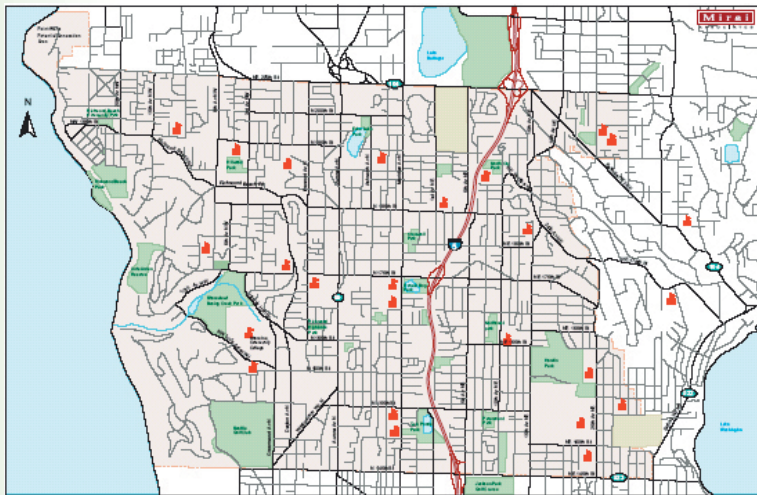




City of Shoreline

Transportation Master Plan

Planning Commission Recommended Draft



November 2004

Prepared by



Mirai Associates

Table of Contents

Chapter 1. Introduction

State and Regional Policy Context.....	1-1
Washington State Growth Management Act	1-1
Puget Sound Regional Council: Vision 2020 and Destination 2030	1-2
King County Countywide Planning Policies.....	1-2
City of Shoreline Transportation Goals & Policies.....	1-2
Planning Process.....	1-2

Chapter 2. Inventory of the Existing Transportation System

Roadway Network	2-1
Access Control Classification System	2-4
Local and Regional Public Transit.....	2-6
Pedestrian and Bicycle Systems.....	2-15
Accident Analysis	2-16
Shoreline's Neighborhood Traffic Safety Program.....	2-25
Transportation Demand Management	2-25

Chapter 3. Forecasts

Shoreline Zone Structure.....	3-1
Current Year Land Use Data	3-1
Year 2022 Land Use Forecasts.....	3-3
2022 Traffic Volumes (PM Peak Hour).....	3-3
Impacts To State Owned Transportation Facilities.....	3-4

Chapter 4. Level of Service

Transportation and Growth Management	4-1
Level of Service Standards for Roads.....	4-2
Level of Service Methodology for Roadways and Intersections	4-3
Adopted and Recommended Level of Service Standards	4-4
Existing Level of Service (2002).....	4-5
Future No Action Level of Service (2022)	4-6
Future Level of Service with Improvements (2022)	4-7
Level of Service for Transit.....	4-10

Chapter 5. Project Evaluation

Pedestrian Project Evaluation	5-1
Bicycle Project Evaluation	5-1
Roadway and Intersection Project Evaluation.....	5-3

Chapter 6. Recommendations: Safe and Friendly Streets

Enhanced Safety Programs	6-2
“Green Streets”.....	6-6
Street Classification Recommendations	6-7
Roadway Improvement Projects	6-10
Transit Improvements.....	6-14
Pedestrian Improvements	6-16
Bicycle Improvements	6-19
Transportation Demand Management (TDM)	6-24
Freight and Mobility System	6-25
Regional Coordination.....	6-25

Chapter 7. Financial Analysis

Financial Analysis	7-1
Transportation Revenue	7-1
Transportation Expenditures	7-1
Financial Forecast	7-3
Available Revenue Sources	7-3
Funding Plan.....	7-6

Appendices

Appendix 1-1. Transportation Goals and Policies	
Appendix 1-2. Guiding Principles	
Appendix 2-1. NTSP Update, October 2003	
Appendix 3-1. Land Use Data at SAZ Level	
Appendix 3-2. 2002 PM Peak Hour Intersection Traffic Volumes	
Appendix 3-3. 2022 PM Peak Hour Intersection Traffic Volumes	
Appendix 4-1. Level of Service	
Appendix 4-2. LOS Standards and Methodology	
Appendix 5-1. Pedestrian Evaluation Chart	
Appendix 5-2. Bicycle Evaluation Chart	
Appendix 5-3. Roadway Evaluation Chart	
Appendix 6-1. Project Recommendations	
Appendix 6-2. New Project Cross Reference	
Appendix 6-3. Planning Commission Transportation Work Group Street Classification Recommendations	
Appendix 7-1. Construction Cost Estimates Methodology	

List of Figures

Chapter 2. Inventory of the Existing Transportation System

Figure 2-1. Existing Street Classifications*	2-3
Figure 2-2. Existing Average Weekday Traffic Volumes (2000-2002)*	2-5
Figure 2-3. All Day Transit Service Routes*	2-13
Figure 2-4. Peak Period Only Transit Service Coverage*	2-14
Figure 2-5. Existing Sidewalks*	2-17
Figure 2-6. Existing Bicycle System Map*	2-18
Figure 2-7. Number of Accidents at Intersections (1998-2003)*	2-21
Figure 2-8. Accidents Rates at Intersection Locations (1998-2003)*	2-22
Figure 2-9. Number of Accidents at Mid-block Locations (1998-2003)*	2-23
Figure 2-10. Accidents Rates at Mid-block Locations (1998-2003)*	2-24
Figure 2-11. Pedestrian and Bicycle Related Accident Locations (1998-2003)*	2-26

Chapter 3. Forecasts

Figure 3-1. Map Showing Shoreline's SAZs and PSRC's TAZs	3-2
Figure 3-2. 2002 Existing PM Peak Hour and 2022 Forecast PM Peak Hour Volumes on Major Arterials*	3-6

Chapter 4. Level of Service

Figure 4-1. Three-Legged Concurrency Stool	4-1
Figure 4-2. Level of Service and Delay for Signalized Intersections: 2002, 2022 No Action and 2022 with Proposed Improvements*	4-9
Figure 4-3. Existing Transit Stop Coverage Areas*	4-13
Figure 4-4. Existing All Day Transit Service Coverage Area*	4-14

Chapter 6. Recommendations: Safe and Friendly Streets

Figure 6-1. Recommended Street Classifications*	6-9
Figure 6-2. Roadway Improvements Recommended for Funding*	6-13
Figure 6-3. Pedestrian Projects Recommended for Funding*	6-18
Figure 6-4. Major Bicycle Corridors*	6-21
Figure 6-5. Bicycle Facility Improvements Recommended for Funding*	6-23
Figure 6-6. Truck Route Map*	6-27

Chapter 7. Financial Analysis

Figure 7-1. 20-Year Transportation Revenue	7-2
Figure 7-2. Transportation Capital Expenditure 2003 Budget	7-2

* Available in larger (11" x 17") format.

Chapter 1. Introduction

The City of Shoreline's Draft Transportation Master Plan (TMP) is the long-range blueprint for travel and mobility, describing a vision for transportation that supports the City's adopted land use plan. The TMP will provide guidance for public and private sector decisions on local and regional transportation investments, including short, mid-, and long-range transportation *and* related land-use activities. In this way, the City can assess the relative importance of the projects and schedule their planning, engineering, and construction as growth takes place and the need for the facilities and improvements is warranted. It also establishes a prioritization of the projects to be included in future Capital Improvement Plans. The TMP covers all forms of personal travel - walking, bicycling, bus and automobile.

The TMP reflects policy direction from the City Council, Planning Commission, public comments, and technical analysis of existing conditions and external requirements (such as federal and state mandates). The TMP focuses on satisfying travel demand by making efficient use of the existing infrastructure and by providing the facilities and services to encourage walking, cycling and transit as priority modes.

How Does the TMP Affect Daily Life in Shoreline?

The TMP describes a vision for Shoreline's transportation future, identifies policies to help achieve that vision and contains the transportation funding program for implementation. These policies affect choices for travel by car, bus, bicycle and on foot. By identifying transportation priorities and the funding to support them, the TMP is able to recommend what projects are built and what programs are pursued.

State and Regional Policy Context

The City's Comprehensive Plan must meet a number of state and regional requirements. Key requirements include compliance with the State Growth Management Act, certification of the transportation-related provisions in local comprehensive plans, and King County's Countywide Planning Policies.

Washington State Growth Management Act

In 1990, Washington adopted the Growth Management Act (GMA) to mandate local comprehensive planning in heavily populated and high growth areas of the state. The GMA establishes broad goals, such as managing urban growth, protecting agricultural lands, reducing sprawl, and encouraging multi-modal transportation systems. The overall goals of the GMA encourage affected jurisdictions, including Shoreline, to keep pace with land development and make public road and transit improvements to help meet the expected transportation demand.

Puget Sound Regional Council: Vision 2020 and Destination 2030

Vision 2020, the growth, economic and transportation strategy for the four-county central Puget Sound region includes the multi-county planning policies required under the Growth

Management Act. These policies are used to review and certify the transportation-related provisions in local comprehensive plans. Destination 2030, adopted in May 2001, is the detailed transportation component of Vision 2020. Destination 2030 emphasizes four areas of transportation policy: (1) optimize and maintain existing facilities and services, (2) manage travel demand, (3) link transportation with land use, and (4) offer greater mobility options. Destination 2030 includes an investment strategy to guide decisions on transportation projects and programming.

King County Countywide Planning Policies

As one of the jurisdictions in King County, the state GMA requires that Shoreline's Transportation Element must be consistent with the King County Countywide Planning Policies. In general, the Countywide Planning Policies direct local jurisdictions to provide a balanced transportation system using all modes of transportation as efficiently as possible. It directs state, regional, county and city governments to coordinate effectively when planning transportation improvements.

City of Shoreline Transportation Goals & Policies

The recommended system improvements in the Transportation Master Plan will implement the City of Shoreline's transportation goals and policies in the Transportation Element of the City's Comprehensive Plan. Those policies provide direction for prioritizing projects and programs and identifying the City's strategic interests in regional investments, adjacent transportation facilities, and funding alternatives. The proposed goals and policies for the 2004 Transportation Element update are listed in **Appendix 1-1** and reprinted as sidebars throughout the relevant chapters of the TMP.

Planning Process

The City of Shoreline initiated the update of its Comprehensive Plan concurrent with development of long-range "Master Plans" for Transportation, Parks and Recreation, and Surface Water Management. The City was also in the process of updating its shoreline policies. The City's general policy direction for updating the Transportation Element of the Comprehensive Plan and creating the Transportation Master Plan called for the following areas of emphasis:

- Build on the existing comprehensive plan and assume the adopted land use vision is unchanged
- Create safe and friendly streets, emphasizing safety, convenience, attractiveness and environmental enhancement ("green streets")
- Be aggressive in developing capital systems that can serve more than one function: for example, coordinate storm- and surface water improvements with transportation projects, and use the transportation system to support the parks system.
- Provide safe linkages to schools
- Develop walk-able communities where residents can walk to the library, park, school, or nearby grocery store, cross streets safely and enjoy the experience

Open Houses

Early in the planning process, the City held two public meetings (in September 2003) to introduce the project to the public. At the open houses, the City asked for public input on the transportation, parks, recreation and open space, shoreline, and storm water conditions

to be addressed in the master plans. Transportation proved to be a very popular topic, and many residents expressed interest in a “green streets” program (see community design element of the comprehensive plan). The City also used its web site, a newsletter and press releases to the media to convey information about the planning processes.

Planning Commission Transportation Work Group

The Planning Commission retained oversight of the initial development of the various work products, dividing into topical work groups for each discipline. The transportation work group held a series of meetings that were open to the public, in which they advised staff and the consultant team in developing policies for the initial update of the transportation element of the comprehensive plan. Each member of the transportation work group identified areas of the City needing transportation improvements and identified policy issues for consideration.

The transportation work group adopted a set of guiding principles (see **Appendix 1-1**) to serve as a framework for developing transportation policies (see **Appendix 1-2**) and highlighted the following priorities:

- Put a major emphasis on alternatives to driving alone... especially pedestrian systems.
- Fix missing links – don’t build “sidewalks to nowhere”
- Coordinate with parks and surface water master planning efforts

The transportation work group reviewed the street classification system recommended in this plan. They also reviewed preliminary lists of proposed transportation improvements, with particular attention to pedestrian project evaluation criteria.

Staff Workshops

A team of senior City staff representing the planning, parks, public works and finance departments reviewed and approved materials for presentation to the planning commission work groups. The staff discussed a number of issues, including

- “SeaStreets” in the City of Seattle as an example of integrated surface water and transportation needs. SeaStreets have no curbs and integrate meandering edge treatments and other landscaping elements.
- Street classifications
- The need to emphasize east-west ped/bike connections
- Recognizing the Interurban Trail as the spine of the City’s bike/pathway network
- How to develop a sense of place around “Greenstreets”
- Potential connections to the regional transportation system

The team identified and reviewed recommended project improvements for consideration in the Capital Facilities Element of the Comprehensive Plan. This project list will be forwarded to the Planning Commission for consideration along with recommendations on the Comprehensive Plan amendments and Master Plans. Both the Planning Commission and City Council will conduct public hearings prior to taking action on the plans.

TMP Review and Adoption

The review and adoption process for the TMP, as well as the Comprehensive Plan and other Master plans, included

- Public open house and presentation of the Draft Comprehensive Plan and Master Plans
- Planning Commission Public Hearings and Plan Reviews
- Planning Commission Recommended Draft Comprehensive Plan and Master Plans
- City Council Public Hearings and Plan Reviews
- City Council Adoption of Comprehensive Plan and Master Plans