# TRANSPORTATION

# **Draft-Transportation Element**

The Transportation Element emphasizes the following Framework Goals:

# FRAMEWORK GOALS

- FG1: Accommodate anticipated levels of growth and enhance the quality of life within the City of Shoreline.
- FG2: Promote quality building and development that is compatible with the surrounding environment.
- FG3: Support diverse and affordable housing opportunities which provide for Shoreline's population growth.
- FG4: Pursue a strong and diverse economy and assure economic development that complements neighborhood character.
- FG5: Protect the natural environment and preserve environmentally sensitive areas.
- FG6: Promote improvements to human services.
- FG7: Assure effective and efficient public investment for quality public services, facilities, and utilities.
- FG8: Improve multi-modal transportation systems which provide for Shoreline's present and future population.
- FG9: Provide for wide involvement in community planning decisions.

#### Intent

The intent of the Transportation Element is to guide the development of a transportation system which improves mobility and offers mobility choices for all of its citizens by identifying capacity, safety, pedestrian, automobile, public transit and bicycle projects to be constructed in the future. The transportation element also establishes policies on how to prioritize system improvements, and on how Shoreline should influence and guide other transportation providers such as Metro/King County transit, Community Transit, and the Regional Transit Authority. Because of Shoreline's location in the region, the City has needs to improve travel within the City, as well needs to address regional through traffic. Because of this, it is important for the City to foster and enhance its relations with neighboring jurisdictions, and to aggressively seek funding sources to assist the development of a safe, efficient and accessible transportation system.

# Background and Context

Shoreline is uniquely situated in the region with ready access to employment, shopping and other destinations to the south and north. The rapid growth in Seattle and in South Snohomish County provides an opportunity and a challenge. Both of these areas provide employment and cultural opportunities for Shoreline residents, but challenges Shoreline to address the through traffic demand created by these growth zones. Shoreline has a developed grid street system, although much of it is unimproved or substandard: it is lacking curbs, gutters, and sidewalks. The existing arterial streets that have curbs, gutters, and sidewalks were constructed in the late 1960's or early 1970's and are exhibiting signs of wear.

The following transportation concerns and values have been identified and supported by citizens throughout the development of the Comprehensive Plan

- Safety
- Congestion relief
- Construction of sidewalks
- Improved transit service and access
- Residential protection from cut-through traffic
- Improvement of the appearance and function of the state highways
- Construction of gateways

There are many factors for the City to consider in developing and implementing the transportation plan. The plan requires striking a balance between mobility, congestion relief, safety, and access to transportation alternatives such as transit, pedestrian facilities and bicycle systems. Additional considerations include the continued reliance on the automobile, the trend for people to drive more and farther, the growth of the region, and Shoreline's relatively low density, suburban character which is a deterrent for investment in local transit service. Because of limited existing revenue sources, the City is currently reliant on grant funding for transportation improvements.

Projected housing growth is not a major factor or cause of congestion by itself within Shoreline. If the City experienced no growth within its borders over the next twenty years, it would still have congestion problems. These problems would be

due to regional growth, primarily in Seattle and South Snohomish County, as these areas will send trips through Shoreline.

## **Growth Management Act**

The Growth Management Act (GMA) specifies the following minimum requirements for information that is to be included in the Transportation Element of the Comprehensive Plan:

- Land use assumptions used in estimating travel;
- Facilities and services needs, including:

An inventory of air, water, and land transportation facilities and services, including transit alignments, to define existing capital facilities and travel levels as a basis for future planning;

Level of service standards for the transportation system to serve as a gauge to judge performance of the system. These standards should be regionally coordinated.

Specific actions and requirements for bringing into compliance any facilities or services that are below an established level of service standard;

Forecasts of traffic for at least ten years based on the adopted land use plan to provide information on the location, timing and capacity needs of future growth;

Identification of system expansion needs and transportation system management needs to meet current and future demands;

Finance, including:

An analysis of funding capability to judge needs against probable funding resources;

A multi-year financing plan based on the needs identified in the comprehensive plan, the appropriate parts of which shall serve as the basis for the six-year street, road, or transit program required by RCW 35.77.010 for cities;

If probable funding falls short of meeting identified needs, a discussion of how additional funding will be raised, or how land use assumptions will be reassessed to ensure that level of service standards will be met:

- Intergovernmental coordination efforts, including an assessment of the impacts of the transportation plan and land use assumptions on the transportation systems of adjacent jurisdictions.
- Demand Management Strategies

The Growth Management Act also states that the Transportation Element for the Comprehensive Plan shall contain "level of service standards for all arterials to serve as a gauge to judge performance of the system." There are many approaches to measuring arterial street performance or levels of service (LOS). These include measuring delay on roadways, delay at intersections, average speed or travel time on roadways, the amount of people (or vehicles) that cross a point over a period of time, and many others. Most other cities and counties in the region use some sort of measurement of intersection delay, and most address travel in the afternoon peak hour, which in most cases is the most congested period of the day. There are several ways to calculate level of service, but most of them are related to a scale that measures performance on an "A" through "F" system (just like a report card).

"F" is when the demand for vehicles through an intersection is greater than the capacity of the intersection. "A" is when traffic flows smoothly, and generally without disruption. LOS "F" may result in a driver waiting through several complete signal cycles before moving through the intersection. "E" is 90 to less than 100% of capacity, "D" is 80 to less than 90%, and so on.

The level of service standard which the City has selected is a zonal average system which will be the basis for measuring concurrency. The City has been divided into five geographical areas: Zone 1 includes all of the signalized intersections west of Aurora, Zone 2 has all of the intersections between Aurora and I-5, Zone 3 is east of I-5, Zone 4 is the Aurora corridor, and Zone 5 is Annexation Area A. The level of service standard for these zones is to maintain an area-wide average LOS "D" in Zone 1, 2, and 3, and to maintain and area-wide average LOS "E" in Zone 4 and 5. LOS "E" equates to the intersection operating at 90 - 99.9% of capacity. LOS "D" is 80 - 89.9% of capacity.

Because of the commercial and multi-family residential activity in the Aurora Avenue corridor, the concurrency standard for that area is set at LOS E or better. Although Annexation Area A is not currently in the Shoreline city limits, a concurrency standard of LOS E has been established because of the commercial activity in that area.

The City has determined that several intersections are exempt from capacity mitigation because the improvement has its own negative impacts such as high cost, an impact on adjacent properties, or may be unfeasible or not cost effective due to topography, grade, or other factors. Additionally, the City may determine that poorer LOS may be acceptable if an intersection provides good transit service, or other mobility options such as pedestrian or bicycle facilities, or special transit provisions such as signal priority or HOV lanes. Because 145th and 205th are not within the jurisdiction (corporate limits) of the City of Shoreline, the intersections on these state highway corridors have been excluded from the level of service calculations. However, improvements have been identified for many of the intersections along these corridors because of the impact of these corridors and adjacent jurisdictions on Shorelines transportation system. The City will need to establish interlocal agreements with adjacent jurisdictions to ensure that its interests are addressed along these corridors.

Level of service at individual signalized intersections was calculated based on a critical lane analysis technique developed by the Transportation Research Board (Transportation Research Circular 212 - Interim Materials on Highway Capacity). The "planning" technique was selected for use in concurrency testing. The Circular 212 methodology provides a volume/capacity (V/C) ratio, as well as the LOS ratings for each individual intersection.

The EMME/2 travel forecasting model was used to forecast traffic volumes at signalized intersections, based on estimated 2015 land use parameters. These forecast volumes were evaluated by the Circular 212 methodology to produce V/C

ratios for each intersection. The EMME/2 model results are available for review at the Shoreline Planning Department.

Table A summarizes the areawide levels of service for Alternative H 1the Preferred Alternative. Two of the areas would have 2015 LOS in excess of the standards: Area 2, which has a standard of LOS D or better and Area 5, which has a standard of LOS E. Mitigation will need to be developed and implemented prior to 2015 in these areas to maintain the current concurrency standards.

Table A: Summary of 2015 Level of Service by Area

| Area   |                                | LOS Zone<br>Standard | Without<br>Mitigation |              | With | Mitigation |
|--------|--------------------------------|----------------------|-----------------------|--------------|------|------------|
| Number | Area Description               |                      | V/C (1)               | LOS (2)      | V/C  | LOS        |
| 1      | West of Aurora Avenue Corridor | D                    | 0.69                  | В            | 0.69 | В          |
| 2      | Aurora Avenue Corridor to 1-5  | D                    | 0.92                  | · <b>E</b> . | 0.81 | D          |
| 3      | I-5 to East City Limits        | D                    | 0.87                  | D            | 0.85 | D          |
| 4      | Aurora Avenue Corridor         | <u>Ē</u>             | 0.93                  | E            | 0.87 | D          |
| 5      | Annexation Area A              | Ē                    | 1.26                  | F            | 0.88 | D          |

- (1) Volume/Capacity ratio.
- (2) Level of Service

Potential mitigation measures were developed and evaluated for intersections that would operate at LOS E or LOS F in 2015, under the preferred land use. Improved LOS at these locations would also result in better areawide LOS. The LOS values summarized in Table A show that the average LOS for all areas improves to LOS D or better with potential mitigation (no potential mitigation was developed for intersections in Area 1).

Transportation analyses made in conjunction with the <u>dD</u>raft Environmental Impact Statement (Technical Appendix B of the Draft Environmental Impact Statement), evaluated the concurrency issue for the period from the present time until 2002. Although the Aurora Avenue corridor area (Area 4) consisted of only intersections on Aurora Avenue, itself, the analysis indicates that the concurrency standards can be met, without mitigation, in all of the areas (Table A, above, indicates that the Area 4 concurrency standard can be met without mitigation in 2015).

# Major transportation projects anticipated in the City of Shoreline include:

Upgrading Aurora Avenue to meet urban standards. This project would include the review and installation of, with curbs, gutters, and sidewalks to support pedestrian traffic. In conjunction with WSDOT and Metropolitan King County drainage and traffic flow improvements will be implemented, and drainage improvements. Also included in the potential mitigation projects on Aurora Avenue are right turn lanes at several signalized intersections. In some places, these added right turn lanes would be extended through the intersection to provide bus bays and space for vehicles to make U-turns.

Consideration of adding transit-only ramps to and from I-5 at North N. 185th Street. These ramps would be supported by improved local transit connections and improved park and ride facilities.

Widening of NorthN. 175th Street to provide a center turn lane between Stone Way and Meridian Avenue. This project would also upgrade to urban standards.

Table B below indicates the percent through traffic on selected arterial streets in Shoreline during the PM peak hour and for existing, 2002, and 2015 land uses. Generally the data shows that Shoreline streets will continue to be influenced by growth in Seattle and South Snohomish County. The north-south arterials carry between 43% and 53% through traffic, while the east-west streets are carry predominantly local traffic.

Table B: Percent Through Traffic by Selected Roadway Segment

| Roadway Segment                                  | Existing | 2002 | 2015 |
|--|----------|------|------|
| Aurora between N 175th and N 185 <sup>th</sup>   | 33%      | 38%  | 43%  |
| Meridian between N 175th and N 185 <sup>th</sup> | 26%      | 36%  | 46%  |
| 15th NE between N 175th and N 185th              | 31%      | 44%  | 53%  |
| N 145th west of I-5                              | 45%      | 48%  | 41%  |
| N 175th west of I-5                              | 9%       | 16%  | 18%  |
| N 185th west of I-5                              | 16%      | 21%  | 23%  |
| N 205th west of I-5                              | 42%      | 38%  | 38%  |

Under GMA the City also must provide a transportation system adequate to meet the needs of the adjacent land uses. This requirement is called achieving concurrency which is a concept whereby the City must have the roadway system in place (or funded) to accommodate new developments without violating (or exceeding) the City's level of service standard. The level of service standard is the basis by which the City will measure and monitor concurrency. Under a concurrency management system, if a development proposal is submitted that causes an area to exceed the LOS standard and if the intersection has not been programmed in the next six years for improvement, there are three options available:

- deny the development and have it come in once the intersection capacity improvement has been completed is fixed;
- 2) require the developer to bring the intersection into compliance with the standard; or modify or phase the project.
- 3) another option is to change the standard via an amendment to the Comprehensive Plan.

In addition to capacity needs, Shoreline is also in need of upgrading its arterial street system to improve safety or operational efficiency. Several intersections have been identified for safety improvements (including signalization of some that currently are not signalized). These improvements are intended to address areas with high accidents because of a lack of a signal, or to provide safer crossing facilities for pedestrians. Several roadways will need to be re-channelized to provide safer or more efficient operations through the addition of a center left turn lane, turning pockets, or changing the number and configuration of the lanes. Finally, many of the sidewalk system needs that are identified on the Pedestrian System Map, will

require the construction of curbs, gutters, drainage, as part of the sidewalk project (significantly increasing the cost of the project). These projects are, in effect, upgrades to urban street standards.

The Growth Management Act requires local jurisdictions to assess the "impacts of the transportation plan and land use assumptions on the transportation systems of adjacent jurisdictions." Shoreline's land use and transportation elements are consistent with and have negligible impacts on our neighbors. In developing this plan, analysis was undertaken to ensure that all transportation system improvements are compatible with our neighbors. The Draft EIS Transportation Appendix B, Table 3, lists the Level of Service Standards for adjacent jurisdictions. Shoreline is impacted by State Routes 523 and 104. Even though these facilities are not within Shoreline City Limits, this plan has identified improvements to these regional corridors. In addition to the state highways bordering north and south Shoreline, the transportation analysis identified potential capacity projects in Annexation Area A. Should Shoreline annex this area, the projects identified would be the responsibility of Shoreline. Should Lake Forest Park annex this area, these intersections would be their responsibility. Shoreline will work with the State and adjoining jurisdictions in planning and coordinating future improvements along these corridors. Shoreline also analyzed street classification, transit, pedestrian, bicycle, and truck route corridors in relation to our neighbors. They are consistent.

House Bill (HB) 1487 was passed by the Legislature in 1998. This bill amends the Growth Management Act to require the Washington State Department of Transportation to identify transportation facilities and services of statewide significance. Once these facilities are identified, local jurisdictions are to include them in their inventories of essential facilities, along with level-of-service standards, needs and impacts. The Department is to work with local jurisdictions to establish the level-of-service standards for statewide facilities. Local jurisdictions have until December 2000 to meet this requirement.

The City of Shoreline currently has two state highways passing through the city, SR 99 (Aurora Avenue) and I-5. The city worked with the WSDOT in establishing the level-of-service standards on these roadways as identified in this Transportation Element. In addition, two other state highways, SR 523 and SR 104, run along the city limits of Shoreline. The city will continue to work with WSDOT as it identifies transportation facilities of statewide significance and establishes level-of-service standards as required under HB 1487. The city will amend its plan as needed to further address the requirements of this bill.

The City of Shoreline does not have air or ferry services. There are three ferry terminals within thirty miles of Shoreline: Edmonds, Mukilteo, and downtown Seattle. Interstate 5 or SR 99 provides good corridor access to Mukilteo and Seattle. SR 104 provides access to Edmonds. Shoreline is served by Seatac International airport. Interstate 5 or SR 99 provides access to Seatac. Metro currently has a bus route that serves Seatac from the Aurora Village Park and Ride (#340.)

#### 1995 Metropolitan Transportation Plan

On May 25, 1995 the General Assembly of the Puget Sound Regional Council (PSRC) adopted the Metropolitan Transportation Plan (MTP), the Transportation Element of Vision 2020, and the Region's adopted growth and transportation strategy. The Metropolitan transportation plan is a detailed, long-range plan for future investments in the central Puget Sound region's transportation system. It responds to legislative mandates such as the Intermodal Surface Transportation Efficiency Act (ISTEA), the federal 1990 Clean Air Act Amendments, and the GMA. It also is intended to respond to regional concerns of pressing transportation problems. The basic building blocks for the MTP are city, county and transit agency plans, adopted multi-county and county-wide planning policies, and the Washington State Department of Transportation (WSDOT) Multimodal and Transportation System plans. The MTP is updated and amended every three years.

The MTP includes the following multi-county transportation policies:

- Optimize and manage the use of transportation facilities and services.
- Manage travel demand addressing traffic congestion and environmental objectives.
- Focus transportation investments supporting transit and pedestrian-oriented land use patterns.
- Expand transportation capacity offering greater mobility options.

Shoreline is required to submit its Comprehensive Plan to the PSRC for certification of compliance with the MTP and GMA.

#### **Existing Conditions**

For a thorough presentation of the existing transportation system in Shoreline, the reader should refer to Technical Appendix B, Transportation of the City of Shoreline Draft Environmental Impact Statement Appendices prepared for the Draft EIS for the City's Comprehensive Plan. The Transportation Element includes several figures (at the end of the element) that summarize existing sidewalks, bicycle facilities, intersection level of service, truck routes, signal locations, arterial classifications, and transit routes and facilities.

Generally speaking, the City of Shoreline's transportation network functions well. A grid street network is in place, Interstate 5 and Aurora Avenue North network is in place, Interstate 5 and Aurora Avenue North network is in place, Interstate 5 and Aurora Avenue North network is provide regional connections to the north and south, and the level of service at the majority of the signalized intersections is generally adequate. The most glaring transportation deficiencies are on Aurora. It is lacking in sidewalks, pedestrian crossings, and of the eight signalized intersections, six are functioning near or over capacity. Other than Aurora, the four areas that are most deficient in the existing system, and thus, in need of major improvement in Shoreline are:

- the need to develop a sidewalk system, especially on the arterial street system,
- improved transit service within Shoreline and between Shoreline and Snohomish County,
- the need to provide additional capacity at intersections, and

• the need to upgrade and improve the State Highway system in and bordering Shoreline including: Aurora Avenue North N., 145th, 205th, and access to and from Interstate 5.

Many of the tools that a city needs to accomplish or address its deficiencies are missing in Shoreline. These include the need for a dedicated revenue stream to address transportation capital needs, the lack of an impact fee mitigation program, the lack of a set of street design standards, and other programs to implement the policies in this plan. The City should undertake an analysis of potential funding sources, the revenues that they would generate, and the feasibility of implementation.

# Goals and Policies

#### Roadway and Capacity Needs

The policies in this subelement are intended to provide direction in addressing the capacity of intersections and roadways. The roadway network is the backbone of transportation system and accommodates automobiles, trucks, transit, pedestrians, and bicycles. The provision of adequate capacity on the street system is important for safety, for commerce, and for efficient bus operations. In addition, congestion increases trucking time and has an impact on cost of goods delivered by truck. Adequate capacity reduces delay which in turn reduces automobile emissions. Adequate capacity also will assist in keeping through traffic on arterial streets and reduce the tendency for drivers to cut-through neighborhoods to avoid congested roadways or intersections.

Shoreline is greatly impacted by deficiencies on the State Highway system. The Washington State Department of Transportation (WSDOT) is solely responsible for I-5 and is responsible for the street surface and approves all projects and striping on the other four state routes. WSDOT may have some fiscal responsibility for future improvements to these highways, but Shoreline's involvement is a major factor in whether future projects are built and how they are designed. These highways deliver many vehicles through and to Shoreline. The State Highways account for nearly 60% of future year LOS problem intersections. The City will not include 145th Street (SR 523) or 205th Street (SR 104) in its concurrency management strategy for determining area-wide LOS. This plan will, however, propose projects on these corridors so that we can work with our neighboring jurisdictions and WSDOT to jointly improve them. Aurora is included in the LOS standard analysis.

Aurora Avenue is a key vehicular, transit and truck corridor, as well as the commercial backbone of the City. Safety, access management, the lack of pedestrian facilities, congestion and the ability of transit to flow on the corridor are all issues to be addressed. The transportation design and facilities along Aurora will have an impact on the land uses in the corridor, as the land uses will impact the transportation system.

The transportation solution for Aurora should strike a balance between: being a downtown or urban street with defined edges, and slower moving traffic, and accommodating a through traffic function that is more typical of a state highway.

In addition to focusing improvements on signalized intersections for capacity and safety purposes, it is important for Shoreline to bring its arterial streets up to urban standards (curb, gutter, and sidewalks). Approximately 65% of the arterial streets in Shoreline are lacking curbs, gutters, and sidewalks. Many of the existing grid streets with curb, gutter and sidewalks were improved as part of the Forward Thrust bonds in the 1960's and early 1970's. These streets were built with a 44 foot cross section from curb to curb. This cross section limits the options to increase capacity, improve safety, provide for bicycles, and parking. Some of these streets may have parking eliminated for a four lane section for capacity purposes, some may be striped as three lanes (one each way and a center left turn lane) to improve the safety, and others may lose parking on one side to accommodate turn pockets and/or bicycle lanes. All roadway and intersection projects are shown on Figure T-3.

Goal T I: Develop a safe and efficient street system that accommodates all users and maximizes the people carrying capacity of the surface transportation system.

#### **Policies**

- T1: Promote adequate capacity on the roadways and intersections to provide access to homes and businesses.
- T2: Include consideration for all surface transportation modes with any new street improvement project if feasible.
- T3: Maintain Level of Service "D" by area-wide averaging in Zones 1, 2, and 3, and LOS "E" in Zones 4 and 5, and develop a funding plan to improve Level of Service. Improvements to transit service or other modes should be considered in developing a concurrency management system as a potential mitigation to increasing intersection capacity.
- T4: Minimize curb cuts (driveways) on arterial streets by combining driveways through the development review process and in implementing capital projects.
- T5: Adopt the Arterial Classification map, and associated design standards. Identify and preserve adequate rights-of-way on roadways for future needs of all modes of transportation. Develop a street design manual that includes roadway classification, right-of-way needs, roadway/lane width, landscaping guidelines, sidewalk width, bicycle needs, transit needs, setbacks, or other features necessary to preserve rights-of-way for future improvements to the roadways. Submit the Classification System to the Federal Highway Administration for approval.

- T6: 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.
- T7: Recognize that the primary use of roadways in Shoreline is to move people. Parking on arterial roadways is a secondary need.
- T8: Enhance Shoreline's border streets as entrances/gateways to the city and design future improvements along these corridors to support the identity of Shoreline and encourage community participation in a beautification program.
- **T9:** Develop a safe roadway system as a high priority. Examples of methods to improve safety include:
  - center left turn lanes,
  - median islands,
  - turn prohibitions,
  - signals, illumination,
  - access management, and
  - other traffic engineering techniques.
- T10: Provide a system of "green streets" for pedestrians and bicycles (where feasible) to connect parks, open space, recreation areas, transit, trails, schools and shopping. These streets should be addressed in the Street Design Manual as discussed under\_T5.

Note: The concept of a system of green streets first came about during the "visioning process" by the Shoreline City Council shortly after incorporation. Green streets were also mentioned frequently during the public involvement portion of plan development. The concept is to link parks, open space, recreation areas, trails, schools and shopping with a system of bicycle friendly and pedestrian friendly streetscapes. Key components of a green street would include a generous sidewalk separated from the street by landscaping and trees. Bicycle use would be encouraged with wider vehicle lanes, or striped bicycle lanes. As commercial developments are constructed along the green streets, they should be required to support the concept through landscaping, wider sidewalks, or pedestrian amenities. See Figure CD-1, at the end of the Community Design element, for the system of green streets.

T11: Assure that transportation systems are appropriately sized and designed to serve the surrounding land uses and to minimize the negative impacts of growth. Utilize the Arterial Classification Map as a guide in balancing street function with land uses.

T12: Work with adjacent jurisdictions and stakeholders to jointly study the 145<sup>th</sup> and 205<sup>th</sup> corridors to develop a plan and funding strategy for future improvements. 145<sup>th</sup> and 205<sup>th</sup> will be excluded from Shoreline's Level of Service Standard unless they are incorporated into the City.

#### Transit and Regional Rail

As the region and Shoreline continue to grow, citizens will become increasingly reliant on alternatives to the single occupant vehicle for mobility purposes. Transit providers and Sound Move (Regional Transit Authority) will be key players in Shorelines ability to maintain mobility. The following policies are intended to provide direction and guide the City as it works with agencies that provide mass transit services and connections from and within Shoreline to the rest of the region.

Shoreline citizens have identified the need for more east west transit service in Shoreline. Also, during midday, evenings, and weekends, Shoreline has limited cross county transit service. METRO currently has 24 routes in Shoreline and Community Transit has six. The commuter service is focused on Downtown Scattle, Northgate and the University District; however, approximately 30% of future peak hour demand is to/from Snohomish County. There is limited cross-county service by and between METRO and Community Transit to meet this future and present need.

Shoreline citizens have identified the need for more east-west transit service in Shoreline. Shoreline citizens also identified the need for improved service during midday, evenings, and weekends, and cross-county. METRO currently has 24 routes in Shoreline and Community Transit has six. The commuter service is focused on Downtown Seattle, Northgate and the University District; however, approximately 30% of future peak hour demand is to/from Snohomish County. There is limited cross-county service by and between METRO and Community Transit to meet this future and present need.

METRO is the primary provider of transit services in Shoreline. Most of their routes are oriented to Downtown Seattle, Northgate or the University District. Most of METRO routes that terminate in Shoreline are oriented to the Park and Ride lots or to Shoreline Community College. Community transit has six routes that cross the city boundary into Shoreline. All of these routes only serve the Aurora Village Park and Ride, and then move south via 205<sup>th</sup> and I-5. There is a need to work with both Community Transit and METRO to encourage penetration by each across county lines. In addition, a universal fare structure should be supported so that passes purchased in one system are honored by the next system.

FigureT-4, at the end of this element, indicates the existing transit system, transfer points, and the location of the existing park and ride lots. In developing the Comprehensive Plan, staff analyzed the City in terms of access to transit and identified all areas within ¼ mile of a bus stop. Analysis indicates areas in Shoreline that are not within ¼ mile of a bus stop. The ¼ mile buffer is an industry standard which indicates the longest distance that most people are willing to walk to catch a

bus. Transit coverage in Shoreline is fairly good, however, several areas within Shoreline that are not accessible by bus. The major areas include: Innis Arden and the Highlands (25<sup>th</sup> Avenue, NortheastN.E. is also shown as lacking bus stops but several bus stops are planned for 25<sup>th</sup> Avenue NortheastN.E.). Besides having a bus stop and route within ¼ mile there are several other transit issues to address that can make transit more attractive:

- proximity of the route and destinations
- frequency of the service ("headway")
- the number of transfers required to reach a destination
- service during non-peak hours, or weekends
- accessibility of transit facilities (bus stops, park and rides)
- safety and security at the transit facility
- protection from the elements

Metro has established ten park and ride lots in Shoreline. Of these, seven are leased lots on private property, and three lots are publicly owned permanent lots (Aurora Village, Shoreline Park and Ride at 192<sup>nd</sup> and Aurora, and North Jackson Park at 147<sup>th</sup> and 5<sup>th</sup> NortheastN.E.). All of Shoreline's existing park and ride lots currently have excess capacity, with the exception of NorthN. 175<sup>th</sup> Street and Meridian Church of the Nazarene lot, which is over capacity. Currently, no additional park and ride lots are scheduled for development in Shoreline.

There are several transit transfer zones in Shoreline that need to be improved with sidewalks, shelters, and other amenities.

The Sound Move (Regional Transit Authority) was approved for funding by the voters in the region in 1996. This proposal would increase commuter transit service in three corridors in Shoreline: Aurora, I-5, and SR 522, although currently there are not any stops planned in Shoreline except at Aurora Village, and at 145<sup>th</sup> and SR 522. Improving the operations of transit can take several forms: transit priority or special treatment at congested intersections, HOV lanes, direct HOV access ramps on the freeway, more express routes, etc. The Sound Move also includes a commuter rail line on the Burlington Northern Tracks along Puget Sound from Everett to Tacoma. There is the potential to have a station constructed in Richmond Beach or Point Wells. Some Richmond Beach residents have expressed concern over the potential parking and traffic impacts of a station in this area. Finally, it appears that Shoreline residents are receiving an inequitable share of service compared to the level of financial support its residents and businesses are providing for the overall RTA service.

Policies below will be used by the City in seeking improved service from the transit providers.

Goal T II: Support increased transit coverage and service throughout the region to improve mobility options for all Shoreline citizens.

#### **Policies**

- T13: Work with all transit providers to ensure that Shoreline residents have frequent and comprehensive transit options available to them for commuting, and for non-work trips.
- T14: Work with Metro to limprove east westlocal bus service in Shoreline that connects residents to shopping, services, and schools, particularly in midday, evening, and on weekends (30 minute headways). Give priority to serving the higher density residential areas over single-family neighborhoods.
- T15: Ensure that Regional Express Bus and future Link Light Rail service on the I-5 corridor is accessible to the residents of Shoreline in the form of stations, and facilities. Pedestrian and bicycle access and park and ride systems should be developed or enhanced near these stops.
- T16: Maximize access to light rail. Support future efforts to provide light rail service to Shoreline along the I-5 corridor.
- T17: Pursue methods to improve and enhance transit operations on Aurora in Shoreline. Ensure that Aurora continues to function as a primary transit corridor and provide frequent headways and express service to downtown Seattle (15 minute headways during commute hours). Explore potential low fare shuttle service on Aurora within Shoreline.
- T18: Work with transit service providers to provide safe, lighted, and weather protected passenger waiting areas at stops with high ridership, transfer points, and park and ride lots.
- T19: Work with Community Transit, Metro, and RTA to support "seamless" service across the county lines and through to major destinations. Support regional efforts by transit providers in implementing a simple, universal, rider friendly fare system.
- T20: Work with RTA to provide a low impact commuter rail stop in the Richmond Beach/Point Wells area. The Richmond Beach residents shall be involved in the decision making process as far as location, design, and access to the service.
- T21: Ensure that Park and Ride lots are secure, safe, well lit, and have adequate capacity to serve demand. Park and Ride lots should be compatible with abutting uses. Park and ride parking supply expansions should be structured parking when feasible.
- T22: Existing and future publicly owned Park and Ride lots should be evaluated for the addition of compatible mixed uses and shared (joint-use) parking.

- T23: Require large commercial or residential projects to include transit stop improvements such as bus pullouts or shelters when supported by the transit agency. Transit agencies should be notified of major developments and have the opportunity to suggest improvements that will improve transit operations or attractiveness.
- T24: Support and promote public involvement in King County/Metro, Community Transit, and RTA decision-making.

#### **Pedestrian Needs**

The community has repeatedly identified sidewalks as important. The City should provide pedestrian facilities (generally sidewalks). It needs to determine how to prioritize these needs. Only 36% of the major (arterial) streets and even fewer of the local streets have sidewalks.

Many people in Shoreline rely on the sidewalk or trail systems daily to go to work, catch a bus, walk to school, go shopping, or for recreation. There are approximately 85-90 group homes in Shoreline. Many of these have residents with mobility challenges: wheelchair-bound, elderly with limited mobility, etc. In addition, Shoreline's population is aging which means they are more likely to be reliant on public transportation and need to have well-maintained sidewalks that are free of tripping hazards, and have ramps. The sidewalk system and all sidewalk or capital construction projects must include wheelchair ramps and comply with the Americans with Disabilities Act (ADA).

This plan proposes as a high priority the completion of the sidewalk system on all arterial streets, on school routes, and in locations demonstrated to need safer facilities. The City needs to develop a sidewalk prioritization process that identifies and ranks sidewalk needs throughout the City. Other factors that should be considered in the development of a sidewalk selection process include: access to transit stops, location of shopping facilities, employment sites, or access to parks. These are all uses that are likely to attract pedestrians. Any trips that can be shifted from vehicle to transit, er-foot, or bicycle assists the City in reducing congestion and potentially delays the need for major capital expense on congestion reduction projects.

Figure T-5, at the end of this element, is the pedestrian system plan. The pedestrian system includes sidewalks, wide shoulders, wheelchair ramps, off-street trails, and signalized or unsignalized crossings. The figure fills in the missing sidewalks on arterial streets, and sidewalks near schools. One of the key plan implementation steps will be to rate/prioritize these missing sections of sidewalk based on the criteria established above. All major roadway capital projects will include the construction of sidewalks.

Goal T III: Provide a pedestrian system that is safe, connects to destinations, accesses transit, and is accessible by all.

#### **Policies**

- T25: Place high priority on sidewalk projects that abut or provide connections to schools, parks, bus stops, shopping, or large places of employment.

  Arterial streets should receive sidewalks prior to local streets. Utilize the project priority matrix to refine priorities for publicly funded sidewalk projects.
- T26: Provide sidewalks on both sides of arterial streets. Arterial sidewalks should be separated from the streets with a planting strip and/or should be constructed to a wider or higher standard.
- T27: Work with the School District to determine and construct high priority safe school walk routes. The City should partner with the School District to achieve these goals.
- **T28:** Provide pedestrian signalization at signalized intersections, and install midblock crossings if safety warrants can be met.
- T29: Develop a curb ramp program to install wheelchair ramps at all curbed intersections.
- T30: Require all commercial, multi-family and residential short-plat and long-plat developments to construct sidewalks or separated all weather trails.
- T31: Reinforce neighborhood character and abutting land uses when developing and designing the pedestrian system.
- T32: Encourage and assist neighborhoods to form Local Improvement Districts for sidewalk construction.
- T33: Develop an off-street trail system that serves a recreational and transportation function. Preserve rights-of-way for future non-motorized trail connections, and utilize utility easements for trails when feasible.

#### **Bicycle Rider Needs**

One of the key elements in developing a multi-modal transportation system is the bicycle. The role of bicycles as a multi-modal component of a trip have been greatly enhanced by Metro and Community Transit which have installed bicycle racks on all transit vehicles. The RTA system as it is implemented over time has made a commitment to include bicycles in its system planning.

Shoreline is generally well-suited for potential north-south bicycle travel, and is relatively flat except for the area between 155th and 145th in the Meridian Park part of Shoreline. The east-west travel is a bit more difficult due to the north-south running hills and valleys, and the limited opportunities to cross I-5. Several areas in Shoreline are difficult to serve by bicycle because of topography. These areas include Richmond Beach and Innis Arden. One of the key bicycle system improvements will be the construction of the Interurban Trail. This trail system will

serve as the north-south spine for the bike rider, much as Aurora and I-5 serve as the automobile and transit spine. Two corridors have been identified to serve the east-west demand in Shoreline. These are 195<sup>th</sup> and 155<sup>th</sup>. As Figure T-6 shows, the Bicycle Network Figure, indicates, there are several forms that bicycle projects will take. These include off-street trails, bicycle lanes on streets, wider outside lanes, and signing. In some instances it may be necessary to restrict on-street parking to accommodate bicycles and increased vehicular traffic. Maintenance in the form of regular sweeping of bicycle streets is also very important. If the shoulder, or bike lane is dirty (full of leaves, glass, gravel, or other debris), then the bike rider will choose to use the vehicle lanes.

Bicycles can legally use all streets in Shoreline (except I-5).

Goal T IV: Consider a bicycle system that is connective and safe and encourages bicycling as a viable alternative method of transportation.

#### **Policies**

- T34: Consider a bicycle system that provides access through the city and to key destinations within (including shopping, schools, libraries, sports facilities, places of employment, services, and parks).
- T35: Work with neighboring jurisdictions and other agencies to ensure that Shoreline's bicycle routes/corridors and designs are compatible and connect.
- Work with the School District to determine and encourage safe bike routes to schools. The City should partner with the School District to achieve these goals.
- T37: Incorporate bicycle-friendly designs in future roadway or intersection improvement projects. The feasibility of bike lanes on roadway capital projects should be considered.
- **T38:** Require new commercial developments to provide convenient bicycle parking facilities for employees and visitors/customers. Encourage merchants to install bike parking facilities.
- T39: Aggressively pursue construction of the Interurban Trail.
- T40: Make improvements to reduce barriers to bicycle travel and resolve bicycle safety problems.
- T41: All future roadway capital improvement projects should consider and accommodate bicycles in design and construction.

#### **Neighborhood Protection**

Citizens have expressed concerns about cut-through traffic and speeding on neighborhood streets. King County had previously installed speed humps on several

streets in Shoreline. Most cut-through traffic occurs because the arterial streets are congested. A balance should be achieved in choosing to improve capacity to keep traffic flowing on the arterials versus installing "traffic calming" devices on neighborhood cut-through streets to discourage inappropriate use of these streets under all alternatives. Issues to consider include the cost of providing adequate capacity, the design and types of traffic calming tools used, the community process to evaluate and select these techniques, and the impact of traffic calming on emergency service access.

During the citizen outreach effort for developing the Comprehensive Plan, almost every neighborhood in the city identified at least one street or subarea that is being impacted by non-local (cut-through) traffic. Concerns expressed by citizens due to the cut-through traffic including noise, speeding, safety, quality of life, loss of property value, deterioration of roadway, etc.

Over the past two decades, a significant number of experiments, and innovations have been tested to reduce the negative impacts of cut-through traffic. Solutions to the impacts range from education and enforcement to capital construction projects. The capital solutions include: traffic circles, speed humps, narrowing, chicanes, textured pavement, closures, partial closures, traffic diverters, and more. Generally speaking, the more frequent a "traffic calming" device is used, the better the results in slowing or discouraging traffic. Also, different devices are successful in different situations.

Goal T V: Protect the livability and safety of residential neighborhoods from the adverse impacts of the automobile.

#### **Policies**

Work with residents on non-arterial streets to reduce speeds and cutthrough traffic with enforcement, traffic calming, signing, or other techniques. The City may want to develop and fund a traffic calming program intended to preserve the neighborhood character and safety on residential streets. These programs can range from enforcement and education, through the construction of physical devices such as speed humps, traffic circles, traffic diverters, chokers, chicanes, closures or partial closures, etc. During the public involvement process for this Plan, Mmany of the neighborhoods during the public involvement process for this plan-identified areas that could be addressed. The implementation program should include a means by which priorities areas can be determined. The Fire and Police Departments should be involved in the development of this program. The City should explore a program whereby neighborhoods could "buy" traffic-calming devices.

T43: Design new residential streets to discourage cut-through traffic while maintaining the connectivity of the transportation system. Discourage cut-de-sacs, and require narrowed residential streets when possible.

## **Transportation Demand Management**

Transportation Demand Management (TDM) is the concept whereby communities, employers, schools, or households develop management techniques to influence mode choice, the time of trip, and even whether or not a trip is made. Demand management is a major policy thrust in the MTP and also required under GMA. Examples of TDM include:

- charging for parking at worksites for those that drive alone so that the cost to drive by oneself is increased;
- providing free or low cost bus passes to employees as an employee benefit package which encourages them to utilize transit or vanpools;
- providing cash or other incentives or subsidies to employees that carpool, walk, or bicycle to work;
- allowing flexible hours at work sites, so that employees can shift their commute trip to non-peak periods;
- developing telecommute programs so that employees do not need to commute into the office to work every day;
- providing guaranteed ride home programs to employees that bus, carpool, or vanpool;
- providing worksite amenities that reduce the need for one to have a car.
   These amenities can include: cash machines, food services, daycare, breakrooms, showers and clothes lockers.

There are many other techniques such as convenient parking for carpool/vanpools, in house ridematching services, up to date bus maps on site, and others that can encourage the non-SOV commute.

In 1991 the State Legislature passed the Commute Trip Reduction (CTR) Law. This law sets goals for single occupant commute trip reduction at worksites that employ over 100 regular full time employees. Shoreline currently has six sites that are required to comply with the CTR law. As the City continues to grow and new businesses locate here, these sites may also fall under the CTR law. The City, CTR sites, Metro and Community Transit need to work together to provide good transit service to these sites.

# Goal T VI: Encourage alternative modes of transportation to reduce the transportation impacts of employment sites.

#### **Policies**

T44: Work with major employers, schools, and conference facilities to provide incentives to employees, students, and visitors to utilize alternatives other than the single occupant vehicle.

T45: Work with transit providers and employment sites to evaluate and improve transit service and facilities that serve these locations.

T46: Support educational programs for children and residents that communicate transportation tradeoffs, safety, and behavior.

T47: New commercial and office developments should provide physical features supportive of the use of alternative modes of travel, such as:

- preferential parking for carpools and vanpools;
- \_bicycle parking;
- on-site shower and changing facilities;
- transportation information kiosks or bulletin boards (with bus schedules);
- funding for education and marketing efforts;
- special loading and unloading facilities for transit, carpools, and vanpools;
- strong pedestrian linkages to off-site destinations (especially to transit stops).

T48: Incorporate new strategies as they are developed into Shoreline's TDM programs that promote or provide alternatives to driving alone.

# Freight and Mobility System

Trucks are the means by which goods are delivered to retail establishments, construction materials delivered to sites, etc. The City must ensure that trucks have the ability to move to and through Shoreline. On the other hand, the City needs to ensure that residential streets are not unnecessarily impacted by cutthrough traffic from trucks. The cost of goods is directly influenced by cost of moving freight. Cost of trucking is directly influenced by the ability to move within Shoreline. Traffic congestion increases the price of goods. This section of the transportation element proposes that the City establish regulations for trucks. The regulations can include weight restrictions on streets, restrictions on the use of compression brakes, and establishment of loading zones.

Currently, Shoreline does not have truck regulations in its City Municipal Code. Truck regulations would designate truck routes and require trucks to use these streets for access by placing weight restrictions on other streets. Truck regulations will give the City a tool to keep trucks off residential streets while maintaining access to, from, and through the City of Shoreline. The regulations could also regulate loading and unloading hours and location or noise levels.

Figure T-7, at the end of this element, includes streets to be identified as truck corridors. Streets not on this map could request the City establish regulations to discourage through truck use.

Goal T VII: Develop a transportation system that enhances the delivery and transport of goods and services.

#### **Policies**

T49: Ensure that trucks, service, delivery, and other freight transportation can move with minimal delay on streets and rail systems in our city.

T50: Adopt, implement, and enforce truck regulations so that through trucks utilize appropriate routes, and do not use local streets for cut-through.

- T51: Minimize the disruption of arterial traffic flow by developing loading zones in commercial areas with time restrictions and regulate areas that don't have loading zones.
- T52: Improve major truck streets to support safe, efficient truck movement.
- **T53:** Discourage truck traffics from driving through residential neighborhoods during typical sleeping hours.
- T53.1: Encourage truck and bus traffic to access the METRO Bus Barn and the Solid Waste Transfer Station from I-5 rather than from city neighborhoods.

#### **Funding**

Currently Shoreline does not have a dedicated revenue stream to construct capital or transportation projects. Upon incorporation, the City received a transfer of some funding for capital projects that the County had funded in its capital program. A portion of this funding is earmarked for certain projects because the funding comes from grants that were written for a specific improvement. The City has been aggressively pursuing grants to fund projects, but available grant sources are few and competition is fierce for these limited sources.

Goal TF VIII: Secure a reliable and fair funding package that ensures continuous maintenance and improvement of the transportation system.

#### **Policies**

- T54: Aggressively seek grant opportunities to implement the adopted transportation element to ensure that Shoreline receives its fair share of regional and federal funding.
- **T55:** Develop-Analyze and if feasible implement a city-wide development impact fee program which will include transportation system improvements.
- **T56:** Support efforts at the state and federal level to increase funding for the transportation system.
- T57: Allocate resources in the City's Transportation Improvement Program and Capital Improvement Program according to the project prioritization matrix.
- T58: Identify and pursue a long-term strategy for obtaining grant funding which matches project objectives with revenue sources so as to maximize opportunities for grant awards. Allocate adequate City resources to effectively compete in regional, state, federal, and special grant programs based on the prioritization criteria.
- T59: Emphasize the development of joint projects which may increase the likelihood of receiving funding by coordinating with neighboring cities, King

County, Snohomish County, the State, Metro, Community Transit and private developers.

- T60: Develop a Transportation Facilities Plan which demonstrates the mediumrange adequacy of transportation revenues by balancing project costs against reasonably expected revenue sources. The TFP shall be updated annually to reflect changes in revenue availability and revisions to the TFP project list.
- **T61:** Pursue one of the following actions in the event that the City is unable to fund the transportation capital improvements (see TFP) needed to maintain adopted transportation level of service standards:
  - Phase development which is consistent with the land use plan until such time that adequate resources can be identified to provide adequate transportation improvements;
  - Reassess the City's land use plan to reduce the travel demand placed on the system to the degree necessary to meet adopted transportation service standards; or
  - Reassess the City's adopted transportation level of service standards to reflect levels that can be maintained given known financial resources.

## **Regional Coordination**

Shoreline is located in a dynamic and complex regional transportation system. Many governmental entities make funding, policy, and project decisions that affect Shoreline, including US Congress, State legislature, Federal Highway Administration, WSDOT, PSRC, King County (including Metro Transit), Snohomish County, Community Transit, and neighboring cities. Shoreline needs to take a more active role in representing the City interests and the Comprehensive Plan goals and policies in these multiple forums. Shoreline should actively seek inclusion and participation in these forums. It should continue participation in the Seashore Transportation Forum, and assist in strengthening the role and effectiveness of this committee. Shoreline should become more active in the Regional Transportation Policy Committee, Regional Transit Committee, Regional Projects Evaluation Committee, and the many committees (including the RTA Board) that are developing and implementing the Regional Transit Authority plan. In addition, Shoreline should track legislation at the regional, state-wide and national level that affect funding or revenues, or which may have fiscal or administrative impacts on the City.

It is important for Shoreline to foster relationships with its neighbors in jointly funding, mitigating, and constructing transportation projects and services. Because of its unique geographic location between two major growth areas, the City needs to ensure that it does not become a pass-through city.

Shoreline is greatly impacted by state highways. Aurora (SR99) and Interstate-5 are two state highways that run the entire length of Shoreline carrying over 225,000 vehicles per day most of which are pass through. In addition, Shoreline is bordered by three state highways: SR 104 (205<sup>th</sup>), SR 523 (145<sup>th</sup>), and SR 522 (Bothell

Way). Even though these three corridors are not currently inside the corporate limits of the City, Shoreline residents and businesses take primary and direct access from them. Generally, the sidewalk systems along these streets are in disrepair, illumination is lacking, and the lanes are narrow and do not include provisions to improve transit operations. Shoreline should aggressively work with WSDOT, the transit providers, and neighboring jurisdictions to improve these corridors.

Interstate-5 has three full interchanges with direct impact on Shoreline: 145<sup>th</sup>, 175<sup>th</sup>, and 205<sup>th</sup>. The location of each of these interchanges has direct and significant impact on these streets, essentially making them Shoreline's most heavily travelled east-west corridors. When I-5 is congested, parallel arterials in Shoreline often receive spillover through traffic: 15<sup>th</sup> NortheastN.E., 5<sup>th</sup> NortheastN.E., 1<sup>st</sup> NortheastN.E., and Meridian are the streets that tend to pick up the overflow traffic.

Shoreline's transportation system and neighborhoods are also impacted by its immediate neighbors. Shoreline needs to develop interlocal agreements for mitigation of impacts by developments in one jurisdiction that impact the neighboring jurisdiction, to jointly develop or push for roadway improvements along common border streets, and to leverage Metro, Community Transit, or RTA service coverage.

# Goal T IX: Coordinate the implementation and development of Shoreline's transportation system with our neighbors and regional partners.

#### **Policies**

- **T62:** Aggressively pursue improvements to the State Highways through or bordering Shoreline. The improvements can include:
  - capacity increases;
  - queue jump lanes, HOV lanes or other transit enhancements;
  - improved pedestrian facilities including sidewalks, pedestrian crossings, bus zone improvements;
  - interconnected signal systems; and
  - illumination.
- T63: Pursue methods of lessening the impact on Richmond Beach Drive at the King/Snohomish County line (e.g. closing) if the Point Wells property is not annexed by the City of Shoreline.
- **T64:** Pursue interlocal agreements for maintenance of 145<sup>th</sup> and 205<sup>th</sup> Streets. Seek simplification of jurisdictional issues on145th and 205<sup>th</sup>.
- **T65:** Develop interlocal agreements with neighboring jurisdictions for development impact mitigation and for coordination of joint projects.
- T66: Support the continuous, cooperative, and comprehensive transportation planning process conducted by the Puget Sound Regional Council (PSRC) pursuant to its designation as the Puget Sound's Metropolitan Planning Organization (MPO). The primary forum for the development of regional transportation systems plans and strategies shall be the PSRC. The City of Shoreline shall submit its local transportation plan to the PSRC for review and certification of conformity with the Metropolitan Transportation Plan, as dictated by county, state and federal guidelines.
- T67: Work with RTA, WSDOT, Metro and City of Seattle to explore utilizing 145<sup>th</sup> as an express bus corridor between I-5 and Bothell Way.
- **T68:** Consider the extension of 205<sup>th</sup> only as potential mitigation for future development of Point Wells.

#### **Operations and Maintenance**

It is important to maintain the transportation infrastructure for safety and to preserve the City's investment. Maintenance includes responding to citizen needs, street sweeping, traffic signal maintenance, roadside vegetation control, illumination, street sign and channelization, sidewalk maintenance, transit stop and park and ride maintenance, and street resurfacing. Operations include operating and improving the traffic signal system, including transportation system management tasks such as transit priority projects, ramp metering, coordination of signals, and monitoring signal system operations. A pavement management system will assist

the City in evaluating and prioritizing streets for resurfacing. A regular program of pavement resurfacing will extend the useful life of the roadway asset, and prevent much more costly repairs in the future.

#### Goal T X: Maintain the transportation infrastructure so that it is safe and functional.

#### **Policies**

T69: Develop a regular maintenance schedule for all components of the transportation infrastructure. Develop maintenance schedules based on safety/imminent danger, and on preservation of resources.

T70: Inventory and inspect the transportation infrastructure.

T71: Establish a pavement management system.

T72: Upgrade our signal system so that it is responsive, fully interconnected, and moves people efficiently and safely.

T73: Ensure that the transit agencies maintain park and ride lots and bus zones so that they are clean, safe, secure and do not negatively impact surrounding land uses.

#### **Parking**

Parking is often a dilemma in transportation planning with what appears to be opposing goals. On the one hand, limiting the supply or increasing the cost of parking has been effective in reducing SOV trips or shifting commuters to other modes, and thus reducing the negative impacts of vehicles on the transportation system. On the other hand, an adequate supply of parking is important for retail merchants to be able to attract employees in a competitive job market. Restricted off-street parking can force parking onto streets and neighborhoods which is often an issue with residents. The design of parking lots is also important to pedestrians and to abutting uses. Buffering parking from the street and adjacent uses through screening, setbacks, landscaping can be effective in mitigating these impacts. Finally, parking lots should be designed to safely draw the pedestrian to the business from the street/sidewalk.

Goal T XI: Assure that parking contributes to the need to provide alternatives to the single occupant vehicle.

#### **Policies**

T74: Develop guidelines that ensure adequate parking supply. Parking requirements should be designed for average need, not full capacity.

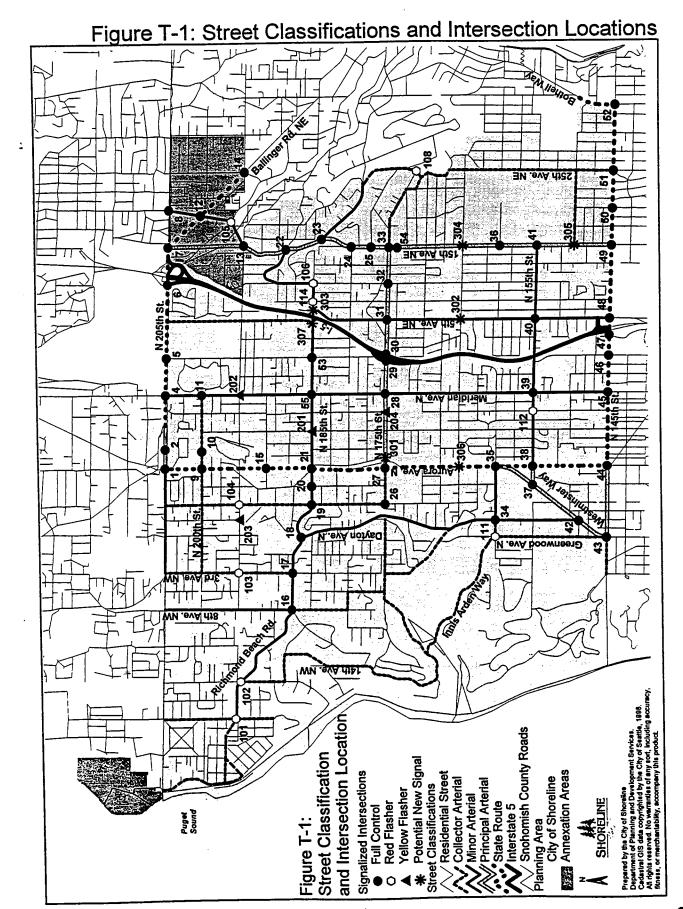
T75: Develop parking pricing strategies to support the utilization of alternative modes of transportation.

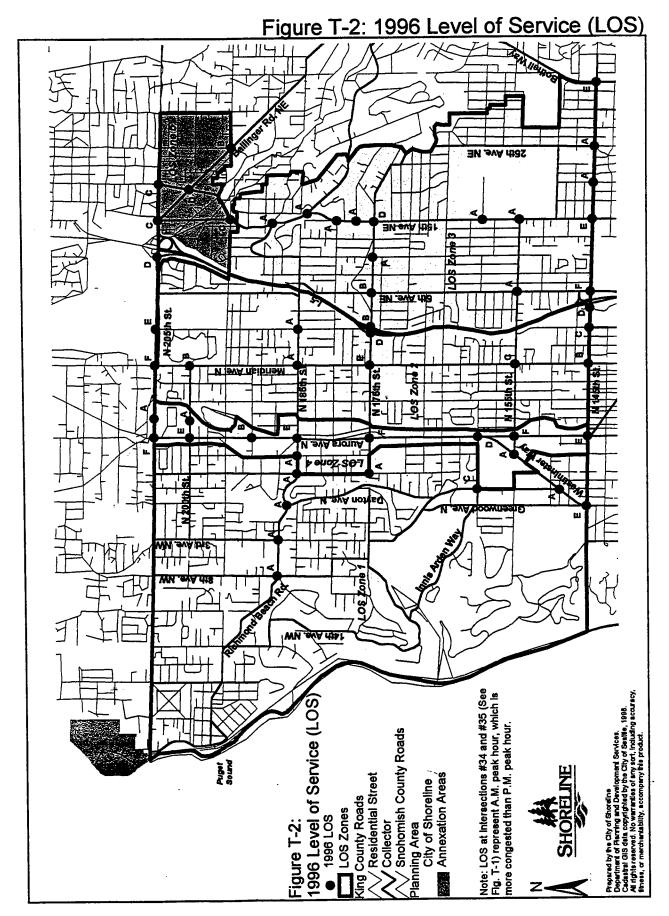
T76: Support the creation of residential parking zones or other strategies to protect neighborhoods from spillover parking from major parking generators.

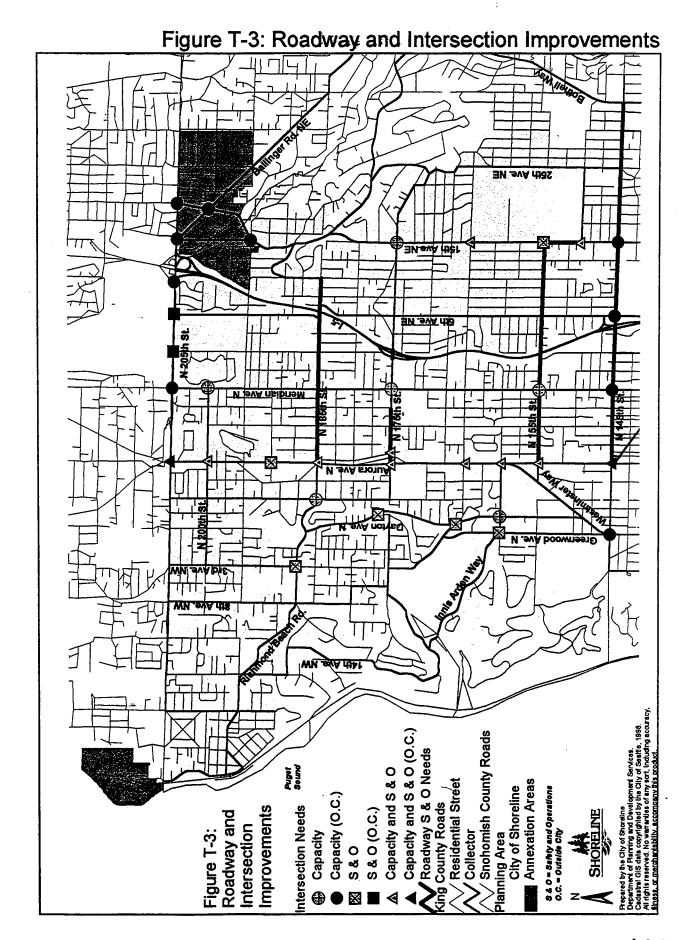
T77: Develop off-street parking that is compatible with abutting uses and supports a pedestrian oriented streetscape. Encourage parking structures where possible.

T78: Encourage shared use of parking and construction of underground parking.

**T79:** Prohibit parking meters in Shoreline.







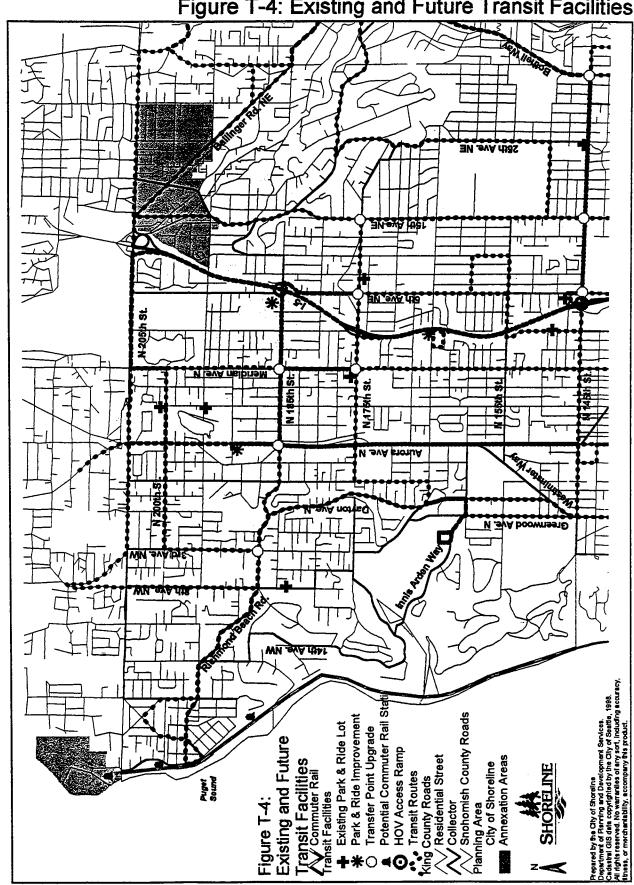


Figure T-4: Existing and Future Transit Facilities

Figure T-5: Existing and Future Pedestrian Facilities Note: This map represents the arterial sidewalk system. Sidewalks on non-arterial streets will be constructed as opportunities arise. Path System
Sidewalk System
Sidewalk System
Sidewalk System
Sidewalk System
Sidewalk System Needs
King County Roads King County Roads Snohomish County Roads Pedestrian Facilities Existing and Future City of Shoreline Annexation Areas Prepared by the City of Shoreline Department of Pararing and Develop Cadastral GIS data copyrighted by the All rights reserved. No warrantes of stress, or nearchartetility, accompan Pedestrian System Figure T-5: Planning Area O.C. - Outside City

Figure T-6: Future Bicycle System 25th Ave. NE Blcycle System

Off-Street Trails

Striped Blcycle Lanes
Signed Blcycle Routes
King County Roads

Collector

Collector

Snohomish County Roads
Planning Area
City of Shoreline
City of Shoreline Figure T-6: Future Bicycle System

