

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Public Hearing and Adoption of Resolution No. 329: 2013-2018 Transportation Improvement Plan
DEPARTMENT:	Public Works
PRESENTED BY:	Mark Relph, Public Works Director Kirk McKinley, Transportation Services Manager Alicia McIntire, Senior Transportation Planner
ACTION:	<input type="checkbox"/> Ordinance <input checked="" type="checkbox"/> Resolution <input type="checkbox"/> Motion <input type="checkbox"/> Discussion

PROBLEM/ISSUE STATEMENT:

In accordance with RCW 35.77.010, cities in Washington State are required to prepare and adopt a comprehensive six-year transportation plan. A city's six-year transportation improvement plan (TIP) must be consistent with its comprehensive plan transportation element. RCW 35.77.010 requires that the City hold at least one public hearing on the TIP and to file the adopted TIP with the Washington State Secretary of Transportation no later than July 31 annually.

The six-year TIP should include transportation projects, such as road and bridge work and new or enhanced bicycle or pedestrian facilities. In addition to local projects, the TIP should also identify projects and programs of regional significance for inclusion in the regional TIP. The TIP is used to secure federal funding for transportation projects as part of the Statewide Transportation Improvement Plan (STIP).

The annual update of the City's TIP is conducted in conjunction with a review of the Capital Improvement Plan (CIP). Through the CIP update process, the City develops a revenue forecast that provides an estimate of the funding available to accomplish transportation improvement needs. Generally, the desire and need for transportation improvements greatly exceeds the available revenues. Through development of the TIP, the City prioritizes these unfunded needs utilizing information such as the City's Transportation Master Plan (TMP), safety and accident history, growth trends, traffic studies and the transportation element of the City's Comprehensive Plan. Project descriptions and costs are identified for each project in the TIP.

The City Council will review the City's proposed six year CIP as part of the 2013 budget process later this fall.

RESOURCE/FINANCIAL IMPACT:

There is no financial impact associated with adoption of the TIP. The projects identified in the City's TIP are a combination of funded projects in the CIP (e.g. Aurora Avenue) as well as currently unfunded projects the City would like to undertake should funding become available. Listing projects in the TIP makes them grant eligible, as most grant

programs will not fund projects not included in a jurisdiction's TIP. The vast majority of projects included in the TIP are unfunded.

RECOMMENDATION

Staff recommends that Council hold the public hearing on the 2013-2018 TIP and adopt Resolution No. 329 approving the 2013-2018 TIP.

Approved By: City Manager **JU** City Attorney **IS**

INTRODUCTION

In accordance with state law, the City is required to prepare a six year Transportation Improvement Plan (TIP). The TIP identifies projects to meet local transportation needs, as well as projects of regional significance, such as the Aurora Corridor project. It also includes some on-going programs, including the curb ramp, gutter and sidewalk program and the traffic safety improvements program. The TIP identifies projects for all modes of transportation, including bicycles, pedestrians, vehicles and transit. Projects in the TIP can be funded and unfunded and the draft TIP includes the transportation projects identified in the preliminary 2013-2018 CIP. Including projects in the TIP improves the City's eligibility to secure grant funding. Many grants require a match and including a dedicated fund in the CIP to meet this requirement can improve the City's success in securing grant funding.

BACKGROUND

The TIP is prepared annually in conjunction with a review of the City's CIP. In the past, the City has utilized the preceding year's TIP as the foundation for development of a new TIP. The updated Transportation Master Plan (TMP), adopted in 2011, included prioritized lists for safety and operations, bicycle and pedestrian projects. Staff developed the proposed 2013-2018 TIP utilizing the high priority projects found on these lists as the foundation. In addition, staff also included several projects from last year's TIP which have been identified by Council as important projects for the City.

DISCUSSION

Attachment A is Resolution 329, which includes the proposed 2013-2018 TIP as an exhibit. The draft 2013-2018 TIP includes project descriptions as well as their estimated costs. The proposed 2013-2018 TIP includes projects that are identified as high priorities in the TMP, as well as some projects from previous TIPs. Very few projects and programs are funded in the next six years. Aurora Avenue N (N 192nd- N 205th Streets) and the 195th Street Trail are funded through their completion in 2014 and other programs, including the curb ramp, gutter and sidewalk program and traffic safety improvements are funded through the six years of the TIP. There are no identified or secure funding sources for other prioritized transportation projects, such as sidewalks, creation of a route development plan for 145th Street (should the City decide to annex it), and installation of bicycle facilities. Transit improvements, including transit signal priority or queue jumps, are generally integrated into larger capital projects, rather than as standalone projects.

As part of the June 18 presentation of the TIP, staff mapped the sidewalk projects included in the TIP to provide an idea of what a potential package of funded sidewalk projects could look like. This map can be viewed at <http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/Council/Staffreports/2012/Staffreport061812-9a.pdf>.

The total cost of all of the projects in the proposed 2013-2018 TIP is \$166,022,666. These include:

Pedestrian/Nonmotorized Projects (funded): \$2,335,000
System Preservation Projects (funded): \$6,141,715
Safety/Operations Projects (funded): \$27,327,371
Nonmotorized Improvements (unfunded): \$40,372,500
Traffic and Intersection Improvements (unfunded): \$56,290,520
Corridor Studies (unfunded): \$1,015,000
Growth Projects (unfunded): \$32,540,560

Follow Up from June 18 Council Meeting

Curb, gutter and sidewalk program

The City's curb, gutter and sidewalk replacement program is developed annually in the fall, in preparation for work the following year. Typically, staff focuses on making improvements in one area of the City per year and then move to another area the next year in order to make improvements throughout the City. For example, staff is completing work along 155th Street between Aurora Avenue N and 15th Avenue NE this year. Next year staff is planning for improvements in the western sector of the city and then rotate it back to the north or east sectors of the city in the following years.

Improvements include replacing curb ramps to comply with ADA requirements and staff plans these improvements along with the annual overlay program whenever possible. We also replace ramps in areas where we may not see overlay maintenance for a few years.

Local Improvement Districts (LID)

LIDs are special assessment districts in which improvements primarily benefit the property owners in the district. They are created under the sponsorship of a municipal government and must be approved by both the local government and benefitted property owners that represent 60% of the assessed valuation of benefitting properties. The sponsoring government "finances" the project, and property owners make annual payments to repay the government – usually over a ten year period. Many cities use these for sidewalk improvements. The increased value of the benefitted properties must be equal to or greater than the value of the project.

Although not required, LIDs may include a City match or contribution to the project. LIDs are typically initiated by citizens and often may not be on the City's high priority routes if the LID program has a single, uniform City contribution throughout the City. One approach to encourage LIDs on arterial streets would be to use a higher City match for higher volume streets as opposed to non-arterial streets. While projects in the TIP may eventually be funded through an LID, the City does not need to have the program established before adopting the TIP.

Unimproved Right-of-Way

During the June 18 presentation to Council, a program dedicated to completing hard surface paths or trails in unopened right-of-way was suggested for inclusion in the TIP. This item was discussed briefly by Council however, no specific direction was provided to staff to include this program as part of tonight's TIP presentation. It is staff's recommendation that should this program be added to the 2013-2018 TIP, it be

nonproject specific, instead referencing the locations shown in the TMP for potential projects. Staff recommends identifying \$25,000 annually for this program. However, as with most projects in the TIP this program would also be unfunded. Attachment B is a map from the TMP that identifies unimproved City right-of-way that could be developed as pedestrian facilities.

STAKEHOLDER OUTREACH

The 2013-2018 TIP was initially presented to Council on June 18, 2012. Prior to adoption tonight, Council will hold a public hearing to receive public comment on the 2013-2018 TIP.

COUNCIL GOAL(S) ADDRESSED

This project addresses Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure. By identifying and developing a plan for multi-modal transportation improvements, the City is working to preserve and enhance the infrastructure.

RESOURCE/FINANCIAL IMPACT

There is no financial impact associated with adoption of the TIP. The projects identified in the City's TIP are a combination of funded projects in the CIP (e.g. Aurora Avenue) as well as currently unfunded projects the City would like to undertake should funding become available. Listing projects in the TIP makes them grant eligible, as most grant programs will not fund projects not included in a jurisdiction's TIP. The vast majority of projects included in the TIP are unfunded.

RECOMMENDATION

Staff recommends that Council hold the public hearing on the 2013-2018 TIP and adopt Resolution No. 329 approving the 2013-2018 TIP.

ATTACHMENTS

Attachment A: Resolution 329: 2013-2018 TIP Adoption

Attachment B: Transportation Master Plan Figure Identifying Unimproved City Right-of-Way

Attachment A

RESOLUTION NO. 329

A RESOLUTION OF THE CITY COUNCIL THE CITY OF SHORELINE, WASHINGTON, ADOPTING A SIX-YEAR (2013-2018) TRANSPORTATION IMPROVEMENT PLAN AND DIRECTING THE SAME TO BE FILED WITH THE STATE SECRETARY OF TRANSPORTATION AND TRANSPORTATION IMPROVEMENT BOARD.

WHEREAS, the City Council of the City of Shoreline has previously adopted a Comprehensive Plan including a six-year Transportation Improvement Plan required by RCW 35.77.010 as part of the Transportation Element of the Plan, and

WHEREAS, the City Council of the City of Shoreline has reviewed the work accomplished under the said Plan, determined current and future City Street needs, and based upon these findings a Six-Year Transportation Improvement Plan for the ensuing six (6) calendar years has been prepared as part of the Annual Capital Improvement Plan update, and

WHEREAS, a public hearing was held on the Six-Year Transportation Improvement Plan on July 9, 2012.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SHORELINE, WASHINGTON, HEREBY RESOLVES AS FOLLOWS:

Section 1. Plan Adopted. The Six-Year Transportation Improvement Plan for the City of Shoreline for the ensuing six (6) calendar years (2013-2018 inclusive) attached hereto as Exhibit A and incorporated herein by this reference, which Plan sets forth the project location, type of improvement and estimated cost thereof, is hereby adopted.

Section 2. Filing of Plan. Pursuant to Chapter 35.77.010 RCW, the City Clerk is hereby authorized and directed to file a copy of this resolution forthwith, together with the Exhibit attached hereto, with the Secretary of Transportation and a copy with the Transportation Improvement Board for the State of Washington.

ADOPTED BY THE CITY COUNCIL ON JULY 9, 2012.

Keith A. McGlashan, Mayor

ATTEST:

Scott Passey
City Clerk

Exhibit A

Proposed 2013-2018 Transportation Improvement Plan

Pedestrian/Non Motorized Improvements

FUNDED

1. **Curb Ramp, Gutter and Sidewalk Program:** 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
 - Installing wheelchair detection loops and audible pedestrian signals
 - Repairing and replacing existing cement concrete gutters and sidewalks damaged by tree roots, cracking or settlement
 - Constructing new sidewalk panel sections to fill existing gaps in the pedestrian walkway
2. **Traffic Safety Improvements:** This program addresses priority traffic and pedestrian safety concerns on both arterial and local streets. The primary purpose of this program will be to investigate traffic and pedestrian safety concerns, evaluate possible alternatives, and implement spot improvement projects to improve safety and enhance the livability of neighborhoods. The program works closely with neighborhoods to address cut-through traffic and neighborhood safety issues, and implement priority projects as identified in the Neighborhood Traffic Action Plans. This program seeks grant-funding sources for modeling new pedestrian safety concepts and traffic calming devices.

UNFUNDED

3. **Interurban/Burke-Gilman Connector – Northern Route:** Construct improvements to strengthen the connection between Shoreline's Interurban Trail and the Burke-Gilman Trail to the east. The route runs along N/NE 195th St from the Interurban Trail to 10th Ave NE, 10th Ave NE to Perkins Way NE and Perkins Way NE to the City limits. Projects include walkways, signage and improvements to the NE 195th Street bridge over I-5. The City will work with Lake Forest Park to ensure facilities are coordinated.
4. **NE 195th St Trail – 1st Ave NE to 5th Ave NE:** This project includes design and construction of a twelve foot wide separated bicycle and pedestrian trail in the undeveloped NE 195th Street right-of-way. The City will need to coordinate with Seattle City Light as relocation of the utility poles is necessary. This project is the final separated segment of the Northern Route of the Interurban/Burke-Gilman Connector.
5. **Bicycle System Completion:** This project will implement a comprehensive bicycle signing and channelization program throughout Shoreline. Bicycle facilities will include dedicated lanes, sharrows and freestanding signage, as well as wayfinding signs directing riders to local and regional destinations. Priority projects that are a part of this completion include:

ST	FROM	TO	PROJECT DESCRIPTION
NW/N 145 th St	3 rd Ave NW	Aurora Ave N	Install signage to indicate a bicycle route. Signage can include freestanding signage, sharrows or other signing mechanisms. Signage methods will be clarified as part of the 145 th Street corridor study.
Ashworth Ave N	N 185 th St	N 200 th St	Install signage to indicate a bicycle route. Signage can include freestanding signage, sharrows or other signing mechanisms
Hamlin Park	15 th Ave NE	Kellogg Middle School	Install signage to indicate a bicycle route. Signage can include freestanding signage, sharrows or other signing mechanisms
N 200 th St	Fremont Ave N	Ashworth Ave N	Construct bicycle lanes in the uphill direction and install signage to indicate a bicycle route in the downhill direction. Signage can include freestanding signage, sharrows or other signing mechanisms
3rd Ave NW	NW Richmond Beach Rd	NW 205th St	Install sharrows
Fremont Ave N	N 165 th St	N 205 th St	Construct bicycle lanes
NE 150 th St	15 th Ave NE	25 th Ave NE	Construct bicycle lanes
20 th Ave NE	NE 145 th St	NE 150 th St	Construct bicycle lanes
NE 160 th St	25 th Ave NE	31 st Ave NE	Install signage to indicate a bicycle route. Signage can include freestanding signage, sharrows or other signing mechanisms

6. **Sidewalk Projects:** Shoreline citizens continue to emphasize the importance of sidewalks for safety, enhanced mobility, convenience and recreation. 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.

One sidewalk funding program identified in the TMP is the Priority Gap program: This program is dedicated to completing missing gaps in sidewalks. Gaps are generally less than five blocks long. By filling in these missing segments, the City can achieve a larger benefit by connecting existing segments and completing continuous walkways along a street or corridor. The primary focus will be to complete sidewalks on one side of the street.

The highest priority projects are listed below. Projects that are eligible for inclusion in the City's Priority Gap Program are noted.

	STREET	FROM	TO	PROJECT DESCRIPTION	GAP PROGRAM
1	20 th Ave NW	Saltwater Park entrance	NW 195 th St	Construct a separated path on the east side of the street	X
2	NW 195 th St	8 th Ave NW	3 rd Ave NW	Construct sidewalks to fill in gaps on the south side of the street	X
3	1 st Ave NE	NE 192 nd St	NE 195 th St	Construct a sidewalk on the west side of the street	X
4	NE 165 th St	5 th Ave NE	6 th Ave NE	Construct a sidewalk on the north side of the street to fill in the gap	X
5	NE 150 th St	Approx. 18 th Ave NE	20 th Ave NE	Construct a sidewalk on the north side of the street to fill in the gap	X
6	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	X
7	19 th Ave NE	Ballinger Way NE	NE 205 th St	Construct sidewalks on the west side of the street, where needed, to complete the sidewalk along this roadway segment	
8	NW 195 th St	3 rd Ave NW	Aurora Ave N	Construct sidewalks on the south side of the street	X
9	25 th Ave NE	NE 165 th St	NE 168 th St	Construct sidewalks on the east side of the street.	
10	Westminster Way N	N 145 th St	N 153 rd St	Construct sidewalks on both sides of the street where needed, to complete sidewalks on both sides of the streets	X
11	Fremont Ave N	N 175 th St	N 205 th St	Construct sidewalks on the east side of the street from N 175 th St to N 185 th St and on the west side of the street from N 185 th St to N 205 th St	
12	NW 175 th St	6 th Ave NW	St. Luke's Place N	Construct sidewalks on the north side of the street	
13	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	X
14	25 th Ave NE	NE 145 th St	NE 150 th St	Construct sidewalks on the east side of the street	X
15	N 192 nd St	Interurban Trail	Ashworth Ave N	Construct sidewalks on the south side of the street from the Interurban Trail to Ashworth Avenue N	
16	N 170 th St	Whitman Ave N	Aurora Ave N	Construct sidewalks on the north side of the street	X
17	NE 165 th St	10 th Ave NE	15 th Ave NE	Construct sidewalks on the south side of the street	X
18	15 th Ave NE	NE 150 th St	NE 160 th St	Construct sidewalks on the east side of the street	
19	NE 150 th St	15 th Ave NE	25 th Ave NE	Construct sidewalks on south side of the street	
20	Carlyle Hall Rd N / N 165 th St	Dayton Ave N	Aurora Ave N	Construct sidewalks on one side of the street	
21	3 rd Ave NW/ Carlyle Hall Rd NW	N 175 th St	Dayton Ave N	Construct sidewalks on the west side of the street, where needed	
22	NE 180 th St	10 th Ave NE	15 th Ave NE	Construct sidewalks on the north and south sides of the street, where needed, to complete sidewalks on both sides of the street	
23	NE 168 th St	15 th Ave NE	25 th Ave NE	Construct sidewalks on the south sides of the street	
24	Firlands Way N	N 185 th St	N 195 th St	Construct sidewalks on one side of the street	
25	Ballinger Way NE	19 th Ave NE	25 th Ave NE	Construct sidewalks on the southwest side of the street where needed	
26	15 th Ave NW	NW 195 th St	NW 205 th St	Construct sidewalks on one side of the street	

27	5 th Ave NE	NE 175 th St	NE 185 th St	Construct sidewalks on the west and east sides of the street	
28	1 st Ave NE	NE 145 th St	NE 155 th St	Construct sidewalks on east and west sides of the street, where needed, to complete sidewalks on both sides of the street	X
29	N Innis Arden Way	10 th Ave NW	Greenwood Ave N	Construct sidewalks on the north side of the street	
30	Linden Ave N	N 175 th St	N 185 th St	Construct sidewalks on the east side of the street from N 175th St to N 177th St, on the west and east sides of the street from N 177th St to N 182nd St and on the west side of the street from N 182nd Street to N 185th Street	
31	NE 175 th St / 22 nd Ave NE / NE 171 st St	15 th Ave NE / NE 171 st St / 22 nd Ave NE	22 nd Ave NE / NE 175 th St / 25 th Ave NE	Construct sidewalks on one side of the streets	
32	N 192 nd St	Across Aurora Ave N		Construct pedestrian and bicycle bridge across Aurora Ave N	

Safety / Operations Projects

FUNDED

1. **Aurora Corridor Improvement Project:** This project begins at N 192nd St and extends to N 205th St. The project scope of work includes adding Business Access and Transit (BAT) lanes, curbs, gutters, landscaping/street furnishings, sidewalks on both sides. The project adds a landscaped center median safety zone with left turn and U-turn provisions, interconnects traffic signals which also include pedestrian crosswalks, improves transit stops with new shelters and new street lighting, places overhead utility lines underground and improves the existing storm water drainage system. Improvements at major intersections to enhance east-west traffic flow will also be included in the project. This is the final phase of this three mile long project.

Traffic and Intersection Improvements

UNFUNDED

1. **Citywide Signal Interconnect, ITS and Cameras:** This project will fully integrate and coordinate all city signals, with Information Technology System (ITS) improvements where appropriate. Traffic monitoring cameras will also be included. A traffic management center (TMC) will be developed in City Hall to help manage these systems.
2. **10th Ave NW Hidden Lake bridge replacement:** Rehabilitate the existing bridge to ensure safe vehicle crossing.
3. **15th Ave NW at NW Richmond Beach Rd:** This project will reconfigure the roadway alignment at the existing off-set intersection to improve operations and safety. The design has not been completed, and one of the first steps will be to identify alternatives, including the potential for a roundabout(s).
4. **N 160th St/Greenwood Ave N/NW Innis Arden Way:** This project will improve the operations and safety of this five-way intersection at N 160th St, Greenwood Ave N and Innis Arden Way. Design will be coordinated with Shoreline Community College (SCC) Master Planning and with Metro Transit. Illumination and landscaping will be provided through the realignment area. Bus zone and layover improvements will be included. This project also includes the construction of new sidewalk on the north side of N 160th St, from Dayton Ave N to Greenwood Ave N. Prior to construction, a study will be performed to identify a preferred solution to the current traffic operating problems at this intersection. This project may be included with the roadway improvements on N 160th Street from Aurora Ave N to Greenwood Ave N.

5. **NW Richmond Beach Rd at 3rd Ave NW:** This project will design and construct left-turn lanes on Richmond Beach Road at the intersection with 3rd Ave NW and install signal modifications. The improvements will also include storm drainage, pavement widening, curb-and-gutter and sidewalks, retaining walls and street lighting. NW Richmond Beach Rd is a high-volume arterial street at this location and this project will improve safety and traffic flow. This intersection has a high accident rate.
6. **Midvale Ave N – N 175th St to N 183rd St:** 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.
7. **N 165th St and Carlyle Hall Rd NW Sidewalk and Intersection Safety:** 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.
8. **Major Preservation Projects:** Perform significant maintenance work on the following roadways:
 - a. Meridian Ave N: N 145th St to N 205th St; roadway rechannelized to include a center turn lane and bicycle lanes in both directions
 - b. Westminster Way N: N 145th St to N 155th St
 - c. N/NE 155th St: Aurora Ave N to 15th Ave NE; roadway rechannelized from 5th Ave NE to 15th Ave NE to include a center turn lane and bicycle lanes in both directions
 - d. N/NE 185th St: Midvale Ave N to 10th Ave NE; roadway rechannelized to include a center turn lane and bicycle lanes in both directions. 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 175th St: Stone Ave N to 25th Ave NE
 - f. NW/NW Richmond Beach Rd: Richmond Beach Dr NW to Fremont Ave N; roadway may be rechannelized to include a center turn lane and bicycle lanes in both directions
 - g. Fremont Ave N: N 175th St to N 185th St; roadway rechannelized to include a center turn lane and bicycle lanes in both directions

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.

9. **15th Ave NE – NE 172nd St to NE 195th St:** This project would construct sidewalks on the west side of the road from NE 180th St to NE 195th St. A corridor study will be performed to identify a preferred transportation solution for this roadway segment. There are significant topographic challenges related to constructing a sidewalk on this arterial. A potential lane reduction for this segment of the road may include the sidewalks, as well as bicycle lanes on both sides of the street. The cross-section of the road from NE 172nd to NE 180th Street would be reduced from four lanes to three and bicycle lanes would be installed.
10. **N 175th St – Stone Ave N to 15th Ave NE:** This project will design and construct improvements on N 175th St between Stone Ave N and 15th Ave NE, which will tie in with the improvements on N 175th St 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, intersection improvements, 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.
11. **N 160th St – Greenwood Ave N to Aurora Ave N:** Rechannelize the existing four-lane cross section to a boulevard-style three-lane cross section (one lane in each direction with a center left turn lane and median

landscaping) with bicycle lanes on both sides of the street. This project may be included with the intersection improvement at N 160th Street and Greenwood Ave N.

12. **NW Richmond Beach Rd at 8th Ave NW:** This project will improve safety and capacity at the intersection with the installation of dedicated turn lanes, sidewalks and curb ramps. A roundabout may be explored as a potential solution.
13. **Firlands Way N – Linden Ave N to Aurora Avenue N:** 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.
14. **Aurora Ave N at N 145th St Dual Left Turn Lane:** Construction of a 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 145th St dual left turn lane will require acquisition of additional rights-of-way along the western edge of Aurora (the Aurora project constructed “interim” sidewalks in this location). Schedule of this project is dependent on redevelopment of the northwest corner of Aurora and N 145th St. Right-of-way and/or frontage improvements may be provided by the developer. The additional width required for this turn lane is currently under consideration by the City of Seattle in their Aurora project planning. The new signal at N 149th St will need to meet signal warrants and receive WSDOT approval. This signal project should be combined with the dual left turn at N 145th St in order to address queue length demands.

Corridor Studies

UNFUNDED

1. **N/NE 145th St (SR 523) Corridor Study:** Perform a multi-modal corridor study of 145th St (SR 523) from Bothell Way NE (SR 522) to 3rd Ave NW. Work in conjunction 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. 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 southern half (eastbound lanes) of the street is within the City of Seattle. Seattle classifies 145th St as Collector Arterial from 3rd Ave NW to Greenwood Ave N and a Primary Arterial from Greenwood Ave N to Bothell Way NE.
2. **Improvements to Richmond Beach Drive NW and NW Richmond Beach Road – NW 199th Street to Aurora Ave N:** Perform a corridor study in response to development proposals at Point Wells located in unincorporated Snohomish County and construct mitigation measures. Improvements may include intersection improvements, bicycle lanes, sidewalks, surface water management, landscaping and lighting.

System Preservation Projects

FUNDED

1. **Annual Road Surface Maintenance Program:** 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). Currently, the asphalt overlays are done in conjunction with King County's overlay projects. King County provides engineering and inspection for the project. The City's Public Works Operations Division will provide project administration, construction oversight, quality review, and final acceptance. Additionally, other accepted BST treatments are provided through private contracting.
2. **Traffic Signal Rehabilitation:** There are currently 46 traffic signals in operation in Shoreline. The typical life span of the electronic hardware is 20 years. As technology improves, their older electronics become obsolete. By the end of the 20-year life span, repair and maintenance becomes more expensive as parts

may no longer be available. Older traffic signal controllers are very simple and limited in functionality. New controllers can accept a wide range of timing schemes and hold special timing patterns for dealing with emergency traffic rerouting, fire truck pre-emption, and transit signal priority. They can be connected to operate in a coordinated network, and connected to a master controller, where signal timing changes can be made from the office, increasing efficiency. There are rechargeable battery packs that can be installed in signal controller cabinets that will keep a traffic signal operating in the event of a loss of power. For extended outages, a generator can be added to keep the signal running. The ability to keep traffic signals operating and vehicles moving is a key part of our emergency back-up support in conjunction with the City's Emergency Management Plan.

Growth Projects

UNFUNDED

1. **Meridian Ave N – N 145th St to N 205th St:** Rechannelize the roadway to add a center two-way left-turn lane and bicycle lanes, remove on-street parking and install traffic calming measures, such as radar speed display signs.
2. **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 eastbound right-turn pocket, which involves widening eastbound approach to include a right-turn pocket. This signal will be coordinated with the signal at Meridian Ave N and 1st Ave NE.
3. **N 175th St – Stone Ave N to Meridian Ave N:** Construct improvements including 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. The profile of the roadway between Ashworth Ave N and Stone Ave N will be lowered to meet standard sight distance requirements.
4. **N 175th St and Meridian Ave N:** Construct an addition 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.
5. **N/NE 175th St – Meridian Ave N and the I-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.
6. **NE 175th St and 15th 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.
7. **185th St – 1st Ave NE to 7th Ave NE:** Rechannelize the roadway to add a center two-way left-turn lane and bicycle lanes and remove on-street parking.

Project	2013 Estimate	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2013-2018 Total
Expenditures							
REPAIR AND REPLACEMENT							
Pedestrian / Non-Motorized Projects							
Curb Ramp, Gutter & Sidewalk Program	\$ 140,000	\$ 113,500	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 853,500
Traffic Safety Improvements	\$ 251,500	\$ 187,500	\$ 187,500	\$ 285,000	\$ 285,000	\$ 285,000	\$ 1,481,500
System Preservation Projects							
Annual Road Surface Maintenance Program	\$ 700,000	\$ 800,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 5,500,000
Traffic Signal Rehabilitation	\$ 120,631	\$ 121,084	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 641,715
Safety / Operations Projects							
Aurora Avenue North 192nd - 205th	\$ 13,484,740	\$ 13,495,132	\$ 347,499				\$ 27,327,371
Unfunded Projects							
Non Motorized Improvements							
NE 195th Street Trail - 1st Ave NE to 5th Ave NE	\$ 25,000	\$ 380,000	\$ 25,000				\$ 430,000
Bicycle System Completion			\$ 1,787,500				\$ 1,787,500
Interurban/Burke-Gilman Connector – Northern Route					\$ 2,570,000		\$ 2,570,000
20th Ave NW – Saltwater Park entrance to NW 195th St	\$ 100,000	\$ 200,000	\$ 200,000				\$ 500,000
NW 195th St - 8th Ave NW to 3rd Ave NW	\$ 40,000	\$ 700,000	\$ 20,000				\$ 760,000
1st Ave NE – NE 192nd St to NE 195th St	\$ 250,000						\$ 250,000
NE 165th St - 5th Ave NE to 6th Ave NE		\$ 50,000					\$ 50,000
NE 150th St – Approx 18th Ave NE to 20th Ave NE		\$ 50,000	\$ 300,000				\$ 350,000
Ashworth Ave N – N 195th St to N 200th St		\$ 200,000	\$ 400,000				\$ 600,000
19th Ave NE – Ballinger Way NE to NE 205th St			\$ 900,000				\$ 900,000
NW 195th St – 3rd Ave NW to Aurora Ave N			\$ 100,000	\$ 500,000	\$ 700,000		\$ 1,300,000
25th Ave NE – NE 165th St to NE 168th St				\$ 450,000			\$ 450,000
Westminster Way N – N 145th St to N 155th St				\$ 600,000	\$ 1,500,000		\$ 2,100,000
Fremont Ave N – N 175th St to N 205th St					\$ 150,000	\$ 1,850,000	\$ 2,000,000
NW 175th St - 6th Ave NW to St. Luke's Place N						\$ 300,000	\$ 300,000
3rd Ave NW - NW 189th St to NW 195th St						\$ 400,000	\$ 400,000
25th Ave NE – NE 145th St to NE 150th St						\$ 500,000	\$ 500,000
N 192nd St - Interurban Trail to Ashworth Ave N						\$ 500,000	\$ 500,000
N 170th St - Whitman Ave N to Aurora Ave N						\$ 525,000	\$ 525,000
NE 165th St - 10th Ave NE to 15th Ave NE						\$ 800,000	\$ 800,000
15th Ave NE – NE 150th to NE 160th Streets Sidewalk						\$ 900,000	\$ 900,000
NE 150th St - 15th Ave NE 25th Ave NE						\$ 900,000	\$ 900,000
Carlyle Hall Rd N/N 165th St - Dayton Ave N to Aurora Ave N						\$ 1,000,000	\$ 1,000,000
3rd Ave NW/Carlyle Hall Rd NW - N 175th St to Dayton Ave N						\$ 1,100,000	\$ 1,100,000
NE 180th St - 10th Ave NE to 15th Ave NE						\$ 1,100,000	\$ 1,100,000
NE 168th St - 15th Ave NE to 25th Ave NE						\$ 1,100,000	\$ 1,100,000
Firlands Way N – N 185th St to N 195th St						\$ 1,200,000	\$ 1,200,000
Ballinger Way NE –19th Ave NE to 25th Ave NE						\$ 1,200,000	\$ 1,200,000
15th Ave NW - NW 195th St to NE 205th St						\$ 1,300,000	\$ 1,300,000
5th Ave NE – NE 175th St to NE 185th St						\$ 1,400,000	\$ 1,400,000
1st Ave NE – NE 145th St to NE 155th St						\$ 1,400,000	\$ 1,400,000
N Innis Arden Way - 10th Ave NW to Greenwood Ave N						\$ 2,000,000	\$ 2,000,000
Linden Ave N – N 175th St to N 185th St						\$ 2,000,000	\$ 2,000,000
NE 175th St/22nd Ave NE/NE 171st St - 15th Ave NE/NE 171st St/22nd Ave NE to 22nd Ave NE/NE 175th St/25th Ave NE						\$ 3,000,000	\$ 3,000,000
N 192nd Street pedestrian and bicycle bridge at Aurora Ave N						\$ 3,700,000	\$ 3,700,000
Traffic and Intersection Improvements							
Citywide Signal Interconnect, ITS and Cameras	\$ 350,000						\$ 350,000
10th Ave NW Hidden Lake bridge replacement		\$ 50,000	\$ 157,500	\$ 3,675,000			\$ 3,882,500
15th Ave NW at NW Richmond Beach Rd			\$ 289,000	\$ 912,000			\$ 1,201,000
N 160th St/Greenwood Ave N/NW Innis Arden Way			\$ 1,953,000				\$ 1,953,000
NW Richmond Beach Rd at 3rd Ave NW			\$ 2,068,500				\$ 2,068,500
Midvale Ave N – N 175th St to N 183rd St Reconstruction			\$ 2,625,000				\$ 2,625,000
N 165th St and Carlyle Hall Rd NW Sidewalk and Intersection Safety				\$ 1,050,000			\$ 1,050,000
Major Preservation Projects				\$ 4,700,000			\$ 4,700,000
15th Ave NE – NE 172nd St to NE 195th St					\$ 262,500	\$ 1,333,500	\$ 1,596,000
N 175th St – Stone Ave N to 15th Ave NE						\$ 27,940,800	\$ 27,940,800
N 160th St – Greenwood Ave N to Aurora Ave N						\$ 563,000	\$ 563,000
NW Richmond Beach Rd at 8th Ave NW						\$ 2,329,440	\$ 2,329,440
Firlands Way N - Linden Ave N to Aurora Ave N						\$ 1,331,280	\$ 1,331,280
145th Dual Left Turn at Aurora						\$ 4,700,000	\$ 4,700,000
Corridor Studies							
N/NE 145th St (SR 523) Corridor Study	\$ 700,000						\$ 700,000
Improvements to Richmond Beach Drive NW and NW Richmond Beach Road – NW 205th Street to Aurora Ave N		\$ 210,000	\$ 105,000				\$ 315,000
Growth Projects							
Meridian Ave N – N 145th St to N 205th St						\$ 7,867,679	\$ 7,867,679
N 185th St and Meridian Ave N						\$ 4,510,924	\$ 4,510,924
N 175th St – Stone Ave N to Meridian Ave N						\$ 11,791,522	\$ 11,791,522
N 175th St and Meridian Ave N						\$ 4,531,148	\$ 4,531,148
N/NE 175th St – Meridian Ave N and the I-5 on-/off-ramps						\$ 3,579,206	\$ 3,579,206
185th St – 1st Ave NE to 7th Ave NE						\$ 260,081	\$ 260,081
Total Expenditures by Year	\$ 16,161,871	\$ 16,557,216	\$ 12,715,499	\$ 13,422,000	\$ 4,147,500	\$ 103,018,580	\$ 166,022,666

