

City of Shoreline

2016-2021 Transportation Improvement Plan

1. What is the Six-Year Transportation Improvement Plan (TIP)?

The City of Shoreline Six-Year Transportation Improvement Plan (TIP) is a short-range planning document that is updated annually based upon needs and policies identified in the City's Comprehensive Plan and Transportation Master Plan. It identifies Shoreline's current needed transportation projects and programs for the next six years. Some projects identified in the TIP are significant enough in nature that they will take longer than six years to complete.

2. What is included in the TIP?

A project sheet for each project or program in the TIP has been developed and includes the following:

- **Scope/Narrative:** A description of the project or program including the specific work to be performed, project elements, project/program purpose and/or interagency coordination efforts.
- **Funding:** Identifies whether a project is funded, partially funded or unfunded and known funding sources.
- **Funding Outlook:** A description of the current funding projection for the project, including possible funding sources (when applicable).
- **Project Status:** Identifies Council goals achieved by each project, the stage of a project (such as design, environmental review or construction), previous years' work and expenditures and/or potential revenue sources for projects.
- **Purpose/Goals Achieved:** Identifies which of several purposes the project satisfies and/or general goals the project achieves including Non-motorized Transportation; System Preservation; Growth Management; Improves Efficiency and Operations; Safety; Major Structures; Corridor Study; and/or Interjurisdictional Coordination.

Projects in the TIP are sorted into three categories: Funded Programs, Funded Projects, Unfunded Projects. Projects and programs that are underfunded or partially funded are included in the funded categories. Generally, funded projects are those included in the City's 2015-2020 Capital Improvement Plan. All projects and programs identified for 2021 are unfunded. All of the funded programs are identified as underfunded, as additional work could be completed through these programs with supplemental funding. The TIP also identifies the potential for new projects or programs that may arise from current City planning efforts in the Emerging Projects section. The final section provides a summary of projects included in the 2015-2020 TIP that are scheduled for completion in 2015.

3. Project Costs and Funding

Each project listed in the TIP includes an estimated cost, the amount of funding secured or unsecured and the funding source(s) for the six year period covered by the TIP. Existing and new project and program costs need to cover all phases of a project (described below), including the staff time necessary to administer them. If grant funding has been secured from a specific source, it is identified. The Funding Outlook section of each project sheet identifies the total project cost and any previous expenditures. Potential grant funding sources are also identified in this section. Projects listed that are necessary to accommodate growth and allow the City to maintain its adopted Levels of Service may be funded in part by transportation impact fees. The costs for projects programmed for the first three years of the TIP have been developed with a higher level of detail whereas those in the latter three

years have been developed with less specificity, as the projects are generally less defined. Unless otherwise noted, project costs do not include the costs for placing overhead utilities underground.

4. Developing the TIP

The annual TIP update starts with the previously adopted TIP. Projects in the previously adopted TIP are reviewed and projects that have been completed, or because of changing conditions, are no longer needed are removed from the TIP. Existing projects may also be updated based upon completed studies, refined project scopes or revised cost estimates. The remaining projects carried over from the previous TIP are reviewed for changes to cost estimates, project funding, schedule, or scope during the update process to ensure that the best information is represented in the TIP.

New projects are generated from many sources, including the City's adopted Transportation Master Plan (TMP), Comprehensive Plan, Council priorities, identification of new issues or deficiencies, response to growth, accident locations or the potential to secure grant funding. The City may use tools such as pavement management rating, analysis of accident data and transportation modeling to help identify potential new projects. Potential new projects undergo a review of scope, priority, schedule and cost analysis.

Updated projects from the previous TIP and new projects are then used to create a draft TIP project list. The phasing and funding of these projects in the draft TIP is based on an evaluation of project priority compared with priorities laid out in the TMP and Comprehensive Plan, commitments to projects and programs that are already underway, secured grants, partnerships the City has entered into with other jurisdictions and agencies and new opportunities that arise to leverage local transportation funding in combination with other funding sources.

Once the draft TIP has been developed, a public hearing is held to provide an opportunity for the community comment. Based on the results of the public hearing and comments from the Shoreline City Council a final version of the TIP is developed. This final version is then adopted by the City Council.

5. Emerging Projects

New transportation projects are often generated from significant planning efforts for new or major redevelopments or land use subarea planning. In 2012, the City designated the Aurora Square area as a Community Renewal Area (CRA) and subsequently adopted a vision and plan for its redevelopment. Transportation improvements will be an important component in supporting redevelopment. The City has developed and adopted a Programmatic EIS to address the transportation impacts associated with redevelopment of the site. It is expected that redevelopment of the CRA will occur over many years, continuing beyond the six year time frame addressed in this TIP. In anticipation of the commencement of light rail service in 2023, the City is planning for land use changes around the future stations located in Shoreline at NE 145th Street and NE 185th Street. Higher residential densities and a mix of land use types near the stations, as well as transit users traveling to the stations will create an increased demand for multi-modal transportation facilities. Transportation impacts and needs associated with future land use changes as well as the necessary solutions to resolve them are outlined in the subarea plans. The redevelopment of the station areas is expected to occur over many decades. The projects needed to accommodate growth in the station areas will be incorporated into future TIPs.

6. Relationship of the TIP to other Transportation Documents

A. Six-Year Capital Improvement Plan

Once adopted, the TIP helps to guide funding and implementation priorities during the development of the transportation portion of the Capital Improvement Plan (CIP). The CIP is a six-year financial plan addressing capital needs and is updated along with the development of the City's operating budget. The CIP shows the City-funded portion of projects and is constrained by current budget forecasts, whereas the TIP shows the complete project list, including unfunded projects and programs. The first year of the CIP is adopted as part of the annual budget

B. Transportation Master Plan

The City of Shoreline's Transportation Master Plan (TMP) is the long-range blueprint for travel and mobility, describing a vision for transportation that supports the City's adopted Comprehensive Plan. 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. In this way, the City can assess the relative importance of projects and schedule their planning, engineering and construction as growth takes place and the need for the facilities and improvements is warranted. It also establishes a prioritization of the projects to be included in future capital improvement plans. The TMP covers all forms of personal travel – walking, bicycling, transit and automobile.

C. State and Federal Requirements

State law requires that each city develop a local TIP and that it be annually updated (RCW 35.77.010). It also requires that projects be included in the TIP in order for cities to compete for transportation funding grants from most federal and state sources. Federal grant funded and regionally significant projects from the first three years of the City's TIP are included in the Regional TIP, which is assembled by the Puget Sound Regional Council for King, Kitsap, Pierce, and Snohomish Counties. The Regional TIPs from around the State are then combined to form the State TIP, which is approved by the Governor and then submitted to the Federal Highway Administration and Federal Transit Authority for their review and approval.

6. Funding Challenges

As is the case for most jurisdictions, the need for transportation improvements in Shoreline greatly outweighs the City's ability to fund them in both the short and long term. In addition to major capital projects such as intersection or corridor improvements, there is an on-going need to maintain the existing system. This includes repair, maintenance and preservation work, such as Bituminous Surface Treatment (BST) or overlays, upgrades and repairs to traffic signals, installation of new street lights and curb ramp upgrades. It is difficult to estimate the annual backlog or degree to which the City's transportation program is underfunded, as new projects are identified annually and maintenance is a continuous necessity. The unfunded projects and programs included in this six year TIP (not including the unfunded portions of partially funded projects) total \$217,916,153.

The City of Shoreline funds transportation capital projects from the General Fund, Real Estate Excise Tax (REET), Transportation Benefit District (TBD) and grant revenue from local, state and federal governments. Because some of these revenue sources are so closely tied to the health of the economy

they can be somewhat unpredictable, making it challenging for the City to plan for transportation improvements with assurance that funding will be available.

Historically the largest sources of funding for Shoreline's transportation programs and projects have been grants. Funding for transportation projects is available from federal, state and local resources. Each funding source has specific rules and guidelines about what types of projects they will fund, how much of a project will be funded and timelines for expenditure of funds. Most grant programs require a funding match, which means that the City must also contribute funding to the cost of a project. The granting agency may also have restrictions about the source of the funding match. For example, a state funded grant might be restricted from having another state funded grant serve as the match. Funding programs for bicycle and pedestrian transportation projects are very limited, especially in comparison to funding for highway and roadway projects. Quite often, granting agencies prefer to fund construction of projects rather than planning, design or environmental work. Having projects fully designed and "shovel ready" improves their ability to compete for funding. The competitive nature of grant funding and the specific requirements associated with available grants narrow the opportunities for many of the City's high priority projects to obtain outside funding.

7. Lifecycle of a Project

Depending upon the size and/or degree of complexity associated with a project, it can take several years to complete. For example, the three mile Aurora Corridor Improvement Project scheduled for completion in 2016, began the initial planning work in 1997. Large projects may be divided into several smaller projects in order to manage the project more effectively, comply with grant funding requirements or minimize inconvenience to the community during construction. Throughout all phases of a project, the City is committed to maintaining open communications with the community. The process to develop projects generally includes the following steps.

Planning and Alternatives Development – During this phase, conceptual ideas for a project are identified, evaluated and narrowed, sometimes to a single option. Citizens, community organizations, neighboring jurisdictions and other stakeholders help shape the project. Public meetings provide updates to the community and help the City gather feedback.

Preliminary Design and Environmental Review – This phase identifies potential environmental impacts of the project alternative(s). The level of review and documentation depends on the scope of the project and its potential for environmental impacts. An Environmental Impact Statement (EIS) is prepared for large projects with potentially significant impacts. Development of a State Environmental Policy Act (SEPA) checklist may be prepared for projects not requiring an EIS. A similar review under the National Environmental Policy Act (NEPA) is required for projects that receive federal funding. The project's design moves from conceptual to preliminary as initial engineering begins.

During this phase:

- If required, a SEPA checklist or Draft EIS is published followed by a public comment period. Responses to those comments are found in the Final EIS.
- Preliminary design is completed.
- The City selects the project that will eventually be built.

Final Design and Property Acquisition – In this phase, architects and engineers define what the project will look like as well as the technical specifications for the project. Field work is performed including testing soil conditions and ground water levels, surveying, and locating utilities. Additionally, the City

acquires any necessary private property and easements. This phase is often referred to as “Projects, Specifications and Estimate (PS and E)”.

Construction – Construction time varies widely from project to project. The City balances the need to complete the project on time and on budget while minimizing construction impacts to the community. Unforeseen site conditions, weather, design corrections and the complexity of a project are some of the factors that can influence the schedule. Construction schedules can also be affected by environmental restrictions, such as permissible timeframes to work in fish bearing waters.

Contact Information

For additional information, contact Kirk McKinley, Transportation Planning Manager, 206.801.2481, kmckinley@shorelinewa.gov or Nytasha Sowers, 206.801.2483, nsowers@shorelinewa.gov.

FUNDED PROGRAMS (FULLY OR UNDERFUNDED)

1. Curb Ramp, Gutter and Sidewalk Program (underfunded)
2. Traffic Safety Improvements (underfunded)
3. Annual Road Surface Maintenance Program (underfunded)
4. Traffic Signal and Intelligent Transportation System (ITS) Improvements (underfunded)

FUNDED PROJECTS (FULLY OR PARTIALLY)

5. 25th Avenue NE Sidewalk
6. 145th Street (SR 523) Corridor Improvements (partially)
7. Echo Lake Safe Routes to School
8. Bicycle System Plan Implementation – Minor Improvements
9. Citywide Radar Speed Signs
10. Meridian Avenue N and N 155th Street Intersection Phase Changes

UNFUNDED PROJECTS

11. New Sidewalk Projects
12. Community Renewal Area (CRA) Roadway Improvements
13. NE Perkins Way Improvements – 10th Avenue NE to 15th Avenue NE
14. 15th Avenue NE – NE 172nd Street to NE 195th Street
15. Fremont Avenue N – N 175th Street to N 185th Street
16. N/NE 175th Street Corridor Improvements
17. NW Richmond Beach Road Corridor Improvements
18. N/NE 185th Street Corridor Improvements
19. Major Pavement Rehabilitation Projects
20. Meridian Avenue N - N 145th Street to N 205th Street
21. Aurora Avenue N at N 145th Street Dual Left Turn Lane
22. Midvale Avenue N – N 175th Street to N 183rd Street
23. N 165th Street and Carlyle Hall Road N Sidewalk and Intersection Safety
24. Firlands Way N – Aurora Avenue N to Linden Ave N
25. N 152nd Street and Ashworth Avenue N Intersection Improvements
26. Ballinger Way - NE 205th St to 19th Ave NE Access Control Preliminary Design
27. N 185th Street and Linden Avenue N Intersection Improvements

EMERGING PROJECTS

Community Renewal Area Projects
Light Rail Station Area Improvements
Transit Service Integration Plan

PROJECT SCHEDULED FOR SUBSTANTIAL COMPLETION IN 2015

NE 195th Street Separated Trail – 1st Avenue NE to 5th Avenue NE
Interurban/Burke-Gilman Connectors
Einstein Safe Routes to School project
Safety Enhancements on Aurora Avenue N
145th Street Corridor Study
10th Avenue NW Bridge Rehabilitation

Project	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2016-2021 Total
FUNDED PROGRAMS (FULLY OR PARTIALLY)							
Curb Ramp, Gutter & Sidewalk Program	\$ 153,000	\$ 153,000	\$ 153,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 1,059,000
Traffic Safety Improvements	\$ 156,000	\$ 158,000	\$ 161,000	\$ 164,000	\$ 168,000	\$ 200,000	\$ 1,007,000
Annual Road Surface Maintenance Program	\$ 2,300,000	\$ 1,000,000	\$ 1,100,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 8,000,000
Traffic Signal and Intelligent Transportation System (ITS) Improvements	\$ 111,000	\$ 116,000	\$ 122,000	\$ 128,000	\$ 135,000	\$ 150,000	\$ 762,000
FUNDED PROJECTS (FULLY OR PARTIALLY)							
25th Avenue NE Sidewalk	\$ 60,000	\$ 510,000	\$ 25,000	\$ -	\$ -	\$ -	\$ 595,000
145 th Street (SR 523) Corridor Improvements	\$ 2,448,000	\$ 2,448,000	\$ 2,000,000	\$ 5,000,000	\$ 20,000,000	\$ 20,000,000	\$ 51,896,000
Echo Lake Safe Routes to School	\$ 483,000	\$ 13,000	\$ -	\$ -	\$ -	\$ -	\$ 496,000
Bicycle System Plan Implementation – Minor Improvements	\$ 633,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 633,000
Citywide Radar Speed Signs	\$ 121,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 121,000
Meridian Avenue N and N 155th Street Intersection Phase Changes	\$ 55,000	\$ 304,000	\$ -	\$ -	\$ -	\$ -	\$ 359,000
UNFUNDED PROJECTS							
New Sidewalk Projects	\$ 183,000	\$ 1,076,000	\$ 769,000	\$ 971,000	\$ 1,359,000	\$ 2,960,000	\$ 7,318,000
Community Renewal Area (CRA) Roadway Improvements	\$ 477,000	\$ 4,650,000	\$ 700,000	\$ 700,000	\$ -	\$ 14,500,000	\$ 21,027,000
NE Perkins Way Improvements – 10 th Avenue NE to 15 th Avenue NE	\$ -	\$ -	\$ -	\$ 3,681,540	\$ -	\$ -	\$ 3,681,540
15 th Avenue NE – NE 172 nd Street to NE 195 th Street	\$ -	\$ -	\$ -	\$ 6,176,793	\$ -	\$ -	\$ 6,176,793
Fremont Avenue N – N 175 th Street to N 185 th Street	\$ -	\$ -	\$ -	\$ 6,292,720	\$ -	\$ -	\$ 6,292,720
N/NE 175 th Street Corridor Improvements	\$ -	\$ 2,820,000	\$ 2,819,000	\$ -	\$ -	\$ 77,156,000	\$ 82,795,000
NW Richmond Beach Road Corridor Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,490,000	\$ 45,490,000
NW Richmond Beach Rd at 3rd Ave NW	\$ -	\$ 2,320,000	\$ -	\$ -	\$ -	\$ -	\$ 2,320,000
N/NE 185 th Street Corridor Improvements	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 8,539,000	\$ 9,039,000
Major Pavement Rehabilitation Projects	\$ 2,300,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 12,300,000
Meridian Avenue N Corridor Improvements	\$ 992,000	\$ -	\$ -	\$ -	\$ -	\$ 9,117,000	\$ 10,109,000
Aurora Avenue N at N 145 th Street Dual Left Turn Lane	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,700,000	\$ 4,700,000
Midvale Avenue N – N 175 th Street to N 183 rd Street	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 510,000	\$ 510,000
N 165 th Street and Carlyle Hall Road N Sidewalk and Intersection Safety	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,482,000	\$ 2,482,000
Firlands Way N – Aurora Avenue N to Linden Ave N	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,600,000	\$ 2,600,000
N 152 nd Street and Ashworth Avenue N Intersection Improvements	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ 320,000	\$ 345,000
Ballinger Way - NE 205th St to 19th Ave NE Access Control Preliminary Design	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000
N 185th Street and Linden Avenue N Intersection Improvements	\$ -	\$ -	\$ 530,100	\$ -	\$ -	\$ -	\$ 530,100
Total Expenditures by Year	\$ 10,972,000	\$ 17,768,000	\$ 10,379,100	\$ 26,514,053	\$ 25,087,000	\$ 192,124,000	\$ 282,844,153

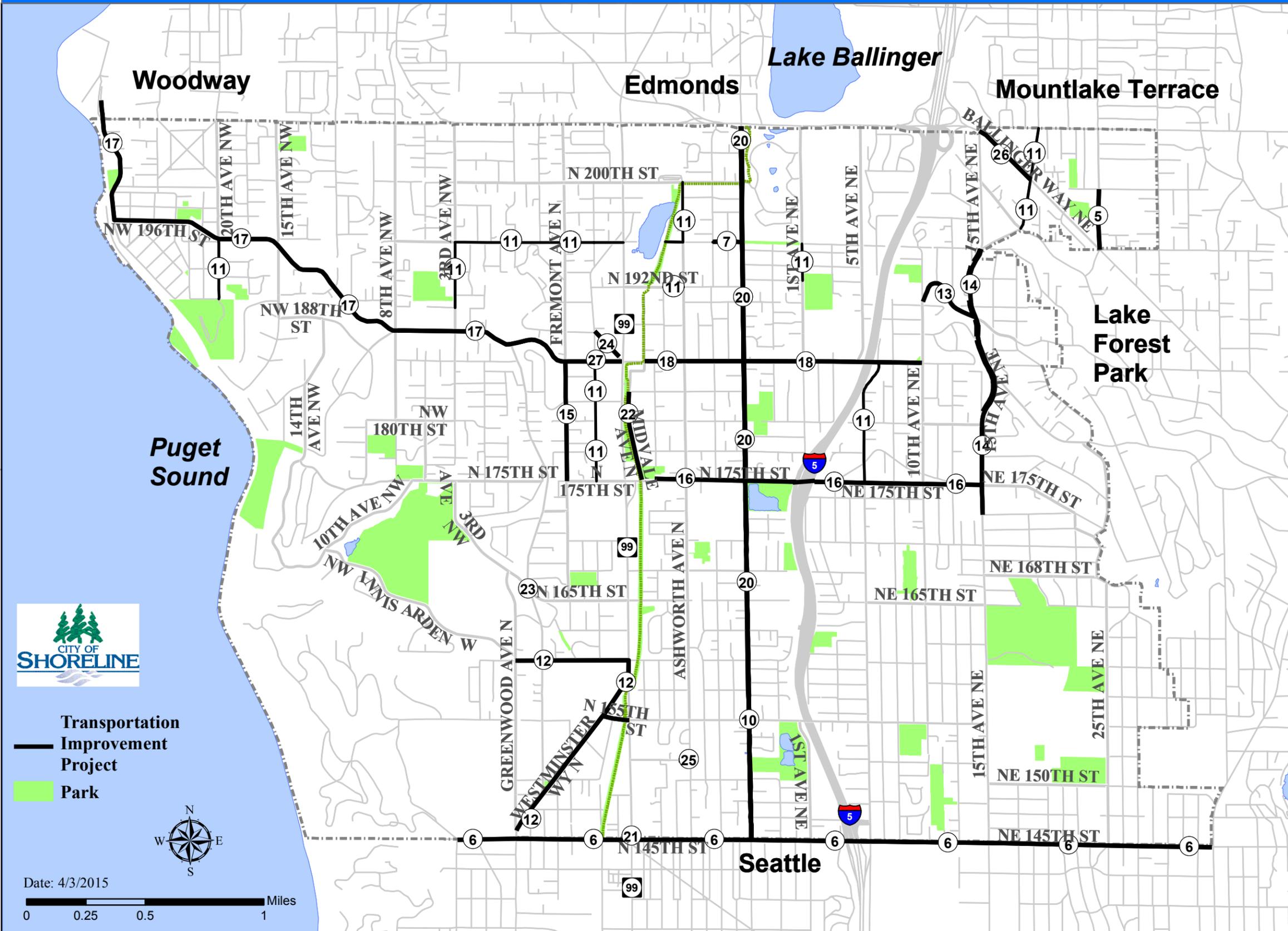
City of Shoreline Transportation Improvement Program 2016 to 2021

Project Location

5. 25th Avenue NE Sidewalk
6. 145th Street (SR 523) Corridor Improvements
7. Echo Lake Safe Routes to School
10. Meridian Avenue N and N 155th Street Intersection Phase Changes
11. New Sidewalk Projects
12. Community Renewal Area Projects
13. NE Perkins Way Improvements – 10th Avenue NE to 15th Avenue NE
14. 15th Avenue NE – NE 172nd Street to NE 195th Street
15. Fremont Avenue N – N 175th Street to N 185th Street
16. N/NE 175th Street Corridor Improvements
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24. Firlands Way N – Aurora Avenue N to Linden Ave N
25. N 152nd Street and Ashworth Avenue N Intersection Improvements
26. Ballinger Way – NE 205th Street to 19th Avenue NE – Access Control Preliminary Design
27. N 185th Street and Linden Avenue N

Citywide Improvements

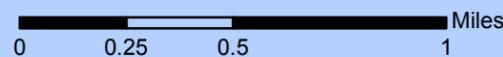
1. Curb Ramp, Gutter and Sidewalk Program
2. Traffic Safety Improvements
3. Annual Road Surface Maintenance Program
4. Traffic Signal and Intelligent Transportation System (ITS) Improvements
8. Bicycle System Plan Implementation – Minor Improvements
9. Citywide Radar Speed Signs
19. Major Pavement Rehabilitation Projects



Transportation Improvement Project
Park



Date: 4/3/2015



FUNDED PROGRAMS
(FULLY OR PARTIALLY)

Project # and Name

1. Curb Ramp, Gutter and Sidewalk Program

Scope / Narrative

The ongoing Curb Ramp, Gutter and Sidewalk Program includes design and construction of curb ramps in compliance with the Americans with Disabilities Act (ADA) standards and repairing and replacing existing cement concrete gutters and sidewalks damaged by tree roots, cracking or settlement. Curb ramp installation and sidewalk repair is often performed in advance of roadway overlay work.

Funding

FUNDING SOURCE	PARTIALLY FUNDED					UNFUNDED	2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Roads Capital	\$ 153,000	\$ 153,000	\$ 153,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 1,059,000

Funding Outlook

This program is currently funded through an annual transfer from the General Fund. It is underfunded, as it is known that additional work is needed to fully maintain the existing sidewalks. It is unknown how much additional funding is needed at this time. A full inventory is required in order to accurately assess the need and an inventory and condition assessment is funded in the 2015 budget. Additionally, new requirements for curb ramp upgrades associated with projects such as traffic signal improvements and pavement overlays continue to increase the costs associated with this program. It is estimated this program is less than 50% funded. Future TIPs may include this information.

Project Status

Annual program, 2016-2021. This program helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

2. Traffic Safety Improvements

Scope / Narrative

This program addresses priority traffic and pedestrian safety concerns on both arterial and local streets. The primary purpose of this program is to design and implement small spot improvement projects to improve safety and enhance the livability of neighborhoods. Projects include traffic calming devices (speed humps, radar speed display signs, etc), capital infrastructure (curb ramps, sidewalks, etc) and operational changes (bike lanes, turn lanes, school signing, etc).

Funding

FUNDING SOURCE	PARTIALLY FUNDED					UNFUNDED	2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Roads Capital	\$ 156,000	\$ 158,000	\$ 161,000	\$ 164,000	\$ 168,000	\$ 200,000	\$ 1,007,000

Funding Outlook

This program is currently underfunded. Additional improvements that could be implemented with supplemental funding include street lighting, ADA upgrades, small sidewalk projects, and projects identified in the Neighborhood Traffic Action Plans. Addressing all the projects identified as high priority by residents in the traffic plans is estimated at \$37.6 million.

Project Status

Annual program, 2016-2021. This program helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure and Goal 5: Promote and enhance the City's safe community and neighborhood initiatives and programs.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

3. Annual Road Surface Maintenance Program

Scope / Narrative

The City's long-term road surface maintenance program is designed to maintain the City's road system to the highest condition rating with the funds available using various thicknesses of asphalt overlay and bituminous surface treatments (BST). By performing continuous maintenance with BST, the City will extend the useful life of City streets by 10-12 years, increase skid resistance of the street surface, and improve ride quality. Each year, the City identifies roadways that require maintenance through this program. Preparatory work may include roadway grinding, crack sealing, pothole filling, curb repair, curb ramp installation or replacement and sidewalk repair. As part of this program, the City reinstates pavement markings and signs covered or disturbed during the preparatory work. All projects include necessary channelization.

A portion of this project budget will be dedicated to the implementation of bicycle signing and channelization throughout Shoreline in accordance with the City's adopted Bicycle System Plan. Bicycle facilities will include dedicated lanes, sharrows and freestanding signage, as well as wayfinding signs directing riders to local and regional destinations. Interim signage or striping may be installed in areas where a larger capital project is required in order to construct the permanent improvements. Installation of new roadway markings striping will be coordinated with the City's annual restriping to eliminate duplication of efforts.

Funding

FUNDING SOURCE	PARTIALLY FUNDED					UNFUNDED	2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Roads Capital	\$ 1,315,000	\$ 1,000,000	\$ 1,100,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 7,015,000
Federal - STP	\$ 985,000						\$ 985,000
PROJECT TOTAL	\$ 2,300,000	\$ 1,000,000	\$ 1,100,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 8,000,000

Funding Outlook

This program is currently funded at approximately 50 percent. 2016 estimates include two awarded grant projects for overlay work on 15th Avenue NE (NE 147th Street - NE 155th Street) and Meridian Avenue N (N 190th Street - N 205th Street)

Project Status

Annual program 2016-2021. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

4. Traffic Signal and Intelligent Transportation System (ITS) Improvements

Scope / Narrative

The maintenance of safe and efficient traffic signals is an important part of the City's responsibility to all users of the transportation network including drivers, pedestrians and bicyclists. New traffic signal technology provides superior functionality compared to older, obsolete equipment. Intersection improvements are one of the most cost effective ways to improve traffic flow while effective maintenance and operation of traffic signals can increase safety and extend the life of the signal, decreasing overall program costs. Examples of signalized intersection improvements include, but are not limited to:

- New controllers which can accommodate transit signal priority, dynamic emergency vehicle preemption and coordination of traffic signals along a corridor for increased efficiency.
- Functional detection to ensure signals operate dynamically, based on actual user demand.
- Back up battery systems to keep signals operational during power outages.
- Communication to a central system for efficient signal timing changes, troubleshooting, and reporting.
- Accessible Pedestrian Signals and countdown signal heads for improved safety and ADA compliance.

The ability to keep traffic signals operating and vehicles moving is a key part of Shoreline's Emergency Management Plan.

Intelligent Transportation Systems (ITS) is the application of advanced information and communications technology to transportation. ITS helps roadway users make more informed decisions about travel routes thereby improving efficiency, safety, productivity, travel time and reliability. Elements of an ITS system can include variable message signs, license plate or bluetooth/wi-fi readers, real-time traffic flow maps, traffic monitoring cameras, and communication between traffic signals and a Traffic Management Center (TMC). Existing City ITS components include fiber optic lines, traffic monitoring cameras, and a central signal system for signals along Aurora. The City began operation of a TMC in 2013 to help manage these systems which may be expanded or modified as the City's ITS system grows. This project will fully integrate all City signals, with ITS improvements where appropriate, including traffic monitoring cameras. Future expansions of the system may include coordination with traffic signals in Seattle, cities to the north, and those operated by WSDOT.

Funding

FUNDING SOURCE	PARTIALLY FUNDED					UNFUNDED	2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Roads Capital	\$ 111,000	\$ 116,000	\$ 122,000	\$ 128,000	\$ 135,000	\$ 150,000	\$ 762,000

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Funding Outlook

The annual funding for this project is not enough to completely rebuild two traffic signals each year, as a traffic signal rebuild typically costs \$60,000. While some signal upgrades were deferred due to the recession, the city still remains on schedule to rebuild an average of two signals each year, in part due to grant-funded CIP projects, such as the Aurora Corridor Improvement Project. The program is currently underfunded by approximately \$20,000 annually to stay on schedule for rebuilding two traffic signals each year. An additional \$750,000 is needed to complete the ITS components of this project. The ITS portion of the project is currently unfunded as well. The City currently does not have a good inventory of signal needs, however, it is expected that this inventory will be completed in 2015.

Project Status

Annual program 2016-2021. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|--|---|
| <input type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

FUNDED PROJECTS
(FULLY OR PARTIALLY)

Project # and Name

5. 25th Avenue NE Sidewalk

Scope / Narrative

This project will extend sidewalks along the west side of 25th Ave NE from NE 195th Pl to NE 200th St. Sidewalk will be installed in front of the proposed Public Works Maintenance Facility and Bruggers Bog Park. Intermittent on-street parking will also be installed.

Funding

FUNDING SOURCE	FUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Roads Capital	\$ 60,000	\$ 510,000	\$ 25,000				\$ 595,000

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

6. 145th Street (SR 523) Corridor Improvements

Scope / Narrative

145th Street (SR 523) serves as the boundary between the Cities of Shoreline and Seattle. Shoreline residents utilize the roadway as a primary travel route however the right-of-way is not within the City's jurisdiction. The southern half (eastbound lanes) is in the City of Seattle and the northern half (westbound lanes) is in unincorporated King County. Seattle classifies 145th Street as a Principal Arterial from Greenwood Ave N to Bothell Way NE. The City of Shoreline is interested in annexing the roadway and has begun developing a plan for corridor improvements which will guide future design and construction. Planning work would be coordinated with the City of Seattle, the Washington State Department of Transportation, King County, Metro Transit and Sound Transit to evaluate the future transportation needs for this corridor.

This project incorporates multiple improvements along the corridor to improve safety and capacity. The first step is to perform a multi-modal corridor study for 145th Street (SR 523) from Bothell Way NE (SR 522) to 3rd Ave NW. The study will include an examination of safety, traffic, transit and non-motorized needs resulting from anticipated changes in the area such as growth, location of light rail station(s) and regional tolling. The cross-section is likely to be different in various segments of the corridor based upon issues such as traffic volumes and multi-modal needs. This project is the first phase of completing improvements to this corridor.

Upon completion of the corridor study, preliminary engineering and environmental work can proceed, followed by right-of-way acquisition and construction. Funding for these latter phases is not yet secured. Construction of transportation improvements will be coordinated with construction of the new waterline that is required as part of the City's acquisition of Seattle Public Utilities water system. Anticipated projects along the corridor include:

- Improvements to vehicular capacity, safety and traffic flow, transit speed and reliability and accessibility to I-5 and the future light rail station
- Upgrade of the existing substandard, non-ADA compliant sidewalks and construct new sidewalk for a continuous system along the corridor
- Installation of continuous illumination and landscaping,
- Bus stop improvements
- Upgrade the existing stormwater management system to improve water quality and provide flow control.

Funding

FUNDING SOURCE	FUNDED		UNFUNDED				
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2016-2021 Total
Roads Capital	\$ 330,000	\$ 330,000					\$ 660,000
Federal - STP	\$ 2,118,000	\$ 2,118,000					\$ 4,236,000
Unknown			\$ 2,000,000	\$ 5,000,000	\$ 20,000,000	\$ 20,000,000	\$ 47,000,000
PROJECT TOTAL	\$ 2,448,000	\$ 2,448,000	\$ 2,000,000	\$ 5,000,000	\$ 20,000,000	\$ 20,000,000	\$ 51,896,000

Continued on next page

Funding Outlook

The estimates for 2018-2021 are included as placeholders. The RDP will provide a general project design and more specific cost estimates for the project. It is anticipated that the total cost for this project will be significantly greater and that the project will continue beyond 2020. The City has submitted a total project cost estimate of \$200 million to the Puget Sound Regional Council for the purposes of regional transportation planning. The City was awarded grant funding for Plans, Specifications and Estimate as well as environmental review in 2014 (to be obligated in 2016 after completion of the RDP) for the segment from Aurora Avenue N to Interstate 5.

Project Status

Project initiated in 2014. The corridor study is scheduled for completion in December 2015. Design work for the segment from Aurora Avenue N to Interstate 5 is scheduled to begin in 2016. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

7. Echo Lake Safe Routes to School

Scope / Narrative

This project will construct sidewalks (including curb and gutter), curb ramps, and crosswalks on N 195th Street between Meridian Avenue N and Wallingford Avenue N, directly adjacent to Echo Lake Elementary. The new sidewalk will connect to sidewalk already in place in front of the school east to the N 195th Street Trail, which connects student walkers and bicyclists to the surrounding neighborhoods.

Funding

FUNDING SOURCE	UNFUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Safe Routes to School	\$ 474,000	\$ 13,000					\$ 487,000
Roads Capital	\$ 9,000						\$ 9,000
PROJECT TOTAL	\$ 483,000	\$ 13,000	\$ -	\$ -	\$ -	\$ -	\$ 496,000

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

8. Bicycle System Plan Implementation – Minor Improvements

Scope / Narrative

Implement the majority of the City of Shoreline's adopted Bicycle System Plan through the installation of bicycle lanes, sharrows and route signage. Wayfinding signage that helps guide nonmotorized travelers to destinations throughout Shoreline and in neighboring jurisdictions will accompany the installation of facilities. Implementation will include the design of facilities, procurement of materials, construction and project management. Improvements that would be installed as part of this project do not include those that would require significant capital projects, construction or right-of-way acquisition, as these are identified as components of other projects within this TIP.

Funding

	UNFUNDED						
FUNDING SOURCE	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2016-2021 Total
Federal - STP	\$ 547,000						\$ 547,000
Roads Capital	\$ 86,000						\$ 86,000
PROJECT TOTAL	\$ 633,000	\$ -	\$ 633,000				

Funding Outlook

The total cost for this project is estimated to be approximately \$643,000. The City intends to spend approximately \$10,000 in 2015.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

9. Citywide Radar Speed Signs

Scope / Narrative

This project includes the installation of speed feedback signs (radar speed signs) at the following five locations:

1. Greenwood Ave N between Westminster Way N and N 160th Street (northbound and southbound)
2. 5th Ave NE between NE 192nd Street and NE 205th Street (northbound and southbound)
3. 1st Ave NE between N 145th Street and N 155th Street (northbound and southbound)
4. 15th Ave NW between NW Richmond Beach Rd and NW 205th St (northbound and southbound)
5. NW Innis Arden Way between Greenwood Ave N and 10th Ave NW (westbound only)

Funding

FUNDING SOURCE	FUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Roads Capital	\$ 1,000						\$ 1,000
HSIP	\$ 120,000						\$ 120,000
PROJECT TOTAL	\$ 121,000	\$ -	\$ 121,000				

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

10. Meridian Avenue N and N 155th Street Intersection Phase Changes

Scope / Narrative

This project will revise northbound/southbound signal phasing from permissive to flashing yellow arrow operation to address at-angle collisions at the intersection of Meridian Ave N and N 155th St. It will decrease intersection radii to lower vehicle turning speeds and reduce pedestrian crossing distance for increased pedestrian safety and repair and provide vehicle and bicycle detection where needed and rebuild intersection sidewalks, curb ramps and pedestrian signal system for ADA compliance.

Funding

FUNDING SOURCE	FUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Roads Capital	\$ 7,000						\$ 7,000
HSIP	\$ 48,000	\$ 304,000					\$ 352,000
PROJECT TOTAL	\$ 55,000	\$ 304,000					\$ 359,000

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

UNFUNDED PROJECTS

Project # and Name

11. New Sidewalk Projects

Scope / Narrative

The 2011 Transportation Master Plan (TMP) includes a Pedestrian System Plan, which identifies key pedestrian corridors in Shoreline that result in a comprehensive pedestrian network throughout the City. Over 100 projects are identified in order to complete the system. These projects are prioritized in the TMP.

The City's standard design for sidewalks includes construction of an amenity zone between the curb and the sidewalk. The amenity zone provides a buffer between pedestrians and traffic and is often vegetated. The amenity zone can be utilized as a stormwater management and treatment facility through the use of low impact development techniques such as rain gardens. It is the City's policy to maintain open stormwater channels whenever possible and these are often in the right-of-way where sidewalks would be constructed. In these circumstances, the City will need to implement flexibility in its design standards to maintain these channels as much as possible.

The primary focus of the sidewalk projects listed in this TIP is to complete sidewalks on one side of a street in order to create continuous walkways along a street or corridor. The sidewalk projects listed in this TIP include a combination of projects that fill in gaps between existing segments, projects that are well qualified for grant programs and those projects that will be required as mitigation for public projects.

Funding

FUNDING SOURCE	UNFUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Unknown	\$ 183,000	\$ 1,076,000	\$ 769,000	\$ 971,000	\$ 1,359,000	\$ 2,960,000	\$ 7,318,000

Funding Outlook

In the past, the City has applied for grant funding for sidewalks from several state sources including the WSDOT Pedestrian and Bicycle Program, WSDOT Safe Routes to School and the Transportation Improvement Board as well as the federal Transportation Alternatives Program. Sidewalks have also been funded through federal Surface Transportation Program as part of larger roadway projects, such as the Aurora Corridor Improvement Project.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project #11 - continued from previous page

	STREET	FROM	TO	PROJECT DESCRIPTION	FUNDING STRATEGY	COST	ESTIMATED PROJECT START YEAR
1	20 th Ave NW	Saltwater Park entrance	NW 195 th St	Construct a separated path on the east side of the street.	Park/Trail Bond, TIB – Sidewalk Program	\$700,000	2017
2	1 st Ave NE	NE 192 nd St	NE 195 th St	Construct a sidewalks to fill in gaps on the west and east sides of the street.	TIB – Sidewalk Program, CIP, Voter Approved Bond, City, General Fund,	\$955,000	2018
3	Ashworth Ave N	N 195 th St	N 200 th St	Construct sidewalks on the west side of the street from N 195 th St to 200 th St, replace the asphalt walkway on the east side of the street in front of Echo Lake Elementary school and install curb ramps at the N 195 th St intersection. This project could be combined with Sidewalk Projects #9, 10 and/or 11.	Safe Routes to School, CIP, Voter Approved Bond, City General Fund	\$890,000	2016
4	NW/N 195 th St	3 rd Ave NW	Aurora Ave N	Construct sidewalks on the south side of the street. This project could be combined with Sidewalk Project #5.	Safe Routes to School, CIP, Voter Approved Bond, City General Fund	\$1,400,000	2021
5	3 rd Ave NW	NW 189 th St	NW 195 th St	Construct sidewalks to fill in gaps on the east side of the street. This project could be combined with Sidewalk Project #4.	TIB – Sidewalk Program, CIP, Voter Approved Bond, City, General Fund	\$380,000	2021
6	5 th Ave NE	NE 175 th St	NE 185 th St	Construct sidewalks on the west and east sides of the street.	Sound Transit mitigation, CIP, Voter Approved Bond, City General Fund	\$1,500,000	2020
7	Linden Ave N	N 175 th St	N 182 nd St	Construct sidewalks to fill in gaps on the east side of the street. Update scope and budget	Safe Routes to School, Private Development Mitigation, CIP, Voter Approved Bond, City General Fund	\$776,000	2019
8	19 th Ave NE	Ballinger Way NE/NE 195 th St	NE 205 th St	Construct sidewalks to fill in gaps on the northwest side of the street.	CIP, Voter Approved Bond, City General Fund	\$330,000	2019
9	N 195 th St*	Interurban Trail	Ashworth Ave N	Construct a sidewalk on the south side of the street. This project could be combined with Sidewalk Project #3.	Safe Routes to School, CIP, Voter Approved Bond, City General Fund	\$257,000	2016
10	N 192 nd St*	Stone Ave N	Ashworth Ave N	Construct sidewalks on the south side of the street from Stone Ave N to Ashworth Ave N; narrow the Interurban Trail crossing at N 192 nd St. This project could be combined with Sidewalk Project #3.	Safe Routes to School, Parks and Recreation Bond	\$130,000	2020

*Project would only be constructed if substantially funded by grants.

Project # and Name

12. Community Renewal Area (CRA) Roadway Improvements

Scope / Narrative

This project incorporates a series of improvements in the Community Renewal Area. Individual projects include the following:

- a. Reconstruct Greenwood/Innis Arden/160th intersection for improved operations. Project also includes sidewalks between Dayton and Greenwood.
- b. N 160th from Aurora to Dayton/Greenwood. This is a multi-phase project. N 160th will be restriped to 3-lanes and bikelanes as part of the Federally funded bicycle project in 2016. Following phases include the construction of a cycle track on the south side of the corridor, construction of new sidewalks, a gateway entrance on N 160th St for Aurora Square and a midblock pedestrian crossing. Most
- c. Intersection at N 155th St and Westminster Way N. Westminster Way N to Aurora Ave N. Improves the main vehicle intersection and increases safety for pedestrians. Includes improvements to the section of N 155th St between Westminster Way N and Aurora Ave N. Most effectively done at one time and in conjunction with the redevelopment of the Sears property.
- d. Westminster Way N (North). N 155th St to N 160th St. Envisioned as a project in the Aurora Square CRA Renewal Plan, reworking Westminster Way N in this section provides a more pedestrian and bicycle friendly section with street parking that can help unite the small triangle property to the rest of Aurora Square. Most effectively completed with the redevelopment of the triangle property. Project includes improving a bike connector from 157th to 160th.
- e. Construct N 157th St. Westminster Way N to Aurora Ave N. New street connection makes Westminster between 155th and 157th pedestrian and cycle-friendly, creates a better entrance to Aurora Square, connects the triangle property to the rest of Aurora Square, and provides on street parking for future retail. Most effectively completed with the redevelopment of the triangle property.
- f. Westminster Way N (South). N 155th St to Fremont Ave N. Frontage improvements provide little support of renewal efforts in this location.

Continued on next page

Funding							
	UNFUNDED						
FUNDING SOURCE	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2016-2021 Total
Greenwood/ N 160th St/ Innis Arden intersection		\$ 100,000	\$ 700,000	\$ 700,000			\$ 1,500,000
Re-construct N 160th from Aurora to Dayton with cycle track, sidewalks, new signalized intersection	\$100,000					\$ 7,500,000	\$ 7,600,000
N 155th St (West) including intersection at Westminster	\$150,000	\$ 2,850,000					\$ 3,000,000
Westminster Way N (North) N 157th to Aurora		\$ 1,700,000					\$ 1,700,000
Construct N 157th St	\$227,000						\$ 227,000
Westminster Way N (South)						\$ 7,000,000	\$ 7,000,000
PROJECT TOTAL	\$ 477,000	\$ 4,650,000	\$ 700,000	\$ 700,000	\$ -	\$ 14,500,000	\$ 21,027,000

Funding Outlook

Many of these projects will be constructed by private development as properties within the Aurora Square Community Renewal Area are redeveloped. The cost estimate does not include the funding needed for utility undergrounding.

Project Status

This project helps to implement City Council Goal 1: Strengthen Shoreline's economic base and Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

Project # and Name

13. NE Perkins Way Improvements – 10th Avenue NE to 15th Avenue NE

Scope / Narrative

Construct bicycle and pedestrian improvements on NE Perkins Way from 10th Ave NE to 15th Ave NE. This roadway segment currently includes two travel lanes and a pedestrian walking on the north side separated from the travel lanes by jersey barriers. No bicycle facilities are present. This segment is part of the Northern Connector route from the Interurban Trail in Shoreline to the Burke-Gilman Trail in Lake Forest Park. Upon completion of the separated trail at NE 195th Street from 1st Ave NE to 5th Ave NE and installation of signage along the remainder of the route, this segment will be the remaining gap within the connector route. A study is needed to determine the appropriate scope of improvements and costs for this project.

Funding

	UNFUNDED						
FUNDING SOURCE	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2016-2021 Total
Unknown				\$ 3,681,540			\$ 3,681,540

Funding Outlook

The funding identified for this project is to identify and design the appropriate improvements for the roadway and develop cost estimates. Because construction costs are unknown at this time, a placeholder for them is identified in 2019-2020. More refined construction costs and a timeline for completion will be updated in future TIPs. This project is likely to be competitive for grant funding.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

Project # and Name

14. 15th Avenue NE – NE 172nd Street to NE 195th Street

Scope / Narrative

This project would construct sidewalks and accessible bus stops on the west side of the road from NE 180th St to NE 195th St. There are significant topographic challenges related to constructing a sidewalk on the west side of this arterial. A corridor study will be performed to identify a preferred transportation solution for this roadway segment. Alternatives to accommodate bicycles will be analyzed, including rechannelization of the roadway from four lanes to three. The cross-section of the road from NE 175th St to NE 180th St would be reduced from four lanes to three and bicycle lanes would be installed. Right-of-way may need to be purchased to complete this project.

Funding

FUNDING SOURCE	UNFUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Unknown				\$ 6,176,793			\$ 6,176,793

Funding Outlook

The funding identified for this project is to identify and design the appropriate improvements for the roadway and develop cost estimates. Because construction costs are unknown at this time, a placeholder for them is identified in 2019-2021. More refined construction costs and a timeline for completion will be updated in future TIPs.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

Project # and Name

15. Fremont Avenue N – N 175th Street to N 185th Street

Scope / Narrative

This project incorporates a series of improvements along this corridor to improve safety and capacity including:

- Rechannelization of the roadway to a three lane cross-section (one travel lane in each direction with a center turn lane) with bicycle lanes.
- Construction of sidewalks on both sides of the street. All sidewalks would be five to eight feet wide, include curb and gutter and five foot amenity zones separating the pedestrians from the roadway.
- Perform overlay/preservation work.

These projects can be constructed individually, allowing the complete set of improvement to be phased over time.

Fremont Ave N serves as a primary route to Shorewood High School and Shoreline's Town Center. Tricia - Need updated cost estimate

Funding

FUNDING SOURCE	UNFUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Unknown				\$ 6,292,720			\$ 6,292,720

Project Status

This project helps to implement City Council Goal 1: Strengthen Shoreline's economic base and Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Funding Outlook

The funding identified for this project is to identify and design the appropriate improvements for the roadway and develop cost estimates. Because construction costs are unknown at this time, a placeholder for them is identified in 2019-2021. More refined construction costs and a timeline for completion will be updated in future TIPs.

Purpose / Goals Achieved

- | | |
|---|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

16. N/NE 175th Street Corridor Improvements

Scope / Narrative

This project incorporates a series of improvements along this corridor to improve safety and capacity. Individual projects include the following:

- a. N 175th St – Stone Ave N to Meridian Ave N* and Interstate 5 to 15th Ave NE: This project will design and construct improvements which will tie in with those recently constructed by the Aurora project. The improvements include: reconstruction of the existing street to provide two traffic lanes in each direction, a center lane with two-way left turn areas, medians and turn pockets, bicycle lanes (integrated into the sidewalk), curb, gutter, and sidewalk with planter strip where feasible, illumination, landscaping and retaining walls. Intersections with high accident rates will be improved as part of this project. The profile of the roadway between Ashworth Ave N and Stone Ave N will be lowered to meet standard sight distance requirements. This project includes improvements to the I-5 intersections, in coordination with WSDOT.
- b. N 175th St and Meridian Ave N*: Construct a northbound add lane on Meridian Ave N, which involves widening the northbound approach to include a second through lane. Rechannelize the southbound approach with a single left turn lane and increase the westbound left turn pocket length.
- c. N/NE 175th St – Meridian Ave N to the Interstate 5 on-/off-ramps*: Extend the left-turn pockets between Meridian Ave N and I-5 to provide additional storage capacity for left turning vehicles at the intersections.
- d. NE 175th St – 15th Ave NE – 25th Ave NE: Re-stripe the westbound approach to provide a dedicated left-turn pocket and shared through/right lane. With dedicated left-turn pockets, remove split-phase signal operation and optimize for eight-phase signal operation.
- e. Interchange Improvements: Projects were identified in the City's TMP to accommodate growth and maintain the City's adopted transportation level of service including several of the projects listed above. In addition to these projects, the City's travel demand model also identified the potential need to improve the interchange at NE 175th Street and I-5. Currently, this interchange experiences delays during the AM and PM peak periods, due in part to the ramp metering, and this backup affects other intersections. Reconstruction of this interchange would allow the City to improve bicycle and pedestrian safety at this location, as well as improve the operations of the nearby intersections. Because this project is not entirely within the jurisdiction of the City, it will require coordination with WSDOT.

Some of these projects can be constructed individually, allowing the complete set of improvement to be phased over time.

* Projects have been identified in the City's Transportation Master Plan as necessary to accommodate growth and allow the City to maintain its adopted Levels of Service. These projects may be funded in part by transportation impact fees.

Continued on next page

Funding							
	UNFUNDED						
FUNDING SOURCE	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2016-2021 Total
N 175 th St – Stone Ave N to Meridian Ave N* and Interstate 5 to 15 th Ave NE (a) - STP		\$ 1,640,000	\$ 1,640,000			\$ 6,660,000	\$ 9,940,000
N 175 th St – Stone Ave N to Meridian Ave N* and Interstate 5 to 15 th Ave NE (a) – impact fee						\$ 3,314,000	\$ 3,314,000
N 175 th St and Meridian Ave N (b) - STP		\$ 651,000	\$ 651,000			\$ 2,644,000	\$ 3,946,000
N 175 th St and Meridian Ave N (b) – impact fee						\$ 1,315,000	\$ 1,315,000
N/NE 175 th St – Meridian Ave N to the I-5 on-/off-ramps (c) - STP		\$ 529,000	\$ 528,000			\$ 2,146,000	\$ 3,203,000
N/NE 175 th St – Meridian Ave N to the I-5 on-/off-ramps (c) – impact fee						\$ 1,067,000	\$ 1,067,000
NE 175 th St – 15 th Ave NE – 25 th Ave NE (d) - unknown						\$ 10,000	\$ 10,000
Interchange Improvements (e)						\$ 60,000,000	\$ 60,000,000
PROJECT TOTAL	\$ -	\$ 2,820,000	\$ 2,819,000	\$ -	\$ -	\$ 77,156,000	\$ 82,795,000

Continued on next page

Funding Outlook

Projects identified in the City's Transportation Master Plan as necessary to accommodate growth and allow the City to maintain its adopted Levels of Service may be funded in part by transportation impact fees. The City pursued federal grant funding for design and environmental work through the Surface Transportation Program administered by PSRC in 2014 and it is included as the first project eligible for funding on the contingency list. It is anticipated that the City will use transportation impact fees collected from private development to serve as the match for this project.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input checked="" type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

Project # and Name

17. NW Richmond Beach Road and Richmond Beach Drive NW Corridor Improvements *(including NW Richmond Beach Rd at 3rd Ave NW)*

Scope / Narrative

The proposed Point Wells development in Snohomish County will result in significant traffic impacts in the City of Shoreline. The developer is currently working with the City to prepare a Transportation Corridor Study (TCS) that identifies anticipated transportation safety and capacity problems resulting from the development and the necessary mitigation to correct them. The TCS will include a defined list of transportation projects, including cost estimates. Mitigation projects for the Point Wells development will be funded or constructed by private developers. *Preliminarily* identified projects are listed below. Upon completion of the TCS, this list and the associated project costs will be updated accordingly.

- a. NW Richmond Beach Rd at 3rd Ave NW: NW Richmond Beach Rd is a high-volume arterial street at this location. It traditionally has ranked at or near the top intersection with a high accident rate. This project will design and construct left-turn lanes on NW Richmond Beach Road at the intersection with 3rd Ave NW in order to improve safety and traffic flow.
- b. NW 195th/196th St – Richmond Beach Dr NW to 24th Ave NW: NW 196th St and NW 195th Street are unimproved roadways with a speed limit of 25 miles per hour and two 12 foot wide lanes with limited sidewalks. Preliminary recommended improvements to the roadway should include sidewalks on one side of the street (including Richmond Beach Drive between NW 195th St/NW 196th Str) and narrowing lanes to slow traffic flow and improve pedestrian comfort. This project will also include a roundabout or other traffic calming technique at the 24th Ave NW intersection.
- c. NW 196th St – 24th Ave NW to 20th Ave NW: NW 196th St is a collector arterial with a speed limit of 25 miles per hour. It consists of two 12 foot wide lanes with a sidewalk on the north side and part of the south side of the street. Improvements to the roadway should include construction of a complete sidewalk on the south side of the street.
- d. NW 195th St at 20th Ave NW: Construct a traffic signal at this intersection which is currently controlled by stop signs on all approaches.
- e. NW Richmond Beach Road at 15th Ave NW: Improve operations and safety at the existing off-set intersection. This could include signalization or construction of roundabouts.
- f. Richmond Beach Dr NW – NW 196th St to NW 205th St: Richmond Beach Dr NW is the only road to serve the Point Wells site. It is designated as a collector arterial and local secondary street. It consists of two 12 foot wide lanes with no sidewalks. Some areas on the east side are wide enough to accommodate on-street parking. Improvements to this roadway include, at a minimum, widening to help maintain traffic flow and construction of a sidewalk on one side of the street.
- g. NW Richmond Beach Rd at 8th Ave NW: Improve safety and operation at this existing five legged intersection through a reconfiguration that eliminates the southwest approach or construction of a roundabout.
- h. NW/N Richmond Beach Rd - Richmond Beach Dr NW to Fremont Ave N: Perform overlay/preservation work. Preservation work may occur in advance of other projects in order to maintain them until funding is available for the larger capital projects.
- i. Off-Corridor Sidewalk/Pedestrian Safety Improvements: Staff and the developer are currently reviewing potential off-corridor sidewalks to improve pedestrian safety on arterial streets that connect to the corridor.
- j. Traffic Calming and Bicycle Improvements: Implement traffic calming techniques to minimize cut-through traffic in the area between Richmond Beach Drive and 20th Ave NW, on NW 190th Street west of 8th Ave NW and bicycle improvements on east-west streets paralleling the Richmond Beach Road corridor.

Continued on next page

Funding							
	UNFUNDED						
FUNDING SOURCE	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2016-2021 Total
NW Richmond Beach Rd at 3 rd Ave NW (a) – developer mitigation		\$2,320,000					\$ 2,320,000
NW 195th/196 th St – Richmond Beach Dr NW to 24 th Ave NW (b) – developer mitigation						\$1,500,000	\$ 1,500,000
NW 196 th St – 24 th Ave NW to 20 th Ave NW (c) – developer mitigation						\$300,000	\$ 300,000
NW 195 th St at 20 th Ave NW (d) – developer mitigation						\$1,340,000	\$ 1,340,000
NW Richmond Beach Road at 15 th Ave NW (e) – developer mitigation						\$2,210,000	\$ 2,210,000
Richmond Beach Dr NW – NW 196 th St to NW 205 th St: (f) – developer mitigation						\$18,250,000	\$ 18,250,000
NW Richmond Beach Rd at 8 th Ave NW: (g) – developer mitigation						\$2,140,000	\$ 2,140,000
NW/N Richmond Beach Rd - Richmond Beach Dr NW to Fremont Ave N (h) – developer mitigation						\$4,000,000	\$ 4,000,000
Off-Corridor Sidewalk/Pedestrian Safety Improvements (i) – developer mitigation						\$15,050,000	\$ 15,050,000
Traffic Calming and Bicycle Improvements (j) - developer mitigation						\$700,000	\$ 700,000
PROJECT TOTAL	\$ -	\$ 2,320,000	\$ -	\$ -	\$ -	\$ 45,490,000	\$ 47,810,000

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Funding Outlook

Many of these projects will be funded or constructed by private developers as mitigation for the Point Wells development. It is unknown at this time when projects will be constructed. The Transportation Corridor Study will provide additional details about timing for construction.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input checked="" type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input checked="" type="checkbox"/> Corridor Study |

Project # and Name

18. N/NE 185th Street Corridor Improvements

Scope / Narrative

NE 185th Street at Interstate 5 is the future site of a light rail station planned as part of Sound Transit's Lynnwood Link Light Rail Extension project. With the construction of this station and the operation of light rail service, the City expects increases to traffic on N/NE 185th Street as residents will drive to access the parking garage planned as part of this facility, as well as increased bicycle, pedestrian and bus traffic. Additionally, the City anticipates that the surrounding areas will transition over time to more densely developed, mixed use neighborhoods, which will also be a source of increased multi-modal traffic. The development of the Point Wells property in Snohomish County is likely to put added pressure on this roadway as well. This project incorporates a series of improvements along this corridor to improve safety and capacity. Individual projects include the following:

- a. NE 185th St – 1st Ave NE to 7th Ave NE* and 7th Ave NE to 10th Ave NE: Rechanelize the roadway to add a center two-way left-turn lane, retain bicycle lanes and remove on-street parking.
- b. N 185th St and Meridian Ave N*: Construction of northbound and southbound add/drop lanes, which involves widening the northbound and southbound approaches to include a second through lane and receiving lane. This project also includes construction of an east to southbound right-turn pocket, which involves widening the eastbound approach. This signal will be coordinated with the signal at Meridian Ave N and 1st Ave NE.
- c. N 185th St – Midvale Ave N to Stone Ave N: Extend the second eastbound through lane from Midvale Ave N to Stone Ave N. The lane will terminate as a right-turn only lane at Stone Ave N.
- d. N/NE 185th St – Midvale Ave N – 10th Ave NE: Perform overlay/preservation work. Work may include milling the roadway and sealing the joints between the concrete panels to improve the smoothness and improve the pavement life span.
- e. N/NE 185th Street Corridor Study: Develop a corridor plan for 185th Street/10th Avenue NE/NE 180th Street that includes multi-modal transportation facilities necessary to support projected growth in the subarea, a phasing plan for implementation and a funding plan for improvements. This project is identified in the 185th Street Station Subarea Plan.

Some of these projects can be constructed individually, allowing the complete set of improvements to be phased over time. Preservation work may occur in advance of other projects in order to maintain them until funding is available for the larger capital projects.

*Projects have been identified in the City's Transportation Master Plan as necessary to accommodate growth and allow the City to maintain its adopted Levels of Service. These projects may be funded in part by transportation impact fees.

Continued on next page

Funding							
FUNDING SOURCE	UNFUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
NE 185 th St – 1 st Ave NE to 7 th Ave NE and 7 th Ave NE to 10 th Ave NE(a) - unknown						\$231,000	\$ 231,000
NE 185 th St – 1 st Ave NE to 7 th Ave NE (a) – impact fee						\$78,000	\$ 78,000
N 185 th St and Meridian Ave N(b) - unknown						\$4,110,000	\$ 4,110,000
N 185 th St and Meridian Ave N (b) – impact fee						\$1,370,000	\$ 1,370,000
N 185 th St – Midvale Ave N to Stone Ave N (c) - unknown						\$550,000	\$ 550,000
NE 185 th St – Midvale Ave N – 10 th Ave NE (d) - unknown						\$2,200,000	\$ 2,200,000
N/NE 185th Street Corridor Study (e) - unknown	\$ 500,000						\$ 500,000
PROJECT TOTAL	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 8,539,000	\$ 9,039,000

Funding Outlook

Projects identified in the City's Transportation Master Plan as necessary to accommodate growth and allow the City to maintain its adopted Levels of Service may be funded in part by transportation impact fees.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure. Bicycle lanes were installed in 2013. The roadway will need to be rechannelized again in order to provide the center turn lane.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input checked="" type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

19. Major Pavement Rehabilitation Projects

Scope / Narrative

Keeping the City's physical infrastructure in good condition is a fundamental transportation capital investment. As transportation facilities age and are used, a regular schedule of rehabilitation, reconstruction and replacement is needed to keep the system usable. Timing is important: if preservation investment is deferred, costs increase dramatically. Overlay projects may include sidewalk repairs and/or upgrades to meet ADA standards.

In addition to the City's annual road surface maintenance program, several roadways in Shoreline are in need of significant maintenance work beyond the surface maintenance program. These include corridors that need complete rehabilitation or rebuilds based on the Pavement Maintenance Index and other factors. These corridors include:

- N/NE 155th St: Aurora Ave N to 15th Ave NE
- N/NE 185th St: Midvale Ave N to 10th Ave NE (costs included with Project #18)
- NW/N Richmond Beach Rd: Richmond Beach Dr NW to Fremont Ave N
(costs included with Project #17)
- Fremont Ave N: N 175th St to N 185th St (costs included with Project #15)
- Westminster Way N: N 145th St to N 155th St
- 15th Ave NE: NE 150th St to NE 172nd St (partially funded with Project #2)
- Greenwood Ave N: Westminster Way N to N Carlyle Hall Rd
- Dayton Ave N: N 160th St to N Carlyle Hall Rd
- N Carlyle Hall Rd: NW 175th St to Fremont Ave N
- 8th Ave NW: NW Richmond Beach Rd to NW 180th St
- 6th Ave NW: NW 175th St to NW 180th St
- N/NW 200th St: 3rd Ave NW to Aurora Ave N
- N/NW 195th St: 8th Ave NW to Aurora Ave N
- Linden Ave N: N 175th St to N 185th St

On roadways where both capital projects and preservation work are identified in this TIP, the preservation work may occur in advance of those projects in order to maintain them until funding is available for the larger capital projects. The costs for these projects are identified on the individual project pages.

Funding

FUNDING SOURCE	UNFUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Unknown	\$ 2,300,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 12,300,000

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Funding Outlook

The City will pursue federal grant funding for overlay work. Grant funding would be pursued for the projects that are most highly qualified. 2016 estimates include two awarded grant projects for overlay work on 15th Avenue NE (NE 147th Street - NE 155th Street) and Meridian Avenue N (N 190th Street - N 205th Street). The annual funding identified for 2017-2021 will not be adequate to perform overlay work for all of the roadways identified.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

20. Meridian Avenue N – N 145th Street to N 205th Street

Scope / Narrative

This project incorporates a series of improvements along this corridor to improve safety and capacity including:

- Rechannelize the roadway to add a center two-way left-turn lane and bicycle lanes (requires removal of on-street parking)
- Installation of traffic calming measures, such as radar speed display signs
- Repair damaged sidewalks, curbs and gutters and install new sidewalks where missing
- Installation of curb ramps to improve ADA accessibility
- Perform overlay work
- Underground utilities.

Right-of-way may need to be acquired in order to meet ADA requirements around trees. This project has been identified in the City's Transportation Master Plan as necessary to accommodate growth and allow the City to maintain its adopted Levels of Service. These projects may be funded in part by transportation impact fees. Overlay from N 190th Street - N 205th Street scheduled to occur in conjunction with Project #2. Rechannelization scheduled to occur in conjunction with Project #8.

As part of improvements to this corridor, the City may choose to incorporate additional projects identified in this TIP, such as intersection improvements at N 175th St (Project #16) or N/NE 185th St (Project #18).

Funding

FUNDING SOURCE	UNFUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Unknown						\$6,590,000	\$ 6,590,000
Roads Capital	\$ 317,000						\$ 317,000
Federal - STP	\$ 675,000						\$ 675,000
Impact Fee						\$2,527,000	\$ 2,527,000
PROJECT TOTAL	\$ 992,000	\$ -	\$ -	\$ -	\$ -	\$ 9,117,000	\$ 10,109,000

Funding Outlook

Projects identified in the City's Transportation Master Plan as necessary to accommodate growth and allow the City to maintain its adopted Levels of Service may be funded in part by transportation impact fees. 2016 estimates include awarded grant funds for overlay work from N 190th Street - N 205th Street.

Continued on next page

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|--|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input checked="" type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

21. Aurora Avenue N at N 145th Street Dual Left Turn Lane

Scope / Narrative

This project consists of construction of an additional south to east bound left turn lane (for a total of two) at N 145th St and Aurora Ave N and construction of a new signal at N 149th St and Aurora Ave N. The N 145th St dual left turn lane will require acquisition of additional right-of-way along the western edge of Aurora Ave N (the Aurora project constructed "interim" width sidewalks in this location). Schedule of this project may be influenced by redevelopment of the northwest corner of Aurora Ave N and N 145th St, implementation of improvements to the 145th St corridor or improvements by the City of Seattle. The additional width required for this turn lane is currently under consideration by the City of Seattle as part of their Aurora Ave N project planning. Shoreline would only proceed with this project in conjunction with construction by the City of Seattle as part of their Aurora Ave N project. The new signal at N 149th St will need to meet signal warrants and receive Washington State Department of Transportation approval. This signal project should be combined with the dual left turn at N 145th St in order to address queue length demands. The 145th Street Corridor Study will include evaluation of this project for consistency with the corridor improvements.

Funding

FUNDING SOURCE	UNFUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Unknown						\$ 4,700,000	\$ 4,700,000

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|--|--|
| <input type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

22. Midvale Avenue N – N 175th Street to N 183rd Street

Scope / Narrative

This project will design, acquire right-of-way and reconstruct Midvale Ave N. This project will move lanes off Seattle City Light (SCL) right-of-way. The project is proposed to include undergrounding electrical distribution lines, curb, gutter, sidewalks, amenity zone and on-street parking and angle parking on the west in the SCL right-of-way. Midvale Ave N serves the City's Town Center.

Funding

	UNFUNDED						
FUNDING SOURCE	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	2016-2021 Total
Unknown						\$ 510,000	\$ 510,000

Funding Outlook

Much of this project will be constructed by private development as properties within the Town Center are redeveloped. The City's primary contributions will be the construction of on-street parking and some sidewalks. The cost estimate does not include the funding needed for utility undergrounding.

Project Status

This project helps to implement City Council Goal 1: Strengthen Shoreline's economic base and Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|--|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input checked="" type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

23. N 165th Street and Carlyle Hall Road N Sidewalk and Intersection Safety

Scope / Narrative

This project will improve an odd-shaped intersection to improve visibility and safety, as well as providing pedestrian safety features. The design has not been completed and one of the first steps will be to scope out alternatives.

Funding

FUNDING SOURCE	UNFUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Unknown						\$ 2,482,000	\$ 2,482,000

Funding Outlook

The funding identified for this project is to identify and design the appropriate improvements for the roadway and develop cost estimates. Because construction costs are unknown at this time, a placeholder for them is identified in 2021. More refined construction costs and a timeline for completion will be updated in future TIPs.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

24. Firlands Way N –Aurora Avenue N to Linden Avenue N

Scope / Narrative

Construct sidewalks and amenity zones and install angle-in on-street parking on both sides of the street. The project scope may include exposing and refurbishing the original red brick roadway surface, if it still exists and is usable. This segment of Firlands Way N is located in the City's Town Center.

Funding

FUNDING SOURCE	UNFUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Unknown						\$ 2,600,000	\$ 2,600,000

Project Status

This project helps to implement City Council Goal 1: Strengthen Shoreline's economic base and Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

25. N 152nd Street and Ashworth Avenue N Intersection Improvements

Scope / Narrative

This project will construct a sidewalk along the north side of N 152nd St from the existing sidewalk (approximately 275 feet to the west) to Ashworth Ave N and the west side of Ashworth Ave N from N 152nd St to N 153rd Street. The sidewalk will wrap around the corner and provide a connection to the pedestrian walkway to the south (scheduled for completion in 2014).

Funding

FUNDING SOURCE	UNFUNDED						2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
WSDOT					\$ 25,000	\$ 320,000	\$ 345,000

Funding Outlook

This project is competitive for funding from the Pedestrian and Bicycle Safety Grant administered through WSDOT.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

**26. Ballinger Way - NE 205th St to 19th Ave NE Access Control
Preliminary Design**

Scope / Narrative

Access control improvements along this corridor are needed to address vehicular and pedestrian collisions as identified in the City's 2014 Annual Traffic Report. Preliminary design to determine the scope of access control and intersection improvements is needed as a first step. Scoping will also identify pedestrian safety improvement opportunities, specifically related to midblock crossings. Right-of-way may need to be acquired in order to provide U-turns at signals and/or at access points.

Funding

FUNDING SOURCE	PARTIALLY FUNDED					UNFUNDED	2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Unknown		\$ 200,000					\$ 200,000

Funding Outlook

This project is competitive for funding from the Citywide Safety Grant administered through WSDOT.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|--|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input checked="" type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

Project # and Name

27. N 185th Street and Linden Avenue N Intersection Improvements

Scope / Narrative

This project would rebuild the intersection of Linden Ave N and N 185th Street in order to revise signal phasing to address at-angle collisions as noted in the City's 2014 Annual Traffic Report. This project would also decrease intersection radii to lower vehicle turning speeds and reduce pedestrian crossing distances for increased pedestrian safety. Sidewalks, curb ramps and pedestrian signal systems for ADA compliance would also be addressed. The current signal infrastructure does not have capacity to provide these phase changes and pedestrian improvements unless the intersection is rebuilt.

Funding

FUNDING SOURCE	PARTIALLY FUNDED					UNFUNDED	2016-2021 Total
	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2020 Estimate	2021 Estimate	
Unknown			\$ 530,100				\$ 530,100

Funding Outlook

This project is competitive for funding from the Citywide Safety Grant administered through WSDOT.

Project Status

This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

- | | |
|---|---|
| <input checked="" type="checkbox"/> Non-motorized | <input type="checkbox"/> Major Structures |
| <input checked="" type="checkbox"/> System Preservation | <input type="checkbox"/> Interjurisdictional Coordination |
| <input type="checkbox"/> Improves Efficiency & Operations | <input type="checkbox"/> Growth Management |
| <input checked="" type="checkbox"/> Safety | <input type="checkbox"/> Corridor Study |

EMERGING PROJECTS

The City of Shoreline is currently engaged in several long range planning efforts that will identify additional transportation improvements needed in the City. Because the type and costs of potential projects will not be known until the completion of the planning stage, it is difficult to include them in the TIP at this time. Once the planning process is complete and projects more clearly defined, they can be included in future TIPs.

Community Renewal Area Projects: In 2012, the Shoreline City Council designated the 70+ acre Aurora Square area as a Community Renewal Area (CRA) where economic renewal would clearly deliver multifaceted public benefits. The associated CRA Plan adopted in 2013, outlines a vision for the CRA, as well as the need for transportation infrastructure improvements to help achieve that vision. The recently adopted Programmatic EIS for the CRA identifies needed improvements that will enhance multi-modal access to Aurora Square as well as circulation on site. Transportation projects included in the EIS include:

- Intersection improvements at:
 - N 155th Street and Westminster Way N
 - N 155th Street and Aurora Avenue N
 - N 160th Street and Linden Avenue N
 - Aurora Avenue N between Westminster Way N and N 155th Street
- Reconfiguration of Westminster Way N/connection to Aurora Avenue N
- Improvements to N 160th Street (TIP Project # 12)
- Sidewalks and bicycle facilities on streets leading/connecting to Aurora Square

Once projects are finalized, they will be included in future TIPs. It is expected that redevelopment of the CRA will occur over many years, continuing beyond the six year time frame addressed in this TIP.

Light Rail Station Area Planning:

In anticipation of the commencement of light rail service in 2023, the City is planning for land use changes around the future stations located in Shoreline at NE 145th Street and NE 185th Street. Higher residential densities and a mix of land use types near the stations, as well as transit users traveling to the stations will create an increased demand for multi-modal transportation facilities. Transportation impacts and needs associated with future land use changes as well as the necessary solutions to resolve them are outlined in the subarea plans. The redevelopment of the station areas is expected to occur over many decades. The projects needed to accommodate growth in the station areas will be incorporated into future TIPs.

Transportation Service Integration Plan

With the beginning of light rail service in Shoreline in 2023, in the City anticipates significant changes to its transit network. In preparation for this change, the City is planning to develop of a Transit Service Integration Plan (TSIP) that will address transit needs throughout Shoreline when light rail service begins and as the City's population and employment base grow. The plan will identify Shoreline's key transit corridors, evaluate the demand for parking citywide and identify transit facilities and infrastructure needed to support the City's transit network and

service and improve transit level of service, speed and reliability. This information will help identify those infrastructure improvements and capital improvement projects that will be City funded. The TSIP is scheduled for completion in 2016.

DRAFT

PROJECTS SCHEDULED FOR SUBSTANTIAL COMPLETION IN 2015

PROJECT NAME	PROJECT DESCRIPTION	COST	FUNDING SOURCES
Aurora Corridor Improvement Project – N 192 nd Street to N 205 th Street	This project began at N 192nd St and extended to N 205th St. The project scope of work included adding Business Access and Transit (BAT) lanes, curbs, gutters, landscaping/street furnishings, sidewalks on both sides. The project added a landscaped center median safety zone with left turn and U-turn provisions, interconnects traffic signals including pedestrian crosswalks, improved transit stops with new shelters and new street lighting, placed overhead utility lines underground and improved the existing storm water drainage system with natural stormwater management treatments. Improvements at major intersections to enhance east-west traffic flow were also be included in the project. This was the final phase of a three mile long project.	\$45,000,000	Roads Capital, King County Metro, CMAQ, TIB, STP, Regional Mobility, FTA, DOE, HSIP
NE 195 th Street Separated Trail – 1 st Avenue NE to 5 th Avenue NE	This project included design and construction of a ten foot wide separated bicycle and pedestrian trail on the north side of NE 195 th St. This project was the final separated trail segment of the Northern Route of the Interurban/Burke-Gilman Connector. This project connects to the separated trail located to the west between Meridian Ave N and 1 st Ave NE and leads to the pedestrian and bicycle bridge crossing I-5.	\$705,000	CMAQ, Roads Capital
Interurban/ Burke-Gilman Connectors	<p>This project constructed improvements to strengthen the connections between Shoreline’s Interurban Trail and the Burke-Gilman Trail to the east in Lake Forest Park along two routes identified cooperatively by the Cities of Shoreline and Lake Forest Park. Projects include:</p> <ul style="list-style-type: none"> • Completion of the sidewalk gap on the north side of NE 150th St between 18th Ave NE and 20th Ave NE • Rechannelization of NE 150th St from 15th Ave NE to 25th Ave NE to provide for bicycle lanes • Rechannelization of NE 155th St from 5th Ave NE to 15th Ave NE to provide for bicycle lanes • Installation of markings (lanes and sharrows) and signage for bicycles, including signage through Hamlin Park • Construction of a short pathway at N 152nd Street and Ashworth Avenue N that provides access to the connectors along N 155th Street <p>The City worked with Lake Forest Park to ensure facilities and signage were coordinated.</p>	\$540,000	WSDOT Pedestrian & Bicycle Safety Program
Safety Enhancements on Aurora Avenue N	This project improved and upgraded safety and accessibility elements on Aurora Ave N. Enhancements included relocation of pedestrian push buttons closer to some curb ramps, installation of skid resistant hand hole/junction box covers and updating street signs to meet current MUTCD standards.	\$420,000	HSIP
Einstein Safe Routes to School (NW 195 th Street)	<p>This project improved pedestrian access to Einstein Middle School through the following projects:</p> <ul style="list-style-type: none"> • Construction of sidewalks where missing on the south side of NW 195th St from 3rd Ave NW to 8th Ave NW 	\$640,000	WSDOT Safe Routes to School Program

	<ul style="list-style-type: none"> • Construction of a sidewalk on the east side of 5th Ave NW between NW 195th St and NW 196th Pl • Installation/replacement of curb ramps at the intersections with 3rd Ave NW, 5th Ave NW and 8th Ave NW • Installation of four School Zone Flashing Signs on all legs of the NW 195th St to 3rd Ave NW intersection • Improved accessibility into the school campus <p>This project connected into the existing sidewalks, resulting in a continuous sidewalk along this stretch of roadway.</p>		
145 th Street Corridor Study	<p>This project performed a multi-modal corridor study of 145th Street (SR 523) from Bothell Way NE (SR 522) to 3rd Ave NW. Work was performed in conjunction with the City of Seattle, the Washington State Department of Transportation, King County, Metro Transit and Sound Transit. The study undertook an examination of transportation needs for the corridor including safety, traffic, transit and non-motorized needs resulting from anticipated changes in the area such as growth, location of light rail station(s) and regional tolling. The process included traffic analysis, development of a base map, evaluation of multiple potential alternatives and development of a preferred alternative, robust public involvement, creation of cost estimates the various sections of the corridor and identification of a strategy for funding and implementation.</p>	\$596,000	Federal – STP, Roads Capital
10 Avenue NW Bridge Rehabilitation	<p>Hidden Lake Bridge No. 167 C, located on 10th Ave NW at Innis Arden Way was built in 1931 and is showing signs of deterioration and was in need of rehabilitation. In 2014, the bridge condition was evaluated and it was determined that certain measures could be taken to extend the life of the bridge. This project designed and constructed the improvements recommended in the May 2014 Evaluation Report, thereby protecting use of the bridge for pedestrians and vehicles.</p>	\$548,000	Roads Capital