

Section VI - 2009 King Countywide STP/CMAQ Non-Motorized Application

This application is available on the King County Web site at
<http://www.kingcounty.gov/transportation/kcdot/PlanningAndPolicy/RegionalTransportationPlanning/2009KCCountywideComp.aspx>

PROJECT DESCRIPTION INFORMATION	
1	<p>Project Title: East King County Bicycle Wayfinding</p> <p><i>(For roadway project titles: list facility name, limits and any other identifying words; e.g., SR-520 HOV (104th Ave NE to 124th Ave NE)</i></p>
2	<p>Sponsoring Agency: City of Bellevue</p> <p>Also identify any co-sponsor(s): Cities of Bothell, Issaquah, Kirkland, and Redmond</p>
3	<p>Project Contact Person: Jen Benn</p> <p>Address: 450 110th Avenue NE, Bellevue, WA 98004</p> <p>Phone: 425-452-4270</p> <p>Fax: 425-452-2817</p> <p>E-Mail: jbenn@bellevuewa.gov</p>
4	<p>Project description. Please distinguish between the scope of the project and the justification and/or need for the project.</p> <p>a. Project scope: Please describe clearly and concisely the individual components of this project. What will be the specific outcome of this project? What will be built, purchased or provided with this grant request? For example, if this is part of a larger project, please be specific as to what portion on which the grant funds will be used.</p> <p>Five cities are partnering to implement a coordinated and comprehensive Wayfinding Program along high priority bicycle corridors in Bellevue, Bothell, Issaquah, Kirkland, and Redmond. Once completed, approximately 1,100 wayfinding signs or pavement markings directing bicyclists to distinct neighborhoods, destinations, and regional trail facilities will be installed on 55-60 corridors throughout East King County.</p> <p>b. Project justification, need or purpose: Please explain the intent, need or purpose of this project. What is the goal or desired outcome?</p> <p>For years cities throughout East King County have been implementing segments of planned bicycle networks in a piecemeal manner. The result is a lack of a connected and easily navigable cycling network. To begin to correct this deficiency with a systemic approach, a coalition of East King County cities have been meeting to implement a comprehensive wayfinding program, similar in format to the City of Seattle's Bicycle Route Sign initiative.</p> <p>The partners agreed to focus on bicycle corridors that spanned "border to border" or that served primary destinations, such as city centers, activity centers, major transit hubs, regional parks and trails, and widely recognized neighborhoods. By adding the wayfinding amenity to the high priority bicycle corridors, the cities will be promoting an environment supportive of inter-jurisdictional commute and recreation trips.</p>

5	<p>Project Location: 55-60 corridors within and connecting the five participating cities</p> <p>Answer the following questions if applicable:</p> <p>b. Crossroad/landmark nearest to beginning of project: NA <i>(Identify landmark if no crossroad)</i></p> <p>c. Crossroad/landmark nearest to end of project: NA <i>(Identify landmark if no crossroad)</i></p>		
6	<p>Map: Include an 8½” x 11” legible vicinity map (if applicable) with completed application form. <i>If unable to send map electronically, provide separately by fax or mail.</i></p>		
7	<p>Federal Functional Classification Code <i>(Select only one)</i></p> <p style="text-align: center;"><i>Assistance in determining the functional classification of a project is available by calling Stephanie Rossi at 206-971-3054..</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding: 5px;"> <p style="text-align: center;"><u>Rural Functional Classifications</u> ("under 5,000 population") <small>(Outside the federal-aid urbanized and federal-aid urban areas)</small></p> <p><input type="checkbox"/> 00 Exception</p> <p><input type="checkbox"/> 01 Principal Arterial - Interstate</p> <p><input type="checkbox"/> 02 Principal Arterial</p> <p><input type="checkbox"/> 06 Minor Arterial</p> <p><input type="checkbox"/> 07 Major Collector</p> <p><input type="checkbox"/> 08 Minor Collector</p> <p><input type="checkbox"/> 09 Local Access</p> <p><input type="checkbox"/> 21 Proposed Principal Arterial – Interstate</p> <p><input type="checkbox"/> 22 Proposed Principal Arterial</p> <p><input type="checkbox"/> 26 Proposed Minor Arterial</p> <p><input type="checkbox"/> 27 Proposed Major Collector</p> <p><input type="checkbox"/> 28 Proposed Minor Collector</p> <p><input type="checkbox"/> 29 Proposed Local Access</p> </td> <td style="width: 50%; padding: 5px;"> <p style="text-align: center;"><u>Urban Functional Classifications</u> ("over 5,000 population") <small>(Inside the federal-aid urbanized and federal-aid urban areas)</small></p> <p><input checked="" type="checkbox"/> 00 Exception</p> <p><input type="checkbox"/> 11 Principal Arterial – Interstate</p> <p><input type="checkbox"/> 12 Principal Arterial – Expressway</p> <p><input type="checkbox"/> 14 Principal Arterial</p> <p><input type="checkbox"/> 16 Minor Arterial</p> <p><input type="checkbox"/> 17 Collector</p> <p><input type="checkbox"/> 19 Local Access</p> <p><input type="checkbox"/> 31 Proposed Principal Arterial – Interstate</p> <p><input type="checkbox"/> 32 Proposed Principal Arterial – Expressway</p> <p><input type="checkbox"/> 34 Proposed Principal Arterial</p> <p><input type="checkbox"/> 36 Proposed Minor Arterial</p> <p><input type="checkbox"/> 37 Proposed Collector</p> <p><input type="checkbox"/> 39 Proposed Local Access</p> </td> </tr> </table> <p>NOTE: <u>Federally Funded Projects.</u> A roadway must be <u>approved</u> on the federally classified roadway system before projects on it may use federal transportation funds (this includes proposed new facilities). Projects which are on a roadway with a functional classification of 09, 19, 29 or 39 are not eligible to use federal transportation funds unless they are one of the exceptions listed below. If your project is an exception, identify its functional class code as "00".</p> <p>Examples of Exceptions:</p> <ul style="list-style-type: none"> • Any bicycle and/or pedestrian project. • Projects <u>not</u> on a roadway and using CMAQ or other funds • Any transit project, including equipment purchase and park-and-ride lot projects. 	<p style="text-align: center;"><u>Rural Functional Classifications</u> ("under 5,000 population") <small>(Outside the federal-aid urbanized and federal-aid urban areas)</small></p> <p><input type="checkbox"/> 00 Exception</p> <p><input type="checkbox"/> 01 Principal Arterial - Interstate</p> <p><input type="checkbox"/> 02 Principal Arterial</p> <p><input type="checkbox"/> 06 Minor Arterial</p> <p><input type="checkbox"/> 07 Major Collector</p> <p><input type="checkbox"/> 08 Minor Collector</p> <p><input type="checkbox"/> 09 Local Access</p> <p><input type="checkbox"/> 21 Proposed Principal Arterial – Interstate</p> <p><input type="checkbox"/> 22 Proposed Principal Arterial</p> <p><input type="checkbox"/> 26 Proposed Minor Arterial</p> <p><input type="checkbox"/> 27 Proposed Major Collector</p> <p><input type="checkbox"/> 28 Proposed Minor Collector</p> <p><input type="checkbox"/> 29 Proposed Local Access</p>	<p style="text-align: center;"><u>Urban Functional Classifications</u> ("over 5,000 population") <small>(Inside the federal-aid urbanized and federal-aid urban areas)</small></p> <p><input checked="" type="checkbox"/> 00 Exception</p> <p><input type="checkbox"/> 11 Principal Arterial – Interstate</p> <p><input type="checkbox"/> 12 Principal Arterial – Expressway</p> <p><input type="checkbox"/> 14 Principal Arterial</p> <p><input type="checkbox"/> 16 Minor Arterial</p> <p><input type="checkbox"/> 17 Collector</p> <p><input type="checkbox"/> 19 Local Access</p> <p><input type="checkbox"/> 31 Proposed Principal Arterial – Interstate</p> <p><input type="checkbox"/> 32 Proposed Principal Arterial – Expressway</p> <p><input type="checkbox"/> 34 Proposed Principal Arterial</p> <p><input type="checkbox"/> 36 Proposed Minor Arterial</p> <p><input type="checkbox"/> 37 Proposed Collector</p> <p><input type="checkbox"/> 39 Proposed Local Access</p>
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PROJECT EVALUATION INFORMATION

IMPORTANT INSTRUCTIONS: Projects will be evaluated and scored based on the information provided in Parts 1 and 2 that follow. Refer to “Countywide Non-Motorized Project Evaluation Criteria” included in the 2006 King Countywide Call for Projects for information on how the projects will be evaluated.

- **Part 1:** Choose one of the two project categories that best fits your proposed project and complete Section A or B
- **Part 2:** Complete all Sections c through F

PROJECT EVALUATION: PART 1

Choose which of the two Centers categories your project falls under:

- Project is located within a Center
> *NOTE: Complete Section A, then proceed to Sections C through F in Part 2*
- Connecting Corridors
> *NOTE: Complete Section B, then proceed to Sections C through F in Part 2*

SECTION B: CONNECTING CORRIDORS

Complete this section if your project is a “Connecting Corridors” project, then proceed to Part 2.

Please explain how your project addresses the following:

- Describe how the investment in the corridor improves access or directly benefits a center(s) by providing a range of travel modes and by serving multiple user groups.
- Describe how the project improves a corridor in logical segments, thereby preventing the creating of missing links or gaps.
- Describe how the project creates more effective and efficient travel flows along the corridor by filling missing links or removing barriers.
- Describe how the improvements create long-term sustainable solutions and improve the system as a whole.

ACCESS TO CENTERS

The five cities support a combined population of nearly 280,000 and the following regional centers within King County: Downtown Bellevue, Downtown Redmond, Redmond-Overlake, and Kirkland-Totem Lake, and numerous locally designated activity/employment centers. The high priority bicycle corridors were selected, in part because they provide a logical and convenient route to and between centers.

TRAVEL MODES/USER GROUPS

The Wayfinding signs are designed primarily to inform bicyclists of route options and destination locations, but are also useful for pedestrians. Because many of the signs will be placed in proximity to intersections, the drivers of cars and trucks will also benefit from the information provided.

EFFICIENCY/SUSTAINABILITY

The routes were planned to coordinate as bicyclists transition from one jurisdiction to another. For example, Redmond, Bellevue, and Issaquah are each signing West Lake Sammamish Parkway so that there will be a continuous and consistent wayfinding presence along the entire corridor. The signs will also direct bicyclists to major regional facilities, such as the Burke-Gilman Trail or Mountains to Sound Trail, using the safest and most efficient bicycle routes.

Implementing a well planned, attractive, and effective system of network signing enhances bikeway facilities by promoting their presence to potential and existing bicyclists as well as to the motorist. Signing helps increase bicycle use by leading people to appropriate routes and demonstrating the variety of trips one can make using an alternative mode. The more people become comfortable navigating the system, the more likely they are to ride than drive, generating a longer term reduction in vehicle trips for commute, errand, and recreational purposes.

Each of the participating cities have strong generators for bicycling, from employers that promote this alternative mode to many schools/colleges to major destinations such as regional trails, Park & Ride lots, and parks.

IMPROVES IN LOGICAL SEGMENTS

The following table provides information about the routes and wayfinding plan for each of the participating agencies.

Corridors	Example Destinations	# Signs or Pavement Markings	Total Cost
Bellevue			
Lake Washington Loop Trail, 118 th Avenue NE, 140 th Avenue NE/145 th Place, 164 th Avenue, West Lake Sammamish Parkway, 520 Trail, Lake to Lake Trail, Lake Washington Boulevard/SE 60 th /Coal Creek Parkway/Forest Drive/Lakemont Boulevard	Mercer Slough, Enatai Beach Park, Bellevue High School, Newcastle Beach Park, Bellevue Golf Course, Crossroads Community Center, Crossroads Mall, Interlake High School, Wilburton Hill Park and Botanical Garden, and Downtown Bellevue	269	174,931
Bothell			
Sammamish River Trail (Burke-Gilman), North Creek Trail, SR-527, NE 180 th Street, Main Street/Beardslee/NE 195 th , Waynita Way	UW Bothell/Cascadia Campus, Park at Bothell Landing, North Creek Business Park, Canyon Park Business Park, North Creek Playfields, Skateboard Park, Downtown Bothell, and Canyon Park shopping Center	152	\$134,307
Issaquah			
Newport Way, West Lake Sammamish Parkway, NW Sammamish Road, Highlands Drive NE, Front Street, East Lake Sammamish Parkway, NW Gilman Boulevard, 2 nd Avenue SE, Sunset Way, 12 th Avenue NE, and SR-900.	Issaquah P&R, Tibbets Valley Park, Lake Sammamish State Park, Timberlake Park, East Lake Sammamish Trail, Costco Corporate, Microsoft, Siemens, Tiger Mountain State Park, Issaquah Commons, King County Library, Issaquah Fish Hatchery, and local schools	136	\$34,000
Kirkland			
NE 132 nd Street, NE 124 th Street, 124 th Avenue NE, Juanita Drive, NE 100 th Street, 100 th Avenue NE, NE 8 th Street, NE 68 th /70 th Street, 520 Trail, 116 th Avenue NE, 108 th Avenue NE, Lake Washington Boulevard	Sammamish River Trail, Burke-Gilman Trail, Totem Lake, Downtown Kirkland, Juanita, Houghton, Bellevue, Woodinville, Bothell, Kenmore, SR 520 Trail, and Rose Hill	399	\$71,130

Redmond

Willows Road, Sammamish River Trail, Redwood Road, 166 th Avenue NE, Avondale Road, NE 109 th Street/NE 104 th Street, NE 90 th Street, NE 80 th Street, 180 th Avenue NE, Old Redmond Road, 150 th Avenue NE, SR 520 Trail, 156 th Avenue NE/154 th Avenue NE, West Lake Sammamish Parkway, East Lake Sammamish Parkway, and Marymoor Connector Trail	Marymoor Park, Downtown Redmond, Overlake/Microsoft, SR 520 Trail, Sammamish River Trail, and adjacent Urban Centers	140	\$98,000
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SECTION C: PROJECT READINESS

Once Section A or B in Part 1 has been completed, complete all of Part 2, Sections C through F.

Introduction: Two primary tools will be used to obtain information needed to judge a project's ability to proceed: responses to the project readiness and financial plan sections below. The primary objective of the evaluation is to determine if a sponsor has assembled all of the funding needed to complete the project or phase(s), and when the sponsor will be ready to obligate the requested funding. All questions **must** be completely and accurately filled out in order for this information to be properly assessed. The information will be used to determine:

- When the sponsor can complete all prerequisites needed to obligate the project's requested funding.
- When the sponsor plans to obligate requested funding.
- The amount and source of secured funding for the project.
- The amount and source of reasonably expected but unsecured funding for the project.
- If the federal funds will complete the project or a phase of the project.

Note: The standard PSRC definitions will apply for determining when funding is "secured" or "reasonably expected to be secured." These definitions can be found at

<http://www.psrc.org/projects/tip/selection/2006/CallMaterials/Secured%20funding%20def%202006.pdf>

Project Readiness: **Please fill out the questions below if your project is requesting funds for a Right of Way (ROW) and/or Construction (CN) phase. Projects requesting funds for a Preliminary Engineering phase need not answer question in Section C: Project Readiness.**

It is recognizes that the complexity of some projects can trigger a variety of prerequisites that must be satisfied before STP and CMAQ funding is typically eligible to obligate. These questions are designed to identify these requirements and assist sponsors to:

- Identify which requirements apply to their specific project.
- Identify which requirements have already been satisfied at time of application.
- Provide an explanation and realistic completion date for all requirements not yet completed.

Important instructions: For question A below, select one of the three options from the drop down list for all items that apply at the time of submission of this application. These items are based on the documentation requirements for obligation of federal funds. For any item where "Item not yet completed" is selected, and for any additional requirements pertaining to the project, provide details in question B, including the estimated schedule for completion.

A. Check all items that apply below. Note: if no ROW is required for the project, select "not needed" for sections b through g.

Not yet completed a. Final FHWA or FTA approval of environmental documents including:

Not needed - BA Concurrence: NMFS, U.S. Fish & Wildlife, WSDOT.

Not needed - Section 106 Concurrence.

Not yet completed - FHWA/FTA Environmental Classification Summary Checklist (or EA or EIS).

Not needed b. True Cost Estimate for Right of Way.

Not needed c. Right of Way Plans (stamped).

Not needed d. Relocation Plan (if applicable).

Not needed e. Right of way certification.

Not needed f. Certification Audit by WSDOT R/W Analyst.

Not needed g. Relocation Certification, if applicable.

(select one) - Certification Audit by WSDOT of Relocation Process, if applicable.

Already completed h. Engineer's Estimate.

Not yet completed i. All environmental permits obtained such as Army Corps of Engineers Permit, HPA, etc.

B. Additional information: include details on any items above that are not yet completed and provide an estimated schedule; please provide any additional information as appropriate.

Partner cities have completed their wayfinding plans. Final installation plans will be completed during spring 2010 and sign installation will be complete by November 2010.

Section D: Financial Plan

Financial plan: **Please fill out Tables A-D below and corresponding questions E-F. The purpose of the tables and questions is to allow sponsors to fully document their project's financial plan and schedule. Tables A, B, and C build upon one another to provide the estimated cost of each phase as well as a project's total cost (Table D). The tables require sponsors to list the federal funds being requested from the Countywide Competition (Table A), as well as ALL other sources of secured (Table B) and unsecured funds (Table C) needed to complete the project.**

Guidelines:

- All requested information must be provided to earn maximum points.
- Provide financial information for all funding types in every applicable phase, and use a separate row for each funding source.
- Totals of federal and other funds listed in Tables A, B, and C should equal the total project cost in Table D.
- Funding commitment letters must be provided for all financial partners.

Required Match: A minimum of 13.5% match is required for both STP and CMAQ funds. Sponsors of projects awarded funds through this competition will be required to provide information on these matching funds at a later date.

Table A: Funding Requested from Non-Motorized Program

Phase	Estimated Obligation Date by Phase (mm/dd/yy)	Federal Funding Source (enter either STP or CMAQ; choose only one)	Federal Funds Amount
CN	5/1/2010	CMAQ	\$443,198
			\$
			\$
Totals:			\$443,198

Table B: Existing Secured Funding

Phase	Estimated Obligation* date by Phase (mm/dd/yy)	Source	Amount
CN	5/1/2010	Local	\$69,170
			\$
			\$
			\$
			\$
TOTAL:			\$69,170

*For tables B or C “obligation” may be defined as expenditure or other commitment of funds

Table C: Needed future funding (unsecured) Note: do not include the grant funds requested in Table A

Phase	Estimated Obligation* date by Phase (mm/dd/yy)	Source	Amount
			\$
			\$
			\$
			\$
			\$
TOTAL:			\$

*For tables B or C “obligation” may be defined as expenditure or other commitment of funds

Table D: Total Project Cost (Please provide the total estimated cost and scheduled completed date for each phase of the project.)

Phase	Total estimated cost	Phase	Scheduled completion date (mm/dd/yy)
Planning:	\$	Planning:	
Preliminary Engineering/Design:	\$	Preliminary Engineering/Design:	
Right of Way:	\$	Right of Way:	
Construction:	\$512,368	Construction:	11/1/2010
Other (Specify) :	\$	Other (specify) :	
Total Project Cost:	\$512,368	Estimated date of completion (i.e. open for use)	11/1/2010

E. Identify the project phases (PE, ROW, CN, etc.) that will be fully completed if requested funding is obtained and status of current phases (i.e. PE at 30%):

The requested funding would complete installation of a five-city bicycle wayfinding program.

All agencies have identified a source for their match requirement:

Bellevue: Transportation Capital Improvement Program

Bothell: Traffic Safety Improvements Fund

Issaquah: Complete Street Funds

Kirkland: General Fund

Redmond: Transportation Capital Improvement Program

F. If unable to completely fill out Table D (Total Project Cost): Use the space below to explain the nature of any project for which the total project cost is presently unknown. For example, a project may study the merits/costs of various routes or construction techniques and, consequently, the total project costs won't be determined until the study is complete.

SECTION E: JOINT OPPORTUNITIES

Please explain how your project addresses the following:

- What other private and/or publicly funded project(s) will receive a benefit from this project? Describe the other project(s) and its relationship to your agency's project. Be specific. (*E.g., If funds are committed to another project, describe the commitment, including the amount. Describe any conditions associated with the commitment, including timing. If the commitment or partnership is non-financial, so indicate.*) In your answer, summarize relevant letters and/or documents describing commitments and key points. Include dates. Do not attach copies of these letters or documents.
- Will an opportunity be lost if the project does not receive funds through this project competition? Describe and explain the consequences.

This is a unique partnership between five cities in East King County to establish a comprehensive and coordinated system of bicycle Wayfinding. It enhances the cities' other investments in the bicycle network, such as Bellevue's West Lake Sammamish Parkway Enhancements Project or Bothell's North Creek Trail Project.

What will be lost is the synergy of this coordinated effort. All partner agencies are committed to installing wayfinding along these high-priority corridors, but without the funding the work will be done on an ad hoc basis and may take many years to complete.

SECTION F: PLANNING

Please explain how your project addresses the following:

- Describe the planning process through which this project has been developed.
- Describe how the project is consistent with a local jurisdiction's adopted comprehensive plan, local plan, transit plan, etc. **IMPORTANT:** Provide specific citations and a copy of the appropriate pages and include dates of adoption.
- Describe how the project is consistent with Destination 2030 (adopted May 2001). Refer to the PSRC website (www.psrc.org) for a list of Destination 2030 policies.

LOCAL PLAN

All agencies have completed pedestrian and bicycle transportation facility plans and sub-area plans that promote improvement of the bicycle network. Bellevue recently completed and update to its Pedestrian and Bicycle Plan which included an extensive public involvement process.

This wayfinding program is consistent with the comprehensive and sub-area plans of all agencies, as noted in the policies below and attaches documentation:

BELLEVUE: Comprehensive Plan Policy PB-8: Install way-finding and route signs and provide maps and internet-based information to guide users through the pedestrian and bicycle systems. [Found in Pedestrian/Bike Transportation Facilities Plan at http://www.bellevuewa.gov/comprehensive_plan.htm]

BOTHELL: Comprehensive Plan Policies TR-P30: Existing bicycle routes should be signed as soon as possible to meet Shared Roadway standards until construction to Bicycle Lane standards is completed; and TR-A57: Erect signage on those roadways which are designated as existing bicycle routes in Figure TR-9. [Found in Bothell Comprehensive Plan / Transportation Element / Bicycle Facilities Policies and Bicycle Facilities Actions, pages TR-43 and TR-44, respectively.]

ISSAQUAH: Comprehensive Plan goals C, D, and H promote non-motorized transportation a viable alternative. Also the City has adopted a Complete Street Ordinance (No. 2514), which is intended to complete missing links and improve non-motorized facilities.

KIRKLAND: Complete Streets Ordinance, Kirkland Municipal Code 19.08.055 and Council approved Active Transportation Plan on March 2, 2009 (Objective G8.1 calls for completion of a bicycle wayfinding system.

REDMOND: Included in Connecting Redmond (found at <http://www.redmond.gov/ConnectingRedmond/policiesplans/tmpprojectdocs.asp>)

REGIONAL PLAN

The East King County Wayfinding program is consistent with Destination 2030 policy RT 8.1 because it enhances multi-modal connections between centers and adjacent jurisdictions.

SECTION G: AIR QUALITY

NOTE: While project sponsors are not requested to provide detailed quantitative analyses at this time, those projects that are selected for CMAQ funds will be asked to assist staff in quantifying the benefits of their projects prior to TIP submittal.

Describe how your project will reduce emissions. Include discussion of the population served by the project – who will benefit, where and over what time period. Be as specific as possible and include examples.

Answers will vary depending on the type of project, for example:

- Describe how your project will reduce VMT, either by eliminating or shortening vehicle trips;
- Describe how your project will result in a mode shift from SOVs to transit, carpool or nonmotorized;
- Describe how your project will result in an increase in transit ridership, either through new transit service or greater accessibility to transit;
- Describe how your project will improve the flow of traffic and reduce the amount of idling vehicles - how will this project relieve an existing problem;
- Describe how your project will reduce emissions through alternative fuels or vehicles.

The Bike Wayfinding project generates air quality improvements by creating an environment conducive to bicycling across jurisdiction lines, which will result in a reduction of vehicle miles traveled and CO₂ emissions across all of East King County.

Pedestrian and Bicycle Transportation Facility Plan

Please note that the Central Business District (CBD) has been renamed the Downtown. Any references in this document to CBD or the Central Business District should be considered as a reference to the Downtown.

INTRODUCTION

The Pedestrian and Bicycle Transportation Facility Plan is intended to create a continuous, safety-oriented system of sidewalks, walkways, trails, and bikeways in and around the City. Its goal is to provide convenient access to schools, activity centers, transit routes, parks, and other recreation areas, thereby increasing citizens' mobility choices while reducing reliance on the single-occupant vehicle.

To accomplish this goal, the Comprehensive Plan's Transportation Element and the Pedestrian and Bicycle Transportation Facility Plan set forth policies relating to the planning, design, implementation, and maintenance of pedestrian and bicycle facilities in and around the City. These policies address various broad areas including non-motorized systems, facility design, transit, property development, and maintenance, among other issues.

The plan also identifies and prioritizes pedestrian and bicycle projects for future implementation. Priority is given to projects that improve system connectivity, complete missing links between existing facilities, and address safety issues and access to activity centers, transit and school bus routes.

BACKGROUND

In 1992 the City of Bellevue recognized the need for a city-wide pedestrian and bicycle transportation system. Working with citizens, several departments, and commissions, the City developed a long-range Pedestrian and Bicycle Transportation Plan. The plan's goal was to create an integrated pedestrian and bicycle system that would provide mobility choices for residents and visitors well into the 21st century. The 1999 Pedestrian and Bicycle Transportation Plan Update supplements the policies, project maps, and project lists found in the Pedestrian and Bicycle Transportation Facility Plan and the broad policies and systems maps found in the Transportation Element of the Comprehensive Plan.

OVERVIEW

Pedestrian facilities are a vital part of the City's transportation system. Sidewalks and walkways provide access to transit routes and business centers, offering residents alternative choices for commuting to work, traveling on errands, and non-work related trips. Pedestrian facilities also provide links to schools, activity centers, and other recreational areas. These facilities provide access to city parks and enable people to travel on foot from one park to another. An integrated and well-maintained system of walkways and off-street trails makes walking an attractive option for people of all ages, whether they are going to work, school, or seeking exercise or recreation.

Bicycle facilities along key north/south and east/west routes provide general mobility and enhance safety for commuters, recreational bicyclists, and individuals running local errands. Planned routes for bicyclists also provide access to transit routes and park-and-ride lots, making this an attractive alternative for commuters. Building and maintaining bicycle facilities along planned routes is a key strategy of this plan.

Pedestrian and Bicycle Project Maps show locations of proposed projects and identify each project by facility type. Project numbers listed on these maps are cross-referenced to the Project Lists.

All projects listed in the plan are prioritized. Priority A projects address safety issues, provide access to activity centers, create links to transit or school bus systems, or complete connections between planned pedestrian or bicycle facilities or trails. System connectivity is an additional consideration for Priority A projects. These projects should be completed within the first half of the 30-year plan. Priority B projects, on the other hand, will be built as opportunities arise. Therefore, these projects may or may not be completed within the first half of the plan's timeframe.

For more detailed policy and programmatic guidance, see the Pedestrian and Bicycle Transportation Plan Update and Parks and Open Space System Plan.

POLICIES

POLICY PB-1. Confirm project process prior to implementation by coordinating the planning, development and funding of non-motorized systems with affected citizens, community councils, neighborhood associations, and business groups. Consider pedestrians and bicyclists as users in the planning, design, construction and maintenance of all roadway projects.

POLICY PB-2. Pedestrian and Bicycle System Maps, Project Maps and Project shall be used as the basis for all planning, design, construction and maintenance of

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 5861

AN ORDINANCE relating to the Comprehensive Plan of the City of Bellevue, as required and adopted pursuant to the Growth Management Act of 1990, as amended (Chapter 36.70A RCW); adopting 2008 amendments to the Comprehensive Plan known as the Pedestrian and Bicycle Transportation Plan Update CPA, amending existing pedestrian and bicycle transportation policies in the Transportation Element and adding a new Goal statement to the Pedestrian and Bicycle Transportation subsection, amending Figures TR-11 and TR-12, amending Policy UD-53 in the Urban Design Element and Policy PA-21 in the Parks, Open Space and Recreation Element, amending existing policies and adding new policies in the Pedestrian and Bicycle Transportation Facility Plan, amending the project list and maps in the Pedestrian and Bicycle Transportation Facility Plan; and establishing an effective date.

WHEREAS, on March 12, 2007, the City Council initiated an update to the 1999 Pedestrian and Bicycle Transportation Plan, charging the Transportation Commission with overseeing the update process that included reviewing the Plan's policies, projects, and priorities to ensure they remain consistent with the City's current transportation needs and overall trends; and

WHEREAS, On October 6, 2008, the City Council received the Transportation Commission's plan update recommendations and directed the Planning Commission to move forward with the related Comprehensive Plan amendment; and

WHEREAS, the Planning Commission held a public hearing on November 19, 2008, with regard to the Pedestrian and Bicycle Transportation Plan Update CPA; and

WHEREAS, the Planning Commission recommended that the City Council approve such proposed amendment; and

WHEREAS, the City Council has considered the Pedestrian and Bicycle Transportation Plan Update CPA concurrently with the other 2008 Comprehensive Plan amendments; and

WHEREAS, the City Council finds that the Pedestrian and Bicycle Transportation Plan Update CPA satisfies the decision criteria established in Part 20.30(I) of the Land Use Code; and

WHEREAS, the City of Bellevue has complied with the requirements of the State Environmental Policy Act (Chapter 43.21C RCW) and the City Environmental Procedures Code (Chapter 22.02 BMC); now, therefore,

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:

Section 1. Policies TR-14, TR-25, TR-26, TR-43, TR-46, TR-54, TR-55, TR-70, and the Pedestrian and Bicycle Transportation System Goal Statement and policies TR-79, TR-85, TR-94, and TR-98 in the Transportation Element as contained in the City of Bellevue's Comprehensive Plan are hereby amended as set forth in Attachment G1 and by this reference fully incorporated herein.

Section 2. The Pedestrian and Bicycle Transportation Facility Plan as contained in the City of Bellevue's Comprehensive Plan is hereby amended as set forth in Attachment G2 and by this reference fully incorporated herein.

Section 3. Figures TR.11 and TR.12 of the Transportation Element as contained in the City of Bellevue's Comprehensive Plan are hereby amended as set forth in Attachment G3 and by this reference fully incorporated herein.

Section 4. Policy UD-53 in the Urban Design Element as contained in the City of Bellevue's Comprehensive Plan is hereby amended as follows:

POLICY UD-53: Integrate into the designs of frontage roads along the I-90 freeway corridor the Mountain-to-Sound greenway concept. Give particular attention to multi-use trails, large-scale landscaping, and pedestrian amenities.

Section 5. Policy PA-21 in the Parks, Open Space and Recreation Element as contained in the City of Bellevue's Comprehensive Plan is hereby amended as follows:

POLICY PA-21: Coordinate with other jurisdictions, including state agencies and the Port of Seattle, in the planning and development of regional greenways, parks, cultural, and recreational facilities, including the Burlington Northern Santa Fe (BNSF) trail system.

Section 6. This ordinance shall take effect and be in force five days after its passage and legal publication. This ordinance, the Transportation Element, the Pedestrian and Bicycle Transportation Facility Plan, the Urban Design Element,

the Parks, Open Space and Recreation Element, and the city's Comprehensive Plan shall be available for public inspection in the office of the City Clerk.

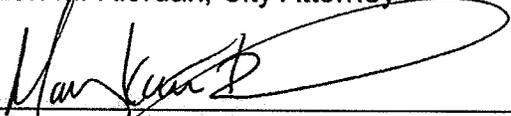
Passed by the City Council this 17th day of Feb, 2009, and signed in authentication of its passage this 17th day of Feb, 2009.

(SEAL)



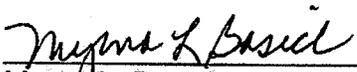
Grant S. Degginger, Mayor

Approved as to form:
Lori M. Riordan, City Attorney



Mary Kate Berens, Deputy City Attorney

Attest:



Myrna L. Basich, City Clerk

Published: 2/20/09

ATTACHMENT G1

Amending existing pedestrian and bicycle transportation policies in the Transportation Element and adding a new Goal statement to the Ped-Bike Transportation subsection

POLICY TR-14. Require new development to incorporate physical features designed to promote use of alternatives to single-occupant vehicles, such as:

1. Preferential parking for carpools and vanpools;
2. Special loading and unloading facilities for carpools and vanpools;
3. Transit facilities, including comfortable bus stops and waiting areas, adequate turning room, and where appropriate, signal preemption and queue-jump lanes; and
4. Bicycle parking, showers, secure storage facilities, lockers, and related facilities.

POLICY TR-25. Provide for adequate roadway, pedestrian, and bicycling connections in newly developing and redeveloping areas of the city, promoting both internal access and linkages with the rest of the city.

POLICY TR-26. Address the special needs of physically challenged and disabled citizens with various degrees of mobility in planning, designing, implementing, and maintaining transportation improvements particularly non-motorized improvements, and other transportation facilities and in delivering transportation services and programs, in accordance with the Americans with Disabilities Act (ADA).
Also cross-reference with TR-79 (Prioritization).

POLICY TR-43. Provide sufficient arterial right-of-way ~~with sufficient width to limit air and noise pollution on adjoining properties,~~ to permit landscaping, and to accommodate ~~non-vehicular circulation.~~ pedestrian and bicycle facilities, while considering neighborhood character and context.

POLICY TR-46. Maintain and enhance safety for all users of the roadway network using measures such as the following:

1. Maintain an accident reduction program to identify high accident locations in the city, evaluate potential alternative solutions and implement recommended changes;
2. ~~Increase enforcement of~~ Enforce traffic laws, particularly speeding, and failing to make a full stop at red lights and stop signs;
3. ~~Expand the use of~~ Employ traffic calming measures to slow vehicular travel speed along residential streets and to reduce cut-through traffic;
4. Improve the opportunities for pedestrians to safely cross streets at intersection and mid-block locations;
5. ~~Increase~~ Provide street lighting where needed and appropriate based on neighborhood context to improve visibility and safety while minimizing light/glare spillover onto adjacent parcels; and
6. Minimize the number of driveways on all arterials to reduce the potential for pedestrian and vehicle collisions.

POLICY TR-54. Work with transit providers to create, maintain, and enhance a system of supportive facilities and systems such as:

1. Transit stations and centers;
2. Passenger shelters;
3. Park and ride lots;
4. Dedicated bus lanes, bus layovers, bus queue by-pass lanes, bus signal priorities;
5. Pedestrian and bicycle facilities, including secure bicycle parking;
6. Pricing;
7. Kiosks and on-line information; and
8. Incentive programs.

POLICY TR-55. Work with private developers and transit providers to integrate transit facilities and pedestrian and bicycle connections into residential, retail, manufacturing, commercial, office, and other types of development.

POLICY TR-70. Promote transit use and achieve land use objectives through transit system planning that includes consideration of:

1. Land uses that support transit, including mixed use and night-time activities;
2. Transit-oriented development opportunities with the private and public sectors;
3. A safe and accessible pedestrian environment, with restrictions on auto access;
4. Integrating multiple access modes, including buses, carpools and vanpools, bicycles and pedestrians;
5. Provisions for bicycles on transit vehicles; and
6. Access to regional destinations, including employment centers, residential concentrations, and major recreational facilities; and
7. Urban design and community character that support and facilitate transit use; and
8. Protecting nearby neighborhoods from undesirable impacts.

Pedestrian and Bicycle Transportation System

GOAL:

To plan, design, build, and maintain an integrated, comprehensive network of pedestrian and bicycle facilities in collaboration with community stakeholders. In doing so, the city will advance the following objectives:

- Provide transportation choices for those who can or wish to travel by foot or bicycle to destinations within their neighborhood, city, and the greater Eastside and region
- Improve health and fitness, and enhance recreational benefits.
- Ensure that those in the community who cannot drive due to age, income or disability have mobility options

- Provide a safe and accessible street environment for all users
- Improve overall neighborhood livability
- Support and enhance public transit use
- Reduce air and noise pollution, energy use, and oil consumption
- Support economic development

Pedestrian and bicycle facilities are a vital part of Bellevue's transportation system. An integrated, safe pedestrian and bicycle system will increase mobility choices, reduce reliance on motorized vehicles, and provide convenient access to schools, activity centers, transit and school bus systems, parks, and other recreation areas throughout the city.

Building and maintaining a seamless network of walkways, bikeways, and off-street trails requires a coordinated, interdepartmental effort. Planning, funding, building, and maintaining a pedestrian and bicycle system will require support from the Transportation, Parks and Community Services, Utilities, and Planning and Community Development departments.

Walking is an important travel mode for residents, particularly non-drivers and children, and provides significant health benefits. Well-maintained pedestrian facilities enhance the quality of life and contribute to improved air quality by encouraging pedestrian travel. A safe and continuous pedestrian system will link key activity areas, transit, and recreation centers and make walking an attractive option for residents, commuters, and visitors, regardless of age or physical abilities.

The bicycle system is a key component in providing mobility choices and bicycle facilities should be incorporated into the city's transportation priorities. Bicycle facilities along key north-south and east-west routes will improve safety and access across the city. A connected system provides access to bus stops and park-and-ride lots, increasing the attractiveness of transit, especially for commute trips.

By constructing pedestrian and bicycle facilities that connect existing facilities to each other and complete missing links in the system, the city will increase mobility options for everyone. This approach to pedestrian and bicycle transportation is consistent with the Puget Sound Regional Council's vision for a region-wide non-motorized transportation system, as articulated in Destination 2030.

Additional policy and programmatic guidance is found in the Pedestrian and Bicycle Transportation Plan, and the Parks and Open Space System Plan.

Cross-reference:

See Figure TR. 11 Pedestrian System map, Figure TR. 12 Bicycle System map, and Pedestrian and Bicycle Transportation Plan.

Policy TR-79: Assign high priority to pedestrian and bicycle projects that:

1. Address safety issues;
2. Provide access to activity centers such as schools, parks, public facilities such as libraries and community centers, retail centers, major employment centers, and concentrations of housing; and commercial areas;
3. Provide accessible linkages to the transit and school bus systems;
4. Complete and connect planned pedestrian or bicycle facilities or trails;

Transportation Element

5. Provide system connectivity or provide connections to the existing portions of the system to develop primary north-south or east-west routes;
 6. Conform to and are consistent with Bellevue's roadway classification system; and
 7. Serve concentrations of residents with special accessibility needs.
6. ~~Recognize and develop minimal energy paths, defined as the route between two given points requiring the least amount of energy for a bicyclist or pedestrian to traverse.~~

POLICY TR-85. Coordinate the planning, design and construction of pedestrian and bicycle facilities with other agencies where City of Bellevue corridors, such as the Lake Washington Loop system, continue into neighboring jurisdictions, such as the Lake Washington Loop system.

POLICY TR-94. Support multi-modal transportation solutions including general purpose lanes, High Capacity Transit, HOV lanes, transit and non-motorized improvements that use the best available technologies and best practices, including state-of-the-art, innovative implementation tools and programs, including such as bike-sharing programs, that have been shown to be successful in other areas and are applicable to Bellevue.

POLICY TR-98. Work with state agencies to include non-motorized facilities when planning, designing and constructing enhancements to I-90 (east of I-405), I-405 and SR-520 (including non-motorized facilities on a replacement for the Evergreen Point floating bridge, and completing the connection between the bridge and the existing non-motorized trail).

Attachment G2
Proposed Amendments to Comprehensive Plan (Volume II)
Pedestrian and Bicycle Transportation Facility Plan

Pedestrian and Bicycle Transportation Facility Plan

Please note that the Central Business District (CBD) has been renamed the Downtown. Any references in this document to CBD or the Central Business District should be considered as a reference to the Downtown.

Introduction

The Pedestrian and Bicycle Transportation Facility Plan is intended to create a continuous, safety-oriented system of sidewalks, walkways, trails, and bikeways in and around the City. Its goal is to provide convenient access to schools, activity centers, transit routes, parks, and other recreation areas, thereby increasing citizens' mobility choices while reducing reliance on the single-occupant vehicle.

To accomplish this goal, the Comprehensive Plan's Transportation Element and the Pedestrian and Bicycle Transportation Facility Plan set forth policies relating to the planning, design, implementation, and maintenance of pedestrian and bicycle facilities in and around the City. These policies address various broad areas including non-motorized systems, facility design, transit, property development, and maintenance, among other issues.

The plan also identifies and prioritizes pedestrian and bicycle projects for future implementation. Priority is given to projects that improve system connectivity, complete missing links between existing facilities, and address safety issues and access to activity centers, transit and school bus routes.

Background

In 2007 the City of Bellevue initiated the Pedestrian and Bicycle Transportation Plan project (the second comprehensive update to the original 1993 Plan). Working with citizens, several departments, and commissions, the City developed a long-range Pedestrian and Bicycle Transportation Plan. The plan's goal is to create an integrated pedestrian and bicycle system that will provide mobility choices for residents and visitors well into the 21st century. The 2009 Pedestrian and Bicycle Transportation Plan Update supplements the policies, project maps, and project lists found in the Pedestrian and Bicycle Transportation Facility Plan and the broad policies and systems maps found in the Transportation Element of the Comprehensive Plan.

Overview

Pedestrian facilities are a vital part of the City's transportation system. Sidewalks and walkways provide access to transit routes and business centers, offering residents alternative choices for commuting to work, traveling on errands, and non-work related trips. Pedestrian facilities also provide links to schools, activity centers, and other recreational areas. These facilities provide access to city parks and enable people to travel on foot from one park to another. An integrated and well-maintained system of walkways and off-street trails makes walking an attractive option for people of all ages, whether they are going to work, school, or seeking exercise or recreation.

Bicycle facilities along key north/south and east/west routes provide general mobility and enhance safety for commuters, recreational bicyclists, and individuals running local errands. Planned routes

for bicyclists also provide access to transit routes and park-and-ride lots, making this an attractive alternative for commuters. Building and maintaining bicycle facilities along planned routes is a key strategy of this plan.

Pedestrian and Bicycle Project Maps show locations of proposed projects and identify each project by facility type. Project numbers listed on these maps are cross-referenced to the Project Lists. All projects listed in the plan are prioritized. "High priority" projects address safety issues, provide access to activity centers, create links to transit, or complete connections between planned pedestrian or bicycle facilities or trails. System connectivity is an additional consideration for "high priority" projects.

For more detailed policy and programmatic guidance, see the Pedestrian and Bicycle Transportation Plan Update and Parks and Open Space System Plan. For more detailed information on the methodology employed in arriving at the high, medium, and low rankings in the project list, see the Pedestrian and Bicycle Transportation Plan Report.

POLICIES

POLICY PB-1. Consider pedestrians and bicyclists as users in the planning, design, construction and maintenance of all roadway projects. Confirm project design prior to implementation by coordinating the planning, development and funding of non-motorized systems with affected citizens, community councils, neighborhood associations, business groups, and other stakeholders.

POLICY PB-2. Work towards specific short and mid-term implementation objectives intended to be completed following the adoption of the 2009 plan update. Specifically:

1. Within 10 years, implement at least two completed, connected, and integrated north-south and at least two east-west bicycle routes that connects the boundaries of the city limits, and connects to the broader regional bicycle system.
2. Within 5 years, implement at least one completed and connected east-west and north-south bicycle route through Downtown Bellevue.
3. Within 10 years, reduce pedestrian/vehicle and bicycle/vehicle accidents by 25 percent from 2007 levels.
4. Within 10 years, construct 25 more miles of sidewalks along arterial streets including collector arterials above 2007 levels.
5. Within 10 years, increase trips by bicycle and foot by 10 percent over 2009 levels.

POLICY PB-3: Consider and evaluate Pedestrian and Bicycle Network Maps, Project Maps and Project Lists in the planning, design, construction and maintenance of all roadway projects to ensure that Plan recommendations are weighed whenever there are competing demands for City right-of-way.

POLICY PB-4: Secure public non-motorized easements or land dedications through the development review process, donation, tax deduction or exemption programs, or legal acquisition when the need is identified or supported by the Plan and involves close coordination with affected property owners. Consider each facility on a case-by-case basis, factoring in system connectivity, whether the facility is needed to fill a gap or complete a link within the overall system, and neighborhood notice and input prior to the design process. *Also cross-reference with TR-84*

POLICY PB-5: Acquire rights to private and utility trail systems and easements for public access, where feasible, provided that they are identified on the network and project maps, and provided that there has been close coordination with affected property owners prior to any acquisition. Consider each facility on a case-by-case basis, factoring in system connectivity, whether the facility is needed to fill a gap or complete a link within the overall system, and neighborhood notice and input prior to the design process

POLICY PB-6: Protect and ensure access to all public trail easements.

POLICY PB-7: When reconstructing or reconfiguring a roadway or right-of-way, strive to maintain or improve existing pedestrian and bicycle non-motorized facilities.

POLICY PB-8: Install way-finding and route signs and provide maps and internet-based information to guide users through the pedestrian and bicycle systems.

POLICY PB-9: Coordinate with the public and private schools in Bellevue to continue developing and implementing recommended walking and bicycle routes that provide access to school bus stops, and pedestrian and bicycle connections to and through school properties.

POLICY PB-10: Incorporate context-sensitive design for pedestrian and bicycle facilities. Project design decisions should reflect the following factors:

- Relationship to or role in overall system mobility and connectivity
- Intent and objectives of project
- Type of bicycle or pedestrian facility,
- Travel speed of roadway
- Topography and other environmental factors
- Cost
- Neighborhood character and context and applicable subarea plan policies
- Equestrian use

POLICY PB-11: In subsequent updates of the Development Manual, incorporate guidelines to separate sidewalks and walkways from the roadway by a landscaping strip or drainage swale, where practical.

POLICY PB-12: Enhance the ability of pedestrians to safely cross or avoid barriers by constructing pedestrian crossing improvements at intersections and midblock crossings where justified by a traffic engineering study.

POLICY PB-13: Adopt design standards to ensure that the bicycle system plan projects are coordinated and consistent in design, as appropriate based on neighborhood context and applicable subarea plan policies.

POLICY PB-14: Consider and mitigate, where possible, the impacts of neighborhood traffic calming devices on existing and proposed pedestrian and bicycle facilities.

POLICY PB-15: Address issues of non-motorized access and safety, through or around a site during construction or maintenance work within the right-of-way.

POLICY PB-16: Construct sidewalks on both sides of arterials or streets that serve transit, or are built in conjunction with new development. An alternative may be appropriate if terrain, lack of right-of-way or local conditions makes it prohibitive or undesirable. The type of pedestrian facilities on all other streets should be considered on a case by case basis.

Transportation Element

Background

Purpose

The purpose of the Transportation Element is to guide the development of the City's transportation system in a manner that supports the Bothell Vision Statement and goals of the Imagine Bothell Comprehensive Plan. It establishes the framework for the City's transportation system and focuses on the policies and actions needed to implement and manage the City's transportation infrastructure and services. It serves as a guide for the development of the City's Transportation Improvement Program (TIP), concurrency requirements, and other planning processes. The Transportation Element represents the City's long-range transportation planning and policy document.

Relationship to GMA

This Transportation Element has been developed in accordance with the Growth Management Act (GMA) to address the transportation needs of the City of Bothell. Specifically, Section 36.70A.070(6)(a) of the Revised Code of Washington (RCW) requires that comprehensive plans contain a transportation element consisting of the following:

1. Land use assumptions used in estimating travel.
2. Estimated traffic impacts to state owned transportation facilities resulting from land use assumptions to assist the Department of Transportation in monitoring the performance of state facilities, to plan improvements for the facilities, and to assess the impacts of land use decisions on state-owned transportation facilities.
3. Facilities and service needs, including:
 - a. An inventory of air, water, and land ground transportation facilities and services, including transit alignments and general aviation airport facilities, to define existing capital facilities and travel levels as a basis for future planning. This inventory must include state-owned transportation facilities within the city or county's jurisdiction boundaries;
 - b. Level of service (LOS) standards for all locally owned arterials and transit routes to serve as a gauge to judge performance of the systems. These standards should be regionally coordinated;
 - c. LOS standards for all state highways to serve as a gauge to judge performance of the state system. The purposes of reflecting LOS standards for state highways in the local comprehensive plan are to monitor the performance of the system, to evaluate improvement strategies, and to facilitate coordination between the county's or city's six-year street, road, or transit program and the department of transportation's six-year investment program.
 - d. Specific actions and requirements for bringing into compliance any facilities or services that are below an established LOS standard;
 - e. Forecasts of traffic for at least 10 years based on the adopted land use plan to provide information on the location, timing, and capacity needs of future growth; and

Park-and-Ride lots. Safety measures include but may not be limited to traffic signals, street lighting, sidewalks, and crosswalks.

- TR-A34 Develop design standards and/or guidelines to ensure that any future development in City activity centers is transit oriented.
- TR-A35 Pursue partnerships with King County Metro, Community Transit, and Sound Transit on the planning, funding, and implementation of transit improvements within Bothell.
- TR-A36 Work with King County Metro, Community Transit, and Sound Transit to ensure that the City's projects and policies are incorporated into their respective transit plans and programs.
- TR-A37 Develop two types of transit service to provide the improved transit service for local and through trips. Local circulator service would be provided to interconnect residents with the regional transit service provided to area park and ride lots, in addition to achieving LOS standards for area covered and quality of service. Regional transit service would be improved by providing infrastructure improvements (such as a transit only transit way which served the travel patterns in the SR-522 transportation shed and the planned HOV network improvements).
- TR-A38 Work with METRO, Community Transit, and Sound Transit to determine suitable locations for a future transit station/center within Bothell.
- TR-A39 Develop codes that provide for the design of transit access in commercial and residential areas.
- TR-A40 Support the expansion of the regional transit system, including Park-and-Ride facilities, transit service frequency, and new High Capacity Transportation (HCT) modes such as Bus Rapid Transit (BRT) consistent within the context of Bothell's regional and local comprehensive planning goals.
- TR-A41 Work with transit providers to provide safe, lighted, and weather protected passenger waiting areas at stops with high ridership, transfer points, and Park-and-Ride facilities.
- TR-A42 Consider transit facilities and service as additional form of mitigation for new developments whose residents, employees, or patrons would benefit from public transportation.
- TR-A43 Promote transit usage in roadway improvements by providing for bus pullouts and shelters.

Transportation Demand Management (TDM) and Transportation System Management (TSM) Policies

- TR-P26 Implement and pursue the use of TDM strategies as a means of reducing traffic congestion.
- TR-P27 Comply with the Commute Trip Reduction (CTR) Act and other regulations which require or encourage the use of TDM measures.
- TR-P28 Support land use patterns that reduce the quantity and length of trips by single occupant vehicle trips.

TR-P29 Implement and pursue the use of TSM strategies as an alternative or supplement to roadway capacity improvements.

Transportation Demand Management (TDM) and Transportation System Management (TSM) Actions

- TR-A44 Continue to implement the requirements of the State's CTR Act and the City's CTR Ordinance.
- TR-A45 Work with King County Metro and Community Transit to implement employer outreach programs to promote the use of alternative transportation modes and other worksite-based strategies such as alternative work schedules.
- TR-A46 Encourage all employers, whether through their CTR programs or on a voluntary basis, to provide financial incentives to employees who commute by transit, carpools and vanpools to reduce the quantity of commute trips by single occupant vehicles.
- TR-A47 Encourage employers to form Transportation Management Associations to increase opportunities for carpooling and shared parking.
- TR-A48 Support the development of High Capacity Transportation (HCT), Bus Rapid Transit (BRT), and High Occupancy Vehicle (HOV) lanes on the State highways that serve Bothell consistent within the context of Bothell's regional and local comprehensive planning goals.
- TR-A49 Work with Sound Transit, King County Metro, and Community Transit to expand and improve existing Park-and-Ride lots and to explore locations for new Park-and-Ride lots.
- TR-A50 Work with WSDOT and other regional planning agencies to assure regional TDM programs and measures are developed and that the policies developed are complementary to and consistent with the Bothell Comprehensive Plan.
- TR-A51 In the activity and regional employment centers, encourage compact and mixed use development to reduce vehicle trips and to encourage transit use.
- TR-A52 Work with Sound Transit, King County Metro, and Community Transit to provide dedicated transit lanes (also referred to as Business Access and Transit lanes) along key transit routes.
- TR-A53 Work with WSDOT and neighboring cities to provide traffic signal synchronization along the State highways and arterials that run through Bothell.
- TR-A54 Continue to pursue grant funding for TDM and TSM implementation.

Bicycle Facilities Policies

- TR-P30 Existing bicycle routes should be signed as soon as possible to meet Shared Roadway standards until construction to Bicycle Lane standards is completed.
- TR-P31 Bicycle access to activity centers such as Canyon Park and Downtown Bothell should be encouraged.

- TR-P32 Land under transmission lines should be used for bicycle use.
- TR-P33 The City should strive to include bicycle lanes in each direction of roadways, if practical. Priority should be given to bicycle facilities that provide access to schools and that fill in gaps in the bicycle system.
- TR-P34 Develop bicycle facilities along key north-south and east-west corridors in conjunction with roadway improvements.
- TR-P35 Complete the North Creek Trail either in conjunction with or independent of roadway improvements and as a condition of future development. The link between 228th and 240th Streets SE may follow 27th Avenue / Fitzgerald Road, but it should be constructed as a shared use path.
- TR-P36 Unimproved public rights-of-way shall be preserved to assure they are available in the future for bicycle improvements.
- TR-P37 Shared use path links located on steep slopes should be avoided whenever possible.

Bicycle Facilities Actions

- TR-A55 Investigate the feasibility of providing continuous bicycle lanes or shared use paths on those roadways which are designated as bicycle routes in Figure TR-9.
- TR-A56 Include bicycle facilities and amenities as components in future roadway construction and maintenance projects.
- TR-A57 Erect signage on those roadways which are designated as existing bicycle routes in Figure TR-9.
- TR-A58 Investigate bicycle connections between neighborhoods to improve neighborhood access and safety.
- TR-A59 Investigate the feasibility of providing additional bicycle crossings or connections to the Burke-Gilman/Sammamish River Trail.
- TR-A60 Work with easement benefactors and individual property owners to allow land under transmission lines to be used for bicycle use.
- TR-A61 Update the Transportation Improvement Program to identify a priority list of proposed bicycle facilities for future implementation within the city.
- TR-A62 Update design standards for bicycle facilities to include WSDOT Design Manual and, where appropriate, American Association of State Highway and Transportation Officials (AASHTO) design guidelines.
- TR-A63 Promote participation by the Northshore School District in the planning and funding of bicycle facilities serving schools.
- TR-A64 Encourage new employers and businesses to provide convenient bicycle parking facilities for employees and customers.

Pedestrian Facilities Policies

- TR-P38 Except in limited circumstances, all new development will be required to install sidewalks. Sidewalks should be constructed of concrete for durability and to reduce long-term maintenance costs and should be separated from the street by landscaping whenever possible.
- TR-P39 Pedestrian access between residential neighborhoods and employment and commercial areas should be encouraged. Pedestrian access should be provided to activity centers such as Canyon Park and Downtown Bothell.
- TR-P40 Land under transmission lines should be used for pedestrian use.
- TR-P41 The City should strive to complete pedestrian facilities (sidewalks or walkways), using the most cost-effective materials, on at least one side of all arterials. High priority should be given to sidewalks or walkways that provide access to schools. Sidewalk/walkway construction priorities around schools shall be to construct pedestrian facilities around elementary schools first, junior high schools second, and high schools third. In addition, priority should be given to sidewalks or walkways that fill in gaps in the pedestrian system.
- TR-P42 A comprehensive network of sidewalks/walkways connecting with shared use paths should be developed to provide alternative routes to employment centers, shopping areas, transit stops, schools, and recreation facilities.
- TR-P43 Unimproved public rights-of-way shall be preserved to assure they are available in the future for pedestrian improvements.
- TR-P44 The Municipal Code shall include building and site design measures, such as reduced setback requirements and through easements for pedestrian and bicycle use which enhance pedestrian access to buildings.
- TR-P45 Pedestrian-activated crosswalk signals shall be provided for pedestrian movements in all directions at all intersections where traffic signals are located.
- TR-P46 Pedestrian crossings should be considered on each arterial and, where warranted, crosswalks should be provided on all roadways with sidewalks or walkways on only one side of the roadway. All crosswalks at signalized intersections, including crosswalks from islands across "free right turn" lanes, should be clearly marked.

Pedestrian Facilities Actions

- TR-A65 Investigate and pursue construction of continuous sidewalks or walkways on those roadways designated in Figure TR-10.
- TR-A66 Include pedestrian facilities and amenities as components in new or renovated arterials and collectors.
- TR-A67 Investigate and pursue construction of pedestrian connections between neighborhoods to improve neighborhood access and safety.

- TR-A68 Pedestrian connections and easements should be required of developers of subdivisions to provide convenient and direct connections to schools, bus stops, parks, and businesses.
- TR-A69 Work with easement benefactors and individual property owners to allow land under transmission lines to be used for pedestrian use.
- TR-A70 Update the Transportation Improvement Program to identify a priority list of proposed pedestrian facilities for future implementation within the city.
- TR-A71 Develop codes that provide for flexibility in the design of pedestrian facilities.
- TR-A72 Update design standards for pedestrian facilities to address Americans with Disabilities Act (ADA) requirements and American Association of State Highway and Transportation Officials (AASHTO) design guidelines.
- TR-A73 Promote participation by the Northshore School District in the planning and funding of pedestrian facilities serving schools.
- TR-A74 Provide regular funding in the City's budget to construct the pedestrian improvements that are necessary to implement the pedestrian policies identified in this Element. Such funding can be used as a matching source to leverage additional funding that is available for these improvements through various grant programs.

Introduction

Transportation Element

In 1980, Issaquah was rural; the phrase “traffic jam” was not associated with Issaquah. Like today, people valued their quiet neighborhoods, the small town feel of Olde Town, wooded hillsides, clean water provided by an aquifer, and healthy streams and creeks. When the Growth Management Act (GMA) was adopted, it directed where growth would occur and accelerated development in those areas. Falling inside the Urban Growth Boundary, Issaquah became a potential hub for future growth.

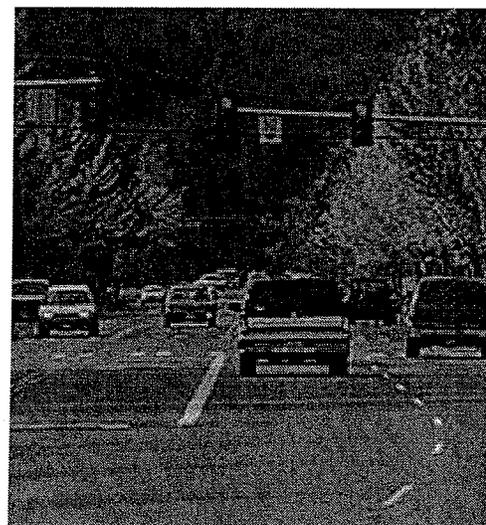
In the past 20 years, Issaquah’s population has increased by almost 10,000 people and increased to a total of 10.65 square miles. Rapid population growth in surrounding areas such as the Sammamish Plateau and along the Highway 18 corridor have significantly increased the amount of traffic passing through Issaquah to I-90 and other destinations. This increasing regional traffic, supplemented by moderate city growth, quickly surpassed our ability to add new roadway capacity.

GMA requires jurisdictions to establish Level of Service (LOS) standards for their transportation systems and to prohibit development if it will cause the transportation LOS to decline below the adopted standard. Issaquah, except for brief periods in 1998 and again in 2000, has failed to meet its adopted transportation LOS and our transportation LOS has continued to decline over time.

With the development of the urban villages, the City has met its 2022 Housing Targets. However, the City’s current 20-year land use plan provides enough capacity for approximately 2,791 housing units and 1.7 million sq. ft. of commercial space in addition to the urban village developments. The number of PM peak hour trips would increase from approximately 43,000 trips today to 53,000 in 2022 with the anticipated buildout of the land use plan. As a result, new development may be approved only if enough capacity is added to the system so the adopted level of service is met.

Both GMA and our Comprehensive Plan require specific actions to bring failing transportation facilities into compliance with the adopted level of service. Because of Issaquah’s current failure to meet capacity and the potential for an overstressed transportation system with the buildout of additional residential and commercial uses, the City has made a significant investment to amend the Transportation Element of the Comprehensive Plan and achieve this goal. Since 2001, the Planning Policy Commission has been leading the effort to amend the Transportation Element in a way that will help move us into concurrency. That effort has included:

- Analyzing existing traffic volumes, traffic operations and safety;
- Forecasting and modeling 2022 traffic volumes, based on the recommended 2022 land use vision;
- Updating the City’s roadway classifications;
- Identifying and modeling system improvement alternatives;
- Recommending changes to the City’s six-year Transportation Improvement Plan and 20 year road plan; and
- Recommending a 7% transit, transit supportive and nonmotorized component to the 2022 transportation vision.



The policies in the Transportation Element were updated in 2005 to reflect the results listed above and are intended to help bring Issaquah's level of service into compliance by encouraging people out of single occupancy vehicles by promoting alternative modes of transportation, constructing a connected, comprehensive transportation system, improving the capacity of the existing roadway system and working with other jurisdictions to ensure the vision comes to fruition.

Vision

Provide a well-managed transportation system that enables the safe and efficient movement of people, goods and services, and supports and complements the City's land use values and goals. In order to achieve this vision, the City must:

- GOAL A.** Coordinate land use and transportation;
- GOAL B.** Link development and transportation improvements;
- GOAL C.** Safely and efficiently connect all modes of transportation throughout the City;
- GOAL D.** Support alternative modes of transportation;
- GOAL E.** Optimize the value of transportation investments and resources;
- GOAL F.** Maintain and improve the existing transportation infrastructure;
- GOAL G.** Collaborate with Issaquah's neighboring municipalities, King County, and other agencies to address regional impacts and issues, and;
- GOAL H.** Continually pursue methods to reduce dependency on single occupancy vehicles (SOV).

Growth Management Act: Transportation Element Requirements

The Growth Management Act requires that the adopted transportation element must implement, and be consistent with, the land use element. In addition, the transportation element must include the following components.

- GMAT-1.** Land use assumptions used in estimating travel;
- GMAT-2.** Estimated traffic impacts to State-owned transportation facilities resulting from land use assumptions;
- GMAT-3.** Facilities and services needs, including:
 - a. An inventory of State and local air, water, and ground transportation facilities and services, including transit alignments and general aviation airport facilities;
 - b. Level of service standards for all locally owned arterials and transit routes;
 - c. Level of service standards for highways for State-owned transportation facilities;
 - d. Specific actions and requirements for bringing into compliance locally owned transportation facilities or services that are below an established level of service standard;
 - e. Forecasts of traffic for at least ten years based on the adopted land use plan ; and
 - f. Identification of State and local system needs to meet current and future demands.
- GMAT-4.** Finance, including:
 - a. An analysis of funding capability to judge needs against probable funding resources;
 - b. A multiyear financing plan based on the needs identified in the comprehensive plan;
 - c. 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 if probable funding falls short of meeting identified needs;
- GMAT-5.** Intergovernmental coordination efforts, including an assessment of the impacts of the transportation plan and land use assumptions on the transportation systems of adjacent jurisdictions; and

GMAT-6. Demand-management strategies.

GMAT-7. Local jurisdictions must adopt and enforce ordinances which prohibit development approval if the development causes the level of service on a locally owned transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development. These strategies may include increased public transportation service, ride sharing programs, demand management, and other transportation systems management strategies. Concurrent with the development means that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years.

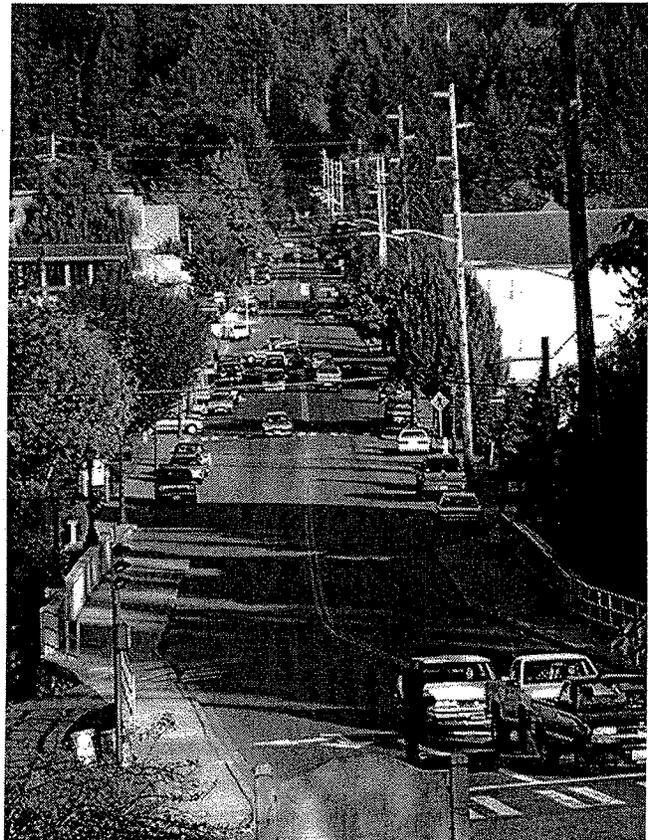
Transportation and Land Use

GOAL A: Coordinate land use and transportation.

GOAL B: Link development and transportation improvements

Transportation and Land Use Policies

- T-1** Maintain the Comprehensive Plan's land use vision in the vicinity of transportation projects by remaining consistent with the land use designations shown in the Land Use Designation Map, Figure 1, Land Use Element, Volume 1.
- T-2** Coordinate land use planning with public transportation service to provide opportunities that reduce transportation demand City-wide
- T-3** Use land use assumptions, including potential build-out and growth targets, to estimate 20-year travel and transportation needs to serve the City's planned growth. Use up to date land use, facilities inventories and travel behavior data to indicate future travel needs. Provide these estimates to the State
- T-4** Update the six year Transportation Improvement Program (TIP) annually to reflect changes in travel demand, land use designations or levels of service standards. Include a 20 year "future years" project list with the six year TIP to establish future system plans that coordinate with the 20 year land use plan
- T-5** Incorporate transit supportive and multimodal/nonmotorized friendly design features in new development through the development review process.



Transportation Demand Management

GOAL H: Continually pursue methods to reduce dependency on single occupancy vehicles.

Transportation Demand Management Policies

- T-6** Develop and implement and continue to monitor transportation demand management regulations and strategies that address the following factors
- Parking
 - Services to increase high-occupancy vehicle (HOV) use
 - Fully utilize HOV lanes.
 - Increased participation in Commute Trip Reduction (CTR) programs
 - Increased public awareness of available travel alternatives
- T-7** REFER ALSO TO TRANSPORTATION AND LAND USE POLICY #T-5, Transit supportive and multimodal/nonmotorized friendly design features.

Mobility Management

GOAL B: Link development and transportation improvements
GOAL C: Safely and efficiently connect all modes of transportation throughout the City
GOAL D: Support alternative modes of transportation

Mobility Management Background

Issaquah Concurrency/Level of Service. As required by GMA, the City Council established Issaquah's transportation LOS and transportation concurrency system in 1998 with the adoption of Ordinance No. 2184. State law defines concurrency as the provision of improvements (e.g. transit facilities, streets, mobility systems, sidewalks, bike lanes etc.) at the time of development, or that a financial commitment is in place to complete the improvements or mitigation strategies within six years¹; however, the State leaves the implementation of transportation concurrency and the adoption of LOS standards to local discretion.

The State provides little prescriptive guidance for how concurrency is to be implemented, how the level of service should be measured or what the level of service should be. As a result, the transportation level of service varies from jurisdiction to jurisdiction depending on community land use and transportation goals.

Issaquah's concurrency system is made up of two elements. The first element uses a transportation-forecasting model to estimate traffic volumes at 80 specific directional screenline roadway locations during the PM peak hour (4-6 p.m.). The traffic model includes approved development in Issaquah and portions of Sammamish and King County. The transportation system in the model includes the existing road network and committed improvements in Issaquah, Sammamish and King County.

The second element uses a spreadsheet to compare the forecast PM peak hour traffic volume at each screenline to the planned capacity of the roadway at that location. Planned Capacity (PC) begins with the base capacity of the roadway² and subtracts capacity if sidewalks, bicycle lanes, roadway shoulders and

¹ Revised Code of Washington 36.70A.070(6)(e)

² Base capacity is determined by reducing the engineering capacity for certain road classifications in order to assure the desired function of each class of roadway. Engineering Capacity is the number of vehicles per hour that a road can carry at the upper limit of level of service E.

certain other improvements are not provided. Using planned capacity allows the provision of alternative transportation facilities (such as sidewalks and bike lanes) to achieve concurrency. The planned capacity in the spreadsheet is based on, and varies by, the functional classification of the roadway and the direction of traffic flow (i.e. in the peak or non-peak direction).

The volume-to-planned capacity (V/PC) standard ranges from 1.0 for regional and principal arterials in the peak direction to 0.50 for collector streets in the non-peak direction. Each of the 80 transportation concurrency screenlines in the City has a V/PC standard. The City's goal for varying the planned capacity was a higher level of service (less congestion) on minor and collector streets and in the non-peak direction. The tradeoff is that some roadway capacity will need to remain unused during the PM peak hour in order to achieve the adopted level of service and meet concurrency.

The concurrency level of service standard, which varies by road classification and travel direction, established "limits" on the amount of planned capacity that can be used in the PM peak hour (i.e. the level of traffic congestion allowed). New development in Issaquah will pass concurrency when five or fewer of the 80 screenlines exceed their V/PC standard, and none of the screenline V/PC ratios exceed the standard by more than .30.

A standard of 1.00 means that the maximum traffic volume allowed during the PM peak hour (in order to pass concurrency) is equal to the planned capacity of the roadway. A standard of 0.85 means that the maximum traffic volume allowed to pass concurrency is 85% of the planned capacity of the roadway (i.e. – the goal is for 15% of the planned capacity of the roadway to remain unused (reserved) during the PM peak hour).

A screenline passes concurrency if the traffic volume at the screenline during the PM peak hour is equal to or less than the adopted standard. For roads not built to City street standards, the V/PC standard is the existing (1998) V/PC rounded up to the nearest 0.05.

In addition to monitoring the City's facilities, the City also coordinates land use data with the State to ensure adequate capacity planning for State-owned facilities. Issaquah's LOS measurement method differs from that of the State's in that Issaquah measures a road's capacity, not its delay. However, in an effort to provide consistency, Issaquah used the State's LOS method to evaluate traffic impacts to State-owned transportation facilities, as illustrated in Table T-1.

**Table T-1
Traffic Density Level of Service Measurements
(Highway Capacity Manual Method)**

Level of Service Standard	Density Range (passenger vehicles/ lane/ mile)
A (Primarily free flow operation, speeds at speed limit prevail, unimpeded maneuvering)	0 - 10.0
B (Reasonable free flow operation, speeds near free flow, slight impedance in maneuvering)	10.1 - 16.0
C (Speeds below free flow, restricted impedance in maneuvering)	16.1 - 24.0
D (Increased restricted impedance in maneuvering)	24.1 - 32.0
E (Steady traffic stream, maximum facility capacity, maneuvering extremely limited)	32.1 - 45.0
F (Stop and go)	> 45.0

Additionally, GMA requires that local jurisdictions provide an estimate of local transportation impacts to State-owned transportation facilities and their level of service standards. Table T-2 provides a summary of traffic impacts to Interstate 90 and SR-900, the two State-owned facilities within Issaquah. Table T-2 provides existing and future average annual daily traffic (AADT) and calculates level of service standards for road segments on both facilities.

For more information on the Level of Service for State Owned Facilities, see the Transportation Element Background, Volume 2.

**Table T-2
Estimated Local Traffic Impacts to State Owned Transportation Facilities**

Interstate 90				
Road Segment (mileage markers)	Existing AADT*	Future (2020) AADT	Existing Level of Service (LOS)	Future (2020) Level of Service (LOS)
12.94 - 13.89	98,774	129,423	D	F
13.89 - 15.24	57,112	80,244	D	D
15.24 - 16.19	41,017	67,451	B	C
16.19 - 17.94	43,743	45,622	B	B
SR-900				
Road Segment (mileage markers)	Existing AADT	Future (2020) AADT	Existing LOS (Am/PM Peaks)	Future (2020) LOS (AM/PM Peaks)
15.39 - 15.66	13,688	39,549	AM: D PM: C	AM: E PM: E
15.66 - 15.69	N/A	38,532	AM: A PM: B	AM: D PM: D
15.69 - 15.98	N/A	41,701	AM: B PM: E	AM: C PM: E
15.98 - 16.20	25,371	61,881	AM: D PM: F	AM: E PM: E

Transportation Improvement Program. Anticipated transportation projects and their estimated costs are identified in the Six Year Transportation Program (TIP) in Table T-4. Sixteen capacity projects, totaling over \$89 million are identified in the six year transportation financing plan. The remaining projects are classified as non-capacity projects as they do not directly add capacity to the City's transportation system and therefore don't directly contribute to the City's level of service standards. The non-capacity projects are expected to cost approximately \$11 million over the six year timeframe. Much of the revenue to fund both the capacity and non-capacity projects will come from grants or bonds, with contributions, impact fees and money from the City's street improvement fund making up the remainder.

Although Table T-4 identifies nearly thirty transportation projects for a total of over \$100 million, not all of the projects are funded and therefore may not be constructed. Because the City has limited fiscal resources which must cover a wide range of services including transportation, it may not be possible for the City to accomplish all the projects identified in the TIP. Each year, the City reviews and prioritizes transportation projects and budgets money for those projects that are deemed most necessary.

Those projects that are reasonably funded are placed on the "A-list" and are budgeted in the adopted budget. Remaining projects will be reviewed against the City's need and its fiscal resources.

The six year transportation finance plan does not lock the City into the projects listed. Instead, it provides

* Average Annual Daily Traffic

the City with an estimate of future transportation needs and costs to help the City budget its resources more efficiently. The City has the flexibility to develop other transportation projects should opportunities arise or new funding sources become available.

Mobility Management Policies

- T-8** If a system failure is triggered, action such as adjustment of LOS standards, modifications to land use assumptions and designations, or restrictions of new development must be taken to address the LOS deficiency.
- T-9** The following Adequacy Time Frame may be used to further define concurrency for various road classifications in the City:

<u>Functional Class</u>	<u>Adequacy Time Frame</u>
Principal Arterials	6 years
Minor Arterials	4 years
Commercial Collector	2 years
Residential Collector	2 years
Local Non-Residential	Immediate
Local Residential	Immediate

Development proposals that do not meet the concurrency level nor provide mitigation measures such as road improvements to meet the concurrency requirement will be denied a permit.

- T-10** Maintain a capital improvement program that improves existing substandard roadways to current standards, provides a balanced system of automobile, nonmotorized and HOV facilities and recognizes road improvements that are needed to improve traffic flow and High Accident Locations and meet transportation needs and concurrency requirements.
- T-11** Support multi-modal transportation solutions including general purpose lanes, High Capacity Transit, HOV lanes, transit and nonmotorized improvements that implement the 20-year transportation projects shown in the Roadway Projects Map (Figure 20, Volume 1), Transit and Transit Programs Map (Figure 22, Volume 1) and the Nonmotorized Corridor Map (Figure 7, Volume 1). Use the best available technologies when implementing these projects.
- T-12** Provide a seamless roadway and nonmotorized transportation system through implementation of the Roadway, Transit, Nonmotorized 20-year plans and the Sidewalk priority criteria. Use transit service within the city boundaries to connect major commercial centers, neighborhoods and regional transportation facilities.

Roadway Network	<p>GOAL C: Safely and efficiently connect all modes of transportation throughout the City</p> <p>GOAL F: Maintain and improve the existing transportation infrastructure</p>
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Roadway Network Background

Functional Roadway Classifications represent the desired functions of the roads.

Principal Arterial. These roadways provide for traffic movements into, out of and through the City. Principal Arterials constitute a small percentage of the overall network, yet they carry the highest traffic volumes and longest trips. These arterials contain the regional and inter-city bus routes and transit centers. Service to abutting land use is subordinate to travel service provided by Principal Arterials.

Minor Arterial. Minor Arterials accommodate trips of moderate length and lower travel mobility than Principal Arterials. They serve intra-city and some through traffic trips as

well as serve local and intra-city bus routes. Unlike Principal Arterials, Minor Arterials provide access to abutting land uses such as retail and office centers.

Collector Arterial. Collector Arterials carry moderate traffic volumes and shorter trips than Principal and Minor Arterials and have little through traffic. They may serve local bus routes. Collector Arterials provide movement within neighborhoods with direct neighborhood trips to Principal and Minor Arterials as well as land access to neighborhoods, commercial and industrial areas.

Local Streets. Local Streets comprise all roadways and streets not otherwise classified. The primary function of Local Streets is the provision of access to abutting properties. The balance of roadways within the City are Local Streets.

Roadway Network Policies

- T-13** Adequately fund, design and build the roadway network in accordance with the 20-year roadway plan shown in Figure 20 (Volume 1) in order to achieve the desired roadway classifications.
- T-14** Complete missing links, sidewalks, and other enhancements in the existing street system to provide more effective use of existing roads through implementation of the Roadway, Transit, Bicycle and Shared Use Maps and Sidewalk Inventory Map and Sidewalk priority criteria.
- T-15** Design arterials to be consistent with their roadway and transitway classifications shown in the Roadway and Transitway Classification Maps. New roadways must be included in the 20-year transportation plan prior to design so that the design is consistent with its roadway and transitway classifications.
- T-16** Facilitate the smooth flow of traffic on major arterials through signal coordination and other available technologies.

Transit Network

GOAL D: Support alternative modes of transportation.

Transit Network Background

Regional Transitways. Regional Transitways are characterized by a separate facility for public transportation modes such as rail, subway, or busway.

Major Transitways. Major Transitways are characterized by having high transit volumes and by utilizing priority lanes or signals for transit vehicles.

Minor Transitways. Minor Transitways exhibit medium bus volumes and function as a minor corridor or single route for buses.

Local Transitways. Local Transitways correspond to routes using small buses, paratransit or jitneys.

Transit Network Policies

- T-17** Achieve the 2022 Transportation System goal to include 7% transit and nonmotorized trips by working with State and regional jurisdictions and transit providers to implement the transit



supportive projects in the 20-year transit plan (Figure 22, Volume 1) and to achieve the desired transitway classifications.

- T-18** Ensure that regional transit system development occurs in accordance with the adopted Sound Transit

Phase 2 system map and plan and King County Metro six-year plan by working with the regional transit providers.

T-19 Ensure regional transit facilities provide safe and convenient access for transit vehicles, automobiles, bicycles and pedestrians. Development surrounding transit centers should contribute to easy mobility to and from regional transit facilities.

T-20 REFER ALSO TO TRANSPORTATION AND LAND USE POLICY #T-5, Transit Supportive and Nonmotorized/Multimodal Friendly Design.

Nonmotorized Network

GOAL D: Support alternative modes of transportation.

Nonmotorized Network Background

Sidewalks, bicycle lanes, shared use paths and transit services are all essential in creating a safe and efficient transportation system. The federal government agrees. Federal legislation States, "Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation projects, except where bicycle and pedestrian use are not permitted." (23USC217) "Due consideration," defined by the federal government, means:

- A presumption that bicyclists and pedestrians will be accommodated in the design of new and improved transportation facilities
- The decision NOT to accommodate them should be the exception not the rule, and
- There must be exceptional circumstances for denying access through design or prohibition. (USDOT's February 2000 Guidance Memorandum)

Additionally, the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities States, "All highways, except those where cyclists are legally prohibited, should be designed and constructed under the assumption that they will be used by cyclists." (AASHTO, 1999)

The nonmotorized corridors, pedestrian walkways and bicycle transportation facilities, in this element address urban corridors, not recreational trails. Recreational trails are addressed in the Parks, Recreation, Trails and Open Space Element.

The primary intent of nonmotorized, urban corridors is to provide safe connections for commuter and recreational cyclists and pedestrians to get from point A to point B such as schools to parks, residential areas to pedestrian emphasis districts and local corridors to regional nonmotorized routes. There are often tremendous constraints in incorporating all of these elements into a transportation system; the challenge is to find the balance.

Shared Use Corridors are intended to serve walkers, joggers, and cyclists and other nonmotorized forms of transportation and connect activity centers such as parks, schools, commercial centers, libraries and high density housing and the regional recreational trail system. Shared Use Corridors shall:

- Be physically separated from the roadway by a 42" high, 2' wide concrete barrier. Where this is not desirable, a clear zone analysis will be done to consider the appropriate width the path should be from the traveled way;
- Have a minimum width of 10' for two-way shared use pedestrian and bicycle traffic with 2-foot shoulders along each side or a 12' path shall be considered where high shared use traffic is expected;

- Have signage used to indicate it is a shared use path with way-finding signs directing path users with arrows, names, and distances to destinations;
- Have a 2-foot buffer between the path and the property line (is usually required only if 2-foot shoulders are not possible); and
- Be constructed with an Americans with Disabilities Act accessible surface.

On-Street Bicycle Lanes shall:

- Be 4-feet wide when located on local, collector and minor arterial roads that do not have a curb.
- Be 5-feet wide when located on local, collector and minor arterial roads that have a curb.
- Be 8-feet wide when located on principal arterials to ensure enough width to provide an additional buffer for the user as well as an emergency stopping point for drivers with automobile trouble.
- Have travel lanes for motor vehicles with a minimum width of 10-feet when an on-street bicycle lane is present.
- Be free of parking. Parking is not allowed in the bicycle lanes.

Nonmotorized Network Policies

- T-21** Use the Nonmotorized Corridor Map (Figure 7, Volume 1) to balance competing demands on City right-of-way, determine use of annual nonmotorized funding, and guide completion of the City's nonmotorized network.
- T-22** Use the Nonmotorized Corridor Map (Figure 7) to guide the planning, design, construction and maintenance of all bicycle and pedestrian corridor projects to be included in the annual Transportation Improvement Program and other annual maintenance programs. Corridors that complete or expand the nonmotorized system rather than make enhancements to existing, safe, functioning corridors should take priority during project selection.
- T-23** All roadway projects shall be consistent with the Nonmotorized Corridor Map unless physical obstacles present significant difficulties or budget constraints are present. If either of the exceptions apply, attempts to design alternative routes must be considered in the project design.
- T-24** Establish annual funding used to construct and maintain nonmotorized projects identified on the Bicycle and Shared Use Corridor Map that are not otherwise included in roadway projects.
- T-25** Use the Sidewalk Priority Criteria to establish a performance system to determine the location of sidewalks to be constructed or restored during the funding of the annual sidewalk program. The sidewalk priority criteria include:
- High Accident Area (5 points)
 - Access for Senior Citizen Groups or Disabled (4 points)
 - Completes Missing Links, Connects to Multi-Purpose Trail or Parks (4 points)
 - Roadway Classification/Hierarchy (3 points)
 - Adjacent to or Access to Transit/School Stops (2 points)
 - Non-Conformance Width of Existing Sidewalk (2 points)
- The annual sidewalk program shall also be consistent with the Issaquah School District's Safe Routes to School sidewalk plan.
- T-26** Require plats to include nonmotorized facilities that connect the ends of cul-de-sacs to existing and/or proposed nonmotorized routes to achieve improved circulation when those plats are adjacent to routes identified in the Nonmotorized Corridor Map (Figure 7).
- T-27** Require new or redeveloping properties to design and build bicycle/ pedestrian corridors that maximize the use of nonmotorized transportation alternatives.
- T-28** Continue to investigate potential nonmotorized corridors that link existing neighborhoods with destinations such as schools and parks, where needed. Needed improvements include:
- a. An additional I-90 crossing
 - b. Links from residential areas to schools
 - c. Additional linkages within the North Issaquah subarea

- T-29** Ensure changes to roads do not eliminate existing nonmotorized transportation facilities unless equivalent mitigation is provided.
- T-30** Ensure public safety by maintaining bicycle and pedestrian facilities.
- T-31** Use the guidelines outlined in the Capital Facilities Element, Policy 1.8 to fund pedestrian and bicycle related projects.
- T-32** Enforce bicycle and pedestrian safety laws equally among bicyclists, pedestrians and motorists to ensure safety and build mutual respect among all system users.
- T-33** Provide transportation safety education programs to elementary schools in conjunction with the Issaquah School District.

Finance	GOAL E: Optimize the value of transportation investments and resources
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Finance Policies

- T-34** Maintain a 20-year financing plan to provide predictability and assurance that transportation system improvements are accomplished when needed and in accordance with the six-year Transportation Improvement Program.
- T-35** Use impact fees to complete projects that mitigate or accommodate growth required by the Growth Management Act.
- T-36** Prioritize transportation funding in accordance with Comprehensive Plan policies CF-1.5 through CF-1.8 in the Capital Facilities Element.

Regional Coordination	GOAL G: Collaborate with Issaquah’s neighboring municipalities, King County, and other agencies to address regional impacts and issues
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Regional Coordination Policies

- T-37** Engage in discussions with the State Department of Transportation, Puget Sound Regional Council, Sound Transit, King County and the cities of Sammamish and Bellevue to attempt to influence regional decision making processes that promote the transportation system in the Issaquah community.
- T-38** Enter into interlocal agreements with regional agencies and adjacent jurisdictions that mandate the shared financial responsibility of mitigating impacts of new developments and their associated transportation facilities as well as those that benefit the regional transportation system.

Table T-3
TRANSPORTATION IMPROVEMENT PROGRAM (TIP) 2009-2014
 City of Issaquah 6-Year Transportation Projects (previously adopted)

Priority	Project	Prior Years (10 years) Annual	2008 Budget	2008 Estimate	2009	2010	2011	2012	2013	2014	Future Years (10 Years)	Total (prior thru future)
T-1	Neighborhood Traffic Calming Program	\$ 29,000	\$ 29,000	\$ 29,000	\$ 30,000	\$ 31,000	\$ 32,000	\$ 33,000	\$ 34,000	\$ 35,000	\$ -	\$ 224,000
T-2	Newport Way & Sunset Way Traffic Signal Replacement	\$ 74,872	\$ 525,000	\$ 525,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T-3	Roundabout at E. Lake Sammamish Pkwy. and SE 41st Way	\$ 59,403	\$ 594,000	\$ 10,000	\$ 3,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,259,403
T-4	I-90 Undercrossing Improvements	\$ 2,704,912	\$ 2,483,000	\$ 1,226,000	\$ 4,479,000	\$ 3,440,000	\$ 1,196,000	\$ -	\$ -	\$ -	\$ -	\$ 13,045,912
T-5	Centralized Intelligent Transportation System (ITS)	\$ 3,142,951	\$ 840,347	\$ 40,000	\$ 150,000	\$ 1,610,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,942,951
T-6	Street Overlay Program	Annual	\$ 694,000	\$ 694,000	\$ 715,000	\$ 715,000	\$ 759,000	\$ 782,000	\$ 806,000	\$ 830,000	\$ 855,000	\$ 6,177,000
T-7	Complete Streets	Annual	\$ 500,000	\$ 500,000	\$ 520,000	\$ 540,000	\$ 560,000	\$ 580,000	\$ 600,000	\$ 620,000	\$ -	\$ 3,250,000
T-8	Providence Point - Sight Distance Safety Improvements	\$ 290,341	\$ 448,000	\$ 70,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,063,341
T-9	Dogwood Bridge Replacement	\$ 42,385	\$ 50,000	\$ -	\$ 52,000	\$ 1,614,080	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,708,465
T-10	NW Dogwood Street Improvements	\$ 22,717	\$ -	\$ -	\$ 182,000	\$ 1,410,474	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,615,191
T-11	NW Juniper St. Improvements	\$ 16,726	\$ 317,000	\$ 60,000	\$ -	\$ -	\$ -	\$ 225,000	\$ 985,000	\$ 1,354,000	\$ -	\$ 2,640,726
T-12	NW Juniper Street Bridge Replacement	\$ 1,747,999	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,755,999
T-13	Rainier Boulevard N. Improvements	\$ 615,912	\$ 100,000	\$ 20,000	\$ 1,030,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,674,912
T-14	NW Newport Way Improvement West of SR-200 to SE 54th St.	\$ 10,148	\$ 578,000	\$ 190,000	\$ -	\$ -	\$ -	\$ 519,000	\$ 974,000	\$ 7,552,000	\$ -	\$ 9,245,148
T-15	SE 56th and 221st SE Intersection Modification	\$ -	\$ 46,000	\$ 20,000	\$ 120,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 140,000
T-16	Newport Way Improvements (Maple Street to W. Sunset Way)	\$ -	\$ -	\$ -	\$ 200,000	\$ 3,392,000	\$ 5,300,000	\$ -	\$ -	\$ -	\$ -	\$ 8,892,000
T-17	E. Sunset Way Improvements	\$ -	\$ -	\$ -	\$ 223,000	\$ 560,000	\$ 3,316,000	\$ -	\$ -	\$ -	\$ -	\$ 4,099,000
T-18	Maple St. & Newport Way Intersection Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 124,000	\$ -	\$ -	\$ -	\$ 124,000
T-19	Front Street & Sunset Way Intersection Improvements	\$ -	\$ -	\$ -	\$ -	\$ 606,000	\$ 4,000,000	\$ 6,003,000	\$ -	\$ -	\$ -	\$ 10,609,000
T-20	E. Lake Sammamish Parkway Improvements (SE 56th Street to I-90)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 495,000	\$ -	\$ -	\$ 495,000
T-21	Issaquah Lake Road	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T-22	17th Ave NW/SR 900/NW Sammamish Road Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 128,000	\$ -	\$ -	\$ -	\$ 128,000
T-23	Maple Street Extension (SR900 to Newport Way)	\$ 3,000	\$ 100,000	\$ 75,000	\$ 475,000	\$ 1,687,000	\$ 9,432,000	\$ 2,226,000	\$ 1,357,000	\$ 276,000	\$ 6,139,000	\$ 11,672,000
T-24	NW Gilman Blvd (SR 900 to 500' east of 7th Ave NW)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ 150,000
T-25	SR900/NW Sammamish Road Widening (WB 11th Ave NW to I-90)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 214,000	\$ -	\$ 334,000	\$ 7,636,000	\$ 8,184,000
T-26	Providence Point Bikes and Pedestrian Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 693,000	\$ 693,000
T-27	SR 900 Widening (Between NW Maple St. and NW Gilman Blvd.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,360,000	\$ 6,360,000
T-28	SR 900 Pedestrian/Bike-Motorized Improvement	\$ 209,208	\$ 4,050,000	\$ 494,000	\$ 5,897,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,600,968
T-29	Traffic Signal Safety Upgrades	Annual	\$ 49,000	\$ 49,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 499,000
T-30	Multi-Modal Missing Link Along I-90 for Mountaineer to Sound Greenway	\$ -	\$ 250,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000
T-31	Front Street/I-90 Interchange Improvements	\$ -	\$ -	\$ -	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000
T-32	Newport Way - SE 54th Street to City Limits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T-33	Utility Street Overlays	Annual	\$ -	\$ -	\$ 200,000	\$ 208,000	\$ 216,000	\$ 225,000	\$ 234,000	\$ 244,000	\$ -	\$ 1,327,000
T-34	ADA Curb Ramps With Overlays	Annual	\$ -	\$ -	\$ 60,000	\$ 63,000	\$ 66,000	\$ 69,000	\$ 72,000	\$ 75,000	\$ -	\$ 405,000
T-35	Providence Point - Intersection Realignment and Signalization	Annual	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T-36	Sunset Interchange - Sunset Way Ramp	Annual	\$ -	\$ -	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000
T-37	NW Sammamish Road from Lakemont Blvd. to State Park	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,000,000	\$ 6,000,000
TOTAL BUDGET		\$ 8,939,314	\$ 11,653,347	\$ 4,251,000	\$ 19,097,000	\$ 16,199,554	\$ 25,036,000	\$ 10,914,000	\$ 5,771,000	\$ 11,458,000	\$ 84,894,000	\$ 186,562,888
TOTAL FROM NON-CITY SOURCES		\$ 3,981,315	\$ 4,355,000	\$ 955,000	\$ 10,766,000	\$ 5,028,080	\$ 14,053,000	\$ 4,802,000	\$ 1,526,000	\$ 4,731,000	\$ 17,769,000	\$ 63,621,395
TOTAL FROM CITY SOURCES		\$ 4,958,019	\$ 7,300,347	\$ 3,296,000	\$ 8,331,000	\$ 11,161,474	\$ 10,983,000	\$ 6,112,000	\$ 4,245,000	\$ 6,727,000	\$ 67,125,000	\$ 122,941,493

City of Kirkland

March, 2009

MORE PEOPLE, MORE PLACES, MORE OFTEN

AN ACTIVE TRANSPORTATION PLAN



Cyclists • Pedestrians • Equestrians

Produced by the City of Kirkland

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Cover

"Bicycle Abstract" 32 x 28 Acrylic on canvas © 2008 Janet Karam, Denison TX www.funkytown-art.com used by permission of the artist

PREFACE

When the City of Kirkland's first Non-motorized Transportation Plan was adopted in 1995, such plans were relatively rare. That has changed; now, almost every city has a plan for walking and cycling. This change from a novelty to a necessity is reflected in the title of this Plan. Success in planning for walking and cycling as transportation is no longer a matter of establishing them as valid modes of travel, it's about increasing participation. That is to say, *more people* walking and cycling *more places, more often*. The term *Active Transportation* replaces Non-motorized in the title recognizing walking and cycling for what they are rather than for what they are not. Realizing the vision in this plan's title will require new facilities, along with programs for education and enforcement. It will also require special attention to children, seniors and those with disabilities.

In 2001, when this Plan was last updated, the City of Kirkland's Geographic Information System was not as fully developed as it is today and since 2001 several analytical tools have been developed to help improve safety of active transportation modes. This Plan relies heavily on the use of GIS for development of the prioritization system for construction of pedestrian projects described in Section 5. An improved database for crash data makes possible the information on reported crashes shown in Section 2. The ability to easily conduct on-line surveys and post documents online has drastically increased the number of people who were able to participate in and comment on the development of this Plan versus earlier plans.

The Cross-Kirkland Trail, a multi-use trail on the Eastside Rail Corridor, is closer than ever to becoming a reality because of a potential agreement between the Port of Seattle, King County and the BNSF railroad. Still, there are many details to be worked out. Realizing construction of the trail is the first priority of many of Kirkland's citizens.

In Kirkland there are strong concerns about how the City should develop and the impact of automobiles on our citizens' quality of life. More citizens are looking for ways to incorporate physical activity into their everyday routines. The City Council has joined with other cities in a pledge to help reduce its carbon footprint. A strong commitment to Active Transportation, through accomplishing the goals laid out in Section 1, will be fundamental to seeing the City manage these concerns.

<Signed for Council by Mayor>

<Adoption date>

ACKNOWLEDGEMENTS

Without the support of the citizens of Kirkland, completion of this Plan would not have been possible. The City of Kirkland would like to specifically thank the following groups and individuals for their contributions and cooperation in preparing *More People, More Places, More Often*.

City of Kirkland City Council

Jim Lauinger, *Mayor*
Joan McBride, *Deputy Mayor*
Dave Asher
Mary-Alyce Burleigh
Jessica Greenway
Tom Hodgson
Bob Sternoff

City of Kirkland Transportation Commission

Jon Pascal, *Chair*
Sandeep Singhal, *Vice-Chair*
Dani Ferrigno
Don Samdahl
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Deidre Johnson, *for detailed review and editing*
Owen Paulus, *for research on sharrows and other cycling topics.*

EXECUTIVE SUMMARY

This Plan is prepared to comply with the call for a Non-Motorized Plan in the Comprehensive Plan. The title *More People, More Places More Often* indicates the plan vision. It is an update of the 2001 Non-Motorized Transportation Plan and is renamed an Active Transportation Plan to better reflect the positive nature of walking and cycling. Its purpose is three fold:

- Present a specific list of objectives to be accomplished in order to improve active transportation (see Section 1; goals)
- Serve as a handbook for Active Transportation (see Sections 2 and 3)
- Provide a way of prioritizing projects for construction (see Sections 5 and 6)

The Plan is focused around eight Goals, each of which has specific objectives and strategies for meeting the goal:

- Goal G1. Develop the Cross Kirkland Trail**
- Goal G2. Reduce crash rates**
- Goal G3. Add facilities for pedestrians**
- Goal G4. Increase the number of children who use active transportation to travel to and from school.**
- Goal G5. Improve safety for people crossing streets**
- Goal G6. Remove physical barriers to walking**
- Goal G7. Improve on-street bicycle facilities**
- Goal G8. Make bicycling more convenient**

Section 2 covers existing conditions. Sidewalks exist on at least one side of all but three miles of its busiest streets. Looking at all streets, about 25% have no walkway on either side. Currently funded projects will complete elementary school walk routes so each school has about than 80% of its walkways complete on at least one side of the street. Goal G3 calls for completion of walkways on one side of all principal and minor arterials by 2016 while Goal G4 calls for completion of walkways on one side of all arterial and collector school walk routes by 2019.

Existing bike lanes provide basic coverage for Kirkland's cyclists, but there are still important missing links, particularly on 116th Avenue NE in the South Rose Hill/Bridle Trails neighborhood and on 100th Avenue NE in Juanita.

Three quarters of accidents involving cyclists or pedestrians occur at intersections. The numbers of accidents have remained fairly steady over the past 10 years. The Plan calls for measuring crash rates (crashes/distance traveled) and reducing them by 10% between 2010 and 2015.

Section 3 describes existing policies and programs. The Zoning Code and Public Works' Pre-approved Plans work together to provide guidance on when and how facilities are constructed. There are a number of programs to support active transportation already in place. Some examples include Senior Steppers, the signed Lakeview Walk, and Bike to Work Month.

The online survey which was fielded in 2007, and the results of which are detailed in Section 4, provided valuable insight into the preferences of Kirkland's citizens through over 700 responses. The survey data was used to shape the goals of the Plan as well as influence the programmatic elements in Section 7.

The survey results also determined the factors that entered into the walkway evaluation in Section 5. This Plan proposes a new system for prioritizing sidewalk construction projects based on proximity to destinations, missing sidewalks, existing walkway conditions and fiscal considerations.

Section 6 proposes a bicycle network and identifies projects needed to improve it. Projects fall into one of three categories; those that can be completed through striping with little or no construction, those that need major construction and those that would support construction of a trail on the Eastside Rail Corridor. The striping projects are to be completed in three years, the construction projects in 10 years and a section of the Cross-Kirkland trail is to be open by 2015.

Section 7 contains programmatic elements that complement the network elements in Sections 5 and 6. These include efforts to remove sidewalk obstructions, add bicycle parking and make it easier for bicycles to activate traffic signals. Section 7 describes an ADA Compliance Plan that will document steps necessary to make walkways more accessible for all users. This is called for as a part of Goal G6.

Section 8 is an updated equestrian section that has been developed with direct input from those in Kirkland's equestrian community. Section 9 briefly describes water trails.

Extra detail and supporting material is at the end of the Plan in its appendices.

Goal G7 Improve on-street bicycle facilities

Many accommodations for bicycle travel can be made by restriping streets so that space is reallocated to bicycles and away from cars. In other locations, construction is required to create enough area for adequate bicycle facilities. Improvements of both kinds are the subject of Section 6.

Objective G7.1 Complete all marking-related improvements to the bicycle network by 2011.

Strategy G7.1.1 Prepare a design for the various projects. *Timing: Incrementally, beginning in 2009.*

Strategy G7.1.2 Add projects to CIP pavement marking contract. *Timing: Incrementally, beginning in 2009.*

Strategy G7.1.3 Through the pavement maintenance program, restripe inside lanes on multi-lane arterials to 10' wide. *Timing: Complete in time for the January 2011 revision of the pre-approved plans.*

Objective G7.2 Complete all construction-related improvements to the bicycle network by 2018.

Strategy G7.2.1 Program improvements from the construction related list by way of the CIP *Timing: biannually.*

Goal G8 Make bicycling more convenient

Some of the clearest support in the on-line survey was for the elements described below. These are discussed in more detail in Section 7. Improving bicycle parking, maintaining clear bicycle facilities, helping cyclists activate traffic signals and adding directional signs (wayfinding) were popular with many cyclists.

Objective G8.1 Plan and install a bicycle wayfinding system by 2013.

Strategy G8.1.1 Prepare a plan for wayfinding signage and priorities for its implementation. *Timing: Complete by December 2009.*

Strategy G8.1.2 Complete installation of 50% of the signage *Timing: Complete by December 2011.*

Strategy G8.1.3 Complete installation of 100% of the signage *Timing: Complete by December 2013.*

Strategy G8.1.4 Pursue opportunities for regional cooperation and grant funding. *Timing: On-going.*

Objective G8.2 Improve the way bicycle parking is codified by 2010.

Strategy G8.2.1 Modify the pre-approved plans to include a standard for bicycle racks and their installation. *Timing: Complete in time for the January 2010 revision of the pre-approved plans.*

Strategy G8.2.2 Change the Zoning Code to require bicycle parking as a part of standard right-of-way improvements. *Timing: Complete by December 2010.*

Objective G8.3 Add 10 new two-position bicycle parking racks in downtown Kirkland and 10 in other commercial areas of the city by 2014.



5B. Bicycle System Plan

connecting
REDMOND

Transportation Master Plan



Figure 5B.1 Redmond has various types of bicyclists who desire various levels of bicycle accommodation.

Contents of this Chapter

This modal chapter of the Transportation Master Plan addresses ways to improve bicycling conditions in Redmond. Topics discussed include:

- ✓ Types of Bicyclists
- ✓ Bicycle Facility Planning in Redmond
- ✓ Implementation
- ✓ Prioritizing Needs
- ✓ Missing Links
- ✓ Making Seamless Transitions
- ✓ Education, Encouragement, Enforcement
- ✓ Secure Bicycle Parking
- ✓ Bike Plan Maps
 - Existing and Proposed Facilities
 - Primary and Secondary Corridors

Introduction

Types of Bicyclists

It is generally recognized that there are two types of cyclists: Group A - Advanced Bicyclists, and Group B - Basic Bicyclists. There is also a Group C - children, whose needs are similar to the basic bicyclists and thus the two are often classified together as Group B and C.

➤ Group A: Advanced

Composed of experienced riders who can operate a bicycle under most traffic conditions. This includes bicycle commuters, bike club riders and other cyclists currently following the rules of the road and riding on area streets and roadways.

➤ Group B: Basic

Casual or new adult and teenage riders who are less confident of their ability to operate in traffic without special provisions for bicycles. Some will develop greater skills and progress to the advanced level, but nationally there will always be millions of basic bicyclists who prefer comfortable access to destinations and well-defined separation of bicycles and motor vehicles.

➤ Group C: Children

Pre-teen cyclists who typically ride close to home under close parental supervision.

Bicycle planning generally promotes a “design cyclist” concept that recognizes and accommodates the needs of both Group A and Group B and C bicyclists.

Group A cyclists will be best served by making every street bicycle-friendly by removing hazards and maintaining smooth pavement surfaces. Group B and C riders will be best served in key travel corridors where designated bicycle facilities are provided in the form of signed and striped bicycle lanes on selected roadways, and off-road trails following waterways and other linear open space corridors. Sidewalks make integrating with vehicle traffic problematic, increasing the risk of an accident significantly more than when a bicyclist uses the roadway as a vehicle, thus they are not included in bicycle planning as bicycle facilities. Also, it is important to recognize that sidewalks are pedestrian spaces, and their presence is not meant to substitute or preclude bicyclist use of local streets and roadways.

Bicycle Facility Planning in Redmond

The City of Redmond has historically undertaken two separate but coordinated planning efforts for facilities that are used by bicycling Groups A, B, and C. One is the trails function of the Parks and Recreation Department, overseen by the Trails Commission and Parks Board. The other is the bikeway plan being implemented by the Public Works Department, with direction from the Pedestrian and Bicycle Advisory Committee.

Facilities existing and/or planned by these groups are summarized in *Figure 5B.2* and mapped in *Figure 5B.12*.

The Parks, Recreation and Open Space (PRO) Plan focuses on a variety off-road trail types, which are classified by a combination of function and surface type/intended user.

Non-motorized transportation planning uses a bikeway classification system that overlaps with the Parks

Trail Network Components		
	Function	Trail Surfacing/Users
Backbone Trails	Large-scale regional facilities that link Redmond with surrounding jurisdictions	Multi-use facilities, providing 10'-12' paved pathways for bicyclists and skaters, with parallel soft-surface trails.
Collector Trails	Medium-scale facilities, typically within City street rights-of-way, that provide connections to the backbone trails	A combination of an 8' wide sidewalk separated from the street with a planting strip, and a parallel 2'-3' soft surface trail. (Most corridors designated for collector trails include on-street bicycle lane facilities.)
Multi-Use/ Hiking and/or Neighborhood Linkages	Small-scale pedestrian connections that link neighborhoods with each other and with longer collector and backbone trails	Soft-surface trails designated as either multi-use or hiking-only. Are relatively narrow, low-intensity trails. (While sidewalks function to link neighborhoods, for trail planning purposes, sidewalk segments are not considered to be neighborhood trail links.)

Non-Motorized Transportation Network Components		
	Characteristic	Facility Design/Users
Class I: Bicycle Paths	Bicycle facilities that are physically separated from motorized traffic.	<p>Paved multi-use trails can be used by all cyclists, especially those uncomfortable riding in traffic. However, commuter cyclists who desire fast travel speeds may often choose to ride on streets instead of trails.</p> <p>Soft-surface trails may be ridden by most cyclists, but are most suitable for mountain bikes and fair-weather riding. Swept and kept clear of debris all time of the year.</p>
Class II: Bicycle Lanes	Portions of a roadway identified by striping, signing and pavement marking for preferential use by bicyclists.	<p>Bicycle lanes are most often provided on major streets where traffic volumes and speeds necessitate some level of separation between cyclists and motor vehicles.</p> <p>If provided for longer distances with no hazards or missing links, bike lanes can encourage people to bicycle who normally wouldn't consider it. Regular maintenance and sweeping of bicycle lanes is necessary to prevent buildup of road debris, which reduces traction, increases incidences of flat tires, and can present dangerous obstacles. Include signal cycle activation not dependent upon automobiles.</p>
Class III: Shared Roadways	<p>Streets shared by bicycles and motor vehicles that have either:</p> <ul style="list-style-type: none"> ➤ Wide curb lanes ➤ Paved shoulders ➤ Low traffic volumes and speeds <p>(May or may not have Bike Route signs)</p>	<p>Arterial streets with undesignated wide curb lanes or paved shoulders typically have traffic speeds and volumes that are too high for all but the most experienced bicyclists.</p> <p>Local streets and areas with effective traffic calming are suitable for cyclists to share the road with motorists because both will be traveling at similar speeds.</p>

Figure 5B.2 Summary of Redmond's definitions for trails and bikeways

Department classifications in the Class I/bicycle path category. It differs from the PRO Plan in that it does not recognize various types of trails intended for users other than cyclists; and it includes, and focuses on, the suitability of streets and roadways for bicycling.

Additionally, Transportation Choices for Downtown Redmond (aka the Downtown TMP), developed in 2002, proposes a bicycle network concept for Downtown to provide bicycle accessibility throughout the city center, as well as direct connectivity between key bicycle facilities. Regional planning efforts, being led by the Cascade Bicycle Club, are underway to integrate connections with King County and surrounding communities.

The TMP Bicycle System Plan

Research has shown that the principal impediments to non-recreational bicycling are discontinuities in routes (missing links) and barriers to travel (unsafe street crossings, etc.). The average length of a future utilitarian bicycle trip in Redmond will be at least 2.5 miles (the national average). That means continuous routes at least that long connecting Redmond's principal origins and destinations must be created.

The Transportation Master Plan therefore distills Redmond's various planned facilities into a functional system that allows bicycling to become a viable transportation option. As outlined in Figure 5B.3 and mapped in Figure 5B.13, a system of Primary and Secondary Bicycling Corridors, based primarily upon facility length, shall be implemented. Primary corridors are at least 2.5 miles long and secondary corridors at least 1 mile in length.

Facilities within the primary corridors shall consist of two types: backbone trails within open space corridors, and bicycle lanes on Redmond streets. The secondary corridors may be shorter in length, feed into the primary network, contain a wider range of facility types, and/or contain trails developed to slightly lower standards.

The type of bikeway may vary throughout the length of a given bicycle corridor, but transitions shall be seamless and barriers removed in an effort to provide bicyclists with viable alternatives for cross-town travel. Completing strategic pieces of the primary system shall be the highest priority for the City of Redmond to ensure barrier-free travel options from various parts of town into and through the city center. (See Chapter 4.)

The TMP Bicycle System Plan			
	Function	Trails Components	Bikeway Components
Primary Bicycling Corridors	Allows bicyclists barrier-free travel for distances of 2.5 miles or more	Backbone Trails: <ul style="list-style-type: none"> ➤ Multi-use facilities with paved trail surfaces 	<ul style="list-style-type: none"> ➤ Bicycle Paths (paved commuter trails) ➤ On-Street Bicycle Lanes
Secondary Bicycling Corridors	Connects into the primary system to provide greater access into all parts of the community; typically for distances at least 1 mile in length	Backbone Trails: <ul style="list-style-type: none"> ➤ Multi-use facilities with soft surfaces 	<ul style="list-style-type: none"> ➤ Bicycle Paths (trails with soft surfaces and/or steep terrain) ➤ On-Street Bicycle Lanes ➤ Paved Shoulders ➤ Wide Curb Lanes ➤ Signed Bike Routes on non-arterial streets
Local Connections	Connects residential neighborhoods and individual destinations into the citywide system with special emphasis to schools	Collector Trails: <ul style="list-style-type: none"> ➤ Wide sidewalk trails (may be used by some bicyclists depending on skill level) Neighborhood Linkages: <ul style="list-style-type: none"> ➤ Short trail segments linking with collector and backbone trails ➤ Should be paved to if desired to support bicycling 	<ul style="list-style-type: none"> ➤ All local streets as undesignated shared roadways

Figure 5B.3 Role of trails and bikeways in establishing Primary and Secondary Bicycling Corridors

Implementation

In 2003, Redmond was named a Bicycle-Friendly Community by the League of American Bicyclists and presented a Bronze level award. In 2004, Redmond was one of five communities selected nationally to participate in the Bike Town USA program. As a municipality that actively supports bicycling through its infrastructure and programs, the following strategies and action items will continue Redmond's successes and move the community into higher levels of bicycle-friendliness:

1. The City will continue to provide enhanced riding environments so that bicycling is an integral part of life in Redmond.

- a.** Continue to routinely accommodate bicyclists as part of roadway improvement projects.
- b.** Develop Parks and Recreation facilities that include hard-surface multi-use trails that meet standards for safe and attractive bicycle transportation.

2. The City of Redmond will develop a continuous, interconnected bicycling system that accommodates longer distance trips and provides access to major destination areas including schools.

- a.** Identify a system of primary and secondary bicycling corridors based upon function.
- b.** Implement missing links in the primary system as highest priority projects.
- c.** Strive to strike a balance between developing off-road trails and making on-street enhancements to provide riding opportunities for all types of bicyclists.
- d.** Ensure schools are safely connected into the bicycle system.

3. The City of Redmond will prioritize the spending of transportation funds into identified areas of greatest need.

- a.** Balance funding allocations between major projects designed to enhance automobile capacity and projects that accommodate multiple modes.
- b.** Complete identified missing links in primary bicycling corridors.
- c.** Make connections and transitions between on- and off-road bicycle facilities.
- d.** Regularly assess street and trail maintenance needs and make spot improvements.

4. The City of Redmond will work with adjacent jurisdictions and transit agencies to accomplish multimodal and regional connections.

- a.** Explore increased capacity to better accommodate bikes on buses.
- b.** Utilize the new transit centers in Overlake and Downtown as hubs of bicycling activity in Redmond.
- c.** Make necessary improvements to corridors identified as regionally significant bicycle routes and coordinate planning and implementation with surrounding jurisdictions.
- d.** Work to improve multimodal connectivity between bicycling and transit by providing safe bicycle storage at transit centers and at key bus stops in multimodal corridors.

5. The City of Redmond will supplement these engineering improvements by implementing bicycle education, encouragement and enforcement programs.

- a.** Work with and expand existing TDM programs to promote increased and safer bicycling in Redmond.
- b.** Work to reinforce public understanding of laws concerning cyclists.
- c.** Keep Redmond Bicycling Guide up to date.

Prioritizing Needs

The City of Redmond needs a systematic way to identify areas of highest need so that funding will be spent on projects that will make a difference to area cyclists. Many of the proposals depicted in *Figure 5B.12* represent unfunded projects not currently contained within the Transportation Facilities Program (TFP).

For off-road bike paths, the current PRO Plan outlines projects funded through the Park Improvement Plan through the year 2013. The highest priority trail projects of the Parks and Recreation Department include acquisition and construction of the Bear/Evans Creek Trail, and planning/acquisition for a potential Burlington Northern rails-to-trails project. For on-road facilities, the Public Works Department works to make bicycling enhancements to street segments as part of larger roadway improvement projects.

These processes, while making progress to make Redmond more bicycle-friendly, result in pieces of facilities rather than an interconnected bicycle system.

To begin to assign priority to potential projects, *Figure 5B.13* identifies a system of primary and secondary bicycling corridors, selected per the criteria presented in *Figure 5B.4* below. This recommended system was developed in conjunction with City staff, the Trails Commission, and the Pedestrian and Bicycle Advisory Committee, and was reviewed by the bicycling public at a TMP open house held June 10, 2004, in conjunction with Redmond's first Bicycle Rally. (Portions of this system that are to be completed by 2022 are presented in *Chapter 4*.)

In the future, two types of facilities will make connections in the primary corridors -- signed and striped on-street bicycle lanes, and hard-surfaced multi-use trails. For each, the facilities shall be designed to standards set forth by the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities, and the Manual on Uniform Traffic Control Devices (MUTCD).

Criteria for Selecting Bicycling Corridors	
<p>PRIMARY CORRIDORS</p> <ul style="list-style-type: none"> ✓ Allow bicyclists barrier-free travel for distances of 2.5 miles or more. 	<p>SECONDARY CORRIDORS</p> <ul style="list-style-type: none"> ✓ Connect into the primary bicycle system to provide greater access to and from all neighborhoods. ✓ Distance typically at least 1 mile in length.

Future Enhancements Recommended for Bicycling Corridors	
<p>PRIMARY CORRIDORS</p> <ul style="list-style-type: none"> ✓ Corridor will provide a combination of Class I: Bike Paths/Backbone Trails and/or Class II: Bicycle Lanes for the entire length. ✓ Seamless transitions between Class I and Class II facilities within the corridor. ✓ Seamless transitions with all intersecting bicycle corridors. ✓ Highest priority for funding missing links in system. 	<p>SECONDARY CORRIDORS</p> <ul style="list-style-type: none"> ✓ Corridor may provide a combination of Class I, Class II, and Class III facilities. ✓ Seamless transitions between facility types within the corridor. ✓ Seamless transitions with intersecting bicycle corridors. ✓ High priority for implementation in conjunction with roadway retrofit and adjacent land development; Moderate priority for independent project funding.

Figure 5B.4 Selection and Planning Criteria for Primary and Secondary Bicycling Corridors

5B. BICYCLE SYSTEM PLAN

Missing Links

Planned segments of the primary system yet to be built are listed below and mapped in *Figure 5B.13*. These high priority missing links include, as noted:

- 1) Projects ranked as top unmet needs by area cyclists.
- 2) Bicycling components of recommended multimodal corridors. (See *Chapter 5E: Modal Integration Plan*)

Missing Links in Primary Bicycle System					
Map Key	Corridor	Segment	Facility Need	Jurisdictional Coordination	Notes
A	NE 124 th Street	SR 202 to Avondale Rd	on-street bike lanes or paved shoulders	Slater Avenue to 132 nd Ave. NE is in the City of Kirkland	
B	NE 116 th Street	Willows Rd to Avondale Rd	missing pieces of on-street bicycle lane	piecemeal construction through land development	2
C	Redmond Puget Power Trail	Existing trail west to 132 nd Ave NE	paved bike path to AASHTO standards	Redmond City limits 132 nd Ave. NE	
D	Redmond Puget Power Trail	Willows Rd to Farrel-McWhirter Park	paved bike path to AASHTO standards parallel to soft-surface facility		
E	Redmond Way (SR 202)	161 st Ave NE to Bear Creek Parkway	on-street bicycle lanes or traffic calming as part of conversion project to two-way street	State Route will need WSDOT approval (see alternate page 5B.8)	1, 2
F	BNSF Corridor (Downtown segment)	NE 90 th St. to Bear Creek Trail	urban bicycle path parallel to transit accommodation	BNSF corridor not owned by the City of Redmond	1, 2
G	Bear and Evans Creek Trail	Bear Creek Parkway to Evans Creek Trail	paved bike path to AASHTO standards	programmed in Park Improvement Program	1
H	Union Hill Road	Avondale Rd to Evans Creek Trail and into adjacent jurisdictions	on-street bicycle lanes or paved shoulders	bike lanes to be constructed from 178 th Pl. NE to 188 th Ave. NE in 2004	2
I	Redmond Fall City Road	Bear Creek Parkway to Evans Creek Trail and into adj. jurisdictions	on-street bicycle lanes or paved shoulders	WSDOT project to include bike lanes in 2004	1
J	NE 24 th Street	148 th Ave NE to 172 nd Ave NE	on-street bicycle lanes	City of Bellevue street	2
1	Willows Road	95 th St. NE to NE 90 th St.	Complete missing segment of on-street bicycle lanes		1
2	BNSF Corridor	NE 124 th St. to Sammamish River Trail	paved bike path to AASHTO standards in rail corridor	BNSF Corridor not owned by the City of Redmond	
3	Red-Wood Road	NE 124 th St. to NE 109 th St.	on-street bicycle lanes or paved shoulders	SR 202/Red-Wood Road will need WSDOT approval	2
4	160 th Ave NE	Red-Wood Road to NE 90 th St.	on-street bicycle lanes	proposed new roadway connection	2
5	Bear Creek Parkway Extension (west)	Leary Way to Redmond Way	on-street bicycle lanes	proposed new roadway connection	2
6	172 nd Ave NE/ 166 th Ave NE	NE 104 th St. to NE 87 th St.	on-street bicycle lanes		2
7	166 th Ave NE/trail extension	Redmond Way to Marymoor Park Way	on-street bike lanes or traffic calming; construct paved path extension across Bear Creek and 520		1
8	Avondale Way	Redmond Way to NE 85 th Pl	on-street bicycle lanes or parallel bike path		1, 2
9	Evans Creek Trail	Puget Power Trail to exst. Evans Creek Trail	paved bike path to AASHTO standards		
10	148 th Ave NE	Willows Rd. to NE 24 th St.	on-street bicycle lanes or parallel primary north/south alternative	148 th not feasible route (see alternate page 5B.8)	1, 2
11	156 th Ave NE/ 152 nd Ave NE	NE 51 st St. to NE 20 th St.	on-street bicycle lanes or parallel bike path		1, 2
12	Bellevue-Redmond Road	W. Lake Sammamish Pkwy to NE 24 th St.	on-street bicycle lanes		1
13	BNSF/East Lake Sammamish Trail	Bear Creek Trail into adjacent jurisdictions	paved bike path to AASHTO standards	King County project	1

Figure 5B.5 Missing Links as depicted in Figure 5B.13

Making Seamless Transitions

In addition to the identified longer segments of missing links, the City shall work to make transitions and connections between on-street bike lanes and the off-road trail system.

The implementation list presented in *Figure 5B.6* was developed with Public Works Staff and the Pedestrian and Bicycle Advisory Committee. Notes:

- 1) Grade-separated trail crossings as proposed in the 2001 Redmond Trail Crossings Study. These need to include appropriate ramps, curb cuts and wayfinding signage to allow bicycle users to transition from street grade to the trail system.
- 2) Located at the junction of one or more multimodal corridors. (See *Chapter 5E*)

In general, Backbone Trail facilities shall have grade-separated crossings of major streets and roadways. This is, of course, dependent on having grade differential to work with. Backbone Trails may cross at-grade when arterial streets have traffic speeds less than 30 mph, where trails can safely route through signalized roadway intersections, and at crossings of local streets with appropriate MUTCD signing and/or midblock enhancements.

At-grade street crossings are also most appropriate for Collector Trails and Neighborhood Linkages, at least as interim facilities until the entire Primary Bicycling System is funded and completed.

Needed Transitions between Trails and Roadways			
Trail Corridor	Roadway Connection	Facility Need	Notes
Sammamish River Trail	Linking to NE 124 th Street	Grade separation exists. Tunnel shall be widened and shall include a connection to 124 th Street as part of the 124 th construction project.	
	Linking to the BNSF rail corridor	Access needed between.	2
BNSF rail corridor	Linking to Willows Road	Connection to Downtown rail-trail segment most likely to occur at NE 90 th Street. Planning and preliminary design shall jointly address any Willows Road improvements and the BNSF trail conversion project.	1
	Linking to Old Redmond Road/ West Lake Sammamish Way	Pursue new trail connection on the north side of Redmond Way at West Lake Sammamish Way to connect to Old Redmond Rd.	2
	Linking to Leary Way	At-grade crossing acceptable for interim solution if traffic signal is added. Long-term should be grade-separated.	2
	Linking to East Lake Sammamish Trail and East Lake Sammamish Parkway	At-grade crossing of Bear Creek Parkway will need improvements for interim solution. Long-term design should be grade-separated.	1, 2
	SR 520	At-grade crossing for interim solution. Long term solution grade separation	
E. Lake Sammamish Trail	Linking to 187 th Ave NE/Redmond Fall City Rd	Existing tunnel needs access improvements.	
Bear and Evans Creek Trail	Linking to 187 th Ave NE/Redmond Fall City Rd	Signal is being added for short-term solution as part of SR 202. Long-term should be grade-separated.	
	Linking to Union Hill Rd	At-grade crossing at signal acceptable for interim solution. Long-term should be grade-separated.	1
	Crossing Avondale Rd at Avondale Way	At-grade intersection improvements	1, 2
	Linking to Novelty Hill Rd	Grade separation desired.	1
Redmond Puget Power Trail	Linking to Willows Road	At-grade signalized crossing	1

Figure 5B.6 Needed connections as identified by the Bicycle and Pedestrian Advisory Committee

5B. BICYCLE SYSTEM PLAN

Alternate Bicycling Corridors

Two desired primary bicycling corridors present significant obstacles for bicycle facility implementation. Both were ranked as critical missing links by the cycling community (*Map 5B.13*) and were identified as part of the priority multimodal corridors system (*Map 5E.7*).

The following alternate bike routes are thus recommended to provide cyclists with continuous, barrier-free travel going east/west through downtown and north/south through west Redmond:

- **Corridor E/F - Redmond Way/BNSF**
Redevelopment of the Burlington Northern Santa Fe railroad corridor as an urban bicycle path could be the preferred way for cyclists to move across downtown Redmond. Traffic calming on Redmond Way with the conversion to two-way traffic flow will additionally improve bicycling conditions on the parallel on-street route, but striping bike lanes is not likely feasible.
- **Corridor #10 - 148th Avenue NE**
Neither on-street bicycle lanes or a parallel sidepath trail can be cost-effectively constructed on 148th Avenue NE from NE 24th to NE 90th. Thus a parallel north/south route will be developed as a primary bicycling corridor through the expanding Overlake Technology Center.

Three missing links to complete this route are:

- #10a - Construct a trail link from the BNSF corridor up to the T-intersection of Old Redmond Road at Redmond Way. Reconfigure intersection design and signalization to accommodate through bicycle travel. Add bike lanes to connect to Old Redmond Road.
- #10b - Beginning at the access point of the SR 520 Trail, stripe bicycle lanes on the following streets through the Overlake Technology Center: NE 51st St, 150th Ave NE, 152nd Ave NE, and NE 36th St.
- #10c - Construct a new two-lane roadway with bicycle lanes across the proposed SR 520 overpass to connect to the Overlake Mixed-Use Core.

In addition, the existing SR 520 Trail provides another primary north/south bicycling route for through travel through the Overlake Technology Center.

Addressing Bicycling in Pedestrian Places

The key to creating places in Redmond where pedestrians feel comfortable is slowing motor vehicles to speeds more compatible with non-motorized modes. Narrowing travel lane widths, providing on-street parking, and "greening" street corridors are viewed as necessary to achieve this. So where do bicycles fit in?

A final bicycle facility issue to address is how to accommodate bicycles in Downtown Redmond and other places designed to give priority to the pedestrian. Additional operating space for bicycles (i.e. bike lanes or a parallel trail) is most needed on roadways with high travel speeds. A general rule of thumb is the greater the speed differential between cars and bikes, the greater the separation desired. When bicycles and motor vehicles are traveling at or near the same speeds, Class II on-street bike lanes are no longer a necessity.

However, the key to ensuring that bikes and cars can share the road is to slow traffic speeds. Doing nothing is not a solution. If bike lanes are not going to be provided within the City Center and Overlake to make key connections for Primary Bicycling Corridors, some level of traffic calming needs to be implemented. If not, many cyclists will likely end up riding on sidewalks, which should be reserved for pedestrian use and can be a safety issue.

One traffic calming option that shall be explored for implementation within pedestrian destination areas is narrowing travel lanes (potentially down to 10' widths) and using colored pavement to delineate space for bicycling and/or parking (which may also be narrower than typical AASHTO standards). An example of such treatment is depicted in *Figure 5B.7* and may be combined with other traffic calming treatments as appropriate.



Figure 5B.7 Traffic calming technique of narrowing vehicular lanes and coloring pavement for bicycling and/or parking along pedestrian-oriented streets

Education, Encouragement, Enforcement

It is widely recognized that engineering solutions alone won't make a community bicycle-friendly. Instead, the City of Redmond shall undertake a "4-E Approach" to bicycle planning that includes TDM measures to address education, encouragement and enforcement needs. The strategies for physical facility improvements shall be accompanied by the following programs:

- ✓ Increased Law Enforcement for Motorists
Speeding, using shoulders and bike lanes as right-turn lanes, and failing to yield when making a right turn on red are frequently sited motorist infractions.
- ✓ Bike-Friendly Businesses and Transit Centers
Public and private sectors of the community shall provide secure and convenient bicycle parking facilities (racks and lockers), showers, changing areas, and other incentives to bike that balance provisions for free auto parking.
- ✓ Bikes on Buses
Redmond cyclists desire increased capacity for bicycles on buses. Metro and Sound Transit buses currently have a front rack that accommodates two bicycles. When the racks are full, cyclists must wait for the next bus, which may not come for another half hour or hour, and may already be full as well. Racks with increased capacity and/or modification to policy restricting bringing bikes into buses should be explored.
- ✓ Share the Road Signing
Motorist awareness may be enhanced through implementation of a Share the Road signing program. Such signs shall be used to warn bicyclists and motorists that less than ideal conditions may exist along a route that is being used by both users.
- ✓ Enhanced Wayfinding for Cyclists
Consider a bike route naming program with signage for cyclists to know how to reach major destinations. Place kiosks with wayfinding at gateways to various parts of the community.
- ✓ Properly Equipped Nighttime Bicyclists
Adult cyclists need to be outfitted with proper lighting equipment and educated on safely riding at night.
- ✓ Education for Child Bicyclists
Children need to be taught how to ride on streets and behave like operators of vehicles. Bicycle rodeos and other programs shall be introduced.
- ✓ Safe Routes to Schools
The Lake Washington School District shall participate in the WSDOT program to provide safe routes to school.