



TRANSPORTATION

Transportation Element Goals & Policies

INTRODUCTION

Several local, regional, and national agencies influence transportation in Shoreline, including the Washington State Department of Transportation, King County Metro, Sound Transit, and Community Transit. One purpose of the Transportation Element is to guide how the City focuses strategic efforts in local and regional investments for a transportation system that utilizes regional transportation facilities and services.

The Transportation Element identifies development and funding priorities for the transportation network, including roads, sidewalks, bike lanes, trails, and public transit, such as bus and light rail. The Transportation Element directs Shoreline's transportation improvements.

The Transportation Element is also designed to provide insight into the City's intentions and commitments, so that public agencies and individual households can make decisions, coordinate development, and participate in achieving a shared vision. It also provides the foundation for development regulations contained in the Shoreline Development Code and Engineering Development Manual.

One of the most significant transportation changes the city will face is the introduction of light rail service in Shoreline. Because of the nature and large impact this service will have, the City has adopted guiding principles as goals and policies in the Land Use Element to help direct future development that will take place around the two new stations anticipated within the city.

The city's transportation system supports land uses envisioned by the Comprehensive Plan. To further that purpose and provide more detailed analysis and direction, the City adopted a Transportation Master Plan (TMP) in 2011 (See Transportation Supporting Analysis). The TMP is the City's long-range (20 year) blueprint for travel and mobility in Shoreline. The TMP provides guidance for public and private sector decisions on local and regional transportation investments, including short-, mid-, and long-range transportation and related land use activities. Shoreline's TMP describes a multi-modal transportation system with an emphasis on moving people and a "Complete Streets" approach where the system accommodates all users. Using the TMP, the City can prioritize capital improvement projects, programs, and facilities, and schedule their planning, engineering, and



Aurora Avenue N - N 152nd

Multi-modal transportation planning refers to decision- making that considers various modes (walking, cycling, automobile, public transit, etc.), and connections among modes so each can fill its optimal role in the overall transport system.

construction as growth takes place. Both the TMP and the Comprehensive Plan have regular cycles for updates to reflect the city's changing transportation needs over time.

GOALS

Goal T I.	Maintain the transportation infrastructure so that it is safe
	and functional.

Goal T II. Develop a bicycle system that is connective, safe, and encourages bicycling as a viable alternative to driving.

Goal T III. Provide a pedestrian system that is safe, connects to destinations, accesses transit, and is accessible by all.

Goal T IV. Work with transit providers and regional partners to develop and implement an efficient and effective multimodal transportation system to address overall mobility and accessibility, and which maximizes the people carrying capacity of the surface transportation system.

Goal T V. Protect the livability and safety of neighborhoods from the adverse impacts of the automobile.

Goal T VI. Encourage alternative modes of transportation to reduce the number of automobiles on the road, promote a healthy city, and reduce carbon emissions.

Goal T VII. Develop a transportation system that enhances the delivery and transport of goods and services.

Goal T VIII. Coordinate the implementation and development of Shoreline's transportation system with neighboring transit systems and regional partners.

Goal T IX. Support and encourage increased transit coverage and service to connect local and regional destinations to improve mobility options for all Shoreline residents.

Goal T X. Secure reliable funding to ensure continuous maintenance and improvement of the transportation system.

POLICIES

Sustainability and Quality of Life

T1. Work with the community and regional partners to create standards for development of the Light Rail Station Special Study Areas identified in the Land Use Map (Figure LU-1) and to implement Light Rail Framework Goals, which became LU20-LU43.

- **T2.** Place a higher priority on pedestrian, bicycle, and automobile safety than vehicle capacity improvements at intersections.
- **T3.** Reduce the impact of the city's transportation system on the environment through the use of technology, expanded transit use, and non-motorized transportation options.
- **T4.** Enhance neighborhood safety and livability. Use engineering, enforcement, and educational tools to improve traffic safety on city roadways.
- **T5.** Communicate with and involve residents and businesses in the development and implementation of transportation projects.
- **T6.** Support and promote opportunities and programs so residents have options to travel throughout Shoreline and the region using modes other than single-occupancy vehicles.
- **T7.** Implement the City's Commute Trip Reduction Plan.
- **T8.** In accordance with Complete Streets practices and guidelines, new or rebuilt streets shall address, as much as practical, right-of-way use by all users.
- **T9.** Develop a comprehensive, detailed street lighting and outdoor master lighting plan to guide ongoing public and private street lighting efforts.
- T10. Use Low Impact Development techniques or other elements of complete or green streets, except when determined to be infeasible. Explore opportunities to expand the use of natural stormwater treatment in the right-of-way through partnerships with public and private property owners.
- **T11.** Site, design, and construct transportation projects and facilities to avoid or minimize negative environmental impacts to the extent feasible.
- **T12.** Develop a regular maintenance program and schedule for all components of the transportation infrastructure. Maintenance schedules should be based on safety/imminent danger and preservation of transportation resources.
- **T13.** Direct service and delivery trucks and other freight transportation to appropriate streets so that they can move through Shoreline safely and efficiently, while minimizing impacts to neighborhoods.
- **T14.** Implement a strategy for regional coordination that includes the following activities:
 - Identify important transportation improvements in Shoreline that involve other agencies. These may include improvements that



Aurora Avenue N

Complete Streets are designed and operated to enable safe access for all users.

impervious street surfaces into landscaped green spaces that capture stormwater runoff and let water soak into the ground as plants and soil filter pollutants.

Green Streets convert stormwater from a waste directed into a pipe, to a resource that replenishes groundwater supplies. They also create attractive streetscapes and urban green spaces, provide natural habitat, and help connect neighborhoods, schools, parks, and business districts.



Skateboarding on the Interurban Trail



Light Rail

- will help keep traffic on I-5 and off of Shoreline streets, such as changes to on-ramp metering and construction of a southbound collector-distributor lane from NE 205th Street to NE 145th Street;
- Remain involved in federal, state, regional, and county budget and appropriations processes;
- Participate in regional and county planning processes that will affect the City's strategic interests;
- Form strategic alliances with potential partners, such as adjacent jurisdictions or like-minded agencies;
- Develop legislative agendas, and meet with federal and state representatives who can help fund key projects;
- Develop a regional legislative agenda and meet with area representatives from the Puget Sound Regional Council, Sound Transit, and King County Council; and
- Develop partnerships with the local business community to advocate at the federal, state, and regional level for common interests.
- **T15.** Balance the necessity for motor vehicle access to and from new development with the need to minimize traffic impacts to existing neighborhoods.
- **T16.** Design and development standards that are adopted to minimize the negative traffic impacts of new development should also take into consideration the needs of the new residents that will occupy the buildings.
- **T17.** Maintain the existing street grid network to maximize multi-modal connectivity throughout the city. Utilize mechanisms that are appropriate for different street classifications to address increased traffic volumes and speeds.

Bicycle System

- T18. Implement the Bicycle System Plan included in the City's
 Transportation Master Plan. Develop a program to construct and
 maintain bicycle facilities that are safe, connect to destinations, access
 transit, and are easily accessible. Use short-term improvements,
 such as signage and markings, to identify routes when large capital
 improvements will not be constructed for several years.
- **T19.** Develop standards for creation of bicycle facilities.
- **T20.** Educate residents about bicycle safety, health benefits of bicycling, and options for bicycling in the city. This program should include coordination or partnering with outside agencies.

Pedestrian System

T21. Implement the Pedestrian System Plan included in the City's TMP

through a combination of public and private investments.

- **T22.** When identifying transportation improvements, prioritize construction of sidewalks, walkways, and trails. Pedestrian facilities should connect to destinations, access transit, and be accessible by all.
- **T23.** Design crossings that are appropriately located, and provide safety and convenience for pedestrians.
- **T24.** Develop flexible sidewalk standards to fit a range of locations, needs, and costs.
- **T25.** Develop a public outreach program to inform residents about options for walking in the city, and educate residents about pedestrian safety and health benefits of walking. This program should include coordination or partnering with outside agencies.

Transit System

- **T26.** Make transit a more convenient, appealing, and viable option for all trips through implementation of the Shoreline Transit Plans included in the City's TMP.
- **T27.** Monitor the level and quality of transit service in the city, and advocate for improvements as appropriate.
- **T28.** Encourage development that is supportive of transit, and advocate for expansion and addition of new routes in areas with transit supportive densities and uses.
- **T29.** Encourage transit providers to expand service on existing transit routes, in accordance with adopted transit agency service guidelines.
- **T30.** Work with transportation providers to develop a safe, efficient, and effective multi-modal transportation system to address overall mobility and accessibility. Maximize the people-carrying capacity of the surface transportation system.
- **T31.** Work with Metro Transit and the City of Seattle to implement "RapidRide" Bus Rapid Transit (BRT) service on the Aurora Avenue N corridor, and operate it as a convenient, appealing option for people who live or work in Shoreline, and those that want to visit.
- **T32.** Work with transit agencies to improve east-west service across the city, and service from Shoreline to the University of Washington.
- **T33.** Strengthen Aurora Avenue N as a high usage transit corridor that encourages cross-county, seamless service.
- **T34.** Work with Sound Transit, the Shoreline School District, the Washington



BRT

Bus rapid transit (BRT) is a term applied to a variety of public transportation systems using buses to provide faster, more efficient service than an ordinary bus line. Often this is achieved by making improvements to existing infrastructure, vehicles, and scheduling.



Bus Stops



Aurora Avenue N Bridge

Level of Service is a term that describes the amount, type, or quality of facilities that are needed in order to serve the community at a desired and measurable standard.

Transportation level of service is a qualitative measure, graded A(best) through F(worst), describing the operational conditions of the City's transportation system.

State Department of Transportation, King County Metro Transit, the City of Seattle, and Shoreline neighborhoods to develop the final light rail alignment and station area plans for the areas surrounding the future Link Light Rail stations. (See LU20 - LU43 for additional light rail station study area policies.)

- T35. Work with King County Metro Transit and/or Sound Transit to develop a plan for bus service to serve the light rail station at Northgate coinciding with the opening of service at Northgate.
- **T36.** Support and encourage the development of additional high capacity transit service in Shoreline.
- **T37.** Continue to install and support the installation of transit supportive infrastructure.
- **T38.** Work with Metro Transit, Sound Transit, and Community Transit to develop a bus service plan that connects residents to light rail stations, high-capacity transit corridors, and park and ride lots throughout the city.
- **T39.** Implement traffic mitigation measures at Light Rail Station Areas.
- **T40.** Promote livable neighborhoods around the light rail stations through land use patterns, transit service, and transportation access.

Master Street Plan

- **T41.** Design City transportation facilities with a primary purpose of moving people and goods via multiple modes, including automobiles, freight trucks, transit, bicycles, and walking, with vehicle parking identified as a secondary use.
- **T42.** Implement the standards outlined in the Master Street Plan for development of the city's roadways.
- **T43.** Frontage improvements shall support the adjacent land uses, and fit the character of the areas in which they are located.

Concurrency and Level of Service

744. Adopt Level of Service (LOS) D at the signalized intersections on arterials and unsignalized intersecting arterials within the city as the level of service standard for evaluating planning level concurrency and reviewing traffic impacts of developments, excluding the Highways of Statewide Significance and Regionally Significant State Highways (I-5, Aurora Avenue N, and Ballinger Way). Intersections that operate worse than LOS D will not meet the City's established concurrency threshold. The level of service shall be calculated with the delay method described in the Transportation Research Board's Highway

Capacity Manual 2010 or its updated versions. Adopt a supplemental level of service for Principal Arterials and Minor Arterials that limits the volume to capacity (V/C) ratio to 0.90 or lower, provided the V/C ratio on any leg of a Principal or Minor Arterial intersection may be greater than 0.90 if the intersection operates at LOS D or better. These Level of Service standards apply throughout the city unless an alternative LOS standard is identified in the Transportation Element for intersections or road segments, where an alternate level of service has been adopted in a subarea plan, or for Principal or Minor Arterial segments where:

- Widening the roadway cross-section is not feasible, due to significant topographic constraints; or
- Rechannelization and safety improvements result in acceptable levels of increased congestion in light of the improved operational safety of the roadway.

Arterial segments meeting at least one of these criteria are:

- Dayton Avenue N from N 175th Street N 185th Street: V/C may not exceed 1.10
- 15th Ave NE from N 15oth Street N 175th Street: V/C may not exceed 1.10
- **T45.** The following levels of service are the desired frequency of transit service in the city:
 - Headways on all-day service routes should be no less than thirty minutes, including weekends and evenings (strive for ten minute or less headways during the day on these routes).
 - Headways on peak-only routes should be no more than twenty minutes (strive for fifteen minute or less headways on these routes).

Transportation Improvements

- **T46.** Projects should be scheduled, designed, and constructed with the following criteria taken into consideration:
 - Greatest benefit and service to as many people as possible;
 - Ability to be flexible and respond to a variety of needs and changes;
 - Coordination with other City projects to minimize costs and disruptions;
 - Ability to partner with private development and other agencies to leverage funding from outside sources; and
 - Flexibility in the implementation of projects when funding sources or opportunities arise.
- **T47.** Consider and coordinate the construction of new capital projects with upgrades or projects needed by utility providers operating in the city.
- **T48.** Pursue corridor studies on key corridors to determine improvements that address safety, capacity, and mobility, and support adjacent land uses.



Signage



Pedestrians



Aurora Avenue N Bridge

- **T49.** Expand the city's pedestrian network. Prioritize projects shown on the Pedestrian System Plan included in the TMP using the following criteria:
 - Ability to be combined with other capital projects or leverage other funding;
 - Proximity to a school or park;
 - Located on an arterial;
 - Located in an activity center, such as Town Center, North City, Ballinger, or connects to Aurora Avenue N;
 - Connects to an existing walkway or the Interurban Trail;
 - Connects to transit; and/or
 - Links major destinations such as neighborhood businesses, highdensity housing, schools, and recreation facilities.
- **T50.** Prioritize projects that complete the city's bicycle networks, as shown on the Bicycle System Plan included in the TMP, using the following criteria:
 - Connects to the Interurban Trail;
 - Completes a portion of the routes connecting the Interurban and Burke Gilman Trails;
 - Provides access to bus rapid transit or light rail;
 - Connects to existing facilities;
 - Connects to high-density housing, commercial areas, or public facilities;
 - Connects to a regional route, or existing or planned facilities in a neighboring jurisdiction;
 - Links to a school or park; and/or
 - Able to be combined with other capital projects or leverage other funding.
- **T51.** Coordinate with the Washington State Department of Transportation to evaluate and design improvements to the interchange at NE 175th Street and I-5. Develop a funding strategy for construction.
- **T52.** Continue to work with Seattle, King County, Sound Transit, and WSDOT to undertake a corridor study of 145th Street that would result in a plan for the corridor to improve safety, efficiency, and modality for all users.

Funding

- **T53.** Aggressively seek grant opportunities to implement the City's TMP, and work to ensure that Shoreline receives regional and federal funding for its high- priority projects.
- **T54.** Support efforts at the state and federal level to increase funding for the transportation system.
- **T55.** Identify and secure funding sources for transportation projects, including bicycle and pedestrian projects.

- **T56.** Develop and implement a citywide transportation impact fee program to fund growth related transportation improvements, and when necessary, use the State Environmental Policy Act to provide traffic mitigation for localized development project impacts.
- **T57.** Provide funding for maintenance, preservation, and safety.



Cyclist on Interurban Trail



Transportation Supporting Analysis

The City of Shoreline 2011 Transportation Master Plan (TMP) is the long-range plan for Shoreline's transportation network. It helps guide how the City develops its Capital Improvement Program, coordinates transportation improvements with land uses, and plans for what is needed to respond to growth.

The TMP contains policies and projects that support the future land uses in the City's Comprehensive Plan. These policies affect choices for travel modes, such as car, bus, bicycle, and on foot. By knowing how Shoreline will grow in the future, the City can plan for how the transportation system will need to change to accommodate that growth. The projects listed in the TMP help ensure that adequate transportation facilities are in place to support growth, which is known as concurrency.

When developing the TMP, the City took an approach that designs a system for all users, including pedestrians, bicyclists, transit riders, and motorists. In doing so, the City developed the following goals, policies, and implementation strategies that identify how to improve and expand Shoreline's transportation system:

- Bicycle, Pedestrian, and Transit System Plans that show complete systems for mobility throughout the city;
- Prioritized projects for funding, including bicycle, pedestrian, and traffic safety and operations projects;
- Projects needed to accommodate growth over the next twenty years;
- Updated street classifications that match the existing use of the street with the appropriate classification;
- A funding strategy to pay for the identified improvements; and
- An updated concurrency standard that ensures adequate transportation facilities will be in place as growth occurs.

The TMP contains a more thorough transportation analysis than what is required in the Comprehensive Plan, so rather than recreating it or selecting certain portions, the entire document can be found at: http://shorelinewa.gov/home/showdocument?id=11146