CITY OF SEATAC

TRANSPORTATION MASTER PLAN

SEPTEMBER 2024

ACKNOWLEDGMENTS

CITY OF SEATAC

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INTRODUCTION

INTRODUCTION

This introductory chapter describes the role of the Transportation Master Plan (TMP) in the overall transportation and land use planning processes and summarizes the process and analyses undertaken to arrive at the recommended future transportation network.

The City of SeaTac is expected to add 5,900 housing units, and 14,810 jobs by 2044 and will continue to focus growth in its Urban Center to meet state and regional growth planning mandates. In addition to growth concentrated in Urban Villages within the Urban Center, land use will also be intensified in Neighborhood Villages and Corner Store areas outside the Urban Center as part of the growth strategy defined in the Land Use Element of the City's Comprehensive Plan.

This growth strategy will require accompanying investment in transportation infrastructure to support the Complete Neighborhoods Concept. This Complete Neighborhoods concept envisions neighborhoods with goods, services, recreation, and employment opportunities found within one-quarter to one-half mile walking distance. Complete Neighborhoods should be connected to one another by multiple transportation modes, including walking, bicycling, and transit as well as driving. The transportation network in SeaTac will also need to support goods movement and provide access to the Seattle-Tacoma (Sea-Tac) International Airport as well as regional transit stations.

This TMP serves as the background report to the Transportation Element (TE) of the City's Comprehensive Plan. Both the TE and the TMP provide a long-range vision for the City's transportation system and are aligned with the land use vision, policies, growth strategy and forecasts developed for the Comprehensive Plan. This TMP provides detail on specific projects and programs as well as the analyses and processes used to identify needs. In contrast, the TE focuses more on vision, goals, and policies.

COMPLETE NEIGHBORHOODS FOR URBAN VILLAGES

As part of the City's growth strategy, Complete Neighborhoods are walkable communities with one-fourth to one-half mile access to transportation choices, diverse, affordable housing options, healthy food, neighborhood services and parks and open space.

DEVELOPMENT PATTERN

Promote mixed use pedestrian environments where public amenities and services can be efficiently and effectively provided.

This could include:

Walkable grid of formalized streets and pedestrian paths

Safe, comfortable, attractive sidewalks

Complete streets designed to accommodate multiple modes

TRANSPORTATION CHOICES

Direct and convenient access for all modes to local and regional transportation networks, especially high-capacity transit, all ages and abilities pedestrian and bicycle connections within and near village, and easy access to frequent transit.

PLAN PURPOSE AND PLANNING CONTEXT

The TMP is a guide for future transportation investments to ensure that projects and priorities are aligned with the growth strategy and vision for SeaTac expressed in the Comprehensive Plan: Access to Opportunity, Urban Villages, Complete Neighborhoods, Multi-modal Transportation, Housing for All, Economic Vitality, and Resilient Environment.

The TMP also plays an important role in the regional land use and transportation planning process. Transportation planning in Washington is required by the Growth Management Act which sets out certain requirements for Transportation Elements and Comprehensive Plans. Regional priorities and policies, including targets for growth in each city and transportation policies, are set by the Puget Sound Regional Council (PSRC). The Comprehensive Plan and Transportation Element must meet both state and regional requirements. Table 1 lists the elements required for transportation plans by the Growth Management Act.

TABLE 1: GROWTH MANAGEMENT ACT REQUIREMENTS FOR TRANSPORTATION PLANS

REQUIRED ELEMENT	TMP CHAPTER REFERENCE
An **inventory of transportation facilities** and services, including roadway, bicycle and pedestrian facilities, transit alignments and service, and general aviation airport facilities.	Roadways, Active Transportation, Transit
Level of service standards for all locally owned arterials and transit routes.	Roadways - Planning Standards, Active Transportation – Planning Standards
Traffic forecasts for at least 10 years based on the adopted land use plan.	Transportation System Performance
Analysis of **transportation demand** (existing and future forecasted) to provide information about the location, timing and capacity needs of future growth.	Transportation System Performance
Identification of **state and local transportation system needs** to meet current and future demand.	Roadways – Planned Roadway Projects
Identification of the **pedestrian and bicycle network** and listing of planned improvements for walking, rolling and biking.	Active Transportation – Pedestrian Needs Assessment, Bicycle Needs Assessment
Specific actions and measures for bringing locally owned transportation facilities or services that are below the established level of service standard into compliance.	Roadways – Planned Roadway Projects
A **multiyear financing plan** based on the needs identified in the comprehensive plan.	Funding and Implementation Strategies
Intergovernmental coordination, including an assessment of the impacts of the transportation plan and land use assumptions on state and adjacent local transportation facilities	Transportation System Performance

Source: Puget Sound Regional Council. Vision 2050 Planning Resources: Transportation Element Guidance, June 2023.

With the policy guidance from the Land Use, Urban Center, Neighborhood and Transportation Elements of the Comprehensive Plan, the TMP outlines the City's future transportation network. The TMP is both informed by more detailed studies and identifies the need for additional detailed studies and plans. These studies and plans recommended in the TMP focus on specific corridors, geographic areas, travel modes, communities, or issues, such as safety. The TMP is implemented with a six-year capital improvement program known as the Transportation Improvement Program or TIP. The TIP is also a requirement of the Washington Growth Management Act. Figure 1 illustrates the role of the TMP in the broader planning context.

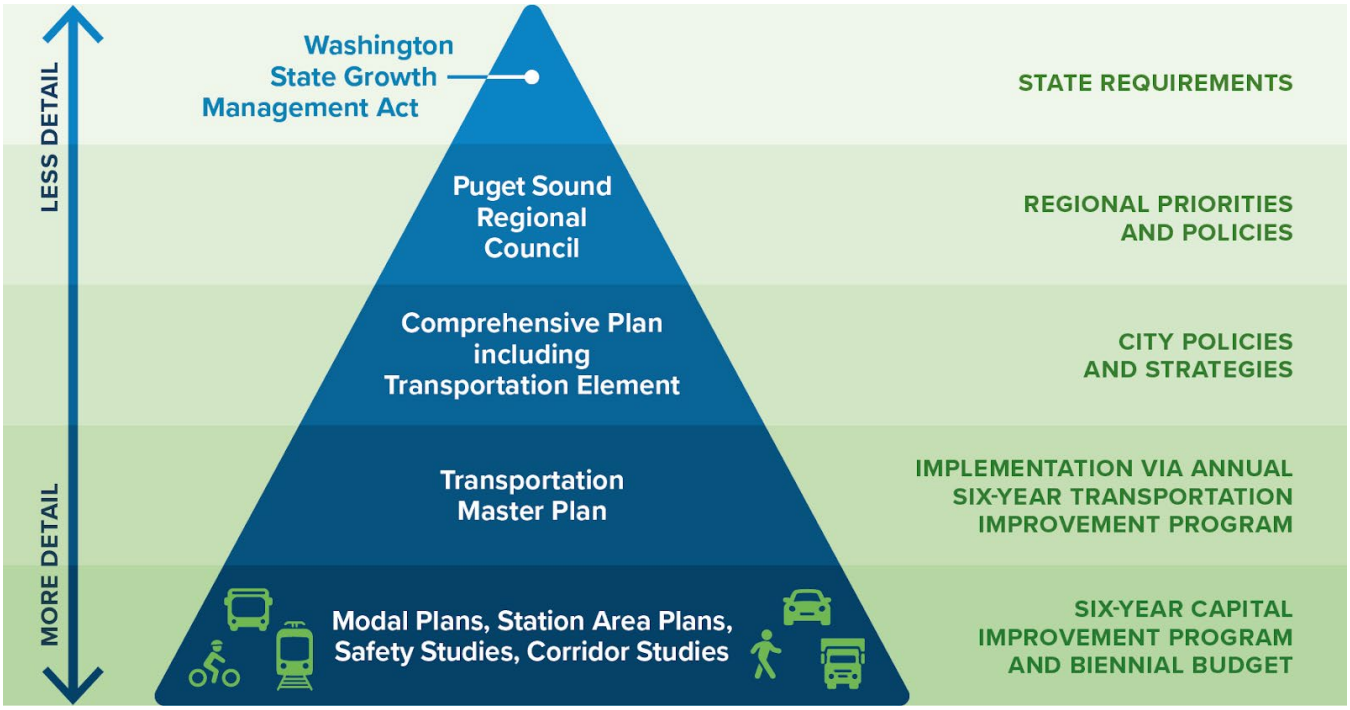


FIGURE 1: THE TMP IN THE PLANNING CONTEXT

PREVIOUS PLANNING WORK

The Transportation Master Plan builds on numerous plans and studies that have been completed in recent years[1]. These include:

- International Boulevard Pedestrian Safety Study
- Angle Lake District Station Area Plan
- S. 154th Street Station Area Plan
- ADA Transition Plan
- Permit Parking Program
- City Center Plan Update
- Military Road South Five-Way Intersection Study
- S 200th Street Corridor Study
- Local Road Safety Plan

[1] Existing Plans Summary, October 2023, DKS Associates.

PLANNING PROCESS

COORDINATION WITH COMPREHENSIVE PLAN

The TMP has been coordinated with the development of SeaTac's Comprehensive Plan update, Envision SeaTac 2044. Household and employment forecasts consistent with regional growth targets and the growth strategy defined in the Land Use element of the Comprehensive Plan were developed and used to prepare the multimodal travel demand forecasts that support the TMP. The goals and policies in the Transportation Element were updated to be consistent with King County Countywide Planning Policies and regional transportation policies. Goals and policies were also refined to address the overarching themes of the Comprehensive Plan and to support the goals of the Land Use, Urban Center, and Neighborhoods elements. The key themes of the comprehensive plan include:

- Access to Opportunity
- Urban Villages
- Complete Neighborhoods
- Multi-modal transportation
- Housing for All
- Economic Vitality
- Resilient Environment

The transportation goals of the Comprehensive Plan are summarized in the next section. Detailed policies may be found in the Transportation Element and throughout the Comprehensive Plan.

TRAVEL DEMAND MODEL UPDATE

As part of the TMP update, the travel demand model jointly maintained by the City and the Port of Seattle was upgraded. This newly calibrated travel demand model was built on the regional activity-based model (SoundCast) maintained by PSRC with additional geographic and network detail focused on the City of SeaTac. In addition, the sub-model used to represent travel to Sea-Tac International Airport was updated.

The "SeaCast" model was used to forecast the future travel demand associated with three alternative future land use scenarios. The basic growth scenario meets mandated housing and employment targets with growth focused in urban villages in the urban center. Two alternative scenarios build on the basic level of anticipated growth with added potential growth in outlying neighborhood villages and "corner store" service areas. Multimodal travel demand needs were assessed based on the most intensive future growth scenario.

For more information on the development of the travel demand model, please reference the *SeaCast Travel Demand Model Documentation*[2].

TRANSPORTATION SYSTEM GOALS AND POLICIES

Goals are broad statements of purpose that define intentions and set a vision, while policies are rules that outline objectives and actions to achieve those goals. The goals for the City of SeaTac's transportation system from the Transportation Element of the Comprehensive Plan are listed in Table 2. The Transportation Element includes the detailed policies and implementation strategies associated with each goal. The Land Use Element, the Urban Center Element and the Neighborhoods Element also contain goals related to multimodal transportation and connectivity to support the overall growth strategy and vision of the Comprehensive Plan. The goals from those Elements are listed in Table 3 with more detailed polices and implementation strategies found in those Comprehensive Plan Elements.

The metrics used to assess future transportation performance, the level of service policies applied in assessing project needs, and the prioritization rubric applied in the Implementation chapter are all built on this policy framework.

TABLE 2: TRANSPORTATION ELEMENT GOALS

	GOAL	THEME
7.1. Overall transportation goal	For the benefit of SeaTac's residents, businesses, and visitors, promote the safe and efficient transport of people and goods by implementing and maintaining an integrated multi-modal transportation system that also supports and encourages alternative and active transportation modes. Support the City's vision for growth by providing multimodal connectivity to, from, and between the Urban Growth Center and Neighborhood Centers while addressing the needs for freight transportation to and from the Industrial Centers.	AO, MT, EV, RE
7.2. Roadway Network and Connectivity	Serve all modes of travel with a street grid designed to support multi-modal access and connectivity throughout the city and into the region.	AO, CN, MT

[2] https://github.com/RSGInc/SeaCast/wiki

	GOAL	THEME
7.3. Arterial Roadways	Develop and maintain an arterial street and highway system that reduces the adverse impact of regional and airport traffic on City arterials, and cost-effectively improves safety for all travel modes, manages congestion to reduce delays and the impacts of traffic diverting through neighborhoods, and enhances the look and feel of the City.	AO, MT, EV
7.4. Neighborhood Streets	Design and operate neighborhood streets to maximize safety of all appropriate travel modes, reduce cut-through traffic, and enhance the look and feel of the City's transportation system in a cost-effective manner.	CC, MM, EV
7.5. Active Transportation	Plan for and develop a system of active transportation facilities for all users and all modes including pedestrians, transit users and bicyclists. Plan for users of all ages and abilities.	AO, UV, CC, MT, RE
7.6. Transit/Multi-modal/Transportation Demand Management	Encourage the use of transit and other High Occupancy Vehicle (HOV)/multi-modal travel modes to more efficiently accommodate a larger proportion of existing and future travel in and adjacent to the City of SeaTac to reduce the adverse impacts of driving alone and support Complete Neighborhoods.	AO, UV, MT, EV, RE
7.7. Parking	Manage parking supply and demand to best support the City's overall goals and objectives in balancing the desire to support alternative transportation modes, neighborhood livability and enhance economic development.	UV, CC, EV
7.8. Airport	Coordinate with local and regional agencies to support regional air transportation needs.	MT, EV
7.9. Program Financing and Implementation	Establish and maintain a consistent, sustainable, adequate, and equitable funding program to maintain, operate and improve the City's transportation system in a timely manner to support implementation of the City's Comprehensive Plan.	MT, EV
7.10. Intergovernmental Coordination	Actively coordinate with the Port of Seattle, WSDOT, and regional and local agencies to advance transportation projects and programs identified in this Transportation Element and in the Transportation Master Plan.	MT

AO = Access to Opportunity; UV = Urban Villages; CN = Complete Neighborhoods; MT = Multi-Modal Transportation; HA = Housing for All; EV = Economic Vitality; RE = Resilient Environment

Source: SeaTac Envision 2044.

TABLE 3: OTHER TRANSPORTATION-RELATED COMPREHENSIVE PLAN GOALS

COMPREHENSIVE PLAN ELEMENT	GOAL	THEME
Land Use Element Goal 2.2	Create complete neighborhoods citywide consisting of healthy, equitable, walkable, connected compact, transit-oriented communities with a range of transportation, employment, housing, recreation, goods, and service choices for residents of all income levels.	AO, CN, MT, HA, EV
Urban Center Element Goal 3.9	Provide a safe and efficient transportation system for all users within the Urban Center including motor vehicles, transit, bicycles, and pedestrians, while leveraging the transit-rich environment to increase mobility and equitable access to social and economic opportunities.	AO, UV, MT, EV
Urban Center Element Goal 3.10	Decrease the necessity of, and dependence on, single-occupancy vehicles in the Urban Center by promoting easily accessed non-motorized options of travel.	UV, MT, RE
Urban Center Element Goal 3.12	Design Urban Villages to be the highest density, urban living experience within the City, consisting of walkable, one-fourth to one-half mile access to transportation choices, with diverse and affordable housing options, healthy foods, neighborhood services, and parks and open space to local and regional residents, workers, and visitors.	AO, UV, CN, MT HA, EV
Neighborhoods Element Goal 4.1	Facilitate equitable access to opportunity citywide by promoting the development of complete neighborhoods throughout SeaTac that provide transportation choices, diverse and affordable housing types, healthy food, neighborhood-oriented services, and parks and open space within one-half mile walking distance of all residents.	AO, CN, MT, HA, EV

AO = Access to Opportunity; UV = Urban Villages; CN = Complete Neighborhoods; MT = Multi-Modal Transportation; HA = Housing for All; EV = Economic Vitality; RE = Resilient Environment

Source: SeaTac Envision 2044.

CHAPTER 2

EXISTING AND FUTURE CONDITIONS

TRANSPORTATION SYSTEM PERFORMANCE

This section describes current and forecasted future travel patterns within the City of SeaTac. The metrics reported were selected to reflect the themes and vision of the Comprehensive Plan. Mode share reflects the extent to which SeaTac residents and visitors have transportation choices (Multi-modal Transportation). Mode share also reflects support for a Resilient Environment by tracking the shift from private automobile transportation to more sustainable modes. Trip length and duration reflect Access to Opportunity by identifying whether low-income and transit-dependent travelers must travel further than the general population to access jobs, shopping, and social opportunities.

EXISTING CONDITIONS

EXISTING LAND USE PATTERNS

Land uses in SeaTac generate transportation activity. Much of the City's nonresidential land use lies within the Urban Center and the Sea-Tac International Airport is an important regional destination. The Urban Center follows the International Boulevard corridor throughout the City limits. The Urban Center is served by three light rail stations either within the city limits or nearby. Outside of the Urban Center, land uses are typically residential. Industrial land use is concentrated in three areas, one of which is located inside the Urban Center and two that are outside. Figure 2 depicts the Urban Center and industrial areas within the city.

MODE SHARE

Today, most trips in SeaTac are taken by automobile, including driving alone and riding as a passenger. SeaTac residents mostly commute to work via private automobile (about 85% of daily work trips), while walking and transit account for about 12% of daily work trips (See Figure 3).

The most recent estimates from the Census American Community Survey (ACS) are similar although the ACS accounts for working from home (Table 4).

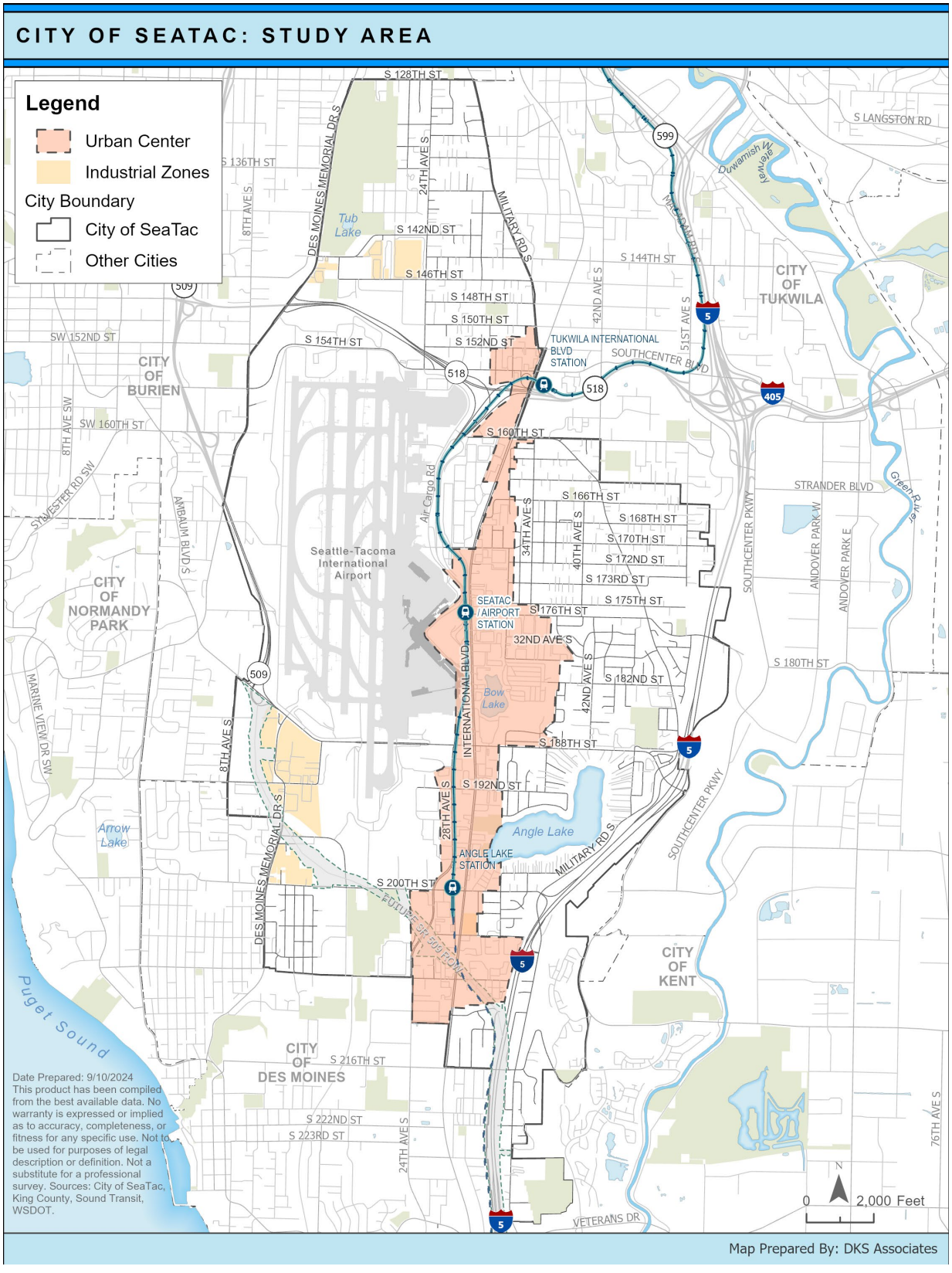
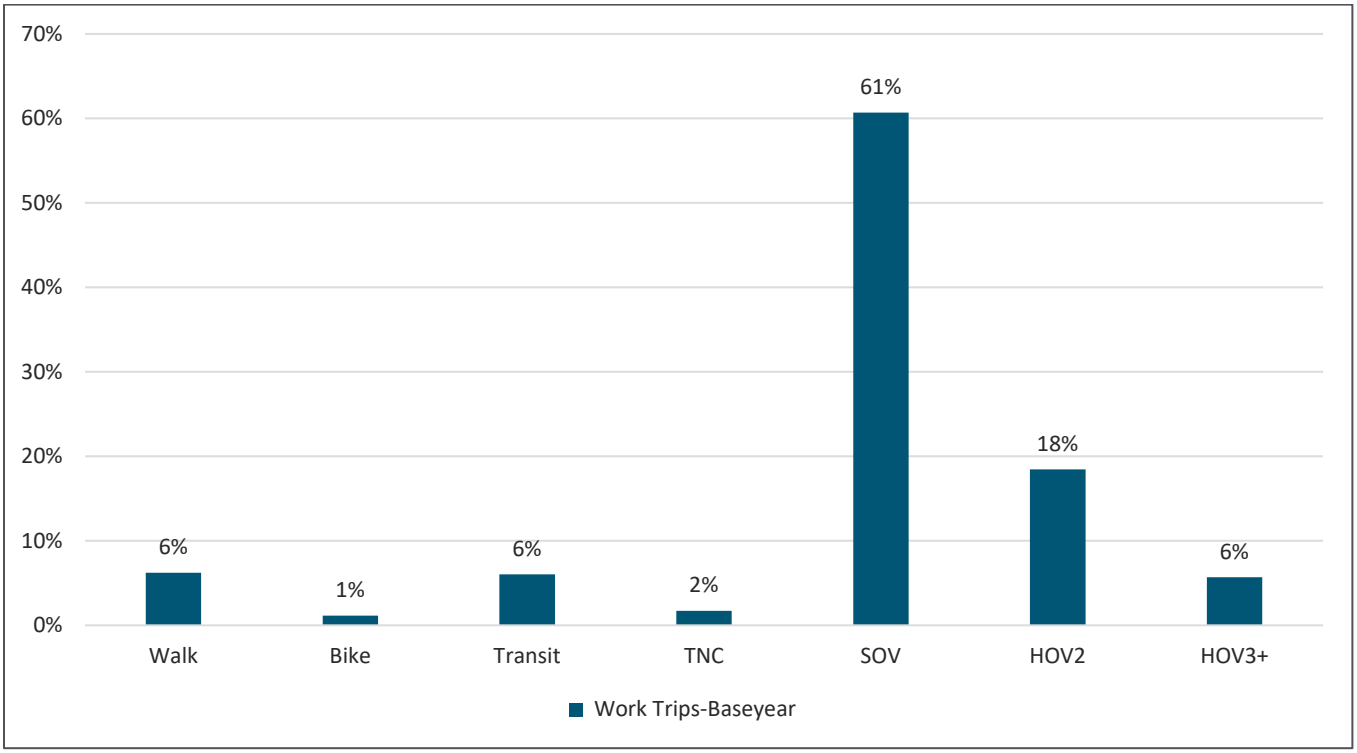


FIGURE 2: STUDY AREA



Source: SeaCast 2018, Base year model outputs.

FIGURE 3: ESTIMATED COMMUTE MODE SHARE FOR SEATAC RESIDENTS (2018 SEACAST MODEL)

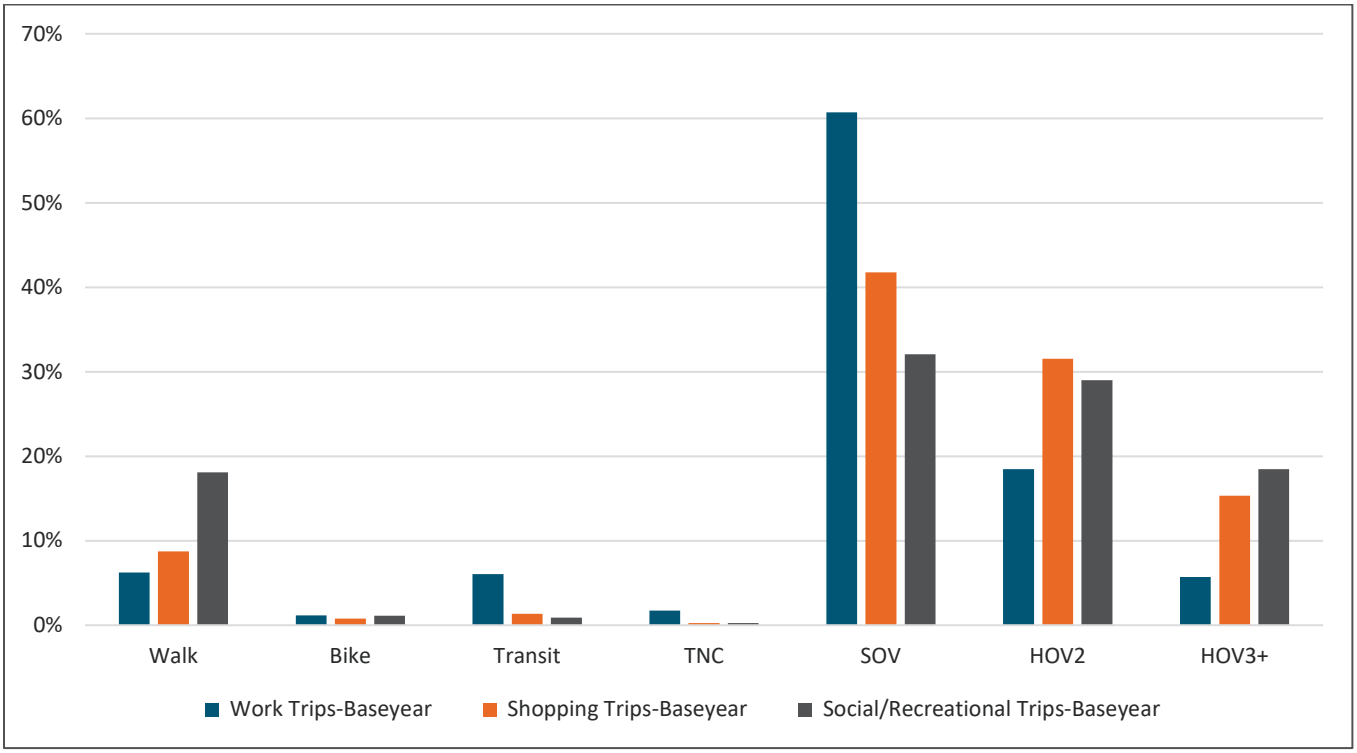
TABLE 4: MEANS OF TRANSPORTATION TO WORK

MODE	ESTIMATED TRIPS	MODE SHARE
Car, truck, or van:	11,608	76%
Drove alone	9,532	62%
Carpooled	2,076	14%
Public Transportation	1,251	8%
Taxicab	32	<1%
Motorcycle	36	<1%
Bicycle	0	<1%
Walked	760	5%
Other means	250	2%
Worked from home	1,384	9%

MODE	ESTIMATED TRIPS	MODE SHARE
Total	15,321	

Source: U.S. Census Bureau. "Means of Transportation to Work." American Community Survey, ACS 5-Year Estimates Detailed Tables, Table B08301, 2022. https://data.census.gov/table/ACSDT5Y2022.B08301?q=B08301&g=160XX00US5362288&y=2022. Accessed on August 16, 2024.

Considering all trip purposes, including shopping and social/recreational trips, private automobile travel is similarly dominant serving about 84%, on average, of all three trip types. Walking and public transit together account for about 14%, on average, of all three trip types (Figure 4); though walking trips are most common for social/recreational trips.



Source: SeaCast 2018, Base year model outputs.

FIGURE 4: TOTAL MODE SHARE FOR TRIPS MADE BY SEATAC RESIDENTS (2018 SEACAST MODEL)

TRIP LENGTH AND DURATION

The 2018 base year for the SeaCast model was used to estimate average trip lengths and trip durations for different trip purposes and by different population categories (low-income, transit-dependent, and all-resident). These trips are further split into two modes of travel: automobile or transit. These metrics help to determine the level of equity of SeaTac's current transportation system and to measure residents' access to opportunity.

The trip lengths and durations for work trips (commuters) of all population types are shown in Figure 5 and Figure 6 respectively. Trip lengths and durations for non-work trips (shopping or social/recreational trips) are shown for all residents in Figure 7 and Figure 8.

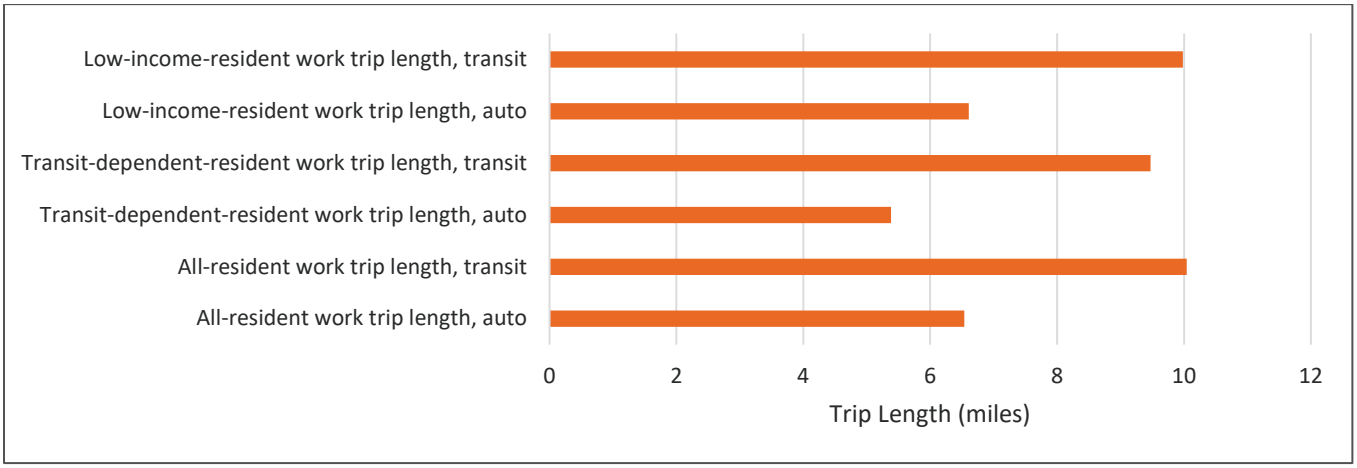


FIGURE 5: EXISTING SEATAC RESIDENT WORK TRIP LENGTH

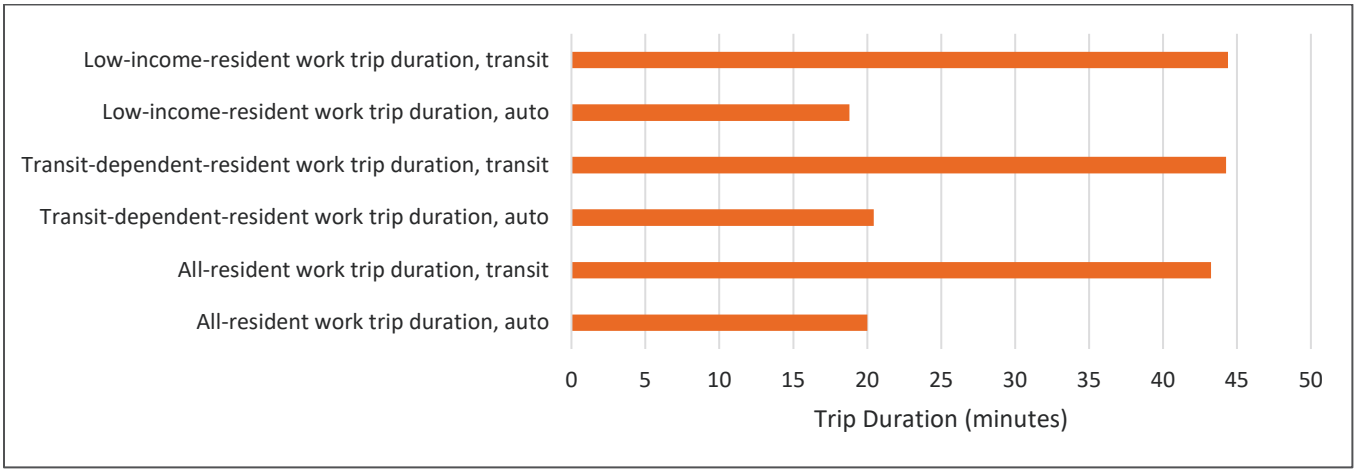


FIGURE 6: EXISTING SEATAC RESIDENT WORK TRIP DURATION

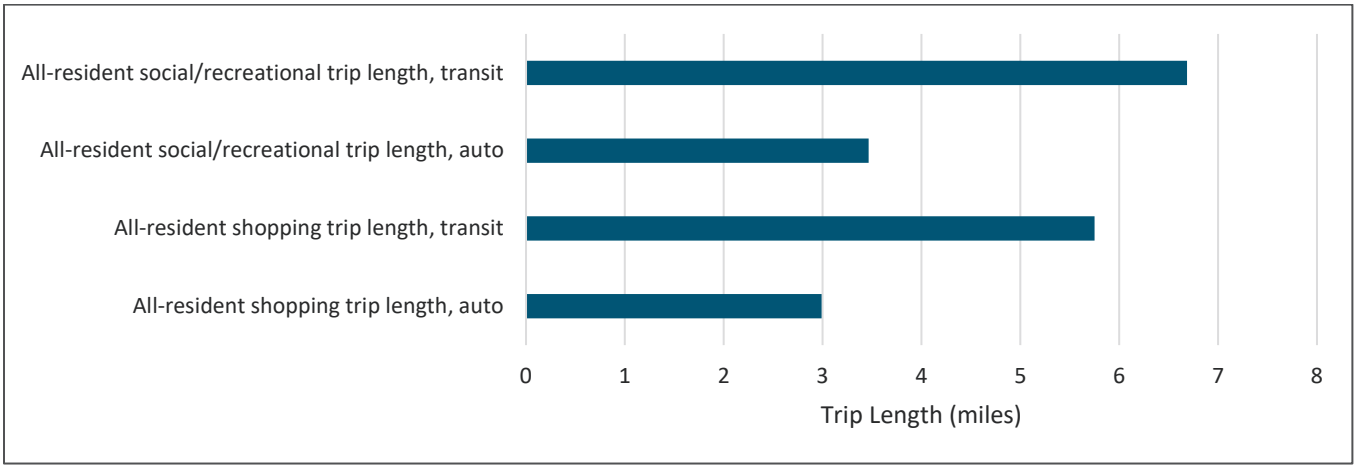


FIGURE 7: EXISTING SEATAC RESIDENT SHOPPING AND SOCIAL RECREATIONAL TRIP LENGTH

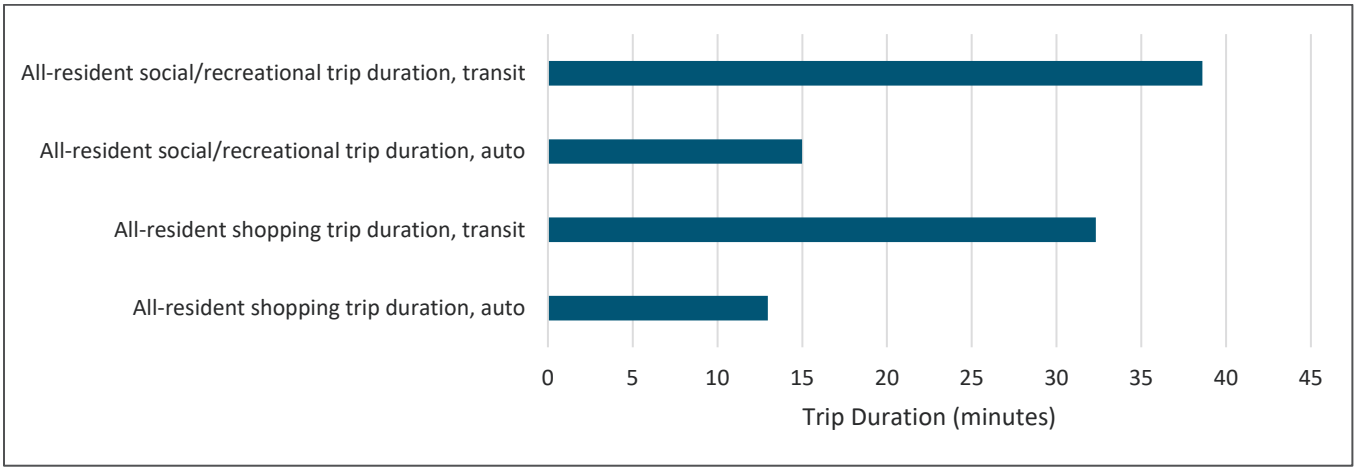


FIGURE 8: EXISTING SEATAC RESIDENT SHOPPING AND SOCIAL RECREATIONAL TRIP DURATION

As shown, there are not significant differences in trip lengths or trip durations for commuters who are low-income or transit-dependent when compared to all SeaTac residents on average. This indicates a high level of transportation equity.

Additionally, both trip duration and lengths are shorter for social/recreational trips than for work commutes. Shopping trips are the shortest trip type.

For all trip types and all population types, transit trips tended to be longer in both distance and duration than automobile trips. However, trip durations show a larger difference between transit and automobile trips than the difference in trip length, indicating that transit trips have a lower average speed than automobile trips.

FUTURE CONDITIONS

GROWTH ASSUMPTIONS

As documented in the Comprehensive Plan's Land Use Element, growth will be focused within urban villages, neighborhood villages, and smaller scale mixed use areas known as corner stores. The intent is to focus growth in these areas to support community health, equity, economic vitality, and citywide transit access – the development of Complete Neighborhoods. Figure 9 illustrates the areas of planned growth in SeaTac as defined in the Land Use Element.

Three different growth scenarios were considered for the future 2044 horizon year:

- Alternative 1: Meets mandated Housing and Employment Targets with growth focused in the Urban Center
- Alternative 2: Alternative 1 growth + Neighborhood Villages
- Alternative 3: Alternative 2 growth + Corner Stores and Neighborhood Corridors

Travel demand was evaluated for the most intensive alternative using the SeaCast model which assumed a version of Alternative 3 that was then further refined through the public outreach process. Under the modeled scenario, the city would add up to 8,194 housing units, and 15,060 jobs by 2044. These households and jobs included assumptions for the corner store locations which are not currently defined in the Land Use Element. This analysis produced not only the citywide travel statistics but also the traffic volumes reported in the Roadways section.

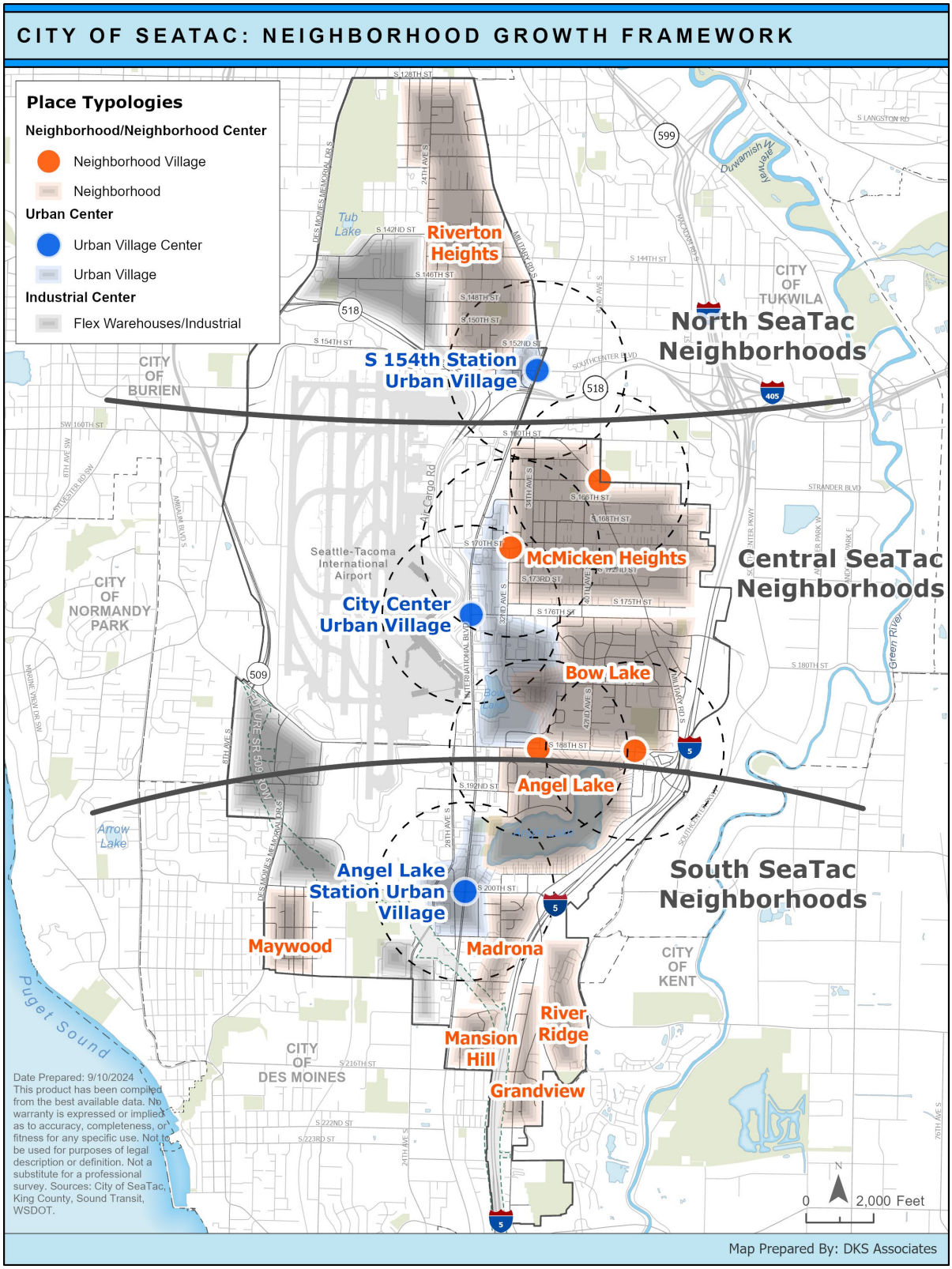
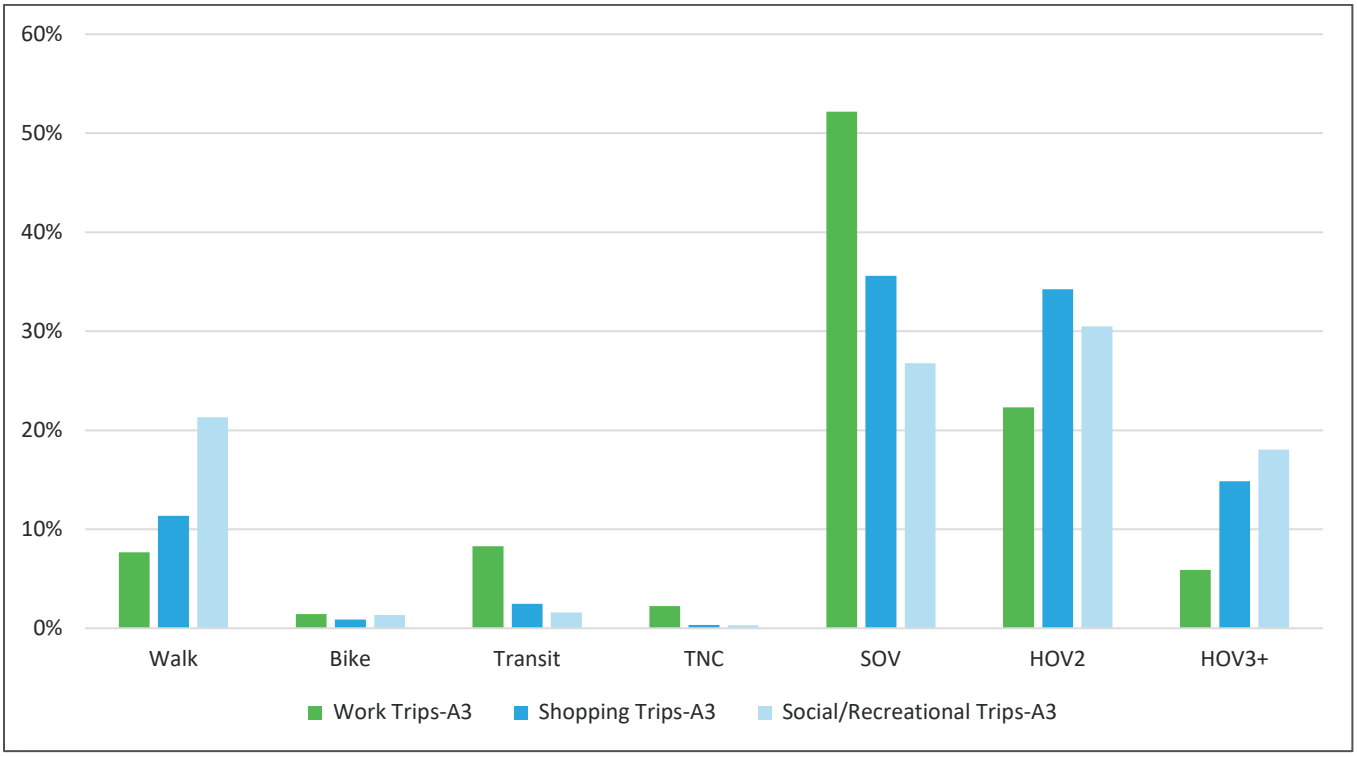


FIGURE 9: SEATAC GROWTH FRAMEWORK

FUTURE MODE SHARE

Although progress will be made, private automobile travel is forecasted to continue to be the predominant mode of transportation in SeaTac in 2044, as shown in Figure 10. Notably, the share of SeaTac resident work trips made by driving alone is expected to decrease from about 61% to 52%. The total private auto share of SeaTac resident work trips, including driving alone and carpooling, is expected to decrease from about 85% to 80%. Transit and walking's share of work trips will increase slightly from about 12% to 16% for SeaTac residents in the future.

Walking also is also forecasted to play an important role for shopping and social/recreational trips, accounting for just over 11% and 21% of these trips, respectively.



Source: SeaCast 2044, Alternative 3 model outputs.

FIGURE 10: SHARE OF DAILY TRIPS BY MODE FOR SEATAC RESIDENTS (2044)

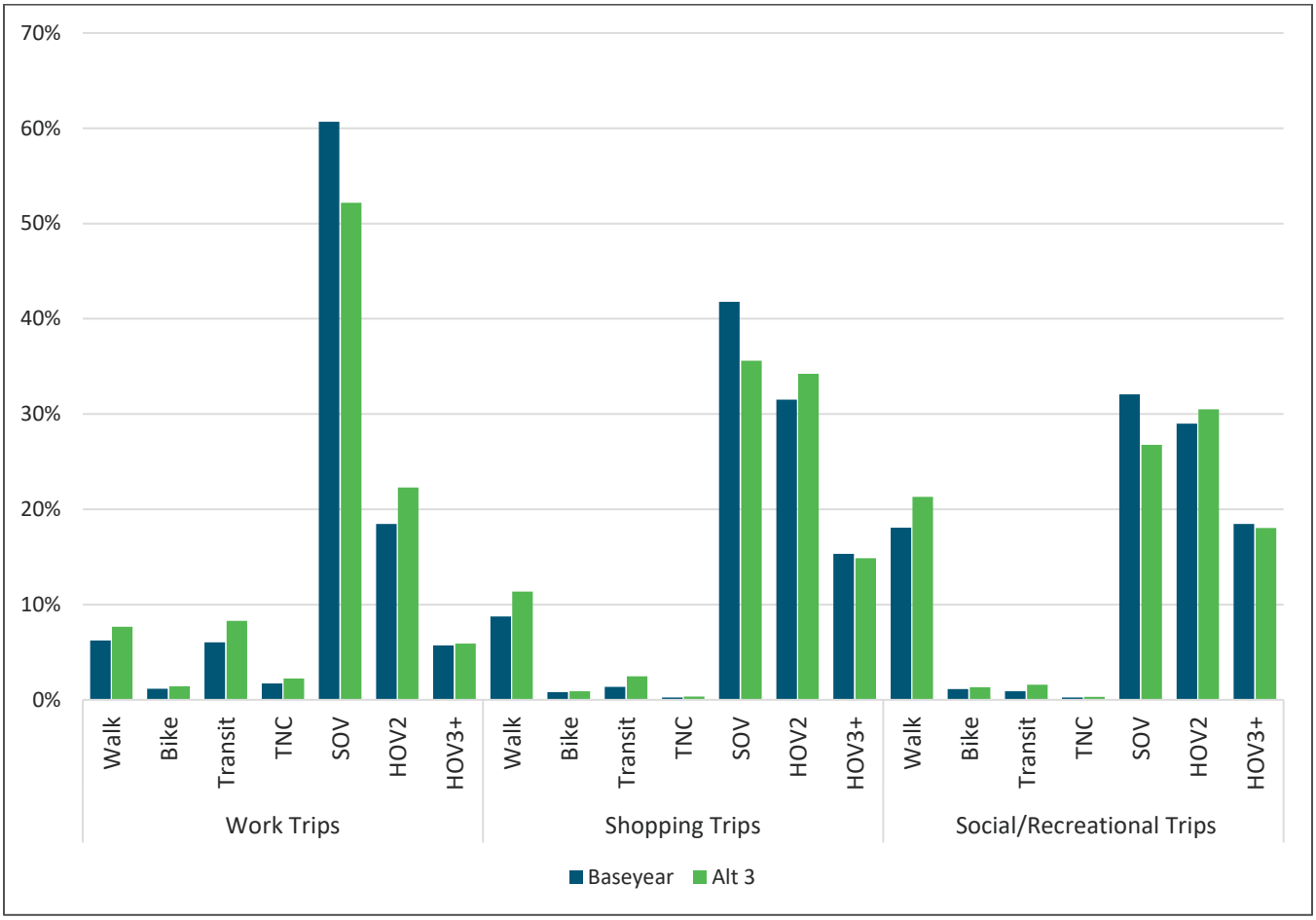


FIGURE 11: SHARE OF DAILY TRIPS BY MODE FOR SEATAC RESIDENTS (2018 VS. 2044)

As shown, walking, transit, and HOV2 travel modes increase their mode shares in 2044 compared to the base year for all trip types. Single-occupancy vehicle trips decrease for all trip types, most notably for work trips.

FUTURE TRIP LENGTH AND DURATION

Trip distance and duration were examined as proxies for Access to Opportunity. Figure 12 compares the existing (2018 Baseyear) and future (2044 Alternative 3) average work trip lengths taken by transit and automobile modes for all SeaTac residents against those of low-income and transit-dependent residents. Figure 13 compares existing and future average trip durations for these same populations.

A comparison of existing and future average trip distances and durations for shopping and social/recreational trips shows that transit trips tend to be longer than those made by auto (Figure 14 and Figure 15).

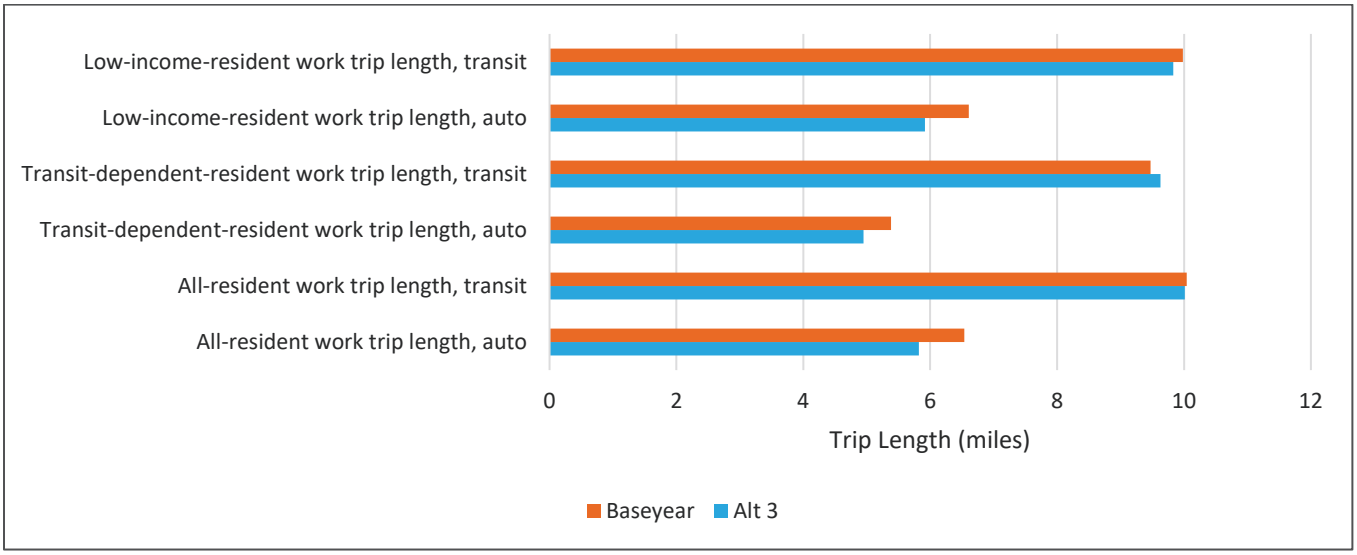


FIGURE 12: EXISTING AND FUTURE SEATAC RESIDENT WORK TRIP LENGTH

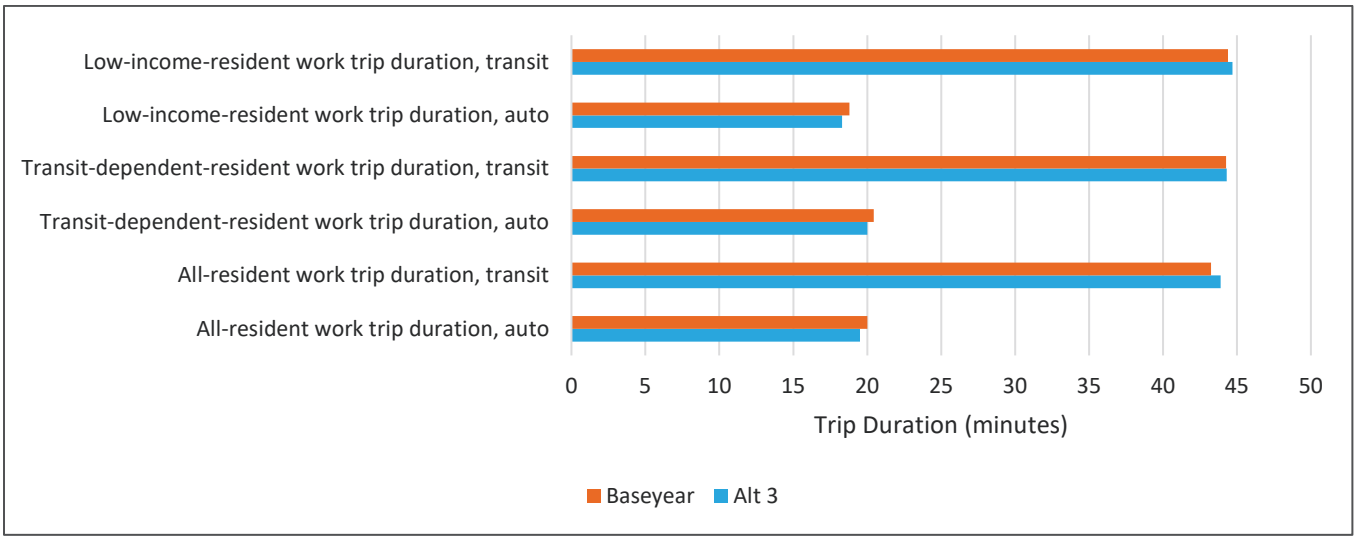


FIGURE 13: EXISTING AND FUTURE SEATAC RESIDENT WORK TRIP DURATION

Although work trips made by transit are longer than those made by automobile, trip lengths and durations do not appear to be significantly longer for transit dependent or low-income residents when compared to all SeaTac residents. Trip lengths and durations are shown decreasing for each population type for automobile trips, while transit trips do not show a clear trend.

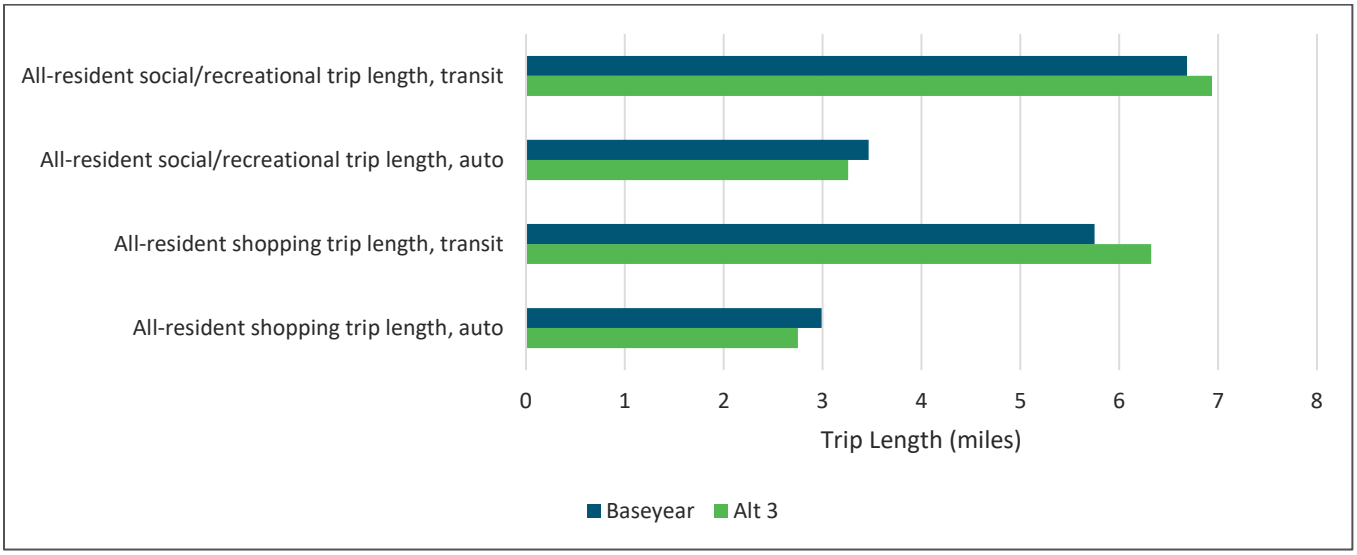


FIGURE 14: EXISTING AND FUTURE SEATAC RESIDENT SHOPPING AND SOCIAL RECREATIONAL TRIP LENGTH

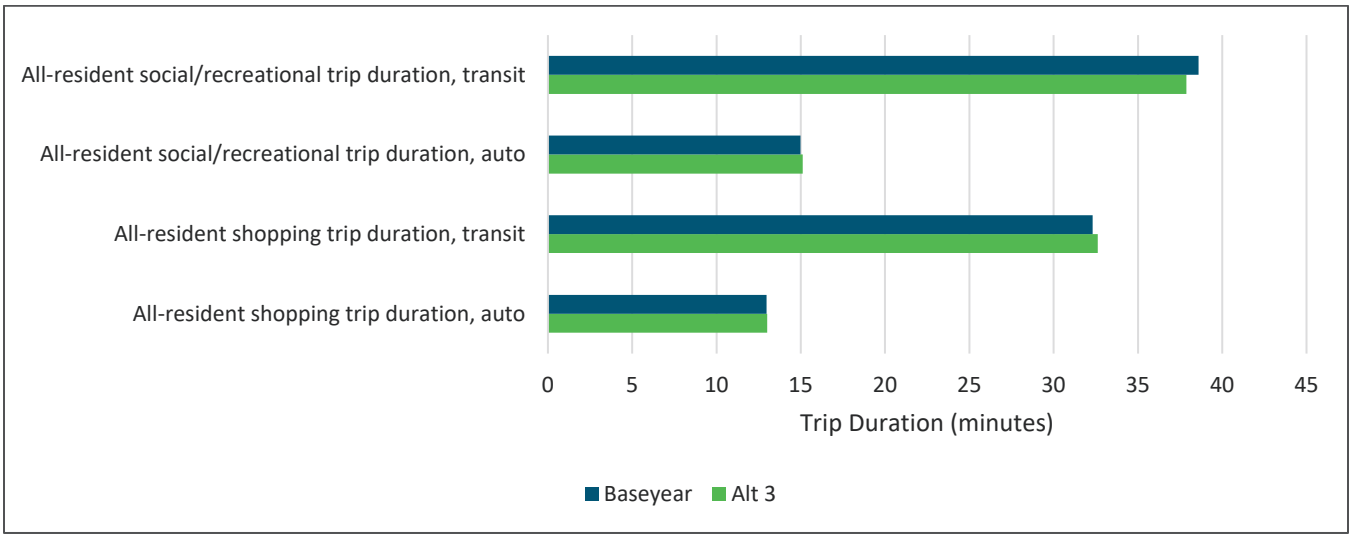


FIGURE 15: EXISTING AND FUTURE SEATAC RESIDENT SHOPPING AND SOCIAL RECREATIONAL TRIP DURATION

Similar to the base year results, the future results show no significant differences among trips taken by low-income, transit-dependent, and all SeaTac residents.

SAFETY

Data on crashes occurring on SeaTac roadways was analyzed to identify safety focus areas. Collision data was retrieved from the Washington Department of Transportation (WSDOT) Public Disclosure Request Center for a five-year period from 2018 to 2022 for all crashes within the city boundary. The data source and analysis methods paralleled those used for the 2022 City of SeaTac Local Road Safety Plan (LRSP)[3], identifying the roadway segments with the highest collision rates.

This section presents the key findings from the collision data analysis. For additional information, please refer to Appendix A.

KEY FINDINGS FROM THE SAFETY ANALYSIS INCLUDE:

1. Between 2018 and 2022, there were a total of **3,232** reported crashes, including **18 fatal crashes** and **73 suspected serious injury crashes.**
2. Approximately **58% of collisions** were identified as **intersection related.**
3. **24%** of pedestrian related reported crashes resulted in a **fatality or serious injury**.
4. **32%** of motorcycle related reported crashes resulted in a **fatality or serious injury**.
5. Of the 18 fatal crashes, **eight involved a pedestrian** and **six involved speeding**.

COLLISION SEVERITY AND OVERALL TREND

Figure 16 illustrates the crash history trend from 2018 to 2022. During this time, the annual number of crashes decreased by 38%, from 763 crashes in 2018 to 485 crashes in 2020. The significant drop in crashes could be explained by the impact of COVID-19 in 2020 when there was a significant reduction of traffic exposure. From 2020 to 2022, the annual number of crashes increased by 31%, almost returning to 2018 levels.

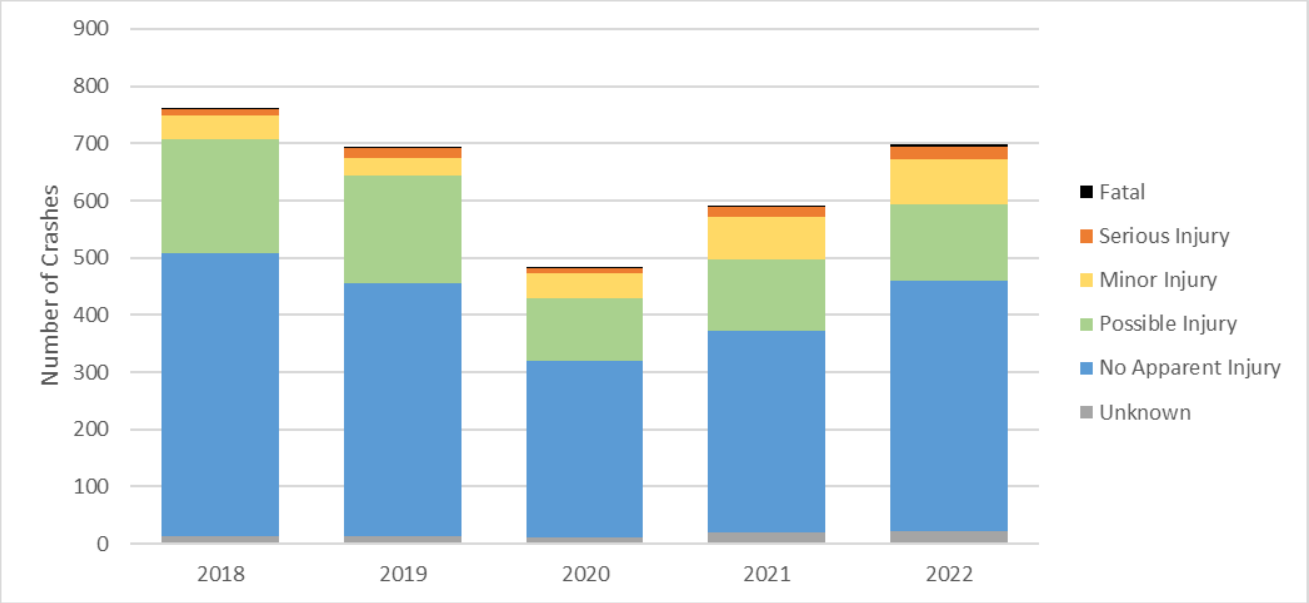
FATAL AND SUSPECTED SERIOUS INJURY CRASHES (KSI)

The WSDOT Safety Analysis Guide specifies how crashes are categorized by severity. The most severe crashes are commonly characterized as KSI (Killed or Seriously Injured). Figure 17 maps the location of KSI crashes occurring from 2018 through 2022.

During the five-year study period, there were 18 reported fatal crashes and 73 suspected serious injury crashes. The highest number of fatal crashes occurred in 2022, where three of the five fatal crashes involved speeding. The corridor with the highest number of KSI crashes is located along International Boulevard (SR 99). In particular, the areas surrounding four intersections along International Boulevard

[3] https://www.seatacwa.gov/home/showpublisheddocument/32435/637818965530470000, Accessed 9/6/2024.

including South 188th Street, South 200th Street, South 208th Street and South 216th Street, accounted for 24% of all KSI crashes.



Source: Washington Department of Transportation (WSDOT) Public Disclosure Request Center for a five-year period from 2018 to 2022 for all crashes within the city boundary (crashes occurring on I-5, SR 51, SR 509 and the Airport Expressway not included).

FIGURE 16: SEATAC CRASH HISTORY TREND (2018-2022)

Table 5 provides a summary of crash attributes for fatal and serious injury crashes. The most common attributes for fatal crashes include dark/dusk/dawn lighting conditions, intersection-related, pedestrian involved, and speeding. The most common attributes for serious injury crashes involved dark/dusk/dawn lighting conditions, intersection-related and drivers between the ages of 16 and 25. Overall, the attributes associated with the highest proportion of KSI crashes were pedestrian-involved (28 of 118 pedestrian crashes or 24%) and motorcycle-involved (10 of 31 motorcycle-involved or 32%).

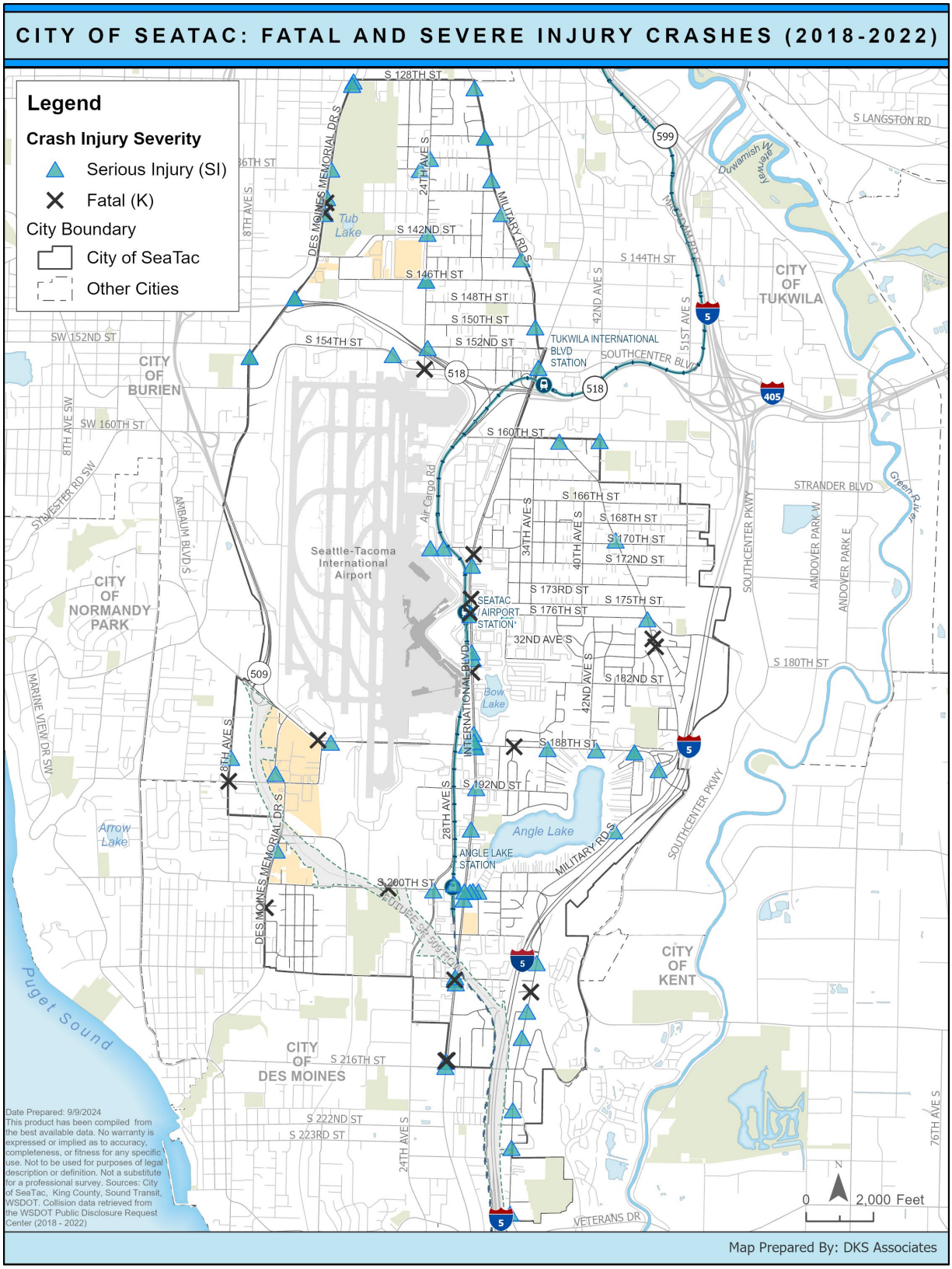


FIGURE 17: FATAL AND SEVERE INJURY CRASHES (2018 – 2022)

TABLE 5: SUMMARY OF KSI CRASH ATTRIBUTES

ATTRIBUTE	ALL CRASHES	NUMBER OF FATAL CRASHES	PERCENT FATAL CRASHES	NUMBER OF SERIOUS INJURY CRASHES	PERCENT OF SERIOUS INJURY CRASHES
Total	3,232	18		73	
Lighting Conditions (Dark, Dusk, Dawn)	1,274	12	67%	42	58%
Intersection Related	1,881	8	44%	35	48%
Pedestrian Involved	118	8	44%	20	27%
Speeding	300	6	33%	11	15%
Lane Departure	479	6	33%	16	22%
Unrestrained	82	5	28%	8	11%
Drivers Between Ages 16 and 25	959	4	22%	24	33%
Drivers Aged 65+	434	4	22%	3	4%
Distracted Driver	848	3	17%	17	23%
Alcohol or Drug Impaired	154	3	17%	13	18%
Hit and Run	760	2	11%	11	15%
Motorcycle	31	2	11%	8	11%
Cyclist Involved	14	0	0%	2	3%

Source: WSDOT Public Disclosure Request Center and DKS Associates.

PRIMARY COLLISION ATTRIBUTES AND HIGH COLLISION LOCATIONS

The top five intersections and corridors were ranked by the number of risk factors listed below and are mapped shown in Figure 18. A location received a "point" for a risk factor if it experienced a relatively high frequency of crashes with that attribute compared to the rest of the City of SeaTac roadway network.

Primary Collision Attribute Patterns

Vulnerable User (Pedestrian or Bicyclist Involved)		Dark/Dusk/Dawn Lighting Conditions		Entering at Angle Collision Type		Speeding	
33% of KSI crashes involved a pedestrian or bicyclist.	**4%** of total crashes involved a pedestrian or bicyclist.	**59%** of KSI crashes occured during dark/dusk/dawn lighting conditions.	**4%** of total crashes occured during dark/dusk/dawn lighting conditions.	**18%** of KSI crashes involved at least one vehicle entering an angle.	**27%** of total crashes involved at least one vehicle entering an angle.	**19%** of KSI crashes involved at least one vehicle speeding.	**9%** of total crashes involved at least one vehicle speeding.

The top five high collision intersections include:

- International Boulevard and South 188th Street
- International Boulevard and South 176th Street
- International Boulevard and South 154th Street
- International Boulevard and South 200th Street
- International Boulevard and South 216th Street

The top five high collision corridors include:

- International Boulevard (From 152nd Street to South 216th Street)
- South 188th Street (Des Moines Memorial Drive South to Orillia Road South)
- Military Road South (South 225th Place to South 200th Street)
- Des Moines Memorial Drive (South 156th Street to South 128th Street)
- Military Road South (South 152nd Street to South 128th Street)

These corridors and intersections will receive greater priority and attention in delivering projects that will improve safety.

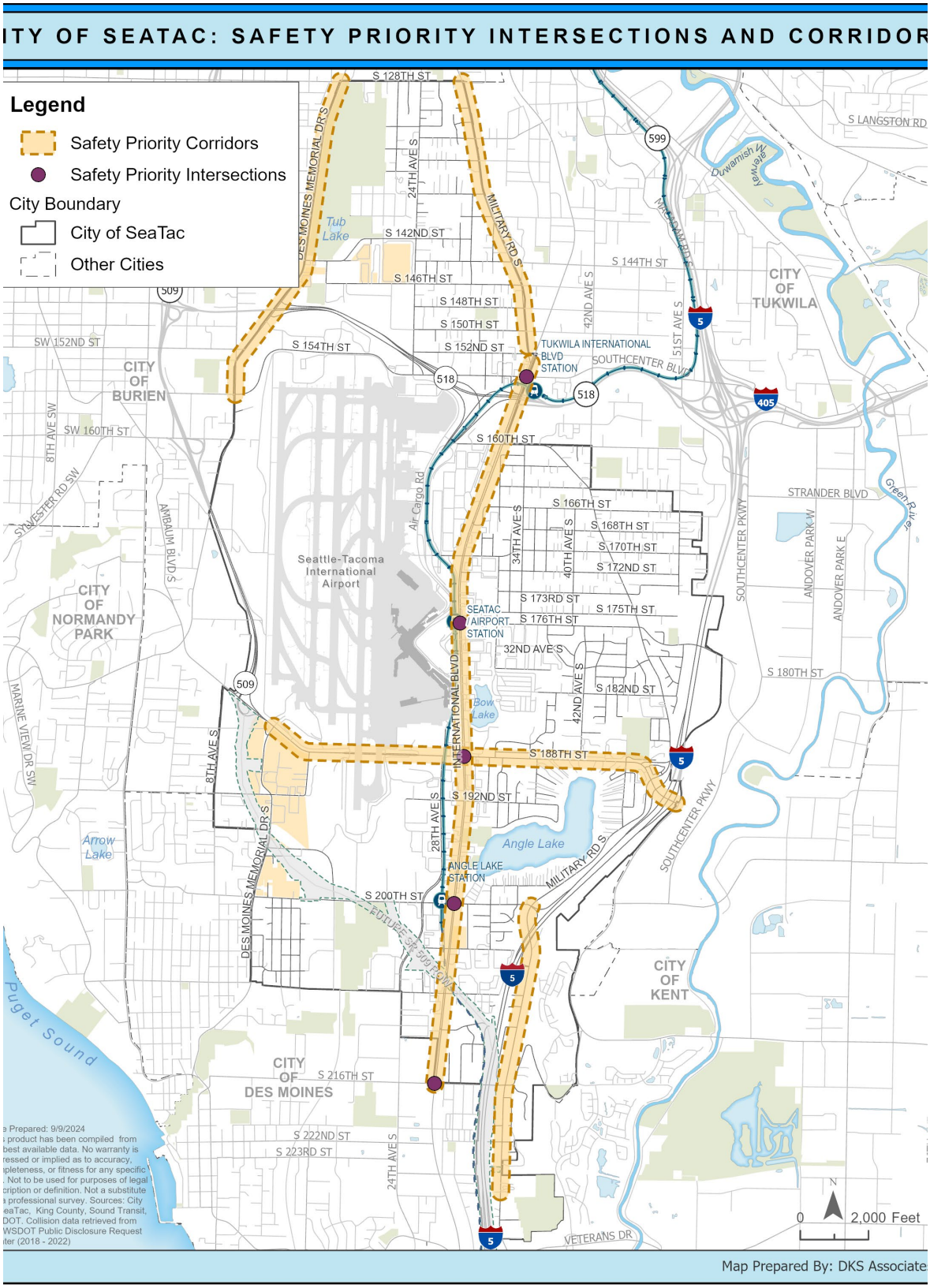


FIGURE 18: SAFETY PRIORITY CORRIDORS

ROADWAYS

Travel within and around the City of SeaTac is primarily accomplished using the city's roadway system. Cars, freight, pedestrians, bicyclists, and transit vehicles all use the roadway system. Roadways are classified according to their intended function for the full range of travel modes. These classifications vary in the degree of access provided, the amount of through traffic versus local traffic carried, design speeds, and modes served. The City of SeaTac and other entities such as the Washington State Department of Transportation (WSDOT) maintain geometric design standards for each roadway classification.

As shown in Table 6, local streets primarily provide access to individual properties via driveways, are designed for lower speeds, and share right-of-way with motorized and non-motorized modes (i.e., bicycles). Large amounts of motorized through traffic are generally considered undesirable on local streets. At the other end of the spectrum are freeways which can be accessed only at infrequent interchanges, are designed for high speeds, carry a high proportion of long-distance through traffic, and are limited to use by motorized vehicles.

TABLE 6: ROADWAY FUNCTIONAL CLASSIFICATIONS

FUNCTIONAL CLASSIFICATION	ACCESS LEVEL	TRAFFIC VOLUME	SEATAC EXAMPLE
Local Streets	Unrestricted	Little through traffic	S 194th Street
Collectors	More use of street for access but also parking and loading	More through traffic	34th Avenue S
Minor Arterials	Increasing degree of access control	Increasing through traffic and decreasing local traffic	Military Road S
Principal Arterials			International Blvd (SR 99)
Freeways	Full access control	Little local traffic	Interstate 5 (I-5)

Source: City of SeaTac.

The following section describes the key arterial and freeway facilities in SeaTac. A map of the existing and planned roadway facilities by classification is shown in Figure 19.

KEY ROADWAY FACILITIES

Key roadway corridors are summarized below. For additional detail on speed limits and roadway geometry, please refer to the *Inventory of Existing Transportation System and Conditions* report (Appendix A).

FREEWAYS

Interstate 5 (I-5) is a state highway and the primary north-south freeway within the eastern portion of the SeaTac study area. I-5 is a limited access freeway under the jurisdiction of WSDOT. The city's two interchanges with I-5 are located at South 188th Street/Orilla Road and Military Road South/South 200th Street. The I-5 freeway connects north to Seattle and south to Tacoma.

State Route 509 (SR 509) is another primary north-south freeway located in the western SeaTac study area. South of South 188th Street, the SR 509 designation follows 1st Avenue South through Des Moines as a two-to-four lane arterial roadway. SR 509 is maintained by WSDOT, and construction began in 2020 to extend the limited access freeway from South 188th Street to I-5 in SeaTac. Stage 1a of the SR 509 Completion Project was completed in 2022 which saw the opening of a new International Boulevard/SR 99 bridge near South 208th Street. Under existing conditions, South 188th Street is the end of the limited access portion of SR 509 and is the only interchange within the City of SeaTac.

State Route 518 (SR 518) is one of the primary east-west routes within the northern portion of the SeaTac study area. There are four interchanges that serve the SeaTac community located on Des Moines Memorial Drive South, South 154th Street, North Airport Expressway (NAE), and International Boulevard. SR 518 connects west to Burien and east to I-5 and Interstate 405 (I-405) in Tukwila.

North Airport Expressway (NAE) is a short north-south limited access freeway in the northern portion of the SeaTac study area east of Sea-Tac International Airport. The NAE is under the jurisdiction of the Port of Seattle. The NAE connects to Airport arrival and departure terminals, parking garages, cell phone lots, and the on-ramp from South 160th Street.

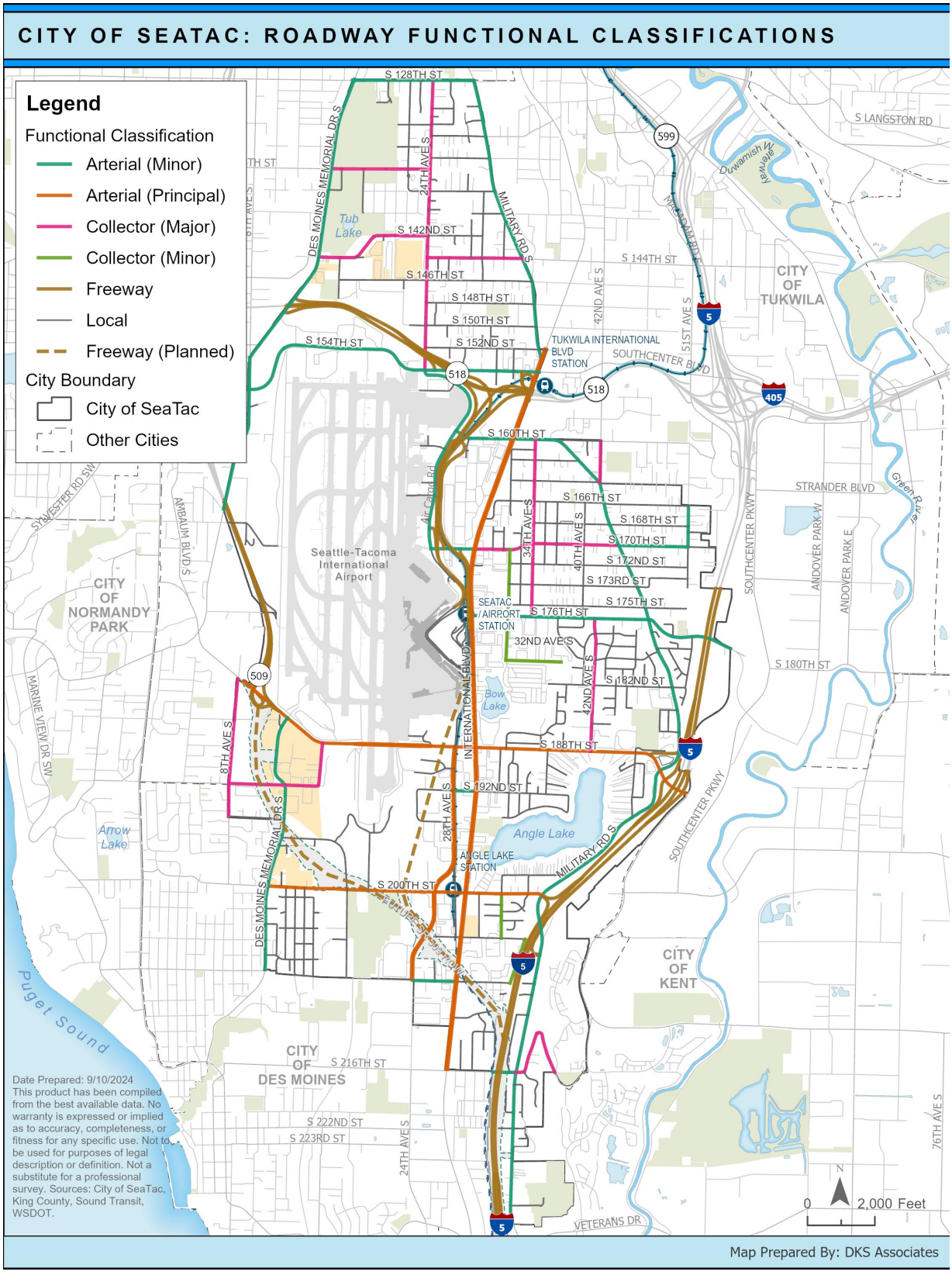


FIGURE 19: EXISTING AND PLANNED ROADWAYS

NORTH-SOUTH ARTERIALS

International Boulevard (SR 99) is a primary north-south arterial that runs through the center of the SeaTac study area. International Boulevard runs parallel to I-5 along the eastern boundary of Sea-Tac International Airport and along the full length of the city's Urban Center. International Boulevard provides access to Sea-Tac International Airport, hotels, park-and-ride services, and rental car agencies.

Des Moines Memorial Drive South is a minor north-south arterial in the western section of the SeaTac study area. Access to SR 518 is provided as a partial interchange with a westbound off-ramp to Des Moines Memorial Drive South, an eastbound off-ramp to Des Moines Memorial Drive South, and an eastbound on-ramp to SR 518.

Military Road South is a minor north-south arterial in the eastern section of the SeaTac study area. The corridor serves residential properties with commercial areas near South 152nd Street and South 160th Street. There are two access points to I-5 at South 200th Street and near South 208th Street.

28th Avenue South is a principal arterial in the southern section of the SeaTac study area. A shared bike/pedestrian path is provided from South 200th Street to South 208th Street. 28th Avenue South provides access to hotels, airport parking services, and commercial developments.

EAST-WEST ARTERIALS

South 188th Street is one of the primary east-west principal arterials in the central section of the SeaTac study area just south of Sea-Tac International Airport. This roadway is the primary connection between SR 509 to the west and I-5 to the east. South 188th Street provides a full interchange with I-5 near Military Road South. There is also a full interchange with the limited access portion of SR 509 near Des Moines Memorial Drive South.

South 200th Street is a principal east-west arterial in the southern section of the SeaTac study area running parallel to South 188th Street. South 200th Street also provides access to the Angle Lake Light Rail Station, the City of Des Moines, residential developments, commercial developments, and vacant properties for the SR 509 Completion Project construction.

South 128th Street is a minor east-west arterial located in the northern portion of the SeaTac study area. South 128th Street mainly connects neighborhoods and local streets to the wider transportation network.

South 156th Way/South 154th Street is a minor east-west arterial located on the north side of the Sea-Tac International Airport.

South 160th Street is a minor east-west arterial in the central portion of the SeaTac study area. This roadway connects Air Cargo Road on the east side of Sea-Tac International Airport with Military Road South to the east of International Boulevard. This minor arterial provides access to hotels, park-and-fly lots, and access to the SeaTac Rental Car Facility.

South 170th Street is a minor arterial/collector roadway in the central section of the SeaTac study area. West of International Boulevard, South 170th Street is designated as a minor arterial. This portion of the roadway connects to the NAE, Air Cargo Road, the cell phone lot, and airport parking. Between International Boulevard and Military Road South, South 170th Street is designated as a collector arterial serving mostly residential property.

South 176th Street/South 178th Street is a minor east-west arterial in the central section of the SeaTac study area. This roadway connects International Boulevard near the Airport to Military Road South and Tukwila.

South 208th Street is a minor east-west arterial and local roadway located along the southern section of the SeaTac study area. West of 24th Avenue South and east of International Boulevard, South 208th Street is classified as a local roadway.

South 216th Street is a minor east-west arterial located along the south city limits of SeaTac in Des Moines. This roadway connects International Boulevard with Military Road South in SeaTac including an overcrossing of I-5.

JOINT RESPONSIBILITY FOR STATE ROUTES

The City of SeaTac and WSDOT share responsibility for planning, maintaining, and expanding state highways within the city, such as International Boulevard (SR 99). Within the public right of way, WSDOT has jurisdiction from curb to curb (i.e., travel lanes, medians, parking lanes, access points) while the City oversees the infrastructure between the curb and private property lines (e.g., sidewalks, street furniture).

TRUCK ROUTES AND FREIGHT MOVEMENT

There are three types of roadways designated for trucks in the City of SeaTac

1. City of SeaTac designated truck routes;
2. WSDOT Freight and Goods Transportation System (FGTS) roadways; and
3. Air cargo routes (Sea-Tac International Airport).

SeaTac has designated several corridors as truck routes within city limits, including Des Moines Memorial Drive South, International Boulevard, 28th Avenue South, 8th Avenue South, Air Cargo Road, 24th Avenue South, South 144th Street/South 142nd Street, South 154th Street, South 160th Street, South 188th Street, South 200th Street, as well as small segments of several more streets. Air Cargo Road is designated as a truck facility that is owned by the Port of Seattle.

The City and Port-designated truck routes are shown in Figure 20 along with facilities where through hauling is prohibited.

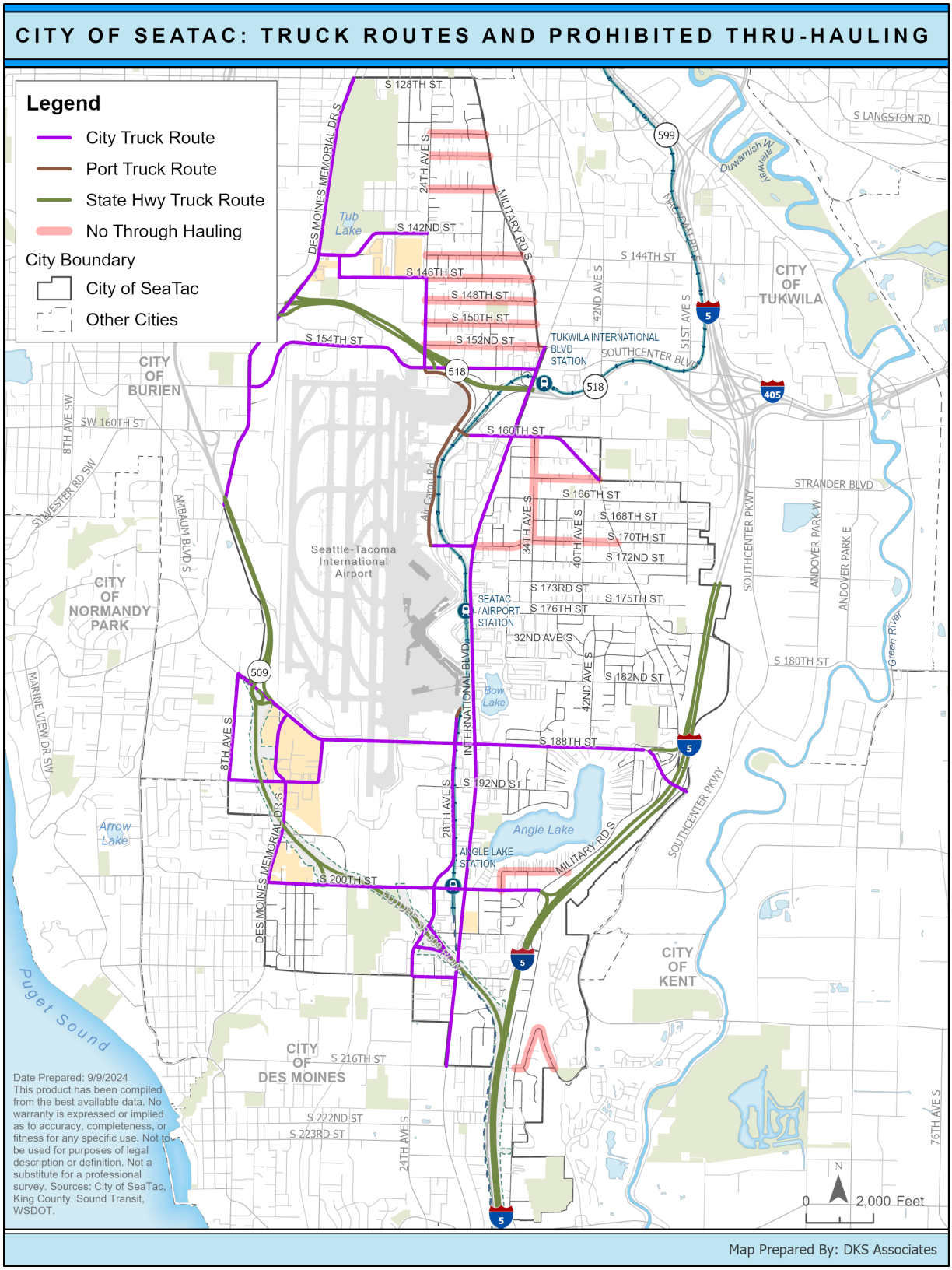


FIGURE 20: TRUCK ROUTES AND RESTRICTIONS

Through movements are prohibited on some roadways to minimize potential impacts to residential neighborhoods. Although this leaves some gaps between industrial areas and major arterials, such as between Military Road South and the northern industrial area, efficiency of freight movement must be balanced with quality of life for neighborhood residents.

SEA-TAC INTERNATIONAL AIRPORT (SEA)

Sea-Tac International Airport (SEA) is the largest single generator of traffic and freight movement in the City of SeaTac. As the regional hub for the Puget Sound, Sea-Tac International Airport served approximately 51 million passengers in 2023 (slightly less than in 2019) according to SEA Airport Statistics. Air travel has rebounded following a decline due to the COVID-19 pandemic. Although many air travelers arrive at Sea-Tac by car, the airport is served by a Sound Transit light rail station as well as several bus routes.

Air cargo is an important element of SEA operations and the total air cargo tonnage in 2022 was slightly higher than that of 2019. City-designated truck routes provide access to the airport for freight operations (see Figure 20).

The Port of Seattle has completed its Sustainable Airport Master Plan (SAMP) which describes how the Sea-Tac International Airport will meet future forecasted demand. The SAMP includes a program of Near-Term Projects (NTP) which are currently under environmental review and await Commission approval.[4]

PLANNED ROADWAY PROJECTS

The two most consequential expansions of the roadway network that have been assumed as planned or programmed projects in the PSRC Regional Transportation Plan[5] include the SR 509 Completion Project and the Port of Seattle sponsored Airport South Access Expressway (SAE).

SR 509 Completion Project

SR 509 currently terminates at Des Moines Memorial Drive South/South 188th Street, west of Sea-Tac International Airport. The SR 509 Completion Project[6] will extend SR 509 south and east towards a new interchange with I-5. Stage 1B, also known as the SR 590/I-5 to 24th Avenue South New Expressway, builds the first mile of the new SR-509 expressway, new I-5 ramps, new interchanges, and a new bridge and is expected to be complete in 2025. Stage 2, the SR 509/24th Avenue South to South 188th Street New Expressway project, would build the remaining two miles of expressway and reconfigure the

[4] https://sampntpenvironmentalreview.org/index.html, Accessed 9/6/2024.

[5] https://www.psrc.org/planning-2050/regional-transportation-plan, Accessed 9/6/2024.

[6] https://wsdot.wa.gov/construction-planning/search-projects/sr-509-completion-project, Accessed 9/6/2024.

SR 509 interchanges at South 188th and South 160th Streets along with an auxiliary lane on I-5. Construction for Stage 2 is expected to be completed in 2028.

Airport South Access Expressway (SAE)

The Airport South Access Expressway (SAE) project would construct a new two-lane limited access arterial between the Sea-Tac International Airport roadway system (including the existing Airport Expressway) and the SR 509 interchange at 24th Avenue S. Based on PSRC's modeling assumptions, the roadway will intersect at-grade with South 188th Street and South 200th Street, and the roadway will terminate via an interchange with SR 509 (see box below). This project is included in the future 2044 SeaCast model to align with PSRC's Regional Transportation Plan (RTP). The RTP includes a 2032 completion date for the SAE. While the Port has worked with WSDOT to ensure that the SR 509 Completion Project is forward compatible with the SAE, the SAE is not included in the SAMP NTP (Near Term Projects). The Port has indicated that it will not actively pursue the SAE project while the SAMP NTP work is underway.

Through coordination with the Port of Seattle, it was discovered that the future roadway network provided by PSRC for the SeaCast travel demand model does not match the Port's plans. Consequently, these discrepancies had been carried forward into the SeaCast model during the development of this TMP. A sensitivity test of the model was conducted with a revised representation of the SAE that matched the Port's assumptions. This sensitivity test showed that the system-wide performance measures remained consistent, indicating no significant variation.

PLANNING STANDARDS

CONCURRENCY CORRIDORS

To meet the state requirements for transportation system concurrency with land use growth, the City of SeaTac tracks afternoon peak hour travel speeds on 17 corridors (two of the corridors are tracked for informational purposes only). Roadway Level of Service (LOS) is related to average travel speeds for urban streets, as documented in the Highway Capacity Manual[7] Level of Service is reported as letter grades with LOS "A" representing free flow traffic conditions and LOS "F" indicating extreme congestion and high delays. The currently adopted Level of Service (LOS) standard for concurrency corridors is LOS "E", which equates to average travel speeds of 9-12 mph.

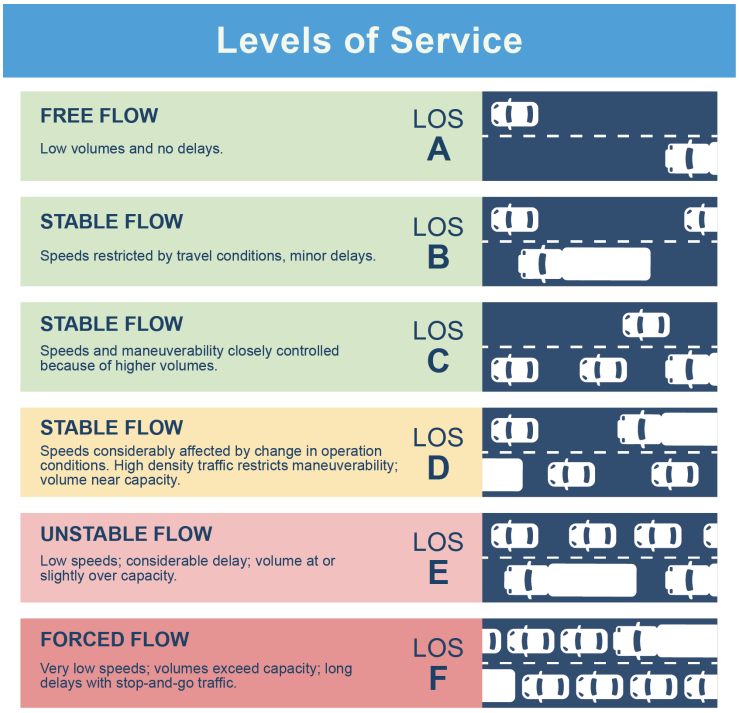
As new development occurs along these corridors, the additional peak hour vehicle trips associated with each project are added to a tracking database. Each corridor is associated with a budget of

[7] Highway Capacity Manual 6th Edition: A Guide for Multimodal Mobility Analysis. Washington, DC: The National Academies Press. https://doi.org/10.17226/24798.

additional traffic that can be accommodated while maintaining the performance standard. The concurrency corridors are shown in Figure 21.

INTERSECTION LEVEL OF SERVICE

While the City does not currently maintain a performance standard limiting vehicle delay at intersections, intersection delay has a direct relation to average speeds over arterial corridors and provides a snapshot of an intersection's overall operation. Level of Service is typically reported as a "report card" rating of letters A through F based on average vehicle delay through the intersection. LOS "A" indicates free flow conditions with minimal delay traveling through an intersection while LOS "F" indicates excessive vehicle delay and demand greater than capacity.



The current operational and forecasted future performance of 44 study intersections within and adjacent to SeaTac has been evaluated in support of the Comprehensive Plan update. Afternoon peak hour intersection Level of Service (LOS) is reported to represent the expected highest volume and most congested conditions. The existing conditions operational analysis was based on vehicle turning movement counts collected in Fall 2023 while the forecasted intersection analysis was based on outputs from the SeaCast travel model 2044 scenario.

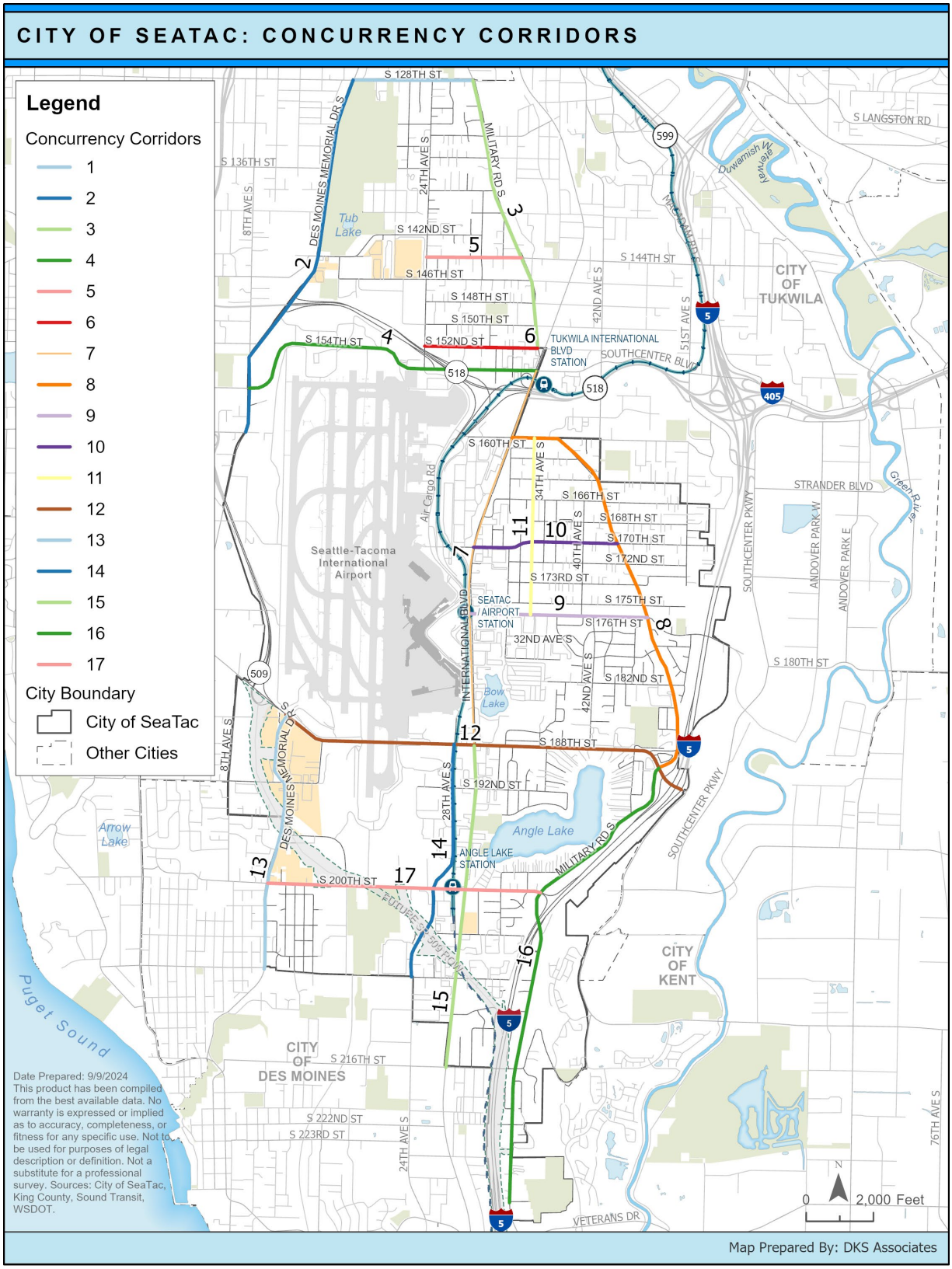


FIGURE 21: CONCURRENCY CORRIDORS

WSDOT's adopted LOS standard for Highways of Statewide Significance (e.g., I-5, SR 518, and SR 509) in urban areas and Tier 2 Highways of Regional Significance (e.g., SR 99 in Des Moines) is LOS "D".[8] Intersections covered by the WSDOT policy include:

- Des Moines Memorial Drive & SR 518 Off Ramp
- Des Moines Memorial Drive & SR 518 Off-Ramp/SR 518 On-Ramp
- SR 518 Off-Ramp & South 154th Street
- International Boulevard & SR 518 On-Ramp
- I-5 On-Ramp/I-5 Off-Ramp & South 188th Street
- I-5 Off-Ramp/I-5 On-Ramp & South 188th Street
- Military Road South & I-5 NB Off/On-Ramp
- Pacific Highway South & South 216th Street

WSDOT intersections on International Boulevard, north of South 216th Street and south of SR 518, are classified as Tier 1 Highway of Regional Significance and have a LOS standard of E-Mitigated (improved to greatest feasible extent).

TRAFFIC VOLUMES AND OPERATING CONDITIONS

TRAFFIC VOLUMES

Average Daily Traffic (ADT) is the amount of motorized traffic on a roadway segment over a 24-hour period. Daily volumes from the SeaCast model are estimated as the sum of traffic from each of the 12 time periods for which the model assigns traffic to the roadway network. To provide an overview of daily traffic volumes, volume data from the Alternative 3 scenario representing 2044 demand is mapped in Figure 22.

As shown, the highest-volume corridors for vehicles are I-5, SR 518, SR 509 (including the planned extension), International Boulevard (SR 99), the new Airport South Access Expressway, and South 188th Street. The completed SR 509 and South Access Expressway are both well utilized in future forecasts, preventing additional demand or even decreasing demand on SeaTac's local roadways.

Decreases in daily volume are forecasted for the northbound direction of International Boulevard from South 200th Street to South 182nd Street/Arrivals Drive, the eastbound and westbound directions of South 188th Street between SR 509 and International Boulevard, the westbound direction of South

[8] https://www.psrc.org/our-work/adopted-level-service-standards-regionally-significant-state-highways, Accessed 9/6/2024.

200th Street between 26th Avenue South and Military Road South, and the eastbound direction of South 200th Street from International Boulevard to I-5. Travel patterns here show a shift to using the competed SR 509 and South Access Expressway.

Growth is forecasted for International Boulevard in the southbound direction, primarily south of South 182nd Street/Arrivals Drive. Northbound volume growth on International Boulevard is primarily on the section north of South 170th Street. For east-west corridors, growth is forecasted on South 188th Street but only east of International Boulevard. There is also growth shown on South 200th Street west of the new SR 509 Interchange at 24th Avenue South. All other corridors see only modest changes in daily traffic.

Truck Volumes

The SeaCast model can forecast travel demand for different vehicle classes, including heavy duty trucks. Future truck volumes consist of heavy and medium trucks, excluding light trucks such as pickups. Forecasted daily truck volumes are shown in Figure 23.

As shown, the truck demand is highest for highways and major arterials. The SR 509 extension and Airport South Access Expressway both attract a significant number of truck trips, lessening the demand on International Boulevard south of South 182nd Street/Arrivals Drive. All other City streets showed similar levels of truck traffic in the future 2044 forecasts compared to the base year model.

Note that the SeaCast model does not currently reflect the through hauling prohibitions in its traffic assignment module. Truck volumes shown on prohibited through hauling routes indicate a demand for more direct freight movement. These prohibited movements are particularly dense between South 128th Street and South 154th Street, where there are no through routes allowed to the east of the industrial area located southwest of 24th Avenue South and South 142nd Street. However, many of these routes pass through existing residential neighborhoods.

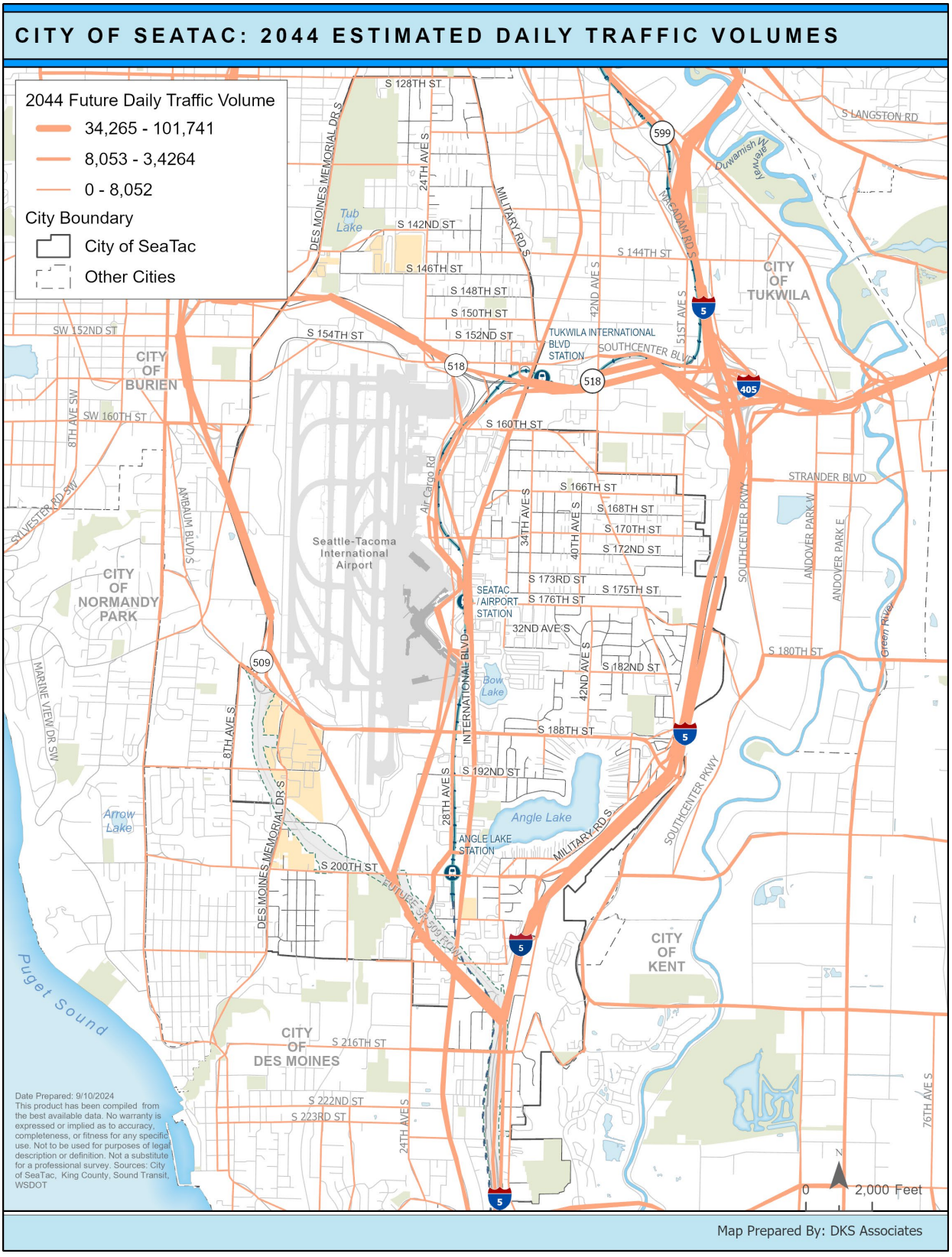


FIGURE 22: FUTURE DAILY TRAFFIC VOLUMES

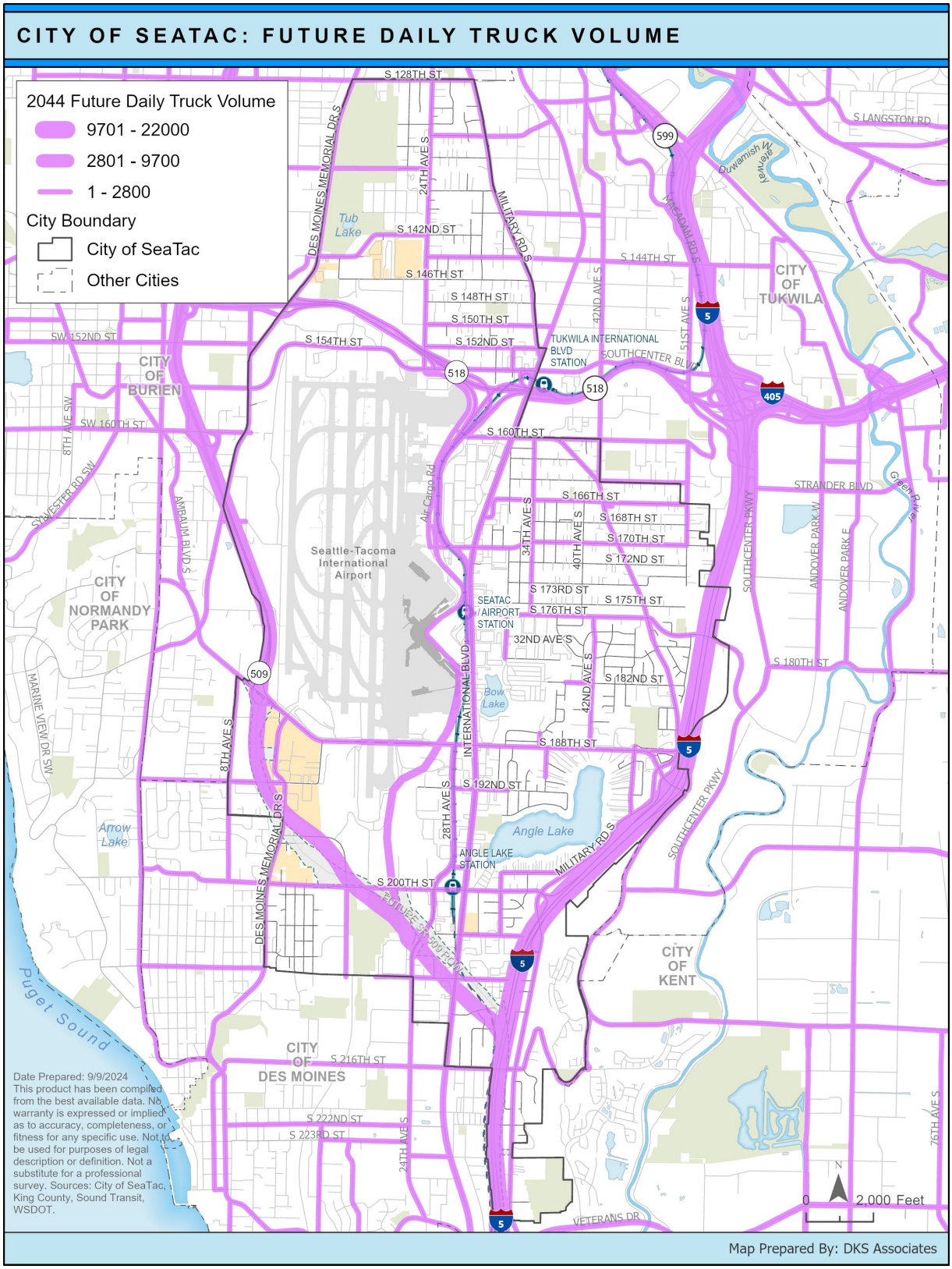


FIGURE 23: FUTURE DAILY TRUCK VOLUMES

CONCURRENCY CORRIDOR PERFORMANCE

As described under roadway Planning Standards, SeaTac tracks concurrency based on a minimum afternoon peak hour travel speed on its concurrency corridors (refer to Figure 21 for a map of concurrency corridors).

The City's current Concurrency Impact Estimator spreadsheet tool was used with forecasted average volume growth to estimate future concurrency corridor speeds. Total PM peak hour volume growth was used at the study intersections to determine an average volume growth for the entire corridor. As noted in the *Future Multimodal Conditions* technical report (see Appendix B), all concurrency corridors are forecasted to serve the anticipated growth in traffic while maintaining LOS "E", thus meeting the City's concurrency standards.

INTERSECTION OPERATIONS

As detailed in the *Inventory of Existing Transportation System and Conditions*, only two study intersections, the SR 518 ramp intersections with Des Moines Memorial Drive, currently operate with unacceptably high delay or LOS "E" (see Appendix A for a more detailed discussion of existing traffic volumes and peak-hour intersection operations).

Under forecasted future 2044 conditions representing the most intensive planned growth scenario, two currently stop-controlled intersections at SR 518 and Des Moines Memorial Drive would operate at LOS "F". However, WSDOT has identified a project to reconstruct this interchange to a full diamond configuration, after which it is expected to operate acceptably. The future forecasted intersection volumes and LOS are shown in Figure 24.

Additionally, two signalized intersections on International Boulevard at South 170th Street and South 188th Street would operate at LOS "E" under the future scenario. International Boulevard north of South 204th Street is not a Highway of Statewide Significance. The WSDOT policy at these intersections is to mitigate congestion at these intersections when p.m. peak hour LOS falls below LOS "E". Therefore, further capacity improvements will not be required at these locations.

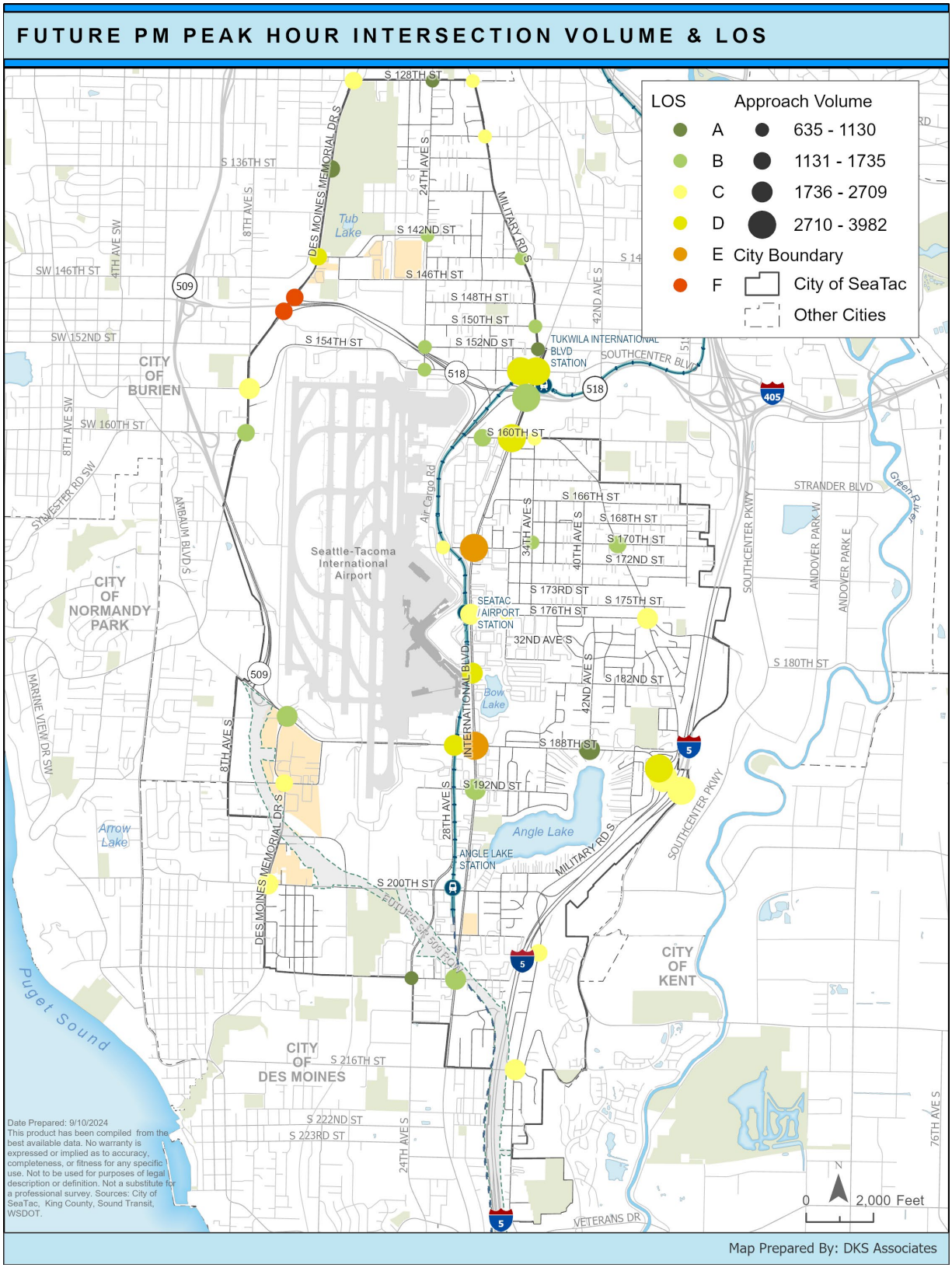


FIGURE 24: FUTURE PEAK HOUR VOLUMES AND INTERSECTION LEVEL OF SERVICE

KEY ISSUES

ROADWAY DESIGN

Many SeaTac roadways were constructed as King County rural roadways and lack many urban features such as curbs, gutters, sidewalks, drainage, illumination, and turn lanes. A number of projects that follow Complete Streets standards have been identified so that major corridors better serve all roadway users. However, specific guidance should be incorporated into the City's design standards to facilitate future improvements. Development and adoption of updated road design standards for City-operated roadways is an implementation strategy for several policies in the Transportation Element and throughout the Comprehensive Plan.

ROADWAY SPACING AND CONNECTIVITY OF NETWORK

Roadway spacing is important in balancing the dual functions of mobility and access to land use. A denser local roadway network can shift vehicular traffic from corridors where mobility is emphasized and provide access to land uses (i.e., driveways, on-street parking, access to off-street parking). Additionally, denser connections support walking and bicycling, aligning with the Complete Neighborhoods concept.

Research based on the physical dimensions for good urbanism proposes that blocks should have sides greater than 200 feet and less than 600 feet, with a perimeter less than 1,800 feet[9]. As shown in Figure 25, most blocks in SeaTac exceed the recommended size and, further, many have cul-de-sacs that limit connectivity. This oversized and disconnected network hinders the city's vision of Complete Neighborhoods with walkable communities. It forces residents to take longer, less direct routes, discouraging walking and bicycling for daily needs.

Enhancing the roadway network's connectivity is a key goal of the Comprehensive Plan. Opportunities to add more vehicular or active transportation connections should be explored whenever land is redeveloped. In some cases, it may be possible to add non-motorized paths through existing development, paired with midblock pedestrian crossings where appropriate.

[9] Georgia Institute of Technology, Doug Allen Institute. *The Urban Form Standard (May 25, 2023). https://urbanformstandard.com/.*

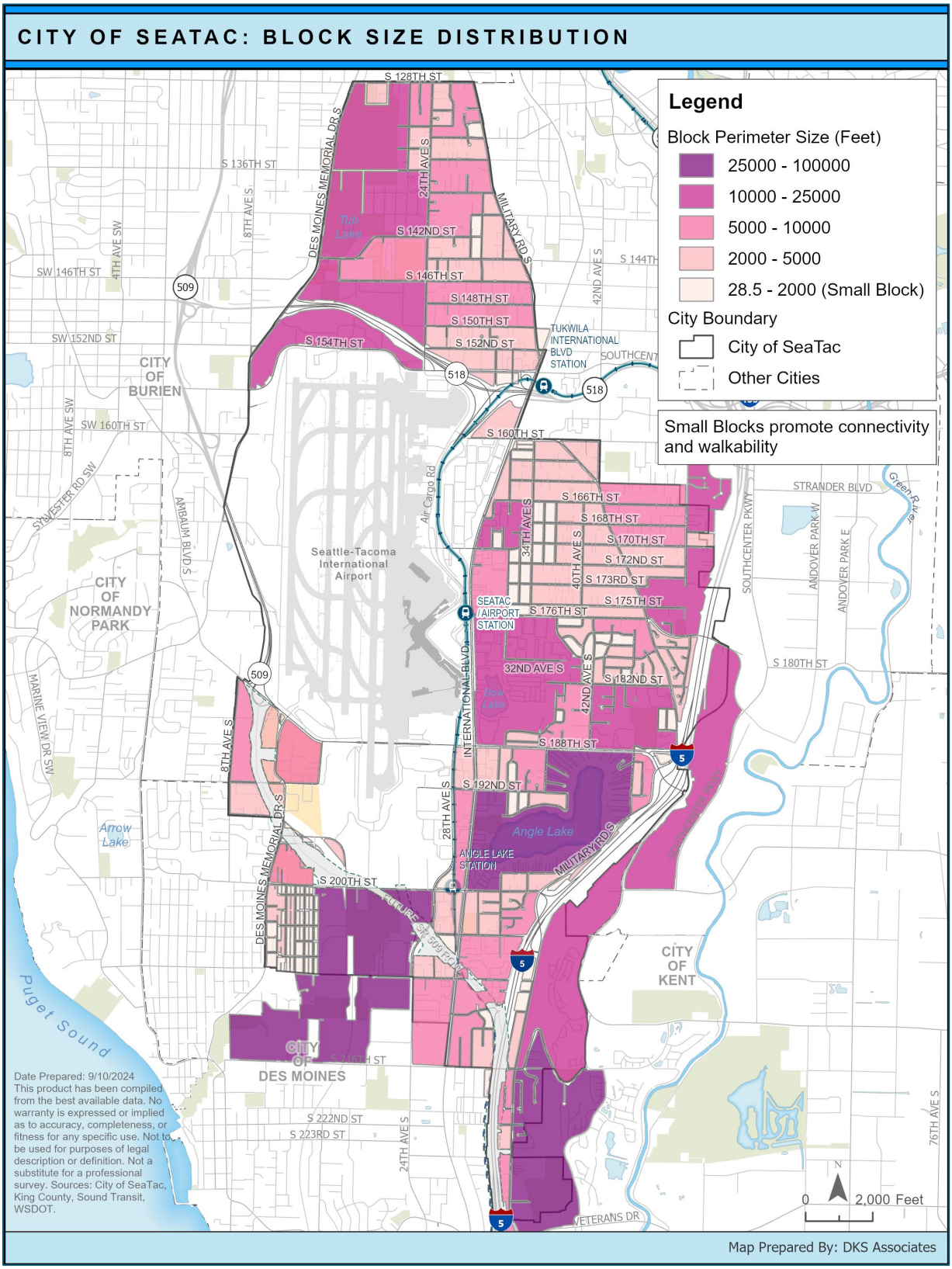


FIGURE 25: EXISTING BLOCK SIZE

ACTIVE TRANSPORTATION

PEDESTRIAN NETWORK

Sidewalks, crosswalks, curb ramps, and pedestrian signals provide important access to key destinations for pedestrians such as schools, parks, senior centers, transit stops, commercial centers, and workplaces. The presence of a continuous sidewalk and safe, accessible crossings influence whether someone chooses to walk somewhere or not, and whether someone who is dependent on walking to get to their destination can do so safely and conveniently. This also affects the independent mobility of people with disabilities, people with reduced mobility, the elderly, and young people. Caregivers may not allow their children to walk independently to a nearby park or school if the streets lack continuous sidewalks and safe crossings.

Safe, comfortable, and convenient street crossings are an integral component of a connected pedestrian network. Distances between these crossings should not be so great as to require pedestrians to take large detours to get to their destination.

EXISTING FACILITIES AND PEDESTRIAN NEEDS ASSESSMENT

The pedestrian level of crossing analysis was reviewed to identify remaining network implementation needs (see Active Transportation Planning Standards). Existing sidewalk locations as well as the location of pedestrian signals in SeaTac are shown in Figure 26.

The pedestrian network will be developed through public projects and private development frontage improvements, designed to King County Road Standards as amended by the City of SeaTac. Figure 27 illustrates the proposed pedestrian network needed to fill missing gaps in the sidewalk network and improve intersections to better support pedestrian safety and reduce stress. This evaluation also identified locations where additional intersections are needed to facilitate pedestrian crossings between intersections with traffic control and/or traffic calming elements. The evaluation also considered ADA improvements needed at crossings, as previously identified in the City's ADA Transition Plan.

Projects to implement the portion of the proposed pedestrian network anticipated to be completed within the horizon of the TMP are described under Recommended Transportation System Improvements.

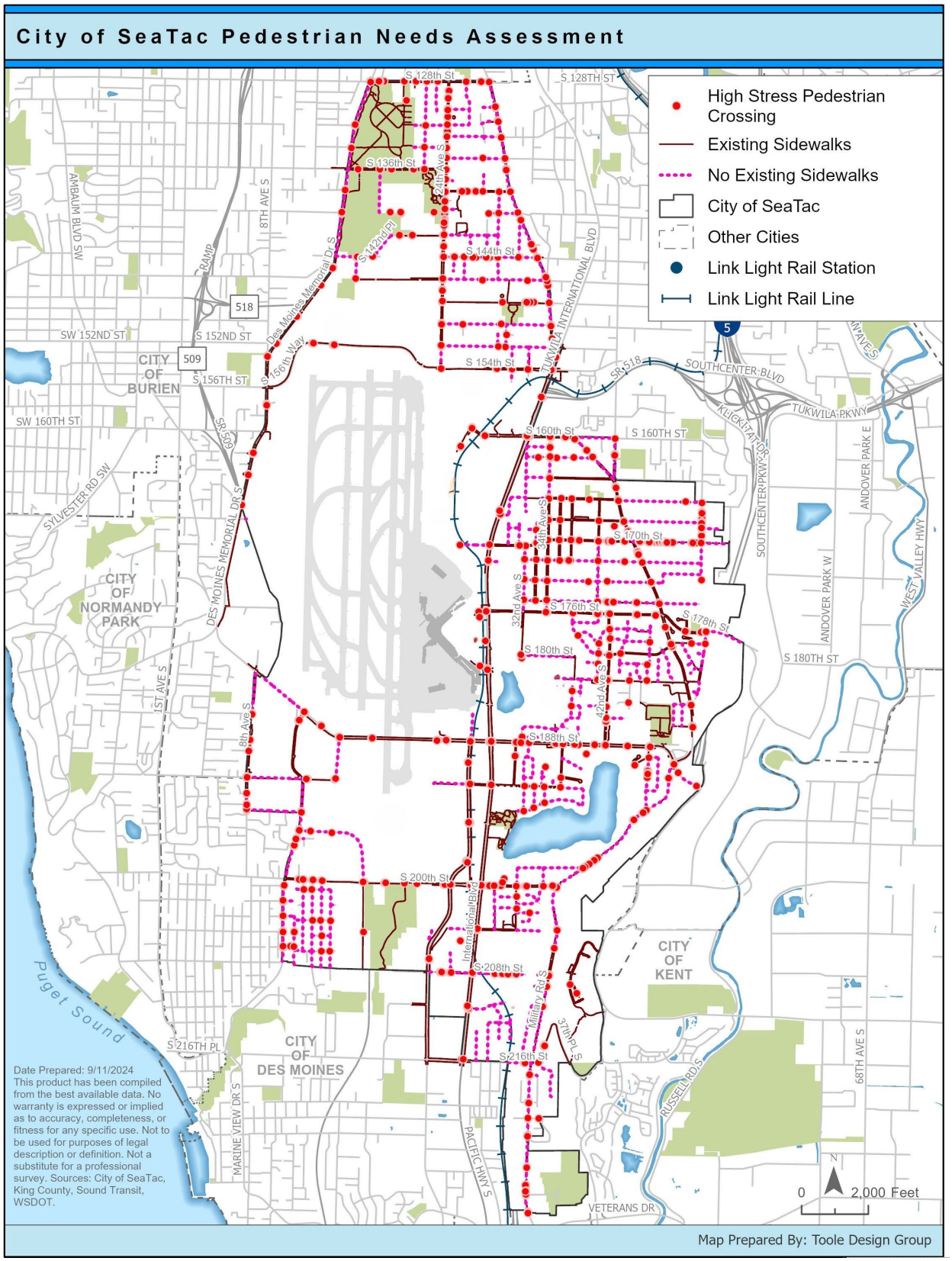


FIGURE 26: EXISTING PEDESTRIAN NETWORK AND NEEDS ASSESSMENT

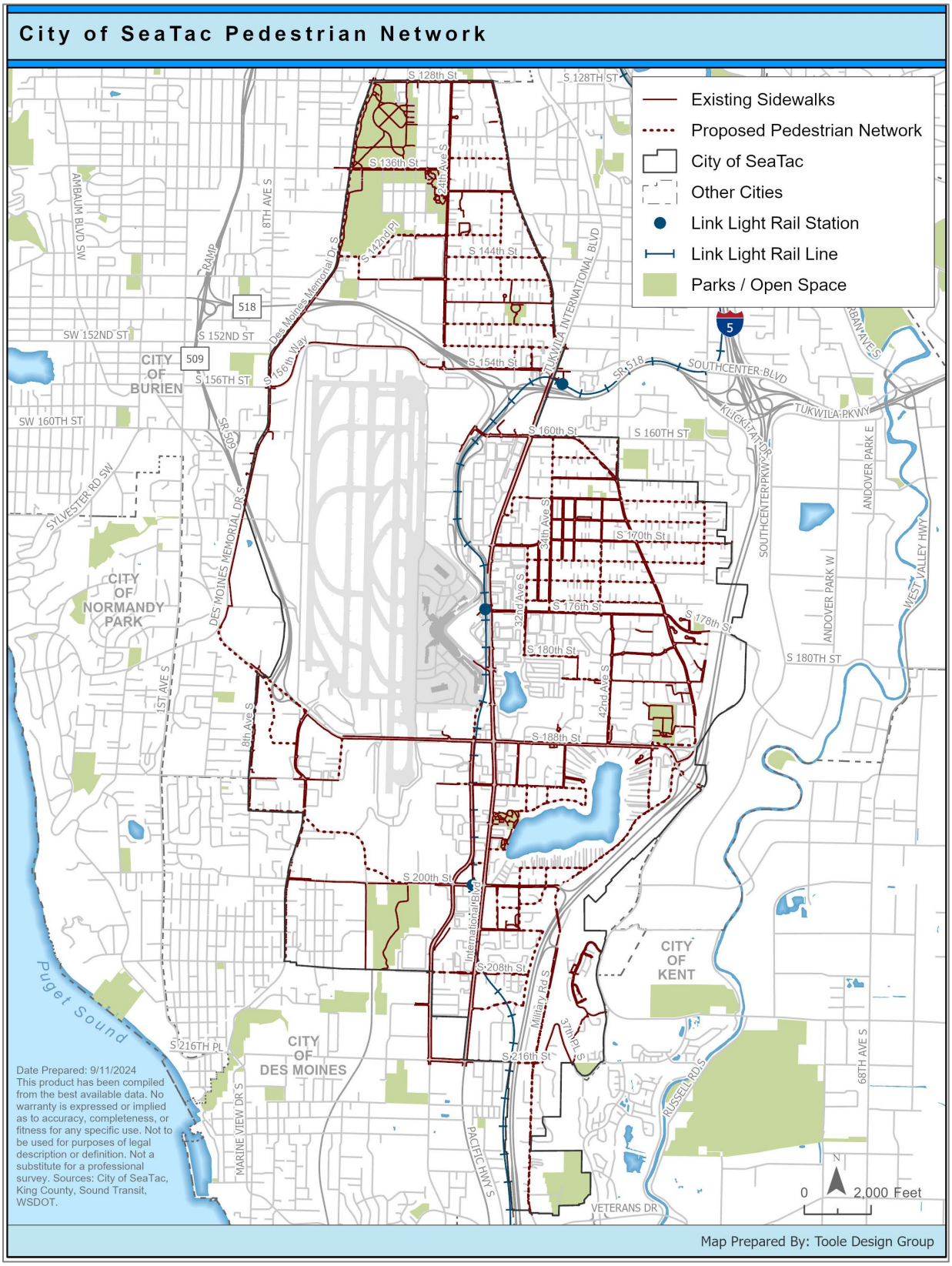


FIGURE 27: PROPOSED PEDESTRIAN NETWORK

BICYCLE NETWORK

The existing bicycle network lacks connections that would allow cyclists to access destinations safely and comfortably throughout the city. In addition, high motor vehicle traffic volumes and speeds in combination with narrow on-street bike lane widths that lack buffers or other protection increase the level of stress and reduce safety for cyclists. The presence of conflict points created by large driveways, right turn lanes that require cyclists to watch for traffic coming from behind, and continuous left turn lanes also diminish cyclist comfort and safety.

The existing on-street bicycle network is shown in Figure 28 and is limited to east-west bicycle lanes along South 170th Street and South 154th Street and north-south bicycle lanes along 24th Avenue South, 26th Avenue South, 24th Avenue South, and on Military Road South. The map also shows bicycle facilities that had been previously proposed in currently adopted planning documents.

Separated and off-street trails include:

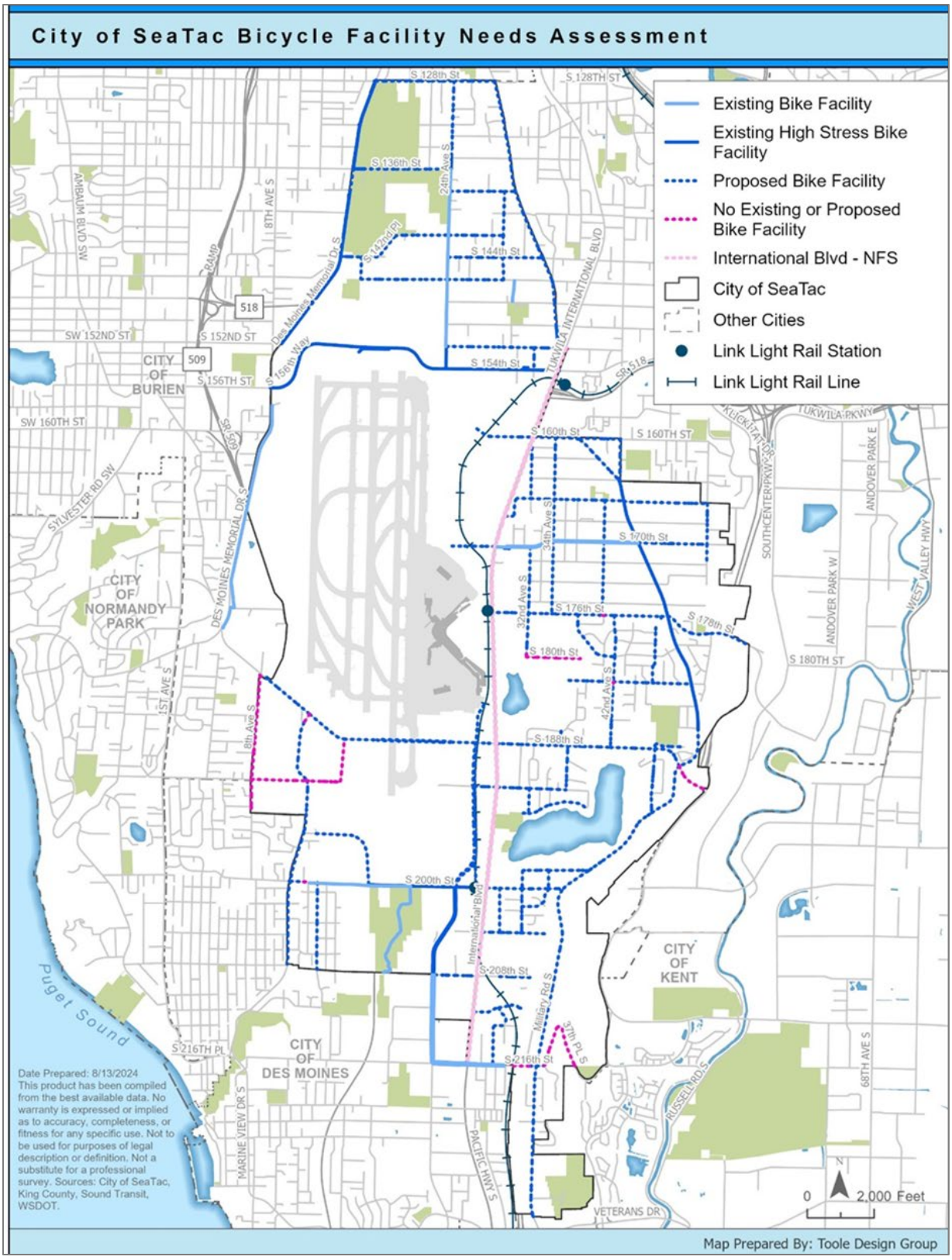
- A separated shared use path along the west side of 26th Avenue South/24th Avenue South from south of South 200th Street to South 208th Street.
- A bi-directional shared use path on South 200th Street west of 26th Avenue South that connects with the Des Moines Creek Trail.
- A Westside Trail multi-use path along Des Moines Memorial Drive South from north of South 144th Street to South 128th Street in the northern area of the city.

EXISTING FACILITIES AND BICYCLE NEEDS ASSESSMENT

SeaTac's bicycle network is less developed than the pedestrian network. Some road segments lack bicycle facilities while several existing facilities do not meet current best practices for an all ages and abilities network. For example, there are some bike lanes that do not provide enough of a barrier to reduce the level of stress that a cyclist experiences along the facility – typically a combination of the speed and proximity of vehicles in the adjacent lane. There are also stress reduction opportunities for improving bicycle facilities and adding traffic calming elements on local roads with lower traffic volumes and speeds. In addition to the linear facilities needs shown in Figure 28, intersection adjustments are required to facilitate safe bicycle crossings, especially across arterials.

A bicycle Level of Traffic Stress (LTS) analysis was used to classify streets based on how stressful they are for riding a bicycle. This analysis was compared to previously planned projects, which were reviewed against the latest best practice design guidelines (see Active Transportation Planning Standards). The resulting recommended bicycle network map is shown in Figure 29.

Projects to implement the portion of the planned bicycle network anticipated to be completed within the horizon of the TMP are described under Recommended Transportation System Improvements.



Note: NFS = Needs Further Study

FIGURE 28: EXISTING BICYCLE NETWORK AND NEEDS ASSESSMENT

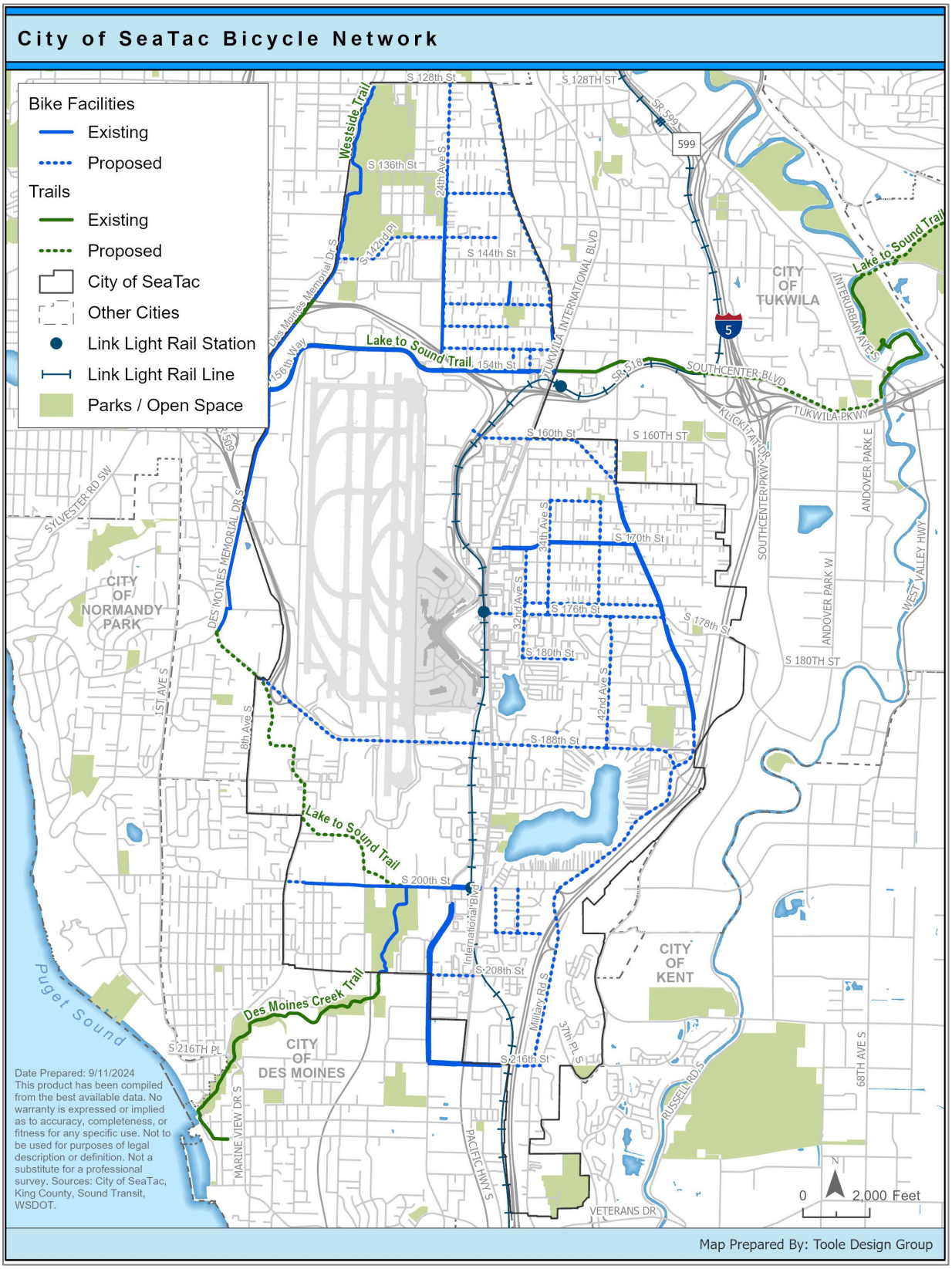
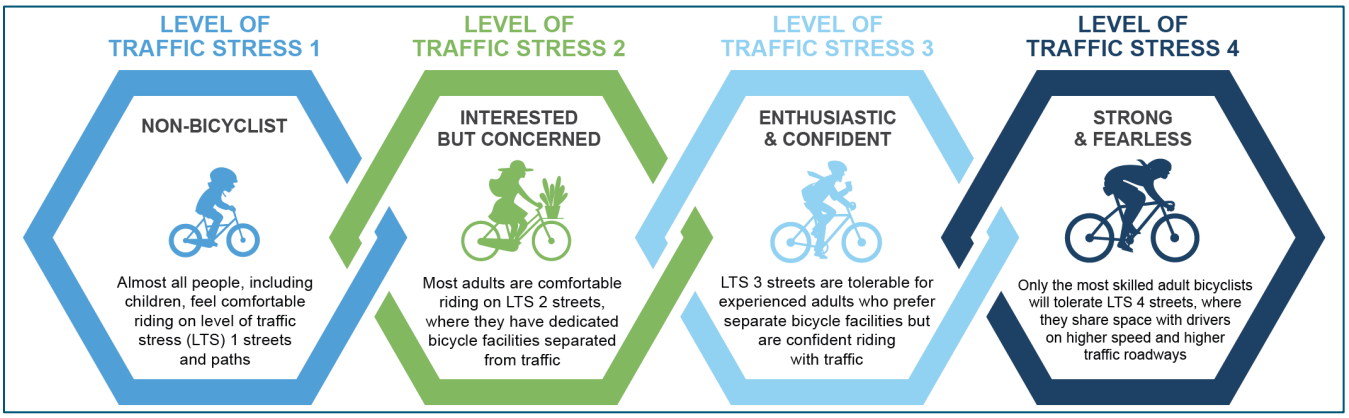


FIGURE 29: PROPOSED BICYCLE FACILITY NETWORK

LEVEL OF TRAFFIC STRESS (LTS)

Level of Traffic Stress (LTS) is a common metric and analysis tool used to quantify the perceived safety and comfort of active transportation facilities. A successful multimodal transportation plan aims to address the needs, skills, and desires of a wide range of bicyclists and pedestrians, with a special focus on the Interested but Concerned population—those who would like to ride a bicycle or walk more but who have concerns about their personal safety. A bicyclist's or pedestrian's perception of their personal safety riding on or walking along a roadway is greatly influenced by their proximity to and interaction with motorized traffic. At low volumes and speeds of traffic, many people feel safe and comfortable sharing the roadway with traffic or crossing the street in unmarked crossings. As traffic speed and volumes increase, the perception of safety degrades significantly, resulting in a feeling of increased stress and discomfort on the roadway.



Pedestrian crossing stress is assessed based on roadway characteristics and the level of crossing enhancements present. The analysis utilizes data on traffic control (traffic signals, stop signs, pedestrian crossing signals), number of lanes, prevailing speed or speed limit, directionality (one-way or two-way traffic), the presence or lack of crosswalks.

Generally, crossings at wide multi-lane streets with higher speed limits are higher stress. The presence of traffic control devices lowers the crossing stress rating. Generally, a lower functional class street crossing a busier street without a traffic control device receives a high crossing stress rating. While not included in this analysis, the presence of curb ramps are also important features in the pedestrian network in that they provide access and safety to people with disabilities and greater comfort for families with small children using strollers.

Bicycle level of traffic stress reflects how stressful street segments are for riding a bicycle using a 1-4 scale, with LTS 1 being least stressful and LTS 4 being very stressful. The LTS classifications use roadway characteristics such as speed limits, the amount of motor vehicle traffic, the number of travel lanes, on-street parking, and bikeway design characteristics. Shared use paths were classified as low stress and bikeways on major arterials that lack separation from motor vehicles are higher stress.

The citywide LTS analysis for bicyclists and pedestrians followed industry standard quantitative methods. This information laid the foundation for the pedestrian and bicycle needs assessment described in the previous section. Additional details on the pedestrian and bicycle LTS analyses may be found in the Existing Conditions report (Appendix A).

In the **Transportation Master Plan**, pedestrian and bicycle needs were identified using **LTS 2** as the threshold.

ACTIVE TRANSPORTATION BEST PRACTICE

While SeaTac has not yet adopted formal design standards for active transportation facilities, consideration of national best practices as well as regional and federal requirements will best position the city for grant funding. Following these guidelines will advance the completion of the future active transportation network.

- Since 2022, all projects constructed on state highways routed over city streets with an estimated cost of $500,000 must now incorporate the principles of Complete Streets, as defined by WSDOT. Under these new standards, all bicycle and pedestrian facilities must offer LTS 1 or 2. Information on the criteria for achieving LTS 1 or 2 is provided in WSDOT's Designing for Level of Traffic Stress Bulletin #2022-01[10], with detailed information on criteria for separation from traffic, facility widths, and buffer types.
- In 2024, WSDOT published an Active Transportation Programs Design Guide[11], which provides detailed information and guidance on the types of pedestrian and bicycle facilities and treatments that are favored for funding in the state Pedestrian and Bicycle Program and Safe Routes to School funding competitions.
- Under the ADA, the U.S. Access Board recently produced updated Public Right-of-Way Accessibility Guidelines (PROWAG) requirements, which were adopted in 2024.

The above standards have been referenced in developing the recommended active transportation networks and associated project lists.

[10] https://wsdot.wa.gov/sites/default/files/2022-06/DesignBulletin2022-01.pdf, Accessed on 9/6/2024.

[11] https://wsdot.wa.gov/sites/default/files/2024-02/WSDOT-Active-Transportation-Programs-Design-Guide_0.pdf, Accessed on 9/6/2024

KEY ISSUES

MISSING OR INADEQUATE PEDESTRIAN FACILITIES

In SeaTac, existing sidewalks and marked crosswalks are primarily located on arterial streets, with local streets often lacking these pedestrian facilities. In some cases, there are also gaps on arterial streets. For example, on Military Road South between South 164th Street and South 166th Street, the sidewalk ends abruptly for a segment on the east side of the street. Other sidewalks on arterial streets such as South 200th Street lack buffers between adjacent loud and fast-moving motor vehicle traffic, resulting in an uncomfortable experience for pedestrians.

INSUFFICIENT PEDESTRIAN CONNECTIVITY

In SeaTac, there are often great distances between marked and/or signalized crossings on major arterials such as Military Road South, leaving pedestrians with a choice of a large detour or risking an unsafe crossing to get to their destination.

A SPARSE BICYCLE FACILITY NETWORK

The existing bicycle network lacks connections that would allow cyclists to access destinations safely and comfortably throughout the city. In addition, high motor vehicle traffic volumes and speeds in combination with narrow on-street bike lane widths that lack buffers or other protection increase the level of stress and reduce safety for cyclists. The presence of conflict points created by large driveways, right turn lanes that require cyclists to watch for traffic coming from behind, and continuous left turn lanes also diminish cyclist comfort and safety. At the same time, right-of-way constraints and other issues will make providing lower stress bicycle facilities on many corridors costly and challenging. The City may wish to consider establishing lower stress bicycle routes on parallel facilities as an interim or ultimate solution to completing a bikeway network.

TRANSIT

EXISTING CONDITIONS

This section describes routes operated within the City of SeaTac and summarizes recent ridership data and trends. Within SeaTac, transit is run by two different agencies- King County Metro and Sound Transit. The bus routes operating within the City of SeaTac as of Fall 2023 are listed in Table 7 and mapped in Figure 30.

SOUND TRANSIT

Sound Transit operates the Link Light Rail and two bus routes that travel through SeaTac. The Link Light Rail 1 line connects Northgate at the north end of the line to Angle Lake at the south end of the line. Sound Transit plans to extend this line south to Des Moines, Federal Way, and beyond.

There are two light rail stations within the City of SeaTac, the SeaTac/Airport Station and Angle Lake Station, and a third station just outside of city limits, the Tukwila International Boulevard Station. SeaTac/Airport Station provides direct access to Sea-Tac International Airport; Angle Lake Station is currently the end of the line, with a 1,160-parking spot Park and Ride facility; and Tukwila International Boulevard Station has 600 parking spots available. All three stations provide bicycle parking and storage. In 2023 through September, SeaTac/Airport Station had 5,400 average daily boardings, Angle Lake Station has 3,800 average daily boardings and Tukwila International Boulevard Station had 2,400 average daily boarding.

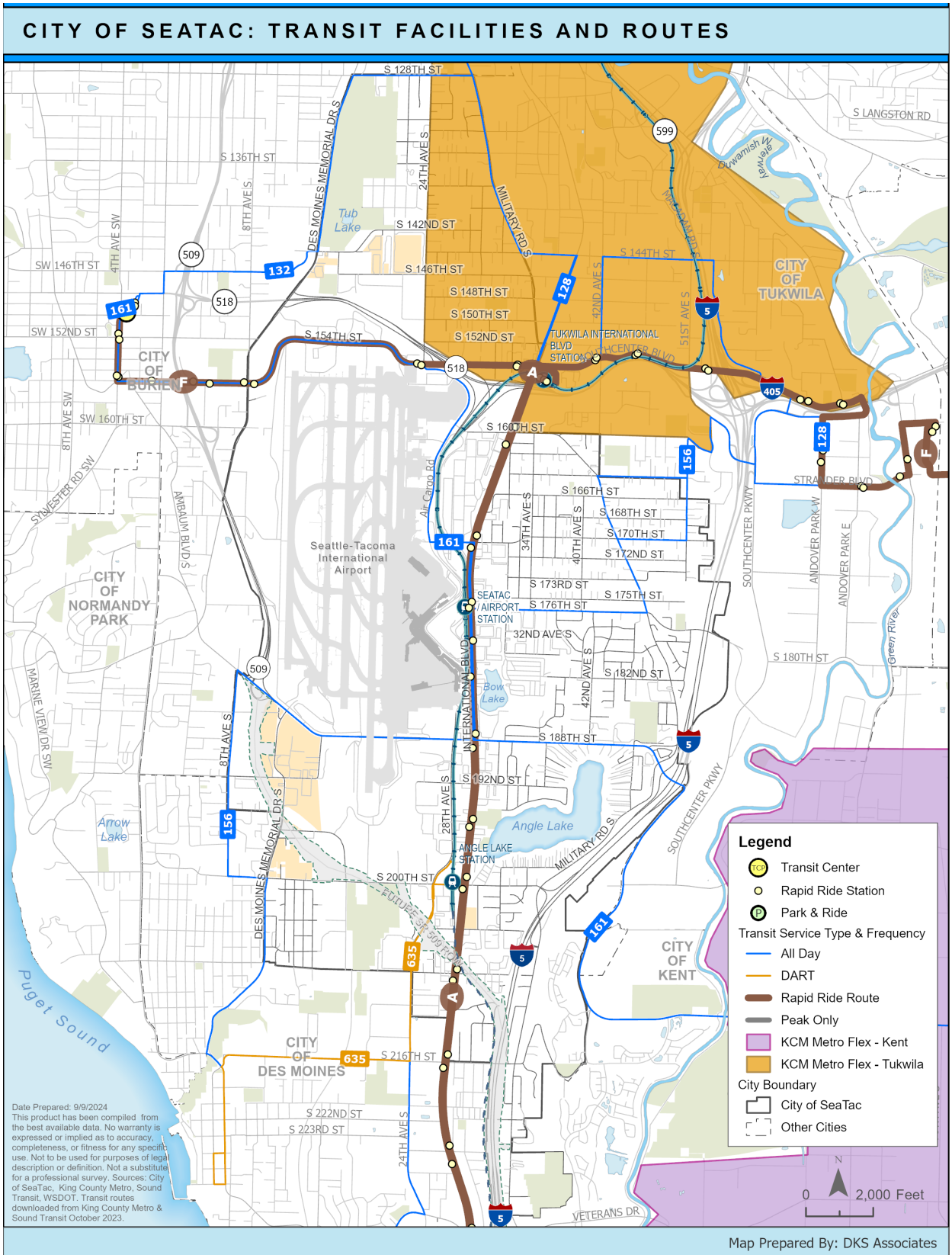


FIGURE 30: TRANSIT ROUTES

TABLE 7: EXISTING TRANSIT SERVICE

ROUTE	DESCRIPTION	WEEKDAY SVC	PEAK HOUR FREQUENCY	WEEKEND SERVICE	WEEKEND FREQUENCY	2022 AVG. WEEKDAY RIDERSHIP
Rapid Ride A Line [a]	Tukwila International Boulevard Station to Federal Way Transit Center	All Day	10 minutes	All Day	10 minutes	6,800
Rapid Ride F Line [a]	Burien Transit Center – SeaTac – Tukwila IB Station, Tukwila Station	All Day	10 minutes	All Day	15 minutes	4,000
128 [a]	Southcenter to West Seattle	All Day	20 minutes	All Day	30 minutes	2,500
132 [a]	Downtown Seattle to Burien	All Day	30 minutes	All Day	30 minutes	2,000
156 [a]	Southcenter to Highline College	All Day	15 minutes	All Day	60 minutes	700
161 [a]	Burien to Kent	All Day	15 minutes	All Day	30 minutes	1,400
DART 635 [a]	Angle Lake Station to Des Moines	All Day	30 minutes	All Day Saturday	30 minutes	N/A
MetroFlex – Tukwila	Tukwila/Othello/Rainier Beach/Skyway/ Renton Highlands	All Day	On-demand	All Day	On-demand	N/A
1 Line (Light Rail) [b]	Northgate to Angle Lake	All Day	8 minutes	All Day	10 minutes	68,700
560 [b]	Bellevue to West Seattle	All Day	30 minutes	All Day	60 minutes	1,100
574 [b]	Lakewood to SeaTac	All Day	30 minutes	All Day	30 minutes	1,500

Source: a) King County Metro, b) Sound Transit.

KING COUNTY METRO

King County Metro currently operates six bus routes that travel through SeaTac, including two RapidRide Lines (Metro's highest quality service). The A Line RapidRide connects Tukwila to Federal Way, stopping at both Angle Lake Station and SeaTac/Airport Station. The F Line RapidRide connects Renton to Burien, stopping at Tukwila International Boulevard Station just outside of the city limits, and

traveling east-west through SeaTac. Routes 156 and 161 also connect to SeaTac/Airport Station. Route 132 travels Des-Moines Memorial Drive on the west border of SeaTac, and Route 128 travels along Military Road on the east border of SeaTac.

King County Metro also operates DART Route 635, which connects Des Moines to Angle Lake Station. This is a Dial-A-Ride Transit (DART) service that runs on a fixed route under contract with the non-profit Hopelink. The service uses smaller transit vehicles and may deviate from the fixed route to make stops upon request. In this case, the deviation area is outside of SeaTac in Des Moines. This service runs Monday through Saturday.

King County Metro provides on-demand transit service in select neighborhoods, including a portion of SeaTac north of S 160th Street and east of 24th Avenue starting in 2023 (see Figure 30). This service is called MetroFlex[12] and it is available weekdays and Saturdays from 5 AM - 1 AM and Sundays 6 AM - 12 AM. Rides are limited to the service area and may be made through an app, by phone, or via a website. Rides cost the same as a Metro bus and transfers are free.

PARK AND RIDE LOTS

A park and ride facility operated by Sound Transit is located at the Angle Lake Station. The lot is available for day use and has 1,160 available parking spaces. The SeaTac/Airport Station does not provide parking but has a drop-off area available. Just outside of the city limits, Sound Transit also operates the Tukwila International Boulevard Station with 600 parking stalls available.

PLANNING STANDARDS

The vision for Complete Neighborhoods in Envision SeaTac 2044 includes accessibility to transit service within a half mile walkshed. Although the City of SeaTac does not directly plan or operate transit services, access to transit can indicate where additional coordination may be needed with transit operators to fully support the Multimodal Transportation goal.

Access to transit was measured by mapping half mile walking distances around each existing or planned future transit stop location. As shown in Figure 31, most of the city currently falls within a half mile of an existing transit stop.

[12] https://kingcounty.gov/en/dept/metro/travel-options/metro-flex, Access 9/6/2024.

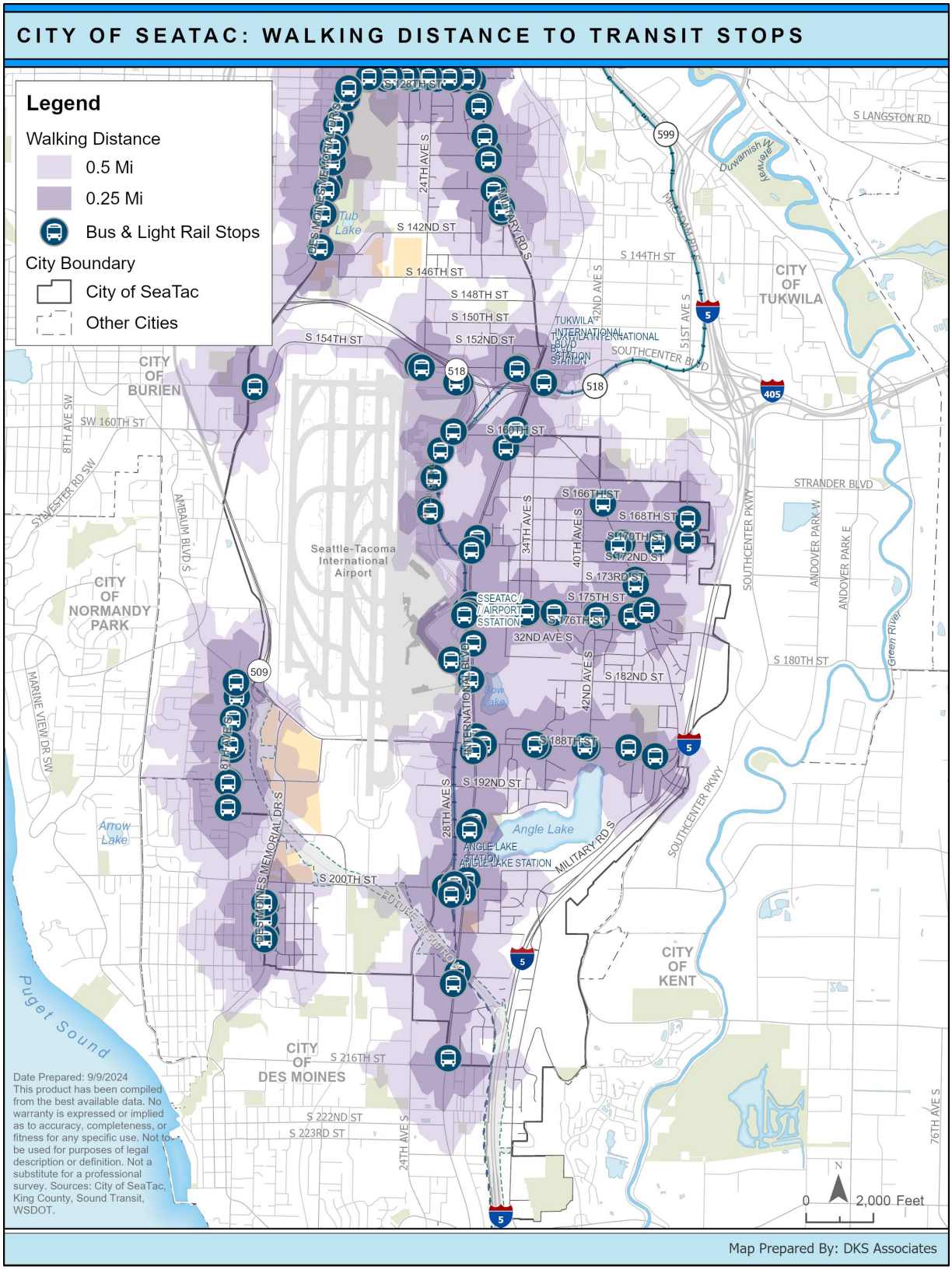


FIGURE 31: WALKING DISTANCE FROM TRANSIT STOPS

PLANNED TRANSIT SERVICE AND ACCESS TO TRANSIT

King County Metro has designated SeaTac as one of three areas within the County that will receive focused improvements to improve transportation equity. More frequent service lines are planned for segments of South 128th Street, Military Road South, Des Moines Memorial Drive South, SR 518, Airport Expressway, South 176th Street/South 178th Street, South 188th Street, South 200th Street, and 24th Avenue South. King County Metro aims to decrease travel time between Federal Way and SeaTac to 25 minutes, a 50% reduction compared to 2019. Travel time between SeaTac and Redmond is expected to drop by 21% to only 1 hour and 15 minutes. No additional RapidRide bus rapid transit lines are proposed within the City of SeaTac within the planning horizon based on King County Metro's long-range plan Metro Connects.[13] While King County Metro, does not currently have plans for expanding its MetroFlex service further into SeaTac, the Transportation Element includes a policy to work with King County Metro to enhance transit service in SeaTac, including consideration of on-demand service.

Sound Transit's Stride bus rapid transit is planned to have the S1 Line between Bellevue and Burien stop at the Tukwila International Boulevard station[14]. This line will connect to the Burien Transit Center and the Bellevue Transit Center. The extension of the LRT to Federal Way from the Angle Lake station is in the design phase and expected to open for service by 2026. Transit routes assumed in the SeaCast 2044 model, based on the Metro Connects plan, are shown in Figure 32.

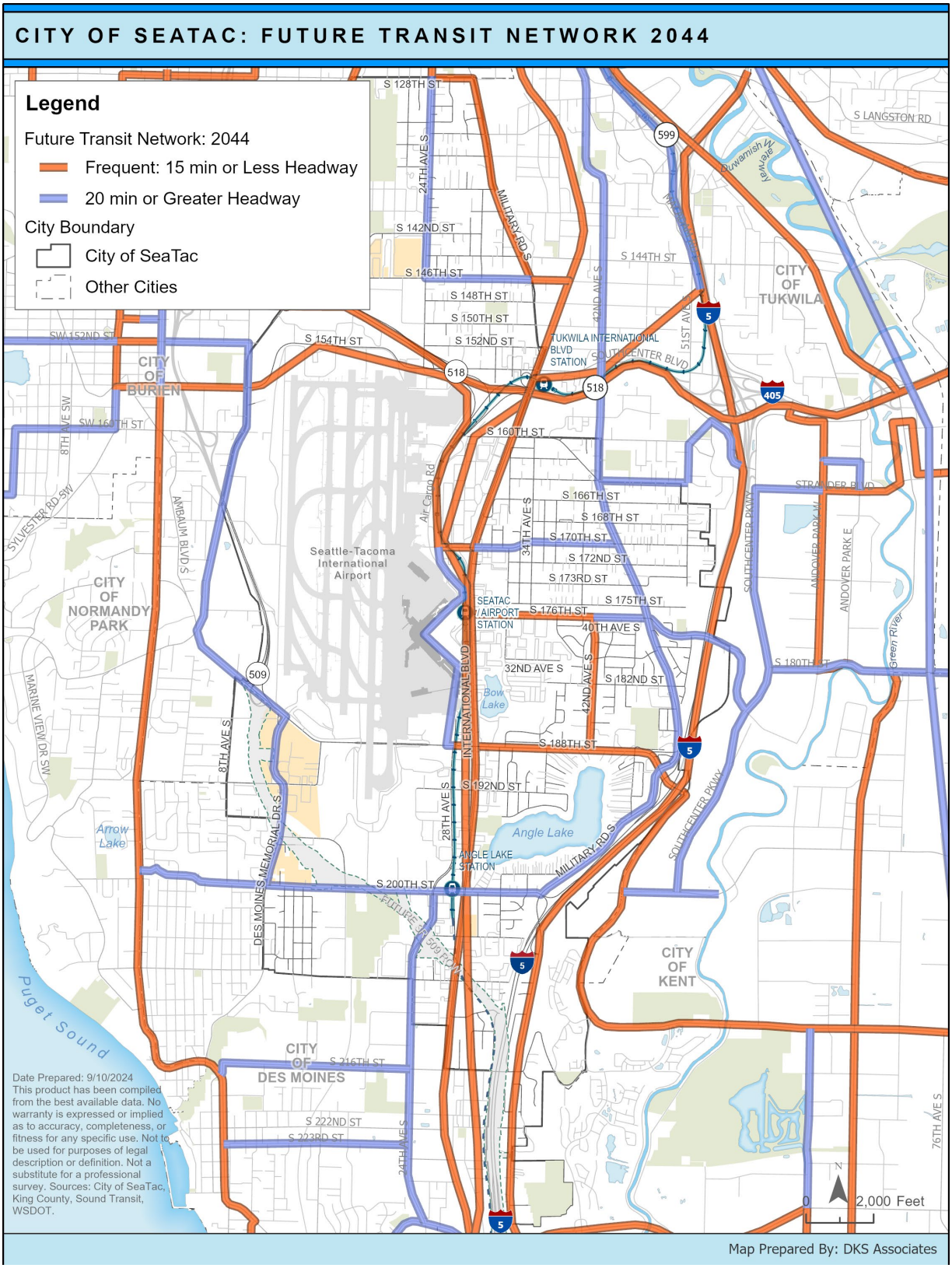
Future access to transit was evaluated by mapping quarter and half mile walksheds from transit stops assumed in the SeaCast 2044 model. While proximity to transit stops is important, the quality of service provided at those stops is also important. Figure 33 shows the walksheds for only transit stops with higher-frequency service (maximum 15-minute headways). While most areas of the city will have access to higher-frequency transit, a few gaps will remain. These areas include:

- Near South 142nd Street and South 146th Street along 24th Avenue South (western edge of Riverton Heights Neighborhood) – now covered by a MetroFlex service area;
- From South 164th Street through South 172nd Place by Military Road South (east end of McMicken Heights Neighborhood);
- West of 18th Avenue South near South 200th Street towards the city limits at Des Moines Memorial Drive – (Maywood Neighborhood).

These areas outside of the half mile walksheds should be included in future discussions with King County Metro on how best to serve SeaTac residents.

[13] Metro Connects: King County Metro Long-Range Plan, November 17, 2021.

[14] Sound Transit Stride S1 Line, Accessed 7/30/2024.



Source: SeaCast 2044.

FIGURE 32: PLANNED TRANSIT ROUTES

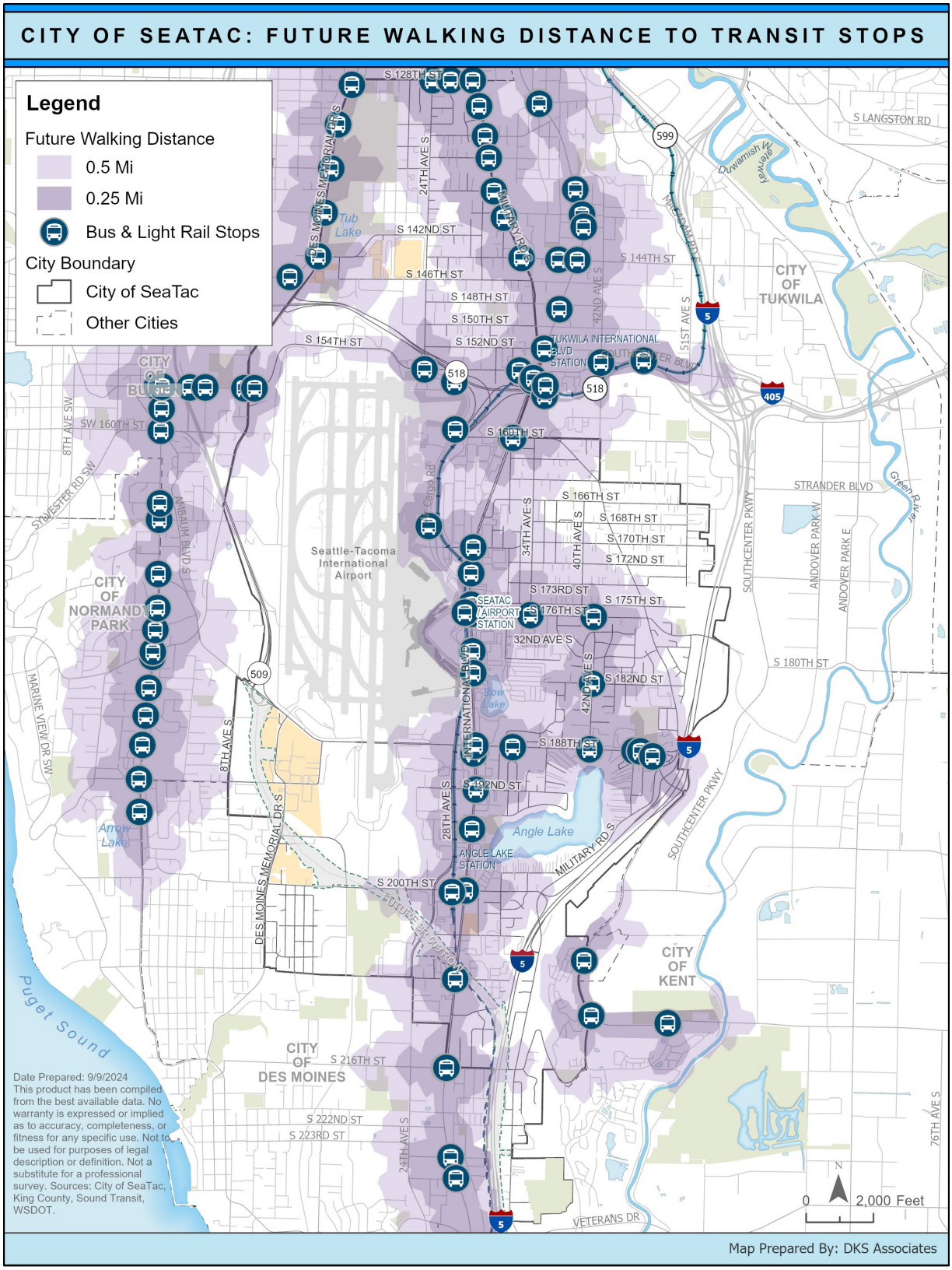


FIGURE 33: FUTURE ACCESS TO TRANSIT

CHAPTER 3

RECOMMENDED TRANSPORTATION SYSTEM IMPROVEMENTS

RECOMMENDED TRANSPORTATION SYSTEM IMPROVEMENTS

This chapter lists the specific projects and associated costs necessary to deliver the future modal networks summarized in the previous chapter. Many significant transportation projects affecting SeaTac will be delivered by partner agencies such as WSDOT, the Port of Seattle and Sound Transit. These are listed under **Partner Agency Projects.**

Complementing the delivery of major capital projects, the City will continue to maintain and make spot improvements to transportation facilities under existing programs that are part of the 2025-2030 Transportation Improvement Program (TIP) including the Street Overlays and Preservation Program, the Citywide Safety Improvement Program and the Intelligent Transportation Systems Program. In addition, the Commute Trip Reduction Program will continue to support the goal of shifting travel from single occupant vehicles to alternative modes. These programs are described under **Transportation Programs**.

Development of a transportation network that serves all users, providing “Complete Streets”, is the impetus for nearly all the projects identified for SeaTac roadways. Safety is another critical focus and integral to all project needs that have been identified. Both these concepts – Complete Streets and Safety – are key to obtaining grant funding under currently defined programs as well as meeting the City’s policies around Complete Neighborhoods, connectivity, and accessibility and supporting the City’s growth strategy. These previously existing and newly identified project needs are listed under **Transportation Projects.**

Finally, multiple corridors will require additional study before moving on to the project design phase. These studies should holistically assess the movement of vehicles, pedestrians, bicyclists, transit users, and freight. The recommended study corridors are discussed under **Recommended Studies** and include South 200th Street and International Boulevard.

PARTNER AGENCY PROJECTS

Many key transportation facilities and services such as state highways, interstate freeways, and transit service in SeaTac are provided by partner agencies. The City supports projects planned by other agencies which will improve regional and local traffic flow and increase transit service. The projects are listed in Table 8 and shown in Figure 34 and are described below.

WSDOT

WSDOT will construct a new full access-controlled facility connecting the existing SR 509 freeway with 28th/24th Avenue South and I-5. The first phase includes two lanes in both directions between South 188th Street and 28th/24th Avenue South. In Stage 2, WSDOT will build the remaining 2 miles of SR

509 Expressway, reconfigure SR 509 interchanges at South 188th and South 160th Streets and add a southbound auxiliary lane on I-5 between SR 516 and South 272nd Street. Stage 2 will provide a full interchange at South 188th Street/Des Moines Memorial Drive South.

Improvements to local streets will accompany the SR 509 extension to reduce potential impacts on SeaTac and maintain connectivity across the freeway. As an active transportation improvement, the South 188th Street interchange will include a shared used path connecting the Lake to Sound Trail to an existing shared use path at Des Moines Memorial Drive South and South 188th Street.

WSDOT also plans to modify the interchanges of SR 518 at International Boulevard and South 154th Street. The local addition of a traffic signal at a new 32nd Avenue South/South 154th Street interchange with the SR 518 westbound offramp (see project TMP-23) is conditioned on the completion of this WSDOT project.

Finally, WSDOT plans the construction of Express Toll Lanes and High Occupancy Vehicle (HOV) lanes connecting I-5 and SR 509, and along I-5.

PORT OF SEATTLE

The Port project that is perhaps the most consequential for SeaTac is the Airport South Access Expressway, a limited access roadway that would connect the south end of Sea-Tac International Airport to the new SR 509 extension. The Port also proposes to build a roundabout at the intersection of South 170th Street and the Airport Expressway. The City will continue to coordinate with the Port as it updates its Sustainable Airport Master Plan (SAMP).

SOUND TRANSIT

The regional transit operator, Sound Transit, plans two projects that will extend the Link light rail south from the Angle Lake Station in SeaTac, ultimately providing service through to Tacoma. As part of the Federal Way Link extension, Sound Transit will build a light rail crossing of International Boulevard and also the SR 509 undercrossing of International Boulevard.

Bus Rapid Transit (BRT) service is planned by Sound Transit between Bellevue Transit Center and Burien Transit Center. The planned Stride BRT S1 line will operate along SR 518 within SeaTac.

KING COUNTY

The Lake to Sound trail will ultimately provide a connection between Lake Washington and the Puget Sound. In SeaTac, the trail will use bike lanes on Des Moines Memorial Drive and South 188th Street.

CITY OF DES MOINES

The neighboring City of Des Moines plans several projects in their Transportation Improvement Plan that will adjoin projects proposed in SeaTac. These include projects on South 216th Street and Des Moines Memorial Drive South.

TABLE 8: PARTNER AGENCY PROJECTS

ID	PROJECT NAME	PROJECT LIMITS	DESCRIPTION	RELATIVE TIMING	LEAD AGENCY
MP-043.1	SR 509 Extension Stage 1a & 1b	28th/24th Ave S to I-5	Construct new, full access control freeway, with tolls, to connect the existing SR 509 freeway terminus with 28th/24th Ave S and I-5. Phase 1 includes two lane each way, with truck climbing lanes, between S 188th St and 28th/24th Ave S. Two lanes each way are planned between 28th/24th Ave S and I-5.	Short term	WSDOT
WSDOT	S 204th St/34th Ave S/S 208th St/S 206th St Connector Road	S 204th St/34th Ave S/S 208th St/S 206th St	This project is included with the extension of SR 509. Install sidewalks, street lighting, and utility infrastructure. This road provides circulation to the neighborhood after S 208th St is severed by SR509.	Short term	WSDOT
MP-043.2	SR 509 Extension Stage 2	S 188th St/Des Moines Memorial Dr S to 28th/24th Ave S	Construct new, full access control freeway, with tolls, to connect the existing SR 509 freeway terminus at S 188th St/Des Moines Memorial Dr S with 28th/24th Ave S. Stage 2 includes two lane each way, with a full interchange at S 188th St/Des Moines Memorial Dr S and a shared use path connecting Lake to Sound Trail to S 188th St.	Short term	WSDOT
	I-5 Express Toll Lanes	I-5/Pierce County Line to I-5/I-405 Interchange	Convert existing HOV lanes to High Occupancy Toll lanes and develop a second HOT lane using roadway shoulders	Medium term	WSDOT
	34th Ave S Roadway Widening	S 204th St to S 211th St	Construct a new 28-foot-wide roadway with sidewalks on one side and sharrows.	Short term	WSDOT
	South Access Expressway	Airport Drive to SR 509 Extension	Construct limited access roadway to connect the south end of Sea-Tac Airport to the new SR 509 extension	Long term	Port of Seattle

ID	PROJECT NAME	PROJECT LIMITS	DESCRIPTION	RELATIVE TIMING	LEAD AGENCY
	S 170th St Roundabout	S 170th St/ Doug Fox Rental Car Driveway	Construct a roundabout at the intersection of S 170th St and driveways near Doug Fox Rental Car	Short term	Port of Seattle
	South Link at 28th Ave S	Terminal Dr to S 188th St	Construct new arterial connecting Sea-Tac airport to S 188th St	Short term	Port of Seattle
MP-069	Federal Way Link Extension	SR 99/ S 200th St to S 320th St/Gateway Center Blvd	Sound Transit (ST) is extending light rail from the Angle Lake light rail station on S 200th St in SeaTac to the Federal Way Transit Center. In addition to building the light rail crossing of International Blvd, ST will also build WSDOT's SR509 bridge crossing under International Boulevard.	Short term	Sound Transit
	Tacoma Dome Link Extension	Federal Way to Tacoma	Light rail expansion from Federal Way Transit Center to Tacoma Dome, with stops in between in South Federal Way, Fife, East Tacoma/Portland Ave	Long term	Sound Transit
	Stride BRT S1 Line	Bellevue Transit Center to Burien Transit Center	New bus rapid transit service will run along SR 518 in SeaTac	Short term	Sound Transit
	Lake to Sound Trail	S 200th St/ 18th Ave S to S Normandy Rd/Des Moines Memorial Dr	16-mile multi-purpose walking/biking trail spanning from Lake Washington in Renton all the way to the shoreline in Des Moines	Short term	King County
	S 216th Street Improvement (Segment 1b)	International Blvd to Eastern City Limits	Widen to provide additional travel lanes, bike lanes, curb, gutter, & sidewalks. Project coordinated with WSDOT construction of SR509 to replace the I-5 overcrossing with transitions to the planned lane configuration.	Short term	Des Moines

ID	PROJECT NAME	PROJECT LIMITS	DESCRIPTION	RELATIVE TIMING	LEAD AGENCY
	Des Moines Memorial Dr S	S 200th St to Marine Dr	Install bike lanes, curb, gutter, drainage & sidewalks. Add a lane to approach to Marine View Dr.& left turn pockets where feasible.	Medium term	Des Moines
	Des Moines Memorial Dr S and S 208th St	Intersection Improvements	Widen DMMD to add left turn pockets at S. 208th Street.	Long term	Des Moines

Sources: Puget Sound Regional Council, Regional Transportation Plan 2022-2050; City of SeaTac, 2025-2030 Transportation Improvement Program; Washington DOT, SR 509 Completion Project, https://wsdot.wa.gov/construction-planning/search-projects/sr-509-completion-project; Port of Seattle; Sound Transit, System Expansion, https://www.soundtransit.org/system-expansion; King County,16-Mile Lake to Sound Trail, City of Des Moines Resolution No. 1467, adopting a Transportation Improvement Plan .

TRANSPORTATION PROGRAMS

The City of SeaTac has developed several programs to maintain and operate its transportation system as well as promote alternative commute modes. These programs are listed in Table 9 along with the projected cost over the six-year Transportation Improvement Program (TIP) cycle.

Street Overlays and Preservation Program: This program encompasses ongoing preservation, and maintenance of the roadway system. The ongoing activities include street overlays, repair of major pavement failures, and crack sealing to extend the usable life of existing pavements.

Citywide Safety Improvement Program: This program will deliver spot safety improvements as identified in the International Boulevard Safety Improvement study and the Local Road Safety Plan. An important consideration for this program is ensuring that improvements meet updated standards such as the U.S. Access Board's Public Right of Way Accessibility Guidelines, known as PROWAG and the WSDOT Complete Streets policy (RCW 47.04.035).

Intelligent Transportation Systems (ITS) Program: The focus of the ITS program for the City of SeaTac is the operations of traffic signals along key arterial corridors. Implementation of an Advanced Traffic Management System (ATMS) will allow the City to improve signal coordination along key corridors, thus reducing delays. An ATMS would also allow the City to remotely adjust traffic signal timing, improving response to events such as a major collision or event.

Commute Trip Reduction (CTR) Program Annual Element: The CTR program requires staff time to review and monitor the trip reduction programs of major employers. City staff also coordinate with state and regional agencies in refining the CTR program to reduce the use of single occupant vehicles.

TABLE 9.CITYWIDE TRANSPORTATION PROGRAMS

ID	PROJECT NAME	DESCRIPTION	SIX YEAR COST ($2024)	TE GOALS AND POLICIES
ST-866	Street Overlays and Preservation Program	Maintain and preserve the integrity of the City's existing roadway surfaces through a combination of repair to major pavement failures, crack sealing of existing pavements to extend their usable life and overlay pavements that are structurally declining.	$7,800,000	Goal 7.1, Policy 7.1A, 7.3J
ST-834	Citywide Safety Improvement Program	Implement safety projects such as pedestrian crossings including those identified in the International Boulevard Safety Study or the Local Road Safety Plan. Bicycle facilities provided under this program should be LTS 2 or better or provided on parallel routes.	$1,357,000	Goal 7.1, 7.5; Policy 7.1A, 7.5A, 7.5B, 7.5E, 7.5F
ST-887	Intelligent Transportation Systems Program	Implement Intelligent Transportation Systems Program to improve signal coordination and management, transit signal priority, roadway monitoring and response, ITS device management, and data collection. System could include communications equipment, traffic signal equipment, video surveillance and monitoring, video detection, or a satellite traffic management center.	$600,000	Goal 7.1, 7.3; Policy 7.1A, 7.3S
MP-033	Commute Trip Reduction Program Annual Element	Provide for review, approval, and monitoring of the Commute Trip Reduction (CTR) programs for major employers within the City.	$162,000	Goal 7.1, Policy 7.1A, 7.1D

Source: City of SeaTac, 2025-2030 Transportation Improvement Program

TRANSPORTATION PROJECTS

PROJECT OR NEEDS IDENTIFICATION

The TMP planning process began with a review of previously completed transportation plans and studies to develop an initial list of needed transportation improvements or projects. This list was reviewed with SeaTac staff to remove any projects that had been completed or no longer aligned with the City's goals. Transportation project needs identified by previous planning efforts were supplemented with additional analyses to ensure that the future transportation network would support the population and job growth envisioned in the comprehensive plan while aligning with the overall vision for SeaTac.

Note that the City's current Transportation Improvement Program (TIP) was adopted in June 2024. The TMP project list builds from this project list with some revisions to existing projects as well as additions for the short, medium and long term. Some assumptions were also made regarding the timing of construction for some projects with the design process occurring in the short term and construction extending through the medium term. The short term TMP project list will inform the City's next adoption of its TIP.

Roadway Capacity Improvements - The need for potential additional roadway capacity improvements was assessed analyzing the future operations of 44 study intersections. This analysis confirmed that all study intersections within the City of SeaTac are expected to operate at acceptable levels of service if planned improvements are implemented. Additionally, future travel speeds on all Concurrency Corridors will meet the currently adopted standards.

Complete Streets Improvements – By far the predominant category of improvements seeks to upgrade existing SeaTac arterials and collectors to modern urban standards with drainage, sidewalks, low-stress bicycle facilities, and other elements. Projects that provide Complete Streets and enhanced active transportation facilities were derived from several sources, including the Local Road Safety Plan, the Angle Lake District Station Area Plan, and the City's current Transportation Improvement Program.

Previously proposed improvements were reviewed to ensure compliance with the most recent WSDOT and federal standards for Complete Streets and accessibility. Additional active transportation needs were identified to fill gaps and ensure that the future urban and neighborhood villages are all connected with low stress routes for bicyclists and pedestrians. A target threshold of Level of Traffic Stress (LTS) 2 was applied in developing active transportation projects to ensure maximum eligibility for state and federal grants. This led to increased costs for some previously identified projects.

Providing low-stress bicycle facilities on some corridors can be costly and challenging, given right-of-way constraints and the need to underground utilities. In response, projects to provide low-stress routes on parallel corridors were identified and included as short term projects. Parallel low-stress routes are

relatively easy to implement and, once in place, can serve to meet grant funding requirements that would help fund improvements on the adjacent high-traffic corridor.

The resulting list of transportation projects is summarized in Table 10.

PROJECT PRIORITIZATION

Because the project needs are greater than available resources, projects were scored according to a rubric aligned with Transportation Element Goals and Policies to provide guidance on implementation. Each project was reviewed against the criteria listed below and assigned a point for each qualifying category. Projects that would provide low-cost active transportation routes parallel to high-traffic corridors received an extra point. The resulting scores were then assigned priority ratings of high (4-5 points), medium (3 points), and low (1-2 points).

TABLE 10: PROJECT PRIORITIZATION FRAMEWORK

CRITERION	POLICY REFERENCE
Connectivity – Project increases connectivity by providing a new roadway, mid-block bike or pedestrian crossing, or new bike/ped path through large parcel.	Goal 7.2
Complete Streets – Project provides or completes low stress (LTS 1 or 2) route between neighborhood village and urban center, LRT transit station or other "Complete Neighborhoods" destination.	Goal 7.5; Policy 7.5C and 7.5H
Goods movement - Project supports freight movement on designated truck route to Airport or industrial area.	Policy 7.3P
Roadway Capacity - Project reduces delay on a concurrency corridor.	Policy 7.3A
Transit – Project supports mode shift to transit by providing improvements on transit route or near transit stops	Goal 7.6 - Transit/Multimodal/TDM
Safety - Project improves safety at intersection or corridor identified in the Local Road Safety Plan (LRSP) or Comprehensive Safety Action Plan (CSAP) and uses countermeasure identified in these plans.	Policy 7.1H - Safety
Equity - Project addresses existing disparities or gaps in the transportation system within a traditionally underrepresented community.	Policy 7.1G - Equity

Feasibility levels for Complete Streets projects were assigned if projects can be delivered under the following conditions:

- Level 1 – Repaving/restriping
- Level 2 – Redesign within existing curbs
- Level 3 Requires widening of existing curbs
- Level 4 – Feasible with right-of-way acquisition

Projects were also assigned a target time frame recognizing the stage of each project and cost. Short term projects would be implemented within the TIP time frame of 6 years. Medium term projects would be implemented after 6 years but within 15 years, and long-term projects would be implemented some time before the planning horizon (2044).

Projects already part of the Transportation Improvement Project were initially assigned a short time frame. Newly identified project needs were initially characterized as short term (score 4-5), medium term (score 3) or long term (score 1-2). Following the initial determination of time frame, some projects were assigned a “short-medium” time frame in recognition that while the project design phase would occur in the short term, the cost and complexity of the project would delay the construction phase until the medium term. A handful of the larger more complex projects were also moved from the initial medium to long term category in recognition of their size and complexity.

Project locations are depicted in Figure 34.

TABLE 11.TRANSPORTATION PROJECTS

ID	PROJECT NAME	PROJECT LIMITS	DESCRIPTION	COST ($2024)	RELATIVE TIMING	TE GOALS AND POLICIES	PRIORITY SCORE
ST-N22	S 152nd St	24th Ave to 30th Ave S	Construct new pedestrian facility and provide for LTS 2 or better bikeway.	$2,500,000	Short-medium term	Goal 7.1, 4, 5, Policy 7.1A, 7.1H, 7.4A, 7.5A, 7.5B, 7.5C, 7.5H	1
ST-140	S 216th St	Military Rd S to 35th Ave S	Reconstruct roadway, install drainage, curb, gutter, sidewalks, and provide for LTS 2 or better bike lanes. Underground utility lines.	$4,100,000	Short-medium term	Goal 7.1, 7.5, Policy 7.1A, 7.1D, 7.1G, 7.1H, 7.5A, 7.5B, 7.5C, 7.5H	4
ST-134	S 204th St Improvements	32nd Ave S to new 34th Ave S	Reconstruct roadway and connectivity to 34th Ave S. Improvements to S 204th St will include drainage, curb, gutter, sidewalks, lighting, shared bicycle lanes, and parking. Consolidated with projects ST-N19 (30th Ave S), ST-136 (32nd Ave S), and ST-N77.	$13,000,000	Short-medium term	Goal 7.1, 7.2, 7.4, 7.5, Policy 7.1A, 7.1H, 7.1G, 7.4A, 7.5A, 7.5B, 7.5C, 7.5H	3
ST-141	Airport Station Area Improvements	32nd Ave S from S 170th St to S 176th St	Combines CIP project scopes for ST-141, ST-N34, and ST-N64. Project Elements include installation/improvement of sidewalks; standalone bicycle lanes, separating bicycles from vehicular traffic; underground of overhead utilities; intersection improvements.	$30,563,822	Short term	Goal 7.1, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.5A, 7.5B, 7.5C, 7.5H	3
ST-069	S 208th St	International Blvd to 28th/24th Ave S	Reconstruct roadway to urban minor arterial with pedestrian and separated bicycle facilities.	$8,800,000	Short-medium term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1H, 7.1G, 7.3C, 7.3I, 7.5A, 7.5B, 7.5E, 7.5H	3

ID	PROJECT NAME	PROJECT LIMITS	DESCRIPTION	COST ($2024)	RELATIVE TIMING	TE GOALS AND POLICIES	PRIORITY SCORE
ST-016	34th Ave S, Phase 2	S 166th St to S 176th St	Reconstruct roadway to collector arterial standards. Construct drainage, curb, gutter, shared bicycle facilities, and sidewalks. Install traffic calming measures. Underground utility lines. Provide for LTS 2 or better bicycle facilities.	$24,900,000	Short-medium term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1D, 7.1H, 7.1G, 7.3C, 7.3I, 7.5A, 7.5B, 7.5E, 7.5H	3
ST-126	S 152nd St	30th Ave S to Military Rd S	Reconstruct existing roadway and construct sidewalks, bicycle lanes/shared lanes, lighting, storm drainage, and on-street parking (where feasible). Provide access and circulation improvements for vehicle and pedestrian movements in support of redevelopment. Also, install traffic signal at 32nd Ave S intersection (conditioned on realignment of SR518 WB off-ramp to S 154th St by WSDOT). Ensure bike facilities added meet LTS 2 or better.	$7,100,000	Short term	Goal 7.1, 7.3, 7.4, 7.5, Policy 7.1A, 7.1B, 7.1D, 7.1G, 7.3C, 7.3O, 7.4A, 7.5A, 7.5B, 7.5C, 7.5E, 7.5H	3

ID	PROJECT NAME	PROJECT LIMITS	DESCRIPTION	COST ($2024)	RELATIVE TIMING	TE GOALS AND POLICIES	PRIORITY SCORE
ST-116	Military Rd and S 160th St	International Blvd to S 166th St	Reconstruct and widen to provide for drainage, bicycle lanes and pedestrian facilities, upgrade existing signals, channelization, street lighting, continuous left turn lane, and underground overhead utilities. Reconfigure the section between 34th Ave S and Military Rd from four lanes to three lanes with a two way left turn lane, bicycle lanes, and a sidewalk on the north side. Build a roundabout at the intersection of Military Rd S/S 164th St/42nd Ave S in alignment with the adopted Military Rd S 5-way Intersection study. Ensure bike facilities added meet LTS 2 or better.	$26,100,000	Short-medium term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1D, 7.1H, 7.3C, 7.3I, 7.3Q, 7.5A, 7.5B, 7.5E, 7.5H	4
ST-022	Military Rd S	S 128th St to S 150th St	Reconstruct and widen to provide for drainage, bicycle lanes, and pedestrian facilities. Construct left turn lanes at high volume intersections. Ensure bike facilities added meet LTS 2 or better.	$47,900,000	Short-medium term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1B, 7.1D, 7.1G, 7.1H, 7.3C, 7.3O, 7.5A, 7.5B, 7.5C, 7.5E, 7.5H	4
ST-044	S 198th St	International Blvd to 28th Ave S	Construct a new three lane roadway with sidewalks to provide an additional access point to the Angle Lake Station Area. Includes a roundabout at the intersection with 28th Ave S. On-street parking may be considered.	$6,100,000	Short-medium term	Goal 7.1, 7.2, 7.5, Policy 7.1A, 7.1B, 7.2A, 7.5A, 7.5B, 7.5C, 7.5D, 7.5E	4
TMP-1	S 200th St	Des Moines Memorial Drive to 12th Pl S	Upgrade bike facilities to LTS 2 or better and provide ped crossing at 12th Pl S.	$400,000	Medium term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1H, 7.3I, 7.5A, 7.5B, 7.5H	3

ID	PROJECT NAME	PROJECT LIMITS	DESCRIPTION	COST ($2024)	RELATIVE TIMING	TE GOALS AND POLICIES	PRIORITY SCORE
TMP -3	51st Ave S	S 164th St to S 170th St	Construct adequate pedestrian facilities to both sides of the street.	$9,800,000	Long term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1H, 7.3C, 7.3I, 7.5A, 7.5B, 7.5E	2
TMP -4	S 208th St	24th Ave S to International Blvd	Construct adequate pedestrian facilities to both sides of the street.	$7,000,000	Long term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1H, 7.3C, 7.3I, 7.5A, 7.5B, 7.5E	2
TMP -5	S 188th St	Des Moines Memorial Drive to Military Rd S	Add LTS 2 or better bike facilities	$7,300,000	Short-medium term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.3I, 7.5A, 7.5B, 7.5H	5
TMP -6	S 176th St	International Blvd to Military Rd S	Add LTS 2 or better bike facilities	$37,200,000	Long term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.3I, 7.5A, 7.5B, 7.5H	3
TMP -7	Military Rd S	S 166th St to S 216th St	Improve existing high stress bike facilities and add LTS 2 or better bike facilities where missing.	$53,000,000	Long term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.3I, 7.5A, 7.5B, 7.5H	3
TMP -8	26th Ave / 28th Ave S	S 188th St to bike facilities south of S 200 St	Add LTS 2 or better bike facilities	$3,100,000	Medium term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.3I, 7.5A, 7.5B, 7.5H	3
TMP -9	24th Ave S	S 128th St to S 142nd St	Add LTS 2 or better bike facilities. Improve high stress pedestrian crossings. Provide parallel route to Military Rd S.	$3,200,000	Short term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.4A, 7.5A, 7.5B, 7.5C, 7.5H, 7.5F	4

ID	PROJECT NAME	PROJECT LIMITS	DESCRIPTION	COST ($2024)	RELATIVE TIMING	TE GOALS AND POLICIES	PRIORITY SCORE
TMP -10	S 142nd St	Des Moines Memorial Drive S to 29th Ave S	Add LTS 2 or better bike facilities. Add adequate pedestrian facilities to both sides of street.	$27,200,000	Long term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1H, 7.3I, 7.5A, 7.5B, 7.5H	3
TMP -11	S 160th St	Air Cargo Rd to International Blvd	Add LTS 2 or better bike facilities	$4,000,000	Medium term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.4A, 7.5A, 7.5B, 7.5C, 7.5E, 7.5F, 7.5G, 7.5H	3
TMP -12	S 148th St	24th Ave S to Military Rd S	Add bike facilities LTS 2 or better. Select intersection improvement to address safety or ADA needs.	$16,900,000	Long term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.4A, 7.5A, 7.5B	2
TMP -13	S 150th St	30th Ave S to Military Rd S	Construct adequate pedestrian facilities to both sides of the street.	$7,200,000	Short-medium term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.4A, 7.5A, 7.5B, 7.5C, 7.5H, 7.5F	2
TMP -14	24th Ave S	S 142nd St to S 150th St	Add LTS 2 or better bike facilities. Provide parallel route to Military Rd S (project 12).	$1,200,000	Short term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.4A, 7.5A, 7.5B, 7.5H	3
TMP -15	S 150th St	24th Ave S to 30th Ave S	Add LTS 2 or better bike facilities. Provide parallel route to Military Rd S (project 12).	$900,000	Short term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1B, 7.1H, 7.4A, 7.5A, 7.5B, 7.5H	3

ID	PROJECT NAME	PROJECT LIMITS	DESCRIPTION	COST ($2024)	RELATIVE TIMING	TE GOALS AND POLICIES	PRIORITY SCORE
TMP -16	S 175th St	32nd Ave S to Military Rd S	Add LTS 2 or better bike facilities. Provide parallel route to S176th (project 19).	$1,500,000	Short term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1B, 7.1G, 7.1H, 7.4A, 7.5A, 7.5B, 7.5H	3
TMP -17	40th Ave S/42nd Ave S	S 166th Ave S to S 188th St	Add LTS 2 or better bike facilities. Provide parallel route to International Blvd (project 27).	$3,400,000	Short-medium term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1H, 7.4A, 7.5A, 7.5B, 7.5H	4
TMP -18	S 166th St	34th Ave S to 40th Ave S	Add LTS 2 or better bike facilities. Provide parallel route to International Blvd (project 27).	$800,000	Short term	Goal 7.1, 7.3, 7.5, Policy 7.1A, 7.1H, 7.3I, 7.5A, 7.5B, 7.5H	2
TMP -19	S 135th St	24th Ave S to Military Rd	Construct adequate pedestrian facilities to both sides of the street and improve the ped crossing improvement at Military Rd.	$9,400,000	Long term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.4A, 7.5A, 7.5B, 7.5C	2
TMP -20	S 138th St	24th Ave S to Military Rd	Add bike facilities LTS 2 or better. Select intersection improvement to address safety or ADA needs.	$1,000,000	Short-medium term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.4A, 7.5A, 7.5B, 7.5H	2
TMP -21	S 166th St	International Blvd to 32nd Ave S	Construct adequate pedestrian facilities to both sides of the street.	$6,500,000	Long term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1H, 7.4A, 7.5A, 7.5B, 7.5H	1
TMP -22	S 182nd St	West of 39th Ave S to 41st Ave S	Construct adequate pedestrian facilities to both sides of the street.	$4,100,000	Long term	Goal 7.1, 7.4, 7.5, Policy 7.1A, 7.1G, 7.1H, 7.4A, 7.5A, 7.5B, 7.5H	2

ID	PROJECT NAME	PROJECT LIMITS	DESCRIPTION	COST ($2024)	RELATIVE TIMING	TE GOALS AND POLICIES	PRIORITY SCORE
TMP -23	South 154th Street and 32nd Avenue South Intersection	32nd Ave S to SR 518/ SR 99 Westbound Off-Ramp	Install traffic signal at new 32nd Ave S/S 154th St interchange with SR518/SR99 westbound off ramp. The project is in alignment with the S 154th St Station Area sub-area plan. The project is contingent on WSDOT completing the realignment of the SR518/SR99 westbound off ramp to align with 32nd Ave S.	$1,129,000	Short term	Goal 7.1, 7.3, 7.4, 7.5, Policy 7.1A, 7.1D, 7.1G, 7.3C, 7.3O, 7.4A, 7.5A, 7.5B, 7.5C, 7.5E, 7.5H	4

Sources: *City of SeaTac, 2025-2030 Transportation Improvement Program, DKS Associates, Toole Design.*

FIGURE 34: TRANSPORTATION PROJECTS

RECOMMENDED STUDIES

Several corridors within the City will require further study and analysis of alternatives before the design phase can begin. As previously mentioned, as the Port of Seattle revises its SAMP, the City should evaluate future traffic operations on roadways providing access to the airport from the south in collaboration with the Port.

In coordination with WSDOT, options for Complete Street design and operations along International Boulevard should be analyzed. The study should consider options such as speed reduction, space reallocation, and/or LTS2 or better bike facilities along the entire corridor within City limits.

Finally, after completion of the SR 509 Stage 1B and Federal Way Link Extension projects, the South 200th Street Corridor Plan can be updated prior to beginning design. This selected design should provide for LTS 2 or better bike lanes on or parallel to the corridor.

The recommended study projects are listed in Table 12.

TABLE 12: RECOMMENDED STUDIES

TIP ID	STUDY	PROJECT LIMITS	DESCRIPTION	COST	LEAD AGENCY
ST-161	S 200th St	International Blvd to Military Rd	After completion of the SR509 Stage 1B and Federal Way Link Extension projects, update S 200th St Corridor Plan and begin design. Provide for LTS 2 or better bike lanes on or parallel to corridor.	$700,000	SeaTac
New Study	International Blvd	Military Rd S to S 216th St	In coordination with WSDOT, study Complete Street design and operations considering speed reduction, space reallocation, and/or LTS2 or better bike facilities along the entire corridor within City limits.	$500,000	WSDOT/SeaTac

CHAPTER 4

IMPLEMENTATION

FUNDING AND IMPLEMENTATION STRATEGY

As is often the case, the cost to implement desired projects and programs exceeds the revenue anticipated to be available over the planning horizon. The financial analysis presented in this chapter provides a framework for decisions on which projects are prioritized for funding and implementation. Following a summary of project and program costs, an assessment of estimated revenues is based on known revenue sources. Options for increasing funding to implement projects over the plan horizon are also discussed.

PROJECT AND PROGRAM COSTS

This section summarizes the costs of the recommended transportation improvement projects and programs. Costs are summarized for the short (2024-2029), medium (2030-2035), and long term (2036-2044) timeframes. Costs include only those expected to be funded by the City of SeaTac and are presented in constant 2024 dollars.

The City's most recent Transportation Improvement Program (TIP) was adopted in June 2024. Projects identified in this TMP will inform the next update of the TIP. The costs for projects and programs listed under the short-term category correspond approximately to those projects that would be included in the next TIP. The TIP supports the development of the Capital Improvement Program (CIP) which must identify funding sources for all projects within a six-year timeframe.

PROGRAM COSTS

As described in the Transportation Programs section, the annual transportation programs address a variety of transportation needs including preservation, maintenance, and operations of the roadway network, systemic safety improvements, and commute trip reduction. Annual costs for these programs reflect costs from the Transportation Improvement Program extrapolated to 2044. The estimated TIP costs for the Street Overlays and Preservation Program were averaged and extrapolated at $1.3M per year. Outlays for the Citywide Safety Improvement Program and Intelligent Transportation Systems Program are anticipated to continue at about $100,000 per year. Ongoing annual outlays for the Commute Trip Reduction Program are estimated at $27,000. The anticipated program costs over the plan horizon total approximately $31.3M and are summarized in Table 13.

PROJECT COSTS

Table 13 also summarizes the costs for projects estimated to be implemented in the short-, medium- and long-term timeframes. As presented in the Transportation Projects section, there is substantial cost associated with the recommended projects. For projects characterized as having a "short-medium"

timeframe in the Recommended Transportation System Improvements section, costs have been split to assign design and Right of Way (ROW) costs to the short-term category and construction costs to the medium-term category.

TABLE 13: TRANSPORTATION PROGRAM AND PROJECT COSTS (2024-2044)

	SHORT TERM (2024- 2029)	MEDIUM TERM (2030 – 2035)	LONG TERM (2036-2044)	TOTAL COSTS (2024-2044)
Street Overlays and Preservation Program	$7,800,000	$7,800,000	$10,400,000	$26,000,000
Citywide Safety Improvement Program	$1,357,000	$600,000	$800,000	$2,757,000
Intelligent Transportation Systems Program	$600,000	$600,000	$800,000	$2,000,000
Commute Trip Reduction Program	$162,000	$162,000	$216,000	$540,000
Total Programs	$9,919,000	$9,162,000	$12,216,000	$31,297,000
Transportation Projects	$98,016,911	$108,175,911	$171,100,000	$377,292,822
Recommended Studies	$1,200,000	$0	$0	$1,200,000
Total Programs, Projects and Studies	**$109,135,911**	**$117,337,911**	**$183,316,000**	**$409,789,822**

Source: City of SeaTac Transportation Improvement Plan 2025-2031, DKS Associates.

REVENUE SOURCES

The City uses a few primary funds for transportation, including motor vehicle fuel taxes, commercial parking taxes, Transportation Impact Fees (TIF) and State and Federal grants, in addition to other miscellaneous funds. The City accounts for most of its transportation improvement revenues and expenditures in its Transportation Capital Improvement Fund (307) and Street Fund (102). This section was completed using historic City budget data.

State and Federal Grants

The City has secured about $2 million in state and federal grants between fiscal years 2019 and 2023. If this level of grant funding were to continue, the City would be able to secure $40 million in state and federal grants over the planning horizon.

Motor Vehicle Fuel Taxes

The motor vehicle fuel tax is statutorily authorized by Chapter 82.36 RCW and is partially allocated by WSDOT to cities and counties through an allocation formula. The revenues are used to fund administrative, construction, reconstruction, maintenance and repair costs to highways, major arterials, and city streets. There are separate allocations for city streets and highways. The City is forecast to receive an average of $675,000 per year in fuel taxes under the current state allocation formulas.

Commercial Parking Taxes

The City of SeaTac levies a special local option transportation tax of $3.99 per commercial parking transaction within city limits. This rate increases annually per City municipal code[15]. This tax applies to commercial, municipal, State of Washington and other governmental entities with parking operations. The tax is collected by parking service operators and remitted to the City each month. Over the past five years, the City has averaged annually about $8 million in Commercial Parking tax revenue.

Transportation Impact Fees

The City also collects transportation impact fees from new developments, which provide a funding source for transportation system capacity projects. The funds collected can pay for constructing or improving portions of roadways impacted by new development and increased traffic demands. The TIF is a one-time fee, which currently generates approximately $1 million annually for SeaTac.

[15] SMC Section 3.70.020(b) Local option transportation tax imposed. https://www.codepublishing.com/WA/SeaTac/#!/SeaTac03/SeaTac0370.html, Accessed 9/16/2024

REVENUE AND EXPENDITURE PROJECTION

Annual revenues include an estimated $675,000 from Motor Vehicle Fuel Taxes, $8.1 million from Commercial Parking Taxes, $1.1 million from Transportation Impact Fees, and $6.9 million from other miscellaneous revenue sources, including State and Federal grants, service charges and transfers from other funds into the Transportation CIP Fund (see Table 14).

Conservatively estimating the same levels of funding occur in the future and incorporating the anticipated increases in the commercial parking rates[16], SeaTac can expect to receive approximately $13.5 million from Motor Vehicle Fuel Taxes, $235.2 million from Commercial Parking Taxes, $22.0 million from Transportation Impact Fees, and $138.5 million from other miscellaneous revenue sources through 2044[17].

Expenditures include personnel services, roadway striping, traffic control, vegetation trimming, street sweeping, maintenance, and roadway engineering. The City estimated that it spends approximately $10.3 million per year (or about $207 million through 2044) to maintain and operate its streets. This estimate also includes transfers out from the Street Fund to other funds.

Through 2044, the City is expected to have approximately $202.2 million available for new project needs as shown in Table 14. The revenues were split out into short term (2024-2029), medium term (2030-2035) and long term (2036-2044) time horizons for comparison with the project costs over the same period.

[16] The parking tax revenue assumes a regional 3.1 percent consumer price index annual adjustment to the 5-year average revenue of $8.1 million.

[17] This assumes the population growth rate in SeaTac will be roughly the same as the cost inflation rate, therefore, maintaining existing revenues through 2044.

TABLE 14: FORECAST TRANSPORTATION REVENUES (2024-2044)

	5-YEAR AVERAGE ANNUAL AMOUNT (FY 2019-2023)	SHORT TERM REVENUES	MEDIUM TERM REVENUES	LONG RANGE REVENUES	TOTAL
Revenues					
Commercial Parking Tax	$8,125,000	$52,650,000	$63,175,000	$119,350,000	$235,175,000
Federal and State Grants	$2,025,000	$12,150,000	$12,150,000	$14,800,000	$40,500,000
Transportation Impact Fee / Other Charges	$1,100,000	$6,600,000	$6,600,000	$4,800,000	$22,000,000
Motor Vehicle Fuel Tax	$675,000	$4,050,000	$4,050,000	$5,400,000	$13,500,000
Other Local Sources	$4,900,000	$29,400,000	$29,400,000	$26,600,000	$98,000,000
Total Revenues	**$16,825,000**	**$104,850,000**	**$115,375,000**	**$188,950,000**	**$409,175,000**
Expenditures					
Personnel Services	$2,900,000	$17,400,000	$17,400,000	$23,200,000	$58,000,000
Materials and Services	$1,725,000	$10,350,000	$10,350,000	$13,800,000	$34,500,000
Capital Outlay/Maintenance	$1,800,000	$10,800,000	$10,800,000	$14,400,000	$36,000,000
Other Local Expenses	$3,925,000	$23,550,000	$23,550,000	$31,400,000	$78,500,000
Total expenditures	**$10,350,000**	**$62,100,000**	**$62,100,000**	**$82,800,000**	**$207,000,000**

Funding Summary (Revenue– Expenditures)	**$6,475,000**	**$42,750,000**	**$53,275,000**	**$106,150,000**	**$202,175,000**

Note: Surface Water Infrastructure built with transportation projects are reimbursed with funding from the City's Surface Water Management Utility Fund on a project-by-project basis.

Sources: City of SeaTac budget documents FY 2019-2023, DKS Associates.

TRANSPORTATION FUNDING SUMMARY

Table 15 compares the forecast transportation revenues from the existing sources with the conceptual timing horizon for funding the improvement projects. As shown, the City would need to both secure substantial additional resources and be strategic about the order in which projects are funded to deliver the full project list by 2044.

TABLE 15: TRANSPORTATION FUNDING NEED (2024-2044)

	SHORT TERM (2024 – 2029)	MEDIUM TERM (2030 – 2035)	LONG TERM (2036 – 2044)	TOTAL COSTS (2024-2044)
Estimated Revenues	$42,750,000	$53,275,000	$106,150,000	$202,175,000
Program and Project Costs	$109,135,911	$117,337,911	$183,316,000	$409,789,822
Net Difference	($66,385,911)	($64,062,911)	($77,166,000)	($207,614,822)

Source: Table 13, Table 14.

As discussed in the Projects chapter, some of the more costly Complete Streets projects may be supported by first constructing a parallel, low-stress bicycle route that would qualify the corridor for additional grant funding. Beyond grant funding, the City can consider the options discussed below for increasing transportation revenues.

Increase transportation impact fee – The next update of the City's transportation impact fee will consider all the projects identified in this Transportation Master Plan. This will likely result in an increased maximum justifiable fee, although the City has historically not implemented a fee rate close to the maximum justifiable. SeaTac currently charges $3,733 per peak hour trip, which is below the statewide average of $5,717 per peak hour trip[18].

Increase commercial parking tax revenues – The City may wish to negotiate with the Port to reallocate the commercial parking tax revenues earmarked for projects as the Port re-evaluates the SAMP project lists.

Establish a Transportation Benefit District (TBD) – Establishing a TBD could be considered by the City. Many agencies have used a TBD to provide additional and more stability to transportation preservation programs. Others have used the TBD funding for advancing implementation of non-motorized projects in neighborhoods or along arterials and collectors.

[18] Transpo Group, *2024 Transportation Impact Fee Comparison, https://mrsc.org/getmedia/7b937ea4-f666-4b86-b21d-fd21f43115e3/m58impactFeeCompare.pdf.*

FUNDING STRATEGY

Without additional revenues the financing summary recognizes the potential for a shortfall of almost $278 million (2024 $) over the life of the plan. The City will continue to reassess transportation needs and funding sources every year as part of the six-year Transportation Improvement Program (TIP) and Capital Improvement Program (CIP) processes. This will allow the City to match the financing program with the short range transportation improvement projects and funding. The TE and TMP also include goals and policies to periodically review land use growth, adopted level of service standards, and funding sources to ensure they support one another and meet concurrency requirements.

To implement the TE and TMP, the City will consider the following principals in its transportation funding program and TIP/CIP processes:

- As part of the development of the annual six-year Transportation Improvement Program and Year Capital Improvement Program, the City will balance improvement costs with available revenues;
- Review project design standards to determine whether costs could be reduced through reasonable changes in scope or deviations from design standards or whether elements of projects may be delivered on parallel corridors;
- Require developer improvements as they become necessary to maintain LOS standards to meet concurrency and off-set impacts on traffic operations, multimodal safety, and to support the completion of the multi-modal transportation systems;
- Periodically review the funding strategy to see if the transportation impact fees or commercial parking taxes should be revised to account for updated capital improvement project cost estimates;
- Consider establishing a TBD to help fund transportation system needs;
- Lower priority projects in the Transportation Element may be postponed to beyond 2044 or deleted from the program.

CHAPTER 5

PUBLIC OUTREACH

PUBLIC OUTREACH ACTIVITIES

Opportunities for public engagement were coordinated with the broader outreach effort organized by the Envision SeaTac 2044 team during the summer of 2024. These activities included three community planning meetings, with one meeting held in the north, central, and south districts of the city. As part of the community meetings, participants received information on planned transportation projects, indicated perceived gaps in the transportation system, and had the opportunity to take a transportation focused survey. The survey was also administered via the Comprehensive Plan web page.

These activities were supplemented by presentations to the SeaTac City Council, Transportation and Public Works Committee and Planning Commission which were all open to the public. Presentations to the Planning Commission were given on June 18, July 2, August 6 and August 20.

More information on public outreach including the full survey results and copies of outreach materials may be found in Appendix C.

SURVEY HIGHLIGHTS

135 SURVEY RESPONSES

5 TRANSLATIONS

ENGLISH
SPANISH
SOMALI
AMHARIC
VIETNAMESE

#1 TRAFFIC CONGESTION

WAS REPORTED THE MOST PRESSING TRANSPORTATION NEED

#2 TRANSIT IMPROVEMENTS

(FREQUENCY, AMENITIES, ETC)

WAS REPORTED THE SECOND PRESSING TRANSPORTATION NEED

ROADWAY CAPACITY PROJECTS

WERE REPORTED THE HIGHEST PRIORITY TYPE OF PROJECTS

84% OF ALL RESPONSES AGREE OR STRONGLY AGREE THAT

“ENHANCING THE OVERALL QUALITY OF LIFE”

SHOULD BE A GUIDING PRINCIPLE FOR THE FUTURE OF TRANSPORTATION IN THE CITY

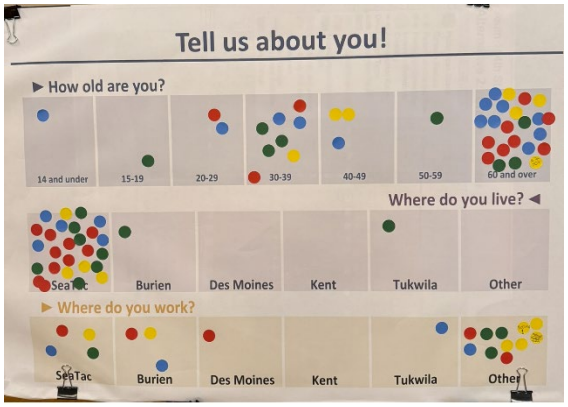
COMMUNITY MEETING HIGHLIGHTS

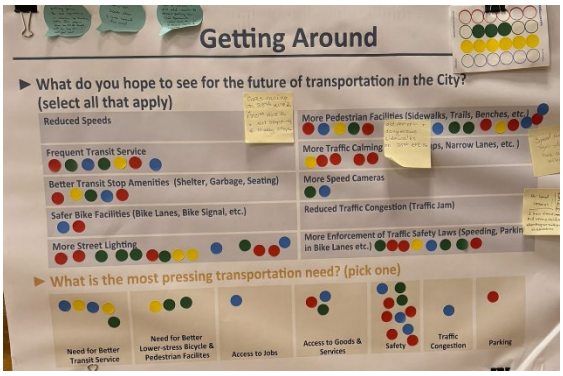
The team conducted three public community planning meetings in different areas of SeaTac:

1 South Neighborhoods
Madrona Elementary School
August 7, 2024
18 Attendees

2 Central Neighborhoods
McMicken Heights Elementary School
August 14, 2024
34 Attendees

3 North Neighborhoods
Sea-Tac Community Center
August 21, 2024
22 Attendees





COMMUNITY MEETING COMMENT HIGHLIGHTS

55 WRITTEN COMMENTS

SAFETY WAS REPORTED THE MOST PRESSING TRANSPORTATION NEED

23 PEDESTRIAN RELATED COMMENTS

14 BIKE RELATED COMMENTS

5 SPEEDING CONCERN COMMENTS

6 COMMENTS REQUESTING IMPROVED LIGHTING

APPENDIX

CONTENTS

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CITY OF SEATAC TRANSPORTATION MASTER PLAN

APPENDIX B. FUTURE MULTIMODAL CONDITIONS

CITY OF SEATAC TRANSPORTATION MASTER PLAN

APPENDIX C. PUBLIC OUTREACH SUMMARY DATA

CITY OF SEATAC TRANSPORTATION MASTER PLAN