oil, and lubricants (POL) line formerly used to transport fuel from the Department of Defense tank farm in Whittier to Anchorage along the Turnagain Arm in 1997. This retrofit allowed for natural gas service to the communities

of Whittier, Indian, Bird Creek, and Girdwood. Past and current natural gas rates in Whittier are similar to the rates seen in Anchorage.

5.2.5 Glacier Bay Terminal

As of July 2025, the Glacier Bay Terminal is fully self-sustaining in terms of utilities. The cruise ship terminal currently runs off three generators and has its own water supply. Huna Totem Corporation, the agency responsible for the development at the HOB, has been quoted two million dollars for Chugach Electric Association to provide power to the location since current regulations require power lines to be buried.

6. Emergency Services and Public Safety

Whittier's unique geography, remote access conditions, and seasonal population shifts present distinct challenges for emergency response and public safety. Providing resilient transportation infrastructure is vital not only for day-to-day mobility, but for safeguarding the health, welfare, and security of residents and visitors. This section outlines current emergency service capacities and coordination among critical agencies.

6.1 Emergency Services

The Whittier Public Safety Department handles the provision of police, fire, and Emergency Medical Services (EMS) to residents. These services are all housed in the Whittier Public Safety Building. The responsibility of services is defined within the Whittier Municipal Code as authorized by Alaska Statute (AS) 29.48.180.

6.1.1 Police

Staffing the Whittier Police Department is widely dependent on current funding and budget considerations, including seasonal fluctuations. Typical staffing includes six patrol officers and a Police Lieutenant, in addition to the Director of Public Safety. During the summer months, a seasonal full-time officer is employed, largely to assist with the increase in tunnel and cruise ship traffic.

In addition to providing police services to the City's residents, the Whittier Police Department also provides services to the Girdwood Valley Service Area, represented in Figure 17. This contract also includes a Whittier Police Substation within Girdwood that is staffed by appointment only.

6.1.2 Fire and EMS

The Whittier Fire Department runs on a voluntary basis with the support of a fleet of one fire engine, a rescue, two four-wheelers, and a utility truck . Additionally, the City is equipped with two ambulances which support Whittier's three full-time fire and EMS employees. During busy seasons, Whittier offsets the influx of calls by employing serval seasonal EMTs.

During the summer season, there is an increase in the number calls received for emergency response. These calls often request emergency response to either of the two cruise ship docks. When emergency response is needed, emergency vehicles are given priority at The Tunnel and may cause delays for cars and trains, alike, when the predetermined schedule is interrupted. Tunnel operators record the number of emergency vehicles that require passage through the tunnel. In 2024, there were a total of 168 EMS calls for service to Whittier. Of those calls, more than half were during the regular business hours of 8:00 am – 6:00 pm, and nine caused traffic delays. Forty-seven of the calls were directly to cruise ships and were frequently after hours.

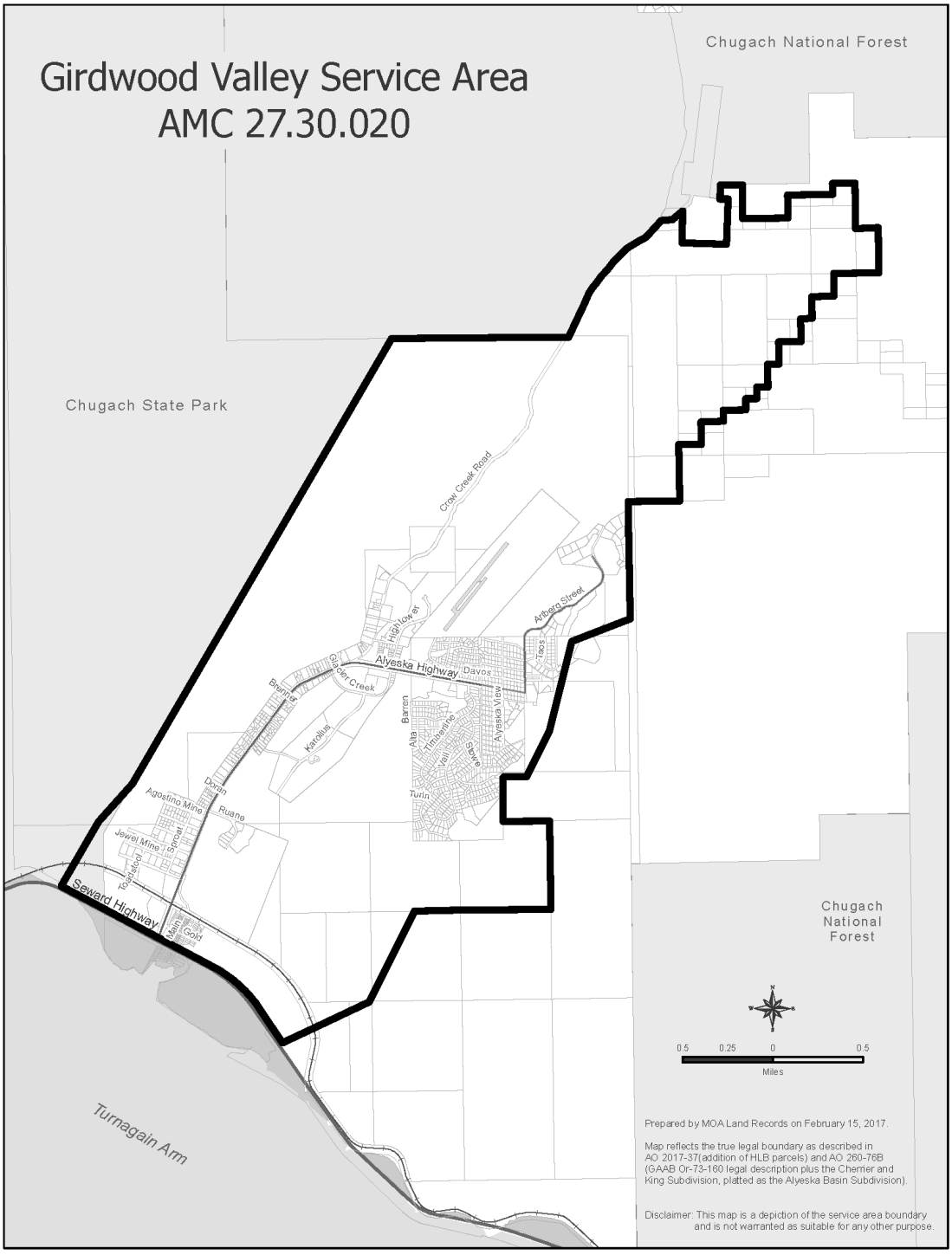


Figure 16. Girdwood Valley Service Area

6.2 Hazards and Safety

The City identifies hazards and vulnerabilities in the 2022 City of Whittier Hazard Mitigation Plan. Table 18 identifies key hazards and at-risk facilities within the City.

Table 18. Whittier Hazards and at-Risk Facilities

Hazard	Number of Critical Facilities in Hazard Area	Percent of Total City Facilities
Climate Change	31	100
Dam Failure	12	32
Earthquake		
Weak-Light	0	0
Moderate	0	0
Strong-Severe	31	100
Hazardous Materials	17	46
Severe Weather	31	100
Tsunami	25	68

7. Fees, Permits and Revenue

Transportation infrastructure plays a large role in generating revenue for the City as well as the DOT&PF.

7.1 DOT&PF Revenue

The DOT&PF generates revenue from tolls collected at the entrance to The Tunnel. The Tunnel into Whittier is the only toll route within the State of Alaska.

7.1.1 Whittier Tunnel Revenue

The Tunnel provides more than $2M in revenue annually.. Tunnel revenue varies significantly based on seasonality, demonstrating the impacts of seasonal visitors both from Alaskan residents and due to the increase in cruise ship-related traffic. These seasonal trends are shown in Figure 18.

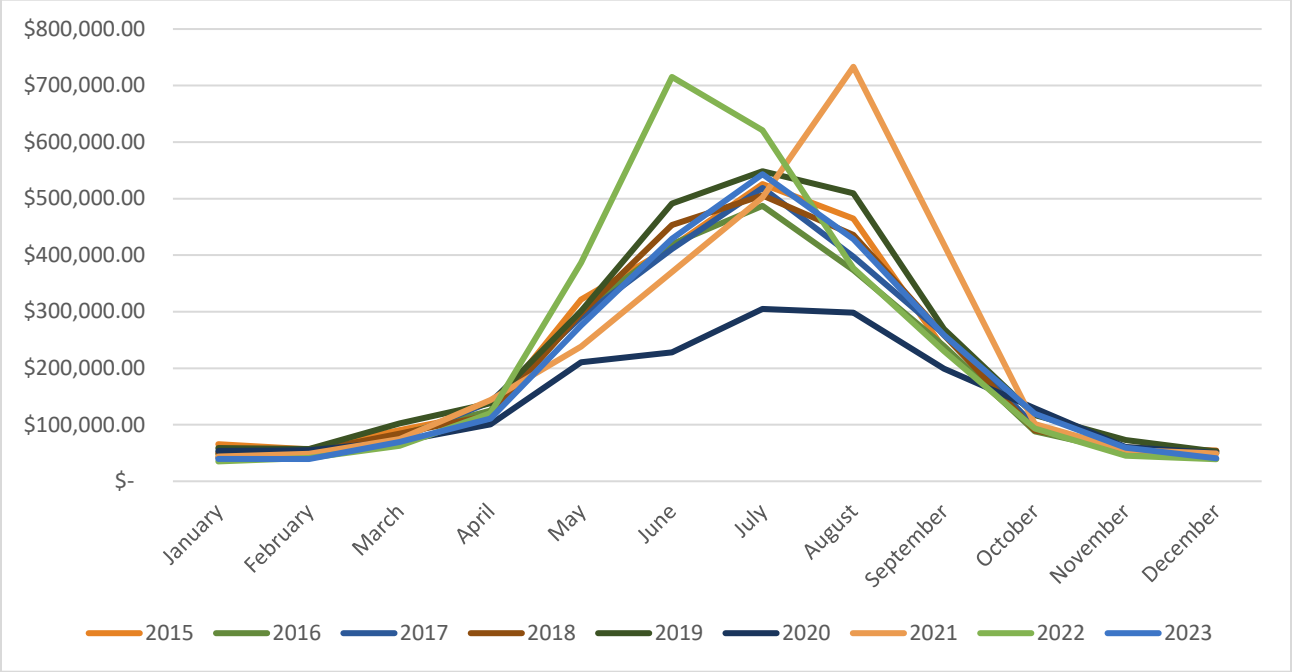


Figure 17. Whittier Tunnel Revenue Seasonal Trends

7.2 City of Whittier Revenue

The City of Whittier generates revenue through taxes, business licenses, user fees and permits, grant funding, leases, fines and citations, and miscellaneous items like fixed asset sales and a contract for Girdwood Police support. Additional revenue is obtained through marine facilities such as the DeLong Dock and Harbor. The total revenue for the City of Whittier and their source are included in Table 19.

Table 19. Total Revenue 2020-2023[14]

Revenue Type	2020	2021	2022	2023
Whittier Harbor	$ 1,540,041.00	$ 1,545,153.00	$ 1,672,582.00	N/A
DeLong Dock	$ 1,147,278.00	$ 467,982.00	$ 249,083.00	N/A
CPV Tax	$ 958,385.00	$ 1,250,015.00	$ 958,431.00	$ 667,298.00
General Fund	$ 2,548,027.00	$ 3,137,460.00	$ 3,861,479.00	$ 3,749,801.00
TOTAL REVENUE	**$ 7,956,572.00**	**$ 9,181,515.00**	**$ 9,510,682.00**	**$ 6,833,539.00**

7.2.1 Whittier General Fund

The General Fund revenue stream generates approximately a third of the income for the City on average.

The City requires permits and licenses for the following uses and activities:

- Variance
- Mobile Food Vendor
- Land Use Permit
- Film Permit
- Facility Use/Special Event
- Dog License
- Burn Permit
- Conditional Use Permit
- Business License

[14] Figures represented in Table 19 have been obtained via the City of Whittier 2023 Finance Report

Business Licenses accounted for less than $5k of revenue annually between 2020 and 2023, while user fees and permits only generated an average of $646 annually during the same timeframe. Sales and property taxes have generated the most significant portion of the General Fund revenue, totaling over $1M annually, followed closely by the Girdwood Police Contract, which was nearly $800k in 2023.

7.2.2 Whittier Harbor & DeLong Dock Revenue

The Whittier Harbor and DeLong Dock both provide revenue to the City through a variety of sources including user and moorage fees, utility fees, and wharfage fees. The Whittier Harbor brings in more than $1M annually in moorage fees alone. Parking fees also contribute to revenue the Whittier Harbor, though user difficulties navigating the parking system means revenue may not be reflective of actual parking use.

Table 20. Annual Parking Revenue

Revenue Type	2020	2021	2022
Annual Parking	$ 41,200.00	$ 36,314.00	$ 50,250.00
Daily Parking	$ 56,586.00	$ 52,433.00	$ 112,651.00
TOTAL PARKING REVENUE	**$ 97,786.00**	**$ 88,747.00**	**$ 162,901.00**

The DeLong Dock generates revenue through the off-loading of seafood during the summer months.

7.3 Commercial Passenger Vessel (CPV) Excise Tax

The Alaska CPV Excise Tax is a tax on passengers traveling on large cruise ships in Alaska. The funds are used for infrastructure and services in the ports that host their vessels and passengers and are meant to support the needs of communities to safely and efficiently host the cruise ship passengers. From 2013 to 2022, Whittier received $8,334,045 in CPV revenue, which reflects 4.7 percent of total CPV Excise Tax collected in Alaska.[15] The communities stated goals for CPV revenue include public safety coverage, enhancing opportunities for cruise visitors, and improving public amenities. The City primarily uses CPV revenue for public safety including hiring seasonal paramedics, police officers, and fire protection, and maintaining vehicles for these services. [16]

[15] CPV Tax: Revenue, Expenditures, and Local Priorities Fiscal Years 2013 - 2022

[16] CPV Tax: Revenue, Expenditures, and Local Priorities Fiscal Years 2013 - 2022