Memorandum

DATE: July 14, 2011

TO: Shoreline Planning Commission

FROM: Kirk McKinley, Transportation Services Manager
Alicia McIntire, Senior Transportation Planner

RE: Transportation Master Plan Update

I. Introduction

Staff is in the final stages of developing the draft TMP for Council and public review. The Transportation Master Plan contains policies and projects that support the future land uses in the City's Comprehensive Plan. These policies affect choices for travel by all modes. By knowing how Shoreline will grow in the future, the City can plan for how the transportation system will need to change to accommodate that growth. The updated plan will use revised growth targets to plan through 2030.

Since adoption of the original TMP in 2005, there have been significant changes to the City's transportation facilities. The Interurban Trail was completed, as were improvements in North City and the first mile of Aurora Avenue North. Construction is underway on the middle and third miles of Aurora, with completion of the project anticipated by 2014. Sidewalks have been constructed in neighborhoods throughout the City under the City's priority sidewalks program.

New transit services are also in service or planned for Shoreline. Community Transit began BRT service on Aurora/SR 99 in Snohomish County in fall 2009, running from the Aurora Village Transit Center in Shoreline to Everett. Metro's bus rapid transit (BRT) service is scheduled to begin in 2013 on Aurora from Shoreline to downtown Seattle. By 2023, Sound Transit will extend light rail service from the University District to Lynnwood, with two stops proposed in Shoreline.

The TMP is a functional plan. It contains policies and projects that support the future land uses in the City's Comprehensive Plan and thereby the City can plan the transportation system to accommodate that growth over the next twenty years. The TMP contains the background information and technical analysis about the City's transportation system, which are used to develop some of the goals and policies

addressing transportation issues in Shoreline. As a result, this detailed information is not needed in the City's Comprehensive Plan. The adopted goals and policies in the TMP will be used during the City's next update of the Comprehensive Plan.

Other uses for the TMP include:

- Development of the six-year Capital Improvement Plan,
- Implementation of the City's vision for all modes of transportation in Shoreline,
- Securing grant funding,
- Establishing the design of transportation improvements, and
- Providing guidance for regional coordination with transit providers, neighboring jurisdictions, the Puget Sound Regional Council, King County and the State of Washington.

II. Discussion

The guiding direction in the TMP is established with goals, policies and implementation strategies. The goals and policies establish the framework and objectives for the City's transportation system and guide its development and management. The implementation strategies are a new addition to the TMP and are action items or specific tasks the City can undertake in order to implement an identified goal or policy. The implementation strategies described in the TMP are not necessarily the only options available to achieve a stated goal or policy.

In addition to the goals, policies and implementation strategies, staff has developed draft system plans for the City's bicycle, pedestrian and transit networks. The system plans represent the ultimate build out for a given element of the City's transportation network, resulting in complete systems that connect neighborhoods, commercial areas, services, parks and schools.

Sustainability and Quality of Life: Transportation is influential in the quality of life of Shoreline's residents. Commute times, vehicle speeds in neighborhoods, the presence of sidewalks and bicycle facilities and the quality of transit service all have an impact on people's lives. Emissions and other pollutants from vehicles influence air quality and the amount of paved surfaces affect water quality and the City's needs to manage stormwater.

The City's street rights-of-way are Shoreline's largest property asset and include more than roadway surface, amenity zones and sidewalks. Overhead and underground utilities, including electricity, telephone, cable, water, sewer and natural gas, are located in the right-of-way. Additionally, the vast majority of the City's stormwater management facilities are located in the right-of-way and many opportunities for natural stormwater treatment in the right-of-way are available. As a result, how the right-of-way is utilized and managed can help the City obtain many of its sustainability goals.

The Sustainability and Quality of Life chapter addresses several topics including:

- Neighborhood Involvement (Neighborhood Traffic Safety Program and Neighborhood Traffic Action Plans)
- Transportation Demand Management and Transportation System Management
- Commute Trip Reduction
- Complete Streets
- Street Lighting
- Stormwater Management
- Maintenance
- Freight and Mobility System
- Regional Coordination

The TMP as a whole is written with a multi-modal, Complete Streets approach, with the specific policy direction for Complete Streets called out in this chapter. While the existing Comprehensive Plan and TMP emphasize accommodating all modes of transportation, this is the City's first Complete Streets policy.

The draft policies and implementation strategies in this chapter expand the opportunities and requirements to utilize the right-of-way for stormwater management, particularly through the use of natural stormwater management techniques. More specific direction for maintenance of the right-of-way is also included.

The language outlining the City's regional coordination policies have been expanded to identify specific transportation projects that require interjurisdictional coordination, such as improvements to 145th Street and transit needs.

Master Street Plan: The Master Street Plan identifies the future cross-section for all streets in Shoreline. For Arterial Streets and Local Primary Streets (formerly Neighborhood Collectors), the Master Street Plan identifies the specific cross-section for the roadway. The cross-section for a given street may vary in different locations and the Master Street Plan divides that roadway into segments to identify where there are different right-of-way needs. Because the City has so many Local Secondary streets (formerly Local Streets), the Master Street Plan includes a "palette" of options for these street cross-sections, rather than a specified design for each street. A determination of the appropriate cross-section for a given local street will be made at the time modifications to the street are needed. This palette includes a cross-section for a green street. The cross-sections establish the location of future curbs, so that complete streets can be constructed.

In developing this Master Street Plan, the City considered and attempted to balance the access and mobility needs of all users including motorists, pedestrians, bicyclists, transit and freight and respond to growth anticipated in the City. The design criteria strive to balance safety, preservation and maintenance of the roadway infrastructure and environmental preservation. The standards established in the Master Street Plan will also be used to guide the City when it designs and constructs right-of-way improvements.

The Master Street Plan will be available with the release of the draft TMP.

Bicycle Plan: The draft Bicycle System Plan is shown on Attachment A. The draft Bicycle System Plan shows the locations for different types of facilities, such as bicycle lanes, trails, sharrows and signage, in order to build a complete bicycle system throughout the City. The Interurban Trail serves as the spine of the bicycle system and most of the proposed bicycle facilities are present primarily on arterials. The Plan includes the north and south connector routes between the Interurban and Burke-Gilman Trails, as previously approved by Council.

The draft Bicycle Plan is comprised almost entirely of new policies. They call for implementation of the Bicycle System Plan, development of standards for bicycle facilities and their maintenance, creation of a funding strategy to develop the City's bicycle system and expanded public outreach and education regarding bicycling and bicycle safety.

Pedestrian Plan: Attachment B is the draft Pedestrian System Plan for the City. The draft Pedestrian System Plan focuses on developing a complete pedestrian system for Shoreline that connects neighborhoods to transit, retail and commercial areas, schools, parks, primarily using the City's arterial streets. The general concept is that all arterial and local primary streets in the City will have sidewalks on both sides of the street, at widths that are appropriate for the adjacent land uses (wider sidewalks in more densely or intensely developed areas, narrower sidewalks in single family neighborhoods).

Similar to the draft Bicycle Plan, the Pedestrian Plan contains many new policies. The draft policies emphasize implementation of the Pedestrian System Plan, construction of sidewalks as priority projects, pedestrian safety, creation of a funding strategy for sidewalk construction and the allowance for flexible design standards for sidewalks.

Transit Plans: Based upon the anticipated future changes to transit service in Shoreline, including implementation of bus rapid transit and light rail service, staff has developed a three-phase transit plan. Attachments C, D and E identify the desired improvements and modifications to transit service in Shoreline resulting from planned changes to transit service in the short, medium and long term. In summary, the draft plans recommend the following:

- Short Range Transit Plan (until 2021): In the next ten years, the City would like to see improvements and expansion to existing transit service, such as additional east-west service. Increases in ridership, enhancements to the quality of service and overall improvements to facilities are all anticipated. Through these efforts, residents will have improved options for transportation to work and for other activities. During this time, the City will complete improvements to Aurora Avenue N and Metro's BRT system will be up and running. This time frame will also be a period of intense long range planning activity in preparation for light rail expansion into Shoreline. In an effort to improve service for riders transferring between providers, the City will encourage and foster communication between

Metro Transit and Community Transit to promote improved cross-county transit service. One large component of this effort will be the full or potential relocation of the Aurora Village Transit Center (AVTC) function to the N 192nd Street park and ride and development of a new transit oriented development at this site.

- Medium Range Transit Plan (2021-2023): In this short time frame, light rail service to Northgate will begin. Bus service will be restructured to feed the light rail station at Northgate, making bus transportation to Northgate a convenient and appealing option for Shoreline residents. BRT service on Aurora Avenue N and bus service on other north-south corridors will continue, as will east-west service, providing connections for residents throughout the City. Construction of the light rail line from Northgate to Shoreline will be underway, as well as the light rail station.

- Long Range Transit Plan (2023+): At the beginning of this time frame, light rail service to Shoreline will be operational. Bus service will be restructured to feed the light rail stations in Shoreline. North-south service will still be needed on corridors other than the light rail alignment for residents wishing to reach destinations outside the reach of light rail. East-west service that feeds the light rail stations, other high capacity transit corridors and park and ride lots and connects residents to destinations throughout the City will continue. With light rail in its infancy, the City is likely to see interest in development around the transit stations. The City may choose to reexamine the land use plans for the station areas, as attitudes about the presence of the stations may change to favor additional increased densities beyond the original station area boundaries. The transportation systems serving these areas may need modifications as well, depending upon their performance. Sound Transit will likely be in a planning mode that examines additional system expansions beyond ST2. This will be an opportunity for the City to advocate for street car service or light rail expansions into the City, including east-west service, as well as additional north-south locations.

Street Classifications: During development of the draft Master Street Plan (see below), staff examined the way different streets operate throughout the City. As part of this analysis, several streets were identified for reclassification. The recommended reclassifications are shown on Attachment F. The streets recommended for reclassification already function in the capacity recommended, with respect to the existing traffic volumes, speeds, striping and connectivity. Additionally, staff recommends renaming of two street classifications in order to minimize confusion and more accurately identify the characteristics of each street type.

Forecasts: Understanding the future nature and volume of traffic in the City makes it possible to recommend appropriate transportation facility improvements in Shoreline. This information builds upon an understanding of existing traffic volumes and flow patterns in the City. The City contracted with DKS Associates to develop a 2030 Shoreline travel demand forecast model to analyze future traffic volumes for the TMP.

This model uses the Puget Sound Regional Council's four-county regional transportation model as a base but divides Shoreline into a much more detailed zone and network system. The City will be able to update this model as needed when land use forecasts are revised and other input data, such as new developments or roadway improvements, are constructed.

Demographic data sets, including household and employment forecasts associated with a system of transportation analysis zones, form the basis for travel demand forecasting. Within Shoreline, household and employment forecasts were based upon future growth estimates developed by King County. For the region outside the City, the model used PSRC's regional household and employment forecasts for 2030, with some adjustments.

The City selected the year 2030 as the planning horizon for developing the future traffic forecasts. Using the growth estimates provided by King County, the City developed the 2030 housing and employment forecasts.

For development of the travel demand model, the City evaluated three land use scenarios. Each scenario was based upon the City's assigned growth targets for 2030 of 5,000 new households and 5,000 new jobs. Each of the 2030 land use scenarios include the two light rail station locations identified in the Sound Transit 2 package along Interstate 5 at NE 145th Street and NE 185th Street. Parking for 500 vehicles was assumed at each station. Each scenario also includes the same growth in households and employment for all zones outside of the City of Shoreline, in accordance with PSRC forecasts.

The future traffic impacts of these three scenarios were shown by the traffic model to be similar throughout the City. In response to these results and current planning efforts, staff created a "TOD Enhanced" scenario. This scenario assumes concentrations around the transit hubs, with additional increased concentrations of jobs and housing units in the Town Center (Aurora Avenue N and N 175th – N 185th Streets).

In general, the traffic modeling shows that Shoreline's future traffic issues are fairly manageable. The results of the traffic modeling were used to identify projects needed to accommodate growth and develop the City's concurrency standard, described below.

Concurrency: The State Growth Management Act (GMA) requires each local jurisdiction to identify facility and service needs based on level of service standards for all arterials and transit routes. Level of service (LOS) standards are used to judge the performance of the transportation system. The GMA further requires that the transportation element of a City's comprehensive plan include specific actions and requirements for bringing into compliance any facilities or services that are below an established level of service standard. The relationship between LOS standards, funding needs to accommodate increased travel and land use assumptions is referred to as "concurrency".

Concurrency is balanced when growth is matched with needed facilities. If any of the features is unbalanced, one of the following three actions must be taken:

1. Reduce growth by denying or delaying land use permit applications, or
2. Increase funding for new facilities, or
3. Change the level of service standard.

Transportation concurrency requires adequate transportation facilities to be available concurrent with private development. Development is not allowed if it causes the LOS on transportation facilities to fall below standards adopted in the comprehensive plan. In the case of transportation facilities, the GMA defines "concurrent with development" to mean that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years.

Transportation concurrency is determined by comparing the capacity of transportation facilities needed by each application for development to the uncommitted capacity that is (or will be) available. If the uncommitted available capacity is equal to, or greater than the capacity required, the applicant passes the concurrency "test." If the uncommitted available capacity is less than the capacity required, the applicant fails the concurrency "test."

If the concurrency test is "failed" there are several alternatives: (1) the applicant can mitigate the impacts to achieve a satisfactory LOS, (2) the applicant can revise the proposed development to reduce the impacts and maintain a satisfactory LOS, or (3) the application is denied, and the proposed development does not occur.

The GMA allows each local jurisdiction to choose a LOS method and standards and the jurisdictions has flexibility regarding how to apply concurrency within their plans, regulations, and permit systems. Level of Service is a qualitative measure used to denote roadway or intersection operating conditions. It generally describes levels of traffic congestion along a roadway segment or at signalized and unsignalized intersections in an urban area.

The Volume to Capacity (V/C) ratio is a common LOS metric for evaluating traffic operations on roadway segments. The V/C ratio compares the volume of traffic traveling over a section of roadway against the theoretical capacity of that roadway segment. Low V/C ratios indicate low levels of congestion, while V/C ratios of 1.0 or greater indicate high levels of congestion.

Intersection delay is a LOS methodology for evaluating traffic operations at signalized intersections. The Highway Capacity Manual 2010 defines LOS at signalized intersections based on the average delay experienced per vehicle traveling through the intersection. At signalized intersections, average vehicle delays of 35 seconds or less represent stable operating conditions with little or no congestion. Average vehicle delays in excess of 80 seconds per vehicle indicate high levels of congestion and jammed conditions at intersections.

LOS is typically represented as a "report card" grading ranging from A at the highest/best level to F at the lowest/worst level. LOS A and B represent minimal delays, and LOS C represents generally acceptable delays. LOS D represents an increasing amount of delay where vehicle movements become more limited based on the density of surrounding vehicles, speeds begin to reduce on roadway segments, and an increasing number of vehicles are stopped at intersections. LOS E represents unstable flow where vehicle speed are highly variable, and intersections operations are approaching capacity, resulting in long queues with more vehicles stopped for longer durations. LOS F represents conditions when the volumes exceed the capacity of the system which results in slow vehicle speeds, excessive delays and long queues. Vehicles approaching an intersection with LOS F frequently have to wait for more than one signal cycle to get through the intersection. The following table summarizes LOS for roadway segments and signalized intersections.

Level of Service	Roadway Segments V/C Ratio	Signalized Intersections Avg. Delay (sec/veh)	General Description
A	≤ 0.60	≤ 10	Free Flow
B	> 0.60 - 0.70	> 10 - 20	Stable Flow (slight delay)
C	> 0.70 - 0.80	> 20 - 35	Stable Flow (acceptable delay)
D	> 0.80 - 0.90	> 35- 55	Approaching unstable flow (speeds somewhat reduced, more vehicles stop and may wait through more than one signal cycle before proceeding)
E	> 0.90 - 1.0	> 55- 80	Unstable Flow (speeds reduced and highly variable, queues occur, many vehicles have to wait through more than one signal cycle before proceeding)
F	> 1.0	> 80	Forced Flow (jammed conditions, long queues occur that do not clear, most vehicles wait through more than one signal cycle before proceeding)

LOS can be measured during different times of the day. Typically, traffic volumes during the p.m. peak periods are used, with the hour experiencing the worst traffic congestion being the time frame measured. However a.m. peak periods are also used, as well as the average daily traffic for a roadway or intersection.

Many cities apply LOS to intersections using the p.m. peak period traffic volumes The focus of this type of analysis is on vehicles and the capacity of an intersection to manage the highest traffic demand. This often results in the construction of large intersections with excess capacity during the non-peak period. By measuring LOS on both roadway segments and intersections, staff was able to more comprehensively

evaluate impacts to the City's transportation network. As a result, staff has identified roadway improvements that both increase capacity and, in accordance with the City's roadway development standards, benefit all users, including bicyclists, pedestrians, transit and vehicles.

When developing the concurrency recommendations, staff considered the various functions and needs of Shoreline's transportation network and the desire to have a system that works well for all users. Staff took a two-tiered approach (V/C and intersections) to evaluating concurrency that looked at the network in a more comprehensive manner. The recommended concurrency standard results in improvements to both roadway segments and intersections that will help traffic flow throughout the City. The traffic improvements will also result in improvement for pedestrians, bicyclists and transit, through implementation of the Shoreline's complete streets standards for roads.

The draft policy language recommends that the City adopt LOS D for all signalized intersections on arterials, with additional volume to capacity standards for Principal and Minor arterials. With these standards, the City will accept intersections that operate at LOS D or better and will help balance levels of congestion, the cost of added capacity, and the need to minimize diversion of traffic onto neighborhood streets.

Recommended Projects: The TMP will identify many transportation projects for the City. They will include projects to accommodate growth, bicycle and pedestrian projects needed in order to complete the system plans, projects to correct existing safety problems and corridor studies that will help identify solutions for large, corridor-wide projects, such as Richmond Beach Road and 145th Street. All of the unfunded projects included in 2012-2017 Transportation Improvement Program are included in the TMP, as well as several additional non-motorized and safety projects. Attachments B and C identify the locations for all projects needed to complete the draft bicycle and pedestrian system plans presented at the July 18th Council meeting.

Projects identified that are needed to accommodate growth include:

1. Addition of a two-way left turn lane on Meridian Avenue N from N 145th Street to N 205th Street
2. Addition of a two-way left turn lane on NE 185th Street from 1st Avenue NE to 5th Avenue NE
3. Addition of a two-way left turn lane on N 175th Street between Stone Avenue N (City Hall) and Meridian Avenue N
4. Extension of left turn pockets on N 175th Street between Meridian Avenue N and the I-5 on/off ramps
5. Intersection improvements at N 185th Street and Meridian Avenue N
6. Intersection improvements at N 175th Street and Meridian Avenue N
7. Intersection improvements at NE 175th Street and 15th Avenue NE

The total estimated costs for the seven projects identified to accommodate growth is $11 million.

Funding: The City of Shoreline funds transportation capital projects from the General Fund, Real Estate Excise Tax (REET), Transportation Benefit District (TBD) and grant revenue from the state and federal governments. The largest sources of funding for Shoreline's transportation programs and projects are grants. The Real Estate Excise Tax, General Fund, the City's Transportation Benefit District and investment interest comprise one-quarter of the funding for transportation projects and programs. REET funds and gambling taxes were much higher revenue sources in the past and have declined over the past ten years.

Grant funding for transportation projects is available from federal, state and local resources. Each funding source has specific rules and guidelines about what types of projects they will fund, how much of a project will be funded and timelines for expenditure of funds. Funding for bicycle and pedestrian transportation projects is very limited, especially in comparison to funding for highway and roadway projects. Most of the City's sidewalk projects that are funded by grants are part of larger capital projects, such as the Aurora Corridor project.

The City's has a long list of desired transportation projects includes many that are unfunded. This is common in jurisdictions, as the need for transportation improvements is continuous and new projects are needed to maintain existing infrastructure or accommodate growth.

The City's current funding sources for transportation projects are becoming increasingly less reliable. In 2000, voters in Washington State eliminated the motor vehicle excise taxes, resulting in a significant reduction for transportation funding. As vehicles become more fuel efficient and drivers switch to alternate modes of transportation, gasoline taxes that support grant programs diminish. Sales tax and Real Estate Sales Tax are unstable revenue sources, varying with the economy. Grants from all sources are highly competitive, each of which have specific eligibility criteria and restrictions for use of the funds.

In order to plan for transportation improvements, the City must identify and secure predictable funding sources. There are several local revenue sources authorized by the State which Shoreline can utilize for transportation projects. Many are voter approved options and are established as Transportation Benefit Districts (TBD). Cities may establish TBDs to fund a variety of transportation projects, such as capital improvements, operation of city streets, high capacity transportation systems, and other transportation programs of regional or statewide significance. A specific project or purpose must be identified when a funding source is established through a TBD. Some options include:

- Impact Mitigation Fee
- Motor Vehicle License Renewal Fee

- General Obligation Bonds and Revenue Bonds
- Property Tax Levy Lid Lift
- Sales Tax Increase
- Local Improvement District
- Revenue Generating Business License Fees.

III. Recommendation

No formal action is requested at this time. This report is for update purposes only.

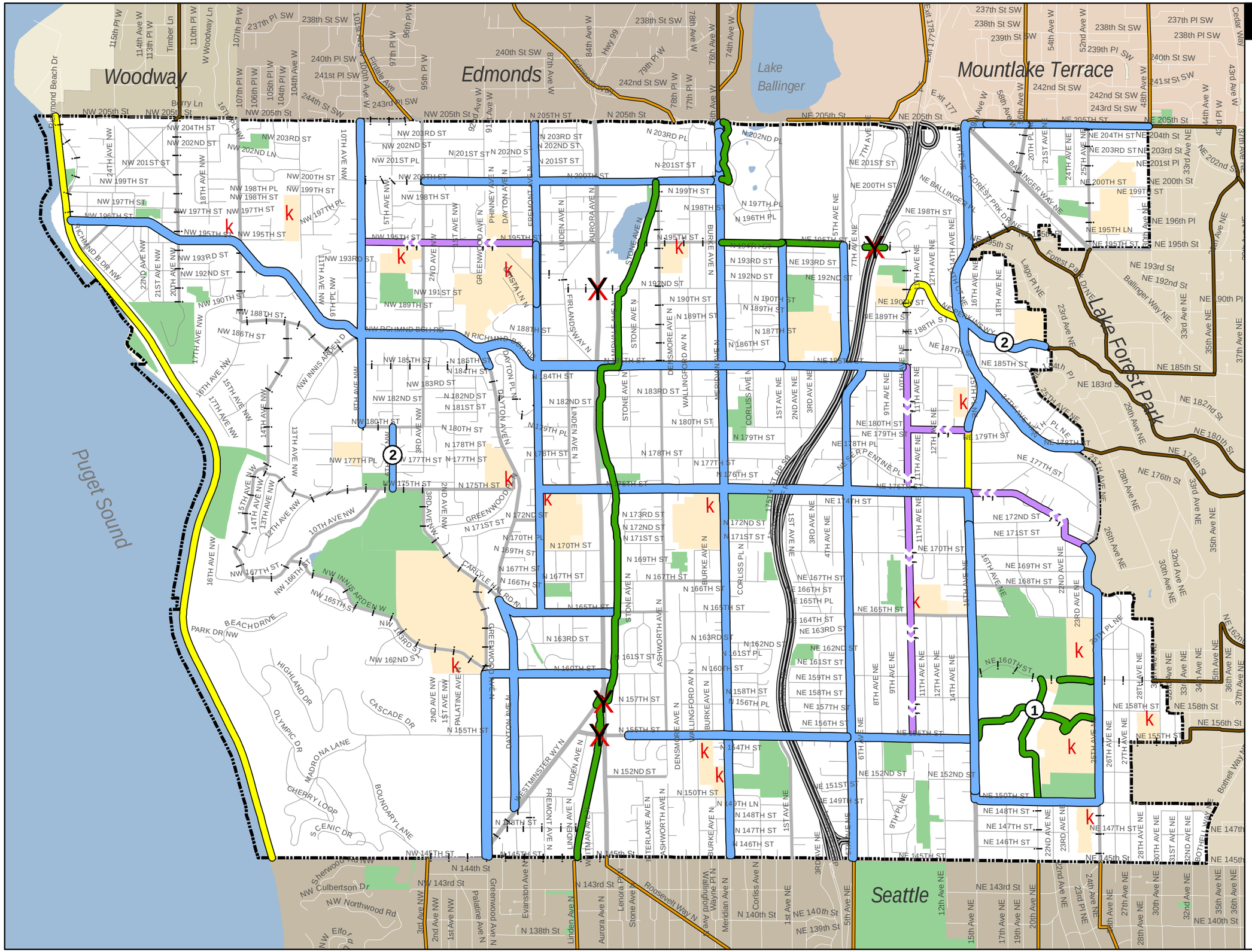
IV. Next Steps

The draft TMP is scheduled for release and environmental review in early August. Staff will return to Council for a public hearing on the TMP on September 12th, with final adoption scheduled for September 26th.

If you have questions or ideas that you would like staff to address at the study session, please email, plancom@shorelinewa.gov and amcintire@shorelinewa.gov.

Attachment A: Draft Bicycle System Plan
Attachment B: Draft Pedestrian System Plan
Attachment C: Draft Proposed Transit Enhancements – Short Range Plan
Attachment D: Draft Proposed Transit Enhancements – Mid Range Plan
Attachment E: Draft Proposed Transit Enhancements – Long Range Plan Draft
Attachment F: Proposed Street Classifications

This page intentionally blank



SHORELINE

Geographic Information System

DRAFT

Bicycle System Plan

Legend

Bicycle Plan Routes:

- Designated Bike Lane
- Separated Path
- Sharrow Lane
- Signed Bicycle Route
- To Be Determined
- Bicycle/Pedestrian Bridge

Other Cities' Bicycle Facilities/Plan

- Existing Facilities
- Planned Facilities

Other Map Features:

- School
- Park
- School Property

1 = Exact location through Fircrest to be determined.

2 = Bicycle Lane, Uphill; Signed Route, Downhill

0 500 1,000 2,000 3,000 Feet

1 inch = 1,953 feet

City of Shoreline
17500 Midvale Ave N
Shoreline, WA 98133
(206) 801-2700
www.shorelinewa.gov

Map Date: 2011

This page intentionally blank

SHORELINE

Geographic Information System

DRAFT

Proposed Pedestrian System Plan

Legend

Proposed Pedestrian System

Other Map Features:

k School

School Property

Park or Trail

0 500 1,000 2,000 3,000 Feet

1 inch = 1,945 feet

City of Shoreline
17500 Midvale Ave N
Shoreline, WA 98133
(206) 801-2700
www.shorelinewa.gov

Map Date: 2011

This page intentionally blank

SHORELINE

Geographic Information System

DRAFT

Proposed Transit Enhancements: Short-Range Plan

Bus-Rapid-Transit Service Beginning 2013

Increase Route 373 to All-Day Service

Increase Route 330 to All-Day Service

Legend

- Bus Stop
- Park and Ride (P&R)

Metro Transit

- 5: Downtown Seattle-Shoreline
- 28: Downtown Seattle-Shoreline
- 65: North Seattle-University District
- 73: Downtown-Cowen Park-Jackson Park
- 331: Kenmore-Aurora Village-Shoreline Comm. College
- 345: Northgate-Transit Center-Shoreline Comm. College
- 346: Northgate Transit Center-Aurora Village
- 347: Northgate Transit Center-Richmond Beach
- 348: Northgate Transit Center-Richmond Beach
- 358: Downtown Seattle-Aurora Village
- 372: Woodinville-Kenmore-University District (Seattle)

Community Transit

- Swift & 101: Aurora Village-Transit Center-Everett Station
- 118: Aurora Village-Transit Center-Ash Way Park and Ride
- 130: Aurora Village Transit Center-Lynnwood Transit Center
- 131: Aurora Village-Transit Center-Edmonds Comm. College

Sound Transit

- 510: Everett-Downtown Seattle
- 511: Ash Way Park and Ride-Downtown Seattle
- 522: Woodinville-Downtown Seattle

Other Map Features

- Transit Attractions/Destinations
- School
- School Property
- Park

City of Shoreline
17500 Midvale Ave N
Shoreline, WA 98133
(206) 801-2700
www.shorelinewa.gov

Map Data: 2011

0 500 1,000 2,000 3,000 Feet

1 inch = 2,046 feet

This page intentionally blank

SHORELINE

Geographic Information System

DRAFT

Proposed Transit Enhancements: Medium-Range Plan

Light Rail Service to Northgate

Maintain EAST-WEST Service

Increase Service Frequency to NORTHGATE

Maintain EAST-WEST Service

Maintain Connections to DOWNTOWN

New Express Service from SHORELINE COMMUNITY COLLEGE to NORTHGATE

Legend

- Bus Stop
- Park and Ride (P&R)

Metro Transit

- 5: Downtown Seattle-Shoreline
- 28: Downtown Seattle-Shoreline
- 65: North Seattle-University District
- 73: Downtown-Cowen Park-Jackson Park
- 331: Kenmore-Aurora Village-Shoreline Comm. College
- 345: Northgate-Transit Center-Shoreline Comm. College
- 346: Northgate Transit Center-Aurora Village
- 347: Northgate Transit Center-Richmond Beach
- 348: Northgate Transit Center-Richmond Beach
- 358: Downtown Seattle-Aurora Village
- 372: Woodinville-Kenmore-University District (Seattle)

Community Transit

- Swift & 101: Aurora Village-Transit Center-Everett Station
- 118: Aurora Village-Transit Center-Ash Way Park and Ride
- 130: Aurora Village Transit Center-Lynnwood Transit Center
- 131: Aurora Village-Transit Center-Edmonds Comm. College

Sound Transit

- 510: Everett-Downtown Seattle
- 511: Ash Way Park and Ride-Downtown Seattle
- 522: Woodinville-Downtown Seattle

Other Map Features

- Transit Attractions/Destinations
- School
- Park
- School Property

City of Shoreline
17500 Midvale Ave N
Shoreline, WA 98133
(206) 801-2700
www.shorelinewa.gov

0 500 1,000 2,000 3,000 Feet

1 inch = 2,046 feet

Map Data: 2011

This page intentionally blank

SHORELINE

Geographic Information System

DRAFT

Conceptual Transit Enhancements: Long Range Plan

Light Rail Service in Shoreline

Legend

Light Rail Station Scenario Options

- Light Rail Station (Scenario #1)
- Light Rail Station (Scenario #2)
- Transit Connection To Be Determined

Bus Locations

- Bus Stop
- Park and Ride (P&R)

Metro Transit

- 5: Downtown Seattle-Shoreline
- 28: Downtown Seattle-Shoreline
- 65: North Seattle-University District
- 73: Downtown-Cowen Park-Jackson Park
- 331: Kenmore-Aurora Village-Shoreline Comm. College
- 345: Northgate-Transit Center-Shoreline Comm. College
- 346: Northgate Transit Center-Aurora Village
- 347: Northgate Transit Center-Richmond Beach
- 348: Northgate Transit Center-Richmond Beach
- 358: Downtown Seattle-Aurora Village
- 372: Woodinville-Kenmore-University District (Seattle)

Community Transit

- Swift & 101: Aurora Village-Transit Center-Everett Station
- 118: Aurora Village-Transit Center-Ash Way Park and Ride
- 130: Aurora Village Transit Center-Lynnwood Transit Center
- 131: Aurora Village-Transit Center-Edmonds Comm. College

Sound Transit

- 510: Everett-Downtown Seattle
- 511: Ash Way Park and Ride-Downtown Seattle
- 522: Woodinville-Downtown Seattle

Other Map Features:

- Transit Attractions/Destinations
- School
- School Property
- Park and Trail

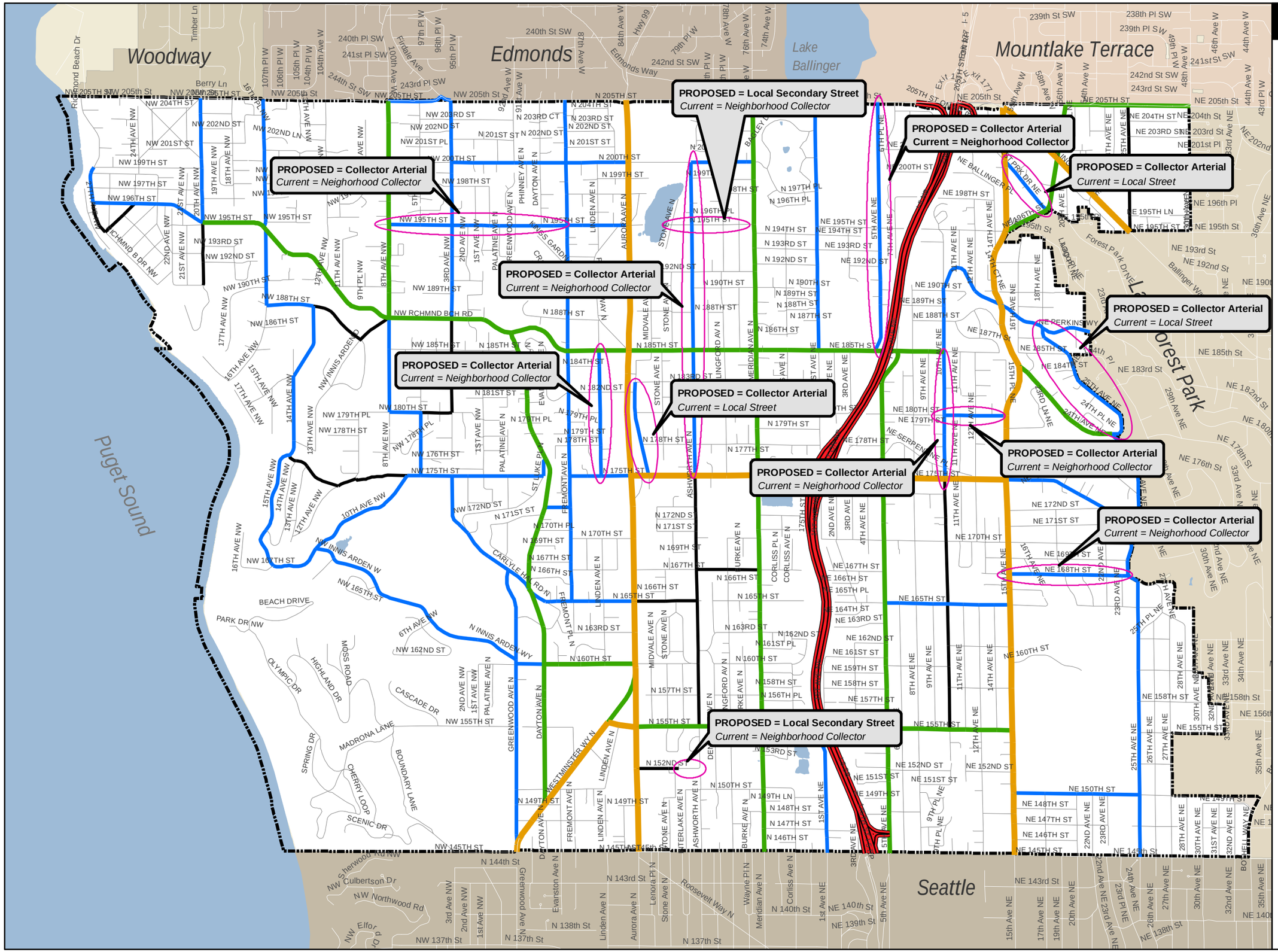
City of Shoreline
17500 Midvale Ave N
Shoreline, WA 98133
(206) 801-2700
www.shorelinewa.gov

0 500 1,000 2,000 3,000 Feet

1 inch = 2,046 feet

Map Data: 2011

This page intentionally blank



SHORELINE

Geographic Information System

DRAFT

Recomended Street Classifications

Legend

- Interstate

Arterial Streets:

- Principal Arterial
- Minor Arterial
- Collector Arterial

Non-Arterial Streets:

- Local Primary Street *(formally "Neighbhorhood Collector")*
- Local Secondary Street *(formally "Local Street")*
- Recommend Change / Affected Street Segment
- City Limits

Note: This map includes the following recommended changes to street classification titles:

- Neighborhood Collectors to be renamed "Local Primary Streets"
- Local Streets to be renamed "Local Secondary Streets"

0 500 1,000 2,000 3,000 Feet

1 inch = 1,919 feet

CITY OF SHORELINE

Map Date: April 2011