



Vehicle Element



TABLE OF CONTENTS

- Introduction V-1
 - How the Vehicle Element Advances the STP V-1
 - Relationship to STP Goals V-4
- Delivering the Key Moves V-5
- Setting the Context V-15
 - Opportunities, Challenges, and Emerging Trends V-15
 - Community Engagement V-20
- Driving in Seattle V-23
 - Roadway Network and Operational Considerations V-24
 - Programmatic Activities and strategies V-36
- Defining Success..... V-45
 - Measurable Outcomes..... V-45
 - Relevant TEF Tactics..... V-47
- Glossary..... V-49

LIST OF FIGURES

- Figure 1: Vehicle-related Public Comments on Webmap #1 (May 2022-October 2022) V-21
- Figure 2: National Highway System (NHS) V-25
- Figure 3: Functional Roadway Classification..... V-26
- Figure 4: Image of Streets Illustrated Webmap..... V-27
- Figure 5: Number of Travel Lanes V-28
- Figure 6: 2022 Traffic Volumes V-29
- Figure 7: High Injury Network (HIN) Street Segments V-31
- Figure 8: Arterials where the 85th Percentile Speed Exceeds 5 MPH over the Posted Speed Limit V-32
- Figure 9: Tier 1 Emergency Response Routes V-33
- Figure 10: Seattle Snowplow Routes V-34
- Figure 11: Seismic Lifeline Routes..... V-35

LIST OF TABLES

- Table 1: Vehicle Element: Delivering the Key Moves V-6
- Table 2: Vehicular Performance Measures..... V-46

[This page intentionally left blank]

INTRODUCTION

As the Seattle Department of Transportation (SDOT) continues to build out a multimodal system that offers diverse travel options, we are committed to maintaining a network of reliable streets for driving. Our work aims to provide safe and steady travel for people who need to drive including emergency responders, freight and urban goods delivery drivers, service providers, and people who rely on driving to make essential trips. Our work includes supporting people who rely on a vehicle, whether by choice or by necessity. While not everyone is in a position to choose alternatives to driving, it is important to provide choices for people who currently have no other travel options. Additionally, the use of private vehicles remains the least efficient use of street space, and it contributes heavily to climate impacts and safety outcomes. Balancing the share of street space will require us to prioritize travel options that meet our identified goals, including mobility for emergency response vehicles, utility functions, freight and goods delivery, transit, and personal vehicles.

HOW THE VEHICLE ELEMENT ADVANCES THE STP

The Seattle Transportation Plan (STP) presents a 20-year vision for transportation in Seattle. The Vehicle Element provides a framework for continued improvement to the design and operation of the city's street system. Planning for vehicular travel is critical to effectively rebalance Seattle's streets for improved safety and mobility and to initiate the system changes recommended in each of the STP's functional elements. Strong and clear policies around vehicular travel will help meet STP objectives to reduce the share of drive-alone trips, vehicle miles traveled (VMT), travel speeds, and greenhouse gas (GHG) emissions (Supports TEF 20.5)¹.

Supporting Growth and Economic Vitality

As Seattle continues to grow, our transportation system must evolve in tandem with our changing landscape. Our comprehensive plan, One Seattle, guides how and where growth will occur to accommodate the growing number of people who live, work and travel here. No matter where people live or work, providing safe and equitable transportation will always be critical to connect people and goods where they need to go. To achieve our shared goals as One Seattle, we must strategically plan for a range of appropriate travel options and supportive infrastructure that fits the needs of unique and varied communities— whether a dense downtown grid, quiet residential neighborhood, or bustling manufacturing and industrial center.

In denser neighborhoods and commercial centers, development typically occurs close together. Combined with safe and supportive transportation infrastructure, density can make it easier for people to walk, bike and use transit because they don't have to travel as far. People have more access in these places, enabling them to live car free if they choose to or can't afford it. In places where development is more spread out, people might still walk or bike for shorter trips or to connect to transit services, but it is often harder due to longer distances between places. While some people choose to live or work in places that are more spread out, others do so because they have no choice and driving is their only

¹ TEF refers to SDOT's Transportation Equity Framework. You can learn more about the TEF at <https://www.seattle.gov/transportation/projects-and-programs/programs/transportation-equity-program/equity-workgroup>. A complete list of the TEF tactics referenced is located at the end of the element.

viable option. For instance, people who live outside of Seattle because housing is more affordable, or people who transport freight or cargo for a living may not have options for how they travel other than driving a vehicle.

Our transportation system can support anticipated growth in different places while continuing to advance our goals by making other travel options more viable and available in appropriate contexts. For example, freight-and-bus only lanes can support reliable travel times for industrial workers and transit riders, or on-demand rideshare services could provide more convenient shared trips. Each functional element of the STP plays a role in supporting Seattle's growth and economic vitality.

By developing a coordinated vehicle strategy, we can support growth in several ways:

- Support effective regional travel and provide a reliable, well-connected roadway network to accommodate critical vehicular travel and essential personal trips
- Support a safe and steady transportation system for all users - particularly our most vulnerable travelers who are traveling outside of vehicles
- Rebalance street space to achieve sustainability and livability goals and address mobility and other essential street functions
- Reduce climate impacts through fewer vehicle miles traveled and vehicle electrification
- Consider and seek to limit impacts to emergency response mobility and building access as other modal priorities are implemented
- Reduce speeding through street design and operations to improve safety and the overall experience for vulnerable travelers

Economic Benefits of New and Emerging Mobility

The STP supports economic vitality in a range of ways and each functional Element plays a role. Maintenance and modernization of our transportation network enables efficient and reliable vehicle trips for the movement of people to jobs, education, markets, and other opportunities. The vehicular network also enables the movement of freight, goods, and services, which provide significant benefits for our economy and communities—especially when our values around safety, equity, and sustainability remain centered.

- Maintain connections to employment, medical services, and other regional centers
- Support the One Seattle Comprehensive Plan and projected jobs and population growth
- Promote effective movement of goods and transit that share general purpose space on streets



ONLY



ONE WAY

ONLY

RELATIONSHIP TO STP GOALS

How we manage vehicular travel is essential to meeting the Seattle Transportation Plan's goals for safety, equity, sustainability, mobility and economic vitality, livability, and maintenance and modernization.



Prioritize safety for travelers in Seattle, with no serious or fatal crashes. Streets should be designed and operated to prioritize the safety of people, especially people outside the protection of a vehicle. Reducing vehicle travel speeds can reduce the frequency and severity of crashes. Separating facilities (physically) by travel option creates more predictable roadways for all travelers. Separating modes can also occur through signal timing or phasing to reduce conflicts at intersections.



Co-create with community and implement restorative practices to address transportation-related inequities. Many arterial streets run through Seattle's underserved communities. By managing vehicular flow, we can seek to improve noise and air quality impacts (TEF 20.5). We will work to equitably preserve and provide access to cultural centers and regional assets in collaboration with community members.



Respond to climate change through innovation and a lens of climate justice. Reductions in private auto travel will have the greatest impact on meeting transportation related emissions reduction goals. Providing more high-quality travel options, especially in underserved areas, for people to choose a mode for each trip will support Seattle's goals of reducing transportation emissions by 83% and ensuring 9 out of 10 personal trips are zero emissions.



Provide reliable and affordable travel options that help people and goods get where they need to go. A functioning and connected street network is essential to meet a variety of vehicular travel needs. These include vehicle access for essential needs, such as medical or emergency services, and mobility of goods and service providers.



Reimagine city streets as inviting places to linger and play. Slowing and reducing vehicular traffic can allow streets to become safer and more people friendly. Designing streets to promote quality places can add lasting community value. Streets are also places to promote green infrastructure design for improved environmental health.



Improve city transportation infrastructure and ready it for the future. Maintaining infrastructure, including critical corridors and bridges, is an important component of SDOT's work. When addressing maintenance needs, we seek to use these opportunities to modernize infrastructure, incorporate safety improvements, and invest in traditionally underinvested portions of the community.

DELIVERING THE KEY MOVES

Part I, Chapter 3 of the Seattle Transportation Plan (STP) includes a collection of key moves, or strategies that describe the priority actions we've identified as critical to achieve our STP goals:

- Safety (S)
- Equity (TJ)
- Sustainability (CA)
- Mobility & Economic Vitality (PG)
- Livability (PP)
- Maintenance & Modernization (MM)

Each of the functional elements serve a distinct and important role in making our key moves happen. This section highlights the most relevant key move actions for this element.

Table 1 is intended to illustrate which of the key moves the **Vehicle Element** will help us to accomplish.

- Element actions with a reference, such as "[Supports Key Move TJ1](#)," link directly back to the corresponding Part I Key Move that it supports. See Chapter 3.
- Element actions with a reference, such as "[Supports TEF 32.1](#)," link directly back to the corresponding Transportation Equity Framework (TEF) tactic(s) the action advances. A comprehensive list of supported TEF tactics is included at the end of each element.

Several actions are repeated across all STP functional elements because they are important commitments that should be present in all of our work. For example, all elements include:

Incorporate Vision Zero and Safe System approaches into every project and program, including proactive safety improvements for citywide implementation. ([Supports Safety Key Move S2a](#))

Feature community voices in planning documents. ([Supports Equity Key Move TJ1b](#))

Part I, Chapter 4 Implementation Strategy of the STP provides additional information on how we'll deliver our shared vision, goals, and key moves.

Table 1: Vehicle Element: Delivering the Key Moves

		STP Goals Supported					
		Safety	Equity	Sustainability	Mobility & Economic Vitality	Livability	Maintenance & Modernization
Vehicle Element: Delivering the Key Moves							
SAFETY KEY MOVES							
Reduce vehicle speeding to increase safety (S1)							
V1.	Design all streets using context-appropriate traffic calming treatments that are proven to reduce speeds and encourage people driving to travel at the posted speed limit. This should include strategies to narrow the street, coordinate traffic signs and signals, and plant street trees. (Supports Key Move S1a)	✓	✗	✗	✗	✗	✗
V2.	Implement traffic calming strategies, such as traffic circles, chicanes, or speed humps, cushions, and tables. Pair strategies with programs that deliver educational campaigns to reduce speeding. (Supports Key Move S1b)	✓				✗	✗
V3.	Reduce posted speed limits where appropriate, consistent with national guidance and best practices. (Supports Key Move S1c)	✓					
V4.	Continue collecting travel speed data and use it to measure progress in reducing speeding. (Supports Key Move S1d)	✓					✗
V5.	Coordinate with the Washington State Department of Transportation to address safety challenges where their roadways impact the city street network. (Supports Key Move S1e)	✓	✗				
Concentrate safety investments where fatal and serious injury collisions occur most or are at a higher risk of occurring (S2)							
V6.	Incorporate Vision Zero and Safe System approaches into every project and program, including proactive safety improvements for citywide implementation. (Supports Key Move S2a)	✓	✗	✗	✗	✗	
V7.	Prioritize safety improvements at locations that are on the high-injury network, have high levels of travel stress, or are identified through the Seattle Bicycle and Pedestrian Safety Analysis. (Supports Key Move S2b)	✓	✗		✗		
V8.	Accelerate implementation of research-backed improvements that are proven to make streets safer for everyone, including but not limited to leading pedestrian intervals (LPIs) at signals, arterial traffic calming, and road diets. (Supports Key Move S2c)	✓			✗		✗
V9.	Make people walking, biking, and rolling more visible by improving sight lines at intersections through treatments such as curb bulbs, intersection daylighting, and refuge islands, with a focus on High Injury Corridors. (Supports Key Move S2d)	✓			✗		✗
V10.	Expand opportunities to more safely cross busy arterials by installing enhanced crossings, improved lighting, and other treatments. (Supports Key Move S2e and TEF 40.6)	✓			✗		✗
V11.	Pilot and evaluate new and emerging safety treatments in locations where proven interventions are infeasible or do not address the identified safety issues. (Supports Key Move S2f)	✓					

		STP Goals Supported					
		Safety	Equity	Sustainability	Mobility & Economic Vitality	Livability	Maintenance & Modernization
Vehicle Element: Delivering the Key Moves							
Make all journeys safer from departure to destination, especially for people traveling outside the protection of a vehicle (S3)							
V12.	Provide dedicated places for people to walk, bike, or roll safely separated from vehicles by using context appropriate treatments, such as protected bike lanes or “complete street” corridors, especially on major truck routes. (Supports Key Move S3b)	✓			✗		✗
V13.	Support programmatic activities and partnerships to reduce the size and weight of vehicles used for personal trips, transit, and urban goods movement. Heavier vehicles are a key factor in pedestrian fatalities. (Supports Key Move S3f)	✓					
V14.	Expand safety education for all travelers. (Supports Key Move S3h)	✓					
Provide safer routes to schools, parks, transit, community gathering spaces, and other common destinations (S4)							
V15.	Provide pedestrian-scale lighting to make people walking more visible to people driving vehicles and to increase personal safety. (Supports Key Move S4f)	✓	✗		✗	✗	
Support public safety through maintenance of critical access routes and planning for a climate resilient network (S5)							
V16.	Work with first responders on multi-modal street design and curb management strategies to understand access and incident response options. (Supports Key Move S5a)	✓	✗			✗	✗
V17.	Continue to develop street designs and curb management strategies that reduce injury collisions and reduce the need for associated emergency response. (Supports Key Move S5b)	✓					✗
V18.	Continue to coordinate with King County and the State to identify key corridors and destinations for access during a catastrophic emergency. Support access to highway transportation routes including “seismic lifelines” and National Highway System (NHS) routes best suited to establish post-disaster emergency supply chains. (Supports Key Move S5c)	✓	✗		✗	✗	✗
V19.	Regularly update SDOT’s Continuity of Operations Plan (COOP) that identifies strategies for maintaining vital functions and services following a disaster including providing access to designated emergency routes and the National Highway System. (Supports Key Move S5d)	✓		✗	✗		✗
V20.	Continue to conduct emergency preparedness trainings and exercises for SDOT staff to comply with the National Incident Management System (NIMS) that supports effective communication and prompt multijurisdictional emergency response. (Supports Key Move S5e and TEF 39.1, 39.2, and 39.4)	✓					
V21.	Work with other City departments and federal regulators to support prompt incident response times through operational or land use strategies, such as use of smaller emergency response vehicles that better fit in urban environments and increased service coverage by adding fire stations or battalions. (Supports Key Move S5f)	✓					

		STP Goals Supported					
		Safety	Equity	Sustainability	Mobility & Economic Vitality	Livability	Maintenance & Modernization
Vehicle Element: Delivering the Key Moves							
V22.	Plan for and invest in infrastructure and culturally relevant landscaping to mitigate transportation from heavy precipitation events, sea level rise, and related flooding and inundation. Planning efforts should include consultation with federally recognized Tribes and community-based outreach with urban Native communities. (Supports Key Move S5g)	✔		✔	✔		✔
EQUITY KEY MOVES							
Center the voices of communities of color and underrepresented groups in planning and decision-making process (TJ1)							
V23.	Implement the Transportation Equity Framework to grow transparency, accountability, and shared power when making transportation decisions with community members. (Supports Key Move TJ1a)		✔				
V24.	Feature community voices in planning documents. (Supports Key Move TJ1b)		✔				
V25.	Continue to build and maintain relationships with vulnerable communities and underrepresented groups. (Supports Key Move TJ1c and TEF 29.1, 41.6)		✔				
V26.	Meet early and often to provide opportunities to influence projects during the initial phases of the development process. (Supports Key Move TJ1d and TEF 3.4)		✔				
V27.	Normalize the practice of making decisions about policies and right-of-way (ROW) allocations with input from vulnerable communities. (Supports Key Move TJ1f and TEF 19.1, 25.4)		✔				
V28.	Support the transportation-related needs of local businesses owned by vulnerable communities and their commuting employees. Provide accessible and culturally relevant information about SDOT services. (Supports Key Moves TJ1h and TEF 17.1, 21.2, 16.1)		✔		✔		✔
V29.	Compensate community partners for their valuable work to connect and communicate with their networks and uplift community-driven initiatives. (Supports Key Move TJ1i and TEF 1.1, 13.4, 31.4, 37.1)		✔				
V30.	Include representation of our region's Coast Salish art, language, and culture in the Seattle transportation system. Support efforts to consult with federally recognized Tribes to standardize policies for project and artist selection and a process to solicit feedback from the greater Native community. (Supports Key Move TJ1j)		✔				
Address inequities in the transportation system by prioritizing investments for impacted communities (TJ2)							
V31.	Prioritize transportation investments that benefit people and local businesses who currently and historically experience high transportation burdens and those at high risk of displacement. Reduce racial inequities in transportation related serious injuries and fatalities. (Supports Key Move TJ2a)		✔				✔
V32.	Support safe, reliable access to employment centers and MICs for BIPOC, low-income and displaced workers, such as increased or late-night transit services or well-lit overnight parking for truck drivers.	✔	✔		✔		

		STP Goals Supported					
		Safety	Equity	Sustainability	Mobility & Economic Vitality	Livability	Maintenance & Modernization
Vehicle Element: Delivering the Key Moves							
(Supports Key Move TJ2b)							
V33.	Collaborate with municipal, county, regional, and state transportation partners to consider the transportation needs of people displaced from Seattle. (Supports Key Move TJ2c)		✓				
V34.	Engage regularly with local businesses owned by our vulnerable communities to hear their concerns around transportation project impacts and displacement, and co-create transportation, public space, and permitting solutions. (Supports Key Move TJ2d and TEF 14.3,15.2)		✓		✓	✓	
V35.	Develop policies to prevent and mitigate transportation projects, both past and present, from contributing to future displacement. (Supports Key Move TJ2g)		✓				
V36.	Implement improvements to make traveling in Seattle more accessible for everyone, such as curb ramps, accessible pedestrian signals, accessible parking, and accessible transit stops. (Supports Key Move TJ2h)		✓		✓		✓
V37.	Partner with other departments and agencies to deploy anti-displacement programs, investments, tools, and mitigation efforts. (Supports Key Move TJ2i)		✓				
V38.	Conduct and implement racial equity assessments at the program level. (Supports Key Move TJ2j)		✓				
Support shifts toward non-punitive transportation enforcement approaches that reduce harm and enhance public safety on city streets (TJ4)							
V39.	Prioritize street designs and infrastructure changes to create self-enforcing streets and curb regulations that encourage safe behaviors and reduce the need for enforcement. (Supports Key Move TJ4a)	✓	✓			✓	✓
V40.	Identify and support implementation of existing non-punitive alternatives to traffic violation fines and fees. Coordinate with community-based organizations to recommend new or revised enforcement alternatives, with accessible options for people of all abilities, such as restorative justice measures, community service, positive reinforcement, or online traffic safety classes. (Supports Key Move TJ4b and TEF 42.2)		✓				
V41.	Avoid reliance on enforcement to fund transportation projects and programs. Revenue generated by punitive enforcement should be additive and should be prioritized for investment in transportation options and safety improvements that can reduce or prevent the need for enforcement. (Supports Key Move TJ4d and TEF 34.1)	✓	✓				
V42.	Develop a policy for automated traffic safety cameras and potential expansions informed by recommendations from the racial equity analysis conducted in partnership with community to address concerns and mitigate harms, while continuing to solicit feedback from community and other stakeholders. (Supports Key Move TJ4e)	✓	✓				✓
V43.	Improve enforcement of existing regulations that support reliable mobility and safety, including those that keep bike lanes and pedestrian zones clear, deter improper use of transit-only lanes, and discourage speeding, especially in school zones. (Supports Key Move TJ4g)	✓	✓		✓	✓	

		STP Goals Supported					
		Safety	Equity	Sustainability	Mobility & Economic Vitality	Livability	Maintenance & Modernization
Vehicle Element: Delivering the Key Moves							
V44.	Collaborate with the Seattle Police Department on parking enforcement for compliance with curb and right-of-way regulations. (Supports Key Move TJ4h)		⬇		⬇		
V45.	Explore programs to deter Disabled Parking Permit abuse to provide predictable and reliable availability of parking spaces for people with disabilities. (Supports Key Move TJ4i)		⬇		⬇		
SUSTAINABILITY KEY MOVES							
Improve neighborhood air quality and health outcomes by promoting clean, sustainable travel options (CA1)							
V46.	Investigate and implement environmentally sustainable intersection controls like roundabouts.	✔	⬇	⬇	⬇	⬇	⬇
V47.	Expand beyond employer-based travel demand management programs to include residential and neighborhood-based strategies that encourage non-driving travel choices for all trips. (Supports Key Move CA1a)			⬇			
Green city streets with landscaping and street trees to better handle changing climate (CA2)							
V48.	Install green stormwater infrastructure on streets that already and will continue to flood frequently. Consider locations for de-paving projects that will expand green spaces and improve climate resiliency. (Supports Key Move CA2e)			⬇		⬇	⬇
V49.	Explore use of different pavement types, including lighter colors, to reduce urban heat island effects. (Supports Key Move CA2f)			⬇		⬇	
Foster neighborhood vitality and improved community health (CA3)							
V50.	Co-create low-emission neighborhoods with communities so the benefits of cleaner air and safer streets are shared equitably. (Supports Key Move CA3a)		⬇	⬇		⬇	
Support the transition from fossil fuel to electric vehicles for personal, commercial, and delivery trips (CA4)							
V51.	Work with City departments to support the transition to electric vehicles for all segments of transportation through equitable incentives, grant opportunities, partnerships, and pilot programming. (Supports Key Move CA4a and TEF 36.2)		⬇	⬇			
V52.	Establish a comprehensive policy for EV charging in the right-of-way, outlining preferred locations, standards, and requirements. (Supports Key Move CA4b)			⬇			⬇
V53.	Lead by example and transition to a 100% zero-emissions City fleet by 2030. (Supports Key Move CA4c)			⬇			
Advance mobility management strategies to encourage walking, biking, and transit trips (CA5)							
V54.	Explore equitable demand management tools that could influence travel choices and create revenues to invest in sustainable transportation options, freight movement, and innovation. (Supports Key Move CA5c)			⬇			⬇

		STP Goals Supported					
		Safety	Equity	Sustainability	Mobility & Economic Vitality	Livability	Maintenance & Modernization
Vehicle Element: Delivering the Key Moves							
V55.	Work with regional partners as they explore pricing options that are equitable and do not put the city at a competitive economic disadvantage. (Supports Key Move CA5d)		🟡	🟢			
MOBILITY & ECONOMIC VITALITY KEY MOVES							
Support access to jobs, freight movement, and growth in deliveries (PG4)							
V56.	Work with other agencies and private partners to provide real-time information to minimize travel time and optimize access for commuters and freight and urban goods vehicles. (Supports Key Move PG4i)				🟡		🟡
V57.	Expand efforts to work with employers and property managers to provide sustainable transportation options, education, and incentives to promote sustainable travel options for shift workers, non-peak hour commuters, small business employees, and workers in MICs. (Supports Key Move PG4i)		🟡	🟢	🟡	🟡	
Manage curbspace to reflect city goals and priorities (PG5)							
V58.	Recognize that the curb supports all essential functions of the right-of-way (mobility, access for people, access for commerce, activation, greening, and storage) and develop decision frameworks to prioritize these functions based on local area and system needs. (Supports Key Move PG5a)	🟢	🟡	🟢	🟡	🟡	🟡
V59.	Continue to use pricing mechanisms to manage on-street parking demands and improve access to adjacent uses (by turning over spaces). (Supports Key Move PG5f and TEF 32.1)		🟡		🟡		🟡
LIVABILITY KEY MOVES							
Reallocate street space to prioritize people, creating enjoyable places that also facilitate goods delivery and mobility (PP1)							
V60.	Prioritize person-throughput as metric rather than vehicle throughput. (Supports TEF 19.6)	🟢	🟡	🟢			🟡
V61.	Update the complete streets project evaluation process around goals to reduce drive-alone rates, reduce vehicle-miles traveled, and grow trips made by healthy and sustainable travel options.	🟢	🟡	🟢			🟡
V62.	Design streets and public spaces with consideration of goods and emergency access needs, while adjacent businesses prosper from an activated public realm. (Supports Key Move PP1c)	🟢	🟡		🟡		🟡
V63.	Update Seattle’s Right-of-Way Improvements Manual (Streets Illustrated) to reflect evolving best practices in safe street designs and emergency response mobility. (Supports Key Move PP1d)	🟢	🟡	🟢	🟡	🟡	🟡
Create welcoming community and mobility hubs (PP2)							
V64.	Provide a safe and comfortable experience moving in and around community and mobility hubs. This includes better crossings and intersections, slower speeds and rightsized travel lanes, decluttered sidewalks, universal access, and more. (Supports Key Move PP2c)	🟢			🟡		🟡
Co-create and enhance public spaces for playing and gathering to improve community health (PP3)							

		STP Goals Supported					
		Safety	Equity	Sustainability	Mobility & Economic Vitality	Livability	Maintenance & Modernization
Vehicle Element: Delivering the Key Moves							
V65.	Implement shared, car-light streets, such as Café Streets and Healthy Streets, and car-free streets to support the transition to a low-carbon transportation system and reduce chronic health disparities. (Supports Key Move PP3d)	✔	✔	✔	✔	✔	✔
MAINTENANCE & MODERNIZATION KEY MOVES							
Maintain our streets, sidewalks, and bridges and incorporate planned safety and network improvements with maintenance work (MM1)							
V66.	Maintain our transportation infrastructure, including streets, sidewalks, and bridges serving the most users and on the high-injury network. (Supports Key Move MM1a)	✔	✔	✔	✔	✔	✔
V67.	Strategically manage the life cycle of our transportation assets in accordance with our Transportation Asset Management Plan to achieve the best performance results for the preservation, improvement, and operation of infrastructure assets. (Supports Key Move MM1b)				✔		✔
V68.	Reduce the maintenance backlog by being proactive, leveraging technology to monitor asset conditions, and using data and lifecycle analyses to help when it's time for upgrades. (Supports Key Move MM1c)				✔		✔
V69.	Conduct proactive bridge and roadway structure maintenance, preservation, and replacement activities to increase the resiliency of vulnerable bridges and other vital connections. (Supports Key Move MM1d)	✔			✔		✔
V70.	Collect feedback on asset conditions as part of community engagement on transportation system planning, design, and co-creation. (Supports Key Move MM1e)		✔				✔
V71.	Conduct asset maintenance in accordance with the priority investment and emergency response route networks, especially when investment supports walking, biking, transit, and freight. (Supports Key Move MM1f and TEF 45.6)		✔				✔
V72.	Modernize city streets by incorporating planned safety and network improvements into maintenance and replacement activities to not only improve the condition of transportation infrastructure and equipment, but also reduce dependence on driving, promote sustainable travel options, and support economic vitality. (Supports Key Move MM1c and TEF 19.3)	✔	✔	✔	✔	✔	✔
Reduce neighborhood disparities in the quality of streets, sidewalks, public spaces, and bridges (MM2)							
V73.	Conduct a racial equity assessment of the maintenance needs of existing assets in neighborhoods that score high on the city's Race and Social Equity Index. (Supports Key Move MM2a and TEF 19.3)	✔	✔				✔
V74.	Focus resources for maintenance and improvements in neighborhoods that have been historically or are currently underserved. (Supports Key Move MM2b and TEF 19.4)		✔		✔		✔
Ready city streets for new travel options and emerging trends and technologies (MM3)							
V75.	Collect, monitor, and use data to inform changes to the transportation system. (Supports Key Move MM3a)	✔	✔	✔	✔	✔	✔

		STP Goals Supported					
		Safety	Equity	Sustainability	Mobility & Economic Vitality	Livability	Maintenance & Modernization
Vehicle Element: Delivering the Key Moves							
V76.	Anticipate and leverage innovative transportation technologies so they are shaped to meet community values and goals, including safety, equity, and climate response. (Supports Key Move MM3b)				✓		✓
V77.	Coordinate with relevant partner agencies on projects of regional and statewide significance within the City of Seattle, such as the I-5 Master Plan, Lid I-5, or high-speed rail corridors. (Supports Key Move MM3d)						
V78.	Use information infrastructure (e.g., data from sensors and traffic control systems) to manage travel flows, inform the traveling public, monitor the conditions of streets and bridges, and promote use of more efficient and sustainable travel options. (Supports Key Move MM3g)						✓
V79.	Research and develop policies to manage the evolution toward connected and autonomous vehicles, recognizing that government and industry must partner to deliver their anticipated benefits safely. (Supports Key Move MM3h)	✓	✓	✓	✓	✓	✓



SETTING THE CONTEXT

Seattle is a dynamic and ever-evolving city. We've seen dramatic changes in the types of travel options available for people to choose from, as well as when and where people want to travel. Additionally, there are increasing demands on the role streets play to support social, environmental, and economic health. We can't fully predict changing conditions (such as a global pandemic) that could disrupt the transportation system and all the functions it serves. As such, we will need to remain agile and able to continually adapt and respond to the evolving transportation needs of the city's residents, businesses, and visitors.

The STP provides a framework for how SDOT will navigate a changing transportation landscape over the next 20 years. This section describes the context we're operating in today, including significant opportunities, emerging trends, and challenges. It also includes a summary of major community engagement themes we heard that relate to vehicular travel, which were used to shape the actions we'll take to achieve our shared transportation vision. SDOT will continue to engage and co-create with community members as transportation system needs, preferences, and circumstances continue to evolve in the years to come.

A reliable and well-connected roadway network is required to accommodate critical vehicular travel and essential personal trips. Critical vehicular travel includes emergency response vehicles, freight and goods movement, and utility functions. Essential vehicle trips include those not easily made by other travel options, such as work shifts not served by transit schedules or routes, trips with large families, or people with disabilities who may experience barriers for accessing and using other travel options.



A Metro bus and a fire truck travelling on 3rd Ave

OPPORTUNITIES, CHALLENGES, AND EMERGING TRENDS

Seattle's street system has many competing demands for finite available space by people using a variety of travel choices. From 2009 to 2019, the city had approximately 1 million average daily vehicle trips, according to SDOT's 2019 Traffic Report (pre-pandemic). This means the city accommodated extensive

growth in jobs and population— without adding vehicle trips to the system, though many of Seattle’s main arterials continued to experience varying levels of traffic congestion over this period.

The COVID-19 pandemic resulted in significant changes in commuting patterns, which led to a steep drop of over 35% in traffic volumes and congestion on Seattle streets. Traffic volumes rebounded in 2022 but are still below their pre-pandemic levels. This section discusses the opportunities, challenges, and emerging trends facing vehicular travel in Seattle.

- **Rise in serious injury and fatal crashes on Seattle streets.** Serious injury and fatal crashes remained high in 2021 and 2022, despite the lower traffic volumes that resulted from the pandemic. Opportunities exist to pair street redesigns and vehicle miles traveled (VMT) reductions to implement Seattle’s Vision Zero action plan recommendations. Example strategies that have reduced the severity and frequency of vehicle collisions with pedestrians and bicycles include reducing vehicle speeds, implementing road diets², and other traffic calming measures.
 - Over the last several years, 93% percent of pedestrian deaths in Seattle occurred due to vehicle collisions on arterial streets³. Reducing driver speeds reduces the severity of collisions for people inside and outside of vehicles.
- **Population growth.** The 2024 Comprehensive Plan update, One Seattle, establishes a 20-year vision for how and where Seattle continues to grow and accommodate a projected 80,000 housing units and 159,000 jobs. As a regional growth and job center, Seattle doesn’t have available roadway capacity for everyone to drive a personal vehicle. To support safe and steady travel options for existing and future residents,
 - The Vehicle Element recommends transportation demand management (TDM) strategies to support future growth and sustainable travel in Seattle. TDM programs promote shifts from private vehicles to other travel options. SDOT’s existing Commute Trip Reduction and Transportation Management Programs help reduce drive-alone trips and commute trips at large employers and development sites, while other limited campaigns focus on all trips in particular neighborhoods.
- **Driving is an expensive travel default.** The costs of owning and maintaining a private vehicle can be extensive, even without considering externalized costs like pollution and carbon emissions. In Seattle, 16.1% of households do not have a vehicle that can be used by members of the household.⁴
 - To create a more affordable transportation system, we’ll need to provide other high quality options for travel that are accessible and reliable, while continuing to support essential vehicle trips.
- **Pandemic impacts.** The pandemic led to an increase in remote work that reduced traffic in many areas of the city. The 2022 Commute Seattle Mode Split Survey⁵ shows that 65% of workers teleworked at least one day a week. Although commuting by personal vehicle rebounded in 2021

² A “road diet” is a reconfiguration of a roadway to reduce the number of travel lanes to free up space for other uses such as transit lanes, bike lanes, wider sidewalks, and landscaping. They have been shown to slow travel speeds, reduce collisions by 19%-47%, and provide space for people biking walking, taking transit or other uses of the right-of-way.

³ This number represents fatalities from personal vehicles. It does not include transit and rail fatalities for pedestrians.

⁴ 2021 5-year American Community Survey estimates. Question: How many automobiles, vans, and trucks of one-ton capacity or less are kept at home for use by members of this household?

⁵ <https://www.commuteseattle.com/wp-content/uploads/2023/03/2022-Seattle-Commute-Survey-Report.pdf>

and 2022, it is still below the 2019 peak. Long term impacts to travel behaviors are unknown. Fewer people driving and more flexible work schedules for portions of the workforce has reduced time traveling for many people.

- In some cases, fewer people driving on less congested streets also resulted in people driving faster, which can result in more serious and fatal collisions. The pandemic impacts resulted in shift from transit and active transportation options (such as walking and biking) to personal vehicle use.
- **Driving continues to impact climate change.** Mayor Harrell’s Executive Order on Climate (EO 2022-07) recognizes the challenges of reducing transportation emissions and achieving a carbon-free transportation system by 2050. Two out of three car trips within Seattle are less than 3 miles. A significant reduction in driving trips in favor of walking, biking, and transit, along with the electrification of as many remaining driving trips as possible, is needed to generate significant reductions in emissions. Such shifts would also result in improved health, safety, and economic outcomes.
- Road transportation accounted for 60% of greenhouse gas emissions in 2018⁶ in Seattle. The Vehicle Element provides a framework for how the roadway network and its operation in support of a range of vehicles and travelers aligns with Seattle’s climate and safety goals. A balanced transportation system that provides opportunities for people to choose which mode they prefer tailored to their trip needs can curb environmental impacts of driving. Existing transportation goals that address climate include:
 - Reduce greenhouse gas (GHG) emissions and vehicle-miles traveled (VMT)⁷
 - Transition people away from gasoline-power vehicles to zero-emissions travel options
 - Increase investments that make it more convenient to walk, roll, bike, and take transit
 - Create climate resiliency for disproportionately impacted communities
 - Implement a more balanced transportation experience with a goal of 9 out of 10 trips being fossil fuel free, which creates space for those trips that need to be made by car
- **Emergency and incident response.** Changes to the street network that reduce vehicular capacity or slow travel speeds can create challenges for first responders to navigate through congestion and could potentially impact response times. Average travel response time for the first arriving fire department unit has increased 40 seconds in 2022 compared to 2012 in Seattle.
 - To support city efforts to reduce response times while serving a growing population, we’ll continue to work with partners across city departments to design streets that consider the access and mobility needs of emergency responders, such as the ability to pass on the left. Longer-term strategies and opportunities to consider include adding response units, stations, and vehicles. Opportunities to employ a range of ITS strategies can also help move emergency or incident response vehicles through congested corridors, when necessary.
- **Vehicle design.** Personal vehicle and freight truck design has trended toward larger and heavier vehicles. Heavier vehicles create increased maintenance needs on streets and have a large impact on serious injury and fatal collisions with people outside of vehicles. As well, large freight vehicles

⁶https://www.seattle.gov/documents/Departments/OSE/ClimateDocs/GHG%20Inventory/2018_GHG_Inventory_Dec2020.pdf

⁷ House Bill 1191 includes a requirement for local governments to reduce VMT <https://lawfilesexternal.wa.gov/biennium/2023-24/Pdf/Bills/House%20Passed%20Legislature/1181-S2.PL.pdf?q=20230509164411>

can be hard to maneuver in dense urban environments with smaller turn radii and narrower streets than provided by traditional highway design.

- City departments have an opportunity to lead by example in transitioning to vehicles right sized for dense environments.

- **Private EV adoption rates are increasing.** Transition to electric vehicles (EVs) is a tool to reduce GHG emissions. The first objective should be mode shift, as electric personal vehicles still have environmental, safety, and economic (congestion-causing) impacts. EVs are heavier than internal combustion engine (ICE) vehicles, which can result in more wear and tear on roads and more serious collisions. Charging infrastructure is limited due to existing real estate prioritized for gas powered vehicles (gas stations), the ability to have at-home charging infrastructure, and existing electrical transmission infrastructure.



Electric vehicle using an EV charging facility

- **Advances in intelligent transportation systems (ITS) and traffic management tools.** Intelligent transportation systems are technologies to manage transportation systems, such as coordinating traffic signals and traveler information systems that provide data such as travel times and road closures. Advances in ITS and other traffic management tools allow more vehicle capacity to be extracted per lane, which can allow reallocation of street space to other travel choices. We also utilize ITS to manage streets during disruptions and major events, and as a tool to prioritize emergency response mobility with enhanced signal preemption. SDOT's ITS Strategic Plan identifies investments on key arterial corridors to improve traveler information and multimodal operation of signals.

- **Transition to connected and automated vehicles (CAVs).** Connected vehicles are cars or trucks that can communicate with other vehicles. Automated vehicles are cars or trucks that can drive without a human operator. CAVs combine these connected and automated aspects. There are many different levels of CAV technologies and capabilities that likely will roll out over time, which could help improve traffic safety if properly managed and regulated.
 - CAVs could increase the capacity of the roadway system by using their sensors to allow vehicles to drive closer together, and it could mean additional vehicle-miles traveled and potentially more crashes as technology use expands. It is easier to operate CAVs on highways than on local streets in complex urban environments. See the New and Emerging Mobility Element for more information on EVs and CAVs.
- **Car share services and Transportation Network Companies (TNCs)** can provide the benefits of getting around by car without the need for private car ownership. These privately run services have been operating in Seattle and provide flexible options for people to get around with one-way or round trip services. See the New and Emerging Mobility Element for more information on car share and TNCs.



A carshare vehicle parked in a dedicated on-street parking space

COMMUNITY ENGAGEMENT

A variety of STP workshops and community engagement activities provided valuable input to the Vehicle Element. Through November 2023, the STP engagement process collected about 2,050 locationally specific vehicular related comments from the public. These comments will provide an ongoing resource for SDOT as we work in partnership with the community to advance STP priorities. Key themes from the engagement are summarized below.

- Reduce vehicle speeding to increase safety, while understanding that reducing speed limits is not enough and must be paired with changes to signal timing, physical changes to the roadway, and other strategies.
- Safety improvements for people walking and biking also makes driving safer and calmer.
- Not everyone in Seattle can ride a bike or walk to/from buses and light rail.
- Competing goals require repurposing vehicle lanes for other travel options. Transit goals require reducing vehicle capacity to support transit investment.
- Roads with separated bike lanes and bus lanes should thoughtfully account for people who are driving and aim to avoid creating more congestion.
- Vehicle size is a large component of safety for people walking and biking, so there should be considerations around discouraging oversized vehicles.
- Slow vehicles and implement traffic calming barriers to keep cars from hitting people/buildings interchanges and access points to freeways.
- Consider limiting vehicle access in front of light rail stations.
- Businesses, especially small businesses, need convenient access for all modes of transportation and also need to be accessible for customers consistent with the Americans with Disabilities Act (ADA). This includes convenient and accessible parking.
- Support transitions to electric vehicles (EVs). Electric cars need to be more sustainable due to current issues with manufacture, lifespan, and disposal of lithium batteries.
- Account for increased pavement wear rates from on heavier battery-electric vehicles.
- Enable high-quality and affordable travel options for everyone. Create affordable parking solutions for people who have no feasible alternative to driving, especially people who drive to employment centers in Seattle.
- Continue to emphasize prioritizing travel choices that reduce drive-alone vehicle trips.
- Support for reducing GHG (greenhouse gas) emissions and VMT (vehicle miles traveled).

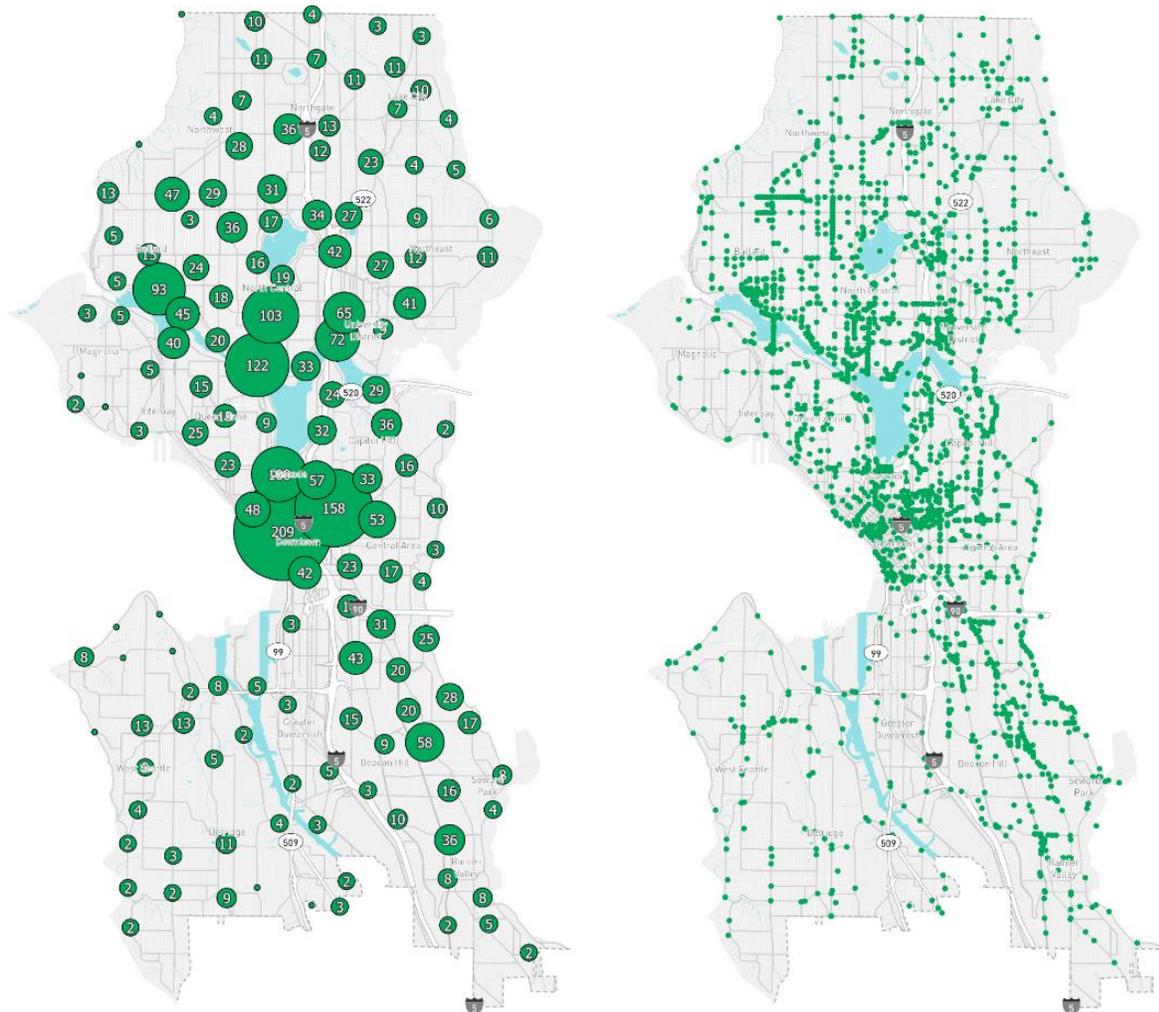
“I drive because cars are the most versatile way to get around. I only have enough money to invest in one mode and I don’t live near transit.”

– Quote from Survey Respondent

Among the locations and areas in Seattle where the most public comments were received related to vehicle travel were Downtown and Capitol Hill; areas near Fremont, Wallingford, and Ballard; and along Rainier Avenue and Martin Luther King Jr. Way. Over 6,300 pins were received from May-August 2022.

Figure 1 presents aggregated vehicle-related comments from the STP webmap. The figure on the left shows density of vehicular related comments and the figure on the right demonstrates individual points.

Figure 1: Vehicle-related Public Comments on Webmap #1 (May 2022-October 2022)





DRIVING IN SEATTLE

Within Seattle, SDOT is responsible for the planning, design, operations, and maintenance of the public right-of-way, which includes the roadway network used by vehicles. We maintain 1,550 lane-miles of arterial streets, 2,400 lane-miles of non-arterial streets, 124 bridges, and 1,118 signalized intersections. These streets, bridges, and signals serve people using many travel options, including driving personal cars, driving trucks, riding buses, people bicycling, people walking, and emergency responders in vehicles. Space for cars (general-purpose travel lanes and storage) currently takes up 66% of the right-of-way on arterials.

We also manage curbside uses and the on-street paid parking system, issue parking and traffic permits, and maintain additional transportation elements, including but not limited to street pavement, signs, crosswalks and lane markings, sidewalks, bicycle facilities, transit lanes, curb ramps and curb bulbs and many other street features. The general street network also provides space for transit stops and stations operated by local transit agencies.

The Washington State Department of Transportation (WSDOT) operates and maintains the regional freeway system and shares jurisdiction on state highways, such as State Route (SR) 99. Additionally, WSDOT operates the Washington State Ferry System, which transports people using vehicles, bicycles, and traveling on foot.

There are more than 150 at-grade rail crossings in Seattle. We coordinate with our railroad partner's work at these locations, including permitting and maintenance in coordination with SDOT crews and inspectors to complete approaches, restore signage, and make sure clean-up and standards are met prior to roadway reopening.

In the 20-year time horizon of this plan, many people will continue to drive a personal vehicle and cars will continue to be an integral part of Seattle's transportation system. There are approximately 1.4 vehicles per household in Seattle and more than a third of households own 2 or more vehicles⁸. There were 6.170 billion vehicle miles traveled in 2018⁹. Two out of every three car trips within Seattle are less than 3 miles. We need to provide affordable alternatives to driving so people do not have to depend solely on cars to get around.

⁸ American Community Survey 5-year estimates (2017-2021)

⁹ Includes VMT for all trips starting and ending in Seattle and one half VMT for all trips where origin or destination but not both is Seattle

ROADWAY NETWORK AND OPERATIONAL CONSIDERATIONS

The following sections highlight key aspects of the vehicular roadway network, including design guidance, functional classification, street types, street characteristics such as number of travel lanes, traffic volumes, crash information, and emergency response routes. Seattle's vehicular network should be a safe and steady option for people who need to drive, and conditions for people using other travel options should be comfortable and convenient, as well.

The following maps describe the network and influence the design, function, and investment of the city's streets.

Functional Classification and National Highway System

The City is required by the Federal Highway Administration (FHWA) to classify streets on the National Highway System (NHS) according to their primary mobility function, and these classifications are used to determine eligibility for federal funding. Functional classifications align with the vehicular mobility needs of people, the level of vehicular access and connectivity to other facilities, vehicular speed and volume, geometric design characteristics, and access to surrounding land uses.

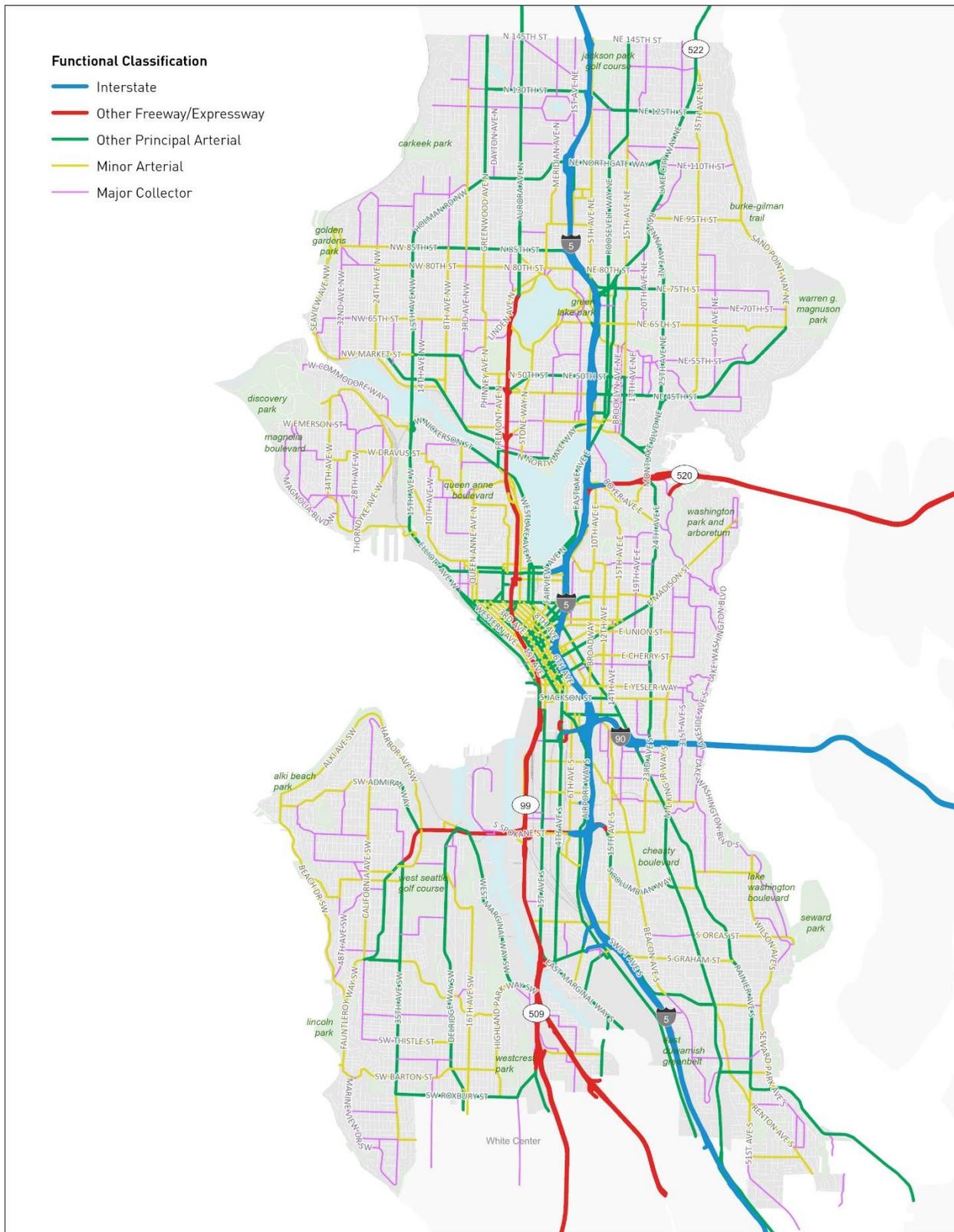
Figure 2 presents the National Highway System routes in Seattle. These classifications include:

- **Interstate Freeways.** A freeway emphasizes vehicular traffic movement and is only accessible by vehicle; it is characterized by higher speeds and traffic volumes and restricts access to adjacent land.
- **State Routes and designated Non-State Routes.** These routes include intermodal facilities and intermodal connector routes where required for travel from the NHS routes to the intermodal facilities. They vary in their speed and volume characteristics, design features, and degree of local access.

Figure 3 presents the Functional Classifications. These classifications include:

- **Regional, Principal, Minor, and Collector Arterial Streets.** Arterials provide the connections between freeways and access streets and vary in their speed and volume characteristics, design features, and degree of local access.
- **Commercial and Residential Access Streets.** Commercial and residential access streets provide a high level of access to adjacent land uses.
- **Alleys.** Alleys are narrow passageways typically located between or behind buildings and provide important access for deliveries, loading and unloading of people and goods and can provide pedestrian access.

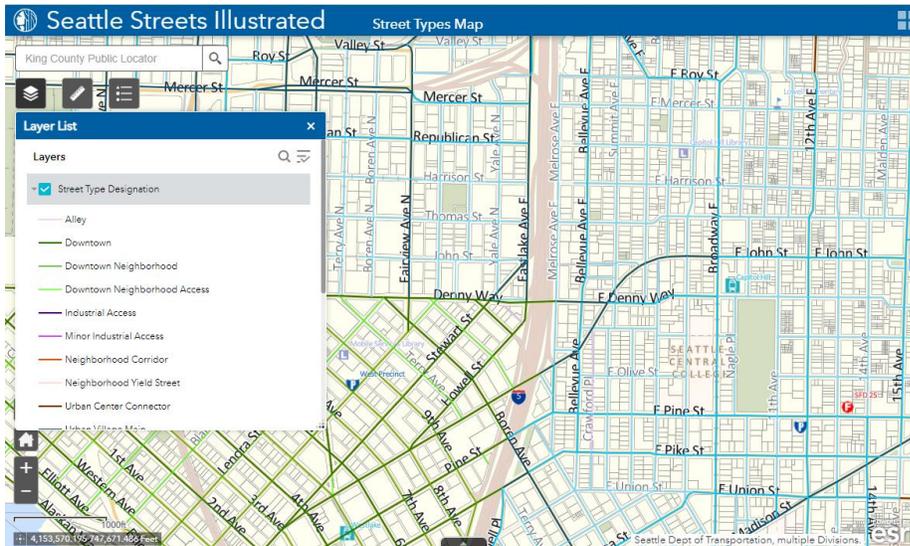
Figure 3: Functional Roadway Classification



Street Types

In addition to functional classification, we also designate street types in our *Right-of-Way Improvements Manual*. Known familiarly as *Streets Illustrated*¹⁰, this document provides specific street design guidance based on adjacent land uses, street functions, and the degree to which they support movement (vehicular speeds) and a sense of place. In this way, we can design streets to best serve both its purpose and to reflect a scale and character appropriate to its context (e.g., downtown, industrial access, neighborhood).

Figure 4: Image of Streets Illustrated Webmap



Streets Illustrated provides design guidance on the number of travel lanes and design treatments. The manual also establishes design standards for various street elements, including lane widths and curb radius, along with a process to approve design deviations. Lane widths and curb radii are designed to accommodate large trucks and transit vehicles where they are most prevalent. Consultation with the Seattle Fire Department (SFD) is required to address the needs of large fire trucks to access people and buildings throughout the city, and to maintain emergency response mobility on Tier 1 response routes.

Travel Lanes and Vehicle Volumes

Figure 5 presents the number of general-purpose travel lanes (two-way total) on city arterial streets. Many arterials with more than a single lane in each direction also support the movement of large freight vehicles and buses. A majority of arterials with 4+ lanes serve north/south travel.

Figure 6 shows average daily traffic (ADT) volumes for arterial streets are for 2022. SDOT routinely collects traffic volume data. Of note are the high vehicle volumes at bridge locations given limited crossing options across the Ship Canal and Duwamish Waterway.

¹⁰ Explore the Streets Illustrated street typologies at: <https://streetsillustrated.seattle.gov/>

Figure 5: Number of Travel Lanes

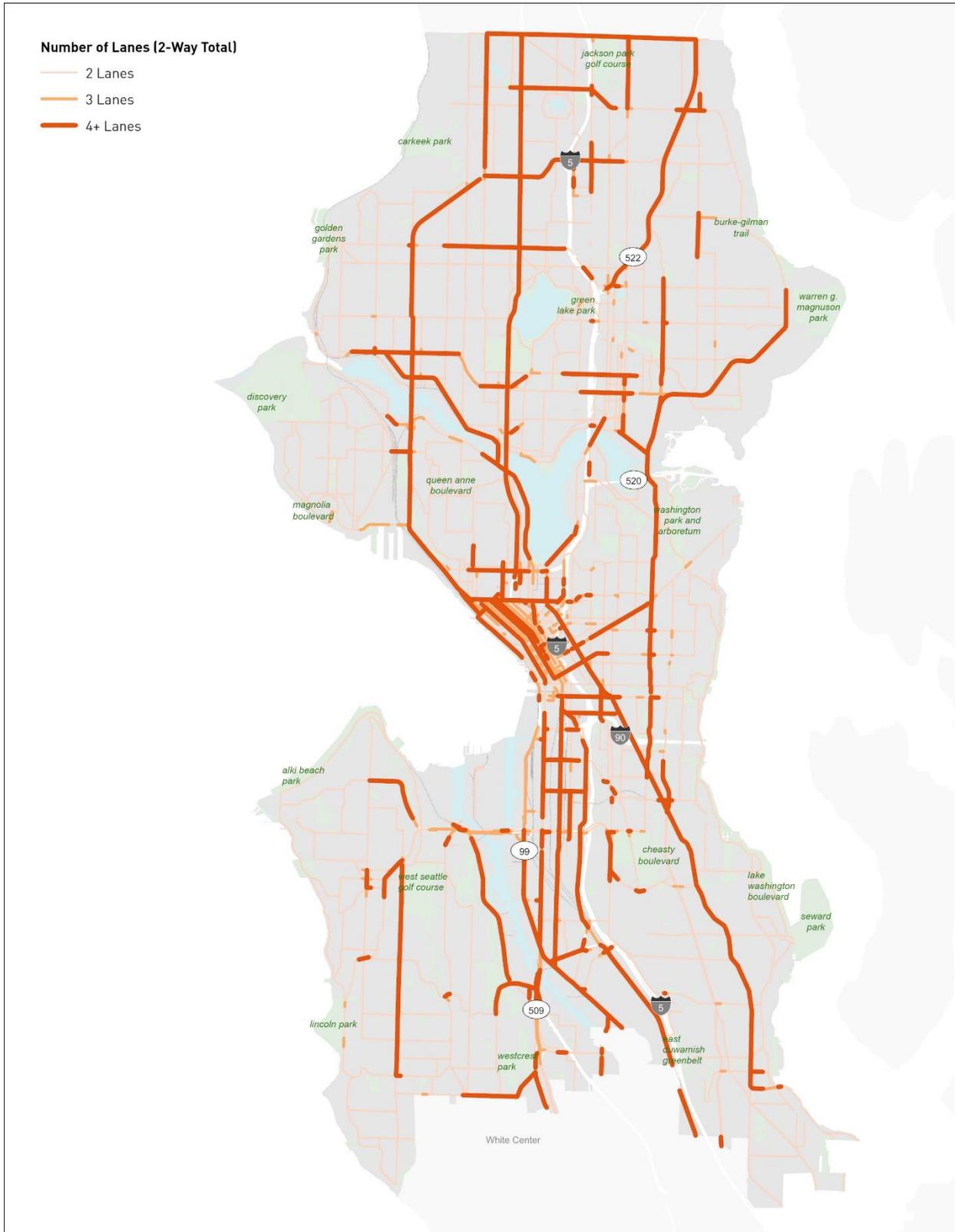
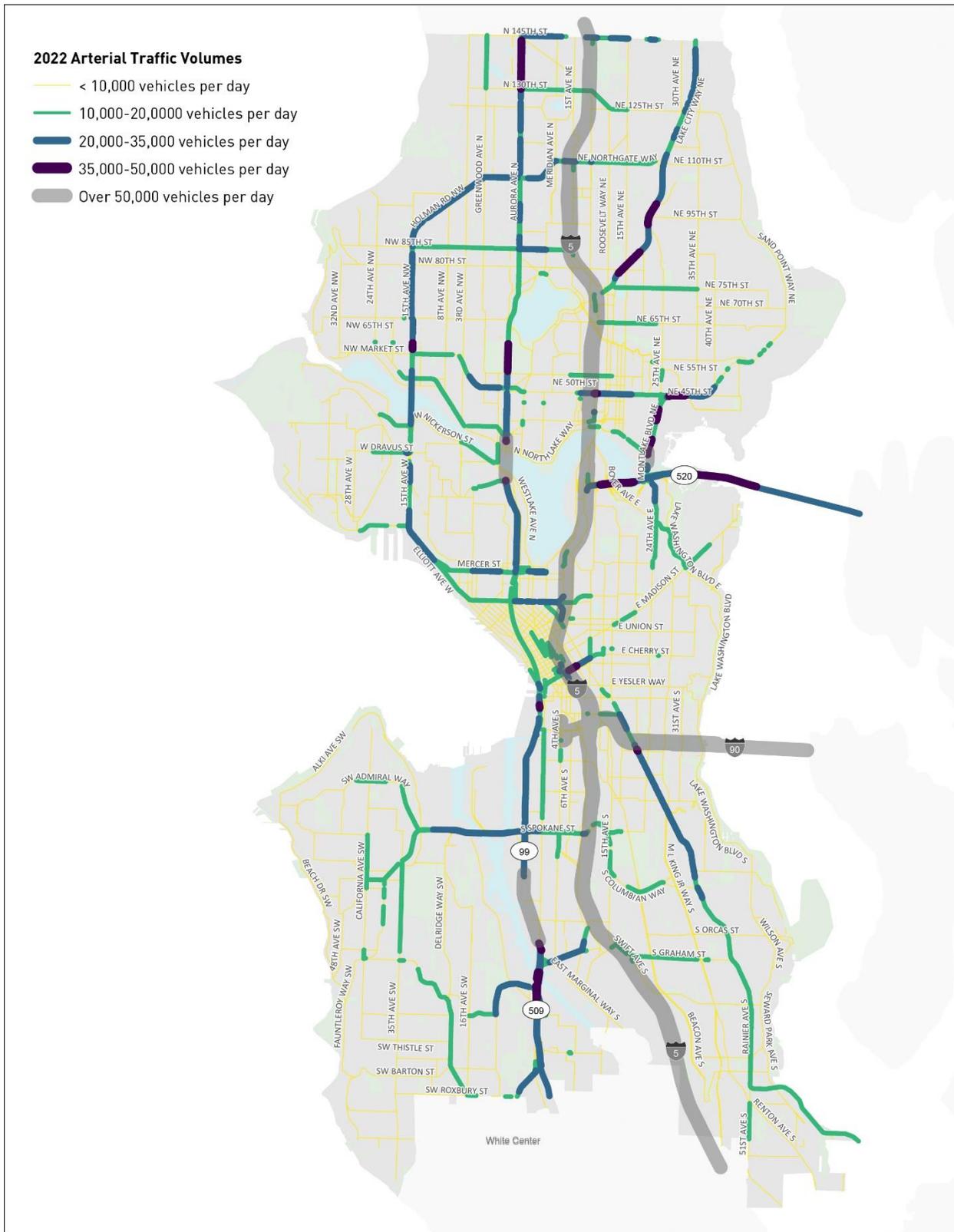


Figure 6: 2022 Traffic Volumes



High Injury Network and Vehicle Speed

Many SDOT safety analyses rely on crash and speed data to identify potential improvements. The High Injury Network (HIN) identifies where fatal and serious crashes have already occurred. Its use is considered a reactive approach that informs safety corridors of focus for the Vision Zero program and more. Through a collisions analysis, the HIN prioritizes corridors according to fatal and serious injury crash rates, as well as race and equity outcomes. People driving faster results in a higher number of serious injury and fatal collisions. **Figure 7** depicts the High Injury Network.

Figure 8 shows arterials where the 85th percentile vehicular speeds are at least 5 miles per hour over the posted speed limit (meaning at least 15% of vehicles are exceeding the speed limit by 5 miles per hour).

Emergency Response Routes

Analysis from SDOT and the Seattle Fire Department has identified Tier 1 streets—those used to reach more than 300 responses per year or that provide critical connectivity (**Figure 9**). Redesign of Tier 1 streets should consider impacts to emergency response times with designs that support the ability of emergency response vehicles to navigate around or through vehicular traffic

During winter snow events, SDOT prioritizes plowing key arterial streets. These are shown in **Figure 10**.

Seismic Lifelines (**Figure 11**) are established to prioritize highway transportation routes that will be able to reopen quickly following a major earthquake to establish post-disaster emergency supply chains between federally designated Incident Support Bases located in central and eastern Washington and Federal Staging Areas located in western Washington.

Figure 8: Arterials where the 85th Percentile Speed Exceeds 5 MPH over the Posted Speed Limit

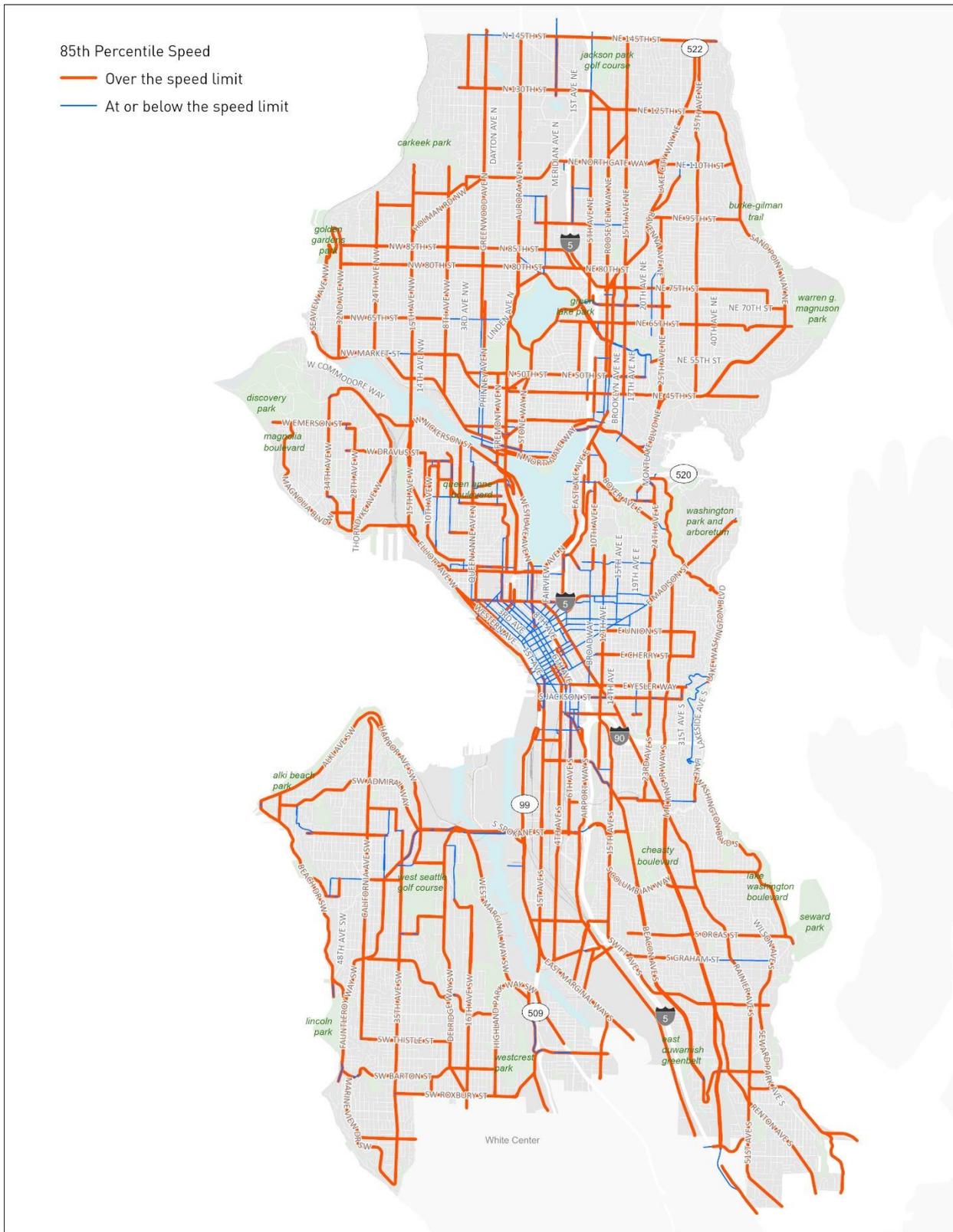


Figure 9: Tier 1 Emergency Response Routes

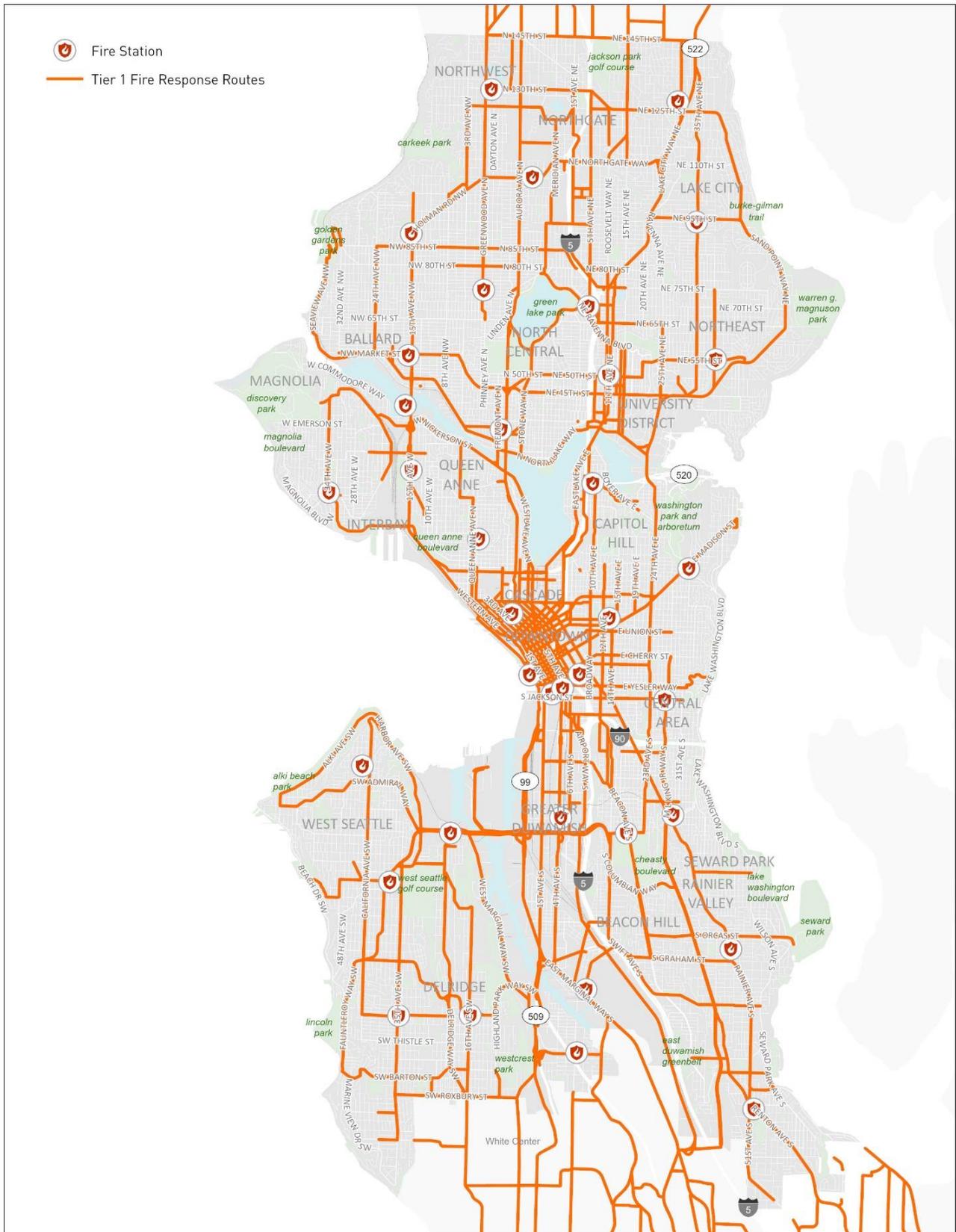


Figure 10: Seattle Snowplow Routes

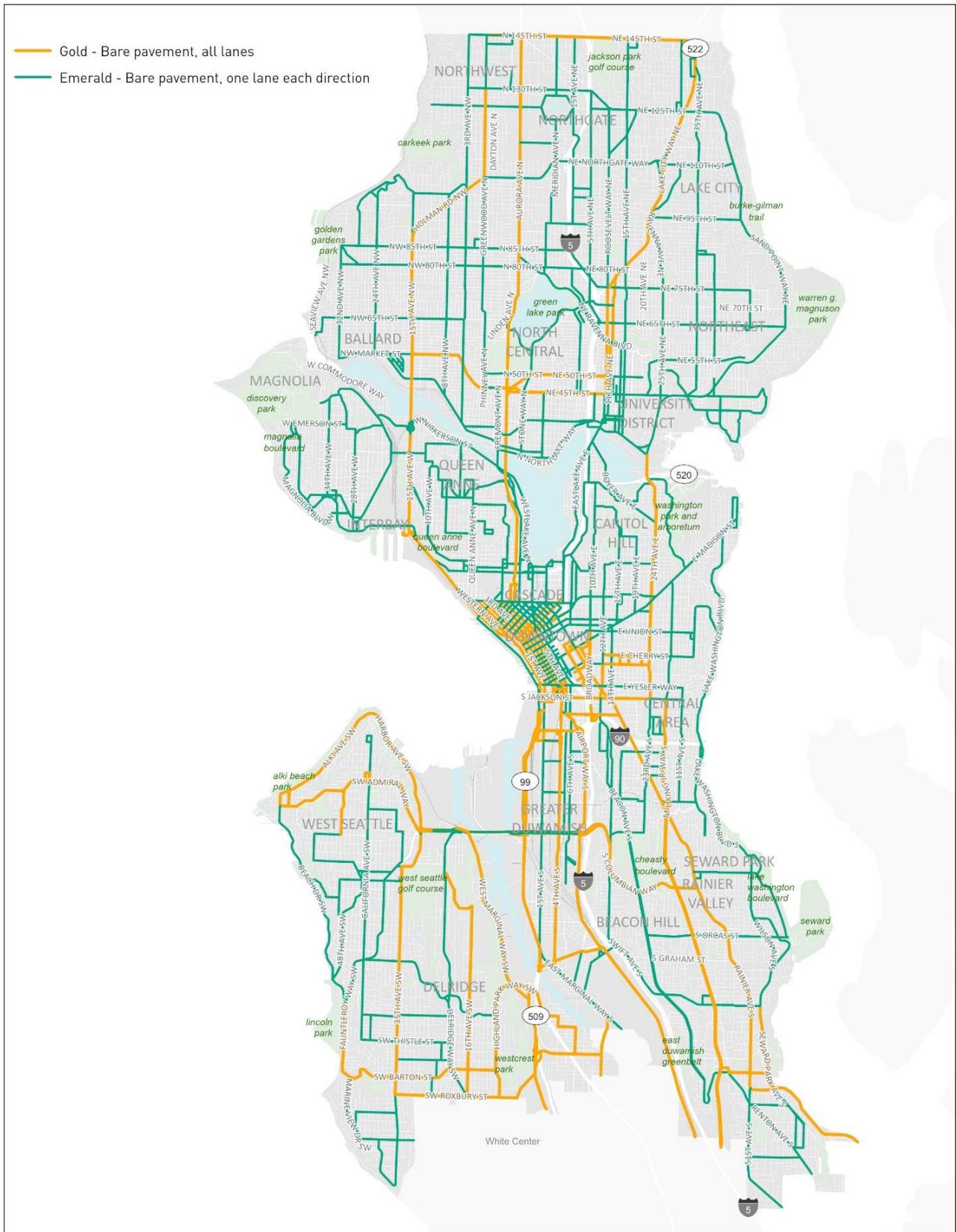
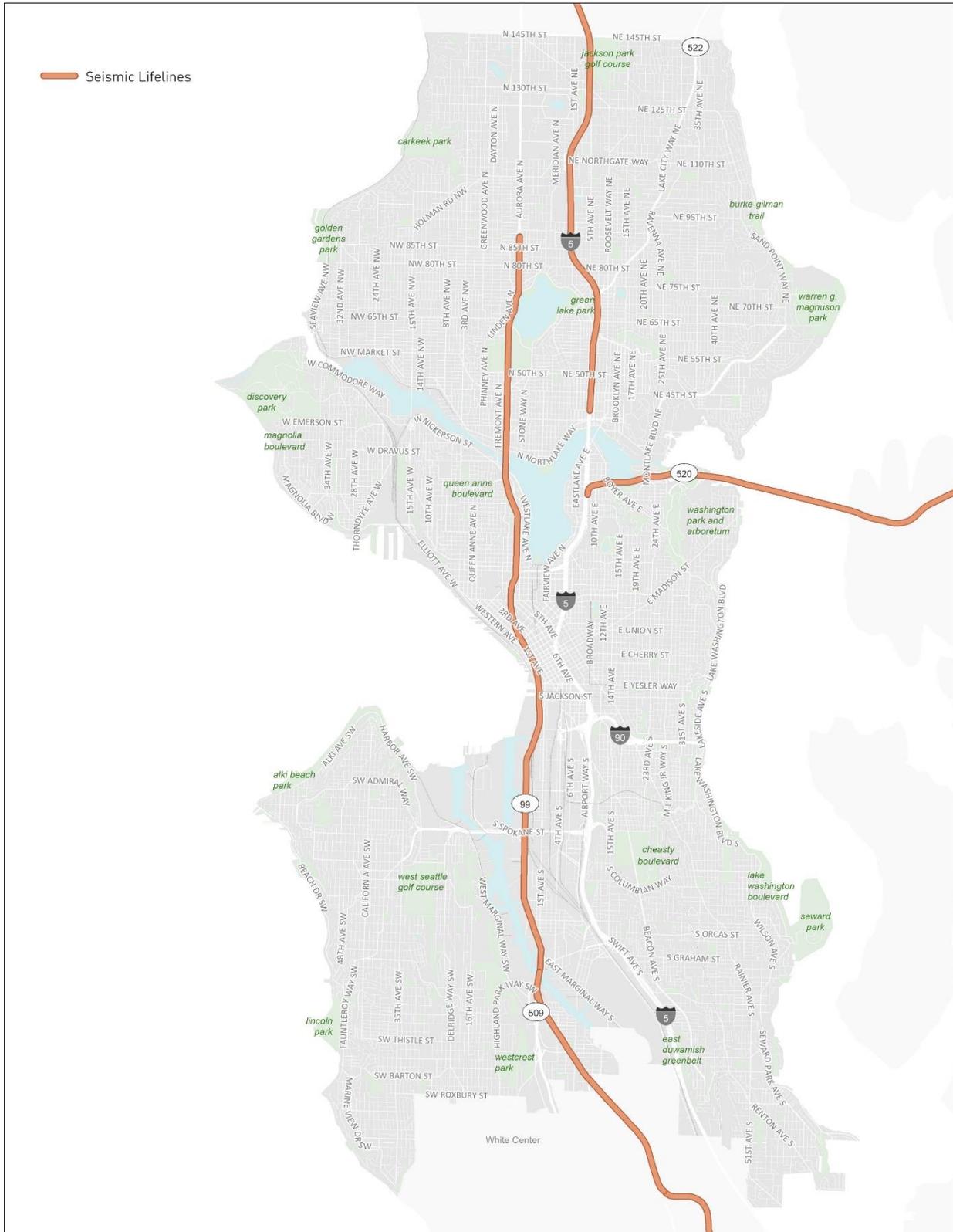


Figure 11: Seismic Lifeline Routes



PROGRAMMATIC ACTIVITIES AND STRATEGIES

SDOT engages in a variety of programmatic activities (that is, activities that relate to programs or are ongoing, rather than specific to a project) to complete the work outlined in this Element. This section highlights existing and new programs or initiatives. Over time, it's not uncommon for program groupings and organization to change; however, the programs listed here provide helpful general information to describe the types of tools and methods we will employ to manage the transportation system. Most of these programmatic activities help to tackle multiple goals including safety, sustainability, and equity through affordability.

A reliable and well-connected roadway network accommodates critical vehicular travel and essential personal trips.

Critical vehicular travel includes emergency vehicles, freight and goods movement, and utility functions. Essential vehicle trips include those not easily made by other travel options such as work shifts that are not served by transit schedules or routes, trips with large families, or people with disabilities who experience barriers for accessing and using other travel options. A drivable street network serves different trip purposes, vehicles and travel options.

Support a Safe and Steady Vehicle System

A transportation system that feels safe and supports personal vehicle trips will continue to be an important part of our transportation system. This includes roadway design that is safe, reliable, and predictable for people driving and encourages people to drive in compliance with the posted speed limit. Driving at or below the posted speed limit has safety benefits that support our Vision Zero safety goals to end traffic deaths and serious injuries for people inside and outside of vehicles.

To support a safe and steady transportation system, SDOT will seek to:

- Expand our design toolkit for physical separation between vehicles and other travel modes.
- Explore innovative ways to calm traffic including strategies from the People Streets and Public Spaces Element.
- Work with first responders on multi-modal street design and curb management strategies to understand access and incident response options.
- Slow vehicles when approaching areas of conflict with other travel options.
- Develop a threshold for implementing traffic calming on roads where speeding is a consistent issue in line with design implications for other STP elements.
- Continue to address equity in the use of automated traffic safety cameras while prioritizing streets design that is self-enforcing streets to help eliminate the need for traffic safety cameras.
- Regularly collect data and monitor traffic speeds, crashes, emergency response travel times, and air quality throughout Seattle.

- Incorporate Vision Zero and Safe System¹¹ approaches to every project and program, including proactive safety improvements for citywide implementation.
- Prioritize safety improvements at locations on the high-injury network, have high levels of travel stress, or identified through the Seattle Bicycle and Pedestrian Safety Analysis.
- Identify opportunities to enhance safety at intersections, including the phase out of dual-turning movements, except at points of ingress/egress to limited access highways.
- Leverage ITS to improve safety, reliable traffic flows, and curbspace management.
- Advocate for changes to state and federal legislation and programs to:
 - Revise driver education policies to require driver education for anyone seeking a Washington driver's license. Put more focus on safety for people walking, biking, and rolling, as well as young driver safety. Many regions of the country do not teach new drivers how to interact with people bicycling and using e-mobility devices, so additional driver education is critical.
 - Require drivers aged 72 and older renew their license every two years and allow authorities to restrict licenses in the interest of keeping drivers and roadways safe.
 - Require driver's license re-examination for drivers who are involved in a serious or fatal crash.

Sustainability and Livability Considerations

To create a transportation system that meets our future goals and vision, we need to intentionally choose which mode we take based on our trip. This means that SDOT will seek to provide convenient, sustainable, and affordable options that can be alternatives to driving and support livable neighborhoods.

To support our sustainability and livability goals in Seattle, SDOT will seek to:

- Close network gaps for people who walk, bike, roll and use transit. Where gaps can't be filled, maintain a safe, steady vehicular network for people who depend on vehicles.
- Invest in transit improvements (see Transit element) to move people more efficiently and allow for others who need to make a trip by personal vehicle to do so.
- Promote transportation options that are more affordable than car ownership which could include car sharing or bike and scooter share options, transit passes, or e-bike rebates.
- Pursue right-of-way allocation strategies to support a growing number of residents and people visiting Seattle. This can be done in a number of ways, including:
 - Advance low-pollution neighborhood concepts per Executive Order 2022-07 to improve air quality and livability by transitioning areas of the city away from fossil-fuel vehicles in favor of electric and human powered transportation modes.
 - Plan for vehicular access needs on car-free/car-lite streets, including consideration of access requirements for emergency vehicles, utility access, and designs that are consistent with the Americans with Disabilities Act.

¹¹ <https://www.transportation.gov/NRSS/SafeSystem>

- Assume a baseline of one general-purpose through-travel lane per direction of travel on most arterials where vehicular mobility will be maintained.
- When conducting future-year traffic analysis, evaluate travel volumes consistent with our VMT target.
- Coordinate transportation system investments with city and regional partners as they pursue land use changes to provide additional housing and services and to reflect the projected growth and characteristics of Seattle’s population into the future.
- Work with partners to accelerate the equitable adoption of electric transportation technology as part of Seattle’s Transportation Electrification Blueprint. More on electric vehicle (EV) adoption strategies can be found in the New and Emerging Mobility Element.
- Build upon design standards and implementation of Green Streets
- Install green stormwater infrastructure on streets that flood frequently.
- Consider locations for de-paving projects that can expand green spaces and improve climate resiliency.
- Leverage street re-allocations to include new and emerging design practices for green infrastructure.
 - Develop policies for decommissioning underperforming signalized intersections and installing all-way stops or roundabouts.

Pricing Strategies

Explore equitable demand management tools that could influence travel choices and create revenues to invest in transportation maintenance, sustainable transportation options, freight movement, and innovation. To support this work, SDOT will seek to:

- Continue to use parking pricing as a demand management tool that can encourage use of travel by modes other than people driving alone in vehicles.
- Employ parking regulatory reform to influence parking supply, duration, and time of day use (See Curbside Management Element for more parking strategies).
- Support the state and region in advancing mobility management strategies. We will work with regional partners as they explore pricing options that are equitable and do not put the city at a competitive economic disadvantage.

The transportation system must support Seattle’s continued growth.

The 2024 Comprehensive Plan update, One Seattle, establishes a 20-year vision for how and where Seattle continues to grow and accommodate a projected 250,000 additional residents.

To provide safe and steady travel options for existing and future residents, the Vehicle Element recommends transportation demand management (TDM) strategies to help support future growth and sustainability of travel in Seattle. Our right-of-way is not getting any wider, so people will need to have options to use modes that take up less space on city streets.

TDM programs are critical for promoting shifts from private vehicles to other travel options and meeting STP goals. Seattle’s existing Commute Trip Reduction and Transportation Management Programs help reduce drive-alone trips and commute trips at large employers and development sites, while other limited campaigns focus on all trips in particular neighborhoods.

Transportation Demand Management (TDM)

TDM strategies typically aim to shift travel to off-peak periods, consolidate trips, encourage travel by options other than driving alone, or avoid trips all together, such as by working from home. These strategies support SDOT’s sustainability goals of reducing vehicle miles traveled (VMT) and greenhouse gas (GHG) in an equitable manner.

To support our TDM efforts, SDOT will seek to:

- Incorporate TDM strategies in various plans and planning activities during program and project development.
- Continue to develop partnerships to expand and strengthen TDM offerings with employers, community-based organizations, agencies, etc.
- Incentivize options to fill first-/last-mile gaps for people who live in areas with less transit connectivity, with a focus on those with low incomes or are living with disabilities.
- Coordinate with the Seattle Department of Construction and Inspections (SDCI) to further incorporate TDM opportunities in the development process.
- Coordinate and promote transit pass programs in partnership with agencies and micromobility offerings with vendors.
- Leverage capital transportation investments by introducing TDM strategies to community members (e.g., Free Orca cards when high-capacity transit opens or bike to work or school when a new bikeway is constructed).
- Align TDM programming to support and focus on short neighborhood trips to reduce reliance on car trips for nearby destinations.
- Coordinate with the Office of Economic Development (OED) to identify TDM opportunities in business districts and for Black, Indigenous, and People of Color (BIPOC) business owners. (Supports TEF tactic 16.1)

Emergency Response Considerations

Time-sensitive emergency and incident response is core to supporting public safety. First responders that use the transportation system to respond to incidents may include firefighters, police and police alternatives, emergency medical personnel, mental health service providers and more. The Seattle Fire Department responds to over 100,000 incidents a year, of which only 2% are related to traffic collisions on Seattle streets. Many incidents are time-critical to provide lifesaving measures, with 14% of overall responses requiring Medic 1 advance life support.

Efforts to improve travel safety by slowing speeds for general-purpose vehicles hold the potential to also slow emergency response in some contexts. As such, we’ll need to continue to coordinate with city

departments to consider the access and mobility needs of emergency vehicles in the design of roadways and intersections.

Various design strategies can be considered in appropriate contexts to support vehicle response times, such as maintaining ability of emergency responders to bypass vehicles on the left or preserving critical access during a crisis events, when feasible. In balancing and providing for many competing uses of city streets, design and operational changes may be made that could reduce vehicular capacity or reduce average travel speeds. Working with other city departments, SDOT will seek to:

- Work with relevant city departments on design criteria that considers access and mobility for emergency response vehicles:
- Explore a toolkit of standard design strategies that seek to mitigate potential impacts to emergency response mobility, including but not limited to:
 - using speed cushions rather than speed humps
 - providing space for vehicles to clear lanes in congested areas
 - limiting use of non-mountable center roadway hardscape
 - providing center turn lanes
 - providing parking/loading pull outs
 - transit lanes
 - enhancing signalization and ITS.
- Implement SFD vehicle-compatible traffic-calming treatments on Tier 1 Seattle Fire Department routes.
- Evaluate and monitor response time and street design performance on Tier 1 Routes.
- Develop metrics to assess and monitor implementation of intersection designs compatible with Tier 1 Seattle Fire Department routes.
- Monitor emergency response time impacts on Tier 1 emergency routes and find ways to assess and analyze the role of street designs on response time impacts, and explore possible street design alternatives and interdepartmental partnerships, where appropriate and warranted.
- Coordinate traffic signal operations to support emergency response vehicle needs.
- Maintain building access for emergency response on car-free/car-light streets.
- Consider impacts to emergency response and access when evaluating changes in circulation patterns (e.g., space on one-way streets for vehicles to pull over for passing; street redesigns, and installation of traffic calming devices, especially on Tier 1 emergency response routes.
- Support agency and city partners as they explore use of smaller emergency response vehicles that better fit into urban environments and add fire stations and battalions to support a growing population.

Support Public Safety Through Maintenance of Critical Access Routes and Planning for a Climate Resilient Network

In addition to enabling people to get around for everyday needs, our streets provide access in emergency events. SDOT's essential functions include maintaining mobility for key arterials and bridges

and communicating critical transportation information. How we design our public streets and rights of way can also help in our adaptation to climate change, helping us be more resilient in the face of storms, water conditions and other changes. Evacuation routes, bridges, retaining walls, and other infrastructure (such as signals) are identified and maintained in coordination with emergency service providers, King County, and Washington state.

To support this work, SDOT will seek to:

- Continue to coordinate with King County and the State to identify key corridors and destinations for access during a catastrophic emergency. Support access to highway transportation routes including “seismic lifelines” and National Highway System (NHS) routes best suited to establish post-disaster emergency supply chains.
- Regularly update SDOT’s Continuity of Operations Plan (COOP) that identifies strategies for maintaining vital functions and services following a disaster including providing access to designated emergency routes and the National Highway System.
- Plan for and invest in infrastructure and culturally relevant landscaping to mitigate transportation from heavy precipitation events, sea level rise, and related flooding and inundation. Planning efforts should include consultation with federally recognized Tribes and community-based outreach with urban Native communities.
- Continue to support snow and ice clearing on key arterials during winter weather events.

Balance the needs of all vehicles on city streets, including delivery trucks and transit

General purpose travel lanes serve more than single occupancy vehicles. They also serve vehicles that pick up waste, deliver packages and goods, trucks that support our international economy, and regional transit systems.

With continued growth in e-commerce, there is an increase in urban goods delivery vehicles on city streets. The STP's Curbside Management Element and Freight and Urban Goods Element identify actions to address this growth, including ways to reduce vehicle trips by consolidating trips or shifting to non-vehicular modes such as e-cargo bikes where possible.

To achieve our safety and climate goals, we need to rely on transit as the backbone of our transportation system for people to get around. With its ability to move many people in a single vehicle, transit is a very space-efficient mode that can maximize people throughput within our limited street capacity.

By investing in our transit network to make a system that works for many or most trips, we can make more room for people who must drive for specific trips. Many of the strategies to slow vehicles and reduce general purpose (GP) vehicular space may impact transit travel time if transit is operating in GP space. Impacts must be offset with investment in our transit system. The STP Transit Element identifies ways to support transit travel through street design, operations, and encouragement.

Update SDOT Tools and Processes

SDOT has a variety of internal tools that inform decision making processes and design guidance and standards. To support our STP goals, SDOT will seek to:

- Streamline internal decision pathways for street design and operation decisions.
- Update design direction in Streets Illustrated and the city's Standard Plans and Specifications, to align with traffic calming efforts and Vision Zero policies.
- Update the complete streets project evaluation process around goals to reduce drive-alone rates, reduce vehicle miles traveled, and grow trips made by healthy and sustainable travel options.
- Consider how right-of-way reallocations among travel modes and other essential functions may impact cut-through traffic in neighborhoods and provide infrastructure and programming to offset impacts.
- Use future-focused goals and metrics for mode share, safety, and climate, to rebalance street right-of-way allocations.

Coordinate with partners

SDOT shares responsibility for creating and maintaining a transportation system. To achieve our vision and goals we collaborate with partners to advance work together.

To continue to coordinate with agency partners, SDOT will seek to:

- Coordinate with the Washington State Department of Transportation (WSDOT) to address safety challenges where their roadways impact the city street network.
- Address safety challenges at free-flow freeway ramps that intersect with city streets in partnership with WSDOT.
- Partner on opportunities to add safety treatments on state routes in Seattle.
 - Where highways or state routes have bisected communities, partner on strategies to reduce harm and re-envision mobility priorities that serve community needs.
 - Support Seattle City Council resolution 32100 and the intent to Lid I-5 where feasible within city limits. Continue to coordinate with the Office of Planning and Community Development, WSDOT, Federal Highway Administration, and Federal and State elected officials as planning, feasibility, and funding move forward.
- Coordinate with railroads for grade crossing surface improvements for vehicles and pedestrians, on-going maintenance and upgrades to signalization, gates, and flashers, and pedestrian channelization through grade crossings.



DEFINING SUCCESS

To track progress toward the STP goals, it is important to define what success looks like and how we'll measure it. This section defines the performance measures that have been identified as important indicators of our progress, as well as relevant Transportation Equity Framework (TEF) tactics this Element supports. Performance measurement is how SDOT is held accountable and provides transparency for community members and decision makers to understand the impacts of the plan as it is implemented over time.

MEASURABLE OUTCOMES

This section outlines desired outcomes and performance measures to monitor implementation of the STP Vehicle Element. They are part of a 3-tiered system of measures that includes:

- **Tier 1:** Overarching outcome-based measures are identified in the STP implementation strategy (see Chapter 4 of the Part I document). Generally, they are tracked at a citywide scale, and SDOT may not have primary control over their achievement. For example, VMT reductions or percentage of household income spent on transportation.
- **Tier 2:** These measures are tracked in individual elements, as they are not as overarching as the measures in Tier 1. Typically measures in Tier 2 are a combination of outcome and output measures over which SDOT has a relatively large degree of control. These measures help SDOT track progress towards our Tier 1 goals. Examples include reducing the drive-alone rate and reducing vehicular speeding.
- **Tier 3:** Measures in the Tier 3 category are typically tracked by individual programs. SDOT has a high degree of control over these measures. They are used to track productivity and to help allocate resources. Examples may include Seattle Fire Department response times on Tier 1 routes, and more.

While all metrics in the table below will be tracked at a citywide scale, it will be important to track several metrics by demographics and/or geography so that we can pivot as needed to meet our equity goals over the next 20 years. The table indicates which metrics will be tracked using the city's Race and Social Equity Index (RSEI) and/or race. RSEI combines information on race, ethnicity, and related demographics with data on socioeconomic and health disadvantages to identify census tracts where priority populations make up relatively large proportions of neighborhood residents.

The ability to successfully track performance measures is dependent on city staff capacity to collect and analyze data, the availability of relevant data, and/or the availability of resources to acquire data.

Table 2 identifies the Tier 2 performance measures that will be tracked for the Vehicle Element.

Table 2: Vehicular Performance Measures

Desired Outcome	Performance Measure (source)	Baseline (year)	Target or Desired Trend	Track measure by RSEI and/or race	Related STP Goal
End traffic deaths and serious injuries on city streets	Number of fatal and serious injury crashes involving people driving (Seattle Police Department (SPD) collision report data)	248 (2022)	Zero fatalities or serious injuries by 2030	Yes	Safety Equity Sustainability Livability
End traffic deaths and serious injuries on city streets due to high-speed collisions	Percent of arterial mileage where 85% of vehicles are traveling within 5 mph of the speed limit (SDOT)	49% (2022)	Increase	Yes	Safety Equity Sustainability Livability
Reduce vehicle mode share	Decrease percent of vehicle trips (SDOT)	66% (2019)	37% by 2044	No	Safety Equity Sustainability Mobility & Economic Vitality Livability
Reduce emissions and other impacts of driving	Reduction of vehicle-miles traveled (VMT) (Office of Sustainability and Environment (OSE))	6.17 billion (2018)	Reduce VMT by 37% by 2044	No	Safety Sustainability Mobility & Economic Vitality Livability Maintenance & Modernization
Reduce dependency on personal	Number of vehicles per household (Census Bureau)	ACS 5-year estimates (2017-2021): 1.4	Reduce the number of vehicles per household	No	Sustainability Livability
Support a well-maintained arterial network	Percent of arterial streets with fair or better pavement condition (SDOT)	61% (2023)	Increase the percent of arterial street segments with a "Fair" or better pavement condition rating (out of Good/Fair/Poor)	Yes	Safety Mobility & Economic Vitality Maintenance & Modernization

RELEVANT TEF TACTICS

- TEF 16.1**—Engage with local BIPOC-owned businesses to determine how SDOT can support their employees' transit and transportation needs for commuting.
- TEF 19.1**—Normalize decisions about right-of-way (ROW) reallocations to be made in partnership with BIPOC communities. This should include investments in alternative modes and land use/housing. Connect this back with the neighborhood/comprehensive planning piece.
- TEF 19.2**—Identify opportunities to repurpose some travel lanes for transit, biking, and smaller, lighter-weight vehicles and devices to create more travel options with the STP.
- TEF 19.6**—Prioritize person-throughput as metric rather than vehicle throughput.
- TEF 20.5**—Consider travel time and air quality impacts of changes to roadway configurations. Use this information to make equitable investment decisions that consider travel time and air quality impacts and benefits, and to communicate those benefits and impacts to community.
- TEF 20.6**—Create a similar "storymap" for decision-making and ongoing monitoring of outcomes for SDOT-related improvements and investments; use power of data and storytelling to help get better sense of where we need to improve our transportation system.
- TEF 31.1**—Implement data storytelling on the comparative costs of cars, electric cars, other mobility options and transportation burdens and privileges. Connect this back to our climate, equity, and safety goals and investment.
- TEF 31.2**—Review previous SDOT studies on non 9 to 5 commuters; identify where additional information needs to be gathered, develop targeted transportation options, and leverage existing programs to better support this community.
- TEF 31.3**—Develop and continue to support targeted transportation options for older adults and people living with disabilities and identify stable funding source; include learnings and results from the Inclusive Mobility On-Demand grant.
- TEF 33.1**—Continue to promote remote work and flexible work options at large employment sites citywide and identify opportunities where we can better support working-class populations.
- TEF 36.1**—Explore an equitable approach to road pricing with BIPOC and vulnerable communities and, develop road pricing policy approaches generated from the conversations with BIPOC and vulnerable communities.
- TEF 36.3**—Partner and fund BIPOC-led community-based organizations to create community-tailored mode shift solutions.
- TEF 42.2**—Identify existing non-punitive alternatives to traffic violation fines and fees; coordinate with community-based organizations (CBOs) to recommend new or revised non-punitive alternatives, such as restorative justice measures, community service options, or online traffic safety classes; review opportunities to reward positive safety-related behaviors.

TEF 43.4—Review SDOT policies, practices, standards, and funding allocation strategies to elevate/give priority to access and use of right-of-way (ROW) for people of all ages and abilities, people recreating, shopping, walking, rolling, riding bikes and transit.

TEF 47.1—Conduct annual community discussions with community-based organizations to assess ridership experience in BIPOC communities and include results in annual transit-related workplans and decisions.

TEF 52.2—Engage with the community to identify the underlying cultural narrative and values of driving alone and weave this into the STP engagement process; use these findings and information to address and resolve the conflict between SDOT values and priorities in reducing personal vehicle use.

TEF 52.3—Engage in an internal transparent conversation within SDOT on our values, approach, and messaging on cars and addressing BIPOC community needs; identify clear department goals and actions for where cars can fit within our transportation system and how we address BIPOC communities' need and reliance on personal vehicle use.

GLOSSARY

ADA: Americans with Disabilities Act

Arterial street: The “backbone” of the roadway system and accommodates the most trips for all modes. Arterials provide the connections between freeways and access streets and vary in their speed and volume characteristics, design features, and degrees of local access.

Bicycle and Pedestrian Safety Analysis (BPSA): A data-driven study conducted by SDOT to understand where, how, and why pedestrian and bicycle crashes happen. The study used data of where crashes happened and pedestrian, cyclist, and vehicle volumes. The results are used to identify locations and prioritize safety investments with the goal of preventing future crashes.

BIPOC: BIPOC stands for Black, Indigenous, and all People of Color (BIPOC). It is a term to make visible the unique and specific experiences of racism and resilience that the Black/African Diaspora and Indigenous communities have faced in the structure of race within the United States. BIPOC is a term that both honors all people of color and creates opportunity to lift up the voices of those communities.

Community and Mobility Hubs: Community and Mobility Hubs are places of connection that bring together transportation options, community spaces, and travel information into a seamless, understandable, and on-demand travel experience.

Commute Trip Reduction (CTR) Program: Collaboration between governments and private employers to motivate and enable workers to shift away from drive-alone commutes toward other modes of travel. The program is a result of the Washington State Commute Trip Reduction passed in 1991 to reduce traffic congestion and air pollution.

Comprehensive Plan: A 20-year vision and roadmap that guides City decisions on where to build new jobs and houses, how to improve the transportation system, and where to make capital investments such as utilities, sidewalks, and libraries.

Connected and autonomous vehicles (CAVs): Vehicles that can communicate with other vehicles (connected) and can drive without a human operator (autonomous).

Curb bulbs: Extensions of the sidewalk into the street that give pedestrians a shorter distance to cross.

E-cargo bikes: Human-driven bikes with battery-powered pedal assist that can transport packages or other small goods in a front-mounted wagon or rear-hitched trailer.

E-commerce: The buying and selling of goods online that are then delivered directly to a home or business. Examples include Amazon and eBay.

EV: Electric vehicles

Executive Order 2022-07: An executive order signed by Mayor Bruce Harrell to advance the City’s climate goals. The order sets goals of establishing 3 low-pollution neighborhoods by 2028, making 20 miles of Healthy Streets permanent, hosting a Youth Transportation Summit, and making the City’s fleet zero-emission by 2030.

FHWA: Federal Highway Administration

First-/last-mile: The distance traveled at the beginning or end of a trip from transit to a final destination.

General purpose (GP) lane: Space in the right-of-way where all vehicular traffic is allowed.

GHG: Greenhouse gas emissions

Grade crossing: An intersection where general purpose traffic and rail tracks cross at the same level.

High-injury Network (HIN): The High Injury Network (HIN) identifies where fatal and serious crashes have already occurred to inform safety corridors of focus for the Vision Zero program and more. It prioritizes corridors according to fatal and serious injury crash rates, as well as race and equity outcomes.

Intelligent Transportation Systems (ITS): Technologies to manage transportation systems, such as coordinating traffic signals and traveler information systems that provide data such as travel times and road closures.

Key Moves: A series of strategies across the 6 STP core values that explain how the goals of the STP can be achieved. The Key Moves represent an integrated view of our complex transportation system, touching multiple elements.

Leading pedestrian intervals (LPIs): Walk signals at intersections that give pedestrians an additional 3-7 seconds to cross the street before vehicles.

Low-emission/low-pollution neighborhood: Low-emission neighborhoods, sometimes called low-pollution neighborhoods, prohibit, or restrict the types of vehicles allowed within an area and encourage zero- and low-emission travel options like walking, biking, electric vehicles, and deliveries by e-cargo bike. Implementation of these concepts will vary by neighborhood and are co-created with local communities.

Micromobility: Small, low-speed transportation devices. They are convenient for traveling short distances or the beginning or end of trips. They include bikes and scooters.

Multimodal: Refers to the various ways people use the transportation system, such as walking, riding a bicycle, taking transit, or driving a truck or personal automobile. It can also refer to a journey that employs more than one mode, such as walking to the bus stop and then taking a bus to a final destination. The vast majority of individual trips involve more than one mode.

Neighborhood Greenways: Neighborhood Greenways are safer, calmer neighborhood streets where people walking and biking are the priority. These streets work together with trails and protected bike lanes to provide routes to bring people to the places they want and need to go as part of Seattle's all ages and abilities bicycle network.

NHS: National Highway System

OED: Office of Economic Development

Personal delivery devices (PDDs): Small automated or remotely piloted robots designed for short deliveries carrying food, packages, or other goods

PSRC: Puget Sound Regional Council

Refuge islands: Paved median protects pedestrians crossing a multi-lane street by providing a safe place to stop.

Right-of-way (ROW): Strip of land legally established for purpose of public travel by pedestrians and vehicles.

Road diet: Physical changes to the right-of-way that decrease vehicle volumes and speeds and reallocate space toward non-motorized modes, such as walking and biking. Examples include curb bump-outs, pedestrian refuge islands, narrowed lanes, street cafes, and street trees and landscaping.

Rolling: A form of travel that includes low-speed, wheeled mobility devices that use the pedestrian network. Examples include wheelchairs and strollers.

Safe System Approach: A framework for transportation planning to move toward a transportation network that is safe for everyone. The approach differs from traditional approaches to traffic safety by recognizing that humans will make mistakes and layers of protection must be built elsewhere into the system to address that. The approach is based on 6 principles:

- Death and serious injuries are unacceptable
- Humans make mistakes
- Humans are vulnerable
- Responsibility is shared
- Safety is proactive
- Redundancy is crucial

Goals are to create safer vehicles, speeds, roads, and people and provide post-crash care.

SDCI: Seattle Department of Construction and Inspections

SFD: Seattle Fire Department

Shared micromobility: Shared bikes and scooters that offer low-cost option for a short distance trip. Riders locate and rent available devices with their phone, ride it where they want to go, and leave it responsibly parked for the next person.

SPD: Seattle Police Department

Speed cushion: Multiple low-rise speed humps placed together that slow vehicle speeds while still allowing emergency vehicles to pass through normally. They are used on low volume and non-arterial streets.

Standard Plans and Specifications: City standards that apply to any public or private construction in the right-of-way. The document standardizes terminology, abbreviations, and symbols to be used in any construction plans.

STP: Seattle Transportation Plan

Streets Illustrated: Seattle’s Right-of-Way Improvements Manual is an online resource for property owners, developers, and architects involved with the design, permitting, and construction in the street right-of-way.

Traffic calming: Physical changes to street design that slow traffic and make the street safer for all travelers. Examples include traffic circles, speed humps, and narrow lanes.

Transportation demand management (TDM): Programs that focus on shifting travel behaviors from single-occupancy vehicles toward more sustainable and efficient modes such as transit and walking.

Transportation Electrification Blueprint: Adopted in 2021, the Transportation Electrification Blueprint is a framework for Seattle to reduce its transportation-related greenhouse gas emissions, with a primary focus on electrification of personal trips, shared mobility, goods delivery, travel by the city fleet, and the installation of electrical charging infrastructure.

Transportation Equity Framework (TEF): A roadmap for decision-makers, employees, stakeholders, partners, and the greater community to collaboratively create an equitable transportation system. The TEF addresses disparities that exist within the transportation system due to institutional racism.

Vision Zero: The City’s goal to eliminate traffic deaths and serious injuries on city streets by 2030.

VMT: Vehicle-miles traveled

Vulnerable communities: Communities that have historically and currently been erased, intentionally excluded and/or underinvested in by government institutions. SDOT’s Transportation Equity Program and Transportation Equity Workgroup include:

- BIPOC communities
- Low-income communities
- Immigrant and refugee populations
- Native communities
- People living with disabilities
- LGBTQIA+ people
- People experiencing homelessness or housing insecurity
- Women and female-identifying populations
- Youth
- Aging adults
- Individuals who were formerly incarcerated
- Displaced and/or high-risk displacement neighborhoods

WSDOT: Washington State Department of Transportation

