CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	2014-2019 Transportation Improvement Plan (TIP) Public Hearing and Discussion							
DEPARTMENT:	Public Works							
	Mark Relph, Public Works Director							
	Kirk McKinley, Transportation Services Manager							
	Alicia McIntire, Senior Transportation Planner							
ACTION:	OrdinanceResolutionMotionX_Public							
	Hearing X_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 submit the adopted TIP to the Washington State Secretary of Transportation . The Department of Transportation has historically accepted submittal of TIPs through the month of July.

The six-year TIP should include transportation projects, such as road and bridge work as well as 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 City's TIP is used to secure federal funding for transportation projects as part of the Statewide Transportation Improvement Plan (STIP).

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, costs, funding options and the project status are identified for each project in the TIP.

Until recently, the annual update of the City's TIP was 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. With the change in schedule for development of the CIP to coincide with the annual budget schedule, the TIP is now being prepared and presented to Council in advance of the CIP. The City Council will review the City's proposed six-year CIP as part of the 2014 budget process later this fall. Next year, staff anticipates bringing the TIP to Council for review in March or April.

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, including projects that are partially funded or underfunded, 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 or partially funded. All of the funded programs are identified as underfunded, as additional work could be completed through these programs with supplemental funding.

RECOMMENDATION

Council should hold the public hearing to receive comments on the proposed 2014-2019 TIP. No other formal Council action is required this evening on the TIP. Staff is requesting direction from Council regarding any revisions to the 2014-2019 TIP, including items that should be added or removed. Council is scheduled to adopt the 2014-2019 TIP on July 22, 2013.

Approved By: City Manager **DT** 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 2014-2019 CIP. Including projects in the TIP improves the city's eligibility to secure grant funding. As discussed with the CIP policy issues at the June 17 Council meeting, 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.

DISCUSSION

Until recently, the annual update of the City's TIP was 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. With the change in schedule for development of the CIP to coincide with the annual budget schedule, the TIP is now being prepared and presented to Council in advance of the CIP. The City Council will review the City's proposed six-year CIP as part of the 2014 budget process later this fall.

In the past, the City has utilized the preceding year's TIP as the foundation for development of a new TIP. Last year's TIP incorporated the high priority projects identified in the 2011 Transportation Master Plan (TMP) as part of the prioritized lists for safety and operations, bicycle and pedestrian projects. Staff also included several projects from the previous year's TIP which were identified by Council as important projects for the City.

This year's TIP (Attachment A) has been prepared in a new format with the intent to provide further detail about the transportation needs of the City. Projects in this year's TIP are sorted into four categories: Funded Programs, Funded Projects, Unfunded Programs and Unfunded Projects. Projects and programs that are partially funded or underfunded are included in the funded categories. Generally, funded projects are those included in the City's 2013-2018 Capital Improvement Plan. All projects identified for 2019 are unfunded, as discussion of capital needs in 2019 have not been discussed by Council at this time. Projects shown in 2014-2017 are those that staff believe have favorable grant possibilities.

A project sheet for each project 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 (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.

Each project listed in the TIP includes an estimated project cost, the amount of funding secured or unsecured and the funding source for the six-year period covered by the TIP. 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. While the City has not adopted an impact fee program at this time, Council has directed staff to develop such a program so this potential funding source is included. 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. The more specific costs for earlier projects help ensure that once the City receives a grant, the project is adequately funded.

A map showing the location of each project is also included as part of the TIP, as well as a summary matrix showing total costs for all projects.

The draft 2014-2019 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 Street – N 205th Street) is the largest funded project in the TIP. Several projects that are mostly or entirely funded by grants are included (NE 195th Street Trail, Interurban-Burke Gilman Connectors, NW 195th Street sidewalk and safety enhancements on Aurora Avenue N). Annual programs, such as the Curb Ramp, Gutter and Sidewalk Program, Traffic Safety Improvements, Annual Road Surface Maintenance and Traffic Signal Rehabilitation, are all included in the draft TIP. These programs are identified as partially funded, as they are programs that have been funded through last year's CIP. However, these programs could use additional funding to meet the present need. The studies for both the 145th

Street Corridor Improvements project and the 10th Avenue NW Bridge Rehabilitation/Replacement are funded; however, the funding for design, environmental review, right-of-way acquisition and/or construction has not been secured. For projects that require a study in order to clearly define their needs, a preliminary range of costs has been developed at this time.

Unfunded programs and projects comprise the majority of the TIP. The Transportation Project Grant Match Fund, which was discussed by Council on June 17, is a new, unfunded program. Staff identified this program as a mechanism to earmark funding that can be used as part of future grant applications. Since many grant agencies require a match, this program can be utilized to provide that match without having the funds allocated to specific projects. Once a grant is secured, the match funding can be allocated to the specific project. It is anticipated that unused funds from this program would roll over annually to a maximum level established by Council and that the fund would be replenished periodically.

Fourteen unfunded projects are also included in the plan. Many of these are large, corridor-wide projects comprised of smaller, individual components which, when combined, would result in a completed roadway. The individual components have been identified in a manner to show how a project might be phased over time. Some of the individual components are projects that were identified as needed to accommodate growth in the City's Transportation Master Plan. These components would be funded, in part, by impact fees once the City adopts a program to collect them.

For the NW Richmond Beach Road corridor, several projects have been identified which are likely to be constructed by the developer at Point Wells. These projects were developed in response to the Draft Supplemental Environmental Impact Statement and Final Environmental Impact Statement for the Point Wells development. These projects are listed contingently and are only to be constructed upon execution of a Municipal Agreement approving these projects as appropriate mitigation. 5 As part of the Transportation Corridor Study, additional projects may be identified as mitigation. However, improvements to the intersection at 3rd Ave NW and NW Richmond Beach Road have been called out separately, as this intersection has identified safety issues that will likely need to be addressed by the City in advance of the Point Wells developer funding. Other unfunded projects, such as New Sidewalk Projects and Major Preservation Projects, include several individual projects that could be designed and constructed individually.

Two sidewalk projects were discussed at the June 17 Council meeting as part of the CIP update. A sidewalk on the west side of 25th Avenue NE from NE 195th Street to NE 205th Street is included in the TIP. This is a medium priority project, however, a portion of this project will be constructed in conjunction with the City's renovation of the Brugger's Bog property. The costs for this project can be included as part of the overall Brugger's Bog project, rather than as separate CIP projects and the draft TIP is only identifying the need for these improvements. Sidewalks on the east side of the street would likely be constructed as part of the mitigation for development of the Aldercrest property.

Sidewalks on 8th Avenue NW were also identified as a potential project at the June 17 meeting. Construction of sidewalks on 8th Avenue NW in the vicinity of Einstein Middle School is divided into smaller projects, all of which are medium priorities in the TMP. Two other high priority sidewalk projects in the vicinity of Einstein Middle School (3rd Avenue NW from NW 189th St to NW 195th St and NW 195th St from 3rd Ave NW to Aurora Ave N) are included in the draft TIP.

The total cost of all of the projects in the draft 2014-2019 TIP is \$292,940,000.

STAKEHOLDER OUTREACH

This is the first presentation of the 2014-2019 TIP to Council. Tonight's presentation will be accompanied by a public hearing.

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 and Council Goal 5: "Promote and enhance the City's safe community and neighborhood initiatives and programs by funding the Traffic Safety Improvements program."

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, including projects that are partially funded or underfunded, 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 or partially funded. All of the funded programs are identified as underfunded, as additional work could be completed through these programs with supplemental funding.

RECOMMENDATION

Council should hold the public hearing to receive comments on the proposed 2014-2019 TIP. No other formal Council action is required this evening on the TIP. Staff is requesting direction from Council regarding any revisions to the 2014-2019 TIP, including items that should be added or removed. Council is scheduled to adopt the 2014-2019 TIP on July 22, 2013.

ATTACHMENTS

Attachment A: Draft 2014-2019 Transportation Improvement Plan

City of Shoreline 2014-2019 Transportation Improvement Program

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

The City of Shoreline Six-Year Transportation Improvement Program (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.

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 (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 four categories: Funded Programs, Funded Projects, Unfunded Programs and 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 2013-2018 Capital Improvement Plan. All projects and programs identified for 2019 are unfunded. All of the funded programs are identified as underfunded, as additional work could be completed through these programs with supplemental funding.

3. Project Costs and Funding

Each project listed in the TIP includes an estimated project cost, the amount of funding secured or unsecured and the funding source for the six year period covered by the TIP. 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. While the City has not adopted an impact fee program at this time, Council has directed staff to develop such a program so this potential funding source is included. 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.

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. 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), 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 Transportation Master 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. 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.

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 is 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 (RTIP) from around the State are then combined to form the State TIP (STIP), which is approved by the Governor and then submitted to the Federal Highway Administration and Federal Transit Authority for their review and approval.

Contact Information

For additional information, contact Kirk McKinley, Transportation Planning Manager, 206.801.2481, <u>kmckinley@shorelinewa.gov</u> or Alicia McIntire, Senior Transportation Planner, 206.801.2483, <u>amcintire@shorelinewa.gov</u>.

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 Rehabilitation (underfunded)

FUNDED PROJECTS (FULLY OR PARTIALLY)

- 5. NE 195^{th} Street Trail 1^{st} Avenue NE to 5^{th} Avenue NE
- 6. Interurban/Burke-Gilman Connectors
- 7. NW 195th Street Safe Routes to School project
- 8. Aurora Corridor Improvement Project N 192nd Street to N 205th Street
- 9. Safety Enhancements on Aurora Avenue N
- 10.145th Street (SR 523) Corridor Improvements (partially)
- 11. 10th Avenue NW Hidden Lake Bridge Rehabilitation/Replacement (partially)

UNFUNDED PROGRAMS

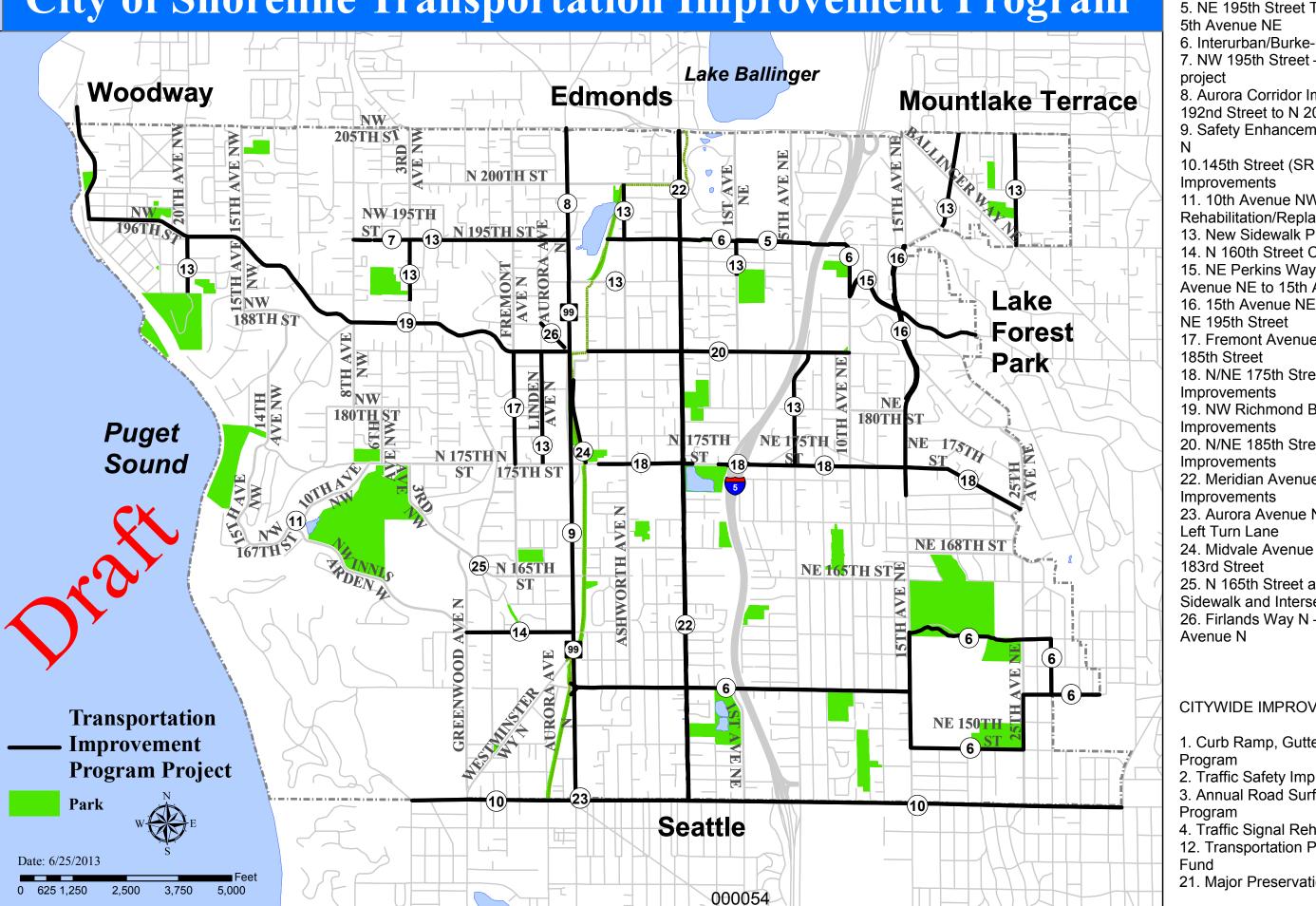
12. Transportation Project Grant Match Fund

UNFUNDED PROJECTS

- 13. New Sidewalk Projects
- 14. N 160th Street Corridor Improvements
- 15. NE Perkins Way Improvements 10th Avenue NE to 15th Avenue NE
- 16. 15th Avenue NE NE 172nd Street to NE 195th Street
- 17. Fremont Avenue N N 175th Street to N 185th Street
- 18. N/NE 175th Street Corridor Improvements
- 19. NW Richmond Beach Road Corridor Improvements
- 20. N/NE 185th Street Corridor Improvements
- 21. Major Preservation Projects
- 22. Meridian Avenue N Corridor Improvements
- 23. Aurora Avenue N at N 145th Street Dual Left Turn Lane
- 24. Midvale Avenue N N 175th Street to N 183rd Street
- 25. N 165th Street and Carlyle Hall Road N Sidewalk and Intersection Safety
- 26. Firlands Way N Linden Ave N to Aurora Avenue N

			2014		2015		2016		2017		2018		2019		2014-2019
Project #	Project		Estimate		Estimate		Estimate	1	Estimate		Estimate		Estimate		Total
	FUNDED PROGRAMS (FULLY OR PARTIALLY)														
	Curb Ramp, Gutter & Sidewalk Program	\$	150,000	-	150,000	\$	150,000	\$	150,000	\$	150,000		150,000	\$	900,000
	Traffic Safety Improvements	\$	285,000		285,000	\$	285,000		285,000	\$	285,000		285,000	\$	1,710,000
	Annual Road Surface Maintenance Program	\$	1,450,000				2,050,000		2,050,000	\$	2,050,000		2,050,000	\$	11,300,000
4	Traffic Signal Rehabilitation	\$	230,000	\$	230,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	1,260,000
	FUNDED PROJECTS (FULLY OR PARTIALLY)														
	NE 195th St Trail - 1st Ave NE to 5th Ave NE	\$	370,000											\$	370,000
	Interurban/Burke-Gilman Connectors	\$	540,000											\$	540,000
	NW 195th St - Safe Routes to School Project	\$	168,500	\$	251,500									\$	420,000
	Aurora Corridor Improvement Project - N 192nd St														
	to N 205th St		17,870,000	\$	17,440,000									\$	35,310,000
	Safety Enhancements to Aurora Ave N	\$	140,000											\$	140,000
	145th St (SR 523) Corridor Improvements	\$	250,000	\$	1,000,000	\$	2,000,000	\$	5,000,000	\$	20,000,000	\$	20,000,000	\$	48,250,000
	10th Ave NW Hidden Lake Bridge														
11	Rehabilitation/Replacement	\$	75,000	\$	2,250,000	\$	2,250,000							\$	4,575,000
	UNFUNDED PROGRAMS														
12	Transportation Project Grant Match Fund	\$	500,000											\$	500,000
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	UNFUNDED PROJECTS	•		•				_		-		_		^	
	New Sidewalk Projects	\$	120,000		690,000		650,000		290,000	\$	2,030,000	\$	2,790,000	\$	6,570,000
	N 160th St Corridor Improvements			\$	300,000	\$	3,625,000	\$	3,625,000					\$	7,550,000
	NE Perkins Way Improvements - 10th Ave NE to				=							^		^	
	15th Ave NE			\$	50,000							\$	580,000	· ·	630,000
	15th Ave NE – NE 172nd St to NE 195th St			\$	75,000							\$	1,400,000	\$	1,475,000
	Fremont Ave N Corridor – N 175th Street to N 185th									^	F 40,000			¢	F 10,000
	Street									\$	540,000	¢	07 000 000	\$	540,000
	N/NE 175th St Corridor Improvements											\$	97,280,000	\$	97,280,000
19	NW Richmond Beach Rd Corridor Improvements	\$	200.000									¢	22 700 000	¢	22 020 000
-	NW Richmond Beach Rd at 3rd Ave NW	Þ	200,000	\$	2,320,000							\$	33,720,000	\$ \$	33,920,000 2,320,000
				φ	2,320,000							¢	7,540,000	Ŧ	
	N/NE 185th St Corridor Improvements Major Preservation Projects	\$	2,000,000	\$	2,000,000	¢	2,000,000	¢	2,000,000	¢	2,000,000	\$ \$	2,000,000	\$ \$	7,540,000 12,000,000
	Major Preservation Projects Meridian Ave N Corridor Improvements	φ	2,000,000	φ	2,000,000	\$	2,000,000	\$	∠,000,000	\$	2,000,000	\$ \$	7,880,000	ծ \$	7,880,000
	Aurora Ave N at N 145th St Dual Left Turn							-				\$ \$	4,700,000	ծ \$	4,700,000
	Midvale Ave N – N 175th St to N 183rd St							-				ֆ \$	4,700,000		4,700,000
	N 165th St and Carlyle Hall Rd N Sidewalk and							-				φ	510,000	φ	510,000
	Intersection Safety							\$	50,000			\$	2,100,000	\$	2,150,000
	Firlands Way N - Linden Ave N to Aurora Ave N					<u> </u>		φ	50,000			٦ \$	2,100,000	э \$	2,150,000
20	I manus way N - Linden Ave N to Autora Ave N			L	28,691,500							Ψ	185,785,000	-	292,940,000

City of Shoreline Transportation Improvement Program





5. NE 195th Street Trail – 1st Avenue NE to 6. Interurban/Burke-Gilman Connectors 7. NW 195th Street – Safe Routes to School 8. Aurora Corridor Improvement Project – N 192nd Street to N 205th Street 9. Safety Enhancements on Aurora Avenue 10.145th Street (SR 523) Corridor 11. 10th Avenue NW Hidden Lake Bridge Rehabilitation/Replacement 13. New Sidewalk Projects 14. N 160th Street Corridor Improvements 15. NE Perkins Way Improvements – 10th Avenue NE to 15th Avenue NE 16. 15th Avenue NE – NE 172nd Street to 17. Fremont Avenue N – N 175th Street to N 18. N/NE 175th Street Corridor 19. NW Richmond Beach Road Corridor 20. N/NE 185th Street Corridor 22. Meridian Avenue N Corridor 23. Aurora Avenue N at N 145th Street Dual 24. Midvale Avenue N – N 175th Street to N 25. N 165th Street and Carlyle Hall Road N Sidewalk and Intersection Safety 26. Firlands Way N – Linden Ave N to Aurora

CITYWIDE IMPROVEMENTS

1. Curb Ramp, Gutter and Sidewalk

2. Traffic Safety Improvements

3. Annual Road Surface Maintenance

4. Traffic Signal Rehabilitation

12. Transportation Project Grant Match

21. Major Preservation Projects

FUNDED PROGRAMS (FULLY OR PARTIALLY)

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							
		PA		UNFUNDED			
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total
Roads Capital	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$900,000

Funding Outlook

This program is currently underfunded, as it is known that additional work could be performed annually. It is unknown how much additional funding is needed at this time. A full inventory is required in order to accurately assess the need. (The inventory is not funded at this time.) It is estimated that this program is underfunded annually by at least half. Future TIPs may include this information.

Project Status

Annual program, 2014-2019. This program helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

\boxtimes	Non-motorized	\boxtimes	Safety	Growth Management
\boxtimes	System Preservation		Major Structures	Corridor Study
	Improves Efficiency and Operations		Interjurisdictional Coordination	

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 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 (NTAPs). This program seeks grant-funding sources for the implementation of new pedestrian safety concepts and traffic calming devices, such as school zone flashing signs.

Funding											
	PARTIALLY FUNDED UNFUNDED										
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total				
Roads Capital	\$285,000	\$285,000	\$285,000	\$285,000	\$285,000	\$285,000	\$1,710,000				

Funding Outlook

This program is currently underfunded by \$97,500 annually in both 2014 and 2015. Additional improvements that could be implemented with supplemental funding include street lighting, ADA upgrades, countdown pedestrian signals and projects identified in the NTAPs.

Project Status

Annual program, 2014-2019. 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.

Pu	rpose / Goals Achieved			
\boxtimes	Non-motorized	\boxtimes	Safety	Growth Management
	System Preservation		Major Structures	Corridor Study
	Improves Efficiency and Operations		Interjurisdictional Coordination	

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 ramp installation or replacement and sidewalk repair. As part of this program, the City repaints roadway markings and replaces signs. Roadways may be rechannelized where it has been determined that a different cross-section is needed.

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											
		PARTIALLY FUNDED UNFUNDED										
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total					
Roads Capital	\$1,450,000	\$1,650,000	\$2,050,000	\$2,050,000	\$2,050,000	\$2,050,000	\$11,300,000					

Funding Outlook

This program is currently underfunded by approximately 50 percent (\$700,000 - \$1,000,000) annually. Additionally, the project fund includes \$50,000 annually for installation of bicycle markings and signage, including sharrows, bicycle lanes and signage. This portion of the project is currently unfunded.

Project Status

Annual program 2014-2019. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Annual Road Surface Maintenance Program (cont.)

Pur	rpose / Goals Achieved			
\boxtimes	Non-motorized	\square	Safety	Growth Management
\boxtimes	System Preservation		Major Structures	Corridor Study
	Improves Efficiency and Operations		Interjurisdictional Coordination	

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

Scope / Narrative

There are currently 46 traffic signals in operation in Shoreline. The typical life span of the electronic hardware is 20 years. As technology improves, the older electronics become obsolete. By the end of a signal's 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 have limited functionality. New controllers can accept a wide range of timing schemes and incorporate 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. Signal timing changes can then be made from a Traffic Management Center (TMC), thereby 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 the City's emergency back-up support in conjunction with Shoreline's Emergency Management Plan.

Intelligent Transportation System (ITS) improvements help roadways operate more efficiently. By improving efficiency, there is also an improvement in safety, productivity, travel speed and reliability. Elements of an ITS system include variable message signs that help drivers make informed decisions about travel routes (such as indicating lane closures or estimated travel times to destinations), real-time traffic flow maps, traffic monitoring cameras and communications between each traffic signal and a TMC. Existing ITS components in the City include new fiber optic lines and traffic monitoring cameras installed as part of the Aurora Corridor Improvement project. The City will begin development of TMC to help manage these systems in 2013. It may be expanded or modified as the City's ITS system grows. This project will fully integrate and coordinate 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 the Washington State Department of Transportation.

Funding							
		PA	UNFUNDED				
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total
Roads Capital	\$230,000	\$230,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,260,000

Funding Outlook

The project fund includes approximately \$100,000 annually to complete the ITS components of this project. This portion of the project is currently unfunded.

Project Status

Annual program 2014-2019. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Traffic Signal Rehabilitation and Intelligent Transportation System (ITS) (cont.)

Pur	pose / Goals Achieved			
	Non-motorized	\square	Safety	Growth Management
\boxtimes	System Preservation		Major Structures	Corridor Study
\boxtimes	Improves Efficiency and Operations		Interjurisdictional Coordination	

FUNDED PROJECTS (FULLY OR PARTIALLY)

5. NE 195th Street Trail – 1st Avenue NE to 5th Avenue NE

Scope / Narrative

This project includes design and construction of a twelve foot wide separated bicycle and pedestrian trail on the north side of NE 195th St. The City will need to coordinate with Seattle City Light as relocation of the utility poles is necessary. This project is the final separated trail segment of the Northern Route of the Interurban/Burke-Gilman Connector. This project will connect to the separated trail located to the west between Meridian Ave N and 1st Ave NE and leads to the pedestrian and bicycle bridge crossing I-5. This project helps complete the Northern Connector between the Interurban and Burke Gilman Trails (Project #6).

Funding							
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total
CMAQ	\$320,050						\$320,050
Roads Capital	\$49,950						\$49,950
PROJECT TOTAL	\$370,000						\$370,000

Funding Outlook

The total cost for this project is \$430,000. The City estimates \$60,000 will be spent in 2013 for project administration, including design.

Project Status

Design initiated in 2013, Construction to be completed in 2014. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose / Goals Achieved

\boxtimes	Non-motorized	\square	Safety	Growth Management
	System Preservation		Major Structures	Corridor Study
	Improves Efficiency and Operations	\square	Interjurisdictional Coordination	

6. Interurban/Burke-Gilman Connectors

Scope / Narrative

Construct 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:

- 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
- Installation of markings (lanes and sharrows) and signage for bicycles, including signage through Hamlin Park
- Construction of short pathways that provide access to the connectors

The City will work with Lake Forest Park to ensure facilities and signage are coordinated. A portion of the Northern Connection route will be the separated trail on NE 195th St from 1st Ave NE to 5th Ave NE (Project #5).

Funding									
	FUNDED								
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total		
WSDOT Pedestrian & Bicycle Safety Program	\$540,000						\$ 540,000		

Funding Outlook

Design may be initiated in 2013, Construction to be completed in 2014 or 2015, depending upon when design begins.

Project Status

Wayfinding signage for this project will be coordinated with the City of Lake Forest Park. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purpose /	Goals Achieved
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\boxtimes	Non-motorized	\boxtimes	Safety	Growth Management
	System Preservation		Major Structures	Corridor Study
	Improves Efficiency and Operations	\boxtimes	Interjurisdictional Coordination	

7. NW 195th Street – Safe Routes to School Project

Scope / Narrative

This project will improve pedestrian access to Einstein Middle School through the following projects:

- Construct sidewalks where missing on the south side of NW 195th St from $3^{\rm rd}$ Ave NW to $8^{\rm th}$ Ave NW
- Construct a sidewalk on the east side of 5th Ave NW between NW 195th St and NW 196th PI
- Install or replace curb ramps at the intersections with 3rd Ave NW, 5th Ave NW and 8th Ave NW
- Install four School Zone Flashing Signs on all legs of the NW 195th St to 3rd Ave NW intersection.

This project will connect into the existing sidewalk adjacent to the school and 2 other intermittent sections previously constructed. When combined with the existing sidewalk improvements, this project will result in a continuous sidewalk along this stretch of roadway.

Funding										
		FUNDED								
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total			
WSDOT Safe Routes to School Program	\$168,500	\$251,500					\$420,000			

Funding Outlook

The total cost for this project is \$435,000. The City estimates \$15,000 will be spent in 2013 for project administration, including design.

Project Status

Design initiated in 2013, Construction to be completed in 2015. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Pu	rpose / Goals Achieved			
\boxtimes	Non-motorized	\square	Safety	Growth Management
	System Preservation		Major Structures	Corridor Study
	Improves Efficiency and Operations		Interjurisdictional Coordination	

8. Aurora Corridor Improvement Project – N 192nd Street to N 205th Street

Scope / Narrative

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 with natural stormwater management treatments. N 200th St will be constructed in concrete, as this is the primary bus route to the Aurora Village Transit Center. N 195th St will be closed at Aurora Ave N, the intersection at Firlands Way N realigned and a "gateway" installed at N 205th St. Improvements at major intersections to enhance east-west traffic flow will also be included in the project. This is the final phase of a three mile long project. The City may also revisit previous improvements to Aurora Ave N from N 145th Street to N 192nd Street to resolve minor design or maintenance issues.

Funding										
	FUNDED									
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total			
Roads Capital	\$50,000	\$2,510,000- \$3,000,000					\$2,560,000- \$3,050,000			
Federal - STP		\$390,000					\$390,000			
King County Metro		\$170,000					\$170,000			
CMAQ	\$4,490,000	\$2,180,000					\$6,670,000			
Transportation Improvement Board	\$3,960,000	\$3,410,000					\$7,730,000			
Utility Reimbursements	\$4,090,000	\$3,440,000					\$7,530,000			
Regional Mobility	\$2,370,000						\$2,370,000			
FTA – RapidRide	\$2,510,000	\$2,280,000					\$4,790,000			
DOE	\$400,000	\$380,000					\$780,000			
HSIP		\$2,180,000					\$2,180,000			
PROJECT TOTAL	\$17,870,000	\$16,940,000- \$17,440,000					\$34,810,000- \$35,310,000			

Funding Outlook

The total cost for this project is estimated to be approximately \$45,000,000. The City spent approximately \$8,140,000 in previous years and will spend approximately \$1,190,000 in 2013 for project administration and construction. City staff and the consultant team are currently evaluating project scope to reduce costs and improve the potential for acceptable/fundable bids from contractors. The bid package will also include some additive alternates to the base bid whereby if there is adequate funding, then these alternates could be added back into the construction design. If the lowest acceptable bid is slightly more than the budget, then Council has the option to add more funds to the project to award the bid.

Aurora Corridor Improvement Project – N 192nd Street to N 205th Street (cont.)

Pro	Project Status									
Construction will begin in 2014 and will be complete by 2016. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.										
	incli Goal 2. Improve Shoreline's u	unity,		imen						
Pu	rpose / Goals Achieved									
\boxtimes	Non-motorized	\boxtimes	Safety		Growth Management					
	System Preservation		Major Structures		Corridor Study					
\boxtimes	Improves Efficiency and Operations	\boxtimes	Interjurisdictional Coordination							

9. Safety Enhancements on Aurora Avenue N

Scope / Narrative

This project will improve and upgrade safety and accessibility elements on Aurora Ave N. Enhancements may include 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.

Funding											
		FUNDED									
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total				
HSIP	\$140,000						\$140,000				

Funding Outlook

The estimated total cost for this project is \$420,000. The City will spend \$280,000 in 2013 for project administration and construction.

Project Status

Project will be completed in 2014. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Pu	rpose / Goals Achieved			
\boxtimes	Non-motorized	\square	Safety	Growth Management
	System Preservation		Major Structures	Corridor Study
\boxtimes	Improves Efficiency and Operations		Interjurisdictional Coordination	

10. 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) of the street is within the City of Seattle and the northern half (westbound lanes) is in unincorporated King County. Seattle classifies 145th St as a Primary Arterial from Greenwood Ave N to Bothell Way NE. The City of Shoreline is interested in annexing the roadway in order to develop a plan for corridor improvements and subsequently design and construct them. 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 will be to perform a multi-modal corridor study of 145th St (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. The City will begin this project pursuant to annexation of the roadway and confirmation of the location of the light rail station at NE 145th St. 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 design 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
- Installation of bicycle facilities.

145th Street (SR 523) Corridor Improvements (cont.)

Funding											
	FUNDED		UNFUNDED								
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total				
Roads Capital	\$250,000						\$250,000				
Unknown		\$1,000,000	\$2,000,000	\$5,000,000	\$20,000,000	\$20,000,000	\$48,000,000				
PROJECT TOTAL	\$250,000	\$1,000,000	\$2,000,000	\$5,000,000	\$20,000,000	\$20,000,000	\$48,250,000				

Funding Outlook

The estimates for 2015-2019 are included as placeholders. The corridor study 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 2019. 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. If the City is able to complete annexation of the roadway by 2013, initial work on the corridor study may begin in late 2013. The costs associated with installation of the new waterline can be used as a grant match.

Project Status

Project initiated in 2013 and estimated for completion in 2019. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Pu	rpose / Goals Achieved				
	Non-motorized	\square	Safety		Growth Management
	System Preservation		Major Structures	\boxtimes	Corridor Study
\boxtimes	Improves Efficiency and Operations	\square	Interjurisdictional Coordination		

11. 10th Avenue NW Hidden Lake Bridge Rehabilitation/Replacement

Scope / Narrative

Hidden Lake Bridge No. 167 C, located on 10th Ave NW at Innis Arden Way, was built in 1931. It is showing signs of deterioration and is in need of rehabilitation or replacement in order to ensure safe vehicle crossing. The Bridge Sufficiency Rating from the 2010 inspection is 51.3 which should make the bridge eligible for bridge repair/rehabilitation funding through WSDOT.

Funding							
			UNFUND	DED			
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total
Unknown	\$75,000	\$1,500,000- \$2,250,000	\$1,500,000- \$2,250,000				\$3,075,000- \$4,575,000

Funding Outlook

The City will pursue grant funding for this project through the Federal Highway Bridge Program. The funding identified for 2014 is for the project study to identify the appropriate improvements for the roadway, including cost estimates. It is estimated that the total study cost will be \$275,000. It is estimated that the City will begin this study and spend \$200,000 in 2013. Because these costs are unknown at this time, a placeholder for design and construction in 2015 and 2016 is included and 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

Non-motorized	\square	Safety	Growth Management
System Preservation	\square	Major Structures	Corridor Study
Improves Efficiency and Operations		Interjurisdictional Coordination	

UNFUNDED PROGRAMS

12. Transportation Project Grant Matching Fund

Scope / Narrative

There are many grants available to fund transportation projects and programs, provided by various sources including federal and state governments. Grants are awarded for specifically identified projects, often through a competitive evaluation process. Project applications are evaluated against a set of established criteria and compared to other submitted applications. Grant programs are often administered in categories, such as traffic safety or capacity improvements, nonmotorized transportation or transit improvements. Many agencies issue calls for grant projects in accordance with an annual or biennial cycle.

Many agencies require that the City provide a match to supplement the grant. The amount of the match varies among agencies. Sometimes grants from different agencies can be used to serve as a match. However, many projects do not qualify for multiple grants (or do not have additional grant sources at the time of application) and the City must provide the match. This fund would serve as a resource to provide a grant match for unfunded or partially funded projects. Projects within the TIP that are likely to qualify for grants and may be able to utilize matching funds include New Sidewalks Projects (#13), N 160th Street Corridor Improvements (#14), NE Perkins Way Improvements (#15), 15th Avenue NE (#16), Fremont Avenue Corridor Improvements (#17), N/NE 175th Street Corridor Improvements (#18) and Midvale Ave N (#24).

Funding										
		UNFUNDED								
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total			
Unknown	\$500,000						\$500,000			

Funding Outlook

It is anticipated that any funds remaining at the end of 2014 would be carried over into 2015 to continue serving as grant match. As funds are allocated to specific projects, this program fund would be periodically replenished.

Project Status

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

Transportation Project Grant Matching Fund (cont.)

Pu	Purpose / Goals Achieved								
	Non-motorized	\boxtimes	Safety	\square	Growth Management				
	System Preservation	\boxtimes	Major Structures		Corridor Study				
\boxtimes	Improves Efficiency and Operations		Interjurisdictional Coordination						

UNFUNDED PROJECTS

13. 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 TMP includes 28 high priority projects, many of which identify construction of sidewalks on both sides of the street as they are not present on either side. 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										
		UNFUNDED								
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total			
Unknown	\$120,000	\$690,000	\$650,000	\$290,000	\$2,030,000	\$2,790,000	\$6,570,000			

Project Status

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

Pu	Purpose / Goals Achieved								
\boxtimes	Non-motorized	\boxtimes	Safety		Growth Management				
	System Preservation		Major Structures		Corridor Study				
	Improves Efficiency and Operations		Interjurisdictional Coordination						

New Sidewalk Projects (cont.)

	STREET	FROM	то	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	\$500,000	2017
2	1 st Ave NE	NE 192 nd St	NE 195 th St	Construct a sidewalk on the west side of the street.	TIB – Sidewalk Program, CIP, Voter Approved Bond, City, General Fund,	\$250,000	2015
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 Project #6.	Safe Routes to School, CIP, Voter Approved Bond, City General Fund	\$410,000	2015
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	2017
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	2017
6	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	2015
7	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	2019
8	Linden Ave N	N 175 th St	N 185 th St	Construct sidewalks on the west and east sides of the street, where needed, to complete sidewalks on both sides of the street.	Private Development Mitigation, CIP, Voter Approved Bond, City General Fund	\$1,000,000	2019
9	25 th Ave NE	Ballinger Way NE/NE 195 th St	NE 205 th St	Construct sidewalks on the west side of the street.	Brugger's Bog mitigation, Park project mitigation CIP, Voter Approved Bond, City General Fund	\$670,000	2014
10	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	2018

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

14. N 160th 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. Redesign and construction of the intersection at Greenwood Ave N, N 160th St and Innis Arden Way N. This could include a five legged signalized intersection or a roundabout.
- b. Design and construct improvements to the intersection at Dayton Ave N including ADA curb ramps and crossings, regrading N 160th St to improve vertical curve transition, sight distance, and accessibility, reconstruction of the traffic signal and installation of transit signal priority.
- c. Corridor wide improvements 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 and construction of islands within the center lane with turn pockets and pedestrian refuge space where feasible. The existing curbs may remain in place. The cross-section at the intersection with Aurora Ave N would be modified as needed before tapering to three in order to ensure efficient transit and traffic operations. Redevelopment of the Aurora Square site could necessitate widening N 160th St to 5 lanes to maintain LOS of the intersection at Aurora Ave N.
- Completion of the sidewalk system, including upgrades to existing sidewalks. All sidewalks would be eight feet wide, include curb and gutter and five foot amenity zones separating the pedestrians from the roadway. This project will include reconstruction of the southside wall from approximately Linden Ave N to Dayton Ave N.
- Upgrades to the stormwater management system to improve water quality and flow control. One component of these upgrades will be the use of low impact development techniques such as rain gardens and natural stormwater treatment features. The medians and amenity zones could be used for this purpose.
- Continuous illumination.
- Upgrade utilities as needed, with possible undergrounding of overhead power. The City will need to negotiate this improvement with Seattle City Light in order to receive utility reimbursement.

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

N 160th St serves as a primary route to Shoreline Community College and the Aurora Square Community Revitalization Area.

N 160th Street Corridor Improvements (cont.)

Funding											
		UNFUNDED									
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total				
Greenwood/ N 160 th St/ Innis Arden intersection (a) – unknown		\$100,000	\$700,000	\$700,000			\$1,500,000				
Dayton Intersection (b) – unknown		\$100,000	\$450,000	\$450,000			\$1,000,000				
Corridor wide Improvements (c) – unknown		\$100,000	\$2,475,000	\$2,475,000			\$5,050,000				
PROJECT TOTAL		\$300,000	\$3,625,000	\$3,625,000			\$7,550,000				

Funding Outlook

The City is pursuing federal grant funding for this project. Funding allocated to 2014 will be used to refine the project scope and perform alternatives analysis for the entire corridor.

Project Status

Pu	rpose / Goals Achieved		
	Non-motorized	Safety	Growth Management
	System Preservation	Major Structures	Corridor Study
\boxtimes	Improves Efficiency and Operations	Interjurisdictional Coordination	

15. 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 area 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. A study is needed to determine the appropriate improvements for this roadway. This project helps complete the Northern Connector between the Interurban and Burke Gilman Trails (Project #6).

Funding										
	UNFUNDED									
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total			
Unknown		\$50,000				\$440,000- \$580,000	\$490,000- \$630,000			

Funding Outlook

The funding identified for 2015 is for the project study to identify the appropriate improvements for the roadway, including cost estimates. Because these costs are unknown at this time, a placeholder for design and construction in 2019 is included and will be updated in future TIPs.

Project Status

Pu	rpose / Goals Achieved		
\boxtimes	Non-motorized	Safety	Growth Management
	System Preservation	Major Structures	Corridor Study
	Improves Efficiency and Operations	Interjurisdictional Coordination	

16. 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											
	UNFUNDED										
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total				
Unknown		\$75,000				\$1,000,000- \$1,400,000	\$1,075,000- \$1,475,000				

Funding Outlook

The funding identified for 2015 is for the project study to identify the appropriate improvements for the roadway, including cost estimates. Because these costs are unknown at this time, a placeholder for design and construction in 2019 is included and will be updated in future TIPs.

Project Status

Pu	rpose / Goals Achieved		_	
\boxtimes	Non-motorized	Safety		Growth Management
	System Preservation	Major Structures	\square	Corridor Study
\boxtimes	Improves Efficiency and Operations	Interjurisdictional Coordination		

17. 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. This project will include reconstruction of the southside wall from approximately Linden Ave N to Dayton Ave N.
- 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.

Funding										
		UNFUNDED								
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total			
Unknown					\$540,000					

Project Status

Pu	rpose / Goals Achieved			
	Non-motorized	\boxtimes	Safety	Growth Management
	System Preservation		Major Structures	Corridor Study
	Improves Efficiency and Operations	\boxtimes	Interjurisdictional Coordination	

18. 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 an additional 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*:* Perform overlay/preservation work. 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. 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.

N/NE 175th Street Corridor Improvements (cont.)

Funding							
			UNF	UNDED			
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total
N 175 th St – Stone	Lotinate	Lotinate	Lotinate	Lotinate	Lotinate	\$25,000,000	\$25,000,000
Ave N to Meridian						Ψ23,000,000	Ψ23,000,000
Ave N* and							
Interstate 5 to							
15 th Ave NE (a) -							
unknown							
N 175 th St – Stone						\$2,950,000	\$2,950,000
Ave N to Meridian						Ψ2,550,000	Ψ2,550,000
Ave N* and							
Interstate 5 to							
15^{th} Ave NE (a) –							
impact fee							
N 175 th St and						\$3,400,000	\$3,400,000
Meridian Ave N						45,100,000	45,100,000
(b) - unknown							
N 175 th St and						\$1,140,000	\$1,140,000
Meridian Ave N						+=,= .0,000	+-,
(b) – impact fee							
N/NE 175 th St –						\$2,690,000	\$2,690,000
Meridian Ave N to						+-,,	+_/
the I-5 on-/off-							
ramps (c) -							
unknown							
N/NE 175 th St –						\$900,000	\$900,000
Meridian Ave N to						. ,	
the I-5 on-/off-							
ramps (c) –							
impact fee							
NE 175 th St – 15 th						\$1,200,000	\$1,200,000
Ave NE – 25 th Ave							
NE (d) - unknown							
Interchange						\$60,000,000	\$60,000,000
Improvements (e)							
PROJECT TOTAL						\$97,280,000	\$97,280,000

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. The City will complete overlay work on N 175th St from Stone Ave N to I-5 in 2013.

N/NE 175th Street Corridor Improvements (cont.)

Pu	rpose / Goals Achieved				
\boxtimes	Non-motorized	\boxtimes	Safety	\boxtimes	Growth Management
	System Preservation		Major Structures	\boxtimes	Corridor Study
\boxtimes	Improves Efficiency and Operations	\boxtimes	Interjurisdictional Coordination		

19. NW Richmond Beach Road and Richmond Beach Drive NW Corridor Improvements

Scope / Narrative

This project incorporates a series of improvements along this corridor to improve safety and capacity. Many of these projects will be constructed by private developers as mitigation for the Point Wells development. Individual projects include the following:

- a. *NW Richmond Beach Rd at 3rd Ave NW:* NW Richmond Beach Rd is a high-volume arterial street at this location and this intersection has 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. Improvements to Richmond Beach Drive NW and NW Richmond Beach Road NW 205th Street to Aurora Ave N: Perform a transportation corridor study in response to development proposals at Point Wells located in unincorporated Snohomish County and construct mitigation measures. The study needs to address multimodal usage, capacity and traffic flow as well as safety improvements and impacts. Additional projects may be identified in the study that will be included in future TIPs. The analysis should ultimately be approved by the City Council to form the basis for developer mitigation.
- c. NW 196th St Richmond Beach Dr NW to 24th 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 no sidewalks. Improvements to the roadway should include sidewalks on both sides of the street and a continuous two-way center turn lane to help maintain traffic flow and improve pedestrian access across NW 196th St.
- d. 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.
- e. *NW 195th St at 20th Ave NW:* Construct a traffic signal at this intersection which is currently controlled by stop signs on all approaches.
- f. *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 twin roundabouts.
- g. 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.
- h. *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.
- i. *Richmond Beach Drive NW at NW 196th St:* Improve operations and safety at this intersection with modifications such as a channelized westbound to northbound right turn, an intersection reconfiguration or a roundabout.
- j. *NW 196th St at 24th Ave NW:* Improve safety and operations at this intersection through reconfiguration or a roundabout.
- k. *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.

NW Richmond Beach Road and Richmond Beach Drive NW Corridor Improvements (cont.)

Funding							
			UNFU	NDED			
FUNDING	2014	2015	2016	2017	2018	2019	2014-2019
SOURCE	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Total
NW Richmond		\$2,320,000					\$2,320,000
Beach Rd at 3 rd							
Ave NW (a) –							
developer							
mitigation							
Improvements	\$200,000						\$200,000
to Richmond							
Beach Drive NW							
and NW							
Richmond Beach							
Road – NW							
205 th Street to							
Aurora Ave N							
(b) – developer							
mitigation							
NW 196 th St –						\$2,060,000	\$2,060,000
Richmond Beach							
Dr NW to 24 th							
Ave NW (c) –							
developer							
mitigation							
NW 196 th St –						\$300,000	\$300,000
24 th Ave NW to							
20 th Ave NW (d)							
 developer 							
mitigation							
NW 195 th St at						\$1,340,000	\$1,340,000
20 th Ave NW (e)							
 developer 							
mitigation							
NW Richmond						\$2,210,000	\$2,210,000
Beach Road at							
15 th Ave NW (f)							
 developer 							
mitigation							
Richmond Beach						\$18,250,000	\$18,250,000
Dr NW – NW							
196 th St to NW							
205 th St: (g) –							
developer							
mitigation							
NW Richmond						\$2,140,000	\$2,140,000
Beach Rd at 8 th							
Ave NW: (h) –							
developer							
mitigation							

Richmond Beach Drive NW at NW 196 th St (i) – developer mitigation				\$1,530,000	\$1,530,000
NW 196 th St at 24 th Ave NW (j) – developer mitigation				\$1,890,000	\$1,890,000
NW/N Richmond Beach Rd - Richmond Beach Dr NW to Fremont Ave N (k) – developer mitigation				\$4,000,000	\$4,000,000
PRÖJECT TOTAL	\$200,000	\$2,320,000		\$33,720,000	\$36,240,000

Funding Outlook

Many of these projects will be 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.

Pui	rpose / Goals Achieved		
\boxtimes	Non-motorized	Safety	⊠ Growth Manageme nt
\boxtimes	System Preservation	Major Structures	Corridor Study
\boxtimes	Improves Efficiency and Operations	Interjurisdictional Coordination	

20. 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: Rechannelize the roadway to add a center two-way left-turn lane and 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 eastbound right-turn pocket, which involves widening eastbound approach to include a southbound right-turn pocket. 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. *NE* 185th St *Midvale Ave N* 10^{th} *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

Some of these projects can be constructed individually, allowing the complete set of improvement 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.

N/NE 185th Street Corridor Improvements (cont.)

Funding										
		UNFUNDED								
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total			
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						\$200,000	\$200,000			
NE 185 th St – 1 st Ave NE to 7 th Ave NE (a) – impact fee						\$70,000	\$70,000			
N 185 th St and Meridian Ave N(b) - unknown						\$3,390,000	\$3,390,000			
N 185 th St and Meridian Ave N (b) – impact fee						\$1,130,000	\$1,130,000			
N 185 th St – Midvale Ave N to Stone Ave N (c) - unknown						\$2,200,000	\$2,200,000			
NE 185 th St – Midvale Ave N – 10 th Ave NE (d) - unknown						\$550,000	\$550,000			
PROJECT TOTAL						\$7,540,000	\$7,540,000			

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, however, the roadway will need to be rechannelized again in order to provide the center turn lane.

Pu	rpose / Goals Achieved	
	Non-motorized	Safety Growth Management
	System Preservation	Major Corridor Study Structures
\boxtimes	Improves Efficiency and Operations	Interjurisdictional Coordination

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21. Major Preservation 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.

In addition to the City's annual road surface maintenance program, several roadways in Shoreline are in need of ssignificant maintenance work on the following roadways including:

- N/NE 155th St: Aurora Ave N to 15th Ave NE
- N/NE 175th St: 15th Ave NE to 25th Ave NE (costs included with Project #18)
- N/NE 185th St: Midvale Ave N to 10th Ave NE (costs included with Project #20)
- NW/N Richmond Beach Rd: Richmond Beach Dr NW to Fremont Ave N (costs included with Project #19)
- Fremont Ave N: N 175th St to N 185th St (costs included with Project #17)
- Meridian Ave N: N 145th St to N 205th St (costs included with Project #22)
- Westminster Way N: N 145th St to N 155th St
- 15th Ave NE: NE 150th St to NE 172nd St
- Greenwood Ave N: Westminster Way N to N Carlyle Hall Rd
- Dayton Ave N: N 172nd 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									
	UNFUNDED								
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total		
Unknown	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$12,000,000		

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. The annual funding identified for 2014-2019 will not be adequate to perform overlay work for all of the roadways identified.

Major Preservation Projects (cont.)

Project Status

Overlay work on N/NE 175th Street from Stone Ave N to I-5 was completed in 2013 and funded in part through by STP grant funding. This project helps to implement City Council Goal 2: Improve Shoreline's utility, transportation, and environmental infrastructure.

Purp	oose / Goals Achieved	
	Non-motorized	Safety Growth Management
	System Preservation	Major Corridor Study
	Improves Efficiency and Operations	Interjurisdictional Coordination

22. 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.

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 # 18) or N/NE 185th St (Project # 20)

Funding											
		UNFUNDED									
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total				
Unknown						\$5,910,000	\$5,910,000				
Impact Fee						\$1,970,000	\$1,970,000				
PROJECT TOTAL						\$7,880,000	\$7,880,000				

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

Meridian Avenue N – N 145th Street to N 205th Street (cont.)

Pu	pose / Goals Achieved				
\boxtimes	Non-motorized	\boxtimes	Safety	\boxtimes	Growth Management
	System Preservation		Major Structures		Corridor Study
\boxtimes	Improves Efficiency and Operations	\boxtimes	Interjurisdictional Coordination		

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

Scope / Narrative

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" 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.

Funding									
	UNFUNDED								
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total		
Unknown						\$4,700,000	\$4,700,000		

Project Status

Pu	rpose / Goals Achieved			
	Non-motorized		Safety	Growth Management
	System Preservation		Major Structures	Corridor Study
\square	Improves Efficiency and Operations	\square	Interjurisdictional Coordination	

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

Scope / Narrative

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.

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Fullaing												
	UNFUNDED											
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 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

Pui	pose / Goals Achieved		
\boxtimes	Non-motorized	Safety	Growth Management
	System Preservation	Major Structures	Corridor Study
	Improves Efficiency and Operations	Interjurisdictional Coordination	

25. 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							
	UNFUNDED						
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total
Unknown				\$50,000		\$2,100,000	\$2,150,000

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Funding Outlook

The funding identified for 2017 is for the project study to identify the appropriate improvements for the intersection, including cost estimates. Because these costs are unknown at this time, a placeholder for design and construction in 2019 is included and will be updated in future TIPs.

Project Status

Pu	rpose / Goals Achieved	-	
	Non-motorized	Safety	Growth Management
	System Preservation	Major Structures	Corridor Study
\boxtimes	Improves Efficiency and Operations	Interjurisdictional Coordination	

26. Firlands Way N –Aurora Avenue N to Linden Ave 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								
	UNFUNDED							
FUNDING SOURCE	2014 Estimate	2015 Estimate	2016 Estimate	2017 Estimate	2018 Estimate	2019 Estimate	2014-2019 Total	
Unknown						\$2,600,000	\$2,600,000	

Project Status

Purpose / Goals Achieved						
\boxtimes	Non-motorized	\boxtimes	Safety		Growth Management	
	System Preservation		Major Structures		Corridor Study	
	Improves Efficiency and Operations		Interjurisdictional Coordination			