



# 1 SUMMARY

## 1.1 PURPOSE OF PROPOSED ACTION

### OVERVIEW

The Wilburton Commercial Area (Study Area) is located between two high growth centers in Bellevue - Downtown and BelRed. The City of Bellevue has identified the Wilburton Commercial Area as a future urban neighborhood with new opportunities for businesses, entertainment, and housing. New improvements to transit, pedestrian, and cyclist connectivity have provided a catalyst for change. East Link light rail will offer high capacity transit connectivity to the region by 2023; the Eastside Rail Corridor (ERC) will create a regional non-motorized connection for pedestrians and cyclists; and the City-led initiative of the Grand Connection will create opportunities to reconnect Downtown and the Wilburton Commercial Area for cyclists and pedestrians. Other assets in the Study Area include the existing Medical Institution District, located in the northwest corner of the Study Area, and a new elementary school that will be just to the southeast of the Study Area.

In addition to transportation connections and the Medical Institution District, the Study Area has a unique context within the City of Bellevue. Directly to the west is the high-growth center of Downtown Bellevue, which serves as the Eastside's primary urban and employment center. To the north is the emerging BelRed neighborhood which includes the Spring District adjacent to



the Spring District/120th East Link Station. The Spring District will include the Global Innovation Exchange, a partnership between Microsoft, University of Washington, and Tsinghua University that will serve as a high tech and innovative education institution. Additionally, REI is relocating their corporate headquarters to the Spring District.



The City is now planning for the future of Wilburton to create a new urban neighborhood with a unique design aesthetic, a mix of many uses, and new transportation modes and connections described above. Based on a vision developed with the guidance of a Citizen Advisory Committee (CAC), amendments to the City's Comprehensive Plan, Land Use Code, and Zoning Map will be made for City Council consideration. To help the CAC and other City decision makers consider the environmental implications of alternative land use and transportation options, the City initiated this Environmental Impact Statement (EIS).



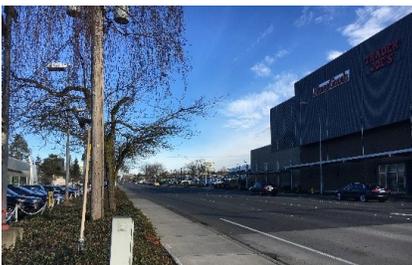
## STUDY AREA AND RELATIONSHIP TO ABUTTING NEIGHBORHOODS

The Study Area boundary overlaps two subareas, BelRed and Wilburton/NE 8th. To the west is Interstate 405 (I-405) and Downtown Bellevue.

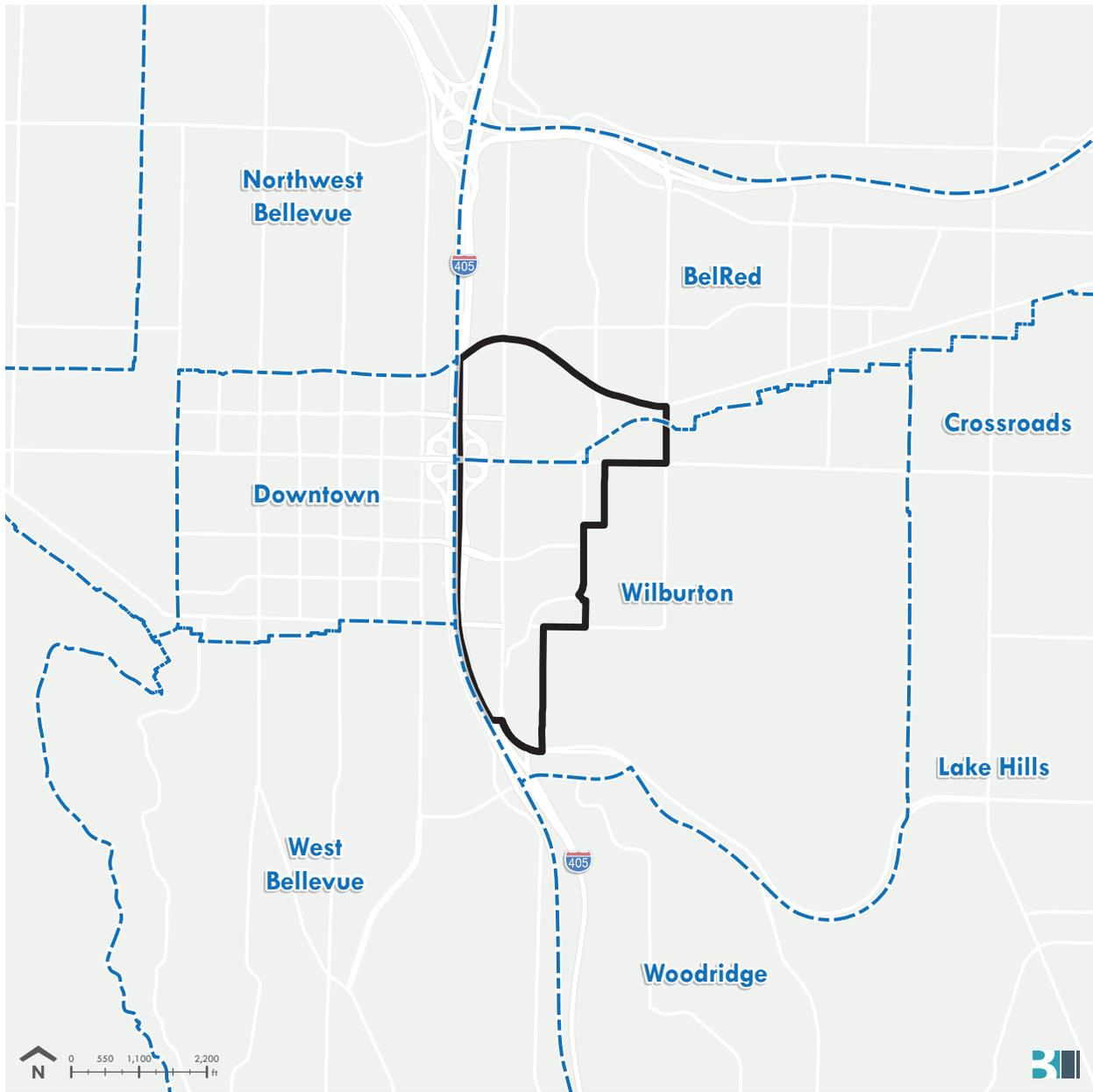


Directly north of the Study Area is BelRed and the Spring District, and to the east is the predominately single-family neighborhood of Wilburton Hill. See Exhibit 1-1.

More specifically, the Study Area is bound by NE 12th Street to the north, I-405 to the west, SE 5th Street to the south, 120th Avenue NE to the east, and a smaller area bound by NE 8th Street and 124th Avenue NE to the east. See Exhibit 1-2.



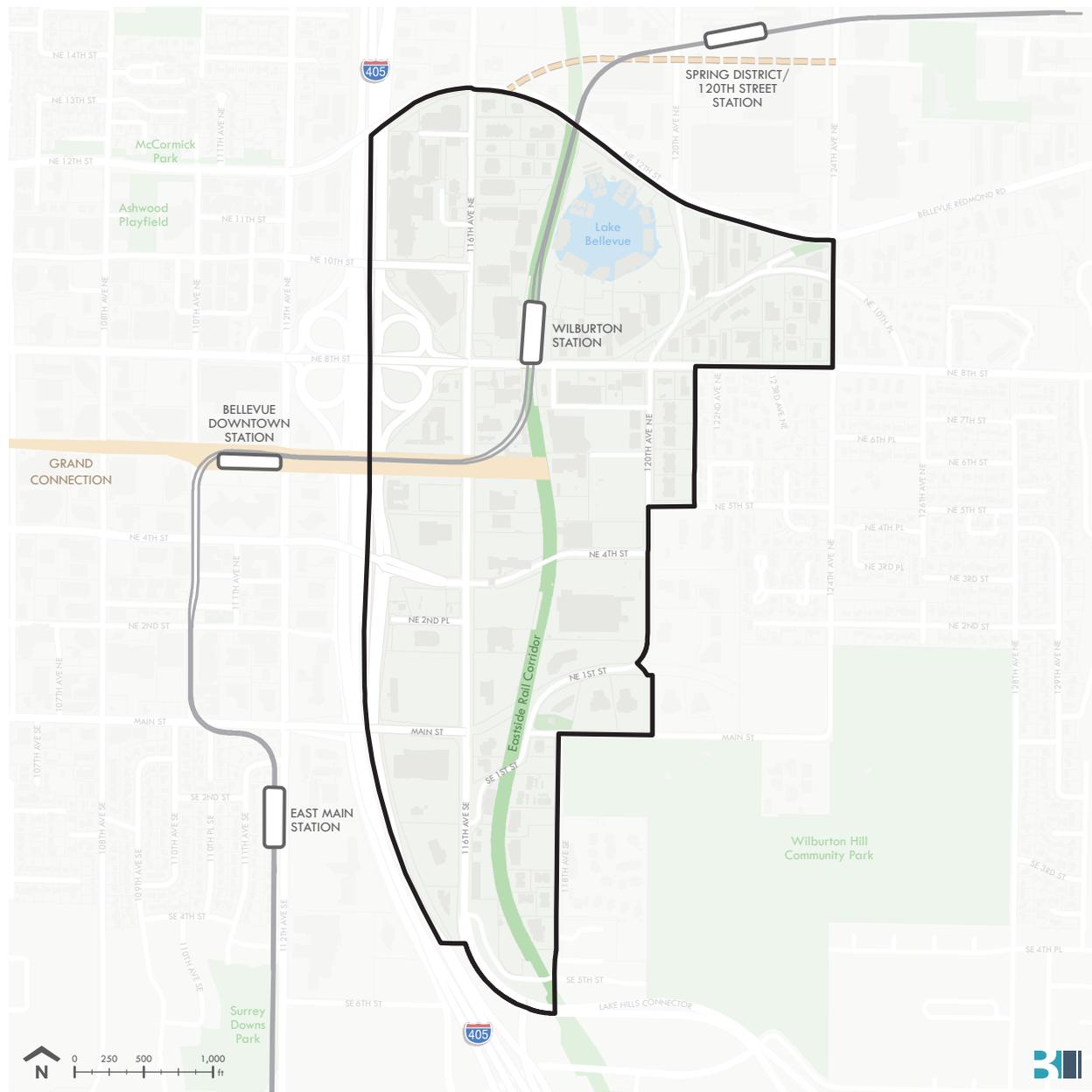
In 2023, the Study Area will have high capacity transit access with the Wilburton light rail station located north of NE 8th Street and east of the Eastside Rail Corridor. Three additional stations will include the entire Study Area within a ½ mile walkshed of light rail, including the Downtown, Spring District/120th, and East Main light rail stations. Access to I-405 is provided via the interchange at NE 8th Street. King County is leading an initiative to transform the former BNSF rail line into a regional trail (ERC) to form a north-south spine within the Study Area with connections to Woodinville in the north, and Renton to the south.



**Exhibit 1-1** Wilburton Commercial Area Boundary and Neighborhood Planning Areas

Source: City of Bellevue, BERK, 2017

-  Wilburton Study Area Boundary
-  Neighborhood Areas



**Exhibit 1-2** Wilburton Commercial Area Study Area

Source: City of Bellevue, BERK, 2017

-  Wilburton Study Area Boundary
-  Grand Connection
-  East Link Light Rail Stations
-  East Link Light Rail Route
-  Spring Blvd—Under Construction
-  Parks & Open Space
-  Buildings



## RELATIONSHIP TO OTHER PLANNING INITIATIVES

### BelRed Planning and Zoning

The Study Area boundaries extend north of NE 8th and encompass a section of the BelRed Subarea that was the subject of its own planning and zoning changes in 2009. For the most part, the portion of BelRed in the Study Area would remain consistent with the 2009 effort (e.g. Medical Institution District); however, a small portion of BelRed is being reconsidered for heights and uses in this EIS given this area's relationship to Wilburton and the new light rail station.

### Grand Connection

The Grand Connection is planned as a signature, urban, connection between Meydenbauer Bay at Lake Washington and the Eastside Rail Corridor in the Wilburton Commercial Area that will focus on improvements to the non-motorized network. These improvements include elements of placemaking and public space, connectivity and mobility, art and culture, and overall experiential quality of the urban environment from the perspective of a pedestrian or cyclist.

The visioning process for the Grand Connection was separated into two sequences of work. The first sequence focused on the existing infrastructure of the route between Meydenbauer Bay Park and west of I-405. The second sequence of work focused on the crossing of I-405 and its relationship to the Eastside Rail Corridor and Wilburton Commercial Area. This EIS only evaluates the segment that crosses I-405 and interfaces with the ERC and Wilburton Commercial Area.

The Grand Connection options considered for the I-405 and Wilburton Commercial Area interface range from a sculptural bridge that capitalizes on existing infrastructure assets, a signature linear bridge, and the creation of a public space with a partial lid over I-405 between NE 6th Street and NE 4th Street. These options are evaluated in this EIS with respect to their compatibility with each alternative and for their contribution to cumulative beneficial and adverse environmental impacts.



## Eastside Rail Corridor

The Eastside Rail Corridor Trail will be 16.7 miles of regional trail connecting Renton, Bellevue, Kirkland, Woodinville and Redmond. It is part of a larger 42-mile Eastside Rail Corridor (ERC) stretching from King to Snohomish County with a collaborative vision to develop options for non-motorized use, transit, and utilities. The trail will link commercial districts, neighborhoods, employment, and transit along with major individual trails crossing the region.

The Wilburton segment of the ERC Trail begins at I-90 and extends to 108th Ave NE in Kirkland. Multiple highway crossings, a new bridge across I-405 (outside of the Study Area), and integration with the planned East Link light rail line add complexity to the project. South of the Study Area, the ERC will have a connection to the Mountains to Sound Greenway/I-90 Trail that extends into Seattle and a scenic crossing at the historic Wilburton Trestle. The ERC will provide accessible bicycle and pedestrian travel through the Study Area with connections to other modes along the route. The ERC is being planned by King County and is assumed to be implemented under all alternatives.

## 1.2 ENVIRONMENTAL REVIEW AND PUBLIC INVOLVEMENT PROCESS

The Wilburton Commercial Area Land Use & Transportation Project planning process is informed by environmental considerations using "SEPA/GMA Integration" provisions of the State Environmental Policy Act (WAC 197-11-210) to ensure that environmental analyses under SEPA are considered concurrently with the subarea planning process.

To help inform the range of issues to be considered in the EIS, the City held a scoping meeting and offered a 21-day written comment period in April 2017. At the scoping meeting, interactive exercises with the Wilburton Commercial Area Citizen Advisory Committee and property owners were conducted, highlighting options



for building form, open space, transportation, and the natural environment. One comment letter requested fish passage and stormwater retrofitting be addressed.

Consistent with the State Environmental Policy Act (SEPA), this Draft EIS provides a qualitative and quantitative analysis of environmental impacts associated with the Wilburton Commercial Area Land Use & Transportation Project proposal and alternatives. An EIS for a non-project proposal such as the Wilburton Commercial Area policy, plan, and code amendments do not require site-specific analyses; instead, the EIS discusses impacts and alternatives appropriate to the scope of the non-project proposal and to the level of planning for the proposal (WAC 197-11-442). Each alternative is evaluated in terms of beneficial and adverse effects associated with geology and soils, water resources, air quality/greenhouse gas, ecosystems, land use and economic activity, neighborhoods and population, aesthetics, transportation, noise, energy, environmental health, and public services and utilities.

With the guidance of a Citizen Advisory Committee (CAC), and the EIS results, a preferred alternative will be developed, and will form the basis for amendments to the City's Comprehensive Plan, Land Use Code, and Zoning Map for City Council consideration.

The segment of the Grand Connection that will cross I-405 is also included as part of this EIS. The I-405 crossing will be subject of future evaluation and analysis, and the scope of the interstate crossing is to evaluate each of the three options as they relate to elements of the Wilburton Commercial Area alternatives such as land use, transportation, public space, cost, and compatibility with public space.

A Final EIS will include responses to public comments received during the 45-day comment period that followed issuance of this Draft EIS. The Final EIS will also evaluate the preferred alternative. See the Fact Sheet for the methods to submit comments.

See Chapter 2, Section 2.5, for additional description of the SEPA process.



## 1.3 PROPOSED OBJECTIVES AND ALTERNATIVES

### OBJECTIVES

In accordance with SEPA, this section states the proposal's objectives, specifying the purpose and need to which the proposal is responding. The Citizen Advisory Committee has identified the following vision for Wilburton:

*“The Wilburton Commercial Area is Bellevue’s next urban mixed-use community that enhances livability, promotes healthy living, supports economic vitality, and serves the needs of a diverse population. As Bellevue’s cultural and innovative hub, it serves as a regional and international destination that connects people and fosters community by leveraging its existing assets to define a unique sense of place and character.”*

Council Principles, listed below and fully stated in Chapter 2, provide consistent direction over the course of the Wilburton Commercial Area Land Use and Transportation Project.

1. Grand Vision
2. Special Niche
3. Grand Connection
4. Neighborhood Identity
5. Emerging Opportunities
6. Integrated Station Area Planning
7. Community Benefit
8. Affordable Housing Opportunities
9. Impact Mitigation
10. Economic Vitality
11. Timing
12. Public Engagement



## ALTERNATIVES

The EIS provides information and analysis comparing the alternative land use and transportation options, as well as Grand Connection and public space options, and their ability to meet objectives and principles as well as their potential effects on the natural and built environment. Key aspects of the alternatives are highlighted below, and detailed in Chapter 2 of this EIS.

**No Action Alternative.** The No Action Alternative is required by the State Environmental Policy Act (SEPA) and assumes the current Comprehensive Plan, Land Use Code, and Zoning Map are retained. The Wilburton Commercial Area could grow from about 3.6 million square feet of development to 4.2 million square feet of development. Most of the growth could be in office and retail space with small amounts of hotel and residential use. This includes portions, north of NE 8th Street and east of 116th Avenue NE, that were part of the BelRed planning initiative and were rezoned under that process. Existing zoning allows for building heights in the range of 35 to 70 feet, with a small portion near the Medical Institution District that allows heights up to 200 feet. There would be no new design guidelines or development standards for the Study Area. City-planned transportation investments in the current Comprehensive Plan Transportation Element could be made. However, the Grand Connection would be assumed to not be developed under the No Action Alternative. As a King County-led initiative, the Eastside Rail Corridor would be completed under the No Action Alternative.

**Alternative 1.** Under Alternative 1 the Wilburton Commercial Area Land Use & Transportation Project could encourage development of a more intense urban form and promote additional multimodal connections. New Land Use Code standards could increase allowable building heights and floor area ratios while providing custom design standards for buildings to create compatible urban forms. There could be a greater concentration of development and mix of uses, with an emphasis on adding housing, office/medical, retail, and hotel space. The amount of potential development could grow to as much as 13.1 million square feet of development, 9.4 million net new development above existing space, or 8.8 million square feet more than the No Action Alternative. The greatest intensity of land use could occur south of the new Wilburton light rail station, primarily between NE 8th Street to the north, NE 4th



Street to the south, I-405 to the west, and the Eastside Rail Corridor (ERC) to the east. The ERC could connect to the eastern terminus of the Grand Connection and could improve pedestrian and bicycle connections. Additional street connections could allow for smaller blocks different development patterns and opportunities. The range of building heights could be 35 feet to 250 feet, with a range between 120 feet and 160 feet being the most predominant building form.

**Alternative 2.** Alternative 2 is similar to Alternative 1 except that potential growth could be about one-third higher, up to 16.3 million square feet of development. There would be an estimated 12.7 million square feet of net new development above existing building space or 12.1 million square feet more than the No Action Alternative. The urban form could be more intense across the Study Area. Building heights between NE 8th Street, NE 4th Street, and west of 116th Avenue NE could reach 300 to 450 feet in height, with ranges between 200 and 250 feet, and 120 and 160 feet being the most predominant. Additional street connections could allow for smaller blocks and a different development pattern and opportunities from the No Action Alternative.

### **Land Use: Building Form, Height, and Space**

As described above, each alternative could vary building form, height, and volume, with the No Action Alternative the least change and mix of suburban and moderate mixed-use formats, and Alternatives 1 and 2 increasing urban densities and intensities reflecting planned transit and non-motorized investments.



**Exhibit 1-3** Building Form, Height, and Volume



**No Action Alternative: Future Baseline**

*Building Form About 4.2 Million Square Feet  
(0.6 Million Square Feet above Existing 3.6 Million Square Feet)*

The No Action Alternative is required by SEPA, meaning future development could occur under current plans and codes. Assumed growth could be about 626,000 square feet of building space in addition to the 3.6 million square feet of development that exists in 2017.



**Alternative 1: Medium**

*13.1 Million Square Feet 2035 Space  
About 16.3 Million Square Feet Ultimate Space  
About 8.8 million square feet more than the No Action Alternative by 2035 and about 12.1 million square feet more than the No Action Alternative at buildout*

Alternative 1 reflects CAC discussions about creating a cohesive urban form that capitalizes on regional investment in the light rail station and the Eastside Rail Corridor, and attracting a mix of land uses including office, retail and residential while respecting the lower intensity development that surrounds the Study Area.



**Alternative 2: High**

*16.3 Million Square Feet 2035 Space  
About 22.8 Million Square Feet Ultimate Space  
About 12.1 million square feet more than the No Action Alternative by 2035 and about 18.6 million square feet more than the No Action Alternative at buildout*

Alternative 2 reflects the input of several property owner and stakeholders, as well as CAC discussions about creating a dense urban neighborhood along the Eastside Rail Corridor and near the light rail station, and greater intensity directly adjacent to the interstate.

Image Source: NBBJ, 2017



## Land Use: Growth Ranges

Growth ranges have been developed based on redevelopment potential, market study results, and preliminary transportation modeling results.

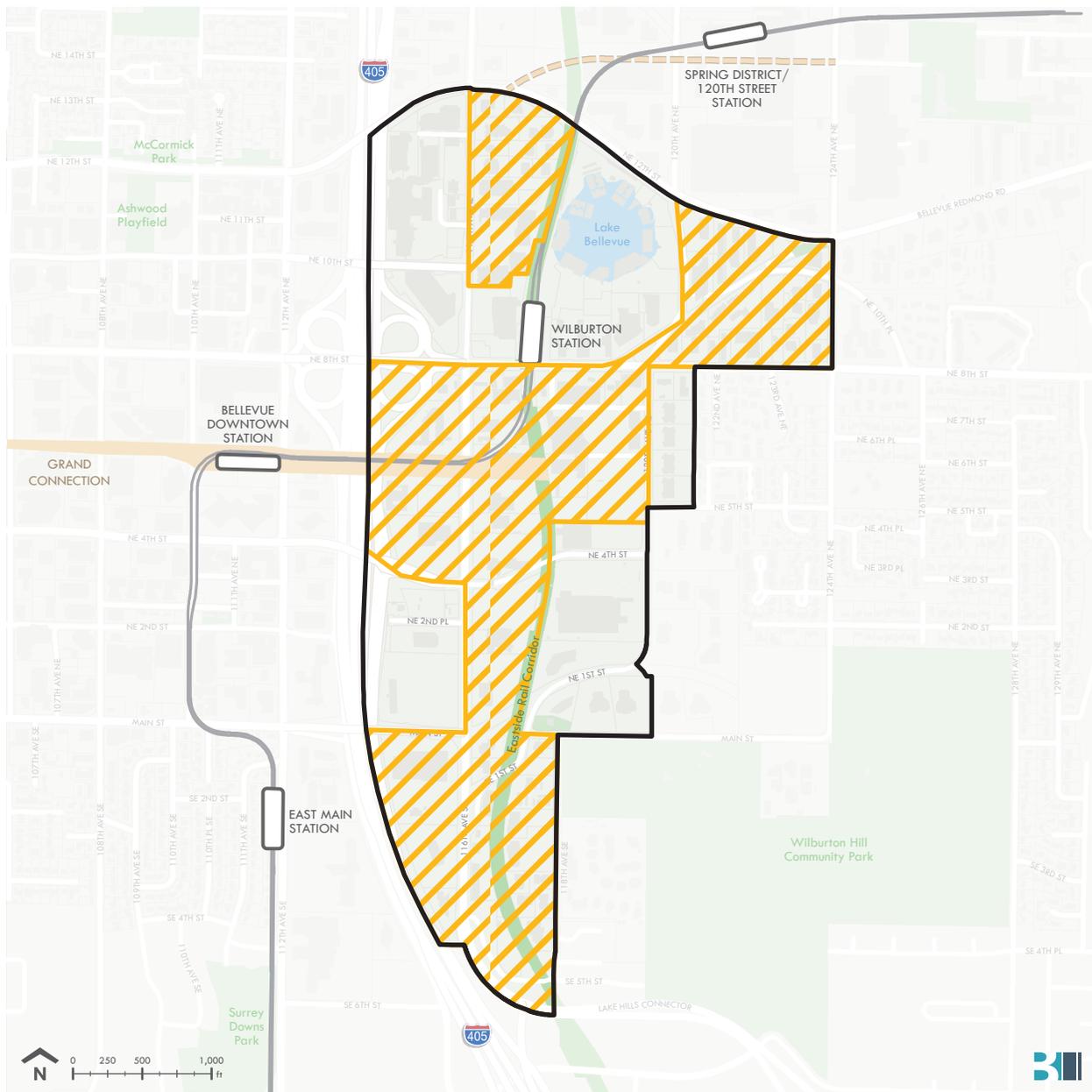
**Exhibit 1-4** Future Growth–Potential Total Building Space, in Square Feet

<b>BUILDING SPACE</b>	<b>CURRENT</b>	<b>NO ACTION ALTERNATIVE</b>	<b>ALTERNATIVE 1 Medium</b>	<b>ALTERNATIVE 2 High</b>
<b>Housing</b>	250,000	335,440	3,798,600	5,050,000
<b>Office</b>	980,000	1,350,299	4,787,400	6,130,000
<b>Retail/Commercial</b>	955,000	1,081,010	1,488,800	1,677,000
<b>Hotel</b>	250,000	292,904	970,900	1,225,000
<b>Medical</b>	1,140,000	1,140,000	1,953,300	2,240,000
<b>Industrial</b>	30,000	30,983	30,000	30,000
<b>Total Square Feet 2035</b>	<b>3,605,000</b>	<b>4,230,636</b>	<b>13,029,000</b>	<b>16,352,000</b>
<b>Ultimate Full Buildout Post 2035 Space</b>	–	4,230,636	16,352,000	22,800,500

*Note: Medical includes institutional and office space. Office includes commercial office space and minimal governmental space.*

*Source: Leland Consulting Group, BERK, 2017*

To determine the growth ranges through 2035, building space on potentially redevelopable properties was considered on several blocks shown in Exhibit 1-5.



**Exhibit 1-5** Potential 2035 Growth Focus Areas

Source: BERK, 2017

- Wilburton Study Area Boundary
- Parks & Open Space
- Buildings
- Potential 2035 Growth Focus
- East Link Light Rail Stations
- East Link Light Rail Route
- Spring Blvd-Under Construction



### Transportation

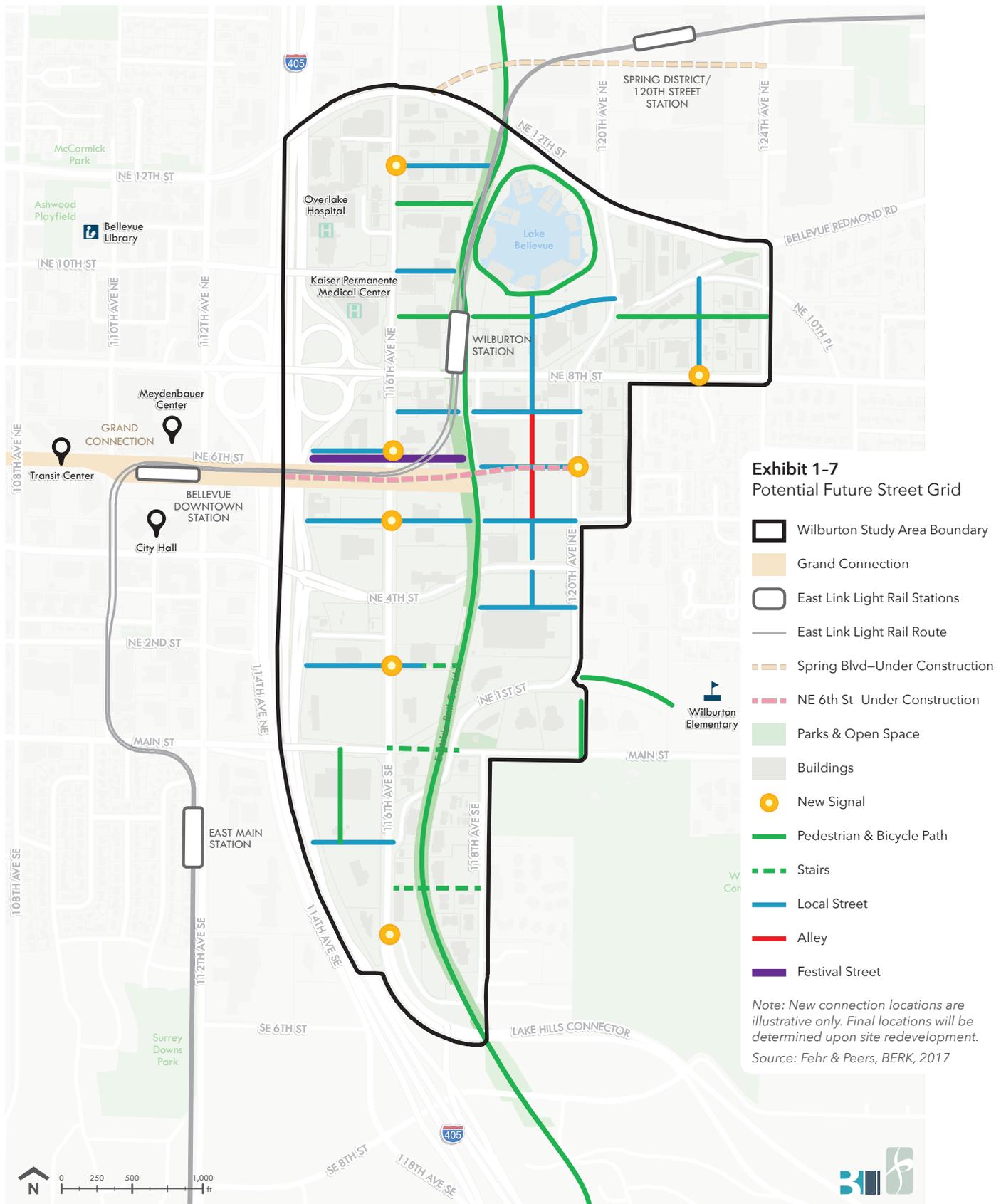
While much of the transportation network within the Study Area is committed—for example East Link light rail, the ERC, and most arterial cross-sections—there are some key decisions that could be influenced by the Wilburton Commercial Area Land Use & Transportation Project. Those decisions are the NE 6th Street extension, the cross-section of 116th Avenue NE, and the ERC crossings at NE 8th and NE 4th Streets. The way these improvements could be matched to alternatives is identified in the table below.

Exhibit 1-6 Transportation Network Assumptions

LOCATION	NO ACTION ALTERNATIVE	ALTERNATIVE 1	ALTERNATIVE 2
NE 6th St Extension	<ul style="list-style-type: none"> <li>To 120th</li> <li>To 116th</li> </ul>	<ul style="list-style-type: none"> <li>To 120th</li> </ul>	<ul style="list-style-type: none"> <li>To 120th</li> <li>To 116th</li> </ul>
NE 4th St/ERC	<ul style="list-style-type: none"> <li>At grade</li> </ul>	<ul style="list-style-type: none"> <li>At grade</li> </ul>	<ul style="list-style-type: none"> <li>At grade</li> </ul>
NE 8th St/ERC	<ul style="list-style-type: none"> <li>Overcrossing</li> </ul>	<ul style="list-style-type: none"> <li>Overcrossing</li> </ul>	<ul style="list-style-type: none"> <li>Overcrossing</li> <li>At grade crossing</li> </ul>
116th Ave NE	<ul style="list-style-type: none"> <li>No changes</li> </ul>	<ul style="list-style-type: none"> <li>5 lanes with buffered bike lanes</li> </ul>	<ul style="list-style-type: none"> <li>5 lanes with buffered bike lanes</li> </ul>
Throughout Study Area: New Street Grid	<ul style="list-style-type: none"> <li>No changes</li> </ul>	<ul style="list-style-type: none"> <li>See Exhibit 1-7</li> </ul>	<ul style="list-style-type: none"> <li>See Exhibit 1-7</li> </ul>

Source: Fehr & Peers, 2017

Within the Study Area the street grid could be broken down with more local streets and pedestrian and bicycle connections. Additionally, there could be unique environments with festival streets and alleys.





## Grand Connection

The Grand Connection is planned as a signature urban non-motorized connection between Lake Washington and the Wilburton Commercial Area.

“*The concept of the Grand Connection seeks to connect Bellevue’s waterfront, beginning at Meydenbauer Bay, and through its dynamic Downtown, connecting to the Wilburton Commercial Area across Interstate 405, and interfacing with the Eastside Rail Corridor.*”

This EIS evaluates three options for the portion of the Grand Connection for the crossing of I-405 and the landing in the Study Area. The options range from a sculptural bridge that capitalizes on existing infrastructure assets (Option A) and creates public space within the Study Area, a signature stand-alone bridge (Option B) with more modest amounts of public space in the Study Area, and the creation of a public space with a partial capping (lid) of I-405 between NE 6th Street and NE 4th Street (Option C). These options are evaluated in this EIS with respect to their compatibility with each alternative and for their contribution to cumulative beneficial and adverse environmental impacts. Ultimately the Grand Connection will be the subject of a separate evaluation and EIS process.

## Elements of Public Space

At the programmatic level, a detailed public space plan has not yet been formed. The conceptual elements considered by the Citizen Advisory Committee (CAC) and property owners during scoping included:

- Grand Connection Lid: A public space lid across I-405 to the west. (See Grand Connection Option C above.)
- Civic Center: A large public space in the Study Area.
- Neighborhood Green: Multiple smaller public spaces, including plaza spaces and neighborhood parks.
- ERC Linear Park: Expanding the ERC with nodes of activity along the linear park including a connection to the Grand Connection.
- Natural Network: Enhancing the natural systems by enhancing, exposing, and utilizing the natural systems such as the lake, wetland, and creek as amenities.



## 1.4 MAJOR ISSUES, SIGNIFICANT AREAS OF CONTROVERSY AND UNCERTAINTY, AND ISSUES TO BE RESOLVED

The major issues under review in this EIS include:

- The proposed building heights, redevelopment, and potential effects of growth on land use, transportation and neighborhoods;
- Potential for changes to views from public spaces, shade and shadow, and other aesthetic impacts due to increased building heights;
- Effect of redevelopment on housing supply and affordability;
- Effect of growth on overall mobility and multiple transportation modes;
- Addressing appropriate building design, streetscape treatments, and on- and off-site parks and recreation space to serve the new population and create a pedestrian oriented design suited to a more intensive mixed-use environment; and
- Providing sufficient public services and utilities to meet the needs of the growing neighborhood.

Issues to be resolved include:

- Preparation of policy and code amendments to address building heights, and custom development standards and design guidelines, together with legislative rezones that will achieve the CAC Vision and the City Council Guiding Principles for Wilburton Commercial Area and the Grand Connection.



## 1.5 SUMMARY OF ALTERNATIVE IMPACTS AND MITIGATION MEASURES

This section describes the results of the environmental evaluation of alternatives further detailed in Chapter 3. Where impacts are identified mitigation is provided in the form of: incorporated plan features (e.g. elements of the alternatives that self-mitigate such as design standards addressing height and bulk); regulations and commitments (e.g. critical areas regulations); and other proposed mitigation measures that the City may consider applying through policies, codes, or other strategies to address potential impacts. The potential residual impacts, if any, following mitigation are also described. The reader is encouraged to review this section to find areas of interest and to read the more detailed analysis in Chapter 3 to have the full context of the affected environment, impact analysis, detailed mitigation measures, and overall findings.



*Eastside Rail Corridor Alignment, Looking North from NE 4th Street, Winter 2017*

### GEOLOGY AND SOILS

#### How did we analyze Geology and Soils?

Experts in geology and soils reviewed information from professional studies and geologic and soils maps to address topography and geology, soils, and groundwater hazards. The EIS analysis studies the potential for the alternatives to impact or be affected by geologic hazards and soil characteristics, and to identify mitigation measures.

#### What outcomes or impacts did we identify?

While the alternatives would not accelerate or create geologic hazards; future development in any alternative would need to be designed to respond to potential hazards consistent with adopted building codes to reduce risk of damage or injury. All alternatives would allow development that would disturb soils, but site development would be subject to erosion control measures prescribed in the City's code.



## What is different between the alternatives?

Short-term impacts may occur during construction with the excavation of contaminated soils. The soils within the Study Area may be contaminated, and contaminated soils excavated during construction activities might require special handling, transport, storage, and off-site disposal. Alternatives 1 and 2 assume more planned growth and could increase the likelihood of encountering contaminated soils compared with the No Action Alternative.

Due to the least amount of planned growth under the No Action Alternative, there could be the least amount of soil disturbance of the studied alternatives.

Alternative 1 could create more excavated material to be hauled due to taller buildings that could require deeper foundations and potentially more underground parking. Excavated materials in the area are potentially contaminated which would require special handling, storage, transportation, and off-site hauling.

Alternative 2 could potentially create the greatest volume of excavated material to be hauled associated with the greater total building space. Similar issues regarding the contamination potential and moisture sensitive nature of the excavated materials (meaning difficult to compact if they are allowed to become wet) holds for Alternative 2.

The risk of damage or injury would be less in new buildings developed to international building code standards; new development under all alternatives will meet such standards and mitigate the potential for damage or injury. The No Action Alternative would have less persons exposed to seismic hazards but also fewer buildings constructed to the latest standards compared with Alternatives 1 and 2.

At areas where Tukwila muck is encountered, compressible soils might need to be excavated and replaced, or planned structures, embankments, and pathways might need to be supported on deep foundations.



## **What are some solutions or mitigation for the impacts?**

Geotechnical investigations will be conducted as part of the design phase for some of the new developments, especially for those with greater building heights.

Structures will be designed to resist seismic forces, as required by applicable codes, and location-specific mitigation for seismic liquefaction may also be required. For all alternatives, specific recommendations for liquefaction mitigation, subgrade preparation, roadway embankment, cut and fill, slope stability, foundation design, retaining structures, and dewatering measures would be prepared prior to construction.

## **With mitigation, what is the ultimate outcome?**

Development in the Study Area, as with most locations in Central Puget Sound, would expose population and structures to geologic hazards, and would disturb soils. These impacts can be mitigated to a less than significant level by designing development to the City's adopted construction codes and applying any site-specific conditions required by the City during permit review.

## **AIR QUALITY**

### **How did we analyze Air Quality?**

Air quality experts reviewed federal and state air quality standards and the potential emissions due to transportation sources based on estimates of vehicle miles traveled (VMT) derived from transportation modeling of projected land use patterns. Estimates of greenhouse gas (GHG) emissions were generated based on proposed land use and VMT employing a Washington Department of Ecology worksheet.

### **What outcomes or impacts did we identify?**

During construction, soil-disturbing activities, operations of heavy-duty equipment, commuting workers, and the laying of asphalt may generate emissions which would temporarily affect air quality. GHGs would be emitted from demolition and construction equipment, much of it diesel-powered.

Operational GHG emissions would occur from electricity usage and transportation.



## What is different between the alternatives?

VMT would increase over the 2016 base year under all alternatives, and Alternatives 1 and 2 would increase VMT over the No Action Alternative at a citywide and Study Area scale:

**Exhibit 1-8** VMT Comparison for Alternatives

	YEAR	CITYWIDE			STUDY AREA	
		PMPK VMT	Change from Base Year	Change from No Action Alt.	VMT	Change from No Action Alt.
<b>Base Year</b>	2016	379,400	–	–	7,800	–
<b>No Action Alternative</b>	2035	429,700	50,300	–	10,600	–
<b>Alternative 1</b>	2035	437,800	58,400	8,100	11,700	1,100
<b>Alternative 2</b>	2035	440,400	61,000	10,700	12,100	1,500

*Note: This analysis uses citywide VMT numbers for two reasons: First, transportation emissions are a small part of the estimates (the vast majority of emissions come from electricity generation). Second, it is conservative for this planning level review.*  
 Source: City of Bellevue, CH2M, 2017

The associated fleet mix emission reduction and technology implementation due to fuel economy standards would offset increases in VMT under all alternatives.

All alternatives would result in greater GHG emissions, with the No Action Alternative the least and Alternative 2 the most. However, the No Action Alternative has the smallest number of new residential units while Alternative 2 has the largest number of new residential units. Because of the more efficient dense residential nature of Alternatives 1 and 2, less greenhouse gas emissions are generated from lower VMT per person and from lower electricity usage per residence. Exhibit 1-9, on the following page, shows the GHG emissions for the three alternatives.

While the No Action Alternative could result in the smallest net increase in GHG emissions when compared to the other alternatives, it could contribute the least towards supporting growth and development near existing and planned high capacity transit. Growth that might otherwise be accommodated in the Wilburton Commercial Area could occur in peripheral areas of the city or region where there are fewer jobs and services in close proximity. This suggests that there could be less progress towards reducing overall GHG emissions related to VMT on a region-wide basis.

Alternative 1 could increase total GHG emissions over existing conditions and above the No Action Alternative, but per capita



**Exhibit 1-9** GHG Emissions in MTCO<sub>2</sub>e

	NO ACTION ALT.	ALT. 1	ALT. 2
<b>GHG Emissions from Electricity Use in the Study Area</b>	26,569	73,392	90,819
<b>GHG Emissions from Transportation Citywide<sup>1</sup></b>	167.48	170.64	171.65
<b>Total</b>	<b>26,736</b>	<b>73,562</b>	<b>90,991</b>
Difference from Existing	4,000	50,826	68,255
Difference from No Action	–	46,826	64,255
GHG Emissions Per Capita	25.04	7.65	7.61

<sup>1</sup> This analysis uses citywide VMT numbers for two reasons: First, transportation emissions are a small part of the estimates (the vast majority of emissions come from electricity generation). Second, it is conservative for this planning level review.

Source: CH2M, 2017

emissions could be less. Since Alternative 1 could result in a net increase in GHG emissions, above the 10,000 MTCO<sub>2</sub>e mandatory reporting threshold for the State of Washington, the increase in GHG emissions could be considered potentially significant and mitigation measures could be warranted.

Alternative 2 could also result in a net increase in total GHG emissions above State reporting thresholds, and mitigation measures could be warranted. Per capita emissions in Alternative 2 would be less than in Alternative 1 and much less than the No Action Alternative.

### What are some solutions or mitigation for the impacts?

GHG emissions from future projects need to be reduced through mitigation efforts so that these projects do not result in a significant environmental impact. Proposed mitigation measures have the potential to reduce emissions such that the impacts from future projects are not significant after mitigation. Some proposed measures would need to be integrated into Wilburton area policies or codes as requirements and incentives to apply to future development.

- Waste diversion
- Green building standards
- Building demolition waste reduction
- Puget Sound Energy (PSE) Carbon Neutrality program
- Electric vehicle charging station incentives and requirements
- Tree retention, replacement, and additional incentives and requirements



## With mitigation, what is the ultimate outcome?

The proposed alternatives would not result in a significant unavoidable adverse impact to air quality.

Regarding GHG emissions, potentially significant impacts could be expected for Alternatives 1 and 2, since they would both increase GHG emissions above reporting thresholds. However, if mitigation measures are implemented and tracked, the alternatives may result in a decrease of future GHG emissions such that impacts from future development allowed by the changes in plans and zoning would be considered less than significant for SEPA.

Significant overall increases in GHG emissions are inevitable with population growth and the proposed alternatives (with proper mitigation) handle this growth while keeping per capita GHG contributions as low as possible.

While each alternative would create a net increase in GHG emissions generated from growth and development in the Study Area, the citywide benefit of capturing development that might otherwise occur in peripheral areas of the city or region would serve to offset these impacts.

## WATER RESOURCES

### How did we analyze Water Resources?

Stormwater engineers reviewed major drainage areas, surface water, and groundwater, and the effect of development on hydrology, flooding, and water quality conditions. The planning level analysis estimates current and future impervious area. Hard surface coverage for existing conditions was estimated from existing GIS and aerial imagery. The estimated future hard surface coverage under the alternatives was estimated by assuming all new and redevelopment projects would generally build to the maximum allowable hard surface coverage allowed by the current or amended zoning code.

Mitigation measures were considered including the potential for increased tree canopy and green infrastructure achieved through streetscape improvements, and the application of the stormwater manual and improvements to water quality at the time of redevelopment.



*Lake Bellevue (City of Bellevue, CAC Briefing Book, 2016)*



## What outcomes or impacts did we identify?

All alternatives could result in changes in hard surface coverage as the Study Area is redeveloped. In the absence of mitigation, the stormwater runoff volume and peak discharges could change because of this change in hard surface. However, new and redevelopment projects are required to implement best management practices (BMPs) to the maximum extent feasible to reduce stormwater runoff and provide flow control per the City's stormwater code, which could provide mitigation to reduce runoff volume and flow rate. Overall, peak flows are anticipated to be less than existing conditions at the discharge points for the Study Area.

As development increases, the utilization and traffic within the Study Area could increase with additional residential units, commercial/retail space, and use of public facilities. The increase in vehicular traffic could result in approximately proportional increases in many pollutants, particularly metals and hydrocarbons. However, the redevelopment is anticipated to consist of greater roof areas, making it easier to collect and treat runoff from more concentrated pollution generating surfaces.

Improved water quality and quantity controls required by the City's stormwater code for new developments and redevelopment projects over the required thresholds will help reduce the potential impacts to increased hard surface. For projects that result in 2,000 square feet or more of new plus replaced hard surface, or where projects result in 7,000 square feet or more of land disturbing activity, the City's stormwater code requires the use of On-Site Stormwater Management BMPs to the extent feasible to infiltrate, disperse, and retain runoff without causing flooding or erosion impacts. BMPs may include Low Impact Development (LID) techniques such as infiltration facilities, dispersion, bioretention facilities, permeable pavements, vegetative roofs, rainwater harvesting, reduction of hard surface area, and retention of native vegetation.

## What is different between the alternatives?

Because of the current largely developed area, and the potential for similar impervious area coverage on redevelopable sites, all alternatives are anticipated to reduce the acres of effective unmitigated hard surfaces:

- **No Action Alternative:** -8.8 ac. of effective unmitigated hard surfaces (-4.7%)
- **Alternative 1:** -10.6 ac. of effective unmitigated hard surfaces (-5.7%)
- **Alternative 2:** -10.6 ac. of effective unmitigated hard surfaces (-5.7%)



## What are some solutions or mitigation for the impacts?

There are Federal, State, and City regulations intended to reduce the potential impact to water resources due to development and redevelopment projects. Compliance with these regulations is anticipated to result in a net benefit to water resources in the Study Area.

The City may also select Grand Connection and Public Space concepts that have the best overall impact to water resources. The selected options could include those that:

- Result in the greatest reduction of pollution-generating hard surfaces and hard surface in general,
- Provide opportunities for integrating BMPs and stormwater facilities with a decentralized approach,
- Trigger thresholds that would require water quality treatment and flow control mitigation per the City's stormwater standards, and
- Result in enhancement of natural systems such as Lake Bellevue and Sturtevant Creek as amenities.

The City could also implement new development code to further reduce development of new and replaced hard surfaces or further reduce potential for runoff.

- One option could include a required amount of greenspace on redeveloped parcels to encourage development of pervious areas and integration of BMPs into landscape areas of the site.
- A second option could be to provide more stringent stormwater regulations to further reduce runoff rates and volumes in the Sturtevant Creek Basin, such as requiring flow control to be provided to "pre-developed forested" conditions rather than "existing" conditions.
- A third option would be to incentivize programs that support optimal stormwater management among other sustainability measures, similar to the amenity system for Downtown, including but not limited to LEED, Built Green, or Living Building Challenge.

## With mitigation, what is the ultimate outcome?

None of the alternatives would have significant unavoidable adverse impacts on water resources, because all redevelopment projects would likely result in an improvement of runoff and recharge flow rates and water quality over existing conditions. In addition, the net change in effective hard surface area would be reduced through implementation of BMPs and flow control facilities.



## ECOSYSTEMS

### How did we analyze Ecosystems?

This section evaluates the impacts on ecosystem resources resulting from the alternatives. The ecosystem resources evaluated include vegetation and wildlife habitat, threatened and endangered species, and aquatic resources and wetlands.

### What outcomes or impacts did we identify?

Impacts to upland habitat could be less than significant due to the limited existing distribution and quality of such habitat in the Study Area. No impacts to wetlands are currently anticipated. Potential impacts to Sturtevant Creek may result from redevelopment proposals such as widening existing roads and/or constructing new road crossings. If such impacts to wetlands and/or stream were proposed to occur, they would be subject to the avoidance, minimization, and mitigation requirements set forth in federal and state laws and in the City's critical areas regulations, which would apply to all alternatives.

There are general requirements that redevelopment either meet current code/buffer standards or provide an equivalent or better level of critical area functions than with application of the code standards. There is likely to be some level of incremental improvement to buffers and critical area functions with redevelopment on non-conforming sites with critical areas.

### What is different between the alternatives?

The No Action Alternative would not fully achieve the City Council Principles for the ecosystems/water resources performance measure.

With the greater density and visions for the neighborhood under Alternatives 1 and 2 there is a greater potential to achieve the performance measure of restoring stream, lake, and wetland systems and habitats through incentives or requirements. City Council Principles achieved would include: Grand Vision, Special Niche, Emerging Opportunities, and Impact Mitigation. Impacts to critical areas from redevelopment may trigger stream, wetland, and/or lake restoration. As stated above, there is likely to be some level of incremental improvement to buffers and critical area functions with redevelopment on non-conforming sites with critical areas. Additional voluntary improvements may further enhance overall aesthetic quality of the redevelopment and of the overall neighborhood.



*Fringe wetland with water lilies at Lake Bellevue (H.Ehlert/CH2M)*



*Main Street wetland north of Main Street and west of 116th Avenue NE (H.Ehlert/CH2M)*



Beneficial cumulative impacts to portions of the natural network could result from the combination of the Grand Connection and Public Space visions for Alternatives 1 and 2. These would include opportunities to improve the natural network by enhancing, exposing, and utilizing the natural systems such as Lake Bellevue, riparian wetlands and uplands, and Sturtevant Creek as amenities, and incorporating native vegetation into landscaping.

### **What are some solutions or mitigation for the impacts?**

Solutions or mitigation related to specific redevelopment projects could vary on a case by case basis. Opportunities to improve the natural network could be achieved by enhancing, exposing, and utilizing the natural systems such as Lake Bellevue, riparian wetlands and uplands, and Sturtevant Creek as amenities. Opportunities may arise to consider daylighting sections of Sturtevant Creek that are currently in a pipe and restoring riparian wetland and upland functions. Redevelopment plans may benefit from creating an open-channel water feature on properties, particularly if the existing pipes do not currently allow fish passage. Redevelopment plans that result in impacts to streams or wetlands may trigger the need to comply with fish passage requirements.

Development that incorporates native vegetation into landscaping would also be desirable.

### **With mitigation, what is the ultimate outcome?**

The intended outcome from mitigating unavoidable impacts to ecosystem resources is to reduce the potential environmental impacts of development and redevelopment projects. Bellevue City Code, State, and Federal regulations are meant to ensure impacts to the environment are avoided, minimized, documented, and mitigated. Certain areas are designated as environmentally sensitive or “critical areas” and are protected from avoidable development impacts.

## **LAND USE**

### **How did we analyze Land Use?**

Land use planners have evaluated each of the alternatives with respect to their 2035 planning horizon and ultimate development capacity, proposed changes in building types, and compatibility with local and regional policies.



### What outcomes or impacts did we identify?

New growth is expected to occur under all the alternatives, although the amount of growth and composition of land uses will vary by alternative. The location of growth through 2035 is anticipated to occur on redevelopable sites located within blocks illustrated on Exhibit 1-5, many of the blocks are in proximity to the future light rail station and the ERC.

### What is different between the alternatives?

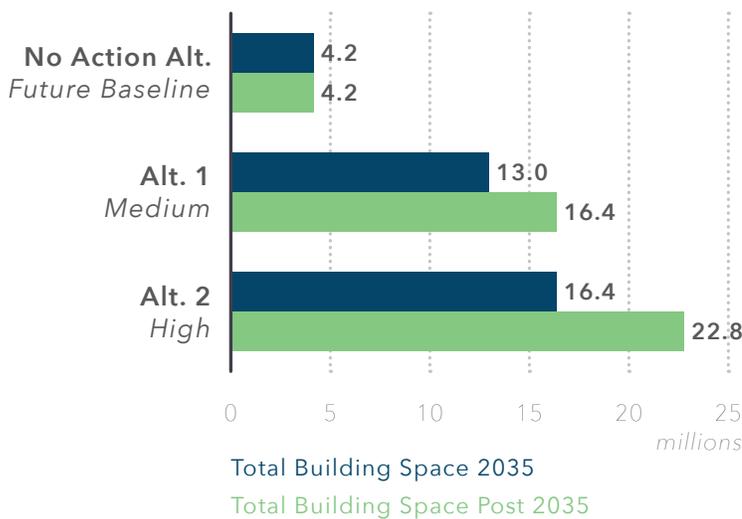


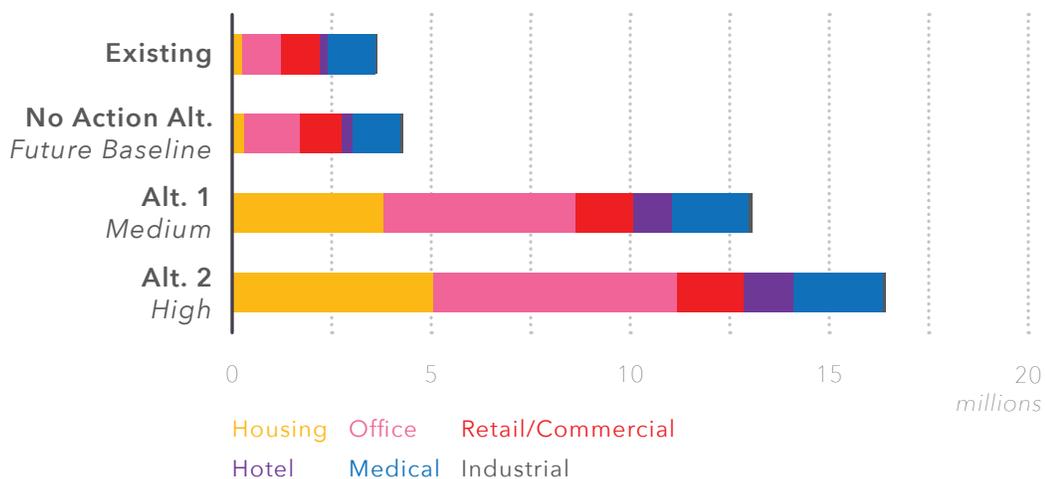
Exhibit 1-10 shows the projected growth in building space under each of the alternatives. Beyond 2035, it is anticipated that additional changes could occur to existing building forms, while in the near term to 2035, growth would be more focused on redevelopable sites.

Under Alternatives 1 and 2, housing would have a greater share of building space in the future, and office space would increase substantially, compared to the No Action Alternative. See Exhibit 1-11.

The No Action Alternative would not amend current plans or regulations to

**Exhibit 1-10** Projected Growth During and Beyond 2035

Source: NBBJ, BERK, 2017



**Exhibit 1-11** Projected Growth and Land Use Mix, 2035

Source: Existing Space—City of Bellevue, 2017; Future Space—Leland Consulting Group 2017; BERK, 2017



reflect changed conditions with the Wilburton light rail station or the ERC. The Comprehensive Plan acknowledges the Wilburton Commercial Area as a future mixed-use center, and Alternatives 1 and 2 are consistent with policy language in the Land Use Element that prioritize mixed-use centers as areas that will receive most of Bellevue's growth. However, there is an inconsistency with Figure LU-3 (Projected Housing Growth), which specifically distributes growth to the Downtown, BelRed, and Eastgate/Factoria centers. The remainder of the city, which includes the Wilburton Commercial Area, is assigned six percent of the city's 20-year housing growth (about 900 units). This figure would need to be updated to include the Wilburton Commercial Area as a mixed-use center. See the comparisons of the alternatives and City policies in Appendix C.

### **What are some solutions or mitigation for the impacts?**

While there are some design standards that apply to portions of the Study Area as part of the No Action Alternative, Alternatives 1 and 2 would include area-wide zoning, development regulations, and design guidelines tailored to the Wilburton Commercial Area. These regulations could limit potential land use compatibility conflicts both within the Study Area and in adjacent areas.

Project level permitting and environmental review can address land use compatibility concerns at a site level where there are unique conditions.

### **With mitigation, what is the ultimate outcome?**

Under all alternatives additional growth and development could occur in the Study Area, leading to increases in height and bulk of buildings and increased land use intensity. This transition is unavoidable but is not considered significant or adverse within an urban area designated as a mixed-use center in the Comprehensive Plan.

Future growth is likely to create temporary or localized land use compatibility issues as development occurs. The potential impacts related to these changes may differ in intensity and location in each of the alternatives. However, with existing and new development regulations, zoning requirements, and design guidelines, no significant adverse impacts are anticipated.



Alternatives 1 and 2 are generally consistent with the policy direction of the Comprehensive Plan and the Wilburton/NE 8th Street Subarea Plan. However, updates to some policies and maps in both the Comprehensive Plan and the Subarea Plan will be needed under the action alternatives to ensure full consistency. A list of these potential updates can be found in Appendix C.



REI at 116th Avenue NE and NE 4th Street (BERK)

## ECONOMIC ACTIVITY

### How did we analyze Economic Activity?

The EIS broadly evaluates each alternative's effects on employment capacity, business sector mix, and potential relocation. The EIS analysis also considers fiscal conditions including a range of revenue sources. Data considered is from the Employment Security Department, Department of Revenue, City of Bellevue, and earlier studies by Leland Consulting Group. Geographic areas studied include the Study Area and the larger subarea region.

### What outcomes or impacts did we identify?

All three alternatives could increase capacity to accommodate employment in the Study Area. Under all alternatives, the most likely areas for redevelopment are centrally located near the Eastside Rail Corridor or 116th Ave NE.

### What is different between the alternatives?

#### Job Capacity and Mix

Currently the Study Area includes 10,366 jobs spread across several sectors. About 64 percent of jobs today are in the services sector (this includes healthcare services and professional, scientific, and technical services) while retail trade accounts for 20 percent of jobs. Based on building square feet per employee ratios in the City's 2014 Buildable Lands report and industry averages, jobs in the Study Area would increase under all alternatives:

- The No Action Alternative could accommodate increased employment of approximately 1,780 potential new jobs.
- Alternative 1 could accommodate increased employment of approximately 17,541 potential new jobs.
- Alternative 2 could accommodate increased employment of approximately 23,726 potential new jobs.



While employment in the Study Area could grow under all alternatives, the job mix could vary under each alternative due to the different zoning and land use policies contemplated. Given the low intensity of commercial development anticipated the No Action Alternative, new jobs could mirror existing patterns and are likely to be clustered in the retail sector scattered across the Study Area, as well as healthcare. Alternatives 1 and 2 could change the job mix: the addition of office development over and above medical office space could create the potential for a more diverse set of service sector employers to locate in the Study Area.

As future development occurs, some businesses may be displaced through redevelopment or priced out as land prices and rents increase. These include both small-scale retailers as well as auto dealerships.

Overall, potential displacement could occur under all alternatives, but may be lower in the No Action Alternative. Increases in development space under Alternatives 1 and 2 may be sufficient to accommodate any businesses that may be displaced, since current businesses are generally of the type that can be accommodated in mixed-use environments. Increasingly, this is the case for auto-dealerships as well. Although most auto dealerships across the county occupy low-slung buildings surrounded by large surface lots of parking, some dealerships have changed their form to a higher-intensity, urban format as suburban commercial areas redevelop into urban, mixed-use environments.

Increasing the capacity and diversity of the Study Area with office and retail space provides the built infrastructure necessary for job growth and new business starts. This infrastructure can support jobs in both Bellevue's established clusters (information technology and healthcare) as well emerging clusters and sub-sectors. In addition, increased residential capacity could improve the vitality of commercial areas and attract more diverse retail sectors.

### **Fiscal Implications**

In terms of fiscal impacts, the No Action Alternative could have relatively lower benefits than Alternatives 1 and 2 given lower growth and associated revenues.

**No Action Alternative.** The No Action Alternative could have relatively lower revenues given lower levels of the one-time sales tax on construction, periodic sales tax on construction related



to ongoing renovations or tenant changes, sales tax from retail spaces, sales taxes from office and housing, as well as property and other city taxes. Market factors may cause auto-dealership sites to redevelop under the No Action Alternative as well, leading to some loss of sales tax revenue compared to existing conditions. The relatively smaller amount of retail space (and office space) that will be added to the Study Area under the No Action Alternative is unlikely to offset this loss, should it happen. Costs related to the provision of city services like fire, emergency medical services and parks would be like existing conditions.

**Alternatives 1 and 2.** Alternative 1, and more so Alternative 2, could increase job growth and diversity and add housing in mixed-use environments adjacent to transit. In terms of fiscal impacts, Alternative 1 could have relatively higher benefits than the No Action Alternative, and Alternative 2 would have the greatest benefit. New building space construction would create one time and potential additional construction sales tax revenues (tenant improvements). Employees and residents could be sources of ongoing spending and sales tax revenue. Property values could likely be higher under mixed use and transit-oriented developments. Increased tax revenue from new retail and office spaces could offset to some degree losses due to auto-dealer relocations; however, auto dealers could remain and be incentivized to reconfigure into a more urban and compact form, compared to their current surface lot configuration.

Costs related to the provision of city services like fire, emergency medical services and parks would be higher than the No Action Alternative. The City Budget as well as mechanisms like system development charges or impact fees could potentially mitigate potential increases to costs anticipated under Alternative 1 or Alternative 2.

### **What are some solutions or mitigation for the impacts?**

Current city plans, programs, and codes define City economic development goals, and help balance costs and revenues to meet City defined levels of service.

- Bellevue Economic Development Plan
- Budget and Capital Facilities Plan
- System development charges or impact fees



- Land Use Code defining allowable land uses supporting employment and mixed use residential uses, and amendments that provide for compatibility and economic development
- Potential incentives to retain businesses and to offer relocation assistance

## **With mitigation, what is the ultimate outcome?**

Under all alternatives, additional growth may occur in the Study Area, leading to a generalized increase in building height and bulk and development intensity over time, as well as the gradual conversion of single purpose, low-intensity uses to higher-intensity mixed-use development patterns. This transition may be unavoidable, but is not significant and adverse since this is an expected characteristic of a mixed-use center; as described in the Land Use Section, the Comprehensive Plan acknowledges the Wilburton Commercial Area as a future mixed-use center.

As the area develops, there may be displacement of existing jobs; however, there is sufficient employment space under any alternative to relocate the businesses and thus no significant unavoidable adverse impacts. Though rents may increase for relocated businesses within the Study Area, the customer base may increase. The potential growth in housing may create more potential customers for retail businesses, and opportunities for residents to live near their work.

## **NEIGHBORHOODS AND POPULATIONS**

### **How did we analyze Neighborhoods and Populations?**

Planners evaluated demographic and socio-economic characteristics within the Study Area and abutting neighborhoods and city. The potential for housing displacement and demand for community services is addressed.

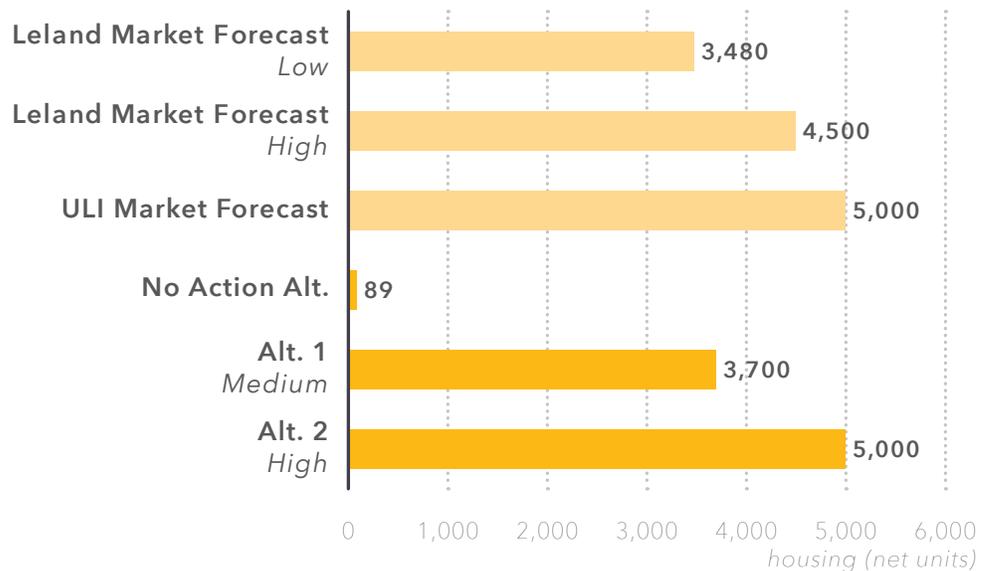
### **What outcomes or impacts did we identify?**

Under all Alternatives, the population of the Study Area would grow, although by varying amounts. There is potential for the existing residential buildings in the Study Area to be torn down and replaced with larger buildings, though Alternatives 1 and 2 would have sufficient capacity to replace them.



## What is different between the alternatives?

Each alternative would increase housing in the Study Area, with the No Action Alternative the least and Alternative 2 the most. Alternatives 1 and 2 would achieve housing levels in the range estimated through market studies addressing the 2035 planning horizon, as shown in Exhibit 1-12.



**Exhibit 1-12** Housing Units by Alternative

Source: Leland Consulting Group, March 2017; BERK, 2017

Under all alternatives, current City policies on affordable housing could apply, including the Multifamily Housing Tax Exemption (MFTE), explained below. Under Alternatives 1 and 2, new affordable housing policies could be developed for the Wilburton Commercial Area, such as an affordable housing incentive zoning program, described below. As of this Draft EIS, City staff are further researching potential changes to the program, and in February of 2018 the City Council is expected to update the MFTE program for Downtown Bellevue.

A summary of estimated units incentivized under each Alternative is shown in Exhibit 1-13. The number of potential new affordable housing units incentivized by 2035 would be highest under Alternative 2 (375-500 units), less under Alternative 1 (278-370) and much lower less under the No Action Alternative (4).

Additionally, Alternatives 1 and 2 provide far more housing to support the light rail station than the No Action Alternative, and both

**Exhibit 1-13** New Affordable Units Incentivized by 2035, by Alternative

	NO ACTION ALT.	ALT. 1	ALT. 2
<b>New Residential Units</b>	89	3,700	5,000
<b>MFTE Production Range</b>			
Potential New MFTE Units (assuming 5% participation)	4	185	250
<b>FAR Incentives</b>			
Potential New FAR Incentive Units, 80% AMI (assuming 2.5% participation)	0	93	125
Potential New FAR Incentive Units, 80% AMI (assuming 5% participation)	0	185	250
<b>Total Potential New Affordable Units</b>	<b>4</b>	<b>278-370</b>	<b>375-500</b>

*Note: The citywide voluntary affordable housing bonus program, described in Section 3.7 has produced 1 unit per year citywide, and is not included in this analysis as the number of potential new units created in Wilburton under the program are assumed to be de minimis.*

*Source: BERK, 2017*

action alternatives exceed transit supportive density of 35 units per acre recommended by the Federal Transit Agency. The No Action Alternative does not meet the minimum transit-oriented density. Much of the new housing under Alternatives 1 and 2 would fall within one-quarter mile of the Wilburton light rail station, and some could fall within one-quarter mile of other light rail stations in the area, notable the East Main station under Alternative 1.

## What are some solutions or mitigation for the impacts?

The City could implement the range of measures recommended in the City of Bellevue's Affordable Housing Strategy:

- MFTE program.
- General Fund contributions to the Housing Trust Fund, used to construct and preserve affordable housing. This fund could be used to preserve affordable units at risk of displacement in the Study Area, identified in the Impacts section in Section 3.7.
- Transportation Impact Fee exemption for new low- and moderate-income housing.
- Affordable housing density bonus: Bellevue allows one bonus market-rate unit for each affordable unit provided, up to 15 percent above maximum density.
- Incentives for small units for seniors.



## **With mitigation, what is the ultimate outcome?**

Under all alternatives, displacement of existing residents in the Study Area is possible as land is redeveloped, and general housing affordability is likely to be a concern throughout Bellevue. As population continues to grow in the Puget Sound region, economic forces will place additional pressure on housing markets, increasing demand for housing affordable to a range of income levels. This is true regardless of which of the three alternatives is realized; however, Alternatives 1 and 2 could substantially increase the capacity for housing that could better meet demand. Increasing affordable housing programs and incentives for providing units affordable to diverse income groups and to investment in affordable housing development would partially offset affordability pressures, as would other actions in the Affordable Housing Strategy, such as funding for affordable housing production.

## **AESTHETICS**

### **How did we analyze Aesthetics?**

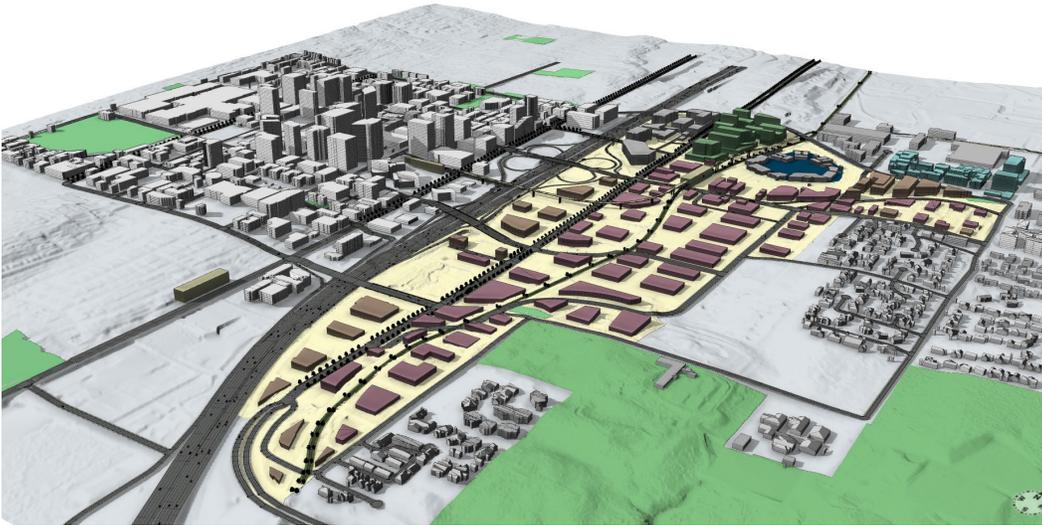
Assessment of aesthetic impacts is subjective and can vary between individuals based on perspectives and preferences. To provide a common basis for the discussion in this impact section, the analysis assumes a No Action Alternative which includes existing conditions plus development under current regulations. This includes recently approved development as well as new development. Development modeling for each alternative distributed future growth to its ultimate buildout under the existing zoning (the No Action Alternative) or transects (Alternatives 1 and 2). A three-dimensional model was employed using the software CityEngine, and allows for the viewing of potential development patterns within the existing and future context of Downtown and BelRed.

### **What outcomes or impacts did we identify?**

Under all alternatives, increased levels of development in the Study Area could create a more urban environment.

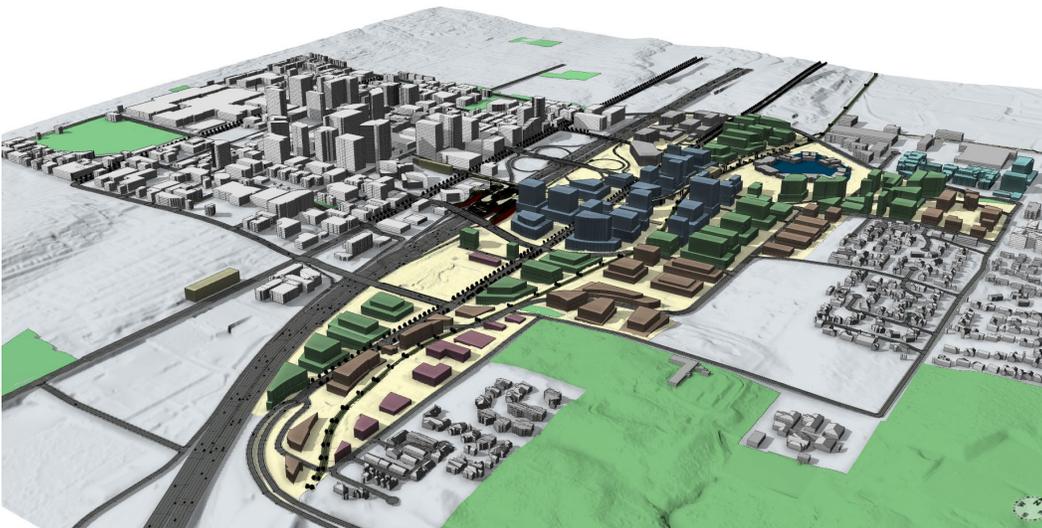
### **What is different between the alternatives?**

While the No Action Alternative would not alter the existing height limits in the Study Area, both Alternative 1 and Alternative 2 would increase allowable building height and scale, creating opportunities



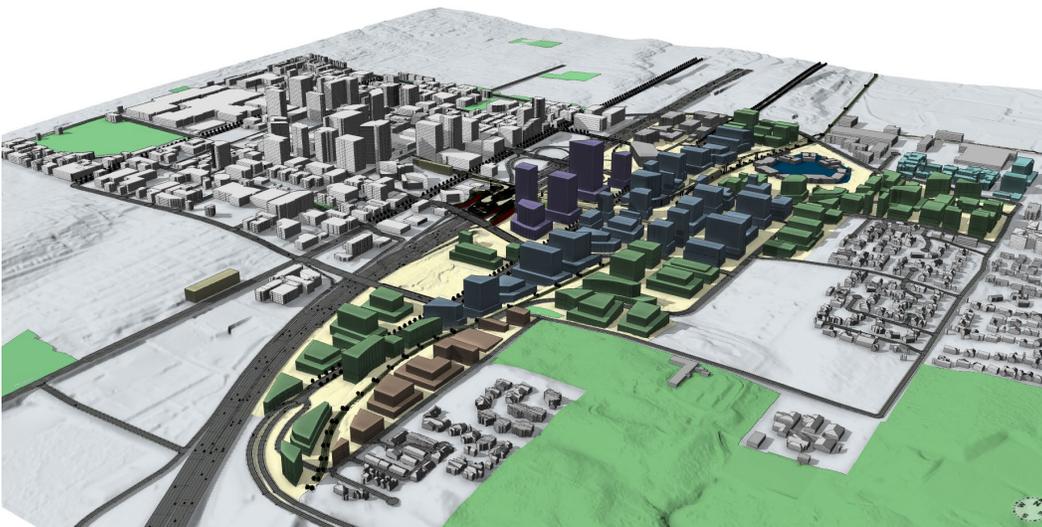
**Exhibit 1-14**  
Overall View (Looking Northwest)—No Action Alternative

Source: NBBJ, CH2M, 2017



**Exhibit 1-15**  
Overall View (Looking Northwest)—Alternative 1

Source: NBBJ, CH2M, 2017



**Exhibit 1-16**  
Overall View (Looking Northwest)—Alternative 2

Source: NBBJ, CH2M, 2017



**Exhibit 1-17** Summary of Aesthetic and Urban Design Impacts

LOCATION (STREET-LEVEL VIEWS)	NATURE OF IMPACT	NO ACTION ALT.	ALT. 1	ALT. 2
Intersection of Eastside Rail Corridor and NE 12th Street—Looking South to Lake Bellevue	No impact	○	○	○
Intersection of NE 12th Street and 120th Ave NE—Looking Southwest to Lake Bellevue	No impact	○	○	○
I-405 at NE 10th Street—Looking Southeast to the proposed Grand Connection and Mt. Rainier	Impact on view of Mt. Rainier—Policy UD-62. P320	○	◐	●
Intersection of NE 8th Street and 124th Ave NE—Looking West	Impact on view of Downtown skyline—Policy S-WI-40	○	◐	●
I-405 at NE 6th—Looking Southeast to the proposed Grand Connection and Mt. Rainier	Impact on view of Mt. Rainier—Policy UD-62. P320	○	◐	●
Intersection of Eastside Rail Corridor and NE 6th Street—View Looking West	Impact on view of Downtown skyline—Policy S-WI-40	○	●	●
NE 5th Street between 120th and 124th Ave NE—View Looking West	Impact on view of Downtown skyline—Policy S-WI-40	○	◐	●
View from City Hall—Looking East	Impact on view of Wilburton Hill—Policy S-WI-40	○	◐	●
Intersection of Main Street and 112th Ave NE—View East	Impact on view of the ridge—Policy S-WI-40	○	◐	●
Intersection of Main Street and 116th Ave NE—View Northeast	No impact on public view	○	○	○
Intersection of Eastside Rail Corridor and SE 1st Street—Looking South	No impact	○	○	○
Bellevue Botanical Garden—Looking Northwest	No impact	○	○	○

- = Consistent with policies for public view protection and shadows on open spaces
- ◐ = Partially consistent with policies for public view protection and shadows on open spaces
- = Inconsistent with policies for public view protection and shadows on open spaces

for more mid-rise and high-rise buildings. Exhibit 1-14 through Exhibit 1-16 show modeled aerial views of the Study Area under each of the alternatives.

Exhibit 1-17 lists the views evaluated in the impact analysis for each individual alternative and summarizes the relative effects on views. Views were selected to exhibit impacts on key intersections and public space, in addition to views of the surrounding built and natural environments. Generally, Alternative 2 would potentially impact and Alternative 1 would partially impact two view locations, regarding views of Mount Rainier. Alternative 2 would also impact three views of the Downtown skyline and one ridge view, whereas Alternative 1 would impact one view of the Downtown skyline and partially affect other Downtown and ridge views. For further analysis and view locations, please see Section 3.8.



Building heights are linked to shading conditions in urban environments, and increased development under all alternatives could increase shade and shadows at street level. Increased building height under Alternatives 1 and 2 could increase shading further by allowing taller buildings that will cast longer shadows.

## What are some solutions or mitigation for the impacts?

Alternatives 1 and 2 will include the adoption of zoning and design guidelines specific to the Wilburton Commercial Area. Aesthetic and urban design impacts could be further mitigated through implementation of the following measures:

### Height, Bulk, and Scale

- In areas where new building heights above 55 feet are allowed, require upper-story stepbacks to preserve access to light and reduce height and bulk impacts.
- For high-rise development, locate the tallest portions of the building away from the street. The height of building podiums along the street frontage and other frontages such as the Eastside Rail Corridor should be limited to ensure smaller scale and pedestrian character at street level.
- Incorporate standards for active and transparent facades for the street level section of buildings.
- Incorporate standards for roof articulation and design that minimize visual bulk.
- Incorporate through-block connections to break up the bulk of buildings and enhance the pedestrian experience.
- Encourage site permeability around public assets such as the Grand Connection, Eastside Rail Corridor, and public spaces.
- Encourage design that breaks up building forms to avoid monolithic buildings that completely block light and views. Slimmer building forms can provide height and development capacity while also maintaining partial views.
- Prioritize streetscape improvements and amenities to maintain an attractive atmosphere for pedestrians.
- Implement development standards that encourage modulation of façades to break up large building facades.
- Implement development standards for maximum façade length or orientation to mitigate the impacts of views and bulk.



- Implement development standards for floorplate sizes to mitigate bulk impacts.
- Establish maximum floorplate sizes for towers.
- Establish tower separation standards to mitigate bulk, scale, and view concerns.

### **Views from Selected Viewpoints**

- Require ground-level setbacks, upper-story setbacks, tower placement, tower separation, or some combination of these to preserve partial views of the peak of Mt. Rainier from key public spaces, particularly the ERC and the Grand Connection.
- Require streetscape vegetation along major street corridors and around Lake Bellevue to help screen future development and provide a buffer and sense of enclosure that enhances pedestrian character.
- Implement building height limits and upper-story setbacks along major street corridors in the Study Area to maintain views of the sky and prevent narrowing of the visual corridor, particularly along NE 8th Street.

### **Shadows**

- Require detailed shadow studies for new development adjacent to parks or public spaces analyzed in this EIS to identify project-specific impacts.
- Condition development near parks and open spaces with a combination of the following measures to reduce shading effects:
  - » Height limits within a specified distance of the significant public space, or shade and shadow analysis that demonstrate the preservation of sunlight in public spaces during peak periods of use.
  - » Separation of high-rise building massing,
  - » Maximum floorplate size,
  - » Modification of high-rise tower location and orientation, or
  - » Upper-level setbacks.

### **With mitigation, what is the ultimate outcome?**

Under Alternatives 1 and 2, increased development in the Wilburton Commercial Area could have the effect of creating a more urban character and more intensive development pattern. Public space



on the Eastside Rail Corridor will experience increased shading from taller buildings compared to the No Action Alternative. More intense development in the Study Area would change the neighborhood character in the Wilburton Commercial Area, particularly under Alternative 2.

With the incorporation of proposed mitigation, all alternatives would be consistent with the City's policies in the Comprehensive Plan and Wilburton/NE 8th Street Subarea Plan regarding protection of public views. However, under all scenarios, private territorial views may be increasingly obstructed.

## TRANSPORTATION

### How did we analyze Transportation?

The analysis identifies current conditions and impacts for each mode: vehicle, transit, pedestrian, and bicycle.

To assess transportation system operations in 2035 for the three alternatives, the project team used a citywide travel demand forecasting model to forecast traffic volume and speed along roadways within the Study Area.

Also evaluated are: transit stop amenities, non-motorized connectivity for pedestrians, and the level of comfort or stress along bicycle routes (LTS 1–Interested but Concerned–Children and Older Adults; LTS 2–Interested but Concerned–Adults; LTS 3–Enthusied and Confident; LTS 4–Strong and Fearless).

### What outcomes or impacts did we identify?

Redevelopment would occur under all three alternatives. During redevelopment, there would be localized and temporary construction impacts that could impact transportation in the immediate vicinity of a project site, for example a sidewalk closure or increased truck traffic. The City will manage such temporary uses through their right-of-way use permit process. While these impacts would occur under any of the alternatives, they would occur more frequently and potentially with longer duration under the action alternatives due to the higher density of land use expected within the Study Area. Other long-term operation impacts vary by alternative as described below.



### What is different between the alternatives?

Exhibit 1-18 summarizes generally impacts of each alternative on each mode. Highlights of each alternative and mode follow the table.

**Exhibit 1-18** Summary of Transportation Impacts

TYPE OF IMPACT	NO ACTION ALT.	ALT. 1	ALT. 2
<b>Vehicle Operations</b> Average Vehicle Delay at MMA and Non-MMA Intersections	No	Yes	Yes
<b>Primary Vehicle Corridor Speed</b> Ratio to Typical Urban Travel Speed	Yes	Yes	Yes
<b>Transit</b> Transit Stop Amenities	Yes	No	No
<b>Pedestrian</b> Sidewalk/Buffer Width and Crossing Frequency	Yes	No	No
<b>Bicycle</b> Level of Traffic Stress	Yes	No	No
<b>Safety</b> Effect on Collision Rates	No	No	No

Source: Fehr & Peers, 2017

### Vehicle–Mobility Management Area (Intersection LOS)

The No Action Alternative results in:

- The average vehicle delay at the Wilburton MMA system intersections exceeding 55 seconds.
- A primary vehicle corridor falling below the threshold of 0.65 times typical urban travel speed.
- A pedestrian facility failing to meet the 16-foot minimum sidewalk and buffer width and/or arterial crossings at least every 600 feet.
- A bicycle corridor failing to meet LTS 3 (Enthusied and Confident) on designated routes in the City’s bicycle network.
- A transit stop failing to meet any of the following criteria: weather protection, seating, wayfinding, and/or paved passenger zone of 40 feet for a primary stop and 60 feet for a FTN stop.

The following intersections are expected to operate in excess of the impact threshold of 55 seconds of delay under both Alternatives 1 and 2:

- 116th Avenue NE and NE 12th Street
- 120th Avenue NE and NE 12th Street
- 124th Avenue NE and NE 12th Street



- 120th Avenue NE and NE 8th Street
- 124th Avenue NE and NE 8th Street
- 116th Avenue and NE 4th Street
- Spring Boulevard and NE 12th Street

Under Alternative 2, the intersection of 116th Avenue NE and NE 8th Street would also operate with more than 55 seconds of vehicle delay.

Under Alternative 1, the Wilburton MMA average vehicle delay is projected to increase to 74 seconds of delay, falling below the City's standard of 55 seconds. Under Alternative 2, increased demand would result in more vehicle delay bringing the MMA average delay to 81 seconds. Therefore, significant impacts are expected to traffic operations within the Wilburton MMA under both Alternatives 1 and 2.

In addition to the impact to the MMA average vehicle delay, several of the aforementioned intersections which act as system intersections to adjacent MMAs would be affected (116th Avenue NE/NE 12th Street,

**Exhibit 1-19** PM Peak Hour Intersection Delay–2035 Alternatives 1 and 2 Compared to No Action Alternative

ID	INTERSECTION	AVERAGE VEHICLE DELAY (IN SECONDS)		
		2035 No Action Alt.	2035 Alt. 1	2035 Alt. 2
1	116th Ave NE and NE 12th St	96	112	117
2	120th Ave NE and NE 12th St	86	103	104
3	124th Ave NE and NE 12th St	60	64	65
4	116th Ave NE and NE 10th St	24	25	27
5	116th Ave NE and NE 8th St	51	53	71
6	120th Ave NE and NE 8th St	42	56	58
7	124th Ave NE and NE 8th St	56	103	112
8	116th Ave NE and NE 4th St	105	>150	>150
9	120th Ave NE and NE 4th St	12	14	16
10	116th Ave NE and Main St	27	37	39
11	116th Ave NE and SE 1st St	26	26	29
12	120th Ave NE and NE 6th St	22	23	28
13	116th Ave NE and NE 6th St	N/A	N/A	N/A
14	Spring Boulevard and Bel-Red Road	68	77	79
<b>Wilburton MMA Average</b>		<b>51</b>	<b>74</b>	<b>81</b>

Note: Wilburton MMA #4 includes intersections 5, 6, 8, 10 & 11. Average MMA vehicle delay is weighted by volume and the LOS Standard is average delay of 55 seconds.

Source: Fehr & Peers, 2017



120th Avenue NE/NE 12th Street, 124th Avenue NE/NE 8th Street and Spring Boulevard/Bel-Red Road). This is also identified as a significant impact to traffic operations in the Study Area.

### **Vehicle–Primary Vehicle Corridor Speed**

Compared to the No Action Alternative, speeds along the primary vehicle corridors are expected to decrease by up to four miles per hour under Alternative 1. Alternative 2 is expected to have more substantial decreases in speed on the Study Area’s arterial corridors. See Exhibit 1-20 and Exhibit 1-21.

### **Transit**

As with the No Action Alternative, transit stop amenities would be implemented as capital improvements or frontage improvements associated with property redevelopment. Because more parcels are likely to redevelop under Alternatives 1 and 2 than under the No Action Alternative, more transit stops are likely to be improved. Therefore, the transit environment would be better than under the No Action Alternative and no significant transit impacts are identified for Alternatives 1 or 2.

### **Pedestrian**

Similar to transit stop improvements, sidewalk and buffer widening would be implemented as capital improvements or frontage improvements associated with property redevelopment. Because more parcels are likely to redevelop under Alternatives 1 and 2 than under the No Action Alternative, more sections of sidewalk are likely to be improved consistent with the City’s LOS guidelines. Moreover, the denser street grid network planned under Alternatives 1 and 2 will result in more frequent arterial crossings. Therefore, the pedestrian environment would be better than under the No Action Alternative and no significant pedestrian impacts are identified for Alternatives 1 or 2.



## **Bicycle**

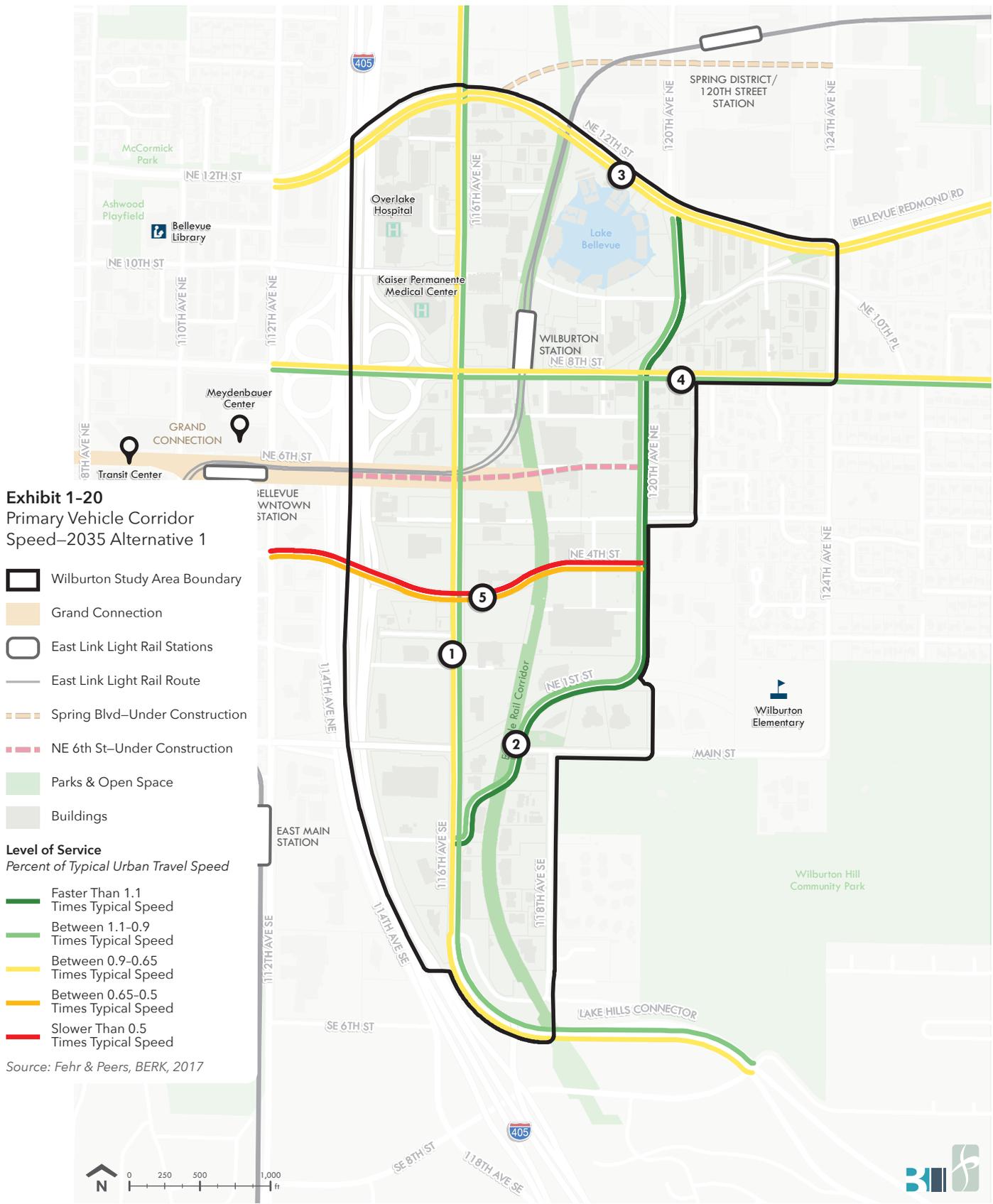
Bicycle LTS ratings were updated for Alternatives 1 and 2 based on the change in traffic volumes as well as the new buffered bike lane planned for 116th Avenue NE. Although Alternative 2 would have higher vehicle volumes than Alternative 1, the LTS ratings would be identical between the two action alternatives. The LTS ratings for most bicycle corridors would remain the same as the No Action Alternative despite the increase in traffic volume. See Exhibit 1-22 compared with Exhibit 1-22. However, the 116th Avenue NE corridor would improve from LTS 4 to LTS 3 due to the presence of the buffered bike lanes. Because bicycle LTS would stay the same or improve on all bicycle corridors compared to the No Action Alternative, no significant bicycle impacts are identified for Alternatives 1 or 2.

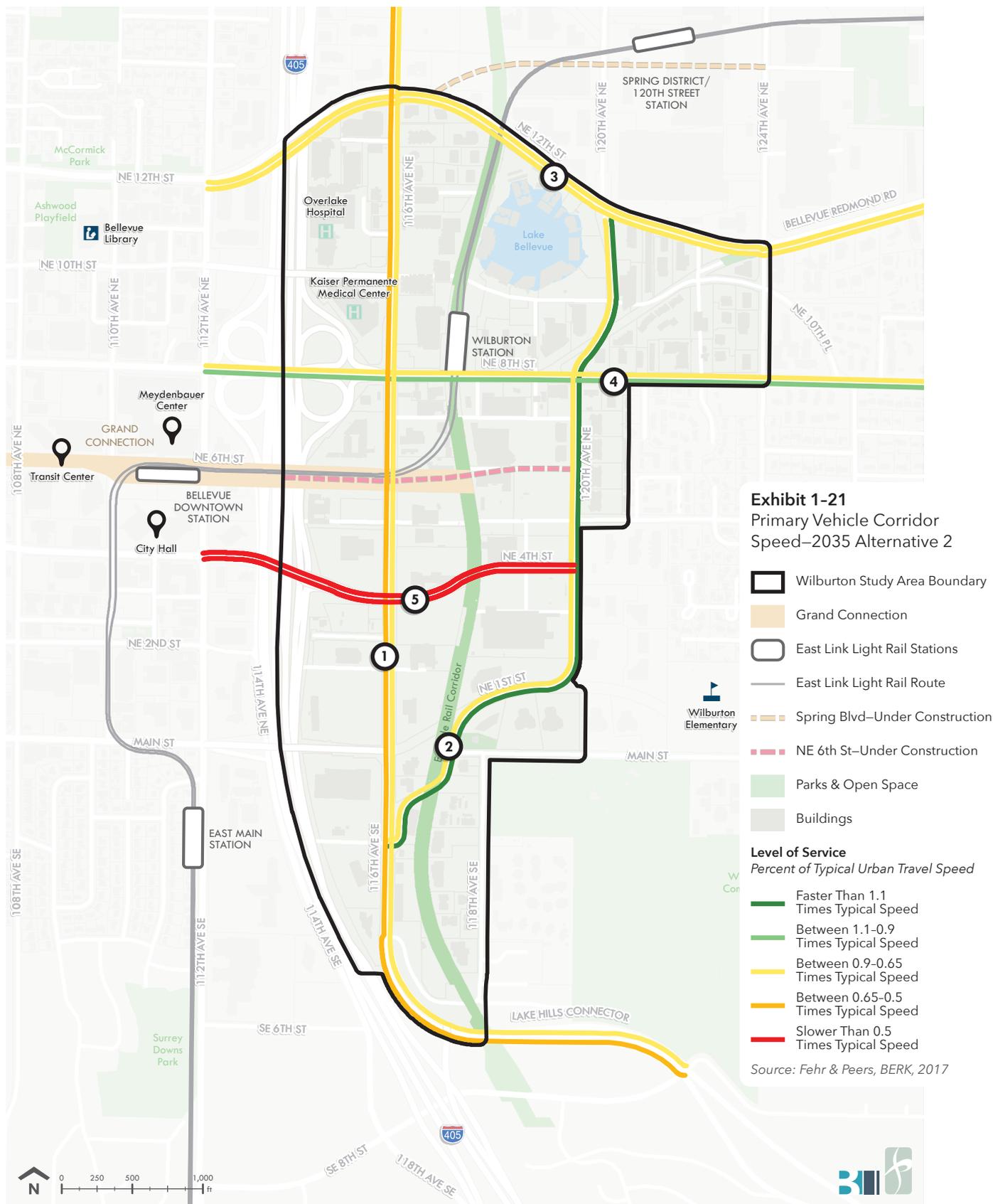
## **Non-motorized Connectivity**

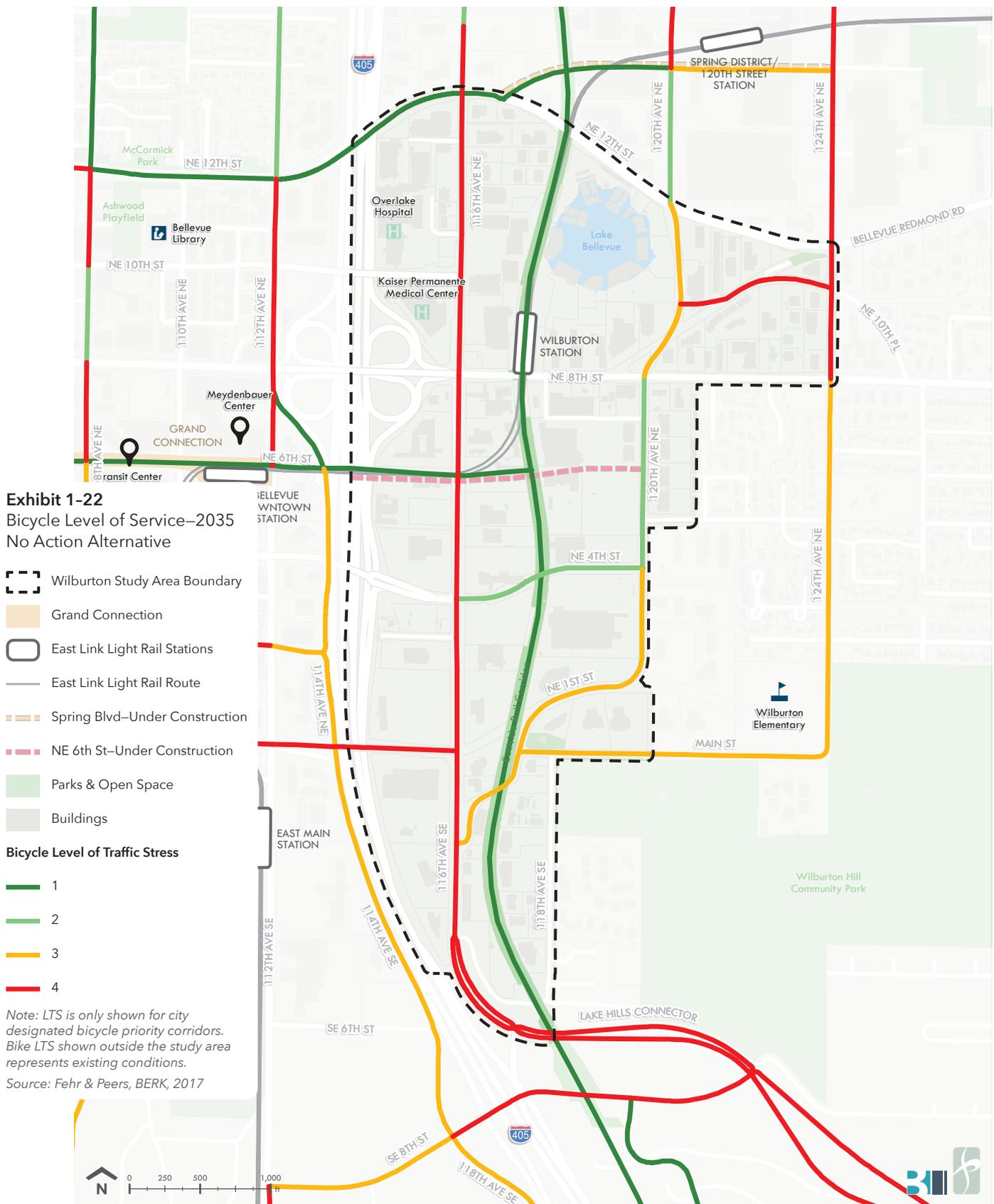
Non-motorized connectivity under Alternatives 1 and 2 is shown in Exhibit 1-24 alongside the No Action Alternative for comparison. The addition of new local streets, alleys, pedestrian paths, stairs, and arterial crossings under Alternatives 1 and 2 would substantially improve non-motorized connectivity throughout the Study Area. Connectivity is greatly improved along and adjacent to 116th Avenue NE, a new north-south street between the ERC and 120th Avenue NE, and along and adjacent to NE 8th Street between 120th Avenue NE and 124th Avenue NE. This improvement in the composite score is driven largely by the improved intersection density and signalized arterial crossing frequency. However, one location continues to see low connectivity due to a lack of signalized arterial crossings: between 116th Avenue NE and 120th Avenue NE from NE 6th Street to Lake Bellevue.

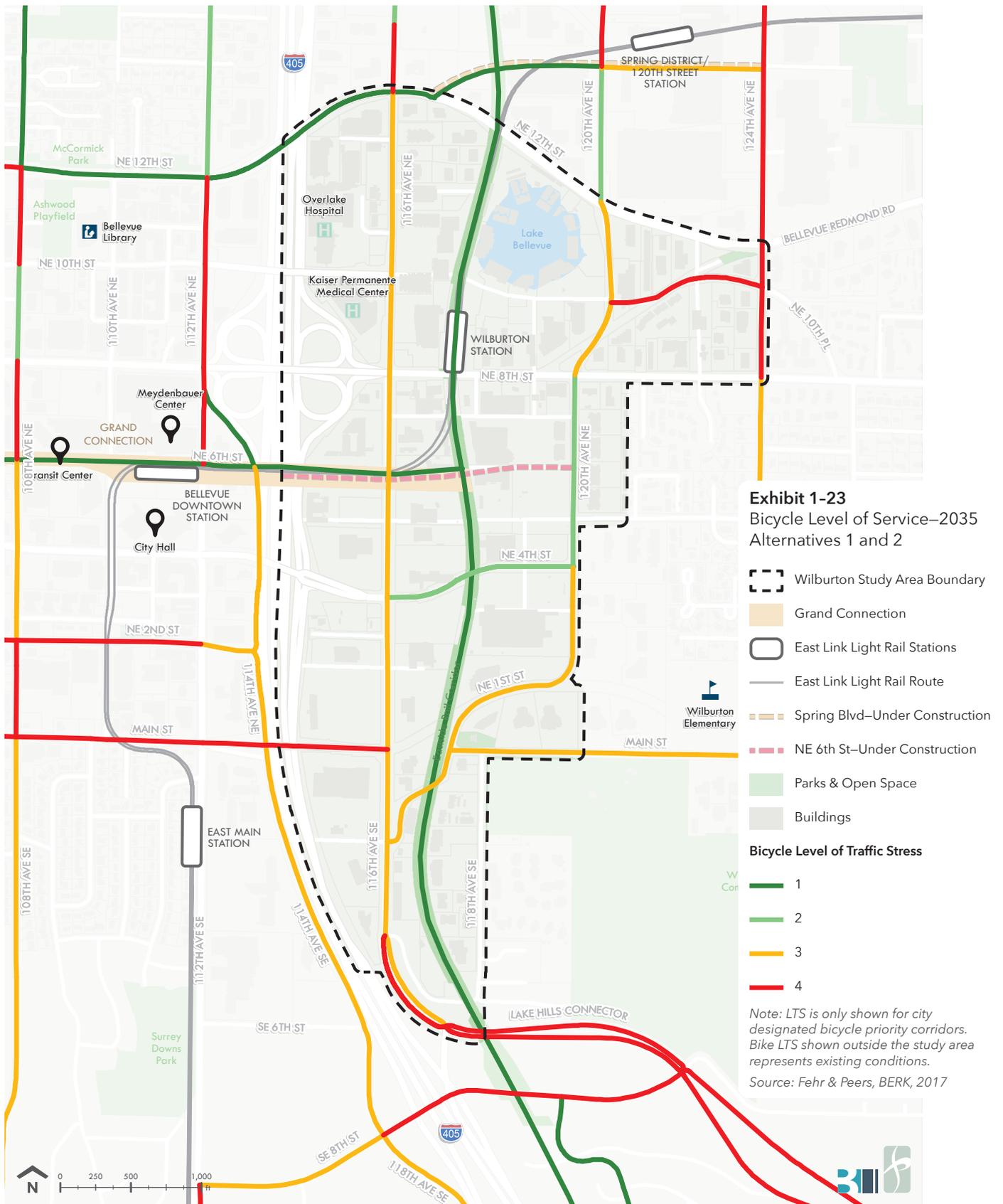
## **Safety**

Traffic volumes in the Study Area are projected to increase under Alternatives 1 and 2 compared to the No Action Alternative, with Alternative 2 resulting in the highest volumes. With higher volumes, there is potential for an increased number of collisions. However, there is no indication that collision rates at intersections or along segments would increase meaningfully compared to the No Action Alternative. Therefore, no significant safety impacts are identified for Alternatives 1 or 2.











2035 No Action Alternative

2035 Alternatives 1 and 2

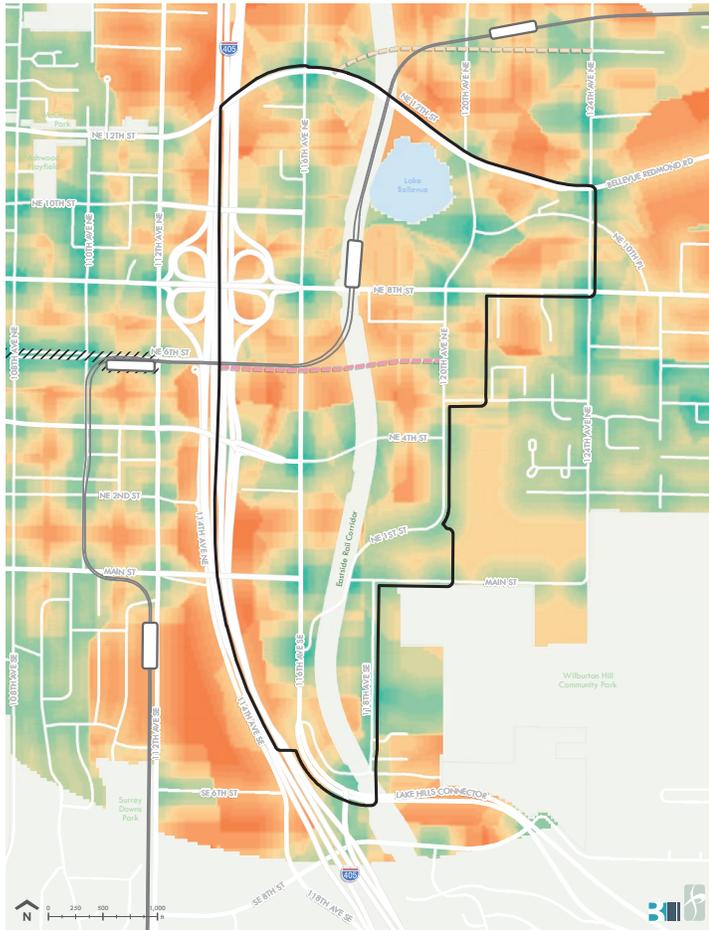


Exhibit 1-24 Non-Motorized Connectivity–2035 Alternatives 1 and 2

- Wilburton Study Area Boundary
- Grand Connection
- East Link Light Rail Stations
- East Link Light Rail Route
- Spring Blvd–Under Construction
- NE 6th St–Under Construction
- Connectivity Index**
- High
- Low

Source: Fehr & Peers, BERK, 2017

### What are some solutions or mitigation for the impacts?

#### Current Plans and Codes

The City of Bellevue incorporates a variety of Transportation Demand Management (TDM) strategies to encourage travel by carpooling, vanpooling, transit, walking, biking, and teleworking. The City published a TDM plan in 2015 guiding its TDM strategies and implementation through 2023.

Key strategies include:

- Requirement-based programs, including Commute Trip Reduction and Transportation Management Programs.



- Product subsidies and discounts, including transportation benefit rebates, transportation mini-grants, and emergency ride home.
- Education and assistance, including commute program consulting services, program expert consulting services, real-time and longer-term travel information assistance, rideshare and ridematch promotion, and school programs aimed at K-12 students and their parents.
- Incentives and rewards, including trip logging and rewards programs, commute challenges, and parking cashout.
- Marketing and promotions of TDM strategies, the Choose Your Way Bellevue website, carsharing, recognition programs, and email newsletters.
- Research, planning, and coordination to explore new TDM concepts and programs.

Several of these programs are discussed here; additional details on the other strategies are provided in Appendix D.

Washington State Commute Trip Reduction (CTR) law focuses on employers with 100 or more employees whose shifts begin during the typical AM commute. This law requires employers to develop commute trip reduction plans and work toward meeting their mode share targets through internal programs and monitoring. Bellevue's monitoring of CTR worksites reflects a steady decrease in SOV rates over the past 20 years, particularly Downtown. As more businesses subject to CTR locate in the Study Area, it is expected that a similar decrease in SOV commute rates will result.

Transportation Management Programs (TMPs) are required by City code (sections 14.60.070 and 14.60.080 BCC) for property owners of newly constructed buildings. TMPs are designed to encourage tenants to reduce their traffic and parking impacts on city facilities. Both the CTR and TMP programs are currently geared toward large employers; however, they could be adapted to smaller employers and residential buildings to maximize their effect.

The TDM strategies discussed here would be implemented regardless of which land use alternative is selected. As demonstrated by the CTR data in Bellevue, TDM programs can have a substantial effect on travel behavior—something which is not fully captured by the travel demand modeling process. With a robust TDM program in place, it is expected that actual trip generation in the Study Area would be lower than that analyzed in the impacts section of this EIS.



### **Level of Service Policy**

The City could approach mitigation through revision of its LOS policy—in particular, through the designation of MMA system intersections and revising the LOS standard for the MMA and primary vehicle corridors to be consistent with more urban areas of the city. See Section 3.9 for more information.

### **Intersection-specific Improvements**

Another potential approach to reduce the MMA intersection impacts is to make capital improvements to increase the capacity of the intersections and roadways in the Study Area. See Exhibit 1-25 and Exhibit 1-26.

If all of the modifications listed above were implemented, the MMA average delay under Alternative 1 would decrease to 54 seconds and under Alternative 2 would decrease to 49 seconds, meeting the City's current standard. A complete table of the mitigated intersection operations may be found in Appendix C.

Mitigation measures for the non-MMA system intersections were also considered.

Exhibit 1-26 summarizes capital improvements that would reduce delay to the level forecasted for the No Action condition.

The intersection modifications proposed above would increase crossing distances for pedestrians and bicycles and may not be desirable in a dense urban area near light rail stations. If these modifications are pursued, substantial pedestrian crossing improvements may be warranted to meet MMLOS guidelines.

It should be noted that some of the above intersections are system intersections for other MMAs. While this study proposes mitigations to return their operations to the No Action Alternative conditions, it is recommended that they be viewed more holistically as part of a Transportation Facilities Plan update to determine if the modifications are warranted given the envisioned urban, multimodal nature of the area.

### **Vehicle Speed**

Significant impacts to vehicle travel speed were identified for eastbound NE 4th Street under Alternative 1 and both eastbound and westbound NE 4th Street and southbound 116th Avenue NE


**Exhibit 1-25** Potential Mitigation Measures for MMA System Intersections

INTERSECTION IMPROVEMENT	VEHICLE DELAY (IN SECONDS)					
	ALT. 1	ALT. 2	Alt. 1	Alt. 1 Mitigated	Alt. 2	Alt. 2 Mitigated
<b>116th Avenue NE/NE 8th Street</b>						
Dual NB left turn lanes		X				
Prohibit WB U-turns to allow NB right turn overlap		X	53	53	71	58
<b>120th Avenue NE/NE 8th Street</b>						
Prohibit EB U-turns to allow SB right turn overlap		X	56	56	58	34
<b>116th Avenue NE/NE 4th Street</b>						
Dual NB left turn lanes		X				
Dual EB left turn lanes	X	X				
EB right turn pocket with overlap		X	>150	85	>150	72
SB right turn pocket with overlap	X	X				
Modify signal phasing	X	X				

Source: Fehr & Peers, 2017

**Exhibit 1-26** Potential Mitigation Measures for Non-MMA System Intersections

INTERSECTION IMPROVEMENT	VEHICLE DELAY (IN SECONDS)						
	ALT. 1	ALT. 2	No Action Alt.	Alt. 1	Alt. 1 Mitigated	Alt. 2	Alt. 2 Mitigated
<b>116th Avenue NE/NE 12th Street</b>							
NB right turn lane	X	X	96	112	86	117	89
<b>120th Avenue NE/NE 12th Street</b>							
NB right turn lane	X	X	86	103	82	104	78
<b>124th Avenue NE/NE 8th Street</b>							
Protected phase for SB left turn		X					
WB right turn lane	X	X					
Signal timing changes including WB right turn overlap	X	X	56	103	53	112	56
Dual SB left turn lanes	X	X					
<b>Spring Boulevard/Bel-Red Road</b>							
Dual EB left turn lanes	X	X	68	77	54	79	55

Source: Fehr & Peers, 2017

under Alternative 2. If the intersection improvements proposed above were implemented, vehicle travel speed would increase along both 116th Avenue NE and NE 4th Street.



Under Alternative 2, the mitigations would bring vehicle travel speed on southbound 116th Avenue NE and eastbound NE 4th Street within the City LOS guideline. However, westbound NE 4th Street would remain at 49 percent of typical urban travel speed under Alternatives 1 and 2. A major reason for the slow travel speed along the NE 4th Street corridor is related to the operation of the I-405 off-ramp signals. WSDOT operates the off-ramp signals to minimize the likelihood of vehicle queues spilling back onto the freeway, which makes traffic on NE 4th Street traveling between 112th Avenue and 116th Avenue NE slower since vehicles typically have to wait at one of the two ramp signals.

These improvements should also be considered in conjunction with a revision of the LOS guideline to be 50 percent of typical urban travel speed consistent with the adjacent neighborhoods of Downtown and BelRed/Northup. It is anticipated that with further signal timing refinements, the impact on westbound NE 4th Street could be mitigated as the speed correlates to less than 10 seconds above the threshold.

### **With mitigation, what is the ultimate outcome?**

This EIS identifies significant adverse impacts to intersection operations and primary vehicle corridor speed under both Action Alternatives. With some combination of the potential mitigation measures outlined in the previous chapter, including measurement of impacts consistent with other urban areas in Bellevue, the magnitude of the intersection LOS and primary vehicle corridor speed impacts could be mitigated to a less-than-significant level. Therefore, no significant and unavoidable adverse impacts to transportation are expected.

## **NOISE**

### **How did we analyze Noise?**

A desktop survey using aerial photography, Google Earth, ArcGIS, and the City of Bellevue Comprehensive Plan and zoning was used to determine locations of noise sensitive land uses in the Study Area. After describing existing noise levels and the methods used for the impact analysis, each alternative was analyzed to determine the effects on noise sensitive land uses within the Study Area. This includes construction, stationary commercial activities, and the resulting increased noise levels associated with increases in traffic.



## What outcomes or impacts did we identify?

Under all alternatives there would be temporary impacts in noise during construction. Construction activities would be temporary in nature and it is anticipated the majority of the activities would occur during daytime working hours.

Future commercial facilities could use stationary mechanical equipment that, unless properly designed or controlled, could cause community noise levels to exceed the allowable City noise ordinance limits. In addition, future facilities could use outdoor loading docks and outdoor material storage areas that, unless properly designed and controlled, could generate substantial amounts of noise in the surrounding community. Such uses would be subject to the noise limits of BCC 9.18.030.

## What is different between the alternatives?

Traffic could increase roadway noise. The existing noise levels range from 64 to 69 dBA, and the increases over existing conditions in the alternatives range from zero to 3 dBA, with most of the increase 1 dBA. Alternative 1 has greater impacts than the No Action Alternative, and Alternative 2 has greater impacts than other studied alternatives. See Exhibit 1-27. However, an increase of 1 dBA is not perceptible to the average person and a 3 dBA increase is barely perceptible. Thus, impacts under any studied alternative would not be significant.

Because the Grand Connection would cross over I-405, there would be increases in noise by bringing the receiver closer to the interstate, but at the receiver near the Grand Connection (R03), the increase in

**Exhibit 1-27** Existing, No Action, and Future Potential Noise Levels

RECEIVER	NAC* (FUTURE CONDITIONS)	EXISTING CONDITIONS	NO ACTION ALT.		ALT. 1		ALT. 2	
			Future Noise	Increase over Existing	Future Noise	Increase over Existing	Future Noise	Increase over Existing
R01	72	68	69	1	70	2	71	3
R02	67	64	64	0	65	1	65	1
R03	67	69	69	0	70	1	70	1
R04	67	65	67	2	66	1	68	3

\* Noise Abatement Criteria

Source: CH2M, 2017



noise over existing conditions would be above the Noise Abatement Criteria (NAC), but not perceptible to the average person. In addition, if new open space areas are constructed in close proximity to the interstate there is also the potential for noise to exceed the NAC.

## **What are some solutions or mitigation for the impacts?**

Current regulations and commitments include:

- BCC 9.18.040 includes nuisance provisions.
- BCC 9.18.030 provides specific noise controls and allowable community noise limits (expressed as dBA levels) for commercial sources affecting residential receivers.
- BCC 9.18.020 limits hours of construction to daytime periods.
- BCC 9.18.045B includes the use of sound attenuation measures if exterior Ldn along proposed building lines of structure exceeds 65 dBA
- The SEPA review process allows the City to consider potential noise impacts. A noise impact study may be required to forecast future noise levels for some developments and identify mitigation measures.
- WSDOT Traffic Noise Abatement Protocol sets requirements to evaluate and abate traffic noise impacts, for roadway improvement projects that use state or federal funding.

Construction noise measures include requiring a noise control plan where the contractor will be required to comply with all federal, state, and local regulations relating to construction noise. See details in Section 3.10 of this EIS.

The City could require each commercial facility proposed for construction within 500 feet of residentially-zoned parcels to conduct a project-specific community noise impact assessment to demonstrate compliance with the community noise limits set by the City's noise ordinance (BCC 9.18.030).

## **With mitigation, what is the ultimate outcome?**

The potential increases in traffic noise is not expected to increase 10 dBA over existing conditions, and based upon the modeling would only increase up to 3 dBA. Considering the level of noise change as well as mitigation measures, no significant, unavoidable adverse impacts are anticipated.



## ENERGY

### How did we analyze Energy?

Energy consumption is qualitatively analyzed for buildings and vehicles considering information from Energy Star (Energy Star 2016a) that includes information on energy consumption by development providing an order of magnitude on energy consumption that could be expected. Information is provided on the different types of land use types expected based on the existing and total development by alternative. Fuel consumption from vehicles is also addressed qualitatively with information from the Puget Sound Regional Council (PSRC) on existing and forecasted average daily vehicle miles traveled (VMT) in the Puget Sound region and the average fuel economy of cars and trucks.



Power pole on 116th Avenue NE (BERK)

### What outcomes or impacts did we identify?

Development in the Study Area under all alternatives will primarily be comprised of retail/commercial, medical, office, housing, and hotel. The increases in development would increase population and employment in the Study Area which would increase energy consumption. Mixtures of newer and older development could likely be more energy efficient than existing development, based on changes to building codes and innovations in building technology and performance. All new development or redevelopment would be designed and constructed to meet the applicable state and city building and energy conservation code requirements.

All the alternatives will result in increases in consumption of energy for vehicles. Increase in density and the introduction of light rail would reduce vehicle energy usage as more people would be able to use transit. Although the change in VMT between the alternatives is significant, the VMT under all alternatives is a relatively small percentage of the citywide VMT. The introduction of new vehicle technologies and increase in fuel economy would continue to increase vehicle mpg and decrease fuel consumption.

Installation of solar would depend on the building footprint and the installation of local generation technologies would require the construction of new facilities to generate and distribute energy, but given the smaller footprint can be blended to match existing infrastructure. District energy is another potential form of alternative



energy that could be used for energy in the Study Area. There is also the potential for alternative energy within individual buildings as long as the developments (multifamily, office, mixed use, and hotel) are large enough to support it. An example of an alternative energy source in a development is sewage heat recovery that captures heat from hot water flowing down drains (i.e., showers, dishwashers, and washing machines) and uses that heat to re-heat hot water tanks and the building and as an example typically works best with residential buildings of greater than 200 units (PHCPPROS 2016). With redevelopment potential under all alternatives, new forms of energy sources can be integrated into new construction, and more so under Alternatives 1 and 2 which allow more opportunities for compact mixed-use growth.

### **What is different between the alternatives?**

The development under the No Action Alternative would not be to the same scale as Alternatives 1 and 2 and increases in population would be lower given the low projection of new housing development. Although new development and redevelopment are lower, the No Action Alternative would result in increased energy consumption. Because the No Action Alternative would have minor increases in density, it would not have the same opportunities for energy savings. The No Action Alternative would not provide opportunities for compact walkable neighborhoods that reduce the dependency on vehicles. Additionally, because the No Action Alternative does not include much increase in housing it could result in residents in the region living further away and result in a greater VMT and fuel consumption. There is also the lost opportunity to connecting additional residents to transit with the East Link station in the Study Area. Because the No Action Alternative does not include the Grand Connection Options there is no potential for additional decreases in vehicle energy consumption and a missing non-motorized link connecting Downtown Bellevue to the Eastside Rail Corridor Trail which could further reduce energy consumption and encourage more people to use non-motorized modes.

Impacts under Alternatives 1 and 2 would result in greater densities and higher percentages of population and employment that would increase energy consumption when compared to the No Action Alternative, particularly for Alternative 2. However, the increased density of development could reduce per capita energy use. Because of the greater potential for larger developments



compared to the No Action Alternative there is a greater likelihood of alternative energy sources, especially those that require greater densities. The increases in density would result in a more compact walkable neighborhood and provide opportunities for more residents and employees to use transit instead of drive compared to the No Action Alternative. Alternatives 1 and 2 would also include the Grand Connection. These connections would result in reductions in vehicle fuel consumption in addition to the improvements in technology that are anticipated to reduce energy consumption.

Under Alternative 1 and particularly under Alternative 2 there would be increases in building heights allowed in the Study Area could affect the use of solar on adjacent properties due to shading. Shading can negatively affect and reduce the effectiveness of solar panels. Refer to Section 3.8, Aesthetics, for information on shading as a result of increased height limits. However, because there is an increase in building heights on some developments the addition of solar may not be warranted because of the lack of available space on the rooftop especially on taller buildings that require additional equipment. The physical interference can be mitigated through the purchase of renewable credits (i.e., PSE's renewable energy program and alternative energy tariff).

### **What are some solutions or mitigation for the impacts?**

The application of energy codes and energy conservation and renewable energy resources could help reduce impacts. Energy infrastructure and resources are planned in advance, and current regional efforts are anticipating needs in the Eastside. Additionally, implementation of sustainability requirements including the construction and operation of LEED-compliant (or similar ranking system) buildings could reduce the increase required in power systems. Use of alternative forms of energy could be included in larger developments where installation is cost effective. The implementation of actions identified in the Bellevue Environmental Stewardship Initiative 2013-2018 related to code and standards would allow permits for developments that have energy efficiency measures to be approved in a quicker timeline.



## **With mitigation, what is the ultimate outcome?**

No significant unavoidable adverse impacts on energy are anticipated. The development capacities proposed under all alternatives would increase overall energy consumption. This is mitigated by identifying conservation, renewables, and alternative energy sources for energy supply. It is also mitigated by applying energy codes to new development which intends reductions in emissions associated with energy consumption and VMT measures for building and transportation energy usage per capita.

Average annual VMT per capita would decrease with increased average vehicle fuel efficiency and deliberating providing the infrastructure and opportunity for people living and working in the Study Area to access alternative transportation modes.

The No Action Alternative would not have the same opportunities to reduce energy consumption both buildings and vehicles as Alternative 1 and 2, but does not result in significant unavoidable adverse impacts because new development or redevelopment would still be constructed to meet energy codes and would have opportunities for solar or alternative energies to help meet energy targets.

## **ENVIRONMENTAL HEALTH**

### **How did we analyze Environmental Health?**

Environmental health specialists reviewed current conditions and available studies about hazardous materials and electromagnetic fields (EMF).

### **What outcomes or impacts did we identify?**

Construction could release hazardous materials due to ground disturbing, dewatering, and demolition activities. Most of the documented hazardous materials sites are associated with auto-related uses, and would be cleaned up to federal and state standards.

As growth occurs in the Study Area, there is potential for hazardous material spills as traffic and the potential for accidents increases. Any spills would be cleaned up consistent with applicable state and local requirements and no significant impacts are anticipated.



The Eastside Hazardous Materials Unit, a consortium of eastside fire departments that Bellevue Fire Department, would respond to hazardous material incidents.

Development is not anticipated to result in impacts related to EMF, or to be impeded by EMF. The operation of East Link would result in a new sources of EMFs, but as documented in the East Link EIS, no impacts on human health are anticipated. (Sound Transit, 2011b) If required, an analysis of potential EMF impacts would be addressed as of the project-level documentation. It should be noted that the Preferred Alternative for Energize Eastside is east of the Study Area.

### **What is different between the alternatives?**

The increased development under Alternatives 1 and 2 increases the likelihood of encountering contaminated sites compared with the No Action Alternative. Given the greater buildout anticipated, Alternative 1 could have the greatest potential for impacts from encountering hazardous materials on redevelopment sites and accidental spills as a result of the higher increase in traffic volumes.

### **What are some solutions or mitigation for the impacts?**

During construction, applicants could prepare a comprehensive contingency and hazardous substances management plan, a worker health and safety plan, a spill prevention control and countermeasures plan, and a stormwater pollution prevention plan.

### **With mitigation, what is the ultimate outcome?**

No significant unavoidable adverse impacts would occur with the implementation of mitigation measures. Hazardous materials sources would not impede redevelopment. Federal, state, and local regulations are in place to require cleanup of sites and to promote spill prevention. EMF sources may influence the location of businesses with sensitive equipment (e.g. medical) but otherwise would not impede redevelopment. Separate environmental studies have been completed on EMF sources from utilities associated with PSE's Energize Eastside project and the Sound Transit East Link project. As noted under Section 3.12.2, the analysis for both projects did not identify impacts associated with EMF or require mitigation measures.



## PUBLIC SERVICES AND UTILITIES

### How did we analyze Public Services and Utilities?

Planners reviewed level of service standards and system plans for police, fire, and emergency medical, parks and recreation, schools, and solid waste.



Wilburton Hill Community Park (City of Bellevue, CAC Briefing Book, 2016)



Force Mains Awaiting Installation (City of Bellevue, CAC Briefing Book, 2016)

### What outcomes or impacts did we identify?

Under all alternatives there could be increases in development and increased population and employment density. The greatest density could occur in the area around the Wilburton light rail station and along the ERC and 116th Avenue NE corridors. The development could be incremental and Bellevue regularly updates plans to accommodate growth and maintain public services and utilities. The Capital Facilities Element of the Bellevue Comprehensive Plan notes that demand will grow during the 2035 planning horizon and that the new demand could be accommodated through both new capacity and managing demand. Based upon information developed in system plans, the Capital Investment Program is updated every two years and identifies the planned and funded infrastructure and facility improvements.

**Police:** The Bellevue Police Department is currently understaffed and needs to hire officers over the next three to four years to reach the planned staff levels. With increases in population and employment in the Study Area there is the potential for increased calls. In addition to the increases in densities, other factors including socioeconomic considerations play into crime levels as areas grow.

**Fire and Emergency Services:** With the increased development under all alternatives there would likely be an increase in calls for service, and, as the area grows, additional staff may be needed to ensure response times are maintained. Under all alternatives there would be increases in building height. The construction and operation of Station 10 by 2021 and the proximity to high-rise buildings will help with response times, including vertical response times (time to travel from curbside to location in a high-rise building).

**Schools:** Increases in residential development could result in additional students. As described above, the school district has



been able to anticipate the increased enrollment growth and ensure that growth can be accommodated.

**Parks:** As population increases in the Study Area from new development, there could be an increased demand for parks and recreation opportunities.

**Water:** The City has planned improvements to the water system in the west portion of the service area, which includes the Study Area, in anticipation of growth in this area.

**Wastewater:** Development of any of the alternatives could result in greater demands on the local wastewater collection system and on the downstream conveyance and treatment facilities. Recent pump station and sewer main upgrades in the Study Area have been proactively completed in anticipation of growth occurring in this area and because of Sound Transit East Link construction.

**Solid Waste:** All of the alternatives could result in increases in population densities and development which could increase demand for garbage, recycling, and organics collection.



*Bellevue Botanical Garden (City of Bellevue, CAC Briefing Book, 2016)*

## What is different between the alternatives?

### Public Services

Under the No Action Alternative, the increase in housing units is limited, and any increases in population within the Study Area is not anticipated to result in greater impacts on police, fire and emergency medical, public schools, or parks. Alternative 1 could have a greater potential demand compared to the No Action Alternative because of the forecasted growth in population and employment in the Study Area. Because anticipated growth in population and employment would be highest, as would building heights, there would be greater demands on public services and utilities under Alternative 2.

### Water and Wastewater

The increase in water demand under the No Action Alternative would be less than 0.01 percent of current (2014) water consumption for the total service area. The increase in wastewater flow would be less than 0.1 percent of current peak wastewater flow demand for the total service area.



Gate Valve at BelRed Inlet Facility (City of Bellevue, CAC Briefing Book, 2016)

Under Alternative 1, the potential increase in water use is less than 0.2 percent of current (2014) water consumption for the total service area and peak wastewater flow would be less than one percent of current peak wastewater flow demand for the service area.

Under Alternative 2, the water demand increase is about 0.2 percent of current (2014) water consumption for the service area and just over one percent of current peak wastewater flow demand for the service area.

### What are some solutions or mitigation for the impacts?

- Through the capital facilities planning process, the City of Bellevue would continue to address changes in service for police, fire, parks, schools, and utilities.
- The City could further encourage the use of Crime Prevention through Environmental Design (CPTED) in new developments in plans and regulations for Wilburton.
- All new buildings would be constructed per City building codes which address life and safety concerns. Sprinklers would be provided in larger buildings.
- Under Alternatives 1 and 2, the options associated with the Grand Connection could add new open space and trail connections in the Study Area that could provide connections to other recreation resources in the surrounding area. The City could look for opportunities to develop new parks, open space, and recreation facilities, especially in the northern portion of the Study Area. This would work to address the 1/3-mile walkable access to parks and open space that the Wilburton Commercial Area currently does not meet.
- Developments may reduce water demand by using new technologies that would reduce per-capita water demand (and therefore wastewater service demand) by using newer, low- or no-flow plumbing fixtures and equipment.
- The City could encourage residents and business to recycle and compost materials to reduce waste streams.



## With mitigation, what is the ultimate outcome?

With the implementation of mitigation measures, no significant unavoidable adverse impacts are anticipated on public services and utilities. The growth planned for the area would be incremental, and the planning process to relevant plans would address improvements required to maintain response times, ensure access to parks, address student growth, and ensure utilities can accommodate growth.

## 1.6 TRANSPORTATION AND ENVIRONMENTAL PERFORMANCE MEASURES

In addition to a typical programmatic analysis of alternatives, this EIS screens alternatives using evaluation criteria responding to City Council Guiding Principles stated in Section 2.3. See Exhibit 1-28.

### NO ACTION ALTERNATIVE

The No Action Alternative continues current plans under existing development regulations. It could result in a development pattern that is not designed to support or respond to the investments in light rail with appropriate densities or mixes of uses around the station area. If located near offices or other concentrated employment centers, public spaces could be used by employees, but would not result in a more continuous pedestrian use day and night common in mixed use urban areas.

With lesser building heights and floor area ratios, and more single-purpose commercial districts, there could be less capacity for jobs, and less likelihood of meeting City economic development goals for business starts in desired sectors. With lower intensity development patterns, there could be a lower capacity for housing units; less residents could be available to support local businesses or use neighborhood parks and gathering spaces. The development patterns could be less compatible with Downtown in terms of the transition of intense urban forms, but could be compatible with development in residential areas to the east.



Exhibit 1-28 Wilburton Commercial Area Performance Criteria Evaluation Matrix

PERFORMANCE MEASURE	NO ACTION ALT.	ALT. 1	ALT. 2
<b>Land Use and Aesthetics</b>			
Character, intensity, and extent of transit-oriented mixed-use development around Wilburton station	●	▲	▲
Addressing the eastern terminus of the Grand Connection and station area planning	●	▲	▲
Density of community gathering spaces and increase in usable public space	▼	●	▲
Amount and location of open spaces and parks, including goals identified in the park and recreation system plan, e.g. neighborhood park	▼	●	▲
Increased opportunities for skyline and water views	▼	●	▲
Height of development, location of roads, and landscaping abutting surrounding neighborhoods creating an appropriate transition to areas of greater or lower density	▼ Downtown & BelRed ▲ Residential	▲ Downtown & BelRed ● Residential	▲ Downtown & BelRed ▼ Residential
Concentration of development and activity at perimeter of neighborhoods creating an appropriate transition to areas of greater or lower activity	Same as above	Same as above	Same as above
Amount of growth on sites likely to develop and needed capital facilities. Potential for near-term and mid-term implementation.	▼	●	▲
<b>Transportation</b>			
Connectivity index and map	●	▲	▲
Access to services (parks, schools etc.)	▼	▲	▲
Multimodal level of service performance measures	▼	●	●
Increase in walk and bike trips	▼	●	▲
Transportation engineering complexity, cost, and funding availability	▲	●	▼

▲ Strong Emphasis    ● Moderate Emphasis    ▼ Weak Emphasis



PERFORMANCE MEASURE	NO ACTION ALT.	ALT. 1	ALT. 2
<b>Economic Activity</b>			
Diversity and number of jobs that support the Economic Development Strategic Plan	▼	▲	▲
Opportunities to leverage jobs in medical and technology sectors, as well as commercial uses, as part of mixed-use development	▼	▲	▲
A strengthened and diversified economic base: capacity for job growth by sector, business starts	▼	▲	▲
Auto sales tax revenue offset by new economic development activity	▼	●	▲
Towards a sustainable city: mobility and congestion, workforce housing, natural environment	▼	▲	▲
Create an opportunity for a district that promotes health and wellness (based on land use case studies)	●	▲	▲
Urban amenities measure such as potential future density of stores, parks, etc.)	●	▲	▲
<b>Neighborhoods and Population</b>			
Capacity for housing and densities that support the light rail station	▼	▲	▲
Housing quantity and diversity in housing forms and affordability:			
<i>Quantity</i>	▼	▲	▲
<i>Diversity</i>	●	▲	▲
<i>Affordability</i>	●	▲	▲
Number of affordable units (at x% AMI) incentivized	▼	●	▲
<b>Ecosystems/Water Resources/Air Quality</b>			
Stream/lake restoration/connecting habitats	▼	●	●
Per capita greenhouse gas emissions	▼	●	▲
Amount of effective hard surfaces	●	●	●
Percent of tree cover	▼	●	●
<b>Public Services</b>			
Benefits in relationship to cost of infrastructure or public realm investments	●	▲	▲
Amount of investment in infrastructure that supports physical activity (e.g. recreation facilities, walking facilities, playgrounds), park and green space	●	▲	▲

▲ Strong Emphasis    ● Moderate Emphasis    ▼ Weak Emphasis



Future development could be subject to the same City stormwater standards and redevelopment could result in less effective hard surfaces. While water quality may improve, there could be less development incentives to promote ecosystem restoration.

Mixed-use development near transit centers and non-motorized investments would not be implemented; suburban development patterns would remain. Per capita GHG emissions would be higher.

Public service demands would be less.

The No Action Alternative would have the least connectivity for all modes, and provide less access to services. This alternative would have the least increase in walk and bike trips. The cost for transportation improvements would be less than for Action Alternatives, but would not support the level of private investment anticipated in Alternatives 1 and 2.

## ALTERNATIVE 1

Alternative 1 could result in substantially more residential, office, and retail development in mixed-use formats and with a new skyline and upper story views, around the light rail station and the ERC. More housing including units created with affordable housing incentives could be possible. A greater mix and capacity for jobs could be possible. There could be more day and night activity within public gathering spaces. Development and design standards could be needed to avoid shading of public spaces, and to ensure appropriate transition to less dense areas.

Per capita GHG emissions could be moderate, because growth would focus in urban mixed use developments with access to transit and services rather than the periphery of the region. It could be more feasible to increase tree cover and integrate natural streams and other ecosystem features as part of redevelopment.

Alternative 1 would improve connectivity with more frequent street connections and smaller blocks. It would improve multi-modal levels of service and increase walk and bike trips, though not quite as high as Alternative 2. The cost for transportation improvements would more than the No Action and less than Alternative 2. The level of growth supported would be substantial, though less than for Alternative 2.



## ALTERNATIVE 2

Alternative 2 would be similar to Alternative 1, except it could have more housing and job opportunities, as well as a higher potential to create and impact views. Its taller structures could shade public places, and could also create a greater demand for parks and gathering spaces.

Design standards could be needed to ensure appropriate development transition to eastern residential areas, though topography and vegetation assist in compatibility.

Similar to Alternative 1, Alternative 2 would improve connectivity with more frequent street connections and smaller blocks. It would improve multi-modal levels of service and increase walk and bike trips to the highest level studied. The cost for transportation improvements would be greatest among alternatives requiring more revenues and partnerships.

## 1.7 GRAND CONNECTION ENVIRONMENTAL IMPLICATIONS

As described in Section 1.3, the Grand Connection is planned as a signature urban non-motorized connection between Lake Washington and the Wilburton Commercial Area. The options range from a sculptural bridge that capitalizes on existing infrastructure assets (Option A) and creates public space within the Study Area, a signature stand-alone bridge (Option B) with more modest amounts of public space in the Study Area, and the creation of a public space with a partial capping (lid) of I-405 between NE 6th Street and NE 4th Street (Option C). Each of the options would allow for formal and informal open space, pervious and impervious areas.

These options are evaluated broadly in terms of environmental implications and evaluation criteria. Any of the Grand Connection Options could be developed in conjunction with Alternatives 1 and 2.



Exhibit 1-29 Grand Connection Options

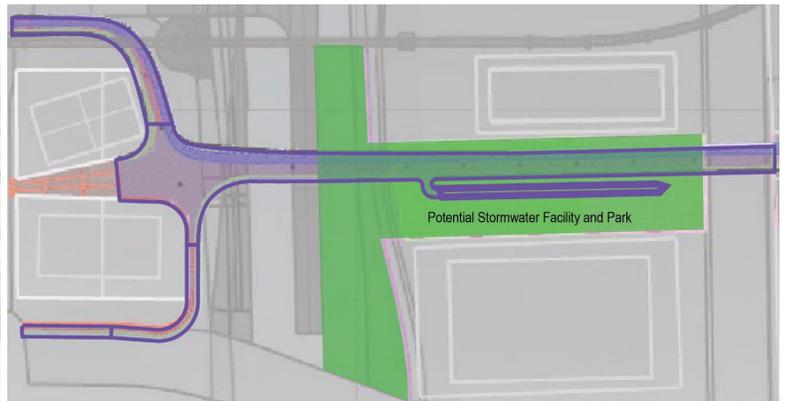
Schematic

Park and Stormwater Features



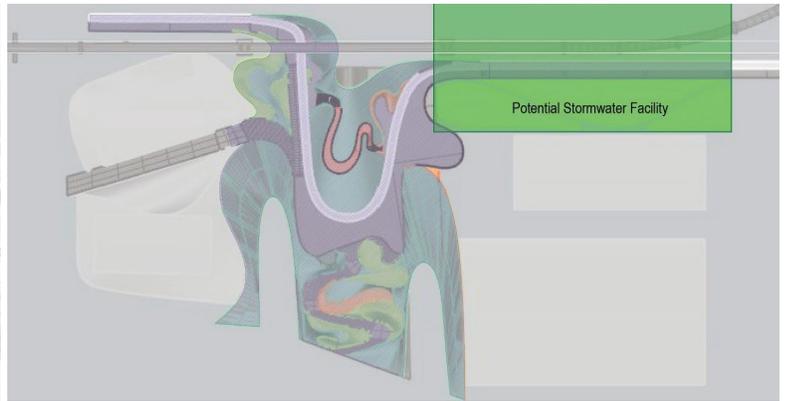
Option A

Sculptural Bridge Stormwater Facility and Park



Option B

Linear Bridge Stormwater Facility and Park



Option C

Lid Stormwater Facility and Park

Source: Balmori 2017



## ENVIRONMENTAL IMPLICATIONS

### Geology and Soils

Under Alternatives 1 and 2, all options for the Grand Connection overcrossing would need to be designed to avoid or minimize geotechnical issues, with geotechnical investigations to guide the design process.

### Air Quality

See Section 1.5, Air Quality on page 1.20 addressing cumulative air quality findings. Depending on timing of construction there would be a cumulative effect on GHG emissions from construction activities. The Grand Connection would promote non-motorized travel and help moderate VMT results. Considering studies of other lids evaluated for SR 520 in several locations (e.g. Montlake), lids would not create adverse air quality impacts for lid users and associated landscaping can help contribute to improved air quality. (Washington State Department of Transportation/Federal Highway Administration, 2016) (Puget Sound Clean Air Agency and Public Health–Seattle & King County, 2008)

### Water Resources

All three Grand Connection options present opportunities to directly replace pollution-generating hard surfaces (PGHS) and add pervious green space and stormwater facilities.

- Option A Sculptural Bridge: approximately 240,000 square feet stormwater facility and greenspace
- Option B Stand-alone Bridge: approximately 167,000 square feet stormwater facility and greenspace
- Option C Lid Park: approximately 30,000 square feet stormwater facility and greenspace

Option A presents the greatest opportunity by converting existing hard surfaces with the largest amount of new pervious surface and green space. Options B and C provide less area to be converted to new pervious and green space than Option A but still represents an increase over existing conditions. All three options present opportunities for utilizing BMPs such as permeable pavements, infiltration facilities, rain gardens, etc. to collect and infiltrate surface runoff to the ground close to the runoff source. Option C proposes



to cover existing hard surface with new hard surface that presents an opportunity to capture runoff and infiltrate to the ground within the Study Area. The supporting stormwater facility for Option C would replace existing PGHS in the Study Area in addition to capturing runoff from the new infrastructure over the interstate.

Options A and B also present opportunities for managing stormwater with decentralized facilities close to sources of runoff. Multiple stormwater facilities could be used with smaller individual footprints, allowing facilities to be directly integrated with landscape areas without greatly encroaching within public space areas. Option C, on the other hand, does not allow for use of decentralized stormwater mitigation to the same extent as Options A and B, and would result in fewer facilities with larger footprints that have potential to encroach in public open space.

## Ecosystems

Constructability challenges to mitigate impacts for ecosystem resources for Options B and C may vary depending on which Grand Connection option is selected. For example, Grand Connection Option B impacts a smaller footprint than Options A and C, and less likely to increase constructability challenges.

Grand Connection Options A and C may affect a greater length of Sturtevant Creek that is in an open channel and not in a culvert (between NE 4th and NE 6th Streets), which could likely increase constructability challenges. Despite the potential short-term constructability challenges, long-term benefits to ecosystem resources could result from enhancements to Sturtevant Creek.

Beneficial cumulative impacts to portions of the natural network could result from the combination of the Grand Connection and Public Space ERC Linear Park or Natural Network Options. These would include opportunities to improve the natural network by enhancing, exposing, and utilizing the natural systems such as Lake Bellevue, riparian wetlands and uplands, and Sturtevant Creek as amenities, and incorporating native vegetation into landscaping. All three of the Grand Connection options pursue strategies to allow Sturtevant Creek to serve as an amenity.



## Land Use

Each of the Grand Connection Option is evaluated for land use implications below.

**Option A—Sculptural Bridge:** Option A would seek to build upon some of the existing infrastructure of NE 6th Street, and then extend with new infrastructure into the Wilburton Commercial Area. East of the existing NE 6th Street infrastructure the crossing would be all new construction that stands independent from surrounding infrastructure, and will navigate around the East Link light rail support structure. The proposal lands on the city-owned Lincoln Center site, and proposes to convert the site, as well as an additional property into a central green civic space for the Wilburton Commercial Area. It would also include an elevated structure that would continue to the Eastside Rail Corridor. Option A is likely to experience a moderate negative visual and sound impact from the light rail line, and a moderate sound impact from the interstate. The form of the crossing would mitigate visual impacts of the interstate while creating a signature and unique design. The public space presents an opportunity to meet the needs for public green space in the Study Area but would require the acquisition of new property, as well as the design and construction of a new park.

**Option B—Linear Bridge:** Option B would create a structure that stands apart from all surrounding infrastructure. This option presents a more direct connection between Downtown and the Wilburton Commercial Area. The option creates less usable green space in the Study Area than Option A, but more than existing. The landing of Option B is in a more modest green space, with an elevated structure that would connect to the Eastside Rail Corridor. The green space proposed in the Study Area would require at least a partial acquisition of property and the conversion of a portion of the city owned parcel into green space. Option B does preserve limited potential for urban development on the north side of the existing Lincoln Center site, directly south of the East Link light rail line. Option B is most likely to experience the greatest negative impacts of sight and sound from the interstate, providing modest visual obstruction through vegetation and landscaped berms. Limited mitigation of the interstate sounds would be available in Option B. This less complex option increases constructability, but also diminishes opportunities to create a signature structure.



**Option C—Lid Park: Option C would cover a large portion of the interstate between NE 6th and NE 4th Streets.** This would include the partial barrel vaulting over the existing access ramps, creating a rolling terrain of approximately 200,000 square feet. The option proposes to use the new land as natural landscaped areas, a civic plaza, and other programmable features for the public. The elevation of the lid would allow for integration into podium rooftops of future developments to the east and west of the interstate. A modest landing would be provided at a stormwater and greenspace facility on the Lincoln Center site, with an elevated structure extending to the Eastside Rail Corridor. This option preserves greater potential for future development on the City owned site, close to 100,000 square feet, and does not require the acquisition of additional property. Option C presents the greatest opportunities to mitigate the sights and sounds of the interstate and would also achieve the objective of creating a signature design.

## Economic Activity

The addition of Grand Connection Options will improve the livability of the area and make the area more desirable to potential residents as well as knowledge workers and talent. This could have positive impacts on economic benefits since it could enhance property values. Several studies conducted over the last twenty years confirm a positive connection between parks and property values and several cities such as Atlanta, Dallas, and Denver have seen economic and development benefits by bridging or lidding across significant pieces of infrastructure.

The Grand Connection Options also have implications for the amount of private use of properties and associated revenues and costs.

Of the three options, options A and B require the conversion of the 4.22-acre City-owned Lincoln Center parcel and other adjacent properties such as the vacant 1.31-acre parcel east of the Lincoln Center parcel currently used as a parking lot. Of the two, Option A with the sculptural bridge would require the conversion of both parcels into public space, limiting their development for other land uses. Option B with a signature stand-alone bridge design could include or be integrated with a park or plaza on the City-owned Lincoln Center site and other properties. This option involves some conversion of the City-owned parcel into public space that would only partially limit its development for other land uses.



Option C would cover I-405 with a lid over the existing interstate ramps between NE 4th Street and NE 6th Street to create a rolling terrain of about 200,000 square feet. This area could be used as a park or other public space and would connect with development on both sides of the interstate via the podiums of future development. Option C would require only a partial conversion of the northern most portion of the City-owned parcel at Lincoln Center for access to the street level of the Study Area and a modest stormwater facility.

The table below reflects costs for the three options for the Grand Connection. The costs are preliminary estimates based on the visioning exercise and would need substantial refinement during design refinement. For Options A and B, the costs reflect property acquisition costs as well as costs for structure, landscape, and other related design elements.

**Exhibit 1-30** Estimated Costs for Grand Connection Options

OPTION	DESCRIPTION	LOW*	HIGH*
<b>Option A</b>	Sculptural Bridge	\$52.80	\$73.10
<b>Option B</b>	Linear Bridge	\$48.70	\$66.10
<b>Option C</b>	Lid Park	\$116.10	\$130.10

\* In Millions

Note: Estimates include structure cost, landscape and hardscape, urban amenities (benches, handrails, etc.), lighting, utilities, and property acquisition (applicable to options A and B).

Source: City of Bellevue, 2017; Balmori, 2017

The acquisition of two parcels of land for Options A and B would have revenue implications as well, since this would remove these OLB-zoned parcels for development opportunities, including the loss of potential tax revenue in the long term. According to the King County assessor, the typical land value range for OLB zoning in this area is \$45-\$85 per square foot. The smaller of the two parcels, the vacant, privately-owned parking lot has a 2017 appraised value of \$4,560,000 which reflects the higher end of the typical land value range (about \$80 per square foot).

## Neighborhoods and Populations

All options for the Grand Connection under Alternatives 1 and 2 would add public space and connectivity amenities that would be available to future residents, and would help meet City goals of



providing parks to meet the needs of future residents. The Grand Connection options would also improve access to Downtown public spaces from the Study Area.

## **Aesthetics**

Each of the Grand Connection Options is evaluated for aesthetic implications below.

### **Option A: Sculptural Bridge**

Option A would extend from NE 6th Street into the Study Area while navigating beneath the East Link light rail aerial guideway. This option would include features such as a viewing platform and ground level plaza and park. The crossing would have a moderate potential for views from the viewing platform. The sight of the interstate would be partially mitigated by the design of the crossing. Sounds would be moderately mitigated through the design and build-up of materials. The form of the crossing, supported by innovative material application would create a signature and unique aesthetic form and represents a modern interpretation of existing neighborhood character and history such as the Wilburton Trestle and former mills that existing in the area. The ground level park would experience moderate visual and sound impacts from the nearby interstate.

### **Option B: Stand-alone Bridge**

Option B would create a freestanding crossing that would be anchored by development to the west and a smaller public space in the Study Area than Option A. The streamlined approach navigates the challenges of the interstate access ramps, but also diminishes opportunities for a unique aesthetic and design of the structure. The design partially mitigates the sight of the interstate from the bridge, but has diminished potential to mitigate the sounds of the interstate. The smaller ground level public space would be equally susceptible to the sights and sounds of the nearby interstate as Option A. Option B preserves more development potential in the Wilburton Commercial Area and better integration into future developments, which conversely diminishes its opportunities to serve as a visually independent and unique structure.



### **Option C: I-405 Lid**

Option C would pursue strategies to best mitigate the sights and sounds of the interstate by covering as much of the interstate as possible. This would create a rolling terrain of approximately 200,000 square feet that could be used as park, plaza, or other public space. It creates a significant opportunity for a signature urban design experience while capturing many of the benefits of Options A and B regarding views, mobility, and public space. Option C would create a much smaller public space in the Study Area, primarily to create an opportunity to descend from the crossing into the Study Area, and for a proposed stormwater facility. This option preserves the greatest potential for development of the city owned parcel. It could also be integrated into future developments and their podium rooftops on both the east and west sides of the interstate to create a larger contiguous urban experience.

The Grand Connection is not part of the No Action Alternative as current plans and regulations did not anticipate the demand for anew crossing.

### **Transportation**

The three Grand Connection Options In will connect to the ERC, and all three options would provide access to 116th Avenue NE, either by elevator, stairs, or ramps.

For the transportation analysis, those key connections to 116th Avenue NE and the ERC are assumed to be in place for Alternatives 1 and 2 and would function similarly regardless of the Grand Connection concept that is pursued. The Grand Connection would provide an excellent dedicated facility to link Downtown Bellevue and the Wilburton Commercial Area. While there are other crossings of I-405, they are generally inhospitable to pedestrians and bicycles due to the limited facilities and high vehicle volumes and speeds.

### **Noise**

The Grand Connection options, if developed in tandem with other area redevelopment, could contribute to cumulative noise impacts and/or construction noise duration in association with Alternative 1 or Alternative 2. There may be more potential for cumulative impacts if development reached levels associated with Alternative 2 versus Alternative 1.



Future users of the Grand Connection may be exposed to traffic noise. Just east of where the Grand Connection may align at 116th Avenue NE, current noise exceeds noise abatement criteria, and alternatives would contribute incrementally to noise exposure.

## Energy

See Section 1.5, Energy on page 1.57 for cumulative energy effects. The Grand Connection Options do not occur within areas associated with the Energize Eastside project and would not be affected by the changes to the energy system.

## Environmental Health

The Grand Connection Options under Alternatives 1 and 2 could be affected by hazardous material if the sites are contaminated; however, it is anticipated that through the environmental and design process for the Grand Connection, hazardous sites would be identified and mitigated prior to development.

No impacts regarding EMF are anticipated with the Grand Connection Options because if there are adjacent uses that emit EMF, mitigation measures would be implemented and the East Link rail would not result in human health effects.

## Public Services and Utilities

Key features and implications of the Grand Connection and Public Services associated with Alternatives 1 and 2 include:

- **Emergency Services:** Depending when the Grand Connection is constructed, there is the challenge for greater traffic impacts with East Link and I-405 projects and the need for additional police and fire services. Growth would be incremental and any construction overlaps would require additional coordination and may require additional police and fire services to address any construction related incidents.
- **Grand Connection and Park Space Extent and Accessibility:** Grand Connection Option A would have moderate sight and sound impacts to uses given the proximity to East Link and the NE 6th Street extension, but would provide more at grade public space within the Study Area. Grand Connection Option C would best mitigate sights and sounds because of the lid structure, but would provide a slightly smaller public space area



than Option A's ground level park. Option B would offer the greatest opportunity for a stand-alone structure that could also provide public benefits of views towards Mt Rainier to the south. Option B provides the least amount of public space and the least mitigation to the interstate's sights and sounds.

- **Park Space—Consequences to City-owned Lincoln Center:**  
Under both Alternative 1 and 2, if the Lincoln Center is turned into a park/plaza it would create a larger central area in the Study Area and provide new open space to help address the gap. Even though it may not provide 1/3-mile access for areas to the north, it would help, and the connection to ERC would improve access for those located in areas with a gap. Grand Connection Option A and B would create the park space directly in the Study Area, requiring the conversion of the existing city-owned Lincoln Center property, in addition to the acquisition of additional property. Option C would create the park space on new land that previously did not exist.

## GRAND CONNECTION PERFORMANCE MEASURES

Performance measures have been developed to test the Grand Connection Options, similar to the Wilburton Commercial Area, to assist the City in its decision-making process.

Option A is mid-range in its costs, though closer to the lower end of the cost range. It would require more than the City-owned Lincoln Center property to complete and thus may reduce developability of that property locally, though parks facilities may increase the overall value of land nearby. It would allow the City to address stormwater BMPs and better meet parks levels of service closer to the population of the new development. It would have the largest potential green space and the least travel distance. Option A timing is dependent on East Link and private property plans and progress.

Option B is the lowest in cost, acquires the least amount of land, appears to provide moderate travel time to the ERC, and has lesser likely impacts to natural systems due to a smaller footprint of the bridge. To allow for a park within the Study Area, it would require more than the City-owned Lincoln Center property to complete. It would allow the City to address stormwater BMPs and better meet parks levels of service closer to the population of the new development. It would have the second highest green space.



**Exhibit 1-31** Grand Connection Performance Criteria Matrix

PERFORMANCE MEASURE	OPTION A	OPTION B	OPTION C
<b>I-405 Crossing Cost</b>			
Estimated design, engineering, and construction cost for each alternative. Not including impacts to city owned property.	●	▲	▼
<b>Constructability</b>			
What challenges exist for each alternative?	●	▲	●
<ul style="list-style-type: none"> <li>Interface with East Link construction</li> <li>Conflicts with I-405 projects</li> </ul>			
<b>Timing</b>			
How is the timing affected by;			
<ul style="list-style-type: none"> <li>East Link Construction (2023, heavy civil complete by 2021)</li> <li>Eastside Rail Corridor (2023)</li> <li>Private development (2021+)</li> </ul>	▼	●	▲
<b>User Experience</b>			
Which alternative mitigates the sights, sounds, and other negative impacts of the interstate the best?	●	▼	▲
Which afford the greatest opportunities for public benefit such as views, public space, programming?			
Which offers the greatest opportunity for a signature physical design?			
<b>Travel Distance and Accessibility</b>			
What are the travel distances and changes in elevation a user must make to access each alternative	▲	●	▼
<b>What are the consequences to the City Owned Parcel (Lincoln Center)?</b>			
Turn Lincoln Center into a park/plaza or not			
Necessity to purchase additional property to complete a park/plaza vision			
<ul style="list-style-type: none"> <li>Applicable to Options A and B</li> <li>What is the cost of a park?</li> <li>What is the cost of land acquisitions for a park?</li> <li>Property tax implications of removing development potential of Lincoln Center and adjacent property</li> </ul>	▼	●	▲

▲ Strong Emphasis or Feasibility   ● Moderate Emphasis or Feasibility   ▼ Weak Emphasis or Feasibility

Option C would cost the most per Exhibit 1-31, but would require less public and private land to create a park and stormwater area than Options A and B. It produces the least pervious green space in the Study Area. Travel distance would be greatest of the three options. Option C can start with timing less affected by the other investments.