Council Meeting Date: July 18, 2011 Agenda Item: 8(a) 9 (a)

CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:

Transportation Master Plan – Goal and Policy Review

DEPARTMENT:

Public Works

PRESENTED BY:

Mark Relph, Public Works Director

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

ACTION:

Ordinance

Resolution

Motion

X Discussion

PROBLEM/ISSUE STATEMENT:

The purpose of this staff report is to discuss the draft goals, policies, implementation strategies and system plans associated with the Transportation Master Plan (TMP) update. The TMP is a 20 year plan that helps the City plan for changes to its transportation network. Staff is in the final stages of developing the draft TMP and would like feedback from Council regarding identified issues.

Tonight's discussion will focus on the goals, policies and implementation strategies in these areas:

- 1. Sustainability and Quality of Life
- 2. Master Street Plan
- 3. Bicycle Plan
- 4. Pedestrian Plan
- 5. Transit Plan

Staff has one additional policy discussion scheduled with Council, August 1, before the draft TMP is released this fall. The topics of that discussion include concurrency, funding, projects and long-range forecasts. Staff will use Council feedback from these two meetings to prepare the final TMP draft.

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.

RESOURCE/FINANCIAL IMPACT:

Consultant costs for work associated with the TMP, including development of the impact fee program, total \$285,000. The policies and projects identified in the plan, as well as the funding strategy contained therein, will direct the City's transportation investments for several years to come.

RECOMMENDATION

No formal action is required at this time, although staff would like Council direction regarding policy issues. This report is for discussion purposes only.

Approved By:

City Manager <u>M</u> City Attorney

INTRODUCTION

Staff is in the final stages of developing the draft TMP for Council and public review. At this meeting, staff will discuss the draft policy direction and system plans for much of the TMP and requests feedback from Council. The draft goals and policies prepared to date have been developed utilizing previous Council direction, public input, the existing vision, goals and policies in the Comprehensive Plan and the Shoreline Sustainability Strategy. Staff will integrate Council comments into the final draft before releasing it for public and environmental review.

BACKGROUND

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. Attachment I is map listing the transportation system projects that have been completed between 1999 and 2011 through the City's CIP.

New transit services are also in service or planned for Shoreline. Community Transit began bus rapid transit (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 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.

Staff has met with Council several times throughout the course of the TMP's development. During a series of meetings in spring/summer 2010, Council provided staff with general direction regarding the discussion topics in this report. Staff has used that direction, as well as feedback received from the public, to develop specific goals, policies and implementation strategies. Both the existing goals and policies in the Comprehensive Plan were used, as well as new language.

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.

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.

Attachment A includes the draft goals, policies and implementation strategies for five chapters of the TMP:

- 1. Sustainability and Quality of Life
- 2. Master Street Plan
- 3. Bicycle Plan
- 4. Pedestrian Plan
- 5. Transit Plan

Staff would like to review these policies during this study session. Additional policies will be included in the Concurrency chapter of the TMP, to be discussed with Council on August 1.

Many of the existing Comprehensive Plan policies have been retained and some have been recommended to be designated as implementation strategies. Staff has also drafted some new policies as well as new implementation strategies.

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 B. 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 C 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 neighborhood collector 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 D, E and F 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 that 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 ST3. 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 and 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 G. 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. Attachment H is the recommended table of typical Shoreline street characteristics, including the labeling changes.

STAKEHOLDER OUTREACH

To date, there have been several components of public outreach associated with the TMP update. The TMP update began in April 2009 with internal staff meetings and project planning efforts and public involvement was initiated the following July with a public open house to gather citizen feedback about bicycle, pedestrian and transit issues. Residents were also asked to participate in a citizens' advisory committee to help staff develop policy and system plan recommendations for bicycle and pedestrian transportation. Twelve residents volunteered and this committee met eight times from September 2009 through May 2010. They included:

- Howard Barkhoff
- Andrew Behnke
- Mark Davies
- Chris Egge
- Paulette Gust
- Barbara Guthrie

- Katherine Hall
- Kenneth Howe
- Patrice McDermott
- Robert Phelps
- Allan Rand
- Joseph Wasikowski

Staff met with Council several times from March through August 2010 to receive policy direction on several aspects of the TMP update.

An open house was held on April 20, 2011 as an opportunity for residents to view draft materials developed by staff and provide feedback. The open house was advertised in Currents and on the City's website. The Shoreline Area News and Shoreline Patch blogs each included postings in advance of the open house. Residents who have signed up for notification about the TMP and advocacy groups, including Feet First, Bicycle Alliance of Washington, the Cascade Bicycle Club and the Cascade Land Conservancy, were all notified of the open house. Several of the advocacy groups sent notice of the open house to their membership.

At the April open house, five stations were set up and staffed by City staff, the City's traffic modeling consultant and two resident volunteers that had served on the Bicycle and Pedestrian Advisory Committee. A representative from Sound Transit was also present to provide information about Sound Transit's North Corridor Transit project.

Approximately thirty people attended the open house. Residents had an opportunity to view the materials, ask questions of the people staffing the individual stations and provide feedback by writing comments on large maps at each station. Questionnaires were available for participants to complete. The materials presented at the open house and the questionnaire were posted on the City's website to provide another opportunity

to receive feedback. The City received 27 completed questionnaires from the open house and via the City website.

Staff is scheduled to present additional draft policies and materials to Council on August 1 and a public hearing for the TMP is scheduled for September 12. Environmental review is scheduled to be underway through August. Council is scheduled to adopt the TMP on September 12.

COUNCIL GOAL(S) ADDRESSED

This project addresses Council Goal 2: Provide safe, efficient and effective infrastructure to support our land use, transportation and surface water plans, as one of the major objectives of the Goal is the update of the Transportation Master Plan, including citywide trail, bicycle, and transit elements.

RESOURCE/FINANCIAL IMPACT

At this time, there is no additional financial impact to the City associated with completion of the TMP. Funds for the staff and consultant time needed to complete the update are already allocated. Consultant costs for work associated with the TMP, including development of the impact fee program, total \$285,000. However, the policies and projects identified in the plan, as well as the funding strategy contained therein, will direct the City's transportation investments for several years to come.

RECOMMENDATION

No formal action is required at this time, although staff would like Council direction for policy issues. This report is for discussion purposes only.

ATTACHMENTS

Attachment A: Draft TMP Goals, Policies and Implementation Strategies

Attachment B: Bicycle System Plan

Attachment C: Draft Pedestrian System Plan

Attachment D: Draft Proposed Transit Enhancements – Short Range Plan Attachment E: Draft Proposed Transit Enhancements – Mid Range Plan

Attachment F: Draft Proposed Transit Enhancements - Long Range Plan Draft

Attachment G: Proposed Street Classifications

Attachment H: Typical Shoreline Street Characteristics

Attachment I: Completed Transportation System Improvements 1999-2011

INTRODUCTION

The Transportation Master Plan identifies several goals and policies that provide the framework for the City's transportation vision. It includes existing goals and policies contained in the City's Comprehensive Plan, as well as new policy recommendations for the next update of the Comprehensive Plan. Many of the goals, policies and implementation were developed in response to Council direction provided during a series of meetings in spring/summer 2010. The staff reports for those discussions can be viewed through the following links to previous staff reports:

- March 22, 2010 Staff Report
- June 14, 2010 Staff Report
- June 21, 2010 Staff Report
- July 6, 2010 Staff Report
- August 10, 2010 Staff Report

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 action items or specific tasks the City can undertake in order to implement an identified goal or policy. The implementation strategies described in this plan are not necessarily the only options available to achieve a stated goal or policy. Where additional detail or clarification is needed for an implementation strategy, discussion is provided.

The draft goals, policies and implementation strategies listed below are an excerpt from the working draft of the TMP. They are not written in priority order. When incorporated within the document, the supporting text helps to provide context.

Several of the policies and implementation strategies reference impact fees. These policies and implementation strategies are subject to the adoption of an impact fee program by the City Council.

I. Sustainability and Quality of Life

A. General

- 1. Existing Comprehensive Plan Goal FG 13: Encourage a variety of transportation options that provide better connectivity within Shoreline and throughout the region.
- 2. Existing Comprehensive Plan Goal T I: Provide safe and friendly streets for Shoreline citizens.
- 3. **Existing Comprehensive Plan Goal T II:** Work with transportation providers to develop a safe, efficient and effective multimodal transportation system to address overall mobility and accessibility. Maximize the people carrying capacity of the surface transportation system.

- 4. Existing Comprehensive Plan Policy T1: Make safety the first priority of citywide transportation planning and traffic management. Place a higher priority on pedestrian, bicycle and automobile safety over vehicle capacity improvements at intersections.
- **5.** Recommended Policy: Reduce the impact of the City's transportation system on the environment through the use of technology, expanded transit use and nonmotorized transportation options.

- a) Minimize curb cuts (driveways) on arterial streets by combining driveways through the development review process and in implementing capital projects. (Existing Comprehensive Plan Policy T9)
- b) Implement the Transportation Master Plan that integrates the City's Complete Streets program. Promote adequate capacity on the roadways and intersections to provide access to homes and businesses. (Existing Comprehensive Plan Policy T10 - modified)
- c) Coordinate transportation infrastructure design and placement to serve multiple public functions when possible, i.e. integrate storm water management, parks development and transportation facility design. (Existing Comprehensive Plan Policy T11)
- d) Implement a coordinated signal system that is efficient and which is flexible depending on the demand or time of day and responsive to all types of users, including transit riders, bicyclists and pedestrians. (Existing Comprehensive Plan Policy T12 - modified)
- e) Require development applicants to provide an evaluation of the transportation impacts resulting from significant land use developments. A higher level and more specific analysis is required to address the unique transportation needs of certain land uses, such as pedestrian activity near schools or high traffic volumes outside of standard peak period travel times.
 - Discussion: Transportation impact studies generally focus on the impacts of vehicle trips, primarily during the p.m. peak period. Many uses, such as schools and churches, have significant traffic impacts at times other than the p.m. peak period and these impacts should be analyzed. Additionally, some uses have transportation demands beyond those of vehicles. For example, schools generate high pedestrian volumes. The needs of these pedestrians and bicyclists should be evaluated to determine if adequate facilities are available to accommodate them. Pedestrian safety must also be considered, as there are likely to be conflicts with vehicular traffic.
- f) Ensure all roadways in the City are appropriately signed and marked, identifying the allowed use(s), speeds and restrictions for all streets.

 Discussion: The various classifications of streets in the City require different types and levels of signage and markings. Arterial streets in Shoreline have centerline stripes to delineate lanes, while non-arterial streets do not. Streets that are part of the City's bicycle system must be marked with separated lanes, sharrows or free standing signage, as appropriate.
- g) Develop a safe roadway system. Examples of methods to improve safety may depend upon existing conditions and can include:
 - two-way center left turn lanes,
 - median islands,
 - turn prohibitions,

- signals, illumination, signage
- · access management, and
- other traffic engineering techniques. (Existing Comprehensive Plan Policy T5 – modified)
- h) Work with bicycle and pedestrian advocacy groups, public health agencies, traffic safety organizations and the state legislature to modify existing traffic laws to allow for the design and construction of streets with speed limits below 25 miles per hour.
 - Discussion: State law currently prohibits the designation of any public street with a speed limit below 25 miles per hour, except in school zones. Through roadway design and the use of facilities intended to reduce traffic speeds, streets can be developed to safely accommodate all users.
- i) Utilize the Arterial Classification Map as a guide in balancing street function with land uses. Minimize through traffic on local streets. (Existing Comprehensive Plan Policy T17)
- Monitor traffic growth on arterials and non-arterials and take measures to keep volumes within appropriate limits for each street based upon its classification. (Existing Comprehensive Plan Policy T47 – modified)
- k) Encourage the use of programs and services that minimize the need to own a car, such as carsharing and increased transit use.
- Encourage the use of technologies that minimize reliance on fossil fuels and reduce greenhouse gas emissions, such as electric and high fuel efficiency automobiles.
- m) Update the development code to include requirements for project elements that help minimize environmental impacts, such as electric vehicle charging stations, car sharing programs or increased bicycle parking and storage facilities.

B. Complete Streets

1. **Recommended Policy:** In accordance with Complete Streets standards, new or rebuilt streets shall address the use of the right-of-way by all users and consider the unique aspects of Shoreline's transportation network.

C. Neighborhood Involvement and Communication

- 1. Existing Comprehensive Plan Goal VI: Protect the livability and safety of residential neighborhoods from the adverse impacts of the automobile.
- 2. **Existing Comprehensive Plan Policy T2:** Use engineering, enforcement and educational tools to improve traffic safety on City roadways.
- 3. **Recommended Policy:** Communicate and involve residents and businesses in the development and implementation of transportation projects.

Implementation Strategies

 Work with neighborhood residents to reduce speeds and cut-through traffic on non-arterial streets with education, enforcement, traffic calming, signing, or other techniques. Design new residential streets to discourage cut-through traffic while

- maintaining the connectivity of the transportation system.(**Existing Comprehensive Plan Policy T45**)
- b) Coordinate with the City's police department to monitor traffic accidents, citizen input/complaints, traffic violations and traffic growth to identify and prioritize locations for safety improvements. (Existing Comprehensive Plan Policy T3 modified)
- Streamline the Neighborhood Traffic Safety Program process and improve opportunities for public input. (Existing Comprehensive Plan Policy T46)
- d) Monitor innovations and changes to standards in the traffic calming and neighborhood stability field and consider implementing them when proven effective and safe.
- e) Communicate with citizens regarding transportation improvement projects so that they are aware of the schedule and scope of projects through methods such as:
 - Telephone hotlines
 - Notices
 - Currents
 - City website
- D. Transportation Demand Management and Transportation System Management
- 1. **Existing Comprehensive Plan Goal T VII:** Encourage alternative modes of transportation to reduce the number of automobiles on the road.
- 2. **Recommended Policy:** Ensure residents have options to travel throughout Shoreline and the region using modes other than single occupancy vehicles.

Implementation Strategies

- a) Support educational programs for residents that communicate transportation costs, safety and travel choices, including specialized programs that emphasize safety to children. (Existing Comprehensive Plan T49 – modified)
- b) Support state and federal tax policies that promote transit and ridesharing. (Existing Comprehensive Plan T50)
- c) Develop parking system management and regulations to support alternatives to the single occupant vehicle. (Existing Comprehensive Plan T51)
- d) Incorporate new strategies, as they are developed, into Shoreline's Transportation Demand Management programs that promote or provide alternatives to driving alone. (Existing Comprehensive Plan T54 modified)
- e) Support the development of employer based programs that encourage employees to minimize single occupancy vehicle trips, such as telecommuting, organizing vanpools and providing showers and secure bicycle parking facilities for bicyclists.

E. Commute Trip Reduction

1. **Recommended Policy:** Implement the City's Commute Trip Reduction Plan.

Implementation Strategies

- a) Work with major employers, developers, schools and conference facilities to provide incentives to employees, tenants, students, and visitors to utilize alternatives other than the single occupant vehicle. (Existing Comprehensive Plan Policy T48)
- Analyze alternatives by which employers and/or developers not subject to the Commute Trip Reduction Act can encourage their employees and tenants to pursue alternative transportation choices. (Existing Comprehensive Plan Policy T52)
- c) Work with Shoreline Community College and King County Metro to reduce employee and student use of single occupant vehicles and promote transit and carpooling. (Existing Comprehensive Plan Policy T53)

F. Street Lighting

1. Existing Comprehensive Plan Policy T8: Develop a comprehensive detailed street lighting and outdoor master lighting plan to guide ongoing public and private street lighting efforts.

Implementation Strategies

- a) Work with Seattle City Light to develop and implement a master lighting plan. The City's master lighting plan should include the following considerations:
 - light level standards
 - reduction of light pollution to enhance star gazing;
 - · nighttime safety criteria;
 - annual operational and maintenance costs
 - streetlight lighting;
 - streetlight pole height standards;
 - criteria for lamp fixture choice:
 - lamp technology; and
 - color rendering and light spectrum criteria.
- b) Due to evolving lighting technologies and lamp fixtures, the City should review this plan on a regular basis.

G. Stormwater Management

1. **Recommended Policy:** Stormwater management shall be integrated into all transportation projects, including low impact development or green street elements when practical.

Implementation Strategies

a) The City's surface water utility is involved in design of transportation projects that affect any part of the City's stormwater utility early in the design process. Surface water funds will contribute funding to the surface water components of transportation projects.

Discussion: The types of facilities selected for inclusion with transportation projects have a long term financial impact on the Utility, both in their initial construction and installation and their long term maintenance needs. The Surface

- Water Utility can best plan for transportation infrastructure needs by coordinating the drainage requirements for transportation projects as part of the City's six year Capital Improvement Program. The practicality, costs and benefits associated with different types of facilities shall be considered during the design process.
- b) As new drainage facilities are required or optionally proposed for transportation projects, green technologies will be considered for inclusion. The review process will examine factors such as cost of installation, maintenance and life span.
- c) Integrate features of green streets throughout the City's transportation system, including arterials and local streets. Designate green streets on select local streets to help connect schools, parks, ecosystems and neighborhoods. Utilize the standards identified in the Master Street Plan when designing roadway improvements for green streets and combine green street design with traffic calming techniques on residential streets where appropriate.

H. Maintenance

- 1. Existing Comprehensive Plan Goal T XI: Maintain the transportation infrastructure so that it is safe and functional.
- 2. Existing Comprehensive Plan Policy T18 (modified): Develop a regular maintenance program and schedule for all components of the transportation infrastructure. Maintenance schedules should be based on safety/imminent danger and on preservation of resources.

Implementation Strategies

- a) Inventory and inspect the transportation infrastructure. (Existing Comprehensive Plan Policy T19)
- b) Maintain a pavement management system. (Existing Comprehensive Plan Policy T20 modified)
- c) Upgrade our signal system so that it is responsive, fully interconnected, and moves people efficiently. (Existing Comprehensive Plan Policy T21)
- d) Ensure that pedestrian facilities are maintained properly. Responsibility for maintenance and repair is shown in the table below.

	Landscaping responsibility (Behind the curb/Beyond the asphalt edge)	Sidewalk clear/clean	Sidewalk repair	Trees (in ROW, behind the curb/beyond the asphalt edge)	Driveway Aprons
Principal Arterials	City	Adjoining property owner	City	City	Adjoining property owner
Minor and Collector Arterials, Local Primary Streets	City	Adjoining property owner	City	City	Adjoining property owner
Local Secondary Streets and Green Streets	Adjoining property owner	Adjoining property owner	City	City	Adjoining property owner

e) Inform and educate residents of their responsibility to maintain pedestrian walkways and the need to keep pedestrian facilities free from obstructions.

Discussion: Walkways need to be safe and clear. Property owners are responsible for ice and snow removal and maintenance of vegetation on private property that can encroach into walkways adjacent to their property. Property owners must also be aware of the need to keep objects, such as vehicles and waste bins, out of walkways and the roadway. The City needs to provide information/guidelines to property owners that explain their requirements for maintaining landscaping in the ROW and keeping the sidewalk clear/clean and an enforcement program is needed to ensure sidewalks are kept clear of intruding vegetation.

- f) Ensure the City's maintenance program keeps pedestrian and multi-purpose facilities, such as the Interurban Trail, in safe, operable conditions.
- g) Establish priorities for tree and vegetation removal and maintenance on primary arterials, minor arterials, collector arterials and neighborhood collectors.
- h) Expand and/or develop a program to address sidewalk damage from tree roots and continue to plant street trees that are appropriate for the built environment. Discussion: As trees grow and mature, they have the potential to damage sidewalks and streets. This is already occurring in many areas of the City. The City's maintenance program should allow for the removal of trees when there is no mechanism available to prevent damage and for the retention of trees when sidewalk repair is needed, such as when tree roots are damaging sidewalks. Whenever trees are removed, appropriate street trees must be planted in their place. Street tree removal should be timed to prevent removal of too many trees at one time.

The City should also explore different technologies that accommodate the placement of trees in the right-of-way. In some cases, it may be appropriate to have an amenity/landscaping area behind the sidewalk, rather than in front, to address root damage from trees.

- i) Develop a mechanism for new development to maintain internal walkways, trails, fences or other public amenities constructed as a part of private development.
- j) Ensure trees planted in the right-of-way have root systems or root management systems appropriate for sidewalk proximity. Mechanisms to prevent sidewalk damage from roots should be installed with new trees as needed.

I. Freight and Mobility System

- 1. Existing Comprehensive Plan Goal T VIII: Develop a transportation system that enhances the delivery and transport of goods and services.
- 2. **Existing Comprehensive Plan Policy T55 (modified):** Ensure that service and delivery trucks, and other freight transportation can move with minimal delay on appropriate streets in Shoreline as shown on the truck route map.

- a) Minimize the disruption of arterial traffic flow by developing time-limited loading zones in commercial areas, if needed, and regulating areas that do not have loading zones. Develop a plan for business access streets to provide freight loading zones on less-heavily traveled roadways.(Existing Comprehensive Plan Policy T56)
- b) Discourage truck traffic through residential neighborhoods during typical sleeping hours. (Existing Comprehensive Plan Policy T57)

 Work with developers/property owners along the Aurora Avenue North corridor and in North City to plan business access streets or alleys as a part of redevelopment. (Existing Comprehensive Plan Policy T58 - modified)

J. Regional Coordination

- 1. Existing Comprehensive Plan Goal T X: Coordinate the implementation and development of Shoreline's transportation system with our neighbors and regional partners.
- 2. Recommended Policy: Implement a strategy for regional coordination that includes the following activities:
 - Identify important transportation improvements in Shoreline which involve other agencies. These may include projects on Aurora Avenue N, 145th Street, 205th Street, Interstate 5 and its access ramps, and transit projects.
 - Remain familiar with and involved in federal, state, regional and county budget and appropriations processes.
 - Participate in regional and county planning processes that will affect the City's strategic interests.
 - Form strategic alliances with potential partners, such as adjacent jurisdictions or like-minded agencies.
 - Develop federal and state legislative agendas and meet with US and state representatives (elected officials and staff) who can help fund key projects.
 - Develop regional legislative agenda and meet with area representatives (elected officials and staff) to the Puget Sound Regional Council, Sound Transit and King County Council.
 - Develop partnerships with the local business community to advocate at the federal, state and regional level for common interests.

Implementation Strategies

- a) Develop interlocal agreements with neighboring jurisdictions for development impact mitigation, for coordination of joint projects, and management of pass through traffic. Interjurisdictional projects include:
- Actively pursue annexation of the 145th Street right-of-way, in its entirety or to the centerline. Coordinate a study including the Washington State Department of Transportation, City of Seattle, King County and Sound Transit to determine the ultimate improvements and a funding plan.
- Consider annexing 205th Street to the centerline.
- Work with adjacent jurisdictions and stakeholders to jointly study the 205th Street and Bothell Way NE corridors to develop level of service standards as part of a plan and funding strategy for future improvements. (Existing Comprehensive Plan Policy T67 – modified)
- b) Work with neighboring jurisdictions to reduce air quality impacts and manage storm water runoff from the transportation system. (Existing Comprehensive Plan Policy T68)

II. Master Street Plan

- Recommended Policy: Design City transportation facilities with the primary purpose of moving people through multiple modes, including automobiles, freight trucks, transit, bicycles and walking, with vehicle parking identified as a secondary use.
- 2. **Recommended Policy:** Implement the standards outlined in the City's Master Street Plan for development of the City's roadways.
- 3. **Existing Comprehensive Plan Policy T16 (modified):** Frontage improvements shall support the adjacent land uses and fit the character of the areas in which they are located.

- Utilize the Arterial Classification Map as a guide in balancing street function with land uses. Minimize through traffic on local streets. (Existing Comprehensive Plan Policy T17)
- b) Require frontage improvements as part of City capital projects such as park improvements and facility developments.
- c) Allow for flexibility in the implementation of the Master Street Plan to address site specific, unique or unforeseen circumstances, such as the presence of bus stops, topography or large trees. Sidewalks should be separated from the curb by a five foot wide amenity zone/landscaping strip. Sidewalks adjacent to single family residential development shall be a minimum of five feet wide. Require the construction of wider sidewalks (minimum width of eight feet) adjacent to uses other than single family residential including, but not limited to:
- Commercial uses
- Medium and high density residential uses
- Parks
- Churches
- Libraries
- Schools
- Sports and social clubs

- Major transit facilities
- Civic facilities
- Conference centers
- Museums
- Medical facilities
- Day cares
- Funeral Homes
- d) Assure that vehicular and non-motorized transportation systems are appropriately sized and designed to serve the surrounding land uses and to minimize the negative impacts of growth. (Existing Comprehensive Plan Policy T15)
- e) Require new development and redevelopment to upgrade substandard frontage improvements in accordance with the Master Street Plan.
- f) Require the dedication of right-of-way and construction of frontage improvements in conjunction with new development in a manner that is equitable, and related to the impacts of adjacent land use. Dedication or building setbacks should be required during the permit review process to ensure new development is served by the appropriate street cross-section identified in the Master Street Plan. Discussion: The Master Street Plan establishes the required cross-section for all roadways in the City. In order to ensure the needed right-of-way is available for transportation improvements and that frontage improvements are constructed in

the correct location, staff will evaluate the existing right-of-way and roadway improvements during permit review. Determinations shall be based upon the need for right-of-way improvements associated with adjacent land uses, such as wider sidewalks, and the historic patterns of dedications in the vicinity. For example, if only half of the needed right-of-way is present and it is clear that all of the existing right-of-way was dedicated by owners opposite a property wishing to develop, the remaining half can be exacted from the developing property. Front yard Setbacks should at a minimum be sufficient to avoid conflicts with future transportation projects.

III. Bicycle Plan

A. Creating a Bicycle System in Shoreline

- Existing Comprehensive Plan Goal T V: Develop a bicycle system that is connective and safe and encourages bicycling as a viable alternative method of transportation.
- Recommended Policy: Implement the Bicycle System Plan. Develop a program
 to construct and maintain bicycle facilities that are safe, connect to destinations,
 access transit and are accessible by all. Use short term improvements, such as
 signage and markings, to identify routes when large capital improvements will not
 be constructed for several years.

- a) Develop a wayfinding signage and mapping system for bicyclists that directs and guides users to public facilities, parks, schools, commercial areas, adjoining cities and major transit and transportation facilities, such as the Interurban Trail.
 This signage should identify facility locations at entrances to the City.
- b) Work with Lake Forest Park to develop a regional bicycle linkage from the Interurban Trail to the Burke-Gilman Trail. Discussion: This regional bicycle facility should be named to improve awareness and recognition.
- c) Through the City's Complete Streets policies, accommodate bicycles in future roadway or intersection improvement projects with facilities or technology that makes bicycling safer, faster and more convenient for riders.
- d) Continue to require new commercial developments to provide bicycle facilities that encourage bicycling.
 - Discussion: Commercial developments should include covered, secure and convenient bicycle parking facilities for employees and visitors/customers and showers and lockers for employees. The City should encourage existing businesses to install bicycle parking facilities for the public and employees, and showers and lockers for employees who commute to work by bicycle.
- e) Include bicycle facilities identified on the City's Bicycle System as part of the City's six-year Capital Improvement Program and Transportation Improvement Program. Develop plans for implementation of short and long term improvements to the bicycle system, including integration with the City's annual overlay program.

- f) Coordinate bicycle facility design and construction with adjacent jurisdictions where routes cross the City boundaries.
- g) Replace storm grates with bicycle friendly grates.
- h) Place a high priority on sweeping streets that contain bicycle facilities or are designated as bicycle streets on the City's system plan.
- i) Provide bicycle lane pathway maintenance, such as filling potholes and repairing cracks and large gaps in concrete panels.
- j) Identify bicycle detour routes in construction areas.
- k) Educate residents about the importance of maintaining safe bicycle facilities and identifying what they can do to assist in the City's efforts (for example, do not blow leaves into bicycle lanes).
- Continue efforts locally and regionally to educate drivers about bicycle laws and behaviors and to educate bicyclists on laws and behaviors.
- 3. **Recommended Policy:** Develop standards for the creation and maintenance of bicycle facilities.

Implementation Strategies

- a) Develop a bicycle system that includes facilities that support and are appropriate for existing and new land uses.
- b) Develop a system to determine the safe and appropriate bicycle facility for a given location that takes into consideration topography, available right-of-way, traffic volumes and other factors.
- c) Integrate highly visible and accessible signage, markings, lighting and amenities for bicycles.
 - Discussion: Bicycle amenities can include painted bicycle lanes, "hot spots" to activate traffic signals or push buttons for cyclists. The hot spot marking system and maintenance system must ensure the loops installed are sensitive to bicycles, in appropriate locations within lanes and are maintained to remain visible to bicyclists.
- 4. **Recommended Policy:** Establish a sustainable funding program to cover the costs to implement the City's Bicycle System Plan.

- a) Direct funds collected through the City's impact fee program toward construction of bicycle improvements that are part of capacity improvements.
- b) Pursue grant funding from local, state and federal sources.
- c) Develop a phased bicycle system implementation plan that provides for installation of minor bicycle signage or facilities on all routes to maximize budget resources.
 - Discussion: In the short term, implement the City's bicycle system through signage, rechannelization and hot spots. Install larger capital investments on identified routes as funding becomes available in the long term.
- d) Require major transit facilities, such as light rail stations, and transit oriented developments to provide bicycle amenities, such as covered bicycle racks or lockers, and facilities at and connecting to the site.
- e) Preserve needed rights-of-way for future bicycle connections and utilize utility easements for trails when feasible.
- f) Include construction of bicycle facilities identified on the City's Bicycle System as projects that qualify for "credits" through the City's Concurrency program.

5. **Recommended Policy:** Develop a public outreach program to inform residents of the options for bicycling in the City and educate residents about bicycle safety and the health benefits of bicycling.

Implementation Strategies

- a) Prepare maps for public distribution that include bicycle facilities, schools, parks, civic buildings and other destinations in the City. The City should develop educational materials for residents that emphasize the importance of bicycle safety and explain the health benefits of bicycling Discussion: The maps should identify bicycle facilities and treatments throughout the City and inform residents of the methods available to report problems with bicycle facilities to the City. Educational materials should provide resources and information that can be easily accessed. Residents should be made aware of these maps and materials through the City's website, newsletter, wayfinding kiosks, Bike to Work Day and public access television channel. The City should have them available for distribution at City buildings, public and community events and on the City website and work with the school district, bicycle advocacy groups, transit providers and bicycle shops to help distribute maps.
- b) Work with the school district and public safety partners to integrate bicycle safety and maintenance as part of the educational curriculum.
- c) Pursue grant funding from private foundations to implement outreach programs. Discussion: Private foundations that emphasize health and safety can provide financial assistance to the City in its education efforts.
- d) Enforce requirements that are designed to keep vehicles from parking in bicycle facilities.

IV. Pedestrian Plan

A. Creating a Pedestrian System in Shoreline

- 1. Existing Comprehensive Plan Goal T IV: Provide a pedestrian system that is safe, connects to destinations, accesses transit, and is accessible by all.
- 2. **Recommended Policy:** Implement the Pedestrian System Plan through a combination of public and private investments.

Implementation Strategies

- a) Develop a wayfinding signage and mapping system for pedestrian facilities that directs and guides users to public facilities, parks, schools, significant transit stops and transportation facilities and commercial areas.
- 3. Recommended Policy: Prioritize construction of sidewalks, walkways and trails that are safe, connect to destinations, access transit and are accessible by all.

Implementation Strategies

a) Develop and regularly update a prioritization and funding strategy for the pedestrian system.

- Include pedestrian facilities identified on the City's Pedestrian System Plan as part of the City's six-year Capital Improvement Program and Transportation Improvement Program.
- c) Through the City's Complete Streets policies, accommodate pedestrians in future roadway or intersection improvement projects with facilities or technology that makes walking safer and more convenient for pedestrians.
- d) Utilize existing undeveloped rights-of-way to create pedestrian paths and connections.
- e) Require all projects that result in an increase in the number of vehicular trips, such as commercial, multi-family and residential short-plat and long-plat developments, to provide for sidewalks or separated all weather trails. Discussion: Through the Master Street Plan, the City has identified the cross-section and design for all arterials and determined appropriate improvements for local streets. Frontage improvements should be consistent with the Master Street Plan.
- f) Implement the City's curb ramp program to install wheelchair ramps and other ADA requirements at all curbed intersections.
- g) Include construction of pedestrian facilities identified on the City's Pedestrian System Plan as projects that qualify for "credits" through the City's Concurrency program.
- Look for opportunities to leverage public or private investments to implement the pedestrian system. Pursue funding opportunities through grants and private foundations.
- i) Identify pedestrian detour routes in construction areas.
- 4. Recommended Policy: Ensure crossings are appropriately located and provide safety and convenience for pedestrians.

- a) Develop a policy and procedure for the location and design of crosswalks. Discussion: The surrounding development should be a key factor when determining location and design for crosswalks. Issues to consider include, but are not limited to, density, land use, demographics and accident history. The roadway cross-section and traffic volumes and speeds should be considered when determining the need for design features such as bulbouts or pedestrian refuge islands.
- b) Install midblock crossings if safety warrants can be met.

 Discussion: The installation of midblock crossings should take into account land uses on both sides of the street and frequency of use. Additionally, traffic must be considered to ensure crossings do not interfere with the flow of vehicles.
- c) Improve pedestrian safety at freeway interchanges and highway intersections. Discussion: Consider over- and under-crossings where feasible and convenient for users and other changes that make freeway entrances more accessible to pedestrians. Example locations include: I-5 crossings at NE 145th Street, NE 155th Street, NE 175th Street, NE 185th, NE 195th Street and Ballinger Way NE; N 192nd Street over Aurora Avenue N.
- d) Utilize technology and driver notification to enhance pedestrian safety and convenience.
 - Discussion: Pedestrian safety can be improved by modifying traffic signals. Options include pedestrian queue jumps, pedestrian signals with countdown timers, pedestrian only cycles or right turn queue jumps that clear right turning

vehicles before pedestrians begin crossing. The latter would be coupled with the elimination of free right turns. Extension of the "walk" phase in areas with populations needing additional time to cross the street, such as children or senior citizens, provides an extra measure of safety.

Convenience for pedestrians can be improved through technology as well. Signals that are timed to speed up pedestrian prompt response, provide an automatic "walk" when the signal turns green and lasting throughout the entire green phase and visual and audio indicators that push buttons have been activated are all measures that give priority or information to pedestrians.

- e) Evaluate and field test installation of devices that increase safety of pedestrian crossings such as flags, in-pavement lights, pedestrian signals, and raised, colored and/or textured crosswalks.
- 5. **Recommended Policy:** Establish a funding program to share the cost and efforts needed to construct sidewalks, walkways and trails identified as part of the City's Pedestrian System Plan.

Implementation Strategies

- a) Explore the range of options available to develop a sustainable source of funding for implementation of the City's Pedestrian System Plan.
- b) Direct funds collected through the City's impact fee program toward construction of pedestrian improvements that are part of capacity improvements needed to accommodate growth.
- c) Pursue grant funding from local, state and federal sources.
- d) Require the developers of major transit facilities, such as light rail stations and transit oriented developments, to provide pedestrian amenities and facilities at and connecting to the site and pay the required impact fee.
- e) Preserve needed rights-of-way for future pedestrian connections and utilize utility easements for trails when feasible.
- f) Develop a funding source for purchasing right-of-way to construct pedestrian facilities.
- g) Prioritize sidewalk projects that fill in gaps in pedestrian facilities.
- 6. **Existing Comprehensive Plan Policy T30:** Develop flexible sidewalk standards to fit a range of locations, needs and costs.

- a) Sidewalk standards should generally be based upon adjacent land use or zoning, rather than street classification.
- b) Develop a program for retrofitting existing sidewalks that do not meet the City's sidewalk standards.
 - Discussion: Property developers must reconstruct existing substandard sidewalks to comply with the established standards when a project triggers frontage improvements. The City should identify circumstances and criteria under which the City will retrofit sidewalks in conjunction with capital projects.
- c) Establish criteria that identify when construction of a sidewalk on only one side of a street is appropriate.
 - Discussion: It is assumed that all streets will have sidewalks on both sides unless there is a wider trail/walkway system that accomplishes the goal of pedestrian movement and safety with traffic calming, such as green streets or findings can

- be established that support construction on one side only, such as topography, environment or costs.
- d) Concrete or porous concrete sidewalks should be installed whenever possible. Examine options for construction of pedestrian facilities utilizing a variety of materials as alternatives to standard concrete sidewalks.

 Discussion: Concrete is the most durable and easily maintained material for sidewalks. However, there are circumstances where concrete is not needed. For example, asphalt may be an appropriate material for separated trails and walkways with minimal driveway crossings and limited potential for intrusion by tree roots. Porous concrete may be used in some circumstances, such as in curbside applications with no amenity zone, when soil conditions support it and maintenance requirements have been considered.
- e) Ensure that walkways have a clear, defined area for walking surfaces and a distinct area for fixed objects, such as utility poles, above ground utility cabinets, benches and public art. The City should work with utility providers to eliminate obstructions in walkways.
- f) Ensure pedestrian facilities support and are appropriate for existing and new land uses, allowing for a variety of treatments. These may include sidewalks, walkways, shared bicycle and pedestrian facilities, trails or widened shoulders.
- g) Where appropriate, provide sidewalks, walkways, and trails with lighting, seating, landscaping, street trees, public art, covered bicycle racks, railings, etc. These improvements should be compatible with safe pedestrian circulation.
- h) Integrate pedestrian design standards into the City's Master Street Plan so that there is flexibility in walkway design, as determined on a street by street basis. Discussion: Street cross-section design should reflect the traffic and pedestrian needs of a given street. For example, streets that serve as transit corridors may include bus pull-outs at stop locations. This allows for easier boarding from the sidewalk and does not result in a bus blocking through traffic. Another possible design feature, curb bulb-outs, reduce the crossing distance for pedestrians, identify pedestrian crossings to drivers and act as traffic calming devices. Amenity zone width should be wide enough to provide space for healthy tree growth. The standard for amenity zone width should be flexible so that it may be widened in some locations to accomplish other City goals, such as natural stormwater treatment.
- i) Encourage private development projects to integrate public space with sidewalks.
- j) Develop design standards for walkway design that integrate sustainability practices, such as porous concrete, bioswales, rain gardens or other natural stormwater drainage systems.
- k) Coordinate sidewalk design and construction with adjacent jurisdictions where sidewalks cross the City boundaries.
- 7. **Recommended Policy:** Develop a public outreach program to inform residents of the options for walking in the City and educate residents about pedestrian safety and the health benefits of walking.

Implementation Strategies

a) Prepare maps that include pedestrian facilities, schools, parks, civic buildings and other destinations in the City. The City should develop educational materials for residents that emphasize the importance of pedestrian safety and explain the health benefits of walking.

Discussion: The maps should identify pedestrian facilities and treatments throughout the City and inform residents of the methods available to report problems with pedestrian facilities to the City. Educational materials should provide resources and information that can be easily accessed. Residents should be made aware of these maps and materials through the City's website, newsletter, wayfinding kiosks and public access television channel. The City should have them available for distribution at City buildings, public and community events and on the City website and coordinate with the school district and transit providers for distribution of materials.

- b) Work with the school district to integrate pedestrian health and safety as part of the educational curriculum.
- c) Pursue grant funding from public and private foundations to implement education and outreach programs.

 Discussion: Private foundations that emphasize health and safety can provide financial assistance to the City in its education efforts. The City can promote private maintenance of public pedestrian facilities through programs such as Adopt-a-Trail, Adopt-a-Street or Adopt-a-Raingarden.
- d) Enforce requirements that are designed to keep vehicles from parking in pedestrian facilities.

V. Transit Plan

A. General

- Existing Comprehensive Plan Goal TIII: Support increased transit coverage and service that connects local and regional destinations to improve mobility options for all Shoreline residents.
- 2. **Recommended Policy:** Make transit a more convenient, appealing and viable option for all trips through implementation of Shoreline's Transit Plan.

- a) Ensure that all riders can catch a bus within a quarter-mile of their home that will deliver them to a transit center or hub in a single trip. Strive to make all destinations accessible with no more than one transfer. Transit centers and hubs accessed by routes serving Shoreline include the Aurora Village Transit Center, Shoreline Community College, the Northgate Park and Ride, Downtown Seattle, University of Washington, Everett Station, Lynnwood Transit Center, Mountlake Terrace Transit Center and the Edmonds Community College Transit Center.
- b) Expand transit service into currently unserved or underserved areas of the City.
- c) Ensure the transit network in Shoreline includes east-west routes and northsouth routes that intersect with each other, connecting residents to services throughout the City.
- d) Support the on-going programs of transit providers to provide bicycle racks on all buses.
- e) Educate residents about the availability and use of trip planning services available from all transit providers serving the City. Support efforts by transit providers to make this information accessible to all users.

- f) Ensure ACCESS and DART paratransit service is available to Shoreline residents that are unable to use fixed route bus service. Paratransit should provide a comparable level of service to that of regular bus service, through coverage areas and span of service.
- g) Request placement of current schedules at all bus stops with shelters and high ridership stops. Encourage transit providers to extend real time information about bus arrivals at all bus stops.
- h) Explore options for public or privately funded shuttle service from transit centers to major employers and employment nodes (like shopping centers or locations with multiple employers) in Shoreline as a means to reduce single occupancy vehicle use and support Commute Trip Reduction programs.
- Advocate for elimination of Metro Transit's policies that negatively impact the City of Shoreline. These include the two-zone fare policy and the current service allocation and reduction policies.
- j) Ensure shelter alignment and design considers weather, street orientation and the visibility of adjacent land uses.
- 3. **Recommended Policy:** Improve transit service quality, passenger comfort and safety.

Implementation Strategies

- a) Work with providers to minimize standing and overcrowding on buses through bus size, frequency of service and infrastructure that helps prevent bus delays.
- Ensure all bus stops are fully ADA compliant. Improvements to currently noncompliant bus stops can be made by public agencies or private development.
- c) Form a partnership with Metro Transit to fund a program to improve accessibility to bus stops.
- d) Ensure all bus stops are clean, safe and well lit. Encourage residents and businesses to participate in the "Adopt-a-Stop" program and provide trash removal at stops that do not have shelters or trash removal services provided by transit agencies.
- e) Encourage efforts by transit agencies to provide transit security on all buses, including on-board security systems and transit police.
- f) Support measures to reduce transit vehicle dwell time, like off board fare collection.
- 4. Recommended Policy: Encourage development that is supportive of transit.

- a) Evaluate land use policies, zoning and development regulations to determine what types of changes are required in order to support transit. Make modifications as needed. Continue land use policies and development code allowances that increase density along Aurora Avenue N.
- b) Create development regulations that require transit supportive investments by private developers. These may include pedestrian facilities that access transit, housing that is oriented toward transit usage or locations near high capacity transit.
- c) Identify and implement City capital projects and improvements that are transit supportive, such as transit signal priority, queue jumps, bus pullouts and sidewalk and bicycle facilities.

B. Shoreline's Short Range Transit Plan

1. Recommended Policy: Expand service on existing transit routes.

Implementation Strategies

- a) Work with transit providers to improve service frequency. Headways on all-day service routes should be no less than thirty minutes, including weekends and evenings. Strive for twenty-minute headways during the day on these routes. Headways on peak-only routes should be no less than twenty minutes. Strive for fifteen-minute headways on these routes.
- b) Encourage Community Transit to expand Swift service farther into Shoreline, with a potential terminus at the N 192nd Street Park and Ride or a more southern location.
- c) Explore routing options to reduce travel times between Shoreline Community College, North Seattle Community College, Northgate and Edmonds Community College. Begin and coordinate efforts between Community Transit and Metro Transit to provide bus service between Shoreline Community College and Edmonds Community College. Work with Metro Transit to provide transit service between the two Shoreline high schools and between the Shoreline high schools and Shoreline Community College.
- d) Work with Metro Transit and Community Transit to allow transfers between providers to occur on Aurora Avenue N, without the need for a transfer at the Aurora Village Transit Center. Keep Swift and RapidRide BRT services on Aurora Avenue N to improve the ease of transfers.
- 2. **Recommended Policy:** Work with Metro Transit to ensure bus rapid transit service (BRT), RapidRide, is implemented on the Aurora Avenue N corridor and operates as a convenient and appealing option for riders in Shoreline.

Implementation Strategies

- a) Advocate for off-board fare payment at all RapidRide stops.
- b) Advocate for a system that includes stops with appropriate spacing and at signalized intersections.
- c) Coordinate with Metro Transit and the City of Seattle to encourage continuous business access-transit lanes along the entire length of the corridor and pursue grant funding to construct these facilities.
- d) Require implementation of "shadow service" on Aurora Avenue N if BRT service increases the distance between stops to more than 1/3 mile.
- e) Ensure east-west transit routes serving Shoreline connect with the BRT corridor on Aurora Avenue N.
- Support the City of Seattle in its efforts to construct BAT lanes on Aurora Avenue N south of N 145th Street.
- 3. Recommended Policy: Improve east-west service across the City of Shoreline and service from Shoreline to the University of Washington.

- a) Encourage Metro Transit to expand Route 330, running from Shoreline Community College to Lake City, from a peak-only service to an all-day service.
- b) Work with Metro to ensure that north-south routes that intersect east-west routes do so at similar times in order to reduce delays associated with transfers.

- c) Encourage Metro Transit to expand Route 373, running from the Aurora Village Transit Center to the University of Washington, from a peak-only service to an all-day service. Emphasize the need for express bus service from Shoreline to the University of Washington during the peak period.
- 4. **Recommended Policy:** Strengthen Aurora Avenue N as a high usage transit corridor that encourages cross-county, seamless service.

Implementation Strategies

- a) Study the relocation of all or a portion of the Aurora Village Transit Center function to the N 192nd Street Park and Ride. This relocation may be in conjunction with construction of a Transit Oriented Development at the N 192nd Street Park and Ride and should occur once the Aurora project is completed. Coordinate with Metro Transit and Community Transit to study the impacts of rerouting service from the Aurora Village Transit Center to the N 192nd Street Park and Ride.
- b) Work with a private developer(s) to create a Transit Oriented Development at the N 192nd Street Park and Ride and/or nearby properties that incorporates a transit center. The transit center must be capable of accommodating the equivalent parking needs of the Aurora Village Transit Center and the N 192nd Street Park and Ride and the layover and bus bay needs for current and future needs of Metro Transit and Community Transit.
- 5. **Recommended Policy:** Work with Shoreline neighborhoods, Sound Transit, the Shoreline School District, the Washington State Department of Transportation and Metro Transit to develop the final light rail alignment and station area plans for the areas surrounding the future Link Light Rail stations.

- a) Participate in Sound Transit's planning process and environmental review to identify the final alignment for light rail from Northgate to Lynnwood. Advocate for two stations in Shoreline that will result in the highest ridership, most costeffective solution and compatibility with surrounding land uses. Should the final light rail alignment be located on I-5, it should be on the side(s) that takes advantage of potential transit oriented development, increased employment and residential densities, as well as land in public ownership, such as the Shoreline Center and NE 185th Street.
- b) Work with the neighborhoods and communities surrounding the future light rail stations to determine the types of land uses desired near the stations. Modify the City's land use policies and development regulations, as needed, to create the underlying zoning that will result in development of the stations as desired and that will lessen the impacts to these neighborhoods.
- c) Determine the desired and needed traffic mitigation for the station areas based upon the planned future land use and anticipated future traffic demand in the area, including provisions for bicycle and pedestrian facilities at and connecting to the stations.
- d) Coordinate with Sound Transit during their planning process to ensure the City's future land use plans are considered and integrated into their station area designs.

e) Closely monitor and participate in Sound Transit's required mode study, alternatives analysis and environmental process and coordinate with cities to the north and south of Shoreline regarding Sound Transit planning and design.

C. Shoreline's Medium Range Transit Plan

1. **Recommended Policy:** Work with Metro Transit to develop a plan to orient bus service to feed the light rail station at Northgate immediately upon the beginning of light rail service.

Implementation Strategies

- a) Coordinate with Metro Transit to ensure fast, frequent and reliable bus service to Northgate from Shoreline upon the beginning of light rail service at Northgate.
- b) Increase the frequency of existing routes that travel through Shoreline to Northgate.
- c) Advocate for the creation of a new express bus route from Shoreline Community College to Northgate that travels on N 145th Street.
- 2. **Recommended Policy:** Develop additional high capacity transit service in Shoreline.

Implementation Strategies

- a) Work with Metro Transit to identify future BRT lines serving Shoreline, including Greenwood Avenue North, 15th Avenue NE, SR 523/145th Street and SR 522/Bothell Way NE, and work with Metro Transit and Sound Transit to incorporate these routes into their planning processes.
- b) Develop specific BRT route plans with transit providers and the communities they will serve, including Seattle.
- c) Participate in Sound Transit discussions regarding development of the next phase of improvements (ST3) including:
 - Advocate for a commuter rail station that serves Richmond Beach.
 - Identify locations and routes that would be appropriate for light rail expansion, including east-west and new north-south routes. This may include connections to proposed extensions into Ballard and Bothell Way NE (SR 522).
 - Develop a plan for improved high capacity transit on Aurora Avenue N, such as a continuous street car or bus rapid transit from downtown Seattle to Everett.
- 3. **Recommended Policy:** Monitor transit service to ensure the City is well served and transit quality, passenger comfort and safety are being maintained at the desired level for Shoreline residents.

<u>Implementation Strategies</u>

- a) Review transit reports regarding ridership, park and ride usage and safety on a regular basis.
- b) Examine existing routes that serve new development to determine if additional or enhanced service is merited.
- c) Ensure new employers subject to Commute Trip Reduction laws are complying with state law and coordinate with them to determine if additional transit service would assist with that goal.

4. Recommended Policy: Continue to install transit supportive infrastructure.

Implementation Strategies

- a) Include projects in the City's Capital Improvement Plan that make it easier, safer and more convenient for residents to access transit.
- b) Ensure private developers continue to construct improvements that are transit supportive.
- Advocate for reconstruction of the SR 104/SR 99 interchange to include business access-transit (BAT) lanes, which will provide seamless BAT lanes across the King/Snohomish County line.

D. Shoreline's Long Range Transit Plan

1. Recommended Policy: Expand and enhance transit within Shoreline.

Implementation Strategies

- a) Ensure transit service in Shoreline continues to serve multiple corridors in Shoreline and destinations other than the light rail stations
- b) Evaluate transit service to ensure the City's desired headways are being met.
- c) Ensure areas of new high-density development, employment and destinations are being adequately served by transit.
- d) Coordinate with transit providers to provide service to areas of the City that are supportive of transit.
- 2. Recommended Policy: Work with Metro Transit and Community Transit to develop a bus service plan that connect residents to light rail stations, high capacity transit corridors, such as BRT on Aurora Avenue N and serves park and ride lots throughout the City.

Implementation Strategies

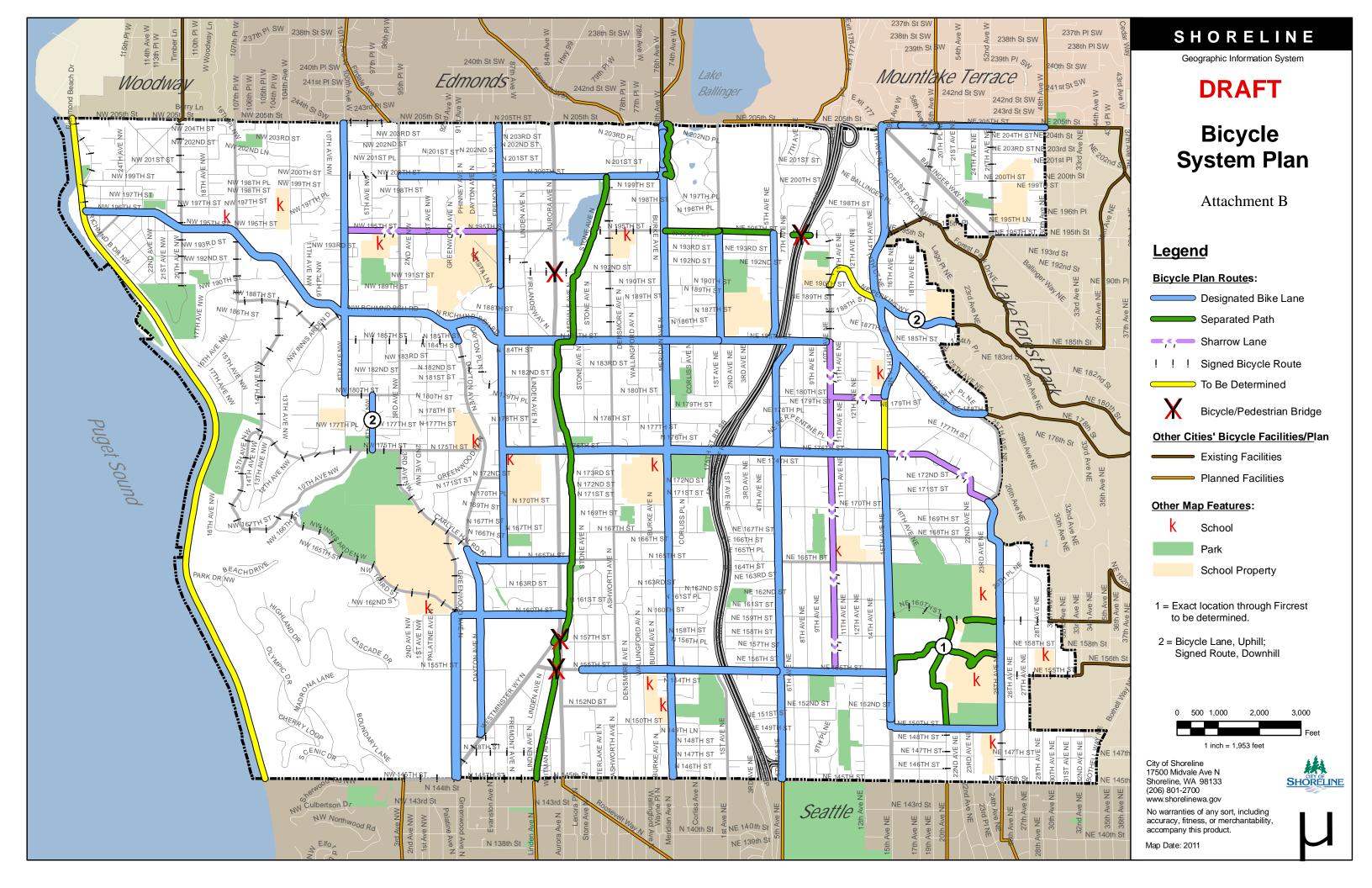
- a) Work with Metro Transit to direct feeder routes from all areas of the City to the Shoreline light rail stations throughout the entire day and on weekends, with additional frequency during the peak periods.
- b) Strengthen links between the N 192nd Street Park and Ride to the light rail line through increased bus frequency, new routes and/or direct service between the two facilities.
- 3. Recommended Policy: Implement traffic mitigation for light rail station areas.

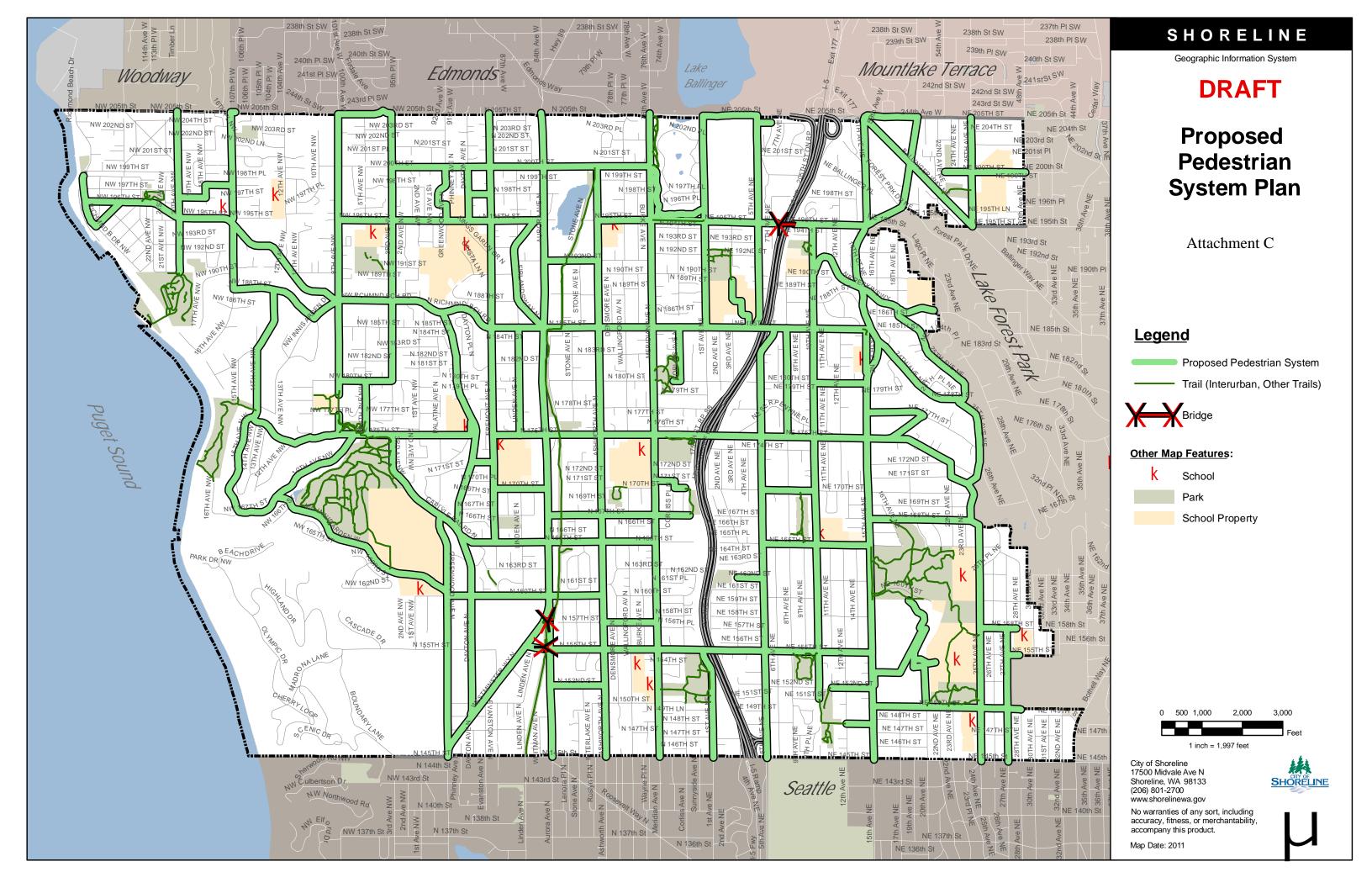
- a) Work with Metro Transit to redirect commuter routes that travel to downtown Seattle via I-5 to light rail. Reallocate those hours to feeder routes that will bring commuters from Park and Ride lots or other areas of Shoreline to light rail.
- b) Work with Sound Transit to implement traffic mitigation in the light rail station areas, as developed in the station area planning process.
- c) Improve bicycle and pedestrian facilities in the vicinity of the light rail stations to encourage and support nonmotorized transportation to the stations.
- d) Work with the City of Seattle, the Washington State Department of Transportation, Sound Transit and Metro Transit to improve N/NE 145th Street from Lake City Way NE to Greenwood Avenue N in order to provide better east-

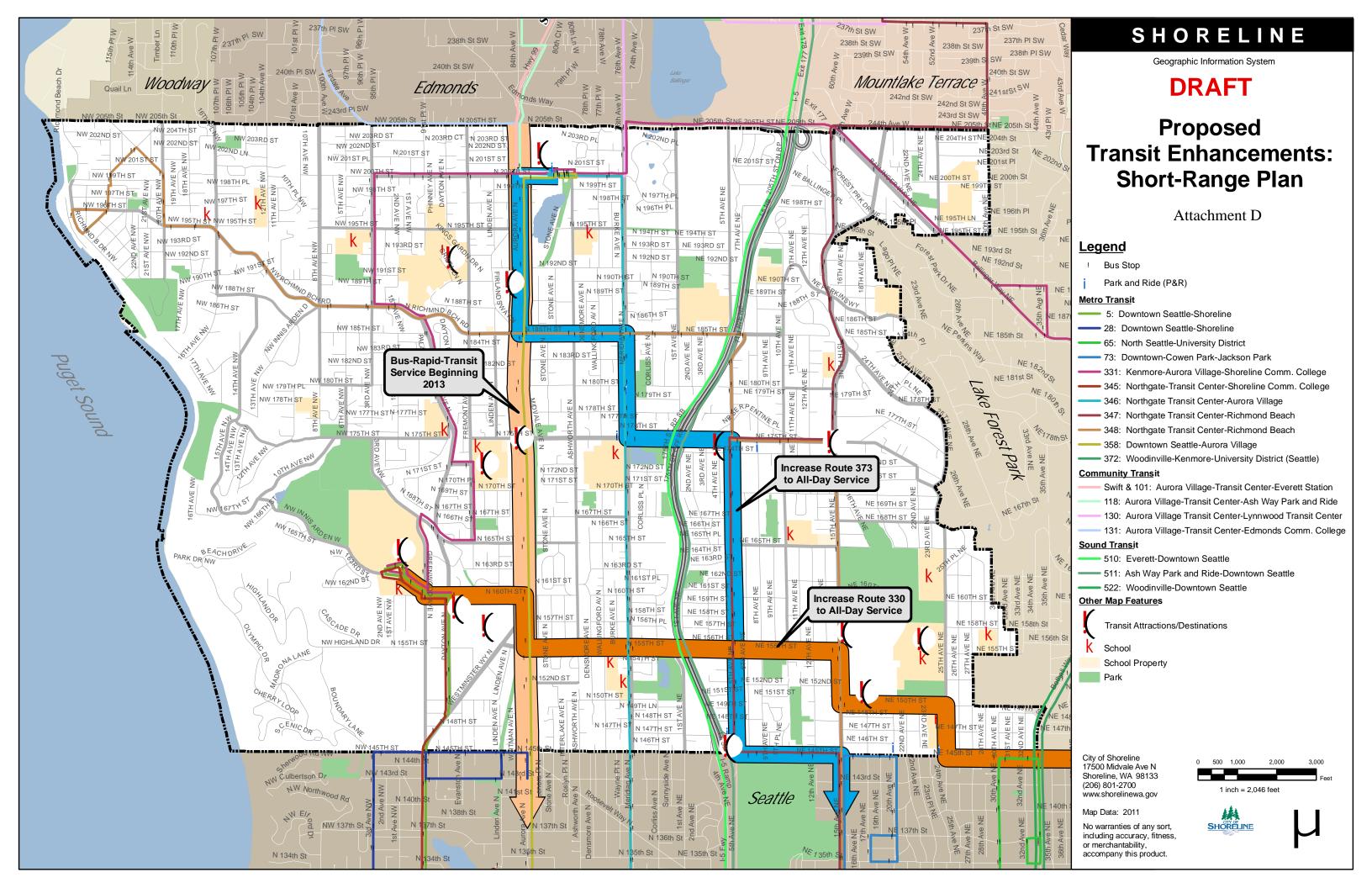
west bus connections to the Aurora BRT line, the light rail station at NE 145th Street and the future BRT line on Lake City Way NE.

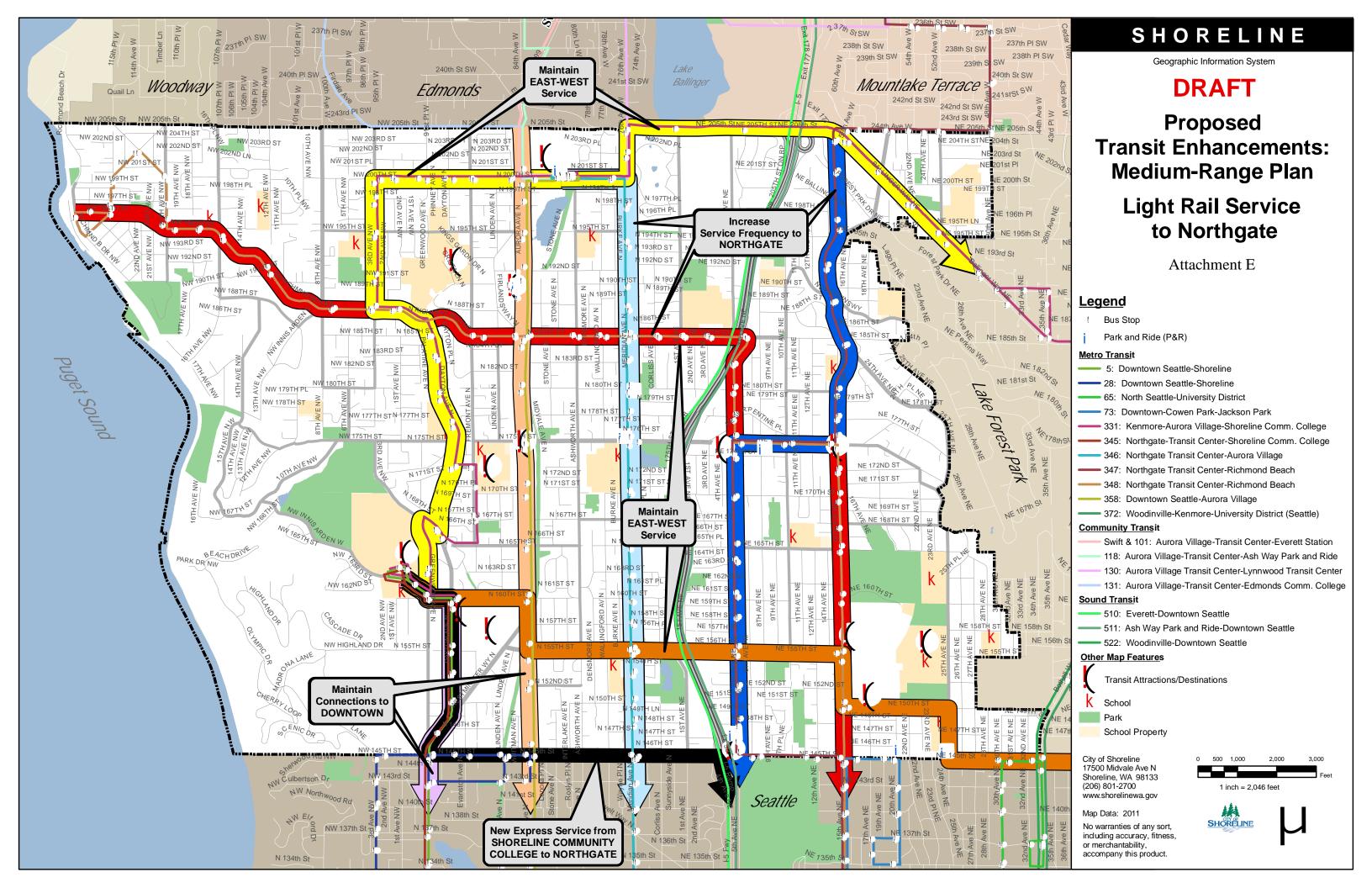
4. **Recommended Policy:** Monitor transit service, transportation patterns and land use around the light rail stations.

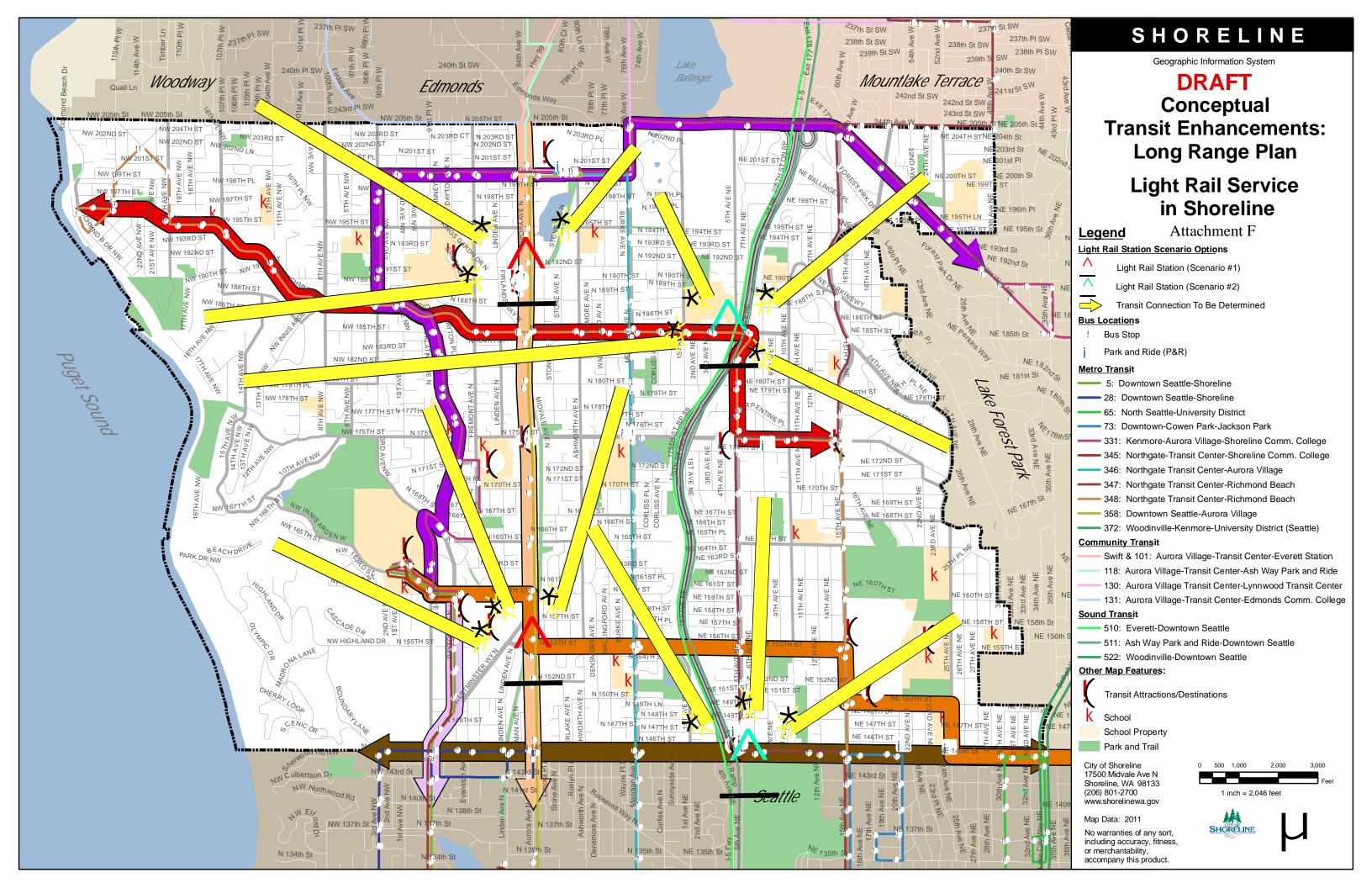
- a) Ensure feeder routes to the light rail stations are serving all neighborhoods in Shoreline and operating at frequencies that encourage light rail use.
- b) Monitor traffic traveling to and from the light rail stations to ensure surrounding neighborhoods are not experiencing cut-through traffic or other negative impacts. Implement appropriate solutions to minimize impacts and improve safety.

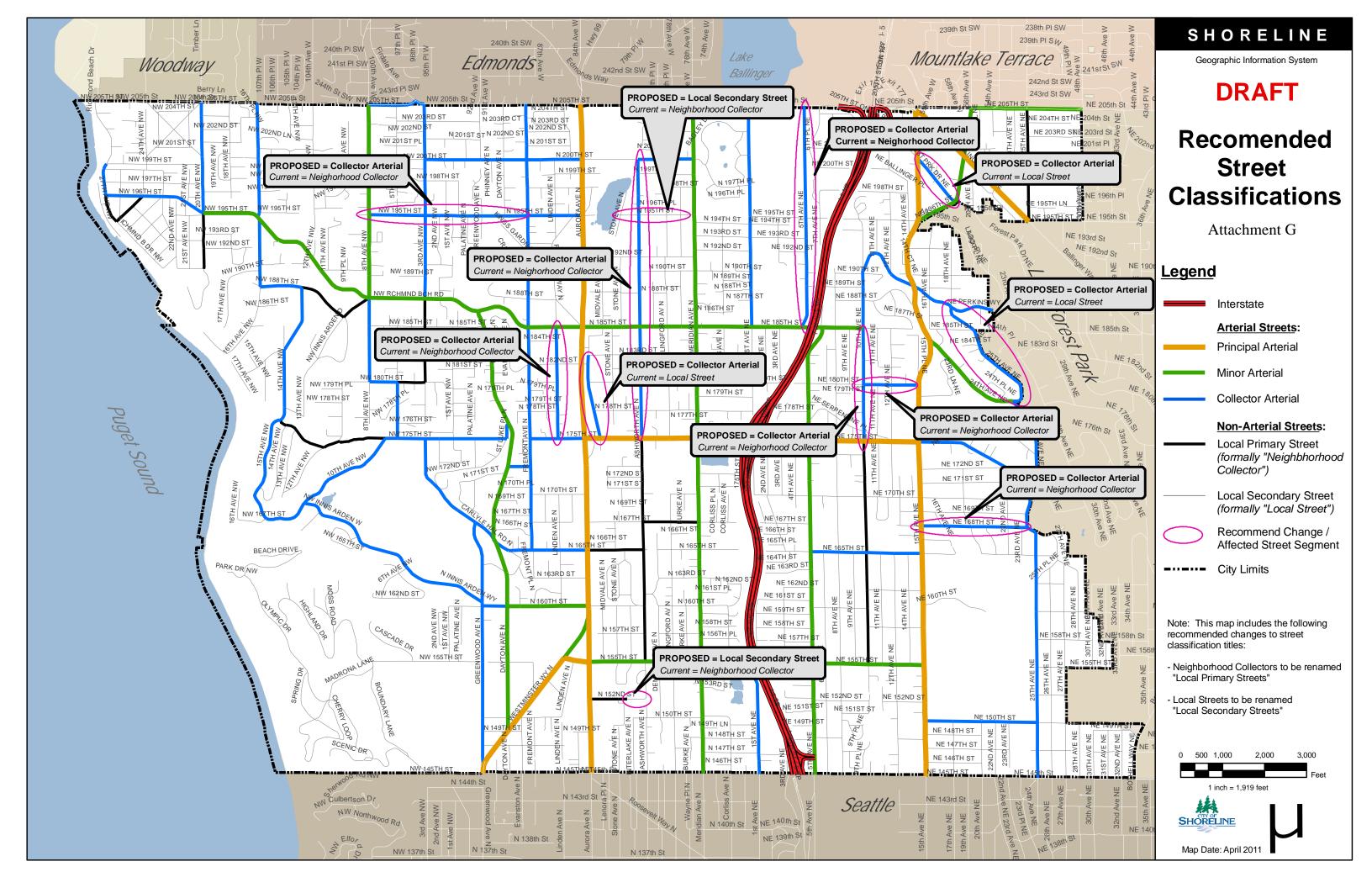












Attachment H: Typical Shoreline Street Characteristics

		Arterial Streets	Non Arterial (Local) Streets		
	Principal Arterial	Minor Arterial	Collector Arterial	Local Primary Street	Local Secondary Street
Function	- Connect cities and urban centers with minimum delay - Connect traffic to Interstate system - Accommodate long and through trips	- Connect activity centers within the City - Connect traffic to Principal Arterials and Interstate - Accommodate some long trips	- Provide access to community services and businesses - Connect traffic from Non Arterial Streets to Minor or Principal Arterials - Accommodate medium length trips	- Connect traffic from local secondary streets to Arterials - Accommodate short trips to neighborhood destinations - Provide local accesses	- Provide local accesses
Speed Limits	30 – 40 mph	30 – 35 mph	25 – 30 mph	25 mph	25 mph
Daily Volume (vehicles per day)	More than 15,000	7,000 – 20,000	2,000 – 8,000	less than 3,000	less than 3,000
Number of Lanes	Three or more lanes	Two or more lanes	Two or more lanes	One or Two lanes	One or Two lanes
Lane striping	Pavement markings used to delineate travel lanes.	Pavement markings used to delineate travel lanes.	Pavement markings used to delineate travel lanes.	No centerline striping	No centerline striping
Transit	Buses/transit stops allowed	Buses/transit stops allowed	Buses/transit stops allowed	Buses/transit stops not generally allowed except for short segments	Buses/transit stops not allowed
Bicycle Facilities	May contain bicycle lanes, shared lanes or signage	May contain bicycle lanes, shared lanes or signage	May contain bicycle lanes, shared lanes or signage	- Shared lanes can be provided - Signs may be included	Bike facilities not specifically provided; may include signed bike routes
Pedestrian Facilities	- Sidewalks on both sides - Amenity zones	- Sidewalks on both sides - Amenity zones	- Sidewalks on both sides - Amenity zones	Safe pedestrian access through the use of sidewalks, trails, or other means.	Safe pedestrian access through the use of sidewalks, trails, or other means.

