

**DATE:** May 2, 2012  
**TO:** Bellevue Transportation Commission  
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**SUBJECT:** Downtown Transportation Plan Update

### INTRODUCTION

The update to the Downtown Transportation Plan will address mobility issues and challenges and support Downtown growth looking out to 2030.

On May, 2012, staff will review 2030 travel demand modeling results and project concept ideas for integrating bicyclists onto the NE 6<sup>th</sup> Street “Pedestrian Corridor”.

No action is requested of the Commission at this meeting.

### DOWNTOWN BELLEVUE TRAVEL DEMAND MODELING

The City of Bellevue Transportation Modeling and Forecasting Group develops travel demand model platforms to provide travel demand forecasts for the cities of Bellevue, Kirkland and Redmond (thus the BKR Model). This collaborative effort provides these cities with a credible source of travel demand forecasts. A unique Traffic Analysis Zone (TAZ) structure, as shown in Figures 1 and 2, is established for the BKR Model. This TAZ structure is increasingly more detailed in urban areas – often down to the block size as in Downtown Bellevue. This allows for a more precise determination of travel behavior in dense, urban areas.

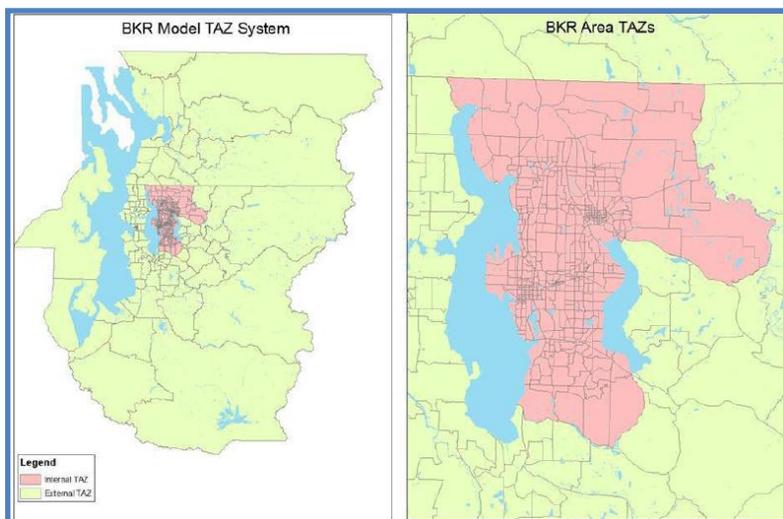


Figure 1. BKR Traffic Analysis Zone (TAZ) Structure

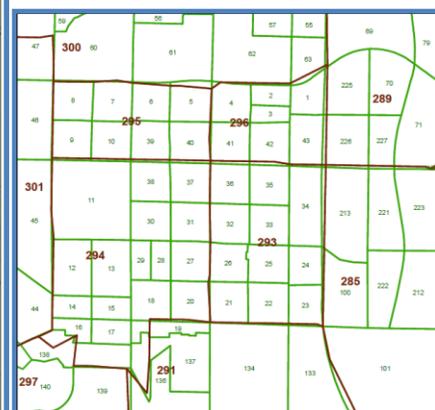


Figure 2. Downtown Bellevue TAZs

A 2010 Base Year modeling platform was established as the base for the BKR forecasting models used to analyze the travel demand in Downtown Bellevue. Using the most current data, forecasting models were built to project a 2030 forecast year travel demand for Downtown Bellevue. The 2010 Base Year model reflects current land use and the existing transportation network. For the 2030 forecast year, both land use and the “reasonable foreseeable” transportation network are projected.

The number of employees and residents in Downtown Bellevue are both expected to increase significantly during the time frame for this analysis - 2010 to 2030. Table 1 shows the current and projected land uses that are the key factors in the travel demand forecast.

**Table 1**

	<b>2010</b>	<b>2030</b>	<b>Growth</b>
<b>Employment</b>	42,525	70,300	+27,775/65%
<b>Population</b>	6,858	19,000	+12,142/177%

**Travel Demand 2010 - 2030**

Table 2 provides a snapshot of the current number of person trips by type, and the expected growth of person trips in Downtown Bellevue.

**Table 2**

	<b>2010</b>	<b>2030</b>	<b>Growth</b>
Home-based work person trips	57,298	106,751	49,453/86%
Home based other person trips	185,201	340,498	155,297/84%
Non-home based person trips	147,645	243,298	95,653/65%
<b>TOTAL</b>	<b>390,144</b>	<b>690,547</b>	<b>300,403/77%</b>

Figures 3-7 portray in pie-chart format, the changes in daily person trips in Downtown Bellevue, categorized by the type of trip.

On May 10, staff and consultants will more fully describe the 2030 transportation situation in Downtown Bellevue, and discuss implications for the Downtown Transportation Plan Update.

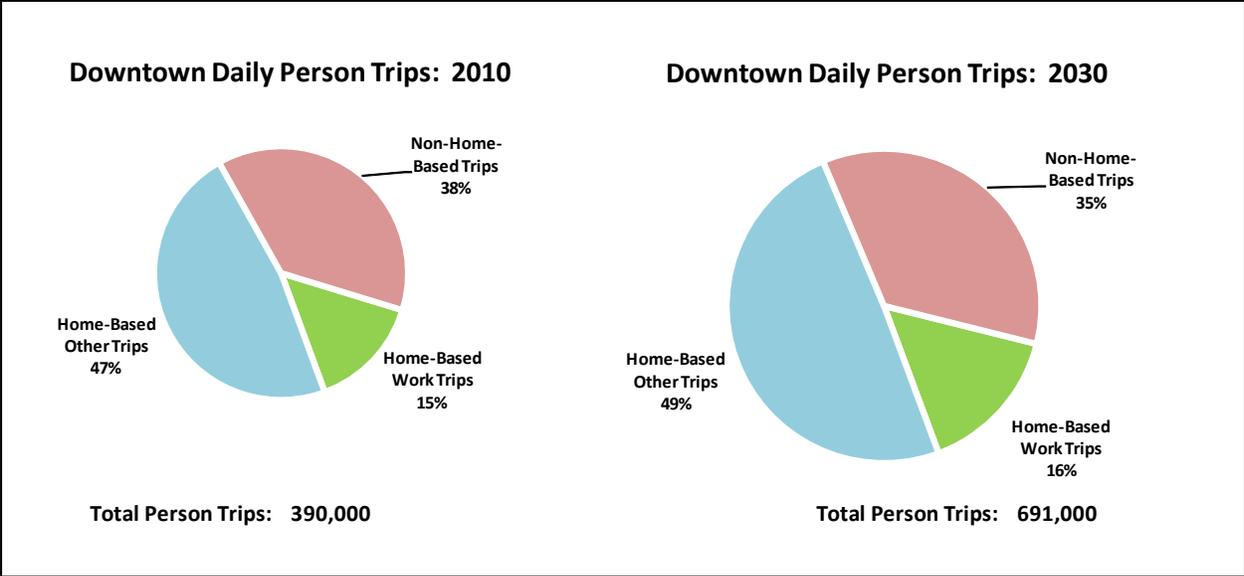


Figure 3. Total Daily Person Trips by Purpose

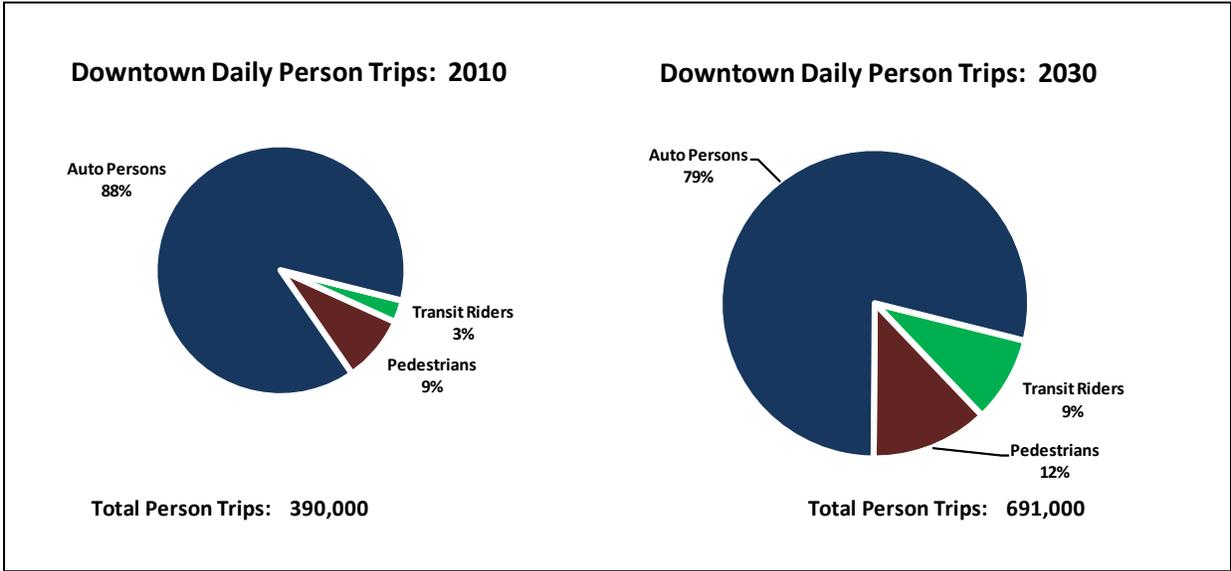


Figure 4. Total Daily Person Trips by Mode

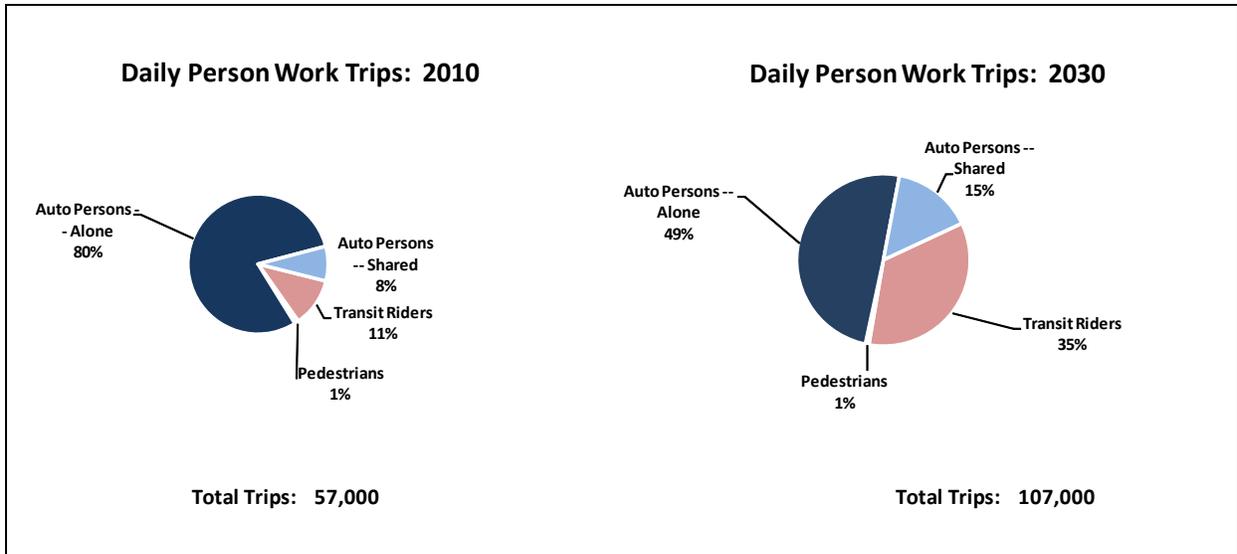


Figure 5. Total Home-Based Work Person Trips by Mode

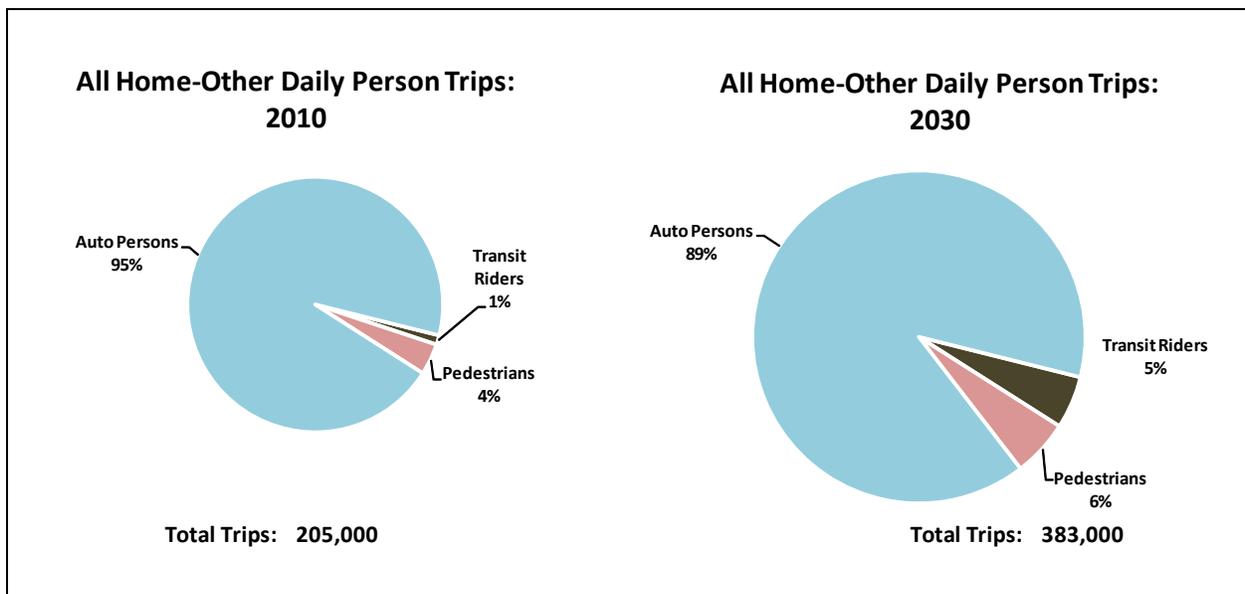


Figure 6. Total Home-Based Other Person Trips by Mode

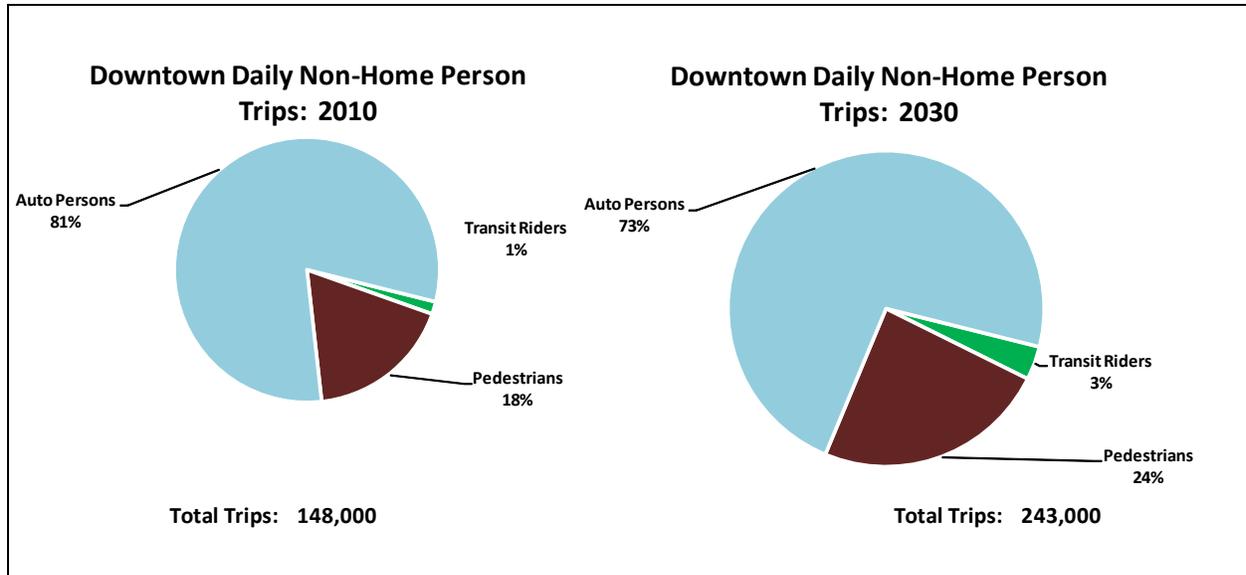


Figure 7. Total Non-Home Based Person Trips by Mode

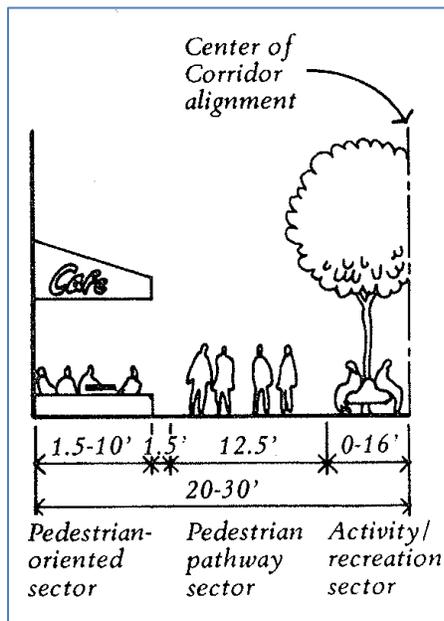
Table 3. Summary of All Person Trips by Mode

Downtown Bellevue Trip Patterns Downtown Bellevue Analysis – All Trips							
	Total						
	2010		2030		Change		
Mode	Trips	Percent	Trips	Percent	Absolute	Diff in %	Growth
Transit Riders	11,211	3%	62,042	9%	50,831	6%	453%
Pedestrians	33,590	9%	84,571	12%	50,981	4%	152%
Auto Persons	345,342	89%	543,933	79%	198,591	-10%	58%
<b>Total</b>	<b>390,144</b>		<b>690,547</b>		<b>300,403</b>		<b>77%</b>
<b>Trips by Purpose</b>							
	Total						
	2010		2030		Change		
Mode	Trips	Percent	Trips	Percent	Absolute	Diff in %	Growth
<b>Home-Based Work Trips</b>							
Transit Riders	6,504	11%	36,982	35%	30,478	23%	469%
Pedestrians	533	1%	728	1%	195	0%	37%
Auto Persons	50,261	88%	69,041	65%	18,780	-23%	37%
<b>Total</b>	<b>57,298</b>		<b>106,751</b>		<b>49,453</b>		<b>86%</b>
<b>Home-Based Other Trips</b>							
Transit Riders	2,450	1%	16,675	5%	14,226	4%	581%
Pedestrians	6,754	4%	25,578	8%	18,824	4%	279%
Auto Persons	175,998	95%	298,245	88%	122,247	-7%	69%
<b>Total</b>	<b>185,201</b>		<b>340,498</b>		<b>155,297</b>		<b>84%</b>
<b>Non-Home-Based Trips</b>							
Transit Riders	2,258	2%	8,385	3%	6,127	2%	271%
Pedestrians	26,303	18%	58,265	24%	31,962	6%	122%
Auto Persons	119,084	81%	176,648	73%	57,564	-8%	48%
<b>Total</b>	<b>147,645</b>		<b>243,298</b>		<b>95,653</b>		<b>65%</b>

## NE 6<sup>TH</sup> STREET “PEDESTRIAN CORRIDOR”

### History

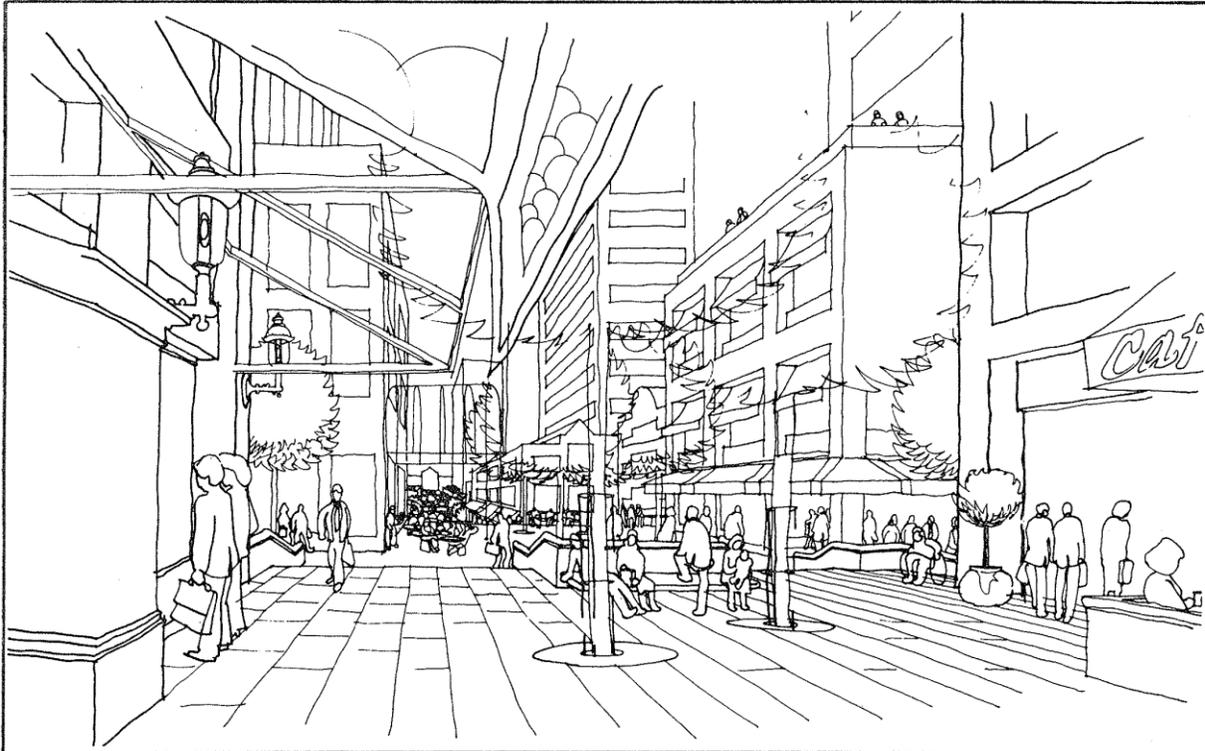
In 1981, Council adopted a CBD (Downtown) Land Use Code that included significant changes to the intensity of development that could be built, and also addressed “quality of life” issues, recognizing that a high quality pedestrian environment was an important component of a vibrant downtown. Amendments to the Land Use Code for the CBD included the concept of the “Pedestrian Corridor”—a 60-foot wide corridor along the alignment of NE 6<sup>th</sup> Street between Bellevue Way and 108<sup>th</sup> Avenue NE, and wrapping around the Transit Center. Design guidelines adopted later that year provide concepts and illustrations to assist developers of properties along the Corridor to incorporate the functional and aesthetic intent.



Pedestrian amenities are described in the design guidelines “to ensure that the corridor emphasizes pedestrian use.” Features such as seating, lighting, wayfinding, landscaping, etc. can accomplish the intent. The guidelines provide a template for creation of the corridor one-half at a time, as development occurs on one side or the other, as shown in Figure 8.

**Figure 8. Building the Pedestrian Corridor by Halves**

When one walks along the Pedestrian Corridor today, one observes and experiences the finished portions that have been installed by adjacent development, and anticipates the completion of the corridor as new development occurs. Shown in Figure 9 below is an illustration of the design concept for the corridor, as envisioned in 1981.



**Figure 9. Illustrative Design Concept for the Pedestrian Corridor**

Beginning with the Downtown Implementation Plan (DIP) work in the early 2000s, the concept of integrating bicycles to the Pedestrian Corridor began to materialize. This was in recognition of the fact that bicyclists had been using the corridor for years as part of a commute, for recreation, or to deliver parcels to nearby businesses, and spurred by two factors: many more people were living Downtown and using bicycles to get around town, and bicycle commuting in association with the Transit Center was becoming more feasible and popular. Further, the parallel streets, NE 4<sup>th</sup> Street and NE 8<sup>th</sup> Street were not seen as being bicycle-friendly streets. On maps included in the final DIP report, bicyclists were officially introduced to the NE 6<sup>th</sup> Street Pedestrian Corridor. No design guidance was provided within that document to describe how to improve the corridor to better accommodate bicyclists.

#### Pedestrian Corridor “Blocks”

Revisions to the design guidelines were initiated in 1998 to allow for the integration of motorized traffic in the block between Bellevue Way and 106<sup>th</sup> Avenue NE. That action also created the concept of integrating distinct character to the other blocks along the Corridor. In the revised guidelines...“the Corridor as a whole is seen as a unit, (and) each block is envisioned to have its own distinguishable and unique character.” This concept is illustrated in Figures 10 and 11. The “Street as Plaza” block between Bellevue Way and 106<sup>th</sup> Avenue NE is to provide the pedestrian-friendly character of an urban plaza while allowing for slow-speed, low-volume vehicular traffic. Along the “Garden Hillclimb, vehicle travel is not allowed and a terraced lushly landscaped corridor is envisioned, perhaps with more intimate garden rooms appropriate for a coffee break or lunch. Transit Central provides for both transit connections and through



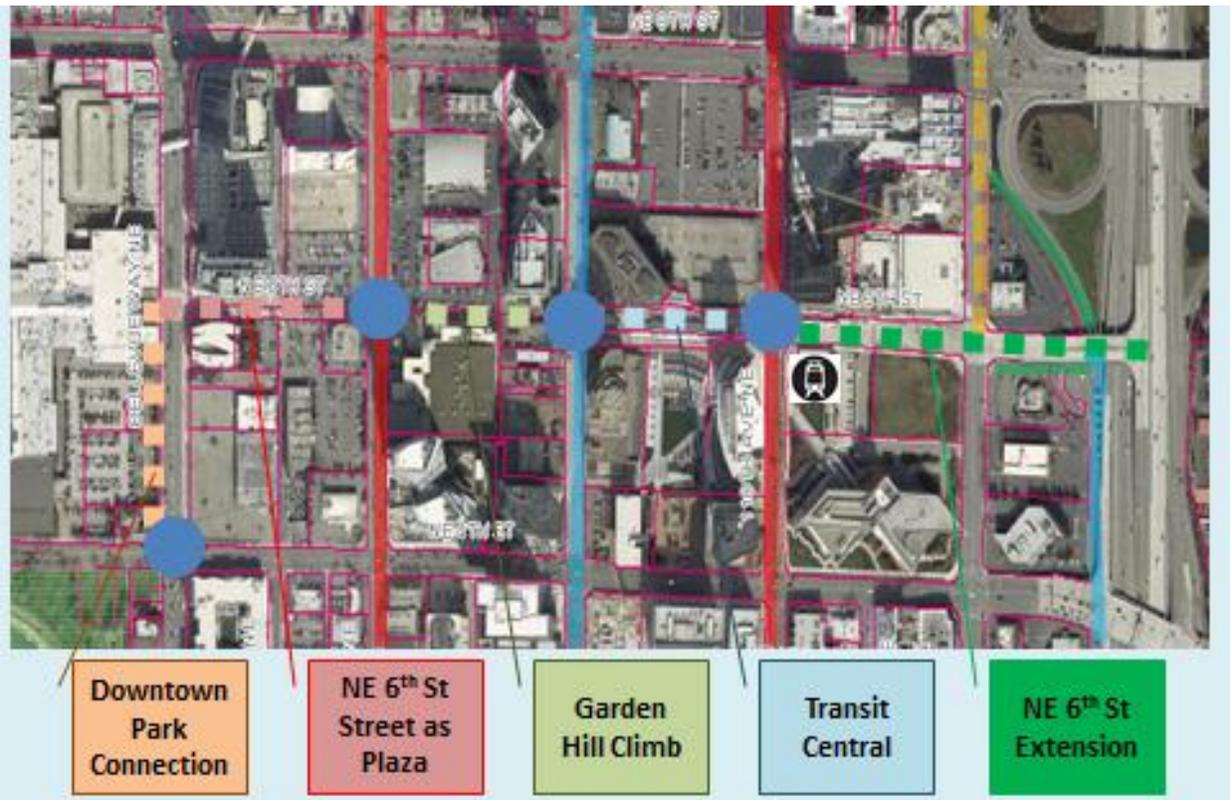


Figure 12. NE 6<sup>th</sup> Street/Bellevue Way Design Concept Segments

### NEXT STEPS

At the next meeting on June 14, 2012 we will discuss pedestrian mobility project ideas.