MEMORANDUM

TO: TRANSPORTATION COMMISSION

FR: FRANZ LOEWENHERZ 425-452-4077

RE: 2008 PEDESTRIAN AND BICYCLE TRANSPORTATION PLAN (DRAFT PROJECT LIST WRAP-UP AND PRIORITIZATION)

DA: APRIL 10, 2008

Direction Needed from Commission

At the April 10 Transportation Commission meeting staff is seeking review and additional comments on the draft network plan and project lists that you received at your April 3 meeting and March 6 workshop. Depending on the progress made at this meeting; it may be possible for Commission to endorse the network plan and project list.

At the April 10 Transportation Commission meeting, staff is also planning to introduce the preliminary prioritization framework. In May, staff intend to return to the Commission with a prioritized project list for Commission consideration and possible action.

Please note the above schedule is presented as a suggested approach and should not be regarded as definitive; staff look to the Commission for guidance on recommended modifications to the project timeline.

Draft Project List

At the April 3 Commission meeting, staff reviewed the facility recommendations outlined in the pedestrian, bicycle, and trail project lists on a district-by-district basis. This review will continue at the April 10 meeting. The City was designated into the following four areas: (i) west of I-405, north of I-90 (basically downtown), (ii) north of NE 8th, east of I-405, (iii) south of NE 8th, east of I-405, north of I-90; and (iv) south of I-90. In advance of the April 10 meeting, the Commission is encouraged to review the Draft District-by-District Ped-Bike-Trail Project List document.

Existing Prioritization Framework

Bellevue's Comprehensive Plan is the document that guides the City's future development and provision of capital facilities to serve and accommodate development. Comprehensive Plan Policy TR-79 asserts that staff should: "Assign high priority to pedestrian and bicycle projects that: 1. Address safety issues; 2. Provide system connectivity or provide connections to the existing portions of the system to develop primary north-south or east-west routes; 3. Complete and connect planned pedestrian or bicycle facilities or trails; 4. Conform to and are consistent with Bellevue's roadway classification system; 5. Provide access to activity centers such as schools, parks, public facilities such as libraries and community centers, retail centers, major employment centers, and concentrations of housing; ~~and commercial areas~~; 6. Provide accessible linkages to the transit and school bus systems; and 7. Serve concentrations of residents with special accessibility needs, including those who are challenged by: disability; a lack of vehicle ownership, low-income status, age, or minority status." (Draft Pedestrian and Bicycle Transportation Plan Policy Framework; March, 2008)

As the city pursues a multi-modal transportation strategy to address the transportation needs of Bellevue, it recognizes the need to prioritize non-motorized capital investments to ensure that funds are programmed for the most compelling needs. The Bellevue City Council is faced with the challenge of optimizing results from investments made with existing funding while developing methods for creating new funding. Strategies to focus limited funding and to determine where available dollars should be spent are essential.

In its role in advising the City Council on non-motorized project scoring, the Transportation Commission has provided guidance during both the Transportation Facilities Plan (preparation, progress and implementation) and Neighborhood Sidewalk Ranking (reflected below are both of these scoring criteria approaches).

Commission approved Pedestrian and Bicycle Project Scoring Criteria used in the 2006-2017 TFP Update process

CATEGORY	MAX. POINTS
1. Safety	
Accident cluster	15
Volume at project	10
Existing facility	10
SUBTOTAL	35
2. System Linkage	
Major non-motorized system	20
Transit facility	15
SUBTOTAL	35
3. Land Use	
Multi-family housing	7.5
School	10
Commercial/office cluster	7.5
Parks, open space, other public facilities	5
SUBTOTAL	30
TOTAL POSSIBLE	100

Updated Neighborhood Sidewalk Ranking Criteria
04/19/2007

Attachment 2

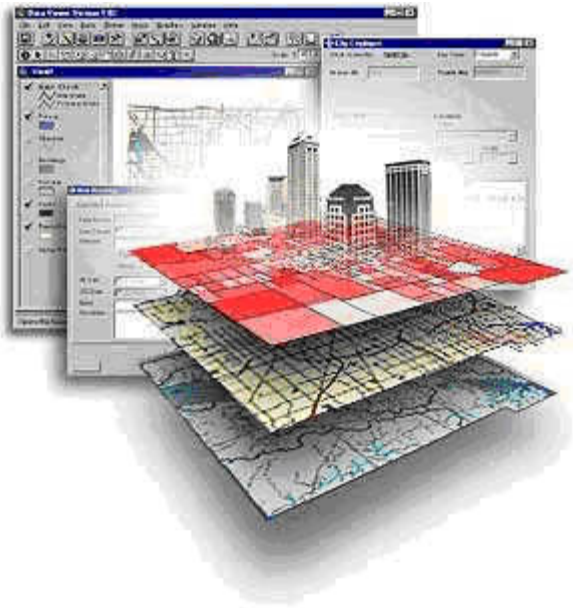
CATEGORY	SCORING		MAX POINTS
Accidents	5 points for every ped accident, up to 10 max		10
Volume	0 pts	0 - 5,000 ADT	10
	5 pts	5,001 - 10,000 ADT	
	10 pts	10,001 + ADT	
Linkage	5 pts	isolated project - no connection to existing sidewalk	15
	10 pts	connects to existing sidewalk on one end	
	15 pts	connects to existing sidewalk on both ends	
Ped-Bike Plan	5 pts	in pedestrian system	10
	10 pts	listed as project in 1999 update	
Transportation Facilities Plan	10 pts if included in current TFP		10
Destination Network	*within a 1/2 mile walking distance (all that apply)*		30
	4 pts	Parks	
	10 pts	Schools (School Walk Route)	
	4 pts	Community Center/Hub/Library	
	4 pts	Retail / Services	
	4 pts	Employment Center	
	4 pts	Bus stops, or connection to bus routes	
Housing Density	*majority within 1/2 mile walking distance (only pick one)*		10
	0 pts	single-family (R1 - R3.5)	
	5 pts	high single-family / low multi-family (R4 - R15)	
	10 pts	multi-family (R20, R30)	
Future Overlay	5 pts if planned for overlay in 2007 - 2010		5
		TOTAL MAXIMUM POINTS	**100**

Bellevue Proposed Prioritization Framework

Because not all of Bellevue's pedestrian and bicycle needs can be immediately addressed, the City of Bellevue must determine where to focus the resources that will be allocated toward the construction of new walkway, bikeway, and trail facilities. Rather than depend on subjective judgments that could change depending on the evaluator, analytical tools are being proposed for project prioritization to ensure that non-motorized facilities are first constructed where existing need and the potential for pedestrian and bicycle traffic is the greatest.

In general, non-motorized activity is directly attributable to factors such as the density of development, mix of land uses, and proximity to major destinations. The greater the intensity of these factors, the higher the potential for walking and bicycling, and the greater the need for these facilities.

The proposed methodology builds on the existing Transportation Commission approved framework for Neighborhood Sidewalk Ranking Criteria (4/19/2007); one of the notable refinement to this earlier methodology is that it is based on a quantitative overlay system that relies on Geographic Information System (GIS) software to automate the evaluation process. By overlapping a series of maps, each representing one of several characteristics, one can easily visualize the concentration of resources in a particular area. If each characteristic is assigned a number value based on its importance or potential for a given condition, then the cumulative intensity of all characteristics at a specific location can be determined. The GIS system effectively adapts this methodology by identifying the specific characteristics that most affect the potential for walking and cycling. The figure at right illustrates how this prioritization approaches utilizes the overlay concept.



The proposed prioritization methodology, which is based on the policy discussion to date on prioritization, broadens the range of criteria to consider when identifying areas of strong walking and bicycling potential; these include:

Corridor Conditions – The corridor condition indicators include:

- Collisions (average annual pedestrian and bicycle/vehicle collisions)
- Roadway Classification
- System Linkage
- Bus Stop Level Ridership (1/4 Mile Proximity)

Destination Network – These are indicators of nearness to key walking and cycling destinations. These land use criteria are based on designations found in the Comprehensive Land Use Plan.

- Park Proximity (ft.)
- School Proximity (ft.)
- Community Center/Social Service Proximity (ft.)
- Retail Proximity (ft.)
- Major Employment Center
- Housing Density

Social Justice – The social justice analysis is based on information from the 2000 U.S. Census. Four social justice proxy factors are used to illustrate non-motorized facility demand based on demographic characteristics of the City of Bellevue. These factors include:

- Vehicle Ownership (%)
- Below Poverty Level (%)
- Under 18, 65 or over (%)
- Minority Population (%)

Appendix A includes representative maps that will be layered to derive a composite score for a particular geographic area or street. The areas or streets with the greatest concentrations of non-

motorized characteristics receive the highest scores, and therefore should have the highest priorities. Appendix B presents the draft criteria and proposed weighting system.

On April 10, staff will present the Transportation Commission with a draft weighting system for the above criteria. The project prioritization framework that is being presented on April 10 strives to meet the following objectives:

- Evidence-based
- Simple to use
- Consistent and Fair
- Aligned with existing processes and priorities

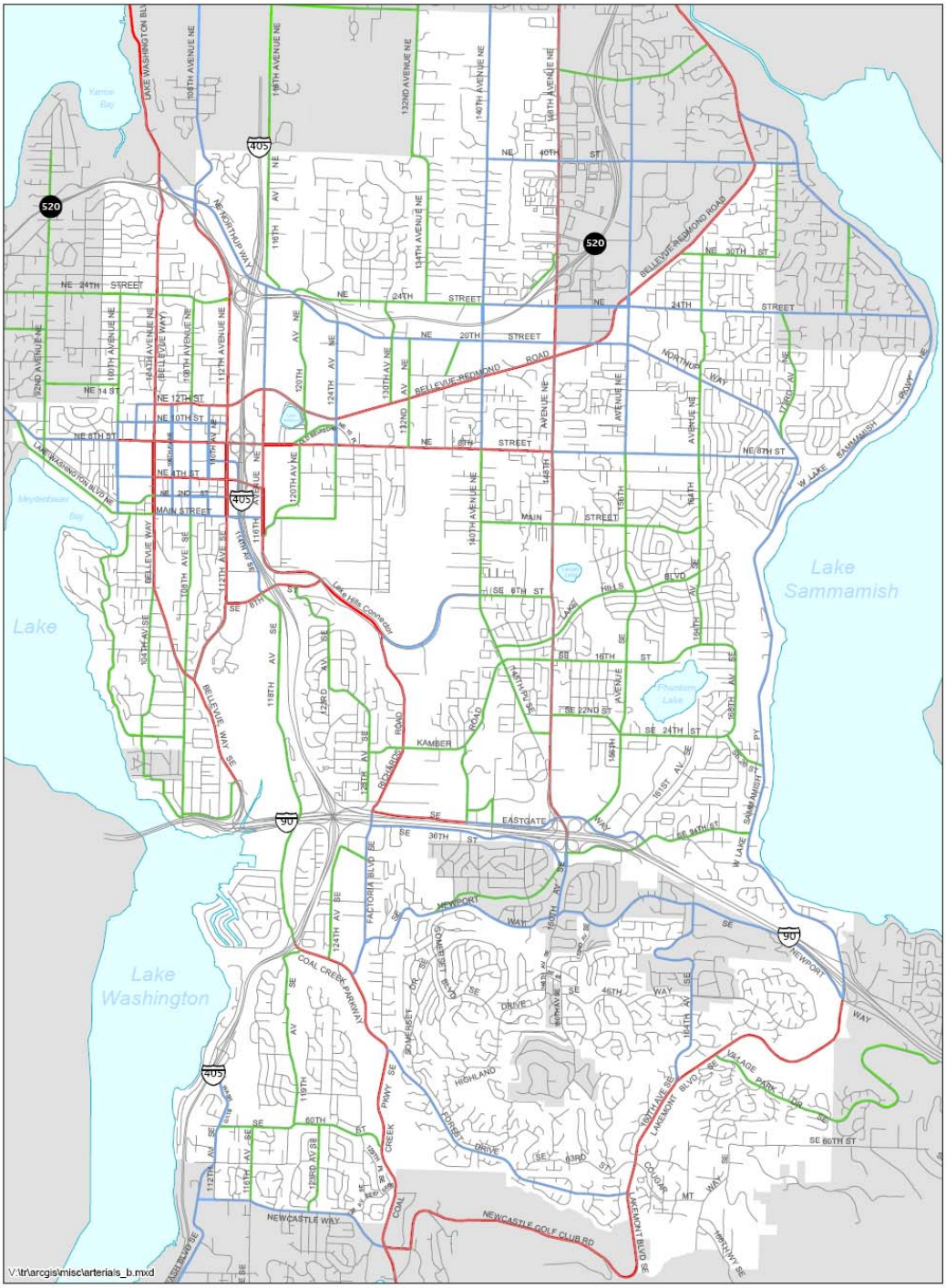
Staff will seek Commission guidance on the appropriateness of this weighting scheme. The preliminary ranking of capital improvement projects will be submitted to the Transportation Commission in May for review and possible adjustments.

APPENDIX A

SAMPLE MAPS FOR PROJECT PRIORITIZATION

City of Bellevue

Bellevue Arterial Classifications



NORTH

= 3,300 feet

City of Bellevue
IT Department
GIS Services
Plot Date: 4/2/2007

Legend of Map Symbols:

- Major Arterial
- Minor Arterial
- Collector Arterial

This map is a graphic representation derived from the City of Bellevue Geographic Information System. It was designed and intended for City of Bellevue staff use only; it is not guaranteed to survey accuracy. This map is based on the best information available on the date shown on this map. Any reproduction or sale of this map, or portions thereof, is prohibited without express written authorization by the City of Bellevue.

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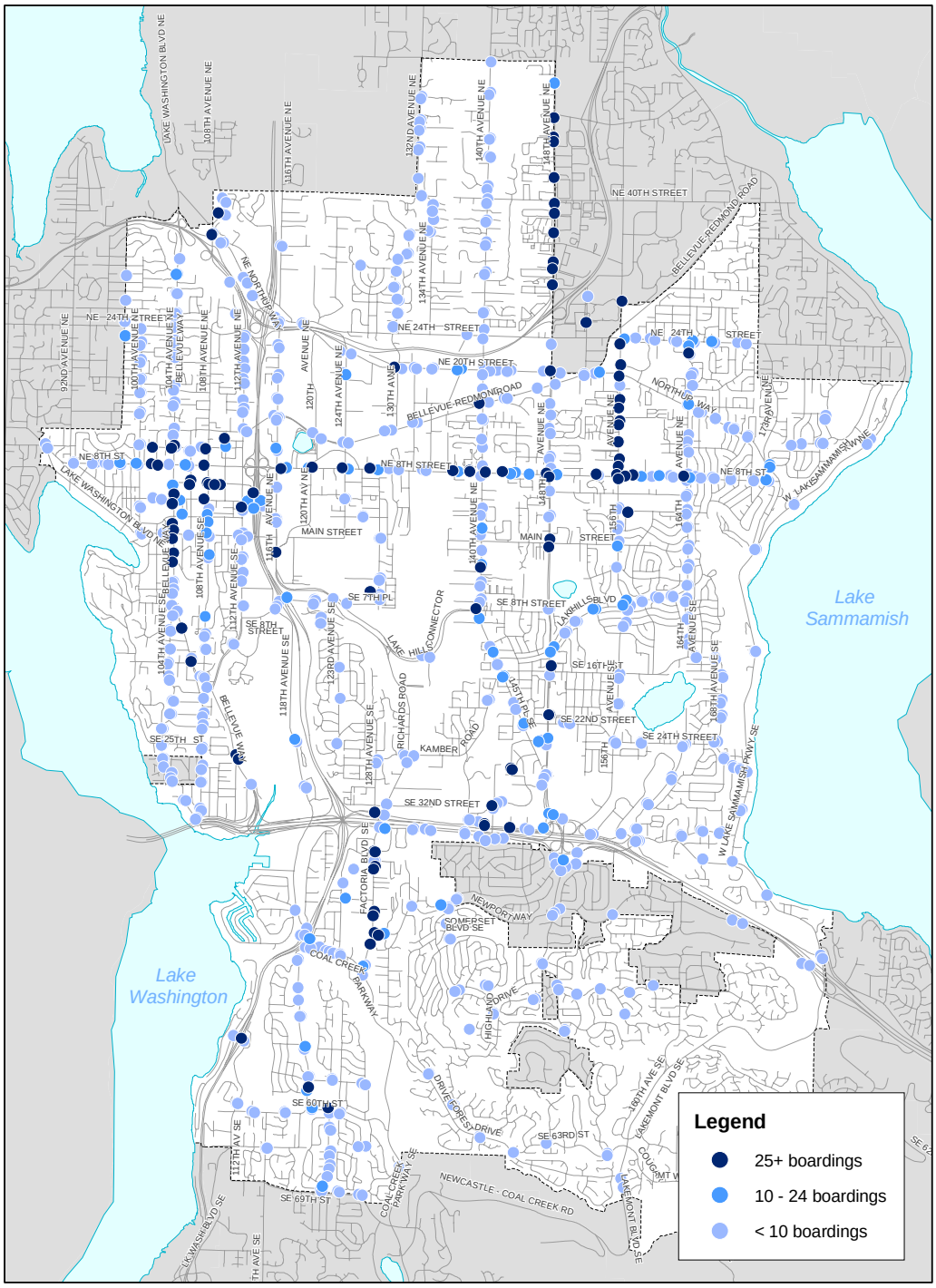
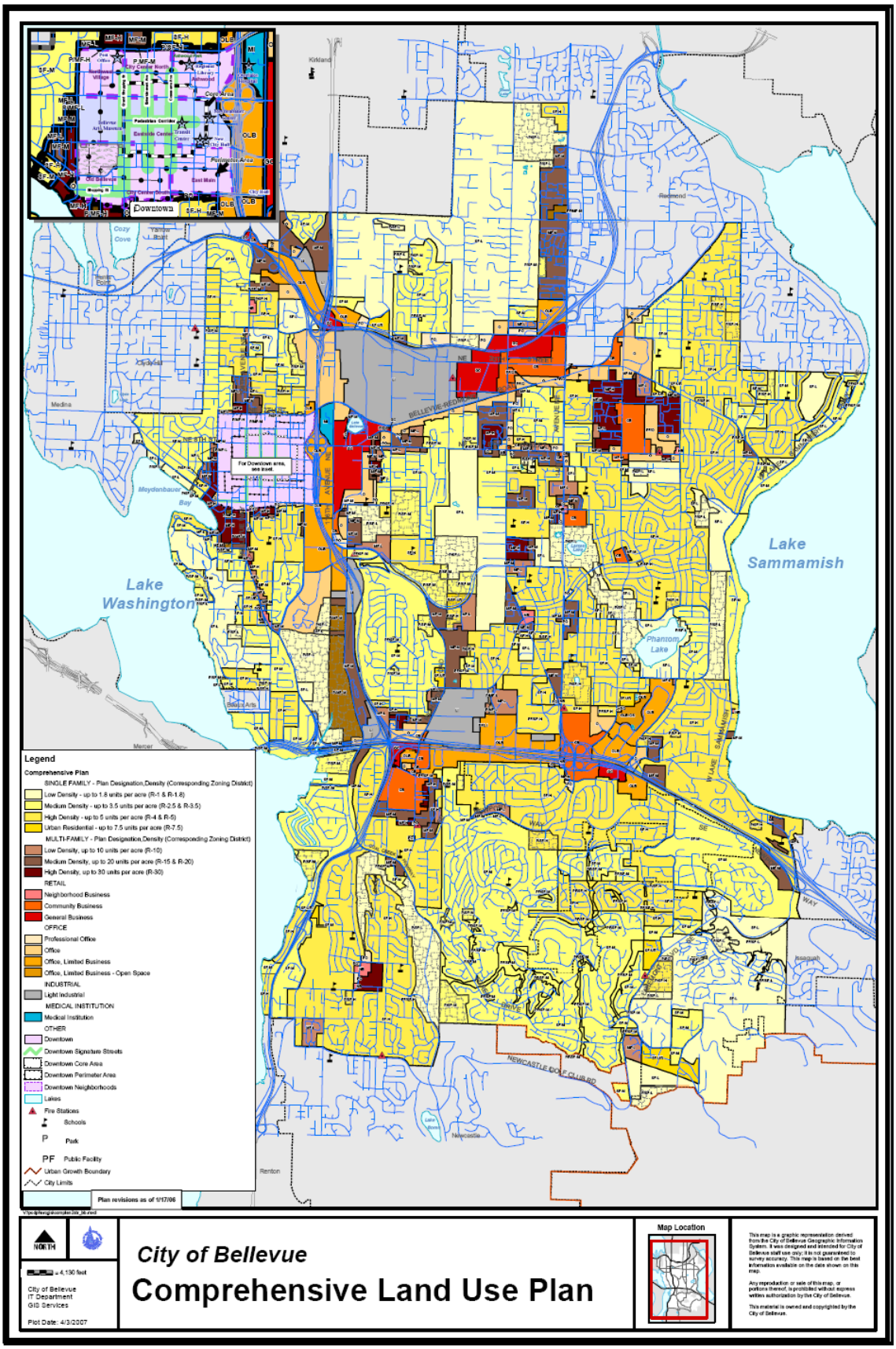
Bellevue Bus Stop Level Ridership



Capital investments for pedestrian and bicycle facilities are most beneficial when use of the existing transit system is high. The GIS system will assign Fall 2006 ridership figures on a bus-stop level to every bus stop in Bellevue. The ridership analysis allows an exact accounting for the number of transit patrons persons benefited by any proposed capital project.


Lake Washington
Lake Sammamish
Phantom Lake
Meydenbauer Bay
Cozy Cove
Kirkland
Redmond
Medina
Mercer
Issaquah
Newcastle
Renton
Downtown
For Downtown area, see inset.
Legend
Comprehensive Plan
SINGLE FAMILY - Plan Designation,Density (Corresponding Zoning District)
Low Density - up to 1.8 units per acre (R-1 & R-1.8)
Medium Density - up to 3.5 units per acre (R-2.5 & R-3.5)
High Density - up to 5 units per acre (R-4 & R-5)
Urban Residential - up to 7.5 units per acre (R-7.5)
MULTI-FAMILY - Plan Designation,Density (Corresponding Zoning District)
Low Density, up to 10 units per acre (R-10)
Medium Density, up to 20 units per acre (R-15 & R-20)
High Density, up to 30 units per acre (R-30)
RETAIL
Neighborhood Business
Community Business
General Business
OFFICE
Professional Office
Office
Office, Limited Business
Office, Limited Business - Open Space
INDUSTRIAL
Light Industrial
MEDICAL INSTITUTION
Medical Institution
OTHER
Downtown
Downtown Signature Streets
Downtown Core Area
Downtown Perimeter Area
Downtown Neighborhoods
Lakes
Fire Stations
Schools
Park
Public Facility
Urban Growth Boundary
City Limits
Plan revisions as of 1/17/06
NORTH
= 4,130 feet
City of Bellevue
IT Department
GIS Services
Plot Date: 4/3/2007
City of Bellevue
Comprehensive Land Use Plan
Map Location
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Comprehensive Plan Land Use Plan

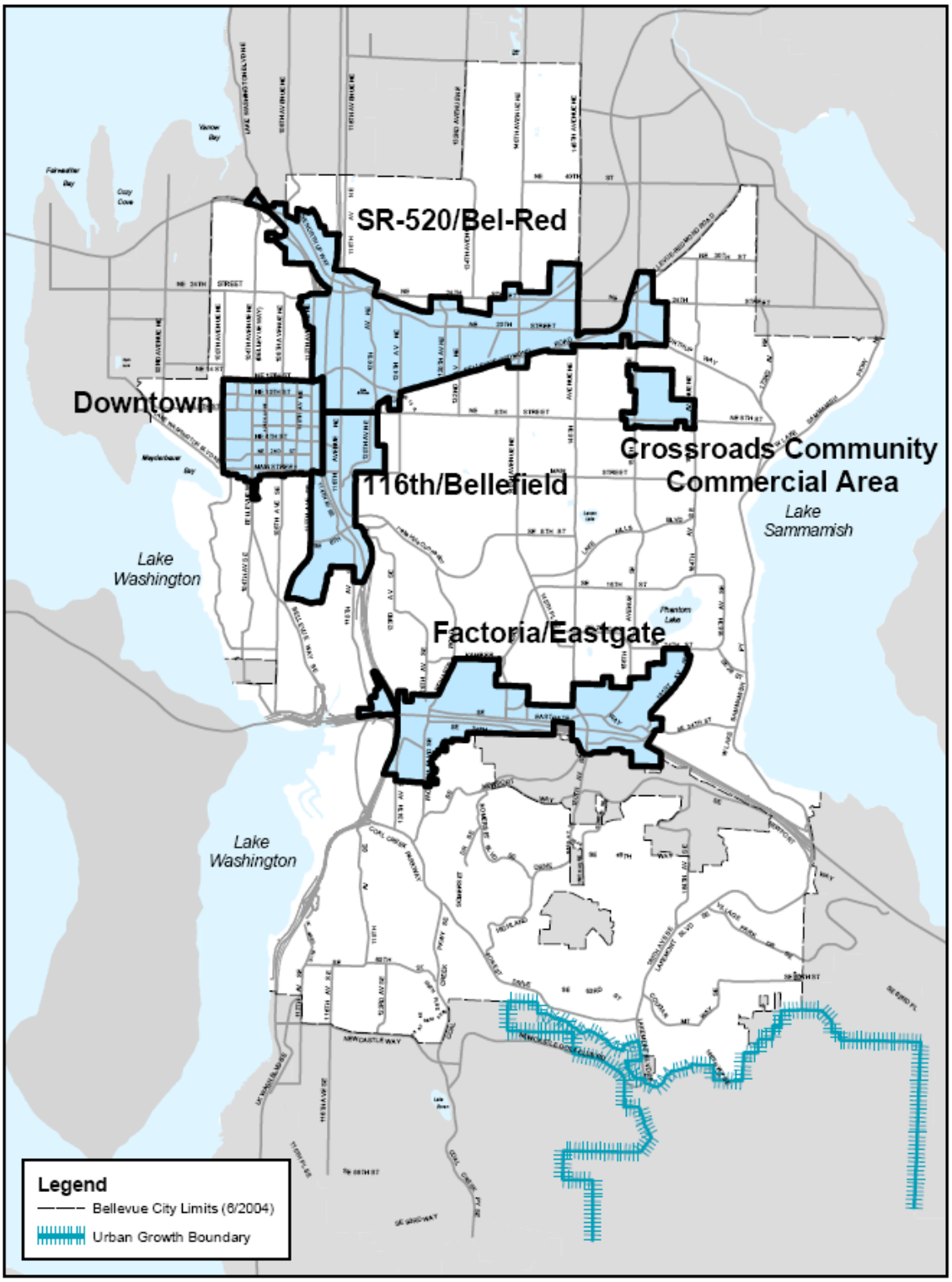

FIGURE LU.1

Major Employment Centers

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APPENDIX B

DISCUSSION DRAFT
NON-MOTORIZED PRIORITIZATION FRAMEWORK

Category	Indicator	Weight	Indicator Score	Rating Value
Corridor Conditions	Collisions (average annual ped/vehicle collisions)	15	0-0.1	10
			0.2-0.3	20
			0.4-0.5	40
			0.6-0.7	60
			0.8-0.9	80
			1.0+	100
	Roadway Arterial Classification Proximity (ft)	10	Collector	10
			Minor	50
			Major	100
	System Linkage	15	Isolated project - no connection to existing sidewalks	10
			Connects to existing sidewalk on one end	50
			Connects to existing sidewalk on both ends	100
	Bus Stop Level Ridership (1/4 Mile Proximity)	10	25+ boardings	100
			10 - 24 boardings	50
			<10 boardings	20
Social Justice	Vehicle Ownership (%)	5	0-10	100
			11-20	80
			21-30	60
			31-40	40
			41-50	20
			51-60	10
			60+	0
	Below Poverty Level (%)	5	0-5	0
			6-10	10
			11-15	20
			16-20	40
			21-25	60
			26-30	80
			30+	100
	Under 18, 65 or over (%)	5	0-5	0
			6-10	10
			11-15	20
			16-20	40
			21-25	60
			26-30	80
			30+	100

Category	Indicator	Weight	Indicator Score	Rating Value
Destination Network	Park Proximity (ft.)	5	0 - 660	100
			661 - 1320	80
			1321 -1980	60
			1980 - 2640	40
			2641 -3960	20
			3961 - 5280	10
			5280+	0
	School Proximity (ft.)	5	0 - 660	100
			661 - 1320	80
			1321 -1980	60
			1980 - 2640	40
			2641 -3960	20
			3961 - 5280	10
			5280+	0
	Community Center/Social Service/Library Proximity (ft.)	5	0 - 660	100
			661 - 1320	80
			1321 -1980	60
			1980 - 2640	40
			2641 -3960	20
			3961 - 5280	10
			5280+	0
	Retail Proximity (ft.)	5	0 - 660	100
			661 - 1320	80
			1321 -1980	60
			1980 - 2640	40
			2641 -3960	20
			3961 - 5280	10
			5280+	0
	Major Employment Center (Source: Comprehensive Plan)	5	In Center	100
			Not in Center	0
	Housing Density (Source: Comprehensive Land Use Plan)	10	Single Family Low Density - up to 1.8 units/acre	0
			Single Family Medium Density - up to 3.5 units/acre	10
			Single Family High Density - up to 5 units/acre	20

			Single Family Urban Residential - up to 7.5 units/acre	40
			Multi Family Low Density - up to 10 units/acre	60
			Multi Family Medium Density - up to 20 units/acre	80
			Multi Family High Density - up to 30 units/acre	100