

Appendix C: Transportation

June 2023



King County

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I. Requirements of the Transportation Element

Specific requirements for the transportation element are found at RCW 36.70A.070(6)(a). The transportation element of the *King County Comprehensive Plan* meets those requirements as follows:

- **Land Use Assumptions.** The transportation element is based on the same population and employment growth targets provided in Chapter 2 (Urban Communities) of the *King County Comprehensive Plan*.
- **Estimated Traffic Impacts to State-Owned Facilities.** The travel forecast in Technical Appendix C uses the Puget Sound Regional Council Travel Model, which incorporates state-owned facilities.
- **An Inventory of Transportation Facilities and Services.** The inventory is provided in Appendix C of the *King County Comprehensive Plan*. As required by growth management legislation, it includes air, water, and ground transportation facilities and services as well as transit alignments and general aviation airport facilities. It includes both county-owned and state-owned transportation facilities within the county's boundaries.
- **Level of Service Standards including Standards for State Routes.** King County has adopted urban and rural area level of service standards for its Transportation Concurrency Management Program. The PSRC uses regional level of service standards to evaluate facilities, including state routes.
- **Actions to Bring Facilities into Compliance.** King County's Transportation Needs Report is adopted by reference with the *King County Comprehensive Plan*. In addition, the Roads Capital Improvement Program, guided by the *Strategic Plan for Road Services*, identifies specific projects, strategies, and actions to address transportation needs.
- **Traffic Forecasts for at Least Ten Years.** King County's Transportation Needs Report is prepared using the Puget Sound Regional Council's Travel Model which has a 2050 horizon year.
- **State and Local Transportation Needs to Meet Current and Future Demands.** The County's Transportation Needs Report identifies local system needs, the *Strategic Plan for Road Services* establishes the priorities, and the Capital Improvement Program provides the funds for projects. State and local transportation needs are included in the Puget Sound Regional Council travel demand forecasts provided in the *King County Comprehensive Plan* Technical Appendix C. These transportation elements address the Growth Management Act requirement of identifying state and local system needs to meet current and future demand.
- **Analysis of Funding Capability.** A financial analysis is included in the Transportation Needs Report, which is adopted as an element of the *King County Comprehensive Plan*. More information on the financial analysis and supporting policies is provided in Chapter 8 of the *King County Comprehensive Plan*.
- **Intergovernmental Coordination.** King County contacted adjacent cities, counties, and state transit agencies as part of its update to the Transportation Needs Report. The Puget Sound Regional Council's Travel Model informs preparation of the Transportation Needs Report and the capacity project needs identified in the report are also included as part of

PSRC's adopted *Regional Transportation Plan 2022-2050*, a key input in the agency's regional travel demand analysis.

- **Transportation Demand Management.** King County includes transportation demand management (TDM) strategies in its policies, codes and project implementation, as well as providing support for others through its transit, rideshare, and market strategies. Chapter 8 of the *King County Comprehensive Plan* and the Transportation Inventory of this appendix contain more information on King County TDM-related efforts.
- **Active (Nonmotorized) Transportation.** King County's Transportation Needs Report and Regional Trails Needs Report identify candidate improvements for pedestrian and bicycle facilities in support of enhanced community access, multimodal transportation, recreation, and healthy lifestyles. Chapter 8 of the *King County Comprehensive Plan* also provides additional detail regarding this topic.
- **Concurrency.** The Concurrency program is described in Chapter 8 of the *King County Comprehensive Plan*.
- **Consistency of Plans.** The *King County Comprehensive Plan* is consistent with the *Regional Transportation Plan 2022-2050*, the regional transportation plan for the four-county region. The *Regional Transportation Plan* is consistent with the region's urban growth strategy, *VISION 2050*, which is also developed by the Puget Sound Regional Council. The Puget Sound Regional Council reviews the *King County Comprehensive Plan* for consistency and has certified its previous versions and amendments. The *King County Comprehensive Plan* provides policy direction for the development of the County's related functional plans.

II. King County Arterial Functional Classification

Arterial functional classification is the designation of highways, roads and streets into groups according to the function each road serves or is intended to provide. A foundational principle to this grouping process is that individual roads do not serve travel independently; instead, most travel involves movement through a network of roads. Functional classification helps to define the part that any individual road will play in serving traffic through the road system. There are two primary functions of a road: to provide mobility for users, and to provide access to adjacent land uses. Functional street classification is an important tool for planning a transportation or roadway system, as well as in designing and constructing individual facilities. The classification system and King County Road Standards are used to distinguish between different types of roads for planning analyses, road design, and the allocation of public funds for transportation improvements.

In unincorporated King County, there are three types of arterial functional classifications:

- **Principal Arterials** - Provide for movement across and between large subareas of an urban region and serve primarily through traffic with minimum direct access to neighboring land uses. Note that freeways and major highways under the jurisdiction of the Washington State Department of Transportation that fall within unincorporated King County also meet this definition, and are sometimes also referred to as Principal Arterials.
- **Minor Arterials** - Provide for movement within the larger subareas bound by principal arterials. A minor arterial may also serve through traffic but provides more direct access to adjacent land uses than does a principal arterial.

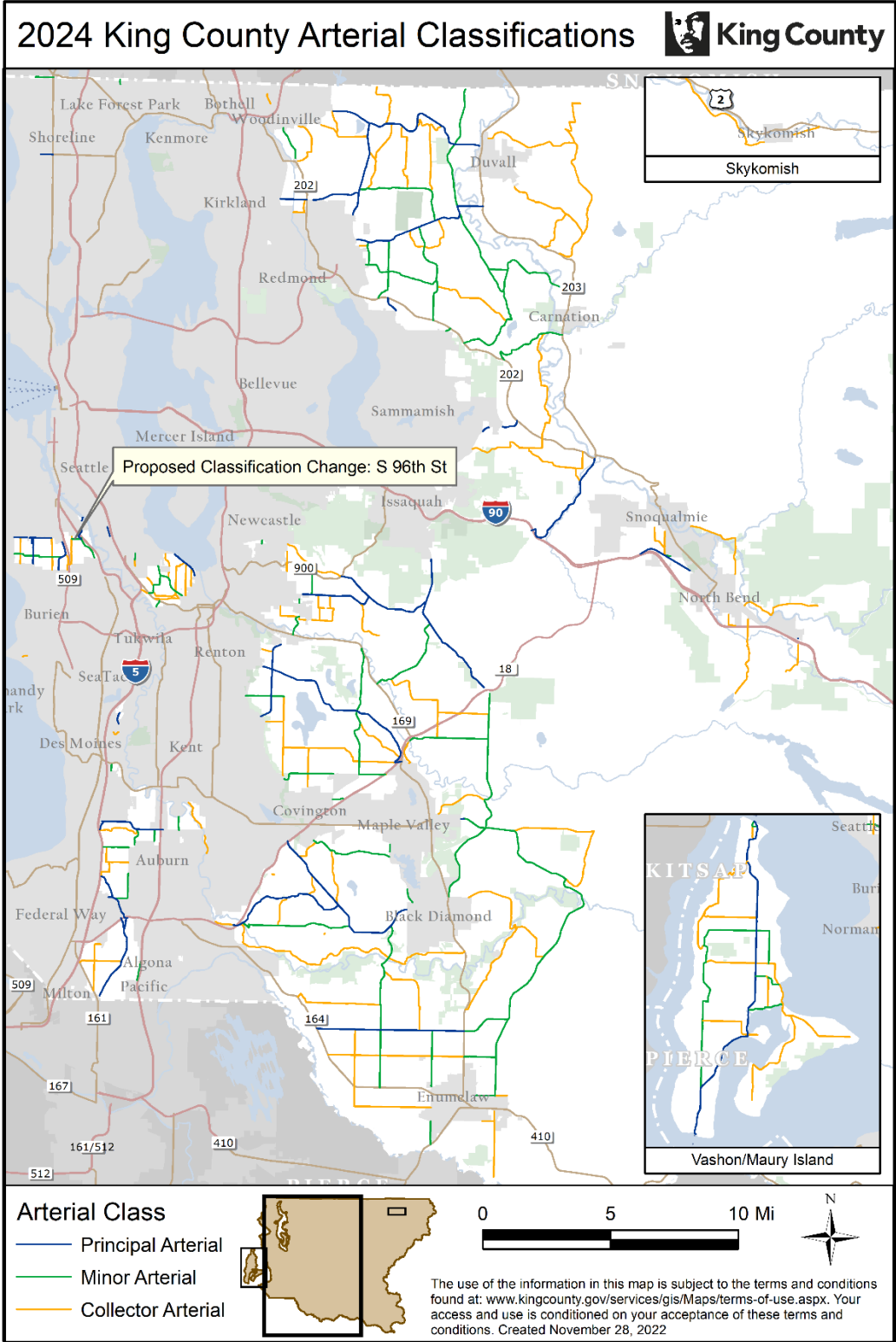
- Collector Arterials** - Provide for movement within smaller areas which are often definable neighborhoods, and which may be bound by arterials with higher classifications. Collectors serve very little through traffic and serve a high proportion of local traffic requiring direct access to adjacent properties. Collector arterials provide the link between local neighborhood streets (i.e. non-arterials) and larger arterials.

The current adopted Arterial Classifications with one proposed classification change is shown on the next page in Figure 1, “2024 King County Arterial Functional Classification Changes”; the proposed reclassification is described in Table 1 below.

Table 1. 2024 Proposed King County Arterial Functional Classification Change

Road	Limits	King County Arterial Functional Classification	
		Existing	Proposed
S 96th Street	8th Avenue S to Des Moines Memorial Drive S	Collector	Minor

Figure 1. 2024 King County Arterial Functional Classification Changes



III. Transportation Inventory

A. Introduction

1. Requirements

The Growth Management Act (RCW 36.70A.070(6)(A)) requires an inventory of air, water, and land transportation facilities and services, including transit alignments, and general aviation facilities, to define existing capital facilities and travel levels as a basis for future planning. The inventory must include state-owned transportation facilities within the unincorporated King County boundaries. This document fulfills this requirement by describing King County's multimodal transportation system and by identifying available resource materials.

2. Process

The County's approach to the inventory construction is that of reference, rather than collection. This approach will enable planners to evaluate inventory information and determine what data will best meet their studies' requirements. Even though the scope of the Comprehensive Plan Transportation Element is primarily focused on unincorporated King County, the scope of the Transportation Inventory is generally countywide.

3. Coordination

The regional coordination of land use and transportation is mandated by the Growth Management Act (RCW 47.80.010). King County has taken an active role in assuring a regionally coordinated transportation system. In cooperation with other central Puget Sound jurisdictions, King County is striving towards a regional approach to important planning issues such as level of service, concurrency, locations of regional and countywide transportation facilities, financing, active transportation, and transportation demand management.

4. Organization

The inventory is organized into three categories—(1) an inventory of air transportation facilities and services; (2) an inventory of marine transportation facilities and services; and (3) an inventory of land transportation facilities and services.

B. Air Transportation System

The Growth Management Act requires an inventory of the air transportation system to define existing capital facilities and travel levels as a basis for future planning. The air transportation system plays an important role as part of the regional and national transportation network because it provides for quick and efficient intrastate, interstate, and international travel of passengers and cargo.

King County public-use airports represent an essential element of the county's transportation system and provide critical support to the King County economy. Sixteen airports are located within King County. The King County airports span a broad range in terms of scale and role, from the Port of Seattle, Seattle-Tacoma International Airport to King County International Airport-Boeing Field, to seaplane facilities and small privately owned airstrips. The King County airport inventory consists of public use and privately owned airport facilities which are open to the public.

The Puget Sound Regional Council (PSRC) *2011 Air Compatible Land Use Program Update Study*, included a wide variety of activities related to planning and support for the central Puget

Sound region's public use airport system. Program activities were included such as airport ground access planning, regional air cargo planning, cooperative efforts with the Washington State Department of Transportation (WSDOT) Aviation Division in planning for long-range airport capacity, and ongoing efforts to address airport compatible land use under the PSRC's Growth Management Act (GMA) authority. WSDOT released an update to the state Aviation System Plan in July 2017.

King County International Airport will begin an airport master plan update in 2023.

C. Marine Transportation System

The Growth Management Act requires an inventory of the marine transportation system to define existing capital facilities and travel levels as a basis for future planning. The marine transportation system plays an important role in the movement of people and goods within King County, supplying the main commuter link between Seattle's central business district and the west Puget Sound corridor and serving as the hub network for local, regional, and international freight movements.

The marine passenger transportation system serves the entire Puget Sound region from Tacoma to Sidney, British Columbia. The facilities that serve King County include ferry terminals and vessels servicing ferry routes. Ferry services are provided by Washington State Ferries, King County Marine Division, and Kitsap Transit. Other passenger-only ferry operators, such as Argosy and FRS Clipper, offer more recreational and travel-related services.

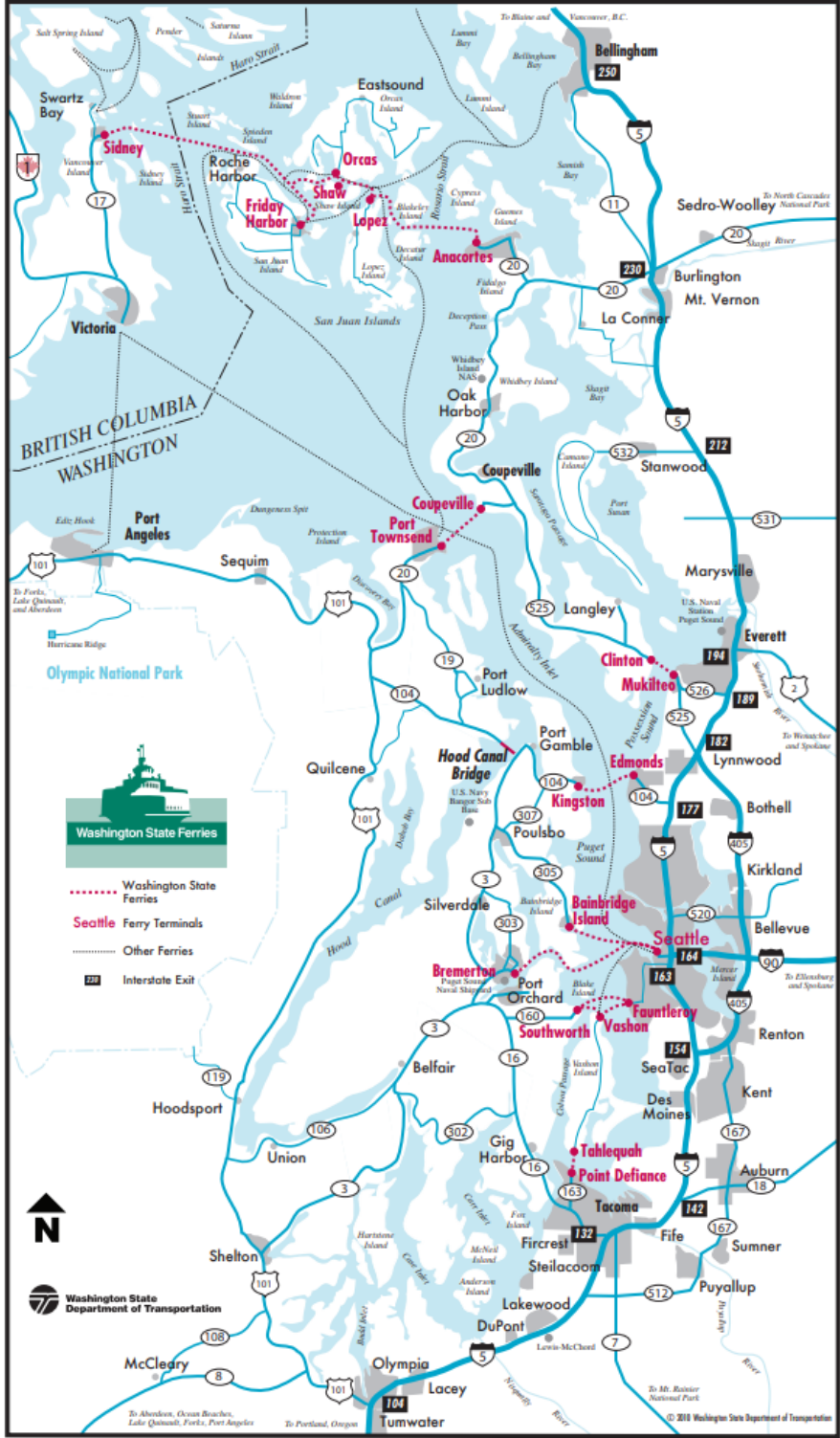
Passenger ferry services provide reliable transportation as regional waterways are not subjected to the typical congestion of the roadway network. As population increases and the demand for additional transportation options grow, more communities are evaluating passenger ferry services as part of the solution. Kitsap Transit has implemented three passenger ferry routes from Kitsap County to downtown Seattle over the past few years. The cities of Tacoma and Des Moines are studying routes from the south Sound to downtown Seattle, including a pilot program to test interest in additional Puget Sound service. Studies are also underway to evaluate possible passenger ferry service on Lake Washington and Lake Union.

1. Washington State Ferries

Washington State Ferries, established in 1951, is the largest ferry system in the United States, and the second largest in the world. The system includes 20 terminals and 21 vehicle ferries, carrying over 24.5 million passenger and vehicle trips annually (before the COVID-19 pandemic). A vehicle reservation system (on select routes) spreads demand and reduces capital improvement costs associated with traffic control.

Washington State Ferries provides service to 20 communities in eight counties, including King County. The vital system functions as both a marine highway and as a transit service provider. Washington State Ferries provides frequent mainland access to several island communities, including Vashon Island in King County, Bainbridge Island in Kitsap County, Whidbey Island in Island County, and San Juan, Orcas, Lopez, and Shaw Islands in San Juan County. Washington State Ferries takes people to and from work in the downtown Seattle business corridor and to other communities on the east and west sides of Puget Sound.

Figure 2: Washington State Ferries Route Map¹



¹ Washington State Ferries, Route Map, [LINK](#) (accessed October 24, 2022).

2. King County Metro Transit Department Marine Division

The King County Metro Transit Department Marine Division is responsible for the operations, moorage, and maintenance of the vessels that provide passenger-only ferry services in King County. Passenger-only ferry services are currently provided between downtown Seattle, Vashon Island, and West Seattle.

The Marine Division operates out of three terminals: Pier 50 in downtown Seattle is home to a King County owned ferry terminal and is a part of the Colman Dock multimodal hub; the ferry dock on Vashon Island is leased from Washington State Ferries; and the West Seattle ferry dock, located at Seacrest Park, is leased from the Seattle Parks Department. The King County Marine Division owns a moorage and maintenance barge located at Pier 48 on the Seattle waterfront.

The Marine Division owns three vessels: the MV Sally Fox, the MV Doc Maynard, and the MV Spirit of Kingston. The MV Sally Fox and MV Doc Maynard were constructed for the Marine Division in 2014 – 2015 and are each certified for a capacity of 278 passengers. The MV Spirit of Kingston is a 150-passenger vessel and is used to back up the two in-service vessels. Each vessel operates with a crew of three.

In 2019, King County’s Water Taxi provided service for over 700,000 passengers (pre-pandemic) system-wide. Water taxi ridership declined with the pandemic, as did ridership on other Metro services, but is recovering. As of September 2022, there were more than 334,000 boardings in 2022.

Figure 3: King County Water Taxi Route Map



3. Kitsap Transit Fast Ferry

Kitsap Transit launched its passenger-only ferry service in 2017, following voter approval of a dedicated sales tax for passenger-only ferry service. Today, Kitsap Transit operates Kitsap Fast Ferries year-round connecting Seattle to Bremerton, Kingston, and Southworth on the Kitsap

Peninsula. All three routes connect to Pier 50 in Seattle and coordinate landings and departures with the King County Marine Division. Kitsap Transit operates weekday service during peak commute hours and on Saturdays, typically from May through September. The service area of the Seattle-Bremerton ferry route is extended through two connecting two Local Foot Ferry routes; these routes connect Bremerton to Port Orchard and Annapolis, and are heavily used by workers at the Puget Sound Naval Shipyard in Bremerton. Both Local Foot Ferries operate year-round; the Port Orchard Foot Ferry operates seven days a week, while the Annapolis Foot Ferry operates on weekdays only.

Although King County’s Pier 50 dock was designed to serve two vessels at a time, it currently serves five passenger-only ferry routes (three operated by Kitsap Transit and two operated by King County). To support current service levels and future growth, Kitsap Transit initiated the Seattle Fast Ferry Terminal Project to analyze alternatives in 2020. The project is working with various Seattle waterfront partners, including local, state, federal and tribal governments. The goal of the project is to identify a suitable location for Kitsap Transit’s existing fast-ferry routes that allows for potential future routes.

Kitsap Transit owns its Bremerton passenger-only ferry dock and leases its Kingston dock from the Port of Kingston. Vessels for those routes are moored at these docks when not in service. For the Southworth route, Kitsap Transit moors its primary vessel at its Bremerton dock and shares use of the Southworth dock with Washington State Ferries. Kitsap Transit and Washington State Ferries are jointly pursuing development of a second landing site at Southworth.

Figure 4: Kitsap-King County Ferry Routes. Kitsap Transit Fast Ferry Routes shown in solid black. Washington State Ferry routes to Seattle and Kitsap Transit foot ferry routes from Bremerton to Port Orchard and Annapolis shown in dashed gray.²



² Kitsap Transit, Fast Ferry System Map [\[LINK\]](#) (accessed October 24, 2022).

4. Port of Seattle Marine Facilities and Services

The Port of Seattle plays a key role in the maritime sector in the Pacific Northwest. Through commercial fishing, cargo shipping, cruise tourism, recreational boating, maritime industrial development, and trade and tourism development, the Port of Seattle and local maritime industries make the region more globally competitive while directing investments toward economic development and environmental and community health. The Port operates or leases:

- Passenger cruise ship terminals: Smith Cove Terminal at Terminal 91 and Bell Street Terminal at Pier 66.
- FRS Clipper terminal: Victoria Clipper/Clipper Navigation fast ferry service at Pier 69.
- Fishing and commercial moorages, grain terminal: Fishermen’s Terminal; Maritime Industrial Center; Terminal 91; Terminal 18 dolphins; Pier 34 dolphins; and the north end of Terminal 46 and Terminal 86 Grain Terminal.
- Recreational boating marinas: Bell Harbor, Fisherman’s Terminal, Harbor Island, Salmon Bay, and Shilshole Bay.
- Conference centers: Bell Harbor Conference Center, World Trade Center, and facilities at Seattle-Tacoma International Airport
- Parks and monuments: Alki Park and Shoreline Habitat (formerly 8th Ave. Park/T18 Park), Bridge Gear Monument Park, Centennial Park, Duwamish River People’s Park and Shoreline Habitat (formerly T117), Jack Block Park, Jack Perry Park, Seattle Fisherman’s Memorial, Duwamish Village Park and Shoreline Habitat (formerly T105 Park), Duwamish Village Park and Shoreline Habitat (formerly T107 Park), and Duwamish Park and Shoreline Habitat (formerly T108/Diagonal Park).

5. Northwest Seaport Alliance Marine Facilities and Services

In 2015, the ports of Seattle and Tacoma formed a marine cargo operating partnership, the Northwest Seaport Alliance. The Alliance is the fourth-largest container gateway in the United States. It is a major center for containerized cargo, bulk, breakbulk, project/heavy-lift cargoes, automobiles, and trucks. It connects to the second-largest concentration of distribution centers on the West Coast. The Alliance has five containerized cargo terminals in the North Harbor (Elliott Bay/Duwamish River in King County), including: Terminal 5, Terminal 18, Terminal 30, Terminal 46, Terminal 115, and other industrial land and facilities.

D. Land Transportation System

This section includes a wide range of information and references for land transportation related facilities, services, and transportation demand management programs in King County. This information provides a foundation for the Comprehensive Plan transportation element and for future transportation planning.

1. Unincorporated King County Roads

King County maintains a detailed inventory of assets that comprise the county’s unincorporated roadway system. Physical features include information on pavement type, roadway and shoulder width, number of lanes, medians, retaining and sea walls, guardrails, sidewalks, and walkways. Administrative features include information such as the roadway’s functional classification, its comprehensive plan designation, and location in the urban or rural areas. The

unincorporated road system owned and managed by the Department of Local Services Road Services Division includes the following asset inventory (numbers are approximate):³

- 1,467 miles of roadway
- 185 bridges, including several jointly owned with cities
- 275 miles of sidewalk
- 723 marked crosswalks
- 49,000 traffic control signs
- 79 traffic signals
- 58 traffic cameras
- 118 miles of protective guardrail
- 4.6 million feet of drainage ditch
- 3.5 million feet of drainage pipe

Pavement

Pavement deteriorates naturally over time. As it ages, the pavement and underlying road base become increasingly susceptible to the impacts of stormwater, weather and temperature changes, and growing traffic volumes. The Road Services Division monitors the condition of unincorporated King County roads by assessing and tracking pavement condition over time. Roads conducts regular field assessments of all roadways to visually determine the condition of the pavement using the County Road Administration Board visual data collection system. Arterial roads are inspected every two years and local roads are inspected every three years. For more information on the Pavement Management System, contact the Road Services Division.

Bridges

The Road Services Division owns and maintains 185 bridges in the unincorporated area of King County. Built over many generations, these bridges are made of concrete, steel, timber, or a combination of the three building materials. King County’s bridge inventory includes long span bridges (those over 20 feet in span length, which appear on the national bridge inventory), short span bridges, safety enhancement bridges that keep wildlife off roadways, and pedestrian bridges. King County’s bridge inventory includes:

- 181 vehicular bridges
- 3 pedestrian bridges
- 1 safety corridor bridge

An updated list of bridge needs is included in the Annual Bridge Report, which is prepared each year by the Road Services Division to fulfill the requirements of Washington Administrative Code (WAC) 136-20-060. The Road Services Division is required to review and update its list of bridge needs for replacement/rehabilitation, seismic retrofit, and re-decking annually, preparatory to the Capital Improvement Program budgeting process.

Roadside Barriers (Guardrails)

One way King County promotes safety on county-maintained unincorporated roads is by installing new guardrails, repairing existing barriers and rails, and upgrading older guardrails to meet current roadway standards. The unincorporated road network includes approximately 118

³ Based on best available data from fall 2022 inventory data. Data represents a point in time and can change slightly throughout the year.

miles of guardrail. More information on guardrails can be obtained by contacting the Road Services Division.

Traffic Control Devices

Traffic control devices are signals and information systems used to regulate, warn, or guide both vehicular and pedestrian traffic. These devices are placed on, over, or adjacent to a roadway, pedestrian path, or shared-use path. Examples of traffic control devices include traffic signals, signs, and pavement markings.

Safety

The Road Services Division produces an annual Traffic Safety Report. This report reviews collision trends within unincorporated King County in an ongoing effort to reduce the number and severity of collisions. The report is intended to provide critical information that can be used to better allocate limited safety funds, increase driver awareness of safety concerns, and improve the safety of the traveling public.

Maintenance Facilities

The Road Services Division is responsible for enhancing and maintaining nearly 1,500 miles of paved roadway.

King County Heritage Corridors

In an effort to preserve the county's transportation history, King County has identified nine "Heritage Corridors" in unincorporated King County. These corridors represent King County's history through its most formative decades of development, from the 1870s through the 1930s. They touch on industrial, commercial, agricultural, and maritime themes. Identification of these Heritage Corridors helps the county maintain and operate its historic and scenic roads in keeping with their unique character.

The Heritage Corridors program also includes public education materials that enhance the public's travel experience and lead to a greater understanding and appreciation of the region's transportation history. The county also encourages adjacent private property owners to support the preservation of the corridors.

The identified Heritage Corridors are:

- Cedarhurst Road / Westside Highway, Vashon Island
- Dockton Road, Vashon-Maury Island
- Green Valley Road, Auburn-Black Diamond
- Issaquah-Fall City Road, Snoqualmie Valley
- Osceola Loop, Enumclaw Plateau
- West Snoqualmie River Road, Snoqualmie Valley
- West Snoqualmie Valley Road / Carnation Farm Road, Snoqualmie Valley
- Old Cascade Scenic Highway, Stevens Pass
- Old Sunset Highway, Snoqualmie Pass

2. State and Federal Highways within King County

Major Highways

The State Highways of Washington comprise a network of state highways, including all Interstate and U.S. Highways that pass through the state, maintained by the Washington State Department of Transportation. Four Federal Highways and twenty-three State Highway Routes

are located in King County. All state highways are designated by the Washington State Legislature.

Highways of Statewide Significance

Highways of Statewide Significance (HSS) include interstate highways and other state principal arterials that are needed to connect major communities in the state. The designation helps assist with the allocation and direction of funding.

Washington State Scenic and Recreational Highways

Washington's Scenic and Recreational Highways, as designated in RCW 47.39, are important access routes to some of the most scenic resources and best recreational destinations in the state. In King County there are approximately 100 miles of designated Scenic and Recreational Highways and 30 miles of designated Scenic and Recreational ferry routes. King County Scenic and Recreational Highways include portions of I-90 (Mountains to Sound Greenway), US 2 (Stevens Pass Greenway), SR 410 (Chinook Pass Scenic Byway), and SR 202 (Cascade Valleys Scenic Byway).

High Occupancy Vehicle System

The High Occupancy Vehicle (HOV) system is an important element of King County's and the region's multimodal transportation system. HOV lanes—also known as carpool lanes, commuter lanes, diamond lanes, or bus lanes—are reserved for vehicles containing at least a specified number of occupants (such as two or more) or for transit vehicles. Such lanes can be on highways, arterials, or metered entrance ramps to highways. They may be physically separated from other lanes or indicated with signage. Some operate only during certain hours. Other types of strategies that potentially promote higher vehicle occupancy include ridesharing programs, parking management, guaranteed ride home policies, and other employer-based programs. Coupled with the County's Transportation Demand Management program, HOV facilities are designed to help accommodate growth by moving more people in fewer vehicles, reducing the need for new road construction or major widening projects on the county's existing arterial system. Recent changes to the HOV system include direct access ramps to support Sound Transit's regional bus service, as well as freeway-to-freeway improvements to connect the system. The HOV system is a crucial part of the central Puget Sound area's highway system, carrying more than one-third of freeway travelers during rush hours.

3. Transit Services

Transit services in King County are provided by four public transit agencies and the City of Seattle. King County Metro Transit (Metro) provides most regular bus service, including RapidRide bus rapid transit, and flexible mobility options available to King County residents. Pierce Transit and Community Transit provide commuter bus services into King County urban centers including downtown Seattle, downtown Bellevue, the University District in northeast Seattle and Federal Way in South King County. Sound Transit provides regional high-capacity transportation throughout parts of King, Pierce and Snohomish counties through commuter rail (Sunder), light rail (Link) and a regional express bus system (ST Express). Link light rail and ST Express bus service within King County are currently operated and maintained by Metro Transit under contract to Sound Transit. The Seattle Department of Transportation provides streetcar service in and near downtown Seattle. This streetcar service is also currently operated and maintained by Metro Transit under contract to the City of Seattle.

King County Metro Transit

As the largest public transportation agency in the Puget Sound region, Metro is creating a world-class, integrated public transportation network. Metro serves customers with a wide range of mobility services including providing and funding bus, paratransit, vanpool, water taxi, and flexible services; and by operating the Seattle Streetcar, Sound Transit Link light rail, and Sound Transit Express bus services in King County. Metro operates more than 180 bus routes and has more than 7,400 bus stops (as of 2021). In 2022, Metro operated approximately 3.7 million annual service hours of fixed route and DART services (excluding Sound Transit services and flexible services).

In 2019, before the COVID-19 pandemic, Metro fixed-route services delivered more than 130 million passenger trips. Ridership declined during the pandemic, but is currently recovering. In 2021, Vanpool saw over 509,000 boardings, Access had more than 557,000 boardings, and fixed route (bus and DART) experienced more than 50 million boardings. As of November 2022, Metro is now serving five million riders per month as more people choose transit. As a mobility agency, King County Metro Transit moves people throughout King County. It is Metro's duty to provide mobility opportunities to all people in the county in a way that supports healthy communities, a thriving economy, a sustainable environment, and equity and access to opportunities.

In 2020, the King County Council adopted Metro's Mobility Framework, which was co-created with community leaders on Metro's Equity Cabinet. The Mobility Framework included guiding principles and recommendations for how Metro should center advancing equity and addressing climate change in its work. Metro then updated its guiding policies—the Strategic Plan for Public Transportation, Metro Connects (Metro's long-range plan), and Service Guidelines—to align with the Mobility Framework's recommendations. In 2022, the King County Council adopted the updated policies, which included a much stronger emphasis on equity and climate change. Metro's goal is to help align its funding, policies, and investments to deliver livable communities, a thriving economy for all, and a sustainable environment.

Metro Services

Metro offers a wide range of mobility services including providing and funding bus, paratransit, vanpool, water taxi, and flexible services; and by operating the Seattle Streetcar, Sound Transit Link light rail, and Sound Transit Express bus services in King County. Metro's fixed route bus services include RapidRide, frequent, express, and local service. More information about many of Metro's services is included below.

- *RapidRide* – RapidRide, Metro's arterial bus rapid transit network, launched in 2010. As of 2022, Metro operates six RapidRide lines throughout King County, with four more scheduled to begin service by 2026. RapidRide separates itself from standard bus service with high frequency (every 10 minutes during peak hours, every 15 minutes during off-peak periods), fewer stops, use of semi-exclusive lanes, and all-door passenger boarding and exiting. Metro is looking to the future to determine how to continue to provide quality service to King County residents and businesses. In 2021, the King County Council adopted an updated version of Metro Connects, the agency's long-range plan. Metro Connects calls for a significant expansion of the RapidRide program. By 2050, Metro plans to operate a minimum of 19 lines, providing this service to all areas of urban King County.
- *Flexible services* – Flexible services are transportation services that do not operate using a fixed route and are tailored to meet specific community needs. Flexible services

may or may not serve designated stops or hubs, depending on service design. Metro plans and provides a range of flexible services, with partner support, to parts of King County where the infrastructure, density, or land uses are not optimal for traditional fixed-route bus service and could benefit from new approaches and complementary services. Flexible services are an important part of Metro’s efforts to deliver transportation alternatives across King County in an equitable and sustainable way..

- *Access Paratransit* – Access Paratransit is Metro’s response to the Americans with Disabilities Act, which requires transit agencies to provide paratransit services for people who cannot use regular, fixed-route transit. It is a primarily van-operated, demand-responsive service with variable routes and schedules. Access provides trips to eligible people with disabilities who are unable to use Metro’s fixed-route or DART service. Passengers must apply and be found eligible to use Access service before making a trip. Access Paratransit vehicles are owned by Metro and operated and maintained by a third-party contractor.
- *Special and Custom Bus Service* – Metro provides special transit services for major community and sporting events in partnership with event sponsors.
- *Contract Services* – Metro serves as the operator for other transit services in Seattle and King County. Metro operates regional ST Express bus routes in King County, as well as light rail for Sound Transit. Metro operates the Seattle Streetcar lines for the City of Seattle.
- *Marine Service (Water Taxi)* – Metro runs King County’s passenger ferry service (water taxi). Passenger ferry service represents one component of the region’s transportation system and can provide fast and reliable connections in appropriate locations. Ferries serve as a supplement to the countywide transportation system in locations where it serves the network as well as, or better than, traditional fixed-route transit service. Service hours could be extended during summer and special events to accommodate rider demand. Section III.C.2 of this appendix includes more information about Metro’s marine services.
- *Service Connections* – Metro service connects to a wide range of other transportation services in King County, including bus, rail, ferry, and air travel hubs. Metro provides intermodal connections with Sound Transit Link light rail and Sounder commuter rail service, Amtrak rail service, Washington State Ferries, Kitsap Transit ferries, and Seattle-Tacoma International Airport. Metro also connects with other bus services including Sound Transit, Community Transit, Pierce Transit, and intercity bus service.

Metro Programs: Transportation Demand Management, Equity and Social Justice, and Partnerships

Metro offers many programs, products, and services to area employers, other organizations, and individuals to make transit accessible and affordable. These programs are designed to encourage behavior change to reduce reliance on single occupancy vehicle trips, vehicle miles traveled (VMT), and environmental impacts. Major Metro programs include:

- *ORCA Business Partnerships* – Employers can contract with Metro to provide ORCA cards as subsidized passes for their employees to access public transportation services, including bus, commuter rail, Link light rail, streetcar, ferry, water taxi, vanpool/vanshare, and guaranteed ride home services. Employers can select a comprehensive program or

a flexible package to suit their needs. Currently, Metro's ORCA Business Passport and ORCA Business Choice programs have more than 1,600 participating employers.

- *ORCA LIFT* – ORCA LIFT provides a discounted transit fare of \$1.00 per trip for residents who earn less than 200 percent of the federal poverty level and are between 19 and 64 years of age. At the end of 2021 there were 40,128 valid ORCA LIFT cards.
- *Human services bus tickets* – Metro subsidizes bus tickets annually for eligible human services agencies to purchase and distribute to the people they serve. Metro subsidizes 90 percent of the cost of the tickets, for a total annual subsidy of \$4 million. Human services agencies apply to participate in the program. During 2021, the 165 selected agencies distributed more than 983,500 tickets to people in need (Human Service ticket sales were lower in 2021 due to the COVID-19 pandemic)..
- *Commuter vans (vanpool/vanshare)* – The Metro Vanpool program groups five or more commuters to share a ride to work, using a Metro-supplied van. Vanshares are for shorter trips, intended to bridge the gap between public transportation (bus, train, water taxi, or ferry) and a final destination. Groups of five or more commuters share the ride to or from a public transit link or transit hub. Metro provides the van and rider support services, maintenance, insurance, fuel, tires, and training for a per-rider monthly fee.
- *Community Access Transportation Program* – The Community Access Transportation (CAT) Program expands mobility options for people with disabilities, older adults, and low-income populations by developing partnerships with community agencies and jurisdictions in King County. Metro provides vehicles and/or operating funds to assist community agencies in setting up their own transportation services.
- *Bicycle programs and facilities* – Metro supports bicycling in conjunction with public transportation by providing racks on every bus to accommodate three bicycles, racks on request for vanpools, racks for multiple bikes on passenger ferries, bicycle lockers at park-and-ride lots and transit centers, and information about getting around by bicycle. Bicycling is also included as a travel option in Metro incentive programs that encourage alternatives to driving alone. More information about bike parking is available in section III.D.4 of this appendix.
- *Home Free Guarantee* – Metro provides emergency taxi service for commuters who arrive at work without their personal vehicle (by transit, carpool, vanpool, bicycle, or walking) and have an unplanned emergency or unscheduled overtime. .
- *Job Access Reverse Commute Program* – The Job Access Reverse Commute (JARC) Transportation Program partners with social service agencies, community-based organizations, housing authorities, local jurisdictions, and employers to assist with transportation issues for low-income individuals.
- *In Motion Program* – In Motion enlists local businesses, organizations, and communities as partners to encourage people to register as participants and pledge to reduce car trips over a period of time as a challenge to change their behavior. Participants earn rewards for their reduced trips, including commute-based trips or everyday trips.
- *Just One Trip Program* – The Just One Trip (JOT) Program delivers campaigns in sync with planned Metro service restructures, onboarding of new or flexible mobility services, and major transit system expansions in the region such as the opening of new Link light rail lines. JOT campaigns focus on ensuring new and existing riders are aware of and

understand these service changes, how their trip may be adjusted, and what new services have become available to them. The campaigns encourage ridership recovery of lapsed transit riders and share the importance of utilizing the ORCA card transit fare system to ease the payment process and receive the best fare for any trip. Through campaign messaging, the JOT Program strives to help riders make the connection between how their mode choice for any trip—local or regional, personal or commute, peak or mid-day—has an impact on the environment, their health, community safety and quality of life, and incentivizes behavior change. The most recent JOT campaign was related to the opening of North Link/Link Line 1 in fall 2022; it reached thousands of riders in north King County and engaged 7,800 households in an incentive program to recover transit ridership.

- *Metro Youth Mobility Program* – The Metro Youth Mobility Program (MYMP) works to realize a future where youth access to transit is safe, easy, affordable, and convenient and where today’s young people become life-long transit riders. The MYMP is carried out in partnership with local school districts, school administrators, teachers, and community-based organizations to enhance youth access to transit and conduct education and outreach focused on building youth ridership. The MYMP also promotes the Free Youth Transit Pass implemented on September 1, 2022.
- *Ridership Recovery Program* – The Ridership Recovery Program focuses on partnership with community-based organizations and small/priority businesses to deepen Metro’s reach into populations currently served or employed by these entities, including essential and under-employed workers; people with low-incomes, limited-English proficiency, or disabilities; communities of color; and cash-paying riders. The goal is to build upstream capacity to maximize downstream impacts to enhance equitable ridership recovery where needs are greatest in King County and to increase enrollment in reduced fares programs for eligible populations.
- *Community Transportation Navigators* – The Community Transportation Navigators is a peer-to-peer transportation outreach and education program focused on identifying and reducing barriers for low-income and limited-English speaking communities to access transportation. Community Navigators are paid community liaisons who have existing connections to the communities they serve, speak the same language of those they engage, have similar lived experiences to those participating in the program, and have experience using public transportation.
- *Rideshare Online* - RideshareOnline.com provides free online self-serve ride matching services. The online system matches commuters interested in sharing rides in carpools, commuter vans, group biking, event travel, and with other parents transporting kids to school.

Metro Capital Facilities

Metro capital facilities include physical plants, rolling stock (buses and other vehicles), electrical trolley lines and substations, facilities such as park-and-ride lots and bus shelters, and roadway infrastructure developed in partnership with local jurisdictions, such as semi-exclusive bus priority lanes. Voter approved sales tax and federal grants are the primary revenue sources. On March 23, 2019, Metro ceased bus operations in the Downtown Seattle Transit Tunnel (DSTT), a 1.3 mile dual-bore transit-only facility with four stations. To accommodate the expansion of Sound Transit’s Link light rail service, the DSTT is now only served by light rail trains. The transfer of the DSTT and its stations was approved by the King County Council in

October 2022 and by the Sound Transit Board in November 2022. The Seattle City Council must affirm the transaction before it can be recorded by the County’s Recorder’s Office; these actions are anticipated to occur in early 2023. The transfer of the DSTT will streamline rail operations and maintenance to support near-term regional rail network expansion. King County Council in October 2022 and by the Sound Transit Board in November 2022. The Seattle City Council must affirm the transaction before it can be recorded by the County’s Recorder’s Office; these actions are anticipated to occur in early 2023. The transfer of the DSTT will streamline rail operations and maintenance to support near-term regional rail network expansion. Metro continues to operate service on the SODO busway, a transit-only roadway between S Spokane Street and Royal Brougham Way in Seattle.

- *Physical Plant* – Metro’s administrative offices are located at 201 South Jackson Street in downtown Seattle. Metro maintains seven operating bases located throughout the county, with two additional bases under construction. Metro purchased an additional base for Access paratransit operations in 2021. Metro has a variety of other physical facilities to support the provision of transit and ridesharing service. Major facilities include:
 - *Central Campus and SODO (Seattle)*
 - Atlantic/Central Bases, 1270 6th Avenue S, Seattle
 - Atlantic Maintenance, 1555 Airport Way S, Seattle
 - Central Maintenance, 640 S Massachusetts Street, Seattle
 - Ryerson Base, 1220 4th Avenue S, Seattle
 - Transit Control Center, 1263 6th Avenue S, Seattle
 - Employee Parking Garage, 1505 6th Avenue S, Seattle
 - Tire and Millwright Shop, 1555 Airport Way S, Seattle
 - Marketing Distribution Center, 1523 6th Avenue S, Seattle
 - Power Distribution, 2255 4th Avenue S, Seattle
 - *Campus & Eastside*
 - Bellevue Base, 1790 124th Avenue NE, Bellevue
 - East Base, 1975 124th Avenue NE, Bellevue
 - Vanpool Distribution, 18655 NE Union Hill Road, Redmond
 - *Tukwila*
 - South Base, 12100 East Marginal Way S, Tukwila
 - Interim Base, 12400 E Marginal Way S, Tukwila
 - South Annex Base, 11911 E Marginal Way S, Tukwila (opening in 2028 on the former site of the Training and Safety Center)
 - Training and Safety Center, 3401 S Norfolk Street, Seattle (leased facility)
 - South Facilities, 11911 E Marginal Way S, Tukwila
 - Component Supply Center, 12200 E Marginal Way S, Tukwila
 - *South Park*
 - Access Base, 8100 8th Avenue S, Seattle
 - *Shoreline*
 - North Base, 2160 N 163rd Street, Shoreline
 - North Facilities, 12525 Stone Avenue N, Seattle
- *Metro Fleet* – As of 2022, Metro’s fleet includes more than 1,400 fuel-efficient buses. The bus fleet includes 40- and 60-foot hybrid diesel-electric buses, electric trolleys, and battery electric buses. Metro also operates and maintains more than 100 Sound Transit buses. Metro’s fleet includes paratransit and DART vehicles, Rideshare vans and electric Metropool vehicles, and passenger ferries. Metro also has a fleet of

approximately 670 non-revenue vehicles to support service and operations, which consists of vehicles ranging from light duty vehicles, such as sedans and vans, to medium and heavy duty vehicles such as tow trucks and maintenance trucks.

- *Bus Stops and Shelters* – Metro’s transit system includes more than 7,000 bus stops. As of 2019, 62 percent of the population lived within one-half mile of frequent transit service, and 81 percent of jobs were within half mile of frequent service.
- *Park-and-Ride Facilities* – A park-and-ride facility is a lot or garage where people may park personal vehicles and catch a bus, light rail, train, vanpool, or carpool to reach their destination. Park-and-ride lots are built, owned, leased, and maintained by several different agencies. A park-and-ride lot can also serve as a park-and-pool lot, where individuals can rendezvous to form carpools and vanpools.

There are 115 park-and-ride facilities in the King County Metro area, with a total of 26,065 vehicle spaces (as of 2022). Metro, Sound Transit, and WSDOT own permanent park-and-ride lots within King County; Metro also leases spaces from a wide variety of agencies and organizations. Although there have been significant changes in park-and-ride usage patterns since the onset of the COVID-19 pandemic, Metro remains committed to implementing its permit parking fee program; this program was developed in 2019 and targets Metro-owned lots at or above 90% capacity.

- *Electric Vehicle Charging Equipment* – Fourteen Metro routes use electric trolley buses. To support the electric trolley bus network, Metro operates and maintains a network of overhead power infrastructure and 35 electrical substations to power the system. In addition, Metro has been testing battery-electric buses and developing the charging stations and power infrastructure necessary to charge them, with the goal of achieving a zero-emission fleet by 2040 or sooner.

Metro oversees a system of Level 2 light-duty vehicle chargers installed at multiple King County facilities. These chargers are located at public-facing park-and-ride lots and transit facilities, as well as internally-focused County facilities. Metro recently upgraded a number of these chargers at park-and-ride lots and other facilities to replace outdated equipment. Metro is currently focusing a major effort on installing chargers at its bases and facilities to support the phased electrification of its non-revenue vehicle fleets. Metro is also working to support its goal to electrify its bus fleet by 2035 by installing bus charging equipment at its bases. Metro has developed the South Base Test Charging Facility with bus charging equipment and will be installing bus charging equipment at Interim Base and South Annex Base as they are constructed. Metro is also planning for the conversion of its existing bases to electric operations to support a fully-electric bus fleet.

- *Capital Program* – The King County Capital Improvement Program funds capital projects help to maintain and improve transit assets and infrastructure. Metro has its own designated revenue sources and service areas. Metro’s Public Transportation Fund Capital Program provides for ongoing replacement of aging infrastructure and supports service delivery and expansion. The Capital Improvement Program focuses on maintaining existing infrastructure and systems, partnering with other regional transportation agencies, and providing the physical capacity needed to support projected service. A key priority for Metro is supporting the transition to a zero emissions fleet, with investments intended to support a fully zero emissions fleet by 2035.

Sound Transit

Sound Transit is a regional transit authority that plans, builds, and operates express buses, light rail, and commuter train services for the central Puget Sound Region so that people can get to where they're going, safely and economically.

ST Express Regional Bus Service

ST Express regional bus service includes limited-stop bus routes, partnerships with WSDOT to develop HOV direct-access projects, and a variety of community connection facilities including transit centers, access improvements, and park-and-ride lots. ST Express buses travel between major cities in King, Snohomish, and Pierce counties.

Sounder Commuter Rail

Sounder commuter rail uses diesel-powered locomotives and multilevel passenger coach trains that run on BNSF Railway Company freight tracks. Sounder trains share the tracks with freight trains and Amtrak passenger trains, using upgraded signals, switches, and street crossings. Trains travel between Lakewood and Seattle and between Everett and Seattle.

Link Light Rail

Link light rail is an electrically powered service that provides high-capacity transportation within the region's highest employment and transit ridership areas. Link light rail travels from the north Seattle Northgate station to the SeaTac Angle Lake station.

Future Expansion and System Integration

The regional mass transit light rail system, operated by Sound Transit, extends from Angle Lake to Northgate. Metro coordinates its services with regional system expansions to provide an integrated mobility network. For example, in 2021, Sound Transit opened three new Link light rail stations in north Seattle to extend the system from the University of Washington station to the Northgate Transit Center. Together with the opening of the Link extension, Metro implemented the North Link Connections Mobility Project to better serve the north Seattle, Shoreline, and North Shore communities.

Sound Transit is continuing to expand the system and open more stations in the mid-2020s and beyond. The Sound Transit 2 projects are currently scheduled to be completed by 2025. The Sound Transit 3 projects will be delivered between 2026 (bus rapid transit) and 2045.

Sound Transit services are integrated with the local bus routes operated by King County Metro so that all services support and complement each other. A 1998 Memorandum of Understanding between the two agencies established the basic principles under which a coordinated system will be planned and operated. Metro has adapted bus service to reflect the existing components of Link light rail, and is planning for future service restructures as additional segments of Link light rail are opened in the mid-2020s and beyond.

4. Active Transportation Facilities

Bicycle Parking at Transit Facilities

Bicycle parking and secure storage support ridership and overall mobility by increasing options for people to connect to bus service or to meet a carpool or vanpool. King County park-and-ride lots and transit centers have bicycle racks and/or bicycle lockers for people who travel by personal bike to meet transit service. Metro aims to reduce car travel to these locations by making it reliable to secure bicycles. As of July 2022, Metro provides secure bike parking at 29

locations, with a total of more than 250 spaces in a combination of leased and BikeLink on-demand lockers. In addition, regional partner Sound Transit provides more than 400 secure locker spaces at 20 locations within the King County portion of their service area. Sound Transit also offers secure bike cages at seven locations in King County with a total of more than 270 spaces. Both Metro and Sound Transit plan expansion of secure bike parking and/or replacement of older equipment in the next few years.

Regional Shared Use Path (Regional Trails) Network

The regional shared use path (Regional Trails) network extends broadly throughout the county, linking cities, other counties in the Central Puget Sound, and other regions of the state. The network reaches more than 30 cities in King County, and is used extensively for active transportation and recreation. King County government stewards approximately 175 miles of the 300-mile network of multi-purpose paved and unpaved shared use paths. Several cities, the Port of Seattle, and the State of Washington are responsible for the remaining portions.

Roadside Active Transportation Facilities

The Department of Local Services Road Services Division maintains active transportation facilities such as bicycle lanes, sidewalks, and shoulders on unincorporated county roads. The division provides crosswalks, signals, pavement markings, and signage to help facilitate safer active travel. The *2021 King County Road Services Division Americans with Disabilities Act Transition Plan* inventoried unincorporated county road pedestrian facilities and guides accessibility improvements to the existing network. The Transportation Needs Report, an appendix to this *Comprehensive Plan*, includes known and forecast active transportation needs on unincorporated King County roads.

5. Rail and Freight

Rail Facilities

The rail network in the state has four distinct types of rail services: freight, long distance passenger, intercity passenger, and commuter.

The Class I freight railroad system primarily serves the inland transportation component of the supply chain for large volumes of import and export cargo moving through state ports including the Port of Seattle. Two Class I freight railroads, the BNSF Railway and the Union Pacific Railroad, as well as 27 Class III (short-line) freight railroads operate through communities in Washington. There are no Class II freight railroads in Washington.

Amtrak provides long distance passenger rail service between Seattle and Chicago, Illinois (the Empire Builder) and Seattle and Los Angeles, California (The Coast Starlight). Ridership for both services declined from 2013-2019 but is expected to increase steadily through 2040. Amtrak provides intercity passenger rail service, known as Amtrak Cascades, along the I-5 corridor between Eugene, Oregon and Vancouver, British Columbia; the service is supported by WSDOT funding. The Cascades High-Speed Rail Program provides four daily round trips between Seattle and Portland, and one daily round trip between Seattle and Vancouver, B.C. There are two Amtrak Stations in King County, located in the cities of Seattle and Tukwila. Ridership has been largely level, with slight growth in 2018-2019. Ridership for intercity rail is expected to increase steadily, pending WSDOT service investments.

Sound Transit's Sounder commuter rail uses diesel-powered locomotives and multi-level passenger coach trains that run on BNSF Railway freight tracks. Sounder shares the tracks with

freight trains and Amtrak passenger trains, using upgraded signals, switches, and street crossings. Trains travel between Lakewood and Seattle and between Everett and Seattle. Sounder ridership grew from about 2.1 million riders in 2010 to 4.6 million riders in 2019 and is expected to grow significantly by 2040.

Other Freight Transport

Freight transport is a major function of the regional transportation system. Regional planning for freight is coordinated by the Puget Sound Regional Council and incorporated into the *2022-2050 PSRC Regional Transportation Plan*. The *Regional Transportation Plan* envisions an interconnected network of highways and streets, railways, deep water ports and waterways, and airports. It examines the current and future conditions and issues as the region looks to planning for a sustainable transportation system out to 2050. Key elements of the regional freight system include roadway corridors used for truck transport. WSDOT maintains a statewide Freight and Goods Transportation System (FGTS) which classifies the state's freight corridors by modes based on annual freight tonnage. Regional centerline miles by FGTS classification are included in the *Regional Transportation Plan*.