



CITY OF KIRKLAND
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MEMORANDUM

To: Kurt Triplett, City Manager
From: David Godfrey, P.E., Transportation Engineering Manager
Kathy Brown, Public Works Director
Date: October 9, 2014
Subject: Transportation Master Plan Update

RECOMMENDATION:

It is recommended that City Council receives a briefing and gives direction on the Transportation Master Plan (TMP). Specifically, staff is seeking comment on the draft Goals and Policies, a draft 20 year Project List and on initial information concerning Impact Fees.

BACKGROUND DISCUSSION:

Introduction

Kirkland’s TMP will serve two major purposes (Figure 1). Its goals and policies will be the basis of the Transportation Element in the revised Comprehensive Plan. Action items, priorities and other information will also be provided to complete the TMP and form a fuller picture of how the goals and policies are to be implemented than would be covered in a Transportation Element by itself. Development of the plan is being guided by the Transportation Commission with extensive public input through the City’s overall Comprehensive Plan public involvement process.

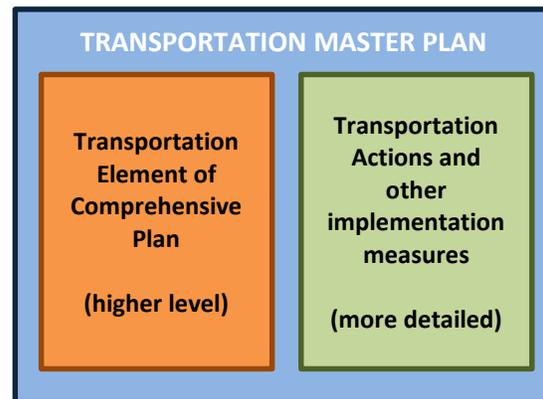


Figure 1 The Transportation Master Plan has two major components.

Goals and Policies

Goals and Policies are the basis for the Transportation Element of the Comprehensive Plan. At the January 7, 2014 Council meeting draft goals and policies were discussed and a large amount of valuable feedback was received. Revisions and expansion of the Goals and Policies based on those comments and Puget Sound Regional Council requirements has been completed and is Attachment 1. The Transportation Commission has reviewed the document in detail, and the Planning Commission also offered comments at a recent briefing.

In Summary, the Goals and Policies are meant to reflect the Kirkland 2035 vision – Green, Livable, Walkable, Vibrant, Accessible, Sustainable-- and four transportation principles¹: Move People, Link to Land Use, Be Sustainable, Be an Active Partner. There are 49 policies arranged under 8 goals, as shown in Table 1.

¹ These principles are from the *Transportation Conversations* document prepared by the Transportation Commission and endorsed by the City Council in 2010

There are still portions of the Goals and Policies that are yet to be fully written and minor new material that will likely be added in response to other comments that are received through future reviews.

As described above, although the Goals and Policies are the foundation of the Transportation Master Plan, more information will be added to the Goals and Policies, prior to Council adoption, to make a comprehensive document. A first aspect of that expansion is included in the form of Actions that accompany many Goals. Note that to complete some of these Actions (e.g. revise the Active Transportation Plan, prepare a Transit Plan) funding will be required.

We are requesting that Council members provide any comments they have on the draft document at the study session. This will allow staff to finalize the Goals and Policies and complete a draft of the final Transportation Master Plan. Given the length of the document and the time available at the study session, Council may not have time to discuss the Goals and Policies in detail during the study session and may instead want to discuss only points of particular interest. The following questions are offered as possible starting points for that discussion:

- Are there questions or comments about the introduction or the transportation concept?
- Are there overall themes that need more emphasis or decreased emphasis in the Goals and Policies?
- Should other goals or policies be added? Is there material that should be deleted?
- Are there any particular areas that need changes?

Table 1 Goals and Policies

T-1 Walking - Form a safe network of sidewalks, trails and crosswalks where walking is comfortable and the first choice for many trips.

Policies

1. Identify and remove barriers to walking.
2. Improve the safety of walking in Kirkland.
3. Make getting around Kirkland on foot intuitive.
4. Prioritize and design sidewalk construction in a manner that supports other goals in the Plan.
5. Develop world-class walking facilities along the CKC/Lakeshore.
6. Make it safer and easier for children to walk to school and other destinations.
7. Improve street crossings.

T-2 Biking – Interconnect bicycle facilities that are safe, nearby, easy to use and popular for people of all ages and abilities.

Policies

1. Measure bicycle use and safety.
2. Create and improve on-street bike facilities.
3. Build a network of greenways.
4. Implement elements and programs that make cycling easier.
5. Make it easy to navigate the bike network.
6. Make the Cross Kirkland Corridor an integral part of the bicycle network and connect it to the region.

T-3 Public Transportation - Support and promote a transit system that is recognized as a high value option for many trips.

Policies

1. Plan and construct an environment that supports frequent and reliable transit service in Kirkland.
2. Support safe and comfortable passenger facilities.
3. Integrate transit facilities with pedestrian and bicycle networks.
4. Support Transportation Demand Management in Kirkland particularly at the work sites of large employers and other locations.
5. Implement transit on the Cross Kirkland Corridor.
6. Work with Sound Transit to incorporate investments in Kirkland.
7. Partner with transit providers to coordinate land use and transit service.

Table 1 Goals and Policies (continued)

T-4 Motor Vehicles - Provide for efficient and safe vehicular circulation recognizing congestion is present during parts of most days.

Policies

1. Make strategic investments in intersections and street capacity to support existing and proposed land use.
2. Use ITS to support optimization of roadway network operations.
3. Position Kirkland to respond to technological innovations such as electric vehicles and driverless cars.
4. Take an active approach to managing on-street and off-street parking.
5. Work with the Washington State Department of Transportation and the State Legislature to improve the way I-405 and SR 520 meet Kirkland's transportation interests. (see Partnership Policy T-7.3)
6. Reduce crash rates for motor vehicles.
7. Mitigate negative impacts of motor vehicles on neighborhood streets.

T-5 Link to Land Use - Create a transportation system that is united with Kirkland's land use plan.

Policies

1. Focus on transportation system developments that expand and improve walkable neighborhoods.
2. Create a transportation network that supports economic development goals.
3. Develop transportation improvements tailored to commercial land use districts such as Totem Lake, Downtown and neighborhood business areas.
4. Adopt requirements and practices for all future development that support transportation infrastructure

T-6 Be Sustainable – As the transportation system is planned, designed, built, maintained and operated, provide mobility for all using reasonably assured revenue sources while minimizing environmental impacts.

Policies

1. Balance overall public capital expenditures and revenues for transportation.
2. Place highest priority for funding on maintenance and operation of existing infrastructure rather than on construction of new facilities. Identify and perform maintenance to maximize the useful lifetime of the transportation network at optimum lifecycle cost.
3. Support modes that are energy efficient and that improve system performance.
4. Minimize the contribution of transportation to air and water pollution; comply with Federal and State air and water quality requirements.
5. Safeguard the Transportation System against disaster.
6. Create an equitable system that provides mobility for all users.
7. Implement transportation programs and projects in ways that prevent or minimize impacts to low-income, minority and special needs populations.
8. Actively pursue grant funding and innovative funding sources.

Table 1 Goals and Policies (continued)

T-7 Be an Active Partner - Coordinate with a broad range of groups, public and private, to help meet Kirkland's transportation Goals.

Policies

1. Play a major role in development of Sound Transit facilities in Kirkland.
2. Establish commitments from transit providers to provide high quality transit service in exchange for land use and transportation commitments that support transit. Partner with King County Metro to meet mutual interests.
3. Work with WSDOT and the Washington State Legislature to achieve mutually beneficial decisions on freeway interchanges and other facilities.
4. Participate in and provide leadership for regional transportation decision making.
5. Work closely with the Lake Washington School District to encourage more children to walk and bicycle to school.
6. Coordinate multi-modal transportation systems with neighboring jurisdictions.
7. Partner with the private sector and other new partners.
8. Engage in a multi-agency, multi-disciplinary Safety program.

T-8 Transportation Measurement - Measure and report on progress toward achieving goals and actions.

Policies

1. Use a multi-modal plan based concurrency method to monitor the rate at which land use development and the transportation system are constructed.
2. Establish acceptable level of service for all modes.
3. Mode split (under construction)
4. Ensure implementation of the Goals and Policies in the Transportation Element and monitor progress toward those goals.

20 year project list

A 20 year project list is a required element of the Transportation Element and of the Capital Facilities element of the Comprehensive Plan. It serves as a source and guide from which projects for the 6-year Capital Improvement Program will be selected. Although funding does not have to be identified for each project on the 20 year list, it is required that, as a whole, funding for the projects can be reasonably expected to be available over the life of the plan.

The intent of the Study Session on October 21 will be for Council to become familiar with an initial set of projects that can be funded with reasonably expected revenue. As is described below, for some categories of projects significant detail is available. In other areas, more detail needs to be provided prior to completing a list. Before staff and the consultant begin a more detailed refinement of the list, it will be helpful to have Council's reactions to the draft list in a general sense. This is reflected in some suggested questions for Council near the end of this section. At the study session we hope to have additional maps available that will help explain the project list.

Based on past data, funding over the next 20 years is expected to be a total of approximately \$250 million for capital needs (Table 2). The appropriate allocation of this \$250 million across project categories is the essence of creating the 20 year project list.

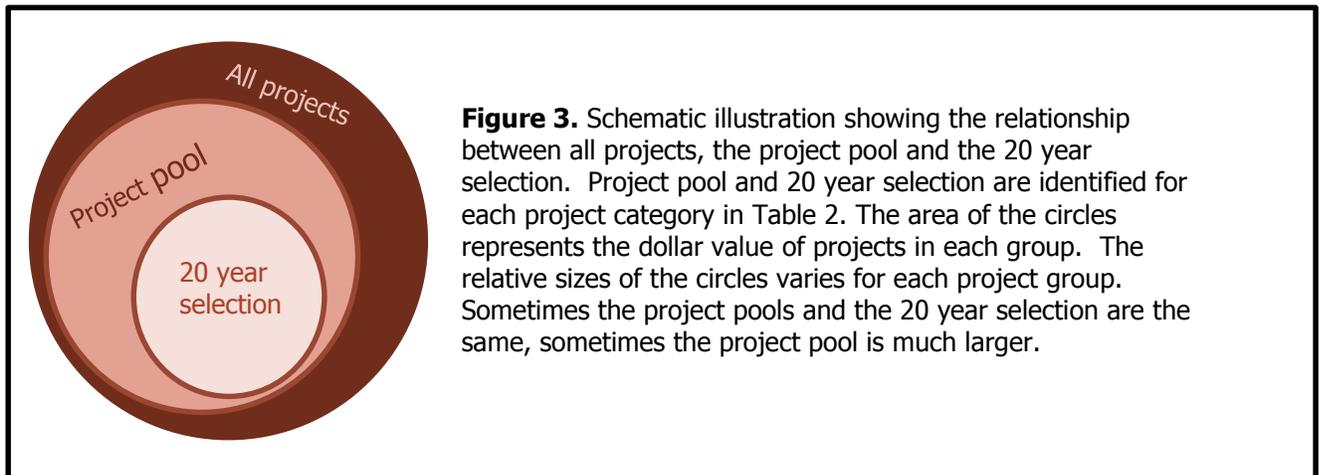
Table 2 Sources of Capital project funding

Capital project funding	
Source	Annual Amount (million)
Gas tax	\$ 0.56
Sales tax	\$ 0.27
Real estate excise tax	\$ 1.42
Street levy	\$ 2.60
Solid waste fund	\$ 0.30
Surface water fund	\$ 0.50
Impact fees	\$ 2.00
Grants	\$ 3.50
Developer Fees	\$ 1.25
Other	\$ 0.25
TOTAL	\$12.65
	<i>Rounded down to \$12.50 million per year or \$250 million over 20 years.</i>

Staff's approach for preparing the 20 year project list was as follows:

1. By policy, recognize a 20 year street maintenance budget of approximately \$85 million of street levy and other committed funds.
2. Establish project categories within each mode (Walk, Bike, Transit, Auto) based on results from the April 15, 2014 Council study session (see Table 2).

3. For each project category, develop a *pool* (see figure 3) of potential projects. This is a larger set of projects in a given category based on staff judgment, complete networks, existing CIP projects, corridor studies, etc.
4. For each project category, develop a *recommended set of projects* (see Figure 2). For most project categories, this is based on a combination of a) projects that will meet the goals and policies in the draft plan, b) fiscal balance across project types c) projects that have been previously developed and d) staff's judgment of a sensible level of completeness for a project category. Sometimes it represents a placeholder amount awaiting another level of analysis.
5. Perform an analysis similar to 2 and 3 above for other maintenance needs over the next 20 years.



It's expected that after the 20 year list is finalized, it will serve a main source of future CIP projects and individual projects will be prioritized within groups based on the prioritization criteria in the Goals and Policies. The 20 year list should be updated in coordination with the CIP process. In many cases, pool projects that are not recommended could serve as an unfunded list of projects to be considered for grant opportunities and to illustrate what is to be constructed in the longer term.

Using the method described above, an initial allocation of funding has been made as summarized in Table 2 below. Note that, in order to give them context and because they directly support goals and policies, several non-capital funding categories (for example transit funding and support for bicycle and walking) have been included in the summary table. Those costs have been subtracted from the overall cost to give a final total of \$250 million. In order to pay for these non-capital projects, other sources of capital funding would need to be identified.

A summary of the information in Table 2 is represented in Figure 4 and more detail is shown in Figure 5. These charts do not include pavement maintenance since the funding amount is set by policy.

Table 3, beginning on page 11, shows, in more detail, the projects that are in both the pool and that were selected for the 20 year project list recommendation. Information about the category's relationship to safety, considerations for timing of project delivery and relationship to the goals and policies is also shown.

Note that although not many projects are specifically designated as "safety projects", almost all the projects have aspects that increase safety for pedestrians, cyclists or drivers. The Motor Vehicle safety category includes a "target zero" type program. Target Zero is Washington State's name for a multi-disciplinary, multi-agency approach to reducing injuries and fatalities to zero. Because of its statewide focus, Target Zero has emphasis areas that may not be appropriate for Kirkland. Programs from other cities such as New York or San Francisco may be better candidates to adopt to our needs. A common feature of all these programs is that they consider safety improvements from a broad perspective as opposed to developing silos around engineering, injury treatment, collision avoidance systems within a vehicle, etc.

Remarks on the 20 year project list shown in Table 3

- The term "project" is used for simplicity but some of the "projects" are actually programs (Support for biking or walking) or groups of smaller projects (e.g. complete greenway network).
- The Transportation Commission has reviewed and commented on the draft 20 year list at both their regular September meeting and a Special meeting on October 3.
- If new funding were available, the Transportation Commission's highest priorities would be for increased funding for the Cross Kirkland Corridor.
- A Transportation Benefit District is an example of a potential new funding source; a \$20 car tab is expected to generate approximately \$2 million per year.
- As described above, some of the items in Tables 2 and 3 are not capital costs, but are included in these tables to put them in context with rest of the capital improvements.
- At this point, the project costs are at a planning level of accuracy. As noted in Table 3, in some cases the magnitude of the complete or 20 year project need is not known and placeholder amounts are shown.
- For some groups, the recommended area includes a placeholder amount, for example the flashing yellow arrow program.

A series of reference maps begins on Page 19. They are intended to help give some geographic context to the projects in Table 3. Additional and more refined versions of these maps will be available at the Study Session on October 21.

- Figure T-1 is a map of street classifications from the existing Comprehensive Plan, there are references to various street classifications in Table 3.
- Map 1: traffic signals and sidewalk coverage this may be useful in understanding maintenance needs for these items.
- Map 2: the proposed bicycle network.
- Map 3: school walk routes, completed and incomplete.
- Map 4: includes crosswalks that are candidates for lighting and other improvements.
- Map 5: transit routes and stop volumes.
- Map 6: Motor vehicle projects in the capacity and respond to new development categories.

As with the Goals and Policies it will be helpful if Council members can provide any comments they may have on the 20 year list. Staff will be available to answer questions and clarify any details that are unclear. Some potential questions/discussion points are presented below:

- Is the balance appropriate across project modes?
- Are there project categories that should be added or modified?
- Does the proposed project list adequately reflect the goals and policies? If not, what changes should be made?

Table 2 Summary of recommended funding categories and 20 year funding proposals

MAINTENANCE (CIP CONTRACTED)		WALK		BIKE		TRANSIT		MOTOR VEHICLES	
Category	20 year funding (millions)	Category	20 year funding (millions)	Category	20 year funding (millions)	Category	20 year funding (millions)	Category	20 year funding (millions)
Signal maintenance Signals, RRFB, School flashers, etc.	\$7.5	Sidewalk Build new sidewalks	\$20.3	On-Street Create new and improve existing on-street bike facilities.	\$17.9	Service Supplement main Metro service, including CKC	\$10.0 (non-capital)	Safety Projects to improve auto safety. Zero crash based safety across modes	\$7.0
Sidewalk maintenance Repair damaged sidewalk	\$4.0	Crosswalk Improve existing and create new crosswalks	\$9.4	Greenways Create greenway network	\$6.0	Speed and Reliability Projects that make buses able to travel with less delay and more on-schedule	\$6.5	Respond to new development Funds for road and intersection projects that support development	\$13.0
Pavement marking maintenance Maintain pavement markings	\$12.0	Trails CKC and other new trail links	\$9.0	Support Parking, way-finding, encouragement, promotion	\$1.6 (non-capital)	Passenger Environment Places where passengers wait and get on buses	\$3.9	Efficiency Intelligent transportation improvements	\$5.8
Pavement maintenance Maintain pavement condition.	\$85.0 (amount set by policy)	Accessibility Improve ADA accessibility	\$7.0			Support/Transportation Demand Management, CTR compliance.	\$1.3 (non-capital)	Capacity Street and intersection widening.	\$35.6
		Support Maps, wayfinding, encouragement, promotion	\$1.3 (non-capital)			TOTAL	\$21.7	TOTAL	\$61.4
TOTAL	\$108.5	TOTAL	\$47.0	TOTAL	\$25.5	Total all categories	\$264.1	Total after subtracting non capital of \$14.2	\$249.9

Figures 4 and 5, 20 year project funding by mode and by category within mode

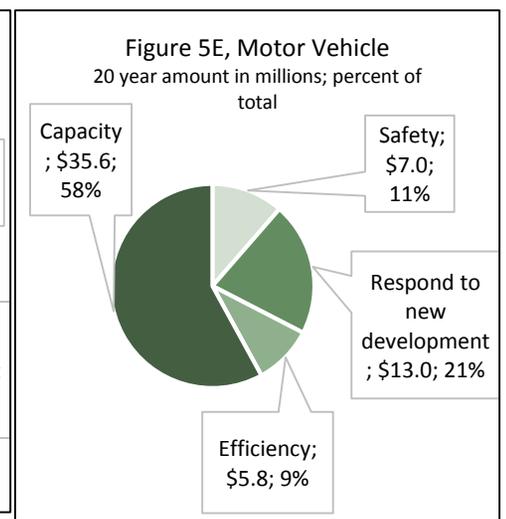
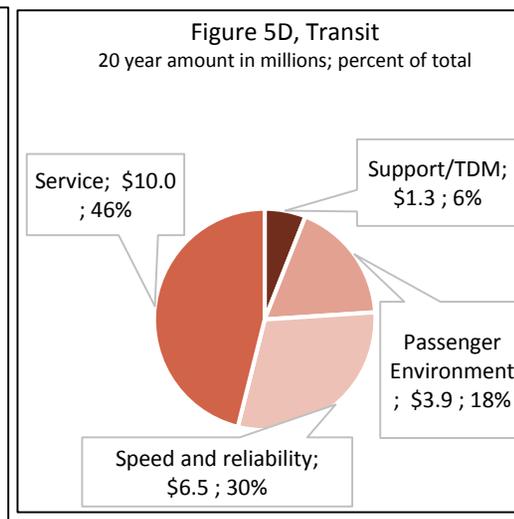
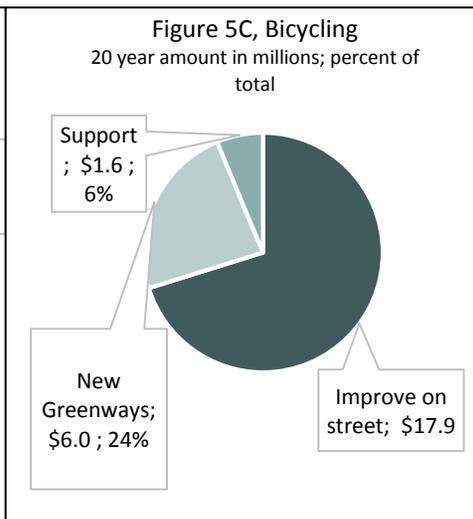
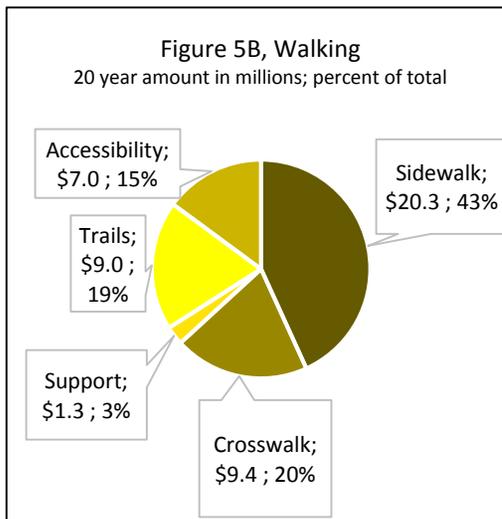
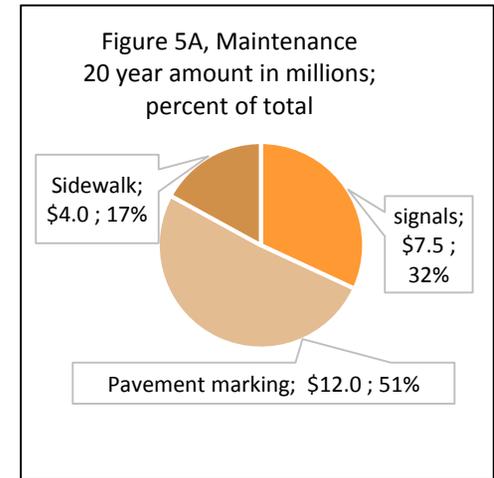
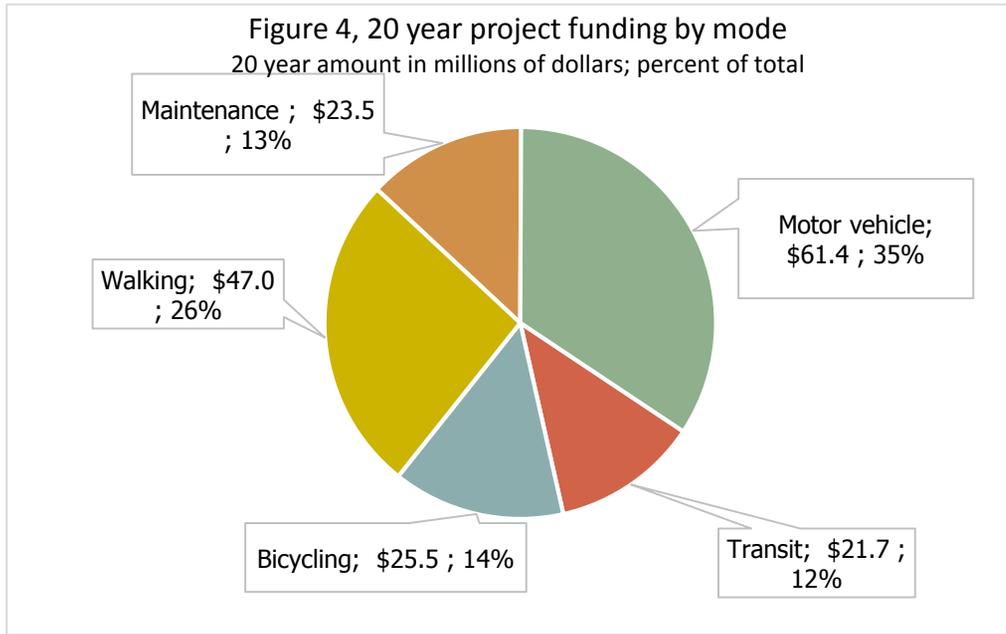


Table 3 Detailed 20 year project list, 20 year costs in millions (Maintenance CIP Contracted)

Category	Pool	Cost	Recommended	Cost	Safety	Timing	Policy
Signal maintenance Signals, RRFB, School flashers, etc.	Generous replacement schedule for all items	\$20.0	Minimum replacement schedule for all items.	\$7.5	All areas have High Safety value.	Maintenance is generally uniformly distributed over time although recent investments in Flashing Beacons and ITS will defer replacement in these areas	Place high priority on maintenance, Use ITS Policy T-6.2, T-4.2
Sidewalk maintenance	Need more data to determine larger need	\$4.0	Keep current funding amount as placeholder	\$4.0			Place high priority on maintenance, Remove barriers to walking improve safety of walking, integrate transit with ped/bike networks Policy T-6.2, T-1.1, 1.2 T-3.3
Pavement Marking maintenance	Estimate of large replacement program	\$15.0	Current amount (\$5 m 20 year equivalent) is small. Suggest relatively large funding to support higher level of service and increase in markings with new projects, particularly bicycle projects	\$12.0			Place high priority on maintenance, increase safety, improve facilities, build networks for bikes. Policy T-1.2 T-2.1,2.2,2.3
			TOTAL	\$ 23.5			

Table 3 Detailed 20 year project list, 20 year costs in millions (Walking part 1)

Category	Pool	Cost	Recommended	Cost	Safety	Timing	Policy
Sidewalks	<i>Sidewalk on one side of:</i>		<i>Sidewalk on one side of:</i>		Emphasis on collector and arterial streets reflects risk presented by higher speed, volume and number of lanes on these streets. Although all projects improve safety, they are also selected for connectivity value.	School walk route projects have traditionally been successful grant candidates, timing should follow grant opportunities. Advance CKC connection project due to its multi-modal value	Walking: remove barriers, increase safety, improve walk to school. Improve pedestrian connections to transit Improve walkable neighborhoods, connect to commercial areas. Promote energy efficient modes, reduce pollution, provide mobility for all users. Policy T-1.1,1.2,1.6 T-3.3, T-5.1, 5.3 T-6.3,6.4, 6.6
	All school walk routes	\$16.0	School walk routes collectors and above	\$4.4			
	10 minute neighborhood streets ² highest 3 categories (some overlap with project below)	\$15.0	10 minute neighborhood streets (highest 2 categories)	\$6.0			
	Principal and minor arterials (overlap with other projects)	\$14.0	Complete sidewalk on one side of principal and minor arterial (overlap removed)	\$2.9			
	CKC Connections	\$13.0	CKC connection at Kirkland Way	\$6.9			
			TOTAL	\$20.3			
Crosswalks	Upgrade locations with few crossing improvements or poor lighting	\$15.4	Upgrade at crossings on arterials and at all poor lighting locations	\$6.4	These projects are safety based.	Current CIP allocates funds every two years for crosswalk improvements. May consider packaging like projects together e.g. lighting improvements. Timing should consider grant funding cycles	All policies for sidewalks (above) plus, improve crossings for pedestrians Policy T-1.1,1.2,1.6 T-3.3, T-5.1, 5.3 T-6.3,6.4, 6.6 Policy T-1.7
	Improvements at signals (Estimate of need)	\$2.0	Improvements at signals	\$2.0			
	New crosswalks (Estimate of need)	\$1.0	New crosswalks	\$1.0			
			TOTAL	\$9.4			

² Street segments were scored for their 10 minute neighborhood value and sorted into four categories high, medium high, medium low and low based on that score. .

Table 3 Detailed 20 year project list, 20 year costs in millions (Walking part 2)

Category	Pool	Cost	Recommended	Cost	Safety	Timing	Policy
Trails	Complete CKC to Master Plan vision	\$70.0	Complete design on strategic selected sections of CKC (up to 50% of full length) in preparation for grants	\$7.0	These projects provide safety through separate facilities for biking and walking	Completing CKC design in intended to help secure construction funding; therefore it should be completed early	Develop CKC for walking and biking, integrate ped and bike networks with transit, promote energy efficient modes, reduce pollution, implement transit on CKC, Provide mobility for all users. Policy T-1.5 T-2.6 T-3.3, 3.5 T-6.3, 6.4, 6.6
	Design CKC to Master Plan vision ³ subset of previous project	\$14.0					
	Other trail connections (estimate)	\$2.0					
Accessibility	Projects that improve ADA accessibility More data needed to improve estimate of total need	\$7.0	Same as pool	\$7.0	These projects improve safety and accessibility	Sidewalk inventory will improve estimate of the need and influence timing. Pavement overlay program also provides ADA improvements.	Remove barriers to walking, provide mobility for all users, minimize impacts to special need populations. Policy T-1.1, T-6.6 T-6.7
Support	Other projects and services that support and promote walking such as wayfinding, maps, promotion/education includes 0.25 FTE staff (estimate of need)	\$1.3 ⁴	Same as pool	\$1.3	Education and promotion improve safety ⁵	Annual program	Remove barriers to walking, make walking intuitive, work with LWSD to encourage walking and biking to school. Policy T-1.1,1.3 T-7.5
			TOTAL WALKING	\$ 47.0			

³ Design cost assumed to be 20% of total cost

⁴ Some of this cost is not capital

⁵ Pedestrian safety is often thought to consist of 4 “Es” Engineering, Enforcement, Education and Encouragement (promotion)

Table 3 Detailed 20 year project list, 20 year costs in millions (Biking)

Category	Pool	Cost	Recommended	Cost	Safety	Timing	Policy
On Street bike network	Restriping to provide wider or buffered bike lanes, better intersections in some cases, separated bike lanes - on or parallel to streets e.g. "cycle tracks"	\$6.0	Same as pool	\$6.0	These projects provide safety through separate facilities for biking and walking	Helpful to coordinate with pavement overlay projects	Improve safety, create and improve on-street bikeways, bicycle connections to transit, connect to commercial areas. Policy T-2.1,2.2, T-3.3, T-5.3
	Juanita Drive. basic cross-section and other bike and pedestrian safety (from corridor study)	\$11.9	Juanita Drive. basic cross-section and other bike and pedestrian safety (from corridor study)	\$11.9	Juanita Drive corridor study improvements are safety based	Coordinate with grant opportunities	
	116 th Ave bike lanes NE 60 th to City limits	\$3.4					
Greenway network	Greenway network	\$6.0	Greenway network	\$6.0	Improved facilities increase ridership. Increased ridership has been tied to improved safety	A relatively small investment can create an entire network so this is a good candidate for early investment	Improve safety, build a network of greenways, bicycle connections to transit, connect to commercial areas Policy T-2.1, 2.3, T-3.3, T-5.3
	Bridges over I-405 at NE 141 st St. and NE 90 th St.	\$9.0					
Support	Other projects and services that support and promote walking such as wayfinding, maps, parking, promotion/education includes 0.25 FTE staff (estimate of need)	\$1.6 ⁶	Same as pool	\$1.6	Education and promotion improve safety ⁷	Annual program	Make bicycling easier, make navigation easier, work with LWSD to encourage walking and biking to school. Policy T-2.4,5, T-7.5
			TOTAL BIKING	\$ 25.5			

⁶ Some of this cost is not capital

⁷ As with pedestrian safety, bicycle safety benefits from the four E consist of 4 "Es" Engineering, Enforcement, Education and Encouragement (promotion). The American Bicycle League [recognizes encouragement](#) as a cornerstone of a bicycle friendly community.

Table 3 Detailed 20 year project list, 20 year costs in millions (Transit Part 1)

Category	Pool	Cost	Recommended	Cost	Safety	Timing	Policy
Service	Service Kirkland would purchase from Metro. 10,000 annual hours of service ⁸ at \$170/hour (current Metro rate)	\$34.0	Innovative demand responsive local service \$500,000 per year as a placeholder		These projects are not safety projects.	Completing a Transit Study would be helpful in clarifying how to handle many of these issues; so timing for implementation may be after that plan is completed.	Create environment to support transit service, support transit trips around and through Kirkland, implement transit on the CKC. Policy T-3.4, 3.1 3.5
	Innovative demand responsive local service. Need more definition before costing			\$10.0 ⁹			
	Transit on CKC. Need more definition before costing						
Speed and reliability	Projects including Transit signal priority and intersection widening/transit lanes			\$6.5			Create environment to support transit service, partner to provide transit projects in exchange for service. Policy T-3.1, T-7.2

⁸ About half the hours in the current routes like 234,236, or 238. Assume ridership of 10 riders/platform hour.

⁹ This is not a capital cost

Table 3 Detailed 20 year project list, 20 year costs in millions Transit (part 2)

Category	Pool	Cost	Recommended	Cost	Safety	Timing	Policy
Passenger Environment	Construct TOD at Kingsgate	\$28.0			Not a safety project	Completing a Transit Study would be helpful in clarifying how to handle this issue; so timing likely after the first 6 years of the program	Create environment to support transit service, partner to provide transit projects in exchange for service Policy T-3.1,T-7.2
	Shelters, lighting and next bus equipment at 30 highest ridership stops	\$3.9	Same as pool	\$3.9	Lighting and shelters improve safety		Support safe and comfortable passenger facilities. Policy T-3.2
Support/ Transportation Demand Management	Development of Totem Lake GTEC and support for CTR and TMP sites ¹⁰ . Other projects and services that support promotion/education of transit includes 0.25 FTE staff (estimate of need)	\$1.3	Same as pool	\$1.3 ¹¹	Not a safety project; develops ridership	Annual program	Support ridesharing and transit Policy T-3.4
			TOTAL TRANSIT	\$21.7			

¹⁰ Council designated the Totem Lake Urban Growth Center as a Growth and Transportation Efficiency Center (GTEC) site. The City of Kirkland is required to provide oversight of Commute Trip Reduction (CTR) sites within the City. CTR sites have more than 100 employees reporting between the hours of 7:00 and 9:00 AM. Transportation Management Program (TMP) sites have entered into agreements to implement various demand management strategies as part of their development and also require oversight by the City.

¹¹ Non-capital costs

Table 3 Detailed 20 year project list, 20 year costs in millions (Motor Vehicle part 1)

Category	Pool	Cost	Recommended	Cost	Safety	Timing	Policy
Safety	New traffic signals (4@\$1m each)	\$4.0	New traffic signals (3@\$1m each)	\$3.0	These projects are selected to address common crash sources such as turning traffic at traffic signals. Also includes "target zero" like safety system.	Safety program can begin immediately and is an annual program. Neighborhood Traffic Control is also an annual program. Other categories can be implemented over time based on need and funding	Reduce crash rates for motor vehicles, mitigate impacts of motor vehicles on neighborhood streets Policy T-4.6, 4.7
	Multi-disciplinary zero injury based safety program (more research needed to confirm estimate)	\$1.0	Multi-disciplinary zero injury based safety program (more research needed to confirm estimate)	\$1.0			
	Driveway management (locations to be determined)	\$2.8	Driveway management	\$1.0			
	Flashing yellow arrow program (locations to be determined)	\$1.0	Flashing yellow arrow program (locations to be determined)	\$1.0			
	Neighborhood Traffic Control	\$1.5	Neighborhood Traffic Control	\$1.0			
			Subtotal	\$7.0			
Respond to new development	Existing unfunded CIP projects connected with circulation and previous Totem Lake Mall proposal (\$62.7 m) and Park Place (\$4.6 m) development proposals.	\$67.3	Opportunity fund for circulation and development proposals (\$10 Totem Lake/\$1 Park Place)	\$11.0	These projects support smaller blocks, traffic signals which provide safety benefits. Also include bicycle and pedestrian facilities.	Coordinate with development opportunities	Make investments in capacity to support proposed land use, support economic development goals, tailor improvements to commercial land use districts. Policy T-4.1 T-5.2,5.3
	Parking expansion City hall site and 150 @ 30,000/stall	\$6.5	Parking expansion at City Hall site (150 stalls)	\$2.0			
			Subtotal	\$13.0			

Table 3 Detailed 20 year project list, 20 year costs in millions (Motor Vehicle part 2)

Category	Pool	Cost	Recommended	Cost	Safety	Timing	Policy
Efficiency	Various ITS improvements (including parking)	\$5.8	Various ITS improvements (including parking)	\$5.8	ITS has components that are helpful for auto, pedestrian and bicycle safety	Current ITS projects will be on-going for the next 2 years. New ITS projects should occur after an update of the ITS Plan	Use ITS to support optimization of roadway networks. Policy -4.2
Capacity	Capacity projects from unfunded CIP plus Juanita Drive, 100 th Avenue and I-405 interchange development funds (3 @\$5m each)	\$133.0	NE 132nd intersections and Street projects in CIP 100th Avenue projects NE 132 nd Interchange fund (\$5m) Juanita Drive Auto improvements	\$35.6	NE 132 nd Street projects include improvements for bicycle and pedestrian facilities. 100 th Avenue includes key missing links	Timing should be coordinated with WSDOT and with grant opportunities	Make strategic investments in intersection and street capacity, Work with WSDOT on interchange improvements. Policy T-4.1, T-7.3
			TOTAL MOTOR VEHICLE	\$61.4			

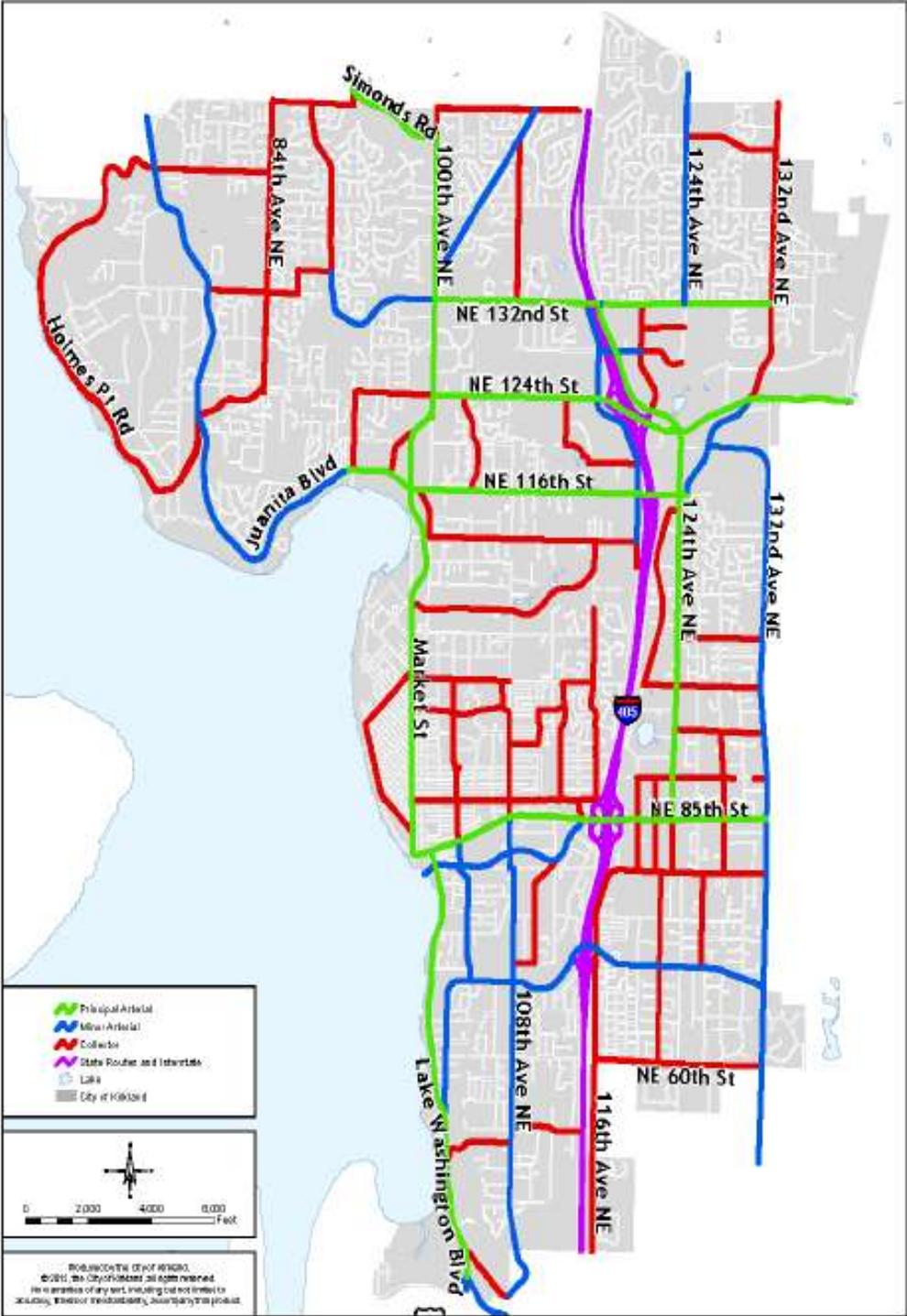
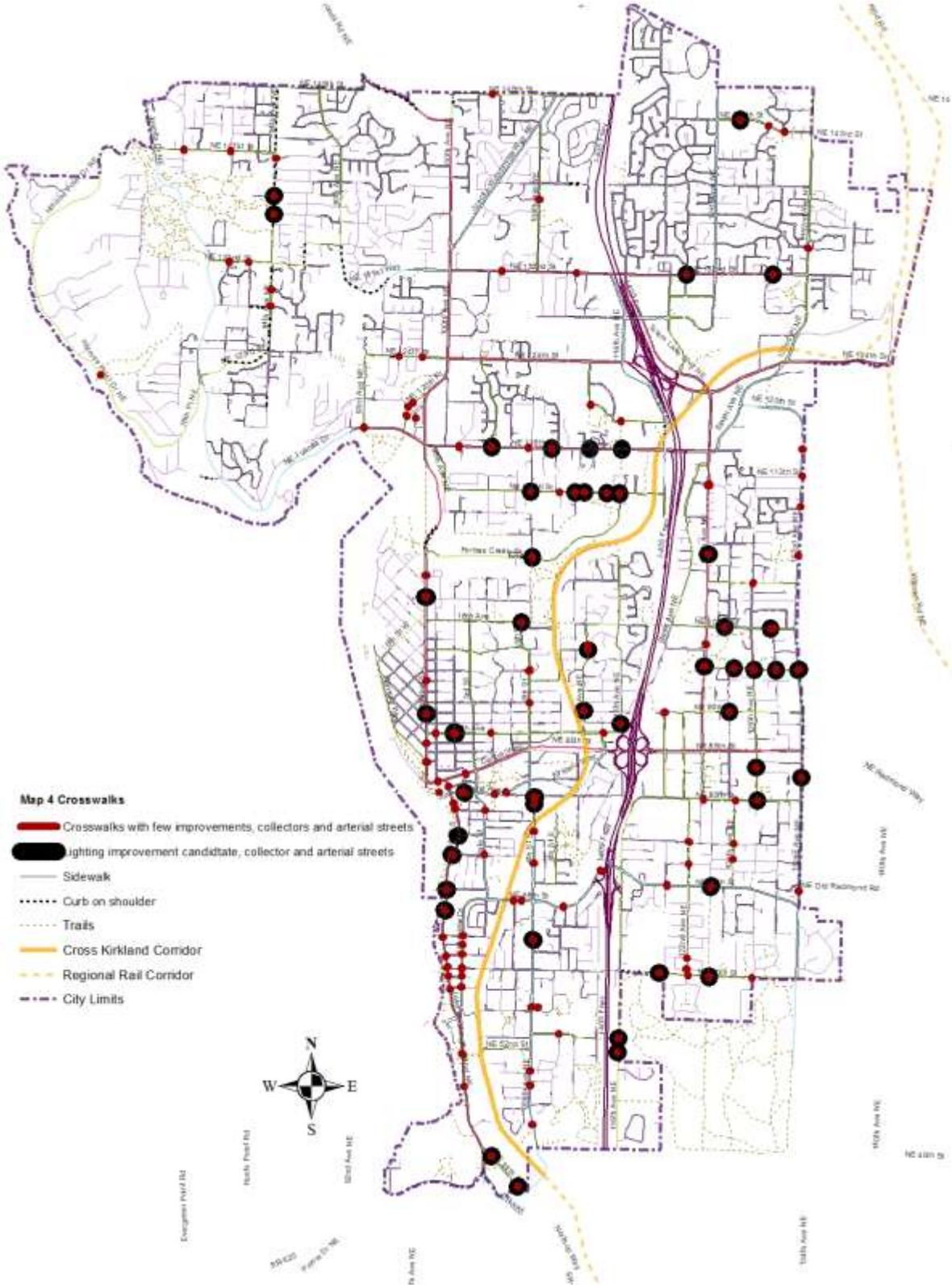
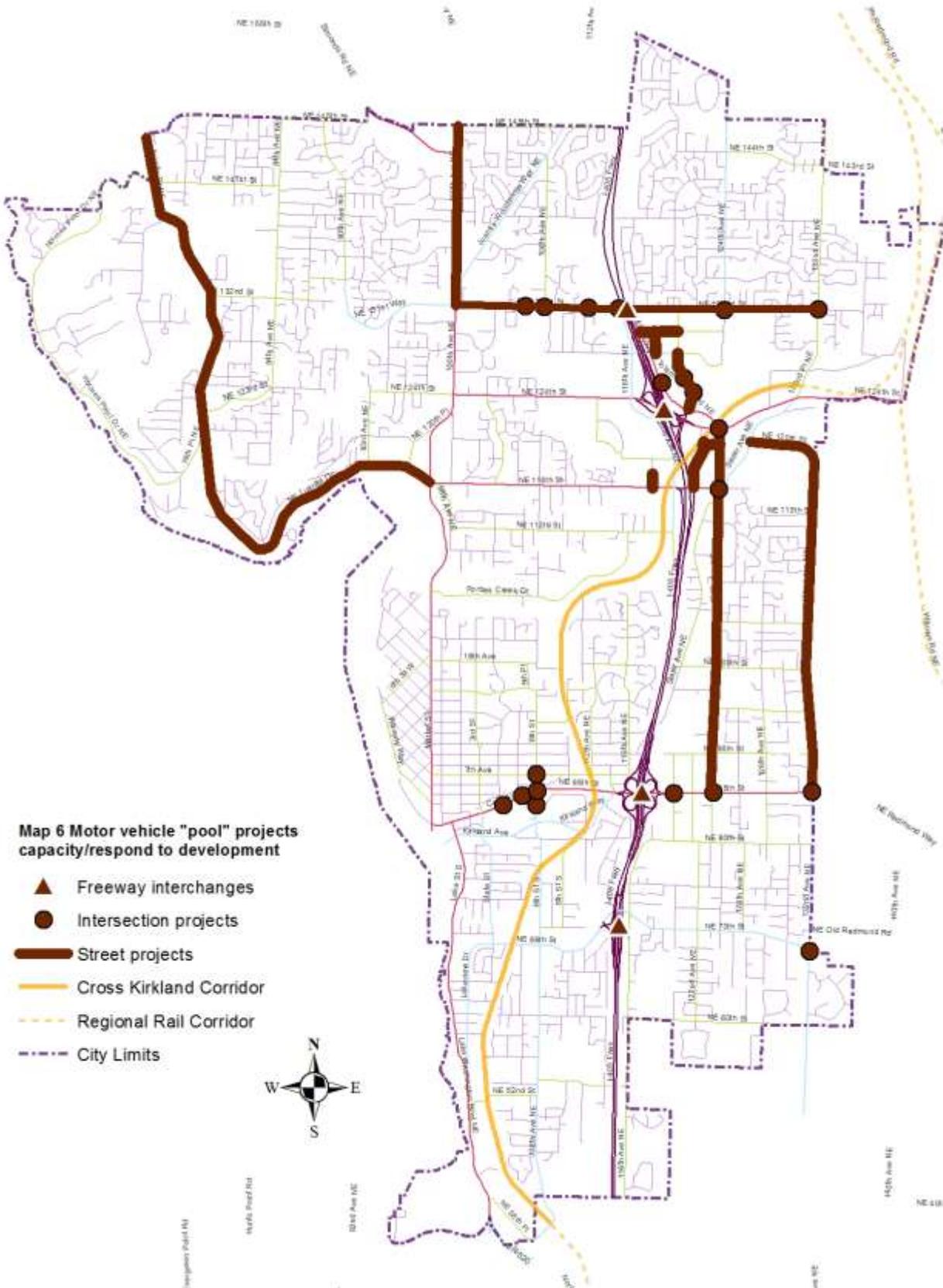


Figure T-1: Street Classifications and State Routes







Impact Fees

This discussion of impact fees is intended to give Council an update on initial findings and raise some questions Council may wish to consider. As the 20 year project list and land use forecasts are finalized, work on impact fees can be advanced. Coordination between Road Impact Fees and Park Impact Fees is also underway, and a revised impact fee ordinance will be coming to Council in 2015.

Transportation impact fees are designed to collect a fair share of transportation improvement costs from new development. The Growth Management Act allows impact fees to be charged for system improvements that reasonably relate to the impacts of new development and specifies that fees are not to exceed a proportionate share of the costs of improvements.

Impact fees are part of a development's transportation mitigation requirements. Developments also must undergo a concurrency evaluation which determines whether there is sufficient transportation infrastructure to support the new development. Assuming that concurrency is achieved, development pays an impact fee to cover its share of the transportation system costs.

During the process of preparing the Transportation Master Plan for the City over the last few months, the Consultant has proposed a network of roadway, biking, walking and transit projects that are substantially different than the projects that are the focus of the city's current impact fees. Historically, Kirkland has narrowly defined the projects eligible for funding with impact fees, notably those that we have identified in our "concurrency network." Given the move to a multimodal concurrency program, the breadth of transportation projects that could be considered for impact fees is expanded.

At the same time, the growth forecasts for the city over the next 20 years are higher than they were back in the 1990's and early 2000's when the current impact fee program was developed. If the growth materializes, there is a larger base over which to spread the impact fee costs. We are working to refine a reasonable expectation for growth that would occur over the 20 year period.

Based on our analysis to date, we expect that the total cost of the impact fee project list will be roughly comparable to the current list, while the amount of growth will increase. Because impact fee rates are proportional to the cost of the projects divided by the number of trips, this could result in impact fee rates that are similar to or less than current rates. The ultimate size of the fee will depend on the extent to which we are successful at including non-motorized and transit projects within the impact fee list.

City staff are also examining possible revisions to the 'change of use' code provisions to make it easier to change land uses within activity centers such as downtown and Totem Lake. Finally, staff is considering an option of designating certain activity centers in the city (e.g. downtown) as mixed use/transit centers, which would reduce trip generation rates and proportionally lower impact fee rates.

Methodology

The flow of steps involved in the Kirkland impact fee process is shown in Figure 5. The key steps include: Establishing travel forecasts and trip patterns (based on land use data and the

future transportation network) and identifying growth-related transportation projects and costs, and preparing the fee schedule.

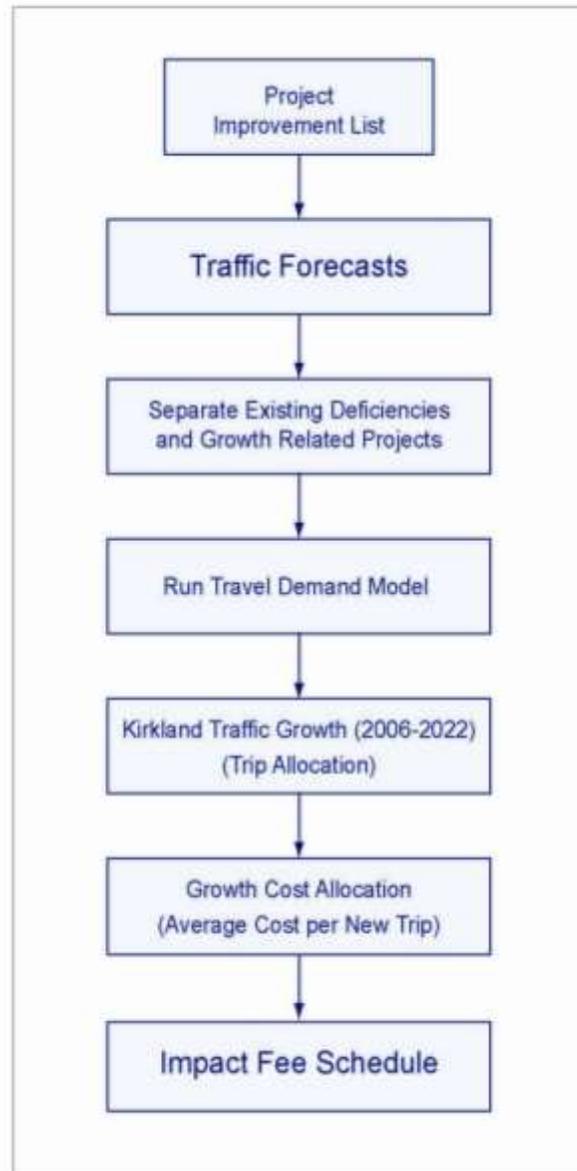


Figure 5- Impact Fee Methodology

Project List

To begin the process, the City compiled the existing impact fee project list and selected other eligible projects from the Capital Improvement Plan (CIP) and the proposed Transportation Master Plan (TMP). As described earlier in this memo, the City is developing a multimodal project list that goes beyond the traditional roadway and intersection capacity projects. Notably, it is the intent to include a portion of the Cross Kirkland Corridor (CKC) costs, since the CKC will provide a vital north-south transportation link within the city. To facilitate this, we are focusing on person movement rather than traffic volumes as the base for both the impact fee and concurrency programs.

Allocating the Costs to Impact Fees

A key step in the process involves allocating the project costs to impact fees. As shown in Figure 6, we first remove the 'non capacity' portion of the costs relating to safety or operations and maintenance. The 'capacity projects' are analyzed to determine whether there are existing deficiencies that do not meet the city's level of service standards. The costs to fix existing deficiencies cannot be charged to new development. The remaining 'growth' portions of the projects are then analyzed to determine who uses the facilities. Trips that pass through Kirkland, but do not have any origins or destinations internal to Kirkland, are not allocated to Kirkland growth. That is, development in Kirkland would not be charged for impacts by growth in trips passing "through" the City. The remaining growth trips that are generated within Kirkland are subject to the impact fee.

Travel Growth

The analysis considers the growth forecasts for the city over the next 20 years. The new growth forecasts are higher than they were back in the 1990's and early 2000's when the current impact fee program was developed. If the growth materializes, there is a larger base to spread the impact fee costs. We are working to refine a reasonable expectation for growth that would occur over the 20 year period.

Impact Fee Rate

The impact fee eligible costs are divided by the travel growth to produce a "cost per trip". In the final step the "cost per trip" is converted into an impact fee schedule that showed fees as dollars per unit of development for different land use categories.

Figure 6- Impact Fee Cost Allocation Concept



Change of Use

The city code (27.04.035) has a temporary suspension of transportation impact fees relating to change in use. This provision expires on December 31, 2014 but staff is proposing to extend the suspension through December 31, 2015 until the new impact fee analysis is completed. The affected changes in use are those that would result in higher trip generation than the previous land use on the property, and where the building structure is not increased, replaced, or substantially redeveloped.

This change of use provision primarily affects retail development where one use (e.g. a florist) is replaced by another use (e.g. a restaurant). These changes occur frequently within shopping districts such as downtown.

In the future, the city may want to consider developing a new impact fee land use category called "activity center retail." Uses within this category would function similar to a shopping center, which by its nature has a mixture of land uses that change over time. Using this designation in certain parts of the city would remove the need to calculate a change of use impact fee when building tenants change. Change of use impact fees would still apply when a building is replaced, enlarged, or substantially redeveloped.

Until a new impact fee system is implemented, and decisions about how change in uses should be handled, the current suspension could be continued. This extension will be on the agenda for the City Council's October 21st Council meeting.

Mixed Use/Transit Impact Fee Adjustments

Another possible change in impact fees would be to designate certain activity centers within the city as mixed use/transit areas (e.g. downtown Kirkland). These areas have vehicle trip generation rates that are lower due to the presence of mixed land uses and better transit service. The impact fee program would remain a citywide program, but the trip generation rates for certain land uses would be reduced within the impact fee schedule. Research shows that impact fee rates would likely be reduced by 15-30% depending on the use and location.

Impact Fee Questions

As the impact fee program is being updated, there are several questions that Council may wish to consider:

- It does not currently appear likely, but given it could be supported technically, would an increase to the current impact fee rates be reasonable to consider?
- What reaction does Council have to the concept of an 'activity center retail' land use category?
- Should selected zones of the city be designated as 'mixed use/transit' areas with lower impact fee rates based on lower trip generation?

Next Steps

Based on comments from the City Council, staff and the consultant will finalize the Goals and Policies and take the project list to the next level of refinement. Selected upcoming meetings are listed below:

November 12: Community event. Staff will display the Goals and Policies along with a draft 20 year project list -reflecting Council comments from the October 21st meeting.

November 18: There is an item scheduled on the Council's regular meeting agenda to discuss Concurrency and Level of Service as they relate to the Master Plan.

January 20, 2015: Study session on draft plan.

March 2015: Present the Master Plan to Council for adoption. The Transportation Element of the Comprehensive Plan will be adopted with the Comprehensive Plan.

The Transportation Commission will continue to provide direction for Plan development on behalf of the Council. Staff will also work closely with the Planning Commission as part of the Comprehensive Plan update. A briefing for the Houghton Community Council is scheduled for October 27.

PRELIMINARY DRAFT TRANSPORTATION MASTER PLAN

Goals and Policies version 2.0

City Council Study Session October 21, 2014 meeting

October 9, 2014

Inside of front cover

1. Introduction

Purpose

This Plan has two functions. One is to serve as the Transportation Element of the Comprehensive Plan. This means that it contains certain elements that are required¹ to be in the City's Comprehensive Plan and is presented in a Goals and Policies format.

The other purpose is to expand upon the Comprehensive Plan and give more detail, context and background to the goals and policies. For example, Actions are associated with some of the policies and additional background is provided for some topics.

How the Plan is reviewed and what it must do.

The **Puget Sound Regional Council (PSRC)** is our Region's **Metropolitan Planning Organization (MPO)** and therefore has oversight responsibilities for ensuring the Transportation Element of the Comprehensive Plan meets certain requirements. *(DESCRIBE THESE ELEMENTS)*

Describe Physical layout (working on this)

Relation to other elements of the Comprehensive Plan

In keeping with the rest of the Comprehensive Plan, this a 20 year document with a target year of 2035. To ensure consistency across the plan, the assumptions in other elements of the Comprehensive Plan have been used in the **Transportation Master Plan (TMP)**. For example, the land use forecasts from the Land Use element were used to predict traffic volumes.

Relationship between the Transportation Master Plan and the Capital Improvement Program

Linkage to priorities and projects. The Transportation Master Plan contains a set of projects that will improve the transportation network across several modes. Programming of these projects for funding in future years is accomplished through the [Capital Improvement Program](#). It also includes priorities that are to be used in deciding the order in which projects are funded.

Multimodal

A main principle of the Master Plan is the need for the transportation system to be multimodal (meaning it supports multiple *modes* of transportation; walking, biking, transit, auto) in nature. Through much of the document, material is organized by four modes, walking, bicycling, transit and auto travel.

Concurrency

A new concurrency method for Kirkland is described in this plan. The concurrency method is multimodal and measures completion of the transportation network against the realization of new trips (from land use development) to determine if the proper balance exists.

Level of Service

Fundamentally, **Level of Service (LOS)** for various modes is determined by the extent to which the network for that mode is completed. This stems from the assumption that the 20 year Transportation Network is adequate to support the 20 year land use plan at an acceptable level of service.

¹ Reference RCW

Transportation Master Plan draft version 2.0 City Council meeting October 21, 2014.

Public involvement

The Transportation Master Plan has been developed with considerable comment from the public in a variety of settings including workshops and presentations. The Transportation Commission has been instrumental in steering the course of the Plan's development.

2. Existing Conditions

(Working on this section)

3. The Transportation Concept

In 2010, the Transportation Commission proposed, and City Council endorsed four principles for transportation in Kirkland in a document titled Transportation Conversation:

Move People	Support a transportation system and related government and private actions that promote all viable forms of transportation.
Link to Land Use	Ensure consistency between land use and transportation planning and implementation.
Be Sustainable	Support a transportation system that can be sustained over the next 50 years.
Be an Active Partner	Actively build and maintain partnerships locally, regionally and nationally, to further our transportation goals.

These themes serve as the foundation of the Transportation Concept for the City of Kirkland.

Livable, vibrant cities like Kirkland offer safe, accessible, well maintained and fully connected alternatives for getting people where they need to go. Because of their safety and approachability, interconnected walking and biking networks offer everyone options for all kinds of trips. Transit is viewed as a good choice; by focusing frequent service on main streets it is efficient, easy to understand and connects popular destinations. Auto congestion is heavy during some of the day; it has been recognized that it is not desirable or financially feasible to build auto capacity sufficient to remove all congestion, nor is this in keeping with the City's land use plan. Efficient deliveries are prioritized to support economic development.

Land use and transportation visions are inextricably linked. This plan tailors a transportation network to a land use vision and the companion land use plan is based on realistic transportation expectations. Economic development is nurtured through a careful Land Use-Transportation balance. Level of Service is established based on the combination of the 20 year Land Use and Transportation networks rather than aspiring to a certain standard of performance.

Sustainability is a multi-dimensional concept. It refers to transportation practices that value the health of the environment, particularly those that affect air quality, water quality and climate change. It also encompasses fiscal prudence –spending within likely revenue, sound maintenance policies –emphasizing repair of what we have and equitable accessibility for all –considering and removing a range of barriers to the transportation system.

Transit providers and the Washington State Department of Transportation immediately come to mind as important partners in implementing Kirkland's Transportation Plan. In order for the Plan's goals to be fully recognized however, entities such as schools, neighboring cities, regional groups and the private sector must also be actively pursued as partners.

Measurement and reporting of progress toward accomplishing goals, policies and actions is critical to ensuring that the plan is well understood and effective. A revised concurrency system offers a simpler more multimodal approach to balancing land use changes and network development.

With the expressed purpose of moving people, goods, and services, the City's transportation decisions will generally reflect a hierarchy of modes:

1. Walking
2. Biking
3. Transit

4. Motor vehicles

This hierarchy is intended to help ensure that the needs of each group of users is considered in the City's planning process. This approach does not mean that users at the top of the hierarchy will always receive the most beneficial treatment on every street. It is not possible to provide ideal accommodations for every mode in every location. Nor does it mean that certain modes will necessarily receive greater funding. However, when lower hierarchy modes are prioritized above higher priority modes, the underlying reasons for this approach will be shared and the city will make special efforts to provide reasonable alternative accommodations such as parallel routes.

On Juanita Drive, Lake Street, Central Way and other locations, pedestrians use crosswalks that cause motor vehicles to stop and, in this sense, pedestrians have a higher priority than motor vehicles at these locations. There are not currently plans to install bicycle facilities on sections of NE 124th Street in Juanita/Totem Lake nor on NE 85th Street on Rose Hill. This exemplifies a case where motor vehicle traffic could be said to receive a higher priority than bicycles. Proposed bicycle greenways on streets parallel to NE 85th Street on Rose Hill can provide an alternative route.

A. GOALS (add page numbers to final version)

The goals that guide the Transportation Master Plan support the plan vision and are consistent with previous work done by the Transportation Commission. They are also consistent with County wide goals and policies. (NEED FOOTNOTES HERE)

Goal T-1 Walking - Form a safe network of sidewalks, trails and crosswalks where walking is comfortable and the first choice for many trips.

Goal T-2 Biking – Interconnect bicycle facilities that are safe, nearby, easy to use and popular for people of all ages and abilities.

Goal T-3 Public Transportation - Support and promote a transit system that is viable and realistic for many trips.

Goal T-4 Motor Vehicles - Efficiently and safely provide for vehicular circulation recognizing congestion is present during parts of most days.

Goal T-5 Link to Land Use - Create a transportation system that supports Kirkland’s land use plan.

Goal T-6 Be Sustainable – As the transportation system is planned, built and maintained, provide mobility for all using reasonably assured revenue sources while minimizing environmental impacts.

Goal T-7 Be an Active Partner - Coordinate with a broad range of groups to help meet Kirkland’s transportation goals.

Goal T-8 Transportation Measurement - Measure and report on progress toward achieving goals and actions.

4. WALKING

A. Background

Walking supports a livable community through increased interpersonal interaction, commerce, and health. Pedestrians, including those who use wheelchairs or other mobility aids, take first priority on Kirkland's transportation network because every traveler is a pedestrian at some stage of their trip, regardless of travel mode.

Walking has long been a cornerstone of the transportation system in Kirkland as evidenced by the creation of lakefront walkways, use of innovative crossing treatments and, most recently, through the purchase of the Cross Kirkland Corridor. Because of an emphasis on walking facilities around schools, improvements have been made at almost every school in Kirkland during the past few years.

Despite these efforts there is more to be done. I-405 is a barrier to pedestrians, too many busy streets do not have sidewalks, crosswalks need upgrades and there are still areas around schools, parks and commercial areas that need improvements. Better lighting, separation from traffic, wayfinding, and facilities to help those who rely on curb ramps and other aids are also areas where improvement is needed.

Focusing on what makes a great walking environment –accessibility, safety, comfort, clarity, completeness –and applying these throughout Kirkland is fundamental to this goal. Two places in particular, the shores of Lake Washington and the Cross Kirkland Corridor offer the opportunity to create places that are both transportation facilities and spaces offering truly remarkable experiences for walking.

Goal T-1. - Complete a safe network of sidewalks, trails and improved crossings where walking is comfortable and the first choice for many trips.

Policy T-1.1. Identify and remove barriers to walking

All the policies and actions associated with goal T-1 are associated in one way or another with removing barriers to walking. This policy serves not only as the basis for the removal of specific barriers but also the policy by which general actions are supported.

The **Active Transportation Plan** (ATP) is a means for coordinating pedestrian needs on a more detailed level than is done here and the ATP should be updated regularly.

Common physical barriers to walking include vegetation that extends into walkways from public and private property. Solid waste receptacles are a common source of obstructed walkways because often there is no place for their storage besides sidewalks. Because of our long fall and winter evenings, lighting is a necessary feature in the pedestrian network.

Making facilities accessible to all users is a large and important undertaking. The City of Kirkland carefully scrutinizes new construction and maintenance activities to make sure that those projects meet the most current standards for accessibility. There is a large fraction of existing facilities that need comprehensive review and possible mitigation. Those mitigations represent a sizable investment relative to the amount of funding that has traditionally been available for capital projects.

Projects that remove barriers to traditionally underserved populations such as low income and senior populations should be prioritized. Often these communities have relatively low auto-ownership rates and therefore draw substantial benefit from pedestrian improvements. Young people should be considered in the design of the pedestrian network for all types of trips; not just for the journey to school.

Because it bisects the City from north to south I-405 is an effective barrier to pedestrian travel. This barrier should be made more permeable wherever feasible. This could include new bridges and improved pedestrian facilities at interchanges.

Connections between cul-de-sacs and dead end streets that remove barriers to pedestrian travel should be planned and implemented. Connections to Lake Washington are of particular importance. Many of these connections are built with new development.

Action T-1.1.1 Update the ATP to cover all of Kirkland's neighborhoods and to further guide implementation of the policies in this plan.

Action T-1.1.2 Reduce sidewalk blockages by reviewing, revising and enacting regulations or other measures.

Action T-1.1.3 Finalize an **Americans with Disability Act** (ADA) Transition Plan for transportation facilities. Fund improvements that come from the plan in a manner that allows for completion of an accessible network in a timely manner.

Action T-1.1.4 Engage Washington State Department of Transportation in discussions in order to advance improvement of existing interchanges with the intention of securing funding to design and construct new interchanges at NE 124th Street, NE 85th Street and NE 70th Street. (See policy T-7.3).

Action: T-1.7.5 In order to provide the best possible designs, Review and revise pre-approved plans and other design guidelines that affect pedestrians. Adopt street design guidelines in keeping with guidance published by the **National Association of City Transportation Officials** (NACTO) and the **American Association of State Highway and Transportation Officials** (AASHTO).

Policy T-1.2. Improve the safety of walking in Kirkland.

Protecting pedestrians is one of the most important values held by Kirkland's residents but also by the current City Council, City Councils of the past and, very likely, City Councils of the future. Therefore this policy is foundational to the planning of transportation system.

Data necessary for an accurate and cost-effective safety evaluation is critical to improving safety and must be gathered over time. Rate-based measures like crashes-per-unit-of-pedestrian-volume are more helpful than simply the number of pedestrian crashes because they help prioritize where crash countermeasures are most needed.

Meaningful increases in pedestrian safety require a multi-disciplinary, multi-agency approach addressing more than the implementation of engineering solutions and simply keeping track of the number of crashes involving pedestrians. Washington State's Target Zero Campaign and other programs throughout the US are examples of this approach. Such efforts should be adopted fully by the City of Kirkland.

Action T-1.2.1 Develop a program to count pedestrian volume in a manner that is meaningful for measuring safety trends. Reporting from "smart" pedestrian pushbuttons can be one means of obtaining this information and such capabilities are part of Intelligent Transportation Systems.

Action T-1.2.2 Integrate efforts between the Public Works and Police Departments to ensure timely reporting and accurate cataloging of crash data.

Action T-1.2.3 Revise Kirkland's pedestrian safety program using Washington's Target Zero Initiative as a template.

Policy T-1.3. Make getting around Kirkland on foot intuitive.

A complete wayfinding system for pedestrians complements and makes the sidewalk and trail network more functional. Wayfinding systems that move beyond signing only, for example those that integrate web-based systems, should be explored. Up to date mapping that is convenient for those traveling by foot is also beneficial to activating neighborhoods where people can walk regularly for daily tasks. Making this information available in multiple formats and across multiple platforms will increase its usefulness.

Action T-1.3.1 Develop and implement a pedestrian-scaled wayfinding system available in multiple formats and across multiple platforms. This will involve identifying destinations, choosing routes, designing and installing infrastructure.

Action T-1.3.2 Regularly update Kirkland's walking map.

Policy T-1.4. Prioritize, design and construct pedestrian facilities in a manner that supports the pedestrian goal and other goals in the Plan

Safe and convenient walkways of the appropriate size are a foundation for pedestrian activity. Kirkland's existing codes call for sidewalks on both sides of almost all streets. Because of the cost to construct sidewalks wherever they are missing in Kirkland's system, it is important that clear priorities are used to assign funding to the most worthy projects first. Locations should be prioritized using the following factors:

- Improve safety— prioritize locations based on crash history and indicators of crash risk like adjacent street auto volume, speed and number of lanes.
- Link to Land Use— choose sidewalks that expand and enhance 10 minute neighborhoods and places where current pedestrian volumes are high.
- Connect to the Cross Kirkland Corridor—make numerous strong links to the CKC.
- Make Connections— give high priority to projects that fill gaps by connecting existing sidewalks.
- Connect to Transit—complete walkways that allow easy access to transit, particularly regional transit.
- Community input—because of the scale of pedestrian projects, gathering the on-the-ground knowledge of community input is particularly important in selecting pedestrian projects.
- Cost/likelihood to receive grant funding – projects that have lower cost or that are good candidates for grant funding should generally have a higher priority. However, caution must be exercised so that high cost, high value projects are also considered.

Design of sidewalks should include features that make them safe and comfortable. The need for planter strips and wider sidewalks increases where land use is more intense and where the number of auto lanes and speeds on adjacent streets are greater. On street parking can also serve as a buffer between pedestrians and moving vehicles.

Action T-1.4.1: Develop a sidewalk prioritization method for the Capital Improvement Program.

Action T-1.4.2: Review and revise design requirements for sidewalks.

Policy T-1.5. Develop world-class walking facilities along the Cross Kirkland Corridor with ample connections to the rest of Kirkland. Consider creating a plan for a Promenade along portions of the shore of Lake Washington.

Kirkland is fortunate to have two walking environments that distinguish it from many other cities. The first is the 5.75 mile long Cross Kirkland Corridor, part of the 42 mile Eastside Rail Corridor. The corridor Master Plan recognizes that the corridor is at once a place for both transportation and recreation, a place

to go through and a place of activity in its own right. Realizing the Master Plan vision will result in a corridor of the highest value to the pedestrian network.

The shore of Lake Washington south of downtown Kirkland is a popular spot for recreational walking, but like the CKC, it can be imagined as the site of a richer pedestrian experience; not only a place to walk through, but a lively gathering place that enhances the entire community. A planning study would be a logical first step in evaluating if and how the space along the lake could and should be used.

Action T-1.5.1: Construct the CKC according to the Master Plan vision

Action T-1.5.2: Consider developing a Master Plan for a lake front Promenade

Policy T-1.6 Make it safer and easier for children to walk to school and other destinations

Because of walking's many benefits, encouraging children to walk to school is a long standing priority of the Kirkland City Council and a Goal in the current Active Transportation Plan. As a result of this focus, the number of school walk routes with sidewalks has steadily increased. Completion of improved walkways on all school walk routes is an ultimate objective. Within the realm of school walk routes, prioritization should be done based on the items in Policy T-1.4.

The City maintains an adopted set of elementary school walk routes in Kirkland. In order to get substantial numbers of children to walk to school however, more than walk routes with sidewalks are needed. A multi-dimensional approach that identifies and systematically removes barriers to children walking is necessary. This may include programs within schools that promote walking along with programs like walking school buses that address the safety concerns of parents. The city should encourage, coordinate and be a resource for such programs but should not necessarily be responsible for their implementation.

In addition to travel to and from School, youth should be encouraged to walk to other activities; for example to a friend's house or to run errands. The same principles that support walking to school should be used to encourage walking for these other purposes.

Action T-1.6.1: Plan and prioritize school walk route projects

Action T-1.6.2: Increase the number of children who walk to school by helping school communities develop and implement programs.

Action T-1.6.3: Help youth to be able to walk to activities by connecting places such as parks and practice fields with safe walkways.

Policy T-1.7 Improve street crossings

Street crossings are critical to the success of a pedestrian network. Kirkland has a history of innovation in treatments at uncontrolled (places where vehicles are not required to stop) crossing locations and this should continue. Rapid flashing beacons or other state of the art devices should be used to enhance pedestrian visibility.

The pedestrian flag program should be continued at crosswalks where volunteers are available to help stock and maintain the flags. Program improvements that increase flag usage should be sought.

Prioritization for street crossing improvements should be similar to those used for sidewalk projects:

- Improve safety—consider crash history and indicators of crash risk such as lack of lighting.
- Link to Land Use—prioritize crossings on routes with sidewalks that expand and enhance 10 minute neighborhoods or that otherwise help achieve Kirkland’s land use goals. Improvements in the Totem Lake Urban Center should be given priority.
- Connect to the Cross Kirkland Corridor—improve crossings on routes that lead to or are near the CKC.
- Connect to Transit—give priority to crosswalks that allow easy access to transit, particularly regional transit, including near stops or at locations where multiple routes converge.
- Community input—continue to involve the community in deciding where crosswalks are located and improved.
- Cost/likeliness to receive grant funding – prioritize projects that have lower cost or that are good candidates for grant funding, but apply caution so that high cost, high value projects are also included.

Medians have been proven to have high value in improving pedestrian safety, and should be given special consideration at multi-lane locations where vehicle volumes are high. Adequate lighting and accessibility are other features that are a basic requirement at any crossing location.

The bulk of pedestrian crashes occur at intersections and turning vehicles are often involved. Features that reduce pedestrian exposure to risks at signalized intersections should be incorporated into the design of all intersections.

Traffic signal operation should regularly implement features that make crossing easier and safer for pedestrians.

Action T-1.7.1: Continue to support the Pedestrian Flag program; measure and improve its performance.

Action: T-1.7.2 Develop a prioritization method for crosswalk improvements

Action: T-1.7.3 Adopt traffic signal operational procedures that include practices such as advance pedestrian phases, generous walk intervals and protected left turn phasing.

5. BICYCLING

Goal T-2 Interconnect bicycle facilities that are safe, nearby, easy to use and popular with people of all ages and abilities.

A. Background

Like walking, bicycling is a clean, healthy and efficient way to make many trips in a livable city. Today, many Kirkland residents would like to make more trips by bicycle; one reason they do not is because they find the current network of on-street bicycle lanes does not meet their needs for safety and convenience. In order to unlock the potential of bicycling, the existing network of on-street bicycle lanes should be improved and supplemented by facilities that people of all ages and abilities find safe and welcoming. A large toolbox of options such as buffering and or widening bike lanes, creating physical separation from traffic with parking or other means, building Greenways and off-street trails should be developed to improve bicycle facilities.

Cities around the globe, including Portland OR and Vancouver BC have documented the relationship between more facilities and safety. When top notch facilities are available, bicycle ridership increases and safety (for all modes) improves. This leads to more cycling, support for more facilities and further safety improvements. Kirkland's terrain means that special treatments should be considered at stairways and steep grades.

For bicycling to be a viable for people of all ages and abilities making a wide variety of trips, bicycle parking must be widespread and plentiful, not just at commercial locations but at parks and transit facilities. Signing and marking for the bicycle network should be applied generously but in a way that fits with the surrounding neighborhood. Routes need to be supported by carefully chosen wayfinding that is integrated with that of neighboring cities.

B. Draft Policies

Policy T-2.1 Make bicycling safer

As with pedestrian safety, the vulnerability of cyclists to motor vehicles dictates that increases in bicycle safety be relentlessly pursued.

Bicycle use should be measured to understand trends in usage, where new facilities are needed and the impact of improved facilities on ridership. Volume data is also used to analyze crash rates.

The same principles that apply to safety for other modes apply to bicycling. Increases in safety will require a multi-disciplinary, multi-agency approach addressing more than the implementation of engineering solutions and more than simply keeping track of the number of bicycle crashes. Washington State's Target Zero Campaign is an example of this approach. Such efforts should be expanded at the City of Kirkland.

Action T-2.1.1 Develop a program to gather bicycle volume at key points in the City in a manner that is meaningful for measuring safety and ridership trends. Reporting from bicycle detectors can be one means of obtaining this information. Such capabilities are part of Intelligent Transportation Systems. Data should be collected in a way that allows comparison with data from other cities in our region.

Action T-2.1.2 Integrate efforts between the Public Works and Police Departments to ensure timely reporting and accurate cataloging of crash data.

Action T-2.1.3 Use Washington's Target Zero Initiative or other appropriate examples as a template for revising and implementing Kirkland's bicycle safety program.

Policy T-2.2 Create new and improve existing on-street bike facilities.

A system of on-street bicycle lanes currently forms the basis of Kirkland's bicycle network and will continue to do so in the future. Most of these bicycle lanes are of minimum width. Research has shown that improving on-street bicycle lanes by widening, separating and/or buffering from auto traffic makes bicycling more attractive. Map x shows a proposed network of bicycle facilities.

Many of Kirkland's existing bicycle facilities can be made wider through changing pavement markings, and, similarly, new bicycle lanes can sometimes be created relatively inexpensively by narrowing auto lanes.

High quality, separated on-street facilities (often known as cycle tracks) should be part of Kirkland's bicycling network. Sometimes these facilities may include traffic signal modifications for bicycles. Higher levels of signing and marking could significantly improve the on-street bicycling experience and therefore the viability of bicycling. Improvements at intersections, including better signal detection where bicycle facilities are currently dropped would have similar effects. Methods for making these improvements and others should be detailed in a revised Active Transportation Plan.

Guidelines that illustrate enhanced bicycle facility design are becoming widely available and should be adopted by Kirkland. These facilities should be the focus for improvement projects.

Improvements to bicycle facilities should be prioritized based on their ability to:

- Improve safety - consider safety history and the potential to reduce conflicts.
- Link to Land Use - make connections to local and regional destinations and trails with particular emphasis on the CKC and the Totem Lake Urban Center.
- Fill gaps in the network and evenly fill in the network – prioritize projects that add geographic balance to the network or fill gaps between completed portions of the network. Consider routes on both sides of I-405 for example.
- Connect to Transit - give higher priority to bicycle connections to locations on the regional transit network.
- Community support - build first projects that have broad community support.
- Cost/likeliness to receive grant funding – prioritize projects that have lower cost or that are good candidates for grant funding, but apply caution so that high cost, high value projects are also included.

Action T-2.2.1: Recognize the National Association of City Transportation Officials and the American Association of State Highway and Transportation Officials bicycle design guidelines and adopt them into pre-approved plans used by the City of Kirkland.

Action T-2.2.2: Provide further guide implementation of the policies in this plan and development of a toolbox of options for improving the bicycle network by updating the Active Transportation Plan.

Action T-2.2.3: Study and implement improvements to the system of on-street bicycle lanes.

Action T-2.2.4: Develop a prioritization system for on-street bicycle improvements.

Policy T-2.3 Build a network of greenways

Greenways are bicycle facilities on streets with lower auto volumes. Greenways have special signing and marking and may have traffic calming features. Traditionally they are on streets that are parallel to major streets to provide quick access to destinations located on such streets. Greenways can also include trails and paths that are off the street networks. Examples of this could include trails between cul-de-sacs or through parks. Other trail connections that are not necessarily part of greenways should also be completed with special emphasis on connections to Lake Washington and the Cross Kirkland Corridor. Where Greenways cross arterial streets special treatments are usually needed. Ideally, Greenways form a network that supports bike travel but together with the on-street network make an even more comprehensive network.

Priorities for Greenway construction should reflect those in Policy T-2.2

Map X shows a network of bicycle facilities including greenways.

Action T-2.3.1: Develop standards for Greenways in Kirkland

Action T-2.3.2: Prioritize and construct greenway projects.

Policy T-2.4 Implement elements and programs that make cycling easier

Secure convenient parking is an important part of most bicycle trips. Policies that affect bicycle parking must accommodate increased bicycle usage and optimize the location of bicycle parking. The City should actively partner with the private sector to facilitate bicycle parking on both public and private property.

Pronto! bike share has launched in Seattle and the City should actively pursue bringing Pronto! to Kirkland. Kirkland should implement policies that remove barriers to bike sharing including facilitating the location of bike share stations throughout the City. Pronto! should complement transit, with stations at transit centers and hubs.

Because of Kirkland's terrain, innovative devices that make climbing hills and using stairs with bikes easier should be pursued. Bike Stations where a range of support items for cyclists are available such as day use lockers, repairs, sales of bike parts, etc. should also be considered.

High-use cycling routes should be given high priority for bicycle friendly signal timing, street sweeping, paving repair and other maintenance activities.

Action T-2.4.1: Establish and regularly review, with input from stakeholders, codes, policies and standards governing the requirements of bicycle parking.

Action T-2.4.2: Create a strategy to increase the supply of public bicycle parking in Kirkland. Adopt clear guidelines that encourage business and property owners to provide bicycle parking on private property.

Action T-2.4.3: Work with Pronto! to create regulations that facilitate bike share such as making stations easy to site/support start up with funding.

Action T-2.4.4: Adopt maintenance policies that emphasize high-use cycling routes.

Policy T-2.5 Make it easy to navigate the bicycle network

A system of bicycle wayfinding that is tied into the systems of surrounding cities that identifies direction and distance to important destinations and routes makes bicycling easier. Advanced wayfinding techniques that incorporate more than signs should also be considered. Maps that provide value to cyclists should be developed. Because of the distance cyclists cover, this may mean providing others with accurate information about the Kirkland system in order to have a regional map that covers Kirkland effectively. Bicycle wayfinding should be coordinated with pedestrian wayfinding and mapping efforts.

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Action T-2.5.1: Work with surrounding jurisdictions to establish a set of destinations and routes for wayfinding. These may include techniques that allow information to be obtained across a wide range of platforms.

Action T-2.5.2: Site and install wayfinding signs and/or other systems.

Action T-2.5.3: Develop mapping as appropriate

Policy T-2.6 Make the Cross Kirkland Corridor an integral part of the bicycle network and connect it to the region.

The Cross Kirkland Corridor is uniquely situated to serve many bicycle trips in Kirkland. The CKC Master plan describes how the corridor itself should be developed to suit this purpose. Links to the CKC have to be constructed and well signed to make the corridor fully connected and integrated to the bicycle network.

Action T-2.6.1: Construct the CKC with the Master Plan vision

Action T-2.6.2: Develop bicycle connections to the CKC

6. PUBLIC TRANSPORTATION

Goal T-3 Support and promote a transit system that is recognized as a high value option for many trips.

A. Background

Historically, transit in Kirkland focused on connections oriented to Seattle in the morning and from Seattle in the afternoon. Bus frequencies were sometimes as low as one hour especially in off-peak periods. Today, Kirkland is served by a number of routes connecting to a variety of Eastside destinations as well as Seattle. Frequency on some routes is 15 minutes, with most service at 30 minute intervals over most of the system. Additionally, instead of being solely a source for trips to employment centers, Kirkland is becoming an employment center that will attract transit trips from residential centers.

Transit with the right characteristics can make an important contribution to Kirkland's transportation system. At its best, transit is

Fast – making long trips competitive and cost effective with driving

Frequent – frequencies of 15 minutes or less with service hours extending from early morning to late night

Reliable – trip times are consistent from day-to-day and riders trust they'll arrive on time

Accessible – facilities and vehicles are designed for all users

Comfortable – all elements of the system are sized to meet demand and offer amenities that make trips pleasant

Complete – popular destinations are served and transfers between routes are easy and clear

Transit providers will continue to be faced with limited resources for maintaining existing service hours limiting their ability to add new service. This, combined with the characteristics above, suggest that Kirkland's transit needs will best be served by a focused network of higher frequency service near major concentrations of residential and commercial land uses.

This plan challenges the idea that because Kirkland does not provide transit service, it has little effect on the quality of that service. Because transit more than any other mode is dependent on land use for success, Kirkland's land use choices will have an important influence on where transit service is deployed. Additionally, Kirkland can make improvements to waiting areas, including improved lighting, more shelters and clearer wayfinding. Parking policy –such as pay parking- that is favorable to transit and projects that increase transit speed and frequency are other ways that Kirkland can support good transit.

In the next 20 years, Sound Transit will have a greater service presence in Kirkland. This is likely to come in the form of bus rapid transit on I-405 and/or Link light rail, both of which will connect to the Totem Lake Urban Center. Additionally, transit has been assumed as an element throughout the planning of the Cross Kirkland Corridor and Sound Transit holds a transit easement on the Corridor. Regardless of where Sound Transit provides service, walking, biking and local transit connections to the regional transit system are paramount for its success.

The successful aspects of the development of the South Kirkland Park and Ride into a Transit Oriented Development should be explored at the Kingsgate and Houghton Park and Rides. The transit system should be operated so that excess parking does not impact neighborhoods.

Other modes of public transportation such as taxis and ridesharing can help fill gaps in transit service that are created when residents have mobility needs that traditional public transit cannot serve. Also, Kirkland

should consider other forms of service provision such as partnering with the private sector, human service agencies and aggressive adoption of new technology that make sharing rides easier.

B. Draft Policies

Policy T-3.1 Plan and construct an environment supportive of frequent and reliable transit service in Kirkland.

A Kirkland Transit Plan that coordinates and describes in detail actions needed to meet the policies in this goal should be created and maintained.

Transit operates primarily on facilities owned and operated by the City of Kirkland. Kirkland should make improvements that increase the speed and reliability of transit in order to attract service that is more useful. These improvements could include Intelligent Transportation System elements like signal priority or more significant projects like separate lanes for transit. In return for these improvements, transit providers should agree to maintain high quality transit service.

Improvements should be prioritized by their ability to decrease rider hours spent delayed in traffic, and effects on other street traffic.

In areas that do not lend themselves to productive service by standard transit modes, innovative solutions should be examined with the intent of providing coverage at a reasonable cost. This could include direct investment by the City in transit service.

Transit riders are likely to continue to drive as a part of their trips. This puts pressure on the parking supply whether at Park and Rides or at on-street locations. Transit riders should not be prohibited from using on-street parking, but there may be cases where impacts of excess parking need to be managed.

Action T-3.1.1: Create Transit Plan for Kirkland that details how to achieve the policies of this goal.

Policy T-3.2 Support safe and comfortable passenger facilities.

Passenger facilities must be clean, well lit and give a feeling of comfort. The location of stops should be coordinated with adjacent land use. Bus arrival information and the ability to obtain fare payment cards are examples of features that should be available. Improvements should be prioritized first to higher ridership stops served by higher frequency, longer span service.

Action T-3.2.1: Develop standards for improvements at transit stops

Action T-3.2.2: Develop a prioritization system for improvements at transit stops

Action T-3.2.3: Working with transit providers, fund and construct improvements at transit stops

Action T-3.2.4: Manage the effects of parking from transit users in an appropriate manner.

Policy T-3.3 Integrate transit facilities with pedestrian and bicycle networks.

Ideally people can walk or bike to transit facilities. Making this possible requires the construction of pedestrian (walkways and crosswalks) and bicycle facilities so that people can walk and bike to transit, particularly when transit is on arterial streets. Work with transit providers to locate bus stops at areas that facilitate walking and biking to transit.

Action T-3.3.1: Coordinate prioritization and construction of pedestrian and bicycle facilities with transit.

Policy T-3.4. Support Transportation Demand Management in Kirkland particularly at the work sites of large employers and other locations where

(This Section still being developed)

Kirkland has a number of employers that fall under the requirements of Washington's Commute Reduction (CTR) Law and has established goals for several measures such as vehicle miles of travel and drive alone trips for these employers. While recognizing that the performance of a particular worksite is influenced primarily by the resources provided by the employer, Kirkland should encourage these employers to provide a complete range of services and monitor results. Given the relatively small numbers of vanpools serving Kirkland employers, an opportunity exists to increase their number.

The City Council has designated the Totem Lake Urban Center as a Growth, Technology and Efficiency Center (GTEC) as described in Washington State Law. The Totem Lake GTEC has additional goals for performance, namely a goal for residential travel and additional reduction of non-CTR affected sites.

Transportation Management Plan sites serve employers that are not CTR mandated, but have agreed to meet many of the same requirements as CTR sites. These sites also need monitoring and support if they are to meet performance goals for trip reduction.

<TABLE WITH GOALS>

There is room for innovation in order to significantly improve ridesharing, and innovations should be made; whether it be new ways of helping people find ridesharing partners, or allowing new kinds of taxi-like services.

Kirkland may be able to more easily meet its transit goals if its control over transit funding was broadened. This idea is explored further in Goal T-8 Be an Active Partner. Because the cost of fuel and drivers make up a high fixed cost of the transit system, automated vehicles and alternative fuels may be helpful in making transit service more affordable and therefore should be pursued.

Programs that support ridesharing should be results focused and cost effective. Grant funding should be pursued for the bulk of program costs and partnering with transit and other agencies should be promoted.

Action T-3.4.1: Create targeted programs that monitor and encourage increases in non-SOV travel rates.

Action T-3.4.2: Review codes and policies to ensure they support innovative ridesharing

Policy T-3.5 Implement transit on the Cross Kirkland Corridor

The vision for the Cross Kirkland Corridor includes quiet, low or no emission transit. This could be regional level light rail or more local service that connects to regional service, for example to East link near Overlake Hospital. New types of transit should be considered where they offer advantages to more standard modes. Appropriate transit on the CKC may well be something for which the City must lead the way as opposed to waiting for traditional transit providers to act. Heavy rail is not a mode that meets Kirkland's interests for transit on the CKC.

Action T-3.5.1: Implement transit on the CKC in keeping with the CKC Master Plan.

Policy T-3.6 Work with Sound Transit to incorporate investments in Kirkland. (See coordination policy T-7.1)

Policy T-3.7 Partner with transit providers to coordinate land use and transit service (see Partner policy T-7.2)

7. MOTOR VEHICLES

Goal T-4 Provide for efficient and safe vehicular circulation recognizing congestion is present during parts of most days.

A. Background

Many Kirkland residents travel by private automobile for a high proportion of their trips. In the peak period there is considerable congestion at many intersections. Both of these phenomena are expected to continue over the next 20 years. At the same time, trends such as decreased motor vehicle ownership, decreased vehicle miles of travel and the increased age at which young people obtain their driver's licenses mark fundamental change from the past 50 years.

Over 20 years ago Kirkland recognized that wide ranging automobile capacity improvements in an attempt to entirely eliminate congestion are neither in keeping with Kirkland's desired urban form nor are they financially sustainable. Because the sole measure of level of service was performance of motor vehicles at signalized intersections, fulfillment of the land use vision may have suffered in favor of providing capacity for motor vehicles.

This plan seeks to maximize the operational efficiency and safety of the existing road network rather than look primarily to expansion. **Intelligent Transportation Systems** (ITS) will play a role in this, but so will the aggressive promotion of technologies. Autonomous vehicles, or vehicles that can change speeds in relationship to the vehicles around them in order to maximize safety and flow are examples of this.

Businesses continue to rely on motor vehicles for deliveries and other needs critical to their operations and these needs must be served. (EXPANDED DISCUSSION OF FREIGHT TO COME)

Totem Lake was developed around the assumption that people are traveling mainly by automobile. The Land Use vision for future Totem Lake is completely different. In order to support this new vision and associated economic development, a finer grid of smaller scale streets and new connections will be needed. Completion of this grid may require dedication of property from those who develop it.

Parking policy is an important factor in determining how vehicles will be used in Kirkland. Totem Lake and Downtown are areas where active refinement of parking policy will continue to be needed. Over the long term, changes in how people use cars such as car sharing, autonomous vehicles and innovative taxi-style services will change the way parking is used and the amount of parking that is needed. More uniform implementation of a broad set of Transportation Demand Management strategies can be used to increase walking, transit and bicycling.

I-405 and SR 520 are important travel arteries for Kirkland which are under the jurisdiction of the Washington State Department of Transportation. New and revised interchanges will be needed to better fit Kirkland's Transportation and Land Use goals. Operating policies such as tolling and HOT lanes have promising benefits but also have potential downsides for Kirkland that require careful monitoring.

Motor vehicles can have negative impacts on neighborhood streets, where higher speeds and volumes need mitigation to improve livability.

B. Draft Policies

Policy T-4.1 Make strategic investments in intersections and street capacity to support existing and proposed land use.

The vision for the Comprehensive Plan supports walkable, livable communities and this transportation plan makes a change from previous plans by placing less emphasis on intersection performance for cars as the main measure of effectiveness for the transportation system. Therefore, there is less emphasis on widening intersections where such projects do not support the surrounding land use vision.

In Totem Lake for example, new streets can help with economic development and general circulation. They should be developed in keeping with neighborhood plans but coordinated with the interests of private development. Other areas, like NE 132nd Street, may have substantial reductions in congestion from modest intersection improvements that are in keeping with the surrounding land use.

Priorities for street improvements should include:

- Increasing safety
- Minimization of person delay and queuing for motor vehicles
- Linking to land use; focus improvements in Totem Lake Urban Center.
- Supporting economic development
- Improving bicycle and pedestrian connections
- Funding/Cost effectiveness
- Community support

Street design should be guided by modern, urban focused design guidelines such as those published by the National Association of Transportation Officials Urban Street Design Guidelines. (See Pad Policy T-1.1)

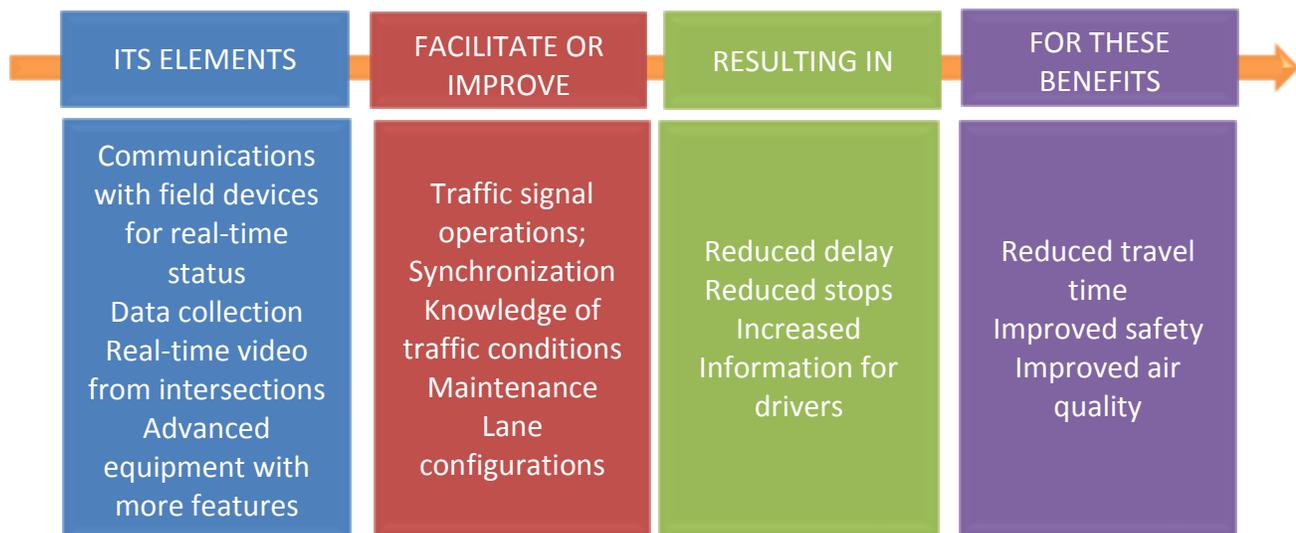
Action T-4.1.1: Review design standards and adopt guidelines that are in keeping with policies in this plan and that consider the best design practices in the industry.

Action T-4.1.2: Using the priorities in this plan, prioritize and construct intersection and roadway projects.

Action T-4.1.3: Review and update as necessary, street network concepts for Totem Lake that focus on efficiency as well as expansion.

Policy T-4.2 Use Intelligent Transportation Systems (ITS) to support optimization of roadway network operations.

Because there is less emphasis on capacity projects, there is more need for elements like **Intelligent Transportation Systems** (ITS) to get the most from existing capacity. ITS exists to make other tasks easier so that the benefits of those tasks can be realized. The City has made sizable investments in ITS, including installation of a Transportation Management Center. These investments are still being brought on line and their potential has not been fully realized. Once the existing projects have been completed, the current ITS Plan should be revised and updated regularly, beginning with the base of finished projects and emphasizing steps needed to make the system more productive.



Parking management is another area in which ITS projects can be deployed. Connections to devices that take payments and to signs that show the number of available stalls are two examples of this.

ITS projects should be prioritized on their ability to provide the benefits in the chart above and improve:

- Transit speed and reliability
- Parking management
- Funding opportunities/cost effectiveness.

Changes in technology will result in major changes to the types of ITS projects that are available and the way they are delivered over the next 20 years. Kirkland's ITS system will have to be continually improved to keep up with such changes.

Action T-4.2.1: Complete construction of and make operational ITS phases that have already been funded for construction.

Action T-4.2.2: Update the City's ITS Plan on a regular basis

Action T-4.2.3: Prioritize and Construct ITS projects

Policy T-4.3 Position Kirkland to respond to technological innovations, such as electric vehicles and driverless cars.

It is difficult to predict how changes over the next 20 years will affect the way we currently drive. Over the next few years vehicles with features that can communicate with other cars, the roadway, and avoid hazards are likely to become more common. Kirkland should stay aware of these trends and look for ways to be a leader in innovative transportation. This is could include partnering with other groups to test and deploy pilot projects.

Action T-4.3.1: Work with regional groups such as PSRC to identify trends in vehicle innovation and seek opportunities to implement them in Kirkland. (See Partnership Policy T-7.4)

Policy T-4.4 Take an active approach to managing on-street and off-street parking.

Parking policy can have substantial effects on Urban Form. Ideally, parking occupancies are around 85 percent; at this level, parking spaces are available, but there is not a large vacancy indicating oversupply. Supply and pricing should be managed so that parking occupancies are around 85 percent most of the time.

Kirkland's business areas, Downtown, Totem Lake, Neighborhood business districts have different needs for parking and should be treated individually.

Large amounts of new parking supply are often expensive and difficult to site. Therefore, efforts should focus on increasing supply strategically in smaller amounts. Where occupancies are high, pay parking has the potential to decrease demand for the best stalls and generate revenue for other improvements, but it is implementable only when supported by the community. Effective signing and information about available stalls are other ways to get the most from existing supply. How employee parking is provided also has implications that affect Kirkland's downtown parking supply. Parking spill over from commercial areas can have impacts on residential neighborhoods and those impacts should be monitored and appropriately mitigated.

Over the long term, increasing use of walking, biking and transit along with changes in land use will make differences in the amount of parking that is needed. Similarly, car sharing and other changes in car ownership may change the way parking is used; for example places for cars to wait for shorter times may be an increasing need.

Action T-4.4.1: Review and update parking codes to ensure they require appropriate amounts of supply.

Action T-4.4.2: Develop strategies for parking issues and regularly monitor parking occupancy and other factors by periodically undertaking parking studies.

Action T-4.4.3: Prioritize and construct/implement projects and policies that improve the parking experience in Kirkland.

Policy T-4.5 Work with the Washington State Department of Transportation and the State Legislature to improve the way I-405 and SR 520 meet Kirkland's transportation interests. (see Partnership Policy T-7.3)

Policy T-4.6 Reduce crash rates for motor vehicles.

Crash severity, rates and frequency are starting places for prioritizing safety projects. As described in other safety related policies, taking a comprehensive look that involves all aspects of the system is the best approach for reducing crashes.

Like other modes, a sizable fraction of auto crashes occur at signalized intersections and involve turning vehicles so these areas should be a focus of safety efforts.

Factors used to prioritize safety projects should include a given project's ability to:

- Reduce crash severity,

- Reduce the number and rate of crashes
- Address locations with highest risk.

Action T-4.6.1: As described in other policies, monitor and evaluate crash data in a comprehensive way. Use Washington's Target Zero Initiative as a template for revising and implementing Kirkland's auto safety program.

Action T-4.6.2: Prioritize and construct projects that improve safety.

Policy T-4.7 Mitigate negative impacts of motor vehicles on neighborhood streets

The livability of neighborhoods is improved when vehicle traffic does not dominate the streetscape. There is a tension between limiting volume on neighborhood streets and creating a network over which traffic is diffused

While the volume on neighborhood streets is relatively low, neighborhood streets make up the vast majority of the City's street network so they require special attention. Excessive speed and volume are the most commonly cited negative effects of motor vehicles on neighborhood streets and should be the focus of the city's neighborhood traffic control program. Traditionally, these effects have been treated with speed humps and traffic circles on a neighborhood-wide basis as opposed to viewing individual streets in isolation. Although the tools may continue to evolve, the practice of looking at projects across neighborhoods should continue.

In 2012, Kirkland voters approved a dedicated source of funding for neighborhood safety projects and this source should be used as appropriate to help fund projects that increase safety.

Many concerns on neighborhood streets stem from issues related to parking, sight distance and other issues that do not require major projects in order to resolve them but the resolution of which contributes greatly to citizens' quality of life.

Action T-4.7.1: Help citizens solve neighborhood traffic concerns by maintaining a program focused on addressing such concerns.

8. Link to Land Use -

Goal T-5 *Create a transportation system that is united with Kirkland's land use plan.*

A. Background

The Land Use chapter of the Comprehensive Plan provides a blueprint to complement Kirkland's transportation network. "Transportation improvements" should truly be improvements to the community that help create place and reflect the character of Kirkland, not only improvements to mobility. Because the built environment influences travel behavior in so many ways, it's often said that the best transportation plan is a good land use plan. This is demonstrated by the land use transportation connections illustrated in the following smart growth "Ds:"

Density: Higher densities shorten trip lengths, allow for more walking and biking, and support quality transit.

Diversity: A diverse neighborhood allows for easier trip linking and shortens distances between trips. It also promotes higher levels of walking and biking and allows for shared parking because of varied demand times amongst the uses.

Design: Good design is that which improves connectivity, encourages walking and biking, and reduces travel distance.

Destinations: Destination accessibility links travel purposes, shortens trips, and offers transportation options.

Distance to Transit: Close proximity to transit encourages its use, along with trip-linking and walking, and often creates accessible walking environments.

Development Scale: Appropriate development scale provides critical mass, increases local opportunities, and supports transit investment.

The Land Use-Transportation Connection is not one way. For example increased density should be supported by an emphasis on transit, but at the same time, increased density should be planned in areas that are easy to serve by transit. Land use should coordinate with travel patterns as well. For example in the mornings, there is more capacity northbound than southbound on I-405, while the opposite is true in the afternoons. There may be land use choices in Kirkland that can take advantage of this capacity.

The Totem Lake Urban Center is transitioning from an auto oriented district to one that relies on a range of modes to support increased density. In particular, improved access to transit hubs by walking and bicycling access should be a focus.

In neighborhoods where larger areas of single family residences make it difficult to support high quality nearby transit, greenways, on-street bike lanes and sidewalks will offer options that help support a more livable community. Connections should focus on schools, parks, transit and commercial areas.

For employers in Kirkland to be competitive with those in other cities, their employees must be able to get to job sites quickly and easily.

B. Draft Policies

Policy T-5.1 Focus on transportation system developments that expand and improve walkable neighborhoods.

The prioritization of transportation improvements should be weighted toward those projects that expand or enhance connections within 10 minute neighborhoods (see Land Use chapter of Comprehensive Plan).

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These could include building missing sidewalks within such neighborhoods or creating new trails that expand high quality walkable neighborhoods.

These areas should serve as focal points for local and regional transit service and should include high quality passenger environments. (See Policy T-1.4)

Similarly, bicycling should be easy and comfortable for a wide range of users in and between 10 minute neighborhoods. (See Policy T-2.2, T-2.3)

Auto congestion often occurs in areas where a variety of popular land uses are located within close proximity of each other. Based on the vision for the Comprehensive Plan, street improvements to add vehicle capacity within these areas should be designed to facilitate walking, biking and transit as well.

Action T-5.1.1: As described in connection with Goals T-1 through T-4, ensure that walkable neighborhoods are considered in the planning of transportation projects and programs.

Policy T-5.2 Create a transportation network that supports economic development goals.

All transportation improvements should be evaluated in terms of their ability to support economic development. In addition to street improvement projects that build capacity for new commercial development, examples of projects that support economic development include bicycle parking improvements that bring bicycle customers to local businesses, transportation demand programs that make it easier for employees to get to work by a variety of modes, and creation of loading zones that expedite delivery of goods. (See Economic Development Chapter of the Comprehensive Plan). Benefits to economic development goals need to be balanced with impacts that may be created by pursuing these benefits.

Action T-5.2.1: As described in connection with Goals T-1 through T-4, ensure that economic development goals are considered in the planning of transportation projects and programs.

Policy T-5.3 Develop transportation improvements tailored to commercial land use districts such as Totem Lake, Downtown and neighborhood business areas.

Fostering growth in Kirkland will require careful consideration of transportation facilities. This is particularly important in areas where traffic congestion occurs regularly and where increases in growth are planned.

The land use vision must not be lost in a quest to remove traffic congestion. For example, it should not be expected that street or intersection widening will be a primary tool in developing walkable, bikeable, livable neighborhood business areas, because this strategy would contradict the very land use vision it is intended to support. Instead, transportation facilities that allow safe and convenient travel by other modes should be promoted. This is not to suggest that cars will be abandoned, but rather to recognize that over the next 20 years this plan is pursuing a transportation approach consistent with its vision; a path that is different than previous plans.

Totem Lake and Downtown Kirkland should have primary connections to regional transit. Because of the size of the Totem Lake Urban Center it is important to make sure that regional transit effectively serves the entire center. (See Policy T-7.1)

New and reconfigured interchanges with I-405 will improve transportation for all modes and should be pursued. (See Policy T-7.3) As discussed in the sections on walking and biking, the existing freeway interchanges are barriers to walking and biking and, in the case of NE 124th Street, severely constrain the

ability to move from one side of the Totem Lake Urban Center to the other. The space dedicated to the interchange is substantial and if the interchange were designed more efficiently, valuable space could be freed up for more productive purposes. While reconstructing interchanges has large benefits, it also has high costs and long time frames.

Policy T-5.4 Adopt requirements and practices for all future development that support planned transportation infrastructure.

A sizable number of public improvements are built by the private sector as part of new development projects. Therefore, it is critical that policies, guidelines and practices used to plan, design and construct private improvements are consistent with this Plan.

Making sure that bicycle facilities are included, adding trail connections between cul-de-sacs and providing safe and practical access to the street system are areas that require particular emphasis.

Codifying transportation requirements would be helpful in order to make development review easier for the development community, staff and the public.

Kirkland maintains a transportation demand planning model (the BKR model) in cooperation with the Cities of Redmond and Bellevue. This should continue and the model should be improved to recognize advances in regional modeling such as better modeling of transit, biking and walking.

Action T-5.4.1: Review, streamline and codify as reasonable, components of transportation-related development review.

Action T-5.4.2: Develop a plan for connections between street ends and complete those connections.

Action T-5.4.3: Participate in the maintenance and improvements of the BKR model.

9. Be Sustainable

Goal T-6 As the transportation system is planned, designed, built, maintained and operated, provide mobility for all using reasonably assured revenue sources while minimizing environmental impacts.

A. Background

Kirkland faces challenges related to both fiscal and environmental sustainability that affect the transportation system.

Fundamental to economic sustainability is the need to keep costs for transportation in line with expected revenue. A list of unfunded transportation projects should be developed to provide opportunities for grant funding or other unexpected revenue sources and as a way of indicating future aspirations for the transportation system. Transportation Impact fees are a source of revenue that can be used for a variety of transportation projects, including the Cross Kirkland Corridor, that meet certain criteria.

Maintaining existing infrastructure in good condition is a critical requirement of sustainability. Kirkland's residents have continued to show support for maintenance efforts by passing a Street Levy in 2012. The bulk of the funding from the levy goes toward pavement maintenance. There are a number of other systems – sidewalks, traffic signals, lighting systems, that do not currently have robust maintenance programs and this plan proposes remedying that shortcoming.

Because roughly half of greenhouse gas emissions are transportation related, it is virtually impossible to meet adopted climate change goals without changing the way we travel. Electric vehicles may be one way that technology can help meet this challenge. Auto-based transportation is also a primary contributor to water and air pollution. It is increasingly being recognized that active transportation like walking and bicycling can play important roles in promoting public health in a community.

Natural disasters have the potential to severely damage or destroy key links and systems in the transportation network. Sustaining the transportation system requires planning for the prevention of and recovery from such events.

Sustainability also encompasses accessibility of transportation. The transportation system should be accessible and provide benefit to all users throughout Kirkland regardless of mobility, vision, hearing and cognitive capabilities.

In accordance with Federal and State law, care is needed to ensure that low-income, special needs and minority populations are not unduly subject to negative impacts from transportation improvements and that they are fully included in decision making processes.

B. Draft Policies

Policy T-6.1 Balance overall public capital expenditures and revenues for transportation.

Because certain projects are good candidates for specific types of funding and for other reasons, there is a need to maintain a list of "unfunded" projects, but the cost of all unfunded projects should be a small percentage of the expected revenue over the 20 year plan.

Impact fees are a means for new development to pay for a fair share of system improvements (projects that benefit the entire transportation system, not just a particular development). Impact fees are not used to pay for existing deficiencies in the transportation system and therefore the implementation of impact fees needs to be closely coordinated with levels of service for various modes. In Kirkland, Transportation Impact fees represent about 15 percent of the expected revenue over the next 20 years.

<Paragraph here that describes why transportation impact fees can be charged for CKC.>

Action T-6.1.1: Revise the Impact Fee rate schedule

Policy T-6.2 Place highest priority for funding on maintenance and operation of existing infrastructure rather than on construction of new facilities. Identify and perform maintenance to maximize the useful lifetime of the transportation network at optimum lifecycle cost.

Maintaining what we have before constructing new facilities is a foundation of sustainability. Therefore, when funding decisions are being made, an amount adequate to fund maintenance and operation should be identified before allocating funding to other needs.

In some areas of the transportation system, true maintenance costs and optimum investment levels need to be identified so that accurate information about deferred maintenance and life cycle cost is available for decision makers.

Action T-6.2.1: Identify and sustain reasonable maintenance funding levels for a complete set of transportation assets.

Action T-6.2.2: Develop and maintain inventories of assets that require maintenance such as pavement markings, traffic signals, sidewalks, etc.

Action T-6.2.3: Develop lifecycle costs for capital and maintenance projects.

Policy T-6.3 Support modes that are energy efficient and that improve system performance

Bicycling and walking may be the most efficient transportation modes available and consistent with other policies in this plan, those modes should be supported. Over the next 20 years, energy efficiency of other modes and transportation related elements will be improved, this may include improvements to auto and truck technology, transit alternatives or more energy efficient street lighting systems. Kirkland's Transportation network should support these innovations. Intelligent Transportation Systems can help reduce auto delay and stops thereby reducing energy use and improving system performance.

Action T-6.3.1: Work with regional groups such as PSRC to identify trends in vehicle innovation and seek opportunities to implement them in Kirkland. (See Partnership Policy T-7.4)

Policy T-6.4 Minimize the contribution of transportation to air and water pollution; comply with Federal and State air and water quality requirements.

Motorized transportation is the chief contributor to air and water pollution. This comes in many forms from tailpipe emissions to the production of petroleum products used for paving to substances dripping from cars, trucks and buses and eventually finding their way to water sources.

Kirkland has adopted goals for reduced greenhouse gases (see Environment Chapter of Comprehensive Plan). Because of the role that vehicle emissions play in greenhouse gas production, reducing those emissions will be a requirement if the goal is to be met. Many actions that will reduce greenhouse gases are included in Actions under other goals. <MORE SPECIFICS NEEDED HERE>

Action T-6.4.1: Coordinate transportation improvements and programs with goals from the Environment Chapter of the Comprehensive Plan to meet the City's greenhouse gas targets.

Policy T-6.5 Safeguard the transportation system against disaster

Because of the risk that natural and other disasters can pose to the transportation system, prevention and recovery should be actively planned for. This should be done in coordination with goals and policies in the Comprehensive Emergency Management Plan.

Action T-6.5.1: Develop and keep current strategies for preventing and recovering from disasters that impact the Transportation System.

Policy T-6.6 Create an equitable system that provides mobility for all users.

Our transportation system has many potential barriers. A sustainable transportation system is open to users of all abilities. There may be cost barriers such as tolls or transit fares that prevent some citizens from using public transportation facilities. Language may be a barrier to some users and this should be considered in the design of written materials. Kirkland should be sensitive to the potential barriers and treat them as required by law or by the need to make the transportation system as open as possible to all users. (See Policy T-1.1)

Action T-6.6.1: Periodically review existing procedures and if needed, adopt new procedures to ensure accessibility to the transportation system.

Policy T-6.7 Implement transportation programs and projects in ways that prevent or minimize impacts to low-income, minority and special needs populations.

As required by applicable state and federal regulations, Kirkland should continue to make sure that all citizens are involved in decision making about transportation projects and that impacts (such as health, environmental, social and economic effects) do not fall disproportionately on vulnerable populations.

Action T-6.7.1: Ensure inclusion of vulnerable populations and ensure that impacts to these populations are not disproportionate by periodically reviewing existing procedures and when needed, adopting new procedures.

Policy T-6.8 Actively pursue grant funding and innovative funding sources

Kirkland has a history of successfully pursuing a wide range of grant funding opportunities for transportation projects and this should continue. Grant funding is expected to make up more than a quarter of transportation funding over the next 20 years. Projects that are a good candidates for particular grant funding sources should be have a prominent place in the lists of potential projects. Sidewalk projects on School Walk Routes and Safe Routes to School grants are an example of this type of pairing.

Action T-6.8.1: Ensure that all applicable grant opportunities are reviewed and competitive grant applications are submitted by periodically reviewing grant application procedures.

10. Be an active Partner

Goal T-7 Coordinate with a broad range of groups; public and private, to help meet Kirkland's transportation Goals.

A. Background

Traffic doesn't stop at city borders. Cars, buses, bicycles and pedestrians all travel between cities. Kirkland is bisected by I-405, a facility which is the responsibility of the **Washington State Department of Transportation** (WSDOT). In many cases, WSDOT is the representative of the Federal Highway Administration. Transit service is provided by King County Metro and Sound Transit both of which are governed by separate boards of elected officials. Regional policy determines, to a large extent, the minimum number of person trips that Kirkland must plan for. For all these reasons, working with other agencies is a requirement for achieving Kirkland's transportation goals.

Kirkland must be proactive in its work with regional partners. Kirkland should come to other partners with a strong sense of our needs rather than reacting to what is offered by others. An example of this can be seen in the work of our City Council and State Legislature, where recent sessions have resulted in securing important funding for the Cross Kirkland Corridor.

At the county-wide and regional levels, there are a number of groups that influence funding decisions and transportation policy. These are often structured with staff groups making recommendation to boards of elected officials. Kirkland should have an active role in these groups.

Partnerships should not end with the transportation agencies such as the Washington State Department of Transportation or King County Metro. Partnering with the private sector, schools, advocacy groups and neighboring cities and sub-regional coalitions will inform and build support to achieve Kirkland's transportation goals.

B. Draft Policies

Policy T-7.1 Play a major role in development of Sound Transit facilities in Kirkland

Sound Transit will likely be implementing one or more new phases of transit over the life of this plan. These updates typically require an update to Sound Transit's Long Range Plan, followed by a System Plan revision that describes projects that are on a ballot put before voters. A connection between the Totem Lake Urban Center and the regional transit system is Kirkland's primary interest for regional transit. The preferred mode for this connection is light rail.

Bus Rapid Transit operating in Express Toll Lanes on I-405 may be the first Regional High Capacity Transit link serving Totem Lake. It is important that such a system includes connections to Downtown Kirkland and that it utilize the Houghton Park and Ride as a component. Rebuilding freeway interchanges are ways by which this may be accomplished.

Kirkland can best affect these plans by cultivating productive and ongoing working relationships with Sound Transit and by being active and persistent advocates for our interests, as directed by the City Council, at both the staff and Sound Transit Board level.

Opportunities to increase Sound Transit's Regional Express Bus Service presence in Kirkland should be pursued.

Action T-7.1.1: Advocate for increases in meaningful Sound Transit services in Kirkland, with a connection to Totem Lake as a first priority.

Policy T-7.2 Establish commitments from transit providers to provide high quality transit service in exchange for land use and transportation commitments that support transit. Partner with King County Metro to meet mutual interests.

Final decisions about King County Metro transit service rest with the King County Council and therefore change can happen without the approval of the City of Kirkland. This lack of certainty weakens the foundations of both the land use and transportation plans, both of which rely heavily on high quality transit service.

In order to thrive, transit service needs certain land use and transportation elements and those elements are largely within the control of cities. Therefore, Kirkland should pursue, ideally in cooperation with other jurisdictions, an agreement by which risk for both transit agencies and cities is reduced by agreeing to transit service levels in exchange for items cities can provide.

Action T-7.2.1: Actively pursue agreements with transit providers that help support Kirkland's land use and transportation plans.

Policy T-7.3 Work with Washington State Department of Transportation and the Washington State Legislature to achieve mutually beneficial decisions on freeway interchanges and other facilities.

As described elsewhere, decisions made by the **Washington State Department of Transportation** (WSDOT) on how facilities are designed and operated have significant bearing on Kirkland's transportation system. Because WSDOT traditionally has viewed the Land Use-Transportation Connection from an auto-oriented viewpoint, previous decisions have resulted in facilities that are less than optimal for meeting Kirkland's goals in a modern urban setting. Age of facilities and prioritization of Kirkland's projects in a statewide context are also complicating factors. These issues could potentially be mitigated by working more closely and regularly with WSDOT leadership, inclusion of transportation and land use items on Kirkland's legislative agenda, and advancing Kirkland's interests by funding initial design work for projects like interchange designs on I-405. Also Kirkland should advocate for improving the interchange of I-405 and SR 520 including new HOV connectivity.

WSDOT must approve any changes to functional classifications (principal arterials, minor arterials, collector streets, and local streets) on Kirkland's streets to ensure that they meet federal guidelines and are coordinated with neighboring jurisdictions. Functional classifications are a useful surrogate for volume and number of lanes and are used, as described in other policy discussions, as one measure for prioritizing projects.

Action T-7.3.1: Foster a strong working relationship with WSDOT leadership

Action T-7.3.2: Advance Kirkland's transportation interests with actions on legislative agendas

Action T-7.3.3: Fund initial studies in order to make it easier to secure funding for construction projects.

Action T-7.3.4: Periodically review and update, when needed, functional classifications.

Policy T-7.4 Participate in and provide leadership for regional transportation decision making.

Multiple regional groups impact funding and policy decisions that affect transportation in Kirkland. As an example, Puget Sound Regional Council has a host of boards and groups. Some of these groups are made up of staff members, others are exclusively for elected officials. Kirkland is a member of the King

County-Cities Climate Collaboration, a partnership between the County and these cities to coordinate and enhance the effectiveness of local government climate and sustainability efforts.

Action T-7.4.1: Develop a clear plan for being a part of groups to allow for the efficient representation and support of Kirkland's transportation interests.

Policy T-7.5 Work closely with the Lake Washington School District to encourage more children to walk and bike to school.

Reducing the number of students who are driven or who drive to school is a multifaceted task. **The Lake Washington School District** (LWSD) is a necessary partner in this effort. Close communications between LWSD and Kirkland staff should be pursued. Contacts at individual schools are usually highly effective and should also be pursued.

Action T-7.5.1: Schedule regular reviews of school walk routes with School District personnel.

Action T-7.5.2: Advance Kirkland's transportation goals by maintaining relationships with schools and the school district.

Policy T-7.6 Coordinate multi-modal transportation systems with neighboring jurisdictions.

Kirkland has strong ties with neighboring jurisdictions. These ties should be reinforced and used to make sure that projects like bike share, wayfinding, traffic signal operation, pavement marking, traffic impacts of new developments and other transportation projects are carefully coordinated so that transportation users can move seamlessly across jurisdiction borders.

Policy T-7.7 Partner with the private sector and other "new" partners.

Kirkland should look for partners outside governmental agencies. Identifying and connecting with other partners could help fund or deliver a range of projects and services including bike share, transit alternatives, traffic data, parking solutions, and a range of improvements on the Cross Kirkland Corridor.

Policy T-7.8 Engage in a multi-agency, multi-disciplinary safety program.

As mentioned elsewhere in this Plan, the most effective approach to safety is a multi-agency, multi-disciplinary approach like the State of Washington's Target Zero program. Implementing this approach requires partnering both within the City and with outside agencies.

Action T-7.8.1: Develop contacts with the State of Washington Target Zero program at the state and county level. Partner with other appropriate agencies to support a safety program.

11. Transportation Measurement

Goal T-8 Measure and report on progress toward achieving goals and actions.

A. Background

For several years the transportation Commission and City Council have contemplated a revised concurrency system that relieves some of the deficiencies of the existing system. The new system is multi-modal and meets the interest of many stakeholders to be easier to understand.

“Level of service” is a term for the performance of the transportation system. One of the required parts of the Transportation Element of the Comprehensive Plan is a level of service for each mode. The underlying philosophy for Kirkland’s level of service is that an acceptable level of service is, by definition, the level of service resulting from the completed 20 year transportation network and the fulfillment of the Land Use Plan. The reason for this is that the projects selected for the transportation network derive from the goals and policies of the plan –including financial constraints, and were chosen because of the performance they provide as a group given the number of trips forecast for the future.

Mode split is another factor considered in the Transportation Element of the Comprehensive Plan. Mode split refers to the fraction of trips using various modes; auto, bike, walking transit. In the Totem Lake, the adopted mode split percentages from the Growth and Transportation Efficiency Center should be used.

Successful implementation of the goals and policies in the transportation element is aided by a clear plan of action. This should take the form of a distillation of the actions of this plan over the short term presented in a form that is easy to understand and accessible for a range of stakeholders.

Information about the transportation system should also be summarized in a way that is easy for people to understand and that has clear and regular reporting methods so that progress toward a handful of measures is simple to track over time. Progress toward the goals of this plan should be reported annually.

B. Draft Policies

Policy T-8.1 Use a multi-modal plan based concurrency method to monitor the rate at which land use development and the transportation system are constructed.

The main function of concurrency is to make sure that the impacts of land use growth are balanced with transportation projects and programs. If growth is far out pacing the rate at which transportation improvements are constructed, then permits for new developments can be halted. Such a halting represents a failure of the system. Ideally concurrency is managed so that development continues.

Concurrency should be no more complicated than is necessary and should consider transit, bicycling and walking along with auto travel. Concurrency should principally monitor the approved land use and transportation plans and ensure that they are being completed in relative balance. It should help achieve land use and transportation goals, not be an impediment to achieving those goals.

Action T-8.1.1 Develop and implement a multi-modal concurrency system.

Policy T-8.2 Establish acceptable level of service for all modes.

The way in which level of service is measured is different for different modes. For example, level of service for walking and bicycling is generally concerned with network coverage while auto level of service is measured more by available capacity. <LEVEL OF SERVICE STANDARDS STILL TO BE DEVELOPED>

Action T-8.2.1: Develop level of service standards for each mode.

Policy T-8.3 Mode split

Working on this section

Policy T-8.4 Ensure implementation of the Goals and Policies in the Transportation Element and monitor progress toward those goals.

(See Implementation section of Comprehensive Plan) An Implementation Plan should include enough information so that people who are not familiar with the Transportation Master Plan can readily understand the key points of the Plan and the actions necessary to accomplish its goals.

A selected few measures that address the key elements of the Plan, presented in a manner that is easily understood by the public, should be developed. These measures should be coordinated with the Action Plan and tracked by Council and be widely distributed.

Action T-8.4.1: Prepare and maintain a succinct short term Action Plan, including a timeline that describes actions necessary to fulfill the goals and policies of this element.

Action T-8.4.2: Deliver annual transportation report cards.