

Date: August 30th, 2017

To: Wilburton Commercial Area Citizen Advisory Committee From: Bradley Calvert (425-452-6930, bcalvert@bellevuewa.gov)

Project Manager for Wilburton - Grand Connection Planning Initiative

Department of Planning and Community Development

Subject: September 7, 2017 Citizen Advisory Committee Meeting

Enclosed you will find your September meeting packet. The meeting is set for Thursday September 7, 2017. We will begin at 6:00 p.m. in Room 1E-112 at Bellevue City Hall. The meeting will be co-chaired by Jeremy Barksdale (Bellevue Planning Commission) and Lei Wu (Bellevue Transportation Commission).

The first item on the agenda is an affordable housing discussion. This will be a presentation from Arthur Sullivan from A Regional Coalition for Housing (ARCH) and Michael Kattermann, Senior Planner for the City of Bellevue. This brief presentation will be part of a series of affordable housing discussions. The first is to serve as a 101 to better explain some of the differences in many terms used to describe affordable housing, as well as potential opportunities for implementation strategies that we will consider in later meetings.

For the latter half of the meeting we will be conducting a group exercise related to design and character. Up to this point we have primarily focused on priorities related to massings, street configurations, and open space locations and concepts. For the September meeting we want to focus more on the design and character of the study area. As we have heard through discussions with the Committee as well as responses from the public surveys, there is a desire to create an aesthetically unique area that is different from other Bellevue urban neighborhoods.

Per the email distributed to Committee members we have assigned teams for the following topics:

Building Typology: Jeremy Barksdale, Matt Jack, Chris Johnson Parks and Open Space: James McEachran, Debra Kumar, Shari Einfalt, Sarah Chong Streets and Connectivity: Lei Wu, Don Weintraub, Alison Washburn, Daniel Renn

Each team will also include two to three stakeholders. The exercise will consist of a blank map of the study area and a collection of precedent and example cards. Each team will select designs, concepts, and ideas from their cards and pin them to locations on the map where they are most appropriate. Each team will also be provided maps outlining the height and density alternatives for reference. As a reminder, this exercise is not to reevaluate the height and density diagrams the Committee agreed upon, but to begin applying aesthetic qualities to them. The final outcome of this exercise is to develop design and character principles, through summarized statements and priorities that will help define the Wilburton Commercial Area and ultimately inform future design guidelines.

In advance of the meeting, contact sheets of the cards are provided in your meeting packet to begin your review. These images are intended to get you thinking about potential aesthetic qualities, and additional images will be provided at the meeting. There is also a blank map where you can begin assigning numbers (see contact sheets) prior to meeting, and a comment card for additional ideas. When studying these precedents it is recommended that you do not look at them as a catalog, or that you are selecting a specific building, park, or street and applying it to the study area. Rather study its elements and consider whether that is something that is a priority to you in the study area as it relates to design, understanding that the execution and implementation could appear different. For example you may want to consider the materiality of a building,



(brick, concrete, glazing, etc.) the design of a park (active vs. passive, pocket park vs. a plaza, etc.), or the composition of a street (alleys with restaurants, planting boxes or planting strips, paving treatment, etc.). There may only be certain elements of each image that you find applicable to the study area. In that case we will ask that you make notes on the card to describe your priorities. For example you may not like the design of a building, but maybe you want to prioritize a particular application of materials. You will also receive a letter from the Eastside Heritage Center. They have graciously provided historical information of the Wilburton Commercial Area and surrounding environments to consider when developing priorities for design and more. This is a great document to review and to incorporate into your notes and thoughts on how history can be exhibited as part of the character and design of the study area.

Following the exercise we will ask that each team present their priorities and have a small group discussion. Each group does not need to reach a consensus on each image used during the exercise, but it should be highlighted as to why there may not be agreement, and make that a part of the discussion following the exercise. Prior to the meeting, if you think of examples that you like or would like to see included as part of the exercise please email them to me and we will make sure that the images are included as part of the meeting.

This should be a fun exercise that allows us to dig a little deeper into the character of the area and how its aesthetic and experiential qualities will help define the Wilburton Commercial Area. As such it is suggested that you look through your workbooks at the priorities that have emerged through the Committee and public survey to help inform your considerations.

Your packet also includes results from the latest public survey. This survey was intended to mirror many of the exercises that the Committee has already completed regarding height, density, open space, and connectivity. The survey also included an open comment section which I encourage each of you to read as there are some very insightful comments. We will briefly review the results of this survey at the meeting.

In addition to materials related to the agenda items, two letters are included from stakeholders. The first is an independent traffic analysis from KG Investments regarding the impacts of a crossing at NE 8th Street for the Eastside Rail Corridor. The second letter is from the Feet First organization and addresses recent CAC topics including the 116th Avenue NE profile, the NE 8th Eastside Rail Corridor crossing, and the overall street grid network of the Wilburton Commercial Area. Please review these important letters and include in future discussions.

Included with this letter are the following meeting packet materials:

- Updated height and density diagrams
- Information sheet on the analysis of options and the 2035 planning horizon
- Results from the August public survey
- Letter from the Eastside Heritage Center
- Letter to the Committee: KG Investments
- Letter to the Committee: Feet First
- Contact sheet of precedent images for the meeting exercise
- Blank maps to assign preliminary ideas from contact sheets
- Comment card
- Slides from the July Committee meeting
- Meeting Minutes from the July 6, 2017 meeting

If you have any questions or need clarification between now and the meeting, please do not hesitate to contact me.



Citizen Advisory Committee Meeting

Thursday, September 7, 2017 6:00 - 8:00 p.m. Room 1E-112 Bellevue City Hall - 450 110th Avenue NE

Agenda

6:00 p.m.

1. Call to Order and Approval of Agenda

Co-chairs Barksdale and Wu (Motion to approve)

2. Approval of minutes of Jul 6, 2017 meeting (Motion to approve)

3. Communication with Boards, Commissions, Stakeholders, Public and Meeting Updates

4. Public Comment

Limit to 3 minutes per person

6:15 p.m. 5. Alternatives and Public Survey Update

Staff will provide a brief overview of the latest public survey results as well as updates to the

evaluation of the height and density alternatives.

6:20 p.m. 6. Affordable Housing 101

Senior Planner Michael Kattermann and ARCH's Arthur Sullivan will provide a brief overview on

opportunities for affordable housing.

7:00 p.m. 7. Committee and Property Owners Workshop

Committee members and selected property owners will engage in a worksession to identify

character and design.

8:00 p.m. 8. Adjourn

Agenda times are approximate

Project website located at https://planning.bellevuewa.gov/planning/planning-initiatives/wilburton-grand-connection/grand-connection/. For additional information, please contact the Wilburton - Grand Connection project manager: Bradley Calvert (425-452-6930, bealvert@bellevuewa.gov. Meeting room is wheelchair accessible. American Sign Language (ASL) interpretation available upon request. Please call at least 48 hours in advance. Assistance for the hearing impaired: dial 711 (TR).



Wilburton Commercial Area Land Use & Transportation Project

Alternatives and Environmental Review | Fact Sheet | August 2017

What is the Wilburton Commercial Area Land Use and Transportation Project?

Wilburton is located between two high growth centers in Bellevue – Downtown and BelRed. Much like the recent transformation of the Spring District, the City is now planning for the future of Wilburton. Ideas include creating a new urban neighborhood with a unique design aesthetic, a mix of many uses, new streets to define small blocks (see Exhibit 5), and many transportation connections, including a light rail station, the Eastside (non-motorized) Rail Corridor and the Grand Connection that will define Wilburton and establish new connections with Downtown. Based on this vision developed with the guidance of a Citizen's Advisory Committee (CAC), amendments to the City's Comprehensive

WILBURTON COMMERCIAL AREA DRAFT VISION STATEMENT

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.

~Citizen's Advisory Committee Spring 2017

Plan, Land Use Code, and Zoning Map will be made for City Council consideration.



What is the Study Area?

The Wilburton Commercial Area study area is bounded 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.

What is the status of the Wilburton Commercial Area planning effort?

The CAC has met monthly between January and July 2017 and has developed a draft vision and conceptual land use and transportation options, and has considered comments from property owners and other stakeholders.

To help the CAC and other City decision makers consider the environmental implications of alternative land use and transportation options, the City initiated an environmental impact statement (EIS). The EIS will provide information and analysis comparing the alternative

land use and transportation options, as well as Grand Connection and open space options. The EIS will also consider how the alternatives incorporate City Council guiding principles and the CAC Vision.

To help scope the EIS, the City held a scoping meeting and a written comment period in April 2017. At the scoping meeting, interactive exercises with the CAC 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.

What Alternatives would be studied in the EIS?

Alternatives include a range of land use, transportation, and open space options as well as design options for the Grand Connection. Key aspects of the alternatives are highlighted below.

Land Use: Building Form, Height, and Space

Exhibit 1. Building Form, Height, and Space



Alternative 1: No Action Future Baseline

Building Form~4.2 Million Square Feet

Alternative 1 is the SEPA-required "No Action" alternative, meaning future development would occur under current plans and codes. Assumed growth would 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 2: Medium

13.1 Million Square Feet 2035 Space ~16.3 Million Square Feet Ultimate Space

Alternative 2 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.



Alternative 3: High

16.3 Million Square Feet 2035 Space ~22.8 Million Square Feet Ultimate Space

Alternative 3 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.

Image Source: NBBJ 2017

Land Use: Growth Ranges and Refinements

The EIS will review ultimate building form, height, and space within the ranges considered by the CAC. However, growth ranges have been adjusted to reflect the year 2035 likely development level based on near-term redevelopment potential, market study results, and preliminary transportation modeling results for the No Action Alternative. This helps the City consider the investments that would be needed in transportation and public services in a timeframe consistent with the Comprehensive Plan.

Exhibit 2. Future Growth: Potential Total Building Space

BUILDING SPACE	CURRENT	ALTERNATIVE 1 (NO ACTION)	ALTERNATIVE 2 (MEDIUM)	ALTERNATIVE 3 (HIGH)
Housing	250,000	335,440	3,798,600	5,050,000
Office	980,000	1,350,299	4,787,400	6,130,000
Retail/Commercial	955,000	1,081,010	1,488,800	1,677,000
Hotel	250,000	292,904	970,900	1,225,000
Medical	1,140,000	1,140,000	1,953,300	2,240,000
Industrial	30,000	30,983	30,000	30,000
Total Square Feet 2035	3,605,000	4,230,636	13,029,000	16,352,000
Post 2035 Ultimate Space		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 2017; BERK Consulting 2017

The 2035 growth studied in the EIS reflects high-range market capture projections from Leland Consulting Group (March 2017) and the Urban Land Institute.

Exhibit 3. Comparison to Market Studies: Net Dwellings and Commercial Space to 2035

LAND USE	LELAND MARKET FORECAST: LOW	LELAND MARKET FORECAST: HIGH	ULI MARKET FORECAST	ALTERNATIVE 1: NO ACTION 2035	ALTERNATIVE 2: MEDIUM 2035	ALTERNATIVE 3: HIGH 2035
Housing (units)	3,480	4,500	5,000	89	3,700	5,000
Office (SF)*	1,800,000	3,000,000	5,000,000	370,299	3,696,500	5,000,000
Retail (SF)	416,000	722,000	310,000	126,010	533,800	722,000

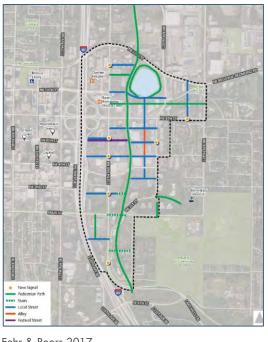
*Note: Generally, excluding medical and governmental, except for Alternative 1. Source: Leland Consulting Group, March 2017

To determine the growth ranges through 2035, building space on potentially redevelopable properties were considered on several blocks shown below (Exhibit 4).

Exhibit 4. Potential 2035 Growth Focus Areas

Exhibit 5. Draft Potential Future Street Grid





Fehr & Peers 2017

Transportation

Transportation concepts include multimodal improvements such as East Link Light Rail, Eastside Rail Corridor Trail (ERC), network improvements, and a new street grid. Some of the key network assumptions are listed in the table.

Exhibit 6. Transportation Network Assumptions

LOCATION	ALTERNATIVE 1: NO ACTION	ALTERNATIVE 2	ALTERNATIVE 3
NE 6th Street Extension	To 120th, or To 116th	To 120 th	To 120th, or To 116th
NE 4th St/ERC	At grade	At grade	At grade
NE 8th St/ERC	Overcrossing	Overcrossing	Overcrossing, or At grade crossing
116th Ave NE	No changes	5 lanes with buffered bike lanes	5 lanes with buffered bike lanes
New street grid	No changes	See map (Exhibit 5)	See map (Exhibit 5)

Source: Fehr & Peers 2017

Next Steps and Schedule

The Draft EIS is anticipated to be published in late September 2017 with a 30-day public comment period. The Final EIS would likely be available in January 2018.

For more information

See the project website at:

http://www.ci.bellevue.wa.us/grand-connection.htm.

Contact: Bradley Calvert bcalvert@bellevuewa.gov 425.452.6930



Wilburton Commercial Area Study Summary of Online Open House #2

August 30, 2017

Overview

The City of Bellevue launched an online open house on July 26, 2017, to solicit public feedback to help inform development of a long-term vision for the Wilburton Commercial Area. The online open house was live at wilburtoncommercialarea.participate.online from July 26 – August 13, 2017.

An online open house is a website, live for a limited time, that simulates the experience of an in-person open house. The site contains "stations" that provide project information and opportunities to give feedback through survey questions.

Public feedback solicited via the online open house will help inform the Citizen Advisory Committee's (CAC's) development of land use, urban design, and transportation strategies for the Wilburton Commercial Area. Survey questions included in the online open house asked respondents to rate their level of support for various development types, street priorities, and uses of public space. Open-ended survey questions asked respondents to describe parks, streets, or buildings that would be good models for the Wilburton Commercial Area and to share general feedback about their vision for the study area. The survey concluded with demographic questions.

The online open house had 414 visitors over the 2.5-week period it was live. On average, survey questions received 125 responses. Overall, respondents indicated a preference for lower-density development and massing. In considering how to best use the street right of way, respondents indicated a preference for separated bike paths and woonerf-style (pedestrian friendly) streets and alleys. Trail-oriented space was respondents' preferred type and distribution of public space.

Feedback from the open-response questions focused on making the Wilburton Commercial Area a walkable neighborhood with shared outdoor space while managing Bellevue's growth and associated traffic.

Notification methods

The online open house was advertised in the following ways:

- Email updates to 2,000 City of Bellevue subscribers to city project websites
- City of Bellevue website post
- City of Bellevue NextDoor post
- City of Bellevue Twitter posts
- CAC member networks

By the numbers

- Total visitors to the online open house: 414
- Average time each visitor spent on site: 4 minutes, 40 seconds

Wilburton Commercial Area Study



- Total number of "stations" (pages) in online open house: 6
- Average number of stations viewed per visitor: 5.5

Online survey questions

The optional online survey included a mix of multiple-choice and open-ended questions. The intent of the survey was to solicit participants' preferences regarding:

- a. Density and building massing types
- b. Uses and approaches for allocating right of way space
- c. Type and distribution of public space

The survey also asked participants to describe parks, streets, or buildings they think would be a good model for the study area. The survey concluded with an open response question about participants' vision for the study area, and concluded with optional demographic questions.

Key comment themes

The following pages present the online survey questions as they were shown in the online open house and include key themes of feedback received. For multiple-choice questions, screen captures of each question and associated photos are presented below each section. For open-response questions, full participant responses are included in the attached appendix.



1. Development and massing types

QUESTION

 Participants were presented with three approaches to density and massing: lower-density and massing, medium-density and massing, and higher-density and massing. Three example photos accompanied each type. Participants indicated their level of support for each development type on a scale of one to five stars.

RESULTS (194 responses)

- Lower-density and massing: 4.5-star average rating
- Medium-density and massing: 3.5-star average rating
- Higher-density and massing: 2.5-star average rating

Development can involve different sizes of buildings and different levels of density. Below are examples of three different approaches to density and massing, which refers to the shape, size and form of a building.

Click images to enlarge.

Lower-Density and Massing







Medium-Density and Massing







Share Your Thoughts Indicate your support for the different development types. 5 stars = highest support. Lower-Density and Massing Medium-Density and Massing Higher-Density and Massing Submit

Higher-Density and Massing









2. Street priorities

QUESTION

Participants were presented with options and accompanying example photos for six ways to use
the street right of way. Participants indicated their level of support for each option on a scale of
one to five stars.

RESULTS (170 responses)

- 4-star average rating:
 - o Bike paths completely separate from roads (e.g., Eastside Rail Corridor)
 - o "Woonerf" or pedestrian-friendly streets or alleys
- 3.5-star average rating:
 - o Make 116th Avenue NE a grand boulevard
 - o Smaller blocks broken up by internal streets
- 3-star average rating:
 - o "Cycle tracks" or protected lanes for people on bicycles
 - Use right of way to build wide sidewalks

Right of way (the space taken up by the street and sidewalk) in the Wilburton Commercial Area can be used in a variety of ways. Below are a variety of possible ways to use the right of way. Click the arrows on the edge of each photo, or the circles at bottom, to scroll.

Click images to enlarge.



Smaller blocks broken up by internal streets with limited or no vehicle access

dicate your support for the different ght of way.	ways to use the
imaller blocks broken up by internal streets	****
Woonerf" or pedestrian-friendly streets or alleys	****
Make 116th Avenue NE a grand boulevard	****
"Cycle tracks" or protected lanes for people on bicycles	****
Use right of way to build wide sidewalks	****
Bike paths completely separate from roads (e.g., Eastside rail corridor)	****

Additional images on next page.



Wilburton Commercial Area Study



"Woonerf" or pedestrian-friendly streets with limited or no vehicle access that allow for temporary seating or other uses



Make 116th Avenue NE a grand boulevard, or a wide street serving multiple uses with possible landscaping



"Cycle tracks," or protected lanes for people on bicycles, parallel but separate from vehicle lanes



Wide sidewalks that can include substantial landscaping



Bike paths completely separate from roads (e.g. Eastside rail corridor)



3. Public space

QUESTION

Participants were presented with three ways to distribute public space in the study area: a
grand civic space, several small spaces, and trail-oriented space. Three example photos
accompanied each option. Participants indicated their level of support for each option on a scale
of one to five stars.

RESULTS (174 responses)

- 4-star average rating:
 - Trail-oriented space (public space aligned in a linear fashion along trails or multi-use paths)
- 3.5-star average rating:
 - o Grand civic space (public space concentrated in a central public plaza or park)
 - Several small spaces (distributed throughout the area in several smaller plazas or parks)

In the last open house, we heard that public space should be an important part of the Wilburton Commercial Area's future. Public space can take several forms. How would you prioritize the type and distribution of public space in the area?

Click images to enlarge.

Grand Civic Space







In this approach, public space is concentrated in a central public plaza or park.

Several Small Spaces







In this approach, public space would be more distributed throughout the area in several smaller plazas or parks.

Trail-Oriented Space







In this approach, public space is aligned in a linear fashion along trails or multi-use paths.





4. Models for the Wilburton Commercial Area

QUESTION

• Participants were asked, "Are there any parks, streets or buildings you love that would be a good model for the Wilburton Commercial Area? If so, tell us briefly where they are and what you love about them."

FEEDBACK (34 responses)

- Respondents desired a walkable neighborhood that includes shared outdoor space and greenery. Respondents supported lower buildings to preserve sunlight, with street-level local shops and narrower roads to encourage walking and bicycling.
 - Quote: "More family oriented, local businesses with smaller blocks."
 - Quote: "I absolutely love Jardin du Luxembourg. There are many ways to enter into the shared space and it has exceptional gardening inside. There is no cars and safe to bring kids."
 - Quote: "Capitol Hill, near Elliot Bay Books. That whole area has a bunch of smaller shops with walkable sidewalks."
 - Quote: "We need narrower streets, smaller or nonexistent parking garages, protected bike lanes, and wider sidewalks...I think of Washington, D.C., with its narrow streets, inherently walkable character, shorter buildings, serendipitous public space you seem to just stumble upon, and predominance of housing types."



5. Anything else?

QUESTION

Participants were asked, "Is there anything else you would like to tell us about your vision for the Wilburton Commercial Area?"

FEEDBACK (46 responses)

- Respondents sought a safe, affordable neighborhood that encourages walking while managing Bellevue's growth and associated traffic. Respondents asked the city to consider connections with the Bellevue Botanical Garden and trail projects, and to focus on human-scale development without dramatically increasing density.
 - Quote: "I think Bellevue should offer places for walkable area for small shops and specialty stores near park like setting."
 - Quote: "It's really, really important to me that the public space be real, public, cityowned space...I see this area developing as a counterpoint to downtown and BelRed, which have experienced explosive growth but don't have the human, pedestrianscale that makes places enjoyable to live."
 - Quote: "A park's access adjacent to the Grand Connection and near the ERC [Eastside Rail Corridor]/Public Transit would be a huge asset for Bellevue's constituents."
 - Quote: "I love that 116th is a wide thoroughfare, especially to help ease downtown traffic congestion. It needs to stay that way to accommodate growth in Wilburton, Bel-Red and the Spring District. What you do on the sides should reflect what we most need - housing and smaller commercial spaces."



6. Demographic questions (129 respondents)

Participants were primarily white, married or in a domestic partnership, and own homes in Bellevue. The majority of survey respondents were Bellevue residents (87 percent). Top responses to demographic questions are listed below. Full demographic data are included in the attached appendix.

- Age: 45 to 54 (31 percent)
- Ethnicity: White (75 percent)
- Neighborhood of residence: Wilburton (16 percent)
- Household composition: Married or domestic partnership (84 percent)
- Children under 21 at home: No (55 percent)
- Household income: \$150,000 or more (35 percent)
- Employment status: Employed for wages (52 percent)
- Time lived in Bellevue: More than 20 years (37 percent)
- Own or rent: Own (89 percent)



Appendix A: Survey verbatim comments and demographic data

Open responses: Models for Wilburton	11
Open responses: Anything Else	15
Demographic data	20

1. Are there any parks, streets or buildings you love that would be a good model for the Wilburton Commercial Area? If so, tell us briefly where they are and what you love about them.

2 1. Burke-Gilman trailwide bike and pedestrian lanes with tall trees surrounding the path 2. NYC Bryant Park a dedicated green space in the city 3. Miami Beach Parks with pedestrians and bike lane on the edge of the park, with outdoor workout space	ì
mix of a large green and distributed smaller areas, will make it a livable space for many years.	
5th Avenue in Seattle is closer to the equivalent of our 116th. It's a major traffic thoroughfare and should remain such. Think about using the existing rail corridor for biking and walking and tying that into the design. Lower rise buildings, such as those currently being seen there (REI, Trader Joe's, etc.) with mixed-use housing would be a appropriate for the space. Not even opposed to keeping car lots there. They need somewhere to go! 116th would be a PERFECT spot for the new Downtown Fire statio and a park could be done in conjunction with that.	n
Bellevue central park has become this amazing thing, but this new area can go in a similarly visionary but completely unqiue direction	
Capitol Hill, near Elliot Bay Books. That whole area has a bunch of smaller shops with walkable sidewalks. Would be nice if there were fewer cars, or better parking outside of a pedestrian area, but it is great. And there's nothing like that here.	f
Covered spaces like at all schools so people have places to go outside when it is raining	ng
1 Crossroads Mall Park and the golf course there. Tall evergreen trees and grass. Mixed ethnicities instead of basically only white children playing in the downtown Bellevue park. Keep the single family/single level (rambler) residences and do not allow any midrises or high-rises to be built. They keep the sun from the ground, streets, parks, yards sidewalks.	,
1 Crossroads Park	
Do NOT block sunlight or create wind tunnels with tall buildings!!!	
Don't like the direction you're heading in with this survey.	

- 1 European squares with small fountain features
- Freeway Park in Seattle. Lots of greenery and a nice place to walk. And it has a great fountain.
- Holland has a great bicycle network where cyclists can travel safely on designated protected bike/walk lanes. need outdoor picnic tables/benches with power/charging, grab a bike and go sharing, more roundabouts rather than lights, less highrises, more schools, more nature trails, less huge trees that block streetlights and cause shadows not being able to see pedestrians, bicycles, and motorcycles
- I absolutely love Jardin du Luxembourg and how you can enter from many different streets...how open it is and everyone has a different favorite spot but still in an open environment that fosters collaboration and acceptance. If you have several smaller gathering places, then you would never be surrounded by different groups that you have not planned to spend time with. So really hoping for a huge gathering area that is safe for kids and not welcoming to homeless.
- I absolutely love Jardin du Luxembourg. There are many ways to enter into the shared space and it has exceptional gardening inside. There is no cars and safe to bring kids. What a great spot for community gatherings and everyone is together. With smaller gathering places you are separate. Even if you create bike paths next to the roads...most of the time I see bikers not using them...so why waist the space???
- I suggest that the design team check out creative work under taken in various designated National Heritage areas, for example the Schuylkill River and Rivers of Steel National Heritage Areas in Pennsylvania.
- I would look to transit-oriented models of development in the Washington, D.C. metro area; the station areas in particular should have radiating concentric circles of dense development with as little parking as possible. But you should also consider what makes a public space enjoyable to walk around. Currently Wilburton and actually much of downtown are terrible places to walk around, despite being relatively dense and "urban" in character. We need narrower streets, smaller or nonexistent parking garages, protected bike lanes, and wider sidewalks. Thinking of the development style of places I've lived that I've really enjoyed and I've felt have been places of enjoyment, I think of Washington, D.C., with its narrow streets, inherently walkable character, shorter buildings, serendipitous public space you seem to just stumble upon, and predominance of housing types which here would be described as the "missing middle -- townhomes, rowhouses, shorter 2- or 3-story developments behind I

- Love large open parks with playing and concerts, biking and walking through and to with lots of open flower and tree space, no cement. Drinking Water dispensers for water bottles. Easy access to coffee, cafe. Marymoor crossed with vegetation and evening lighting of University Village (awesome). Must have biking and it should be separate of pedestrians. Very little cement and hard modern items. NW is natural not hard, snobby uptight.
- Many cities in Europe and Asia have the broad sidewalks with lots of green, a mix of grand and smaller parks, and encouragement for street vendors, artists, etc. to set up stands. That combined with the ground level retail with residential above, make for comfortable living and working. Also, making that living a mix of levels, so lower level earners, whether wage workers or your kids just out of school, are not priced out of the rental and buying markets! The "gentrification" in our area is a tragedy! My current neighbors are now no longer a mix, just high tech people with a single focus.
- Marymoor, University Village, Victoria, Suncadia. No more skyscrapers. No more sterile city boring. Time to make a gathering space with modern PNW charm.
- Model after Crossroads Mall park and golf course. Keep tall evergreen trees and grass. Build single family single level (rambler) houses only, no apartments or condos or midrises or highrises. We need to keep the sun in Bellevue and anything over 1 story tall is blocking the sun.
- 1 More family oriented, local businesses with smaller blocks.
- NOT like bare downtown park before new playground and more parking access, event space, actual usable, water features for kids. More like botanical gardens with seating gathering spaces games play spaces that build community interactions. More europeanish. Walkable with perimeter or ubdergroubd parkibg and vehicle access...keep it walkable...covered, areas/arbors.
- Not like the bare downtown park before tge playfround and crappy vehicle access. More like or expand botanical garden type space....trails fountains, seating, gathering spaces, shops, cafes...make it walkable with perimeter access to roads/transit...parkibg underground or at perimeters. Make area more european-ish.
- Occidental Square in Seattle between Main and Jackson is a wonderful example of an urban streetscape that is pedestrian friendly and has the benefit of a canopy of trees.

 Bellevue needs more spaces like this that are scaled to human size. Please don't make Wilburton (or any other Bellevue neighborhood) another downtown Bellevue, which is over scaled, car oriented and soul-less.

- Parks: The playground at Central Park of Fremont in California. Belleuve lacks a playground suitable not only for younger children but also for kids above 10. Streets: Castro at City of Mountain View in California or University at City of Palo Alto in California. Both are highly walkable.
- 1 Presque Isle pedestrian zone, Lyon, France. Also Vienna, Austria Wien Mitte and the area near St. Stephen's Church
- 1 Something like downtown park will be great!
- The South Lake Union area south of Mercer St and north of Denny in Seattle is a great example of business and free time space combined.
- The bike-first layout of Amsterdam. Cats have enough places. Please crave out a space where pedestrians and cyclists come first.
- The new REI, Homegoods, TJ is a great new addition. It would be nice to have more of this type of building and use of space. Matching up with the apartments and buildings that are being build in the Spring District would be pleasing. Also keeping in mind of the look of the Botanical gardens and the architecture of the new BSD Transportation department. Love the Frank Lloyd Wright look.
- There are lots of parks that I love, but each for different reasons. The best parks highlight what their uniqueness. The ERC has a chance to be a linear park that connects an urban area with the suburbs and a feeling of nature. It has the opportunity to be many things to many people. A place to stretch your legs during a work day, a safe off road walking/biking option, a place to stop and sit and take in the view, a place to meet friends and take a walk, a place to gather and have small performances, a connection to your work or home, a place to take your pet, a corridor lined with unique local restaurants, way to access light rail, a connector. Please make sure you take advantage of the entire right of way in key areas and encourage the right kind of connections to the trail from adjacent landowners. It should feel permeable and accessible and free and easy. It can be Bellevue's Central Park.

2. Is there anything else you would like to tell us about your vision for the Wilburton Commercial Area?

2	I love that 116th is a wide thoroughfare, especially to help ease downtown traffic congestion. It needs to stay that way to accommodate growth in Wilburton, Bel-Red and the Spring District. What you do on the sides should reflect what we most need housing and smaller commercial spaces. Leave the highrises to the west of 405 in Downtown and along 112th near the light rail stations.
1	Affordability!!!! for families or non tech singles, but maintain quality lije rich areas get.
1	An inspiring solar project that encourages children to dream of a renewable future.
1	Cars are dirty, noisy, polluting, and ugly. Better to make the area walkable.
1	Cultural heritage has been largely ignored in various central Bellevue planning studies. The rail cooridor, historic structures that still exist in the original Wilburton town site, the gardens, all offer opportunities to interpret the Pre-World War II occupancy, settlement, industry, and development of the area.
1	Density breeds energy and activity and should be encouraged. This area has so many unique attributes that should be shared with as many people as possible. It shouldn't be a downtown, but it should be packed with people who live and work here and should have enough energy to create it's own unique cultural niche.

1 Don't forget bike stands!

- Downtown Bellevue has urban feel and I think Bellevue should offer places for walkable area for small shops and specialty stores near park like setting.
- Expansion into this area needs to be of significant density to help it function as a destination and support the already planned rail and pedestrian connections from downtown Bellevue.
- Having park and ride with sufficient parking space for either the future light rail station or bus stops would be great as well.
- Higher percentage of affordable units for famikies, service workers, non tech but maintain same level of quality in design maintenance access services thats afforded to richer, areas

1 Tappreciate the opportunity to provide my opinions. Thanks! 1 I do not see a point in making it a "grand area". it's right next to the 405. Not everything requires a huge vision. 1 I envision residential neighborhoods, single family residences, one story. No development of offices, mixed use development, or mid-rise or high rise condominiums. Belleve needs to keep its views and to keep the sun shining down on the streets, sidewalks, yards, parks. 1 Ithink a Park on the East side of the freeway would be a great opportunity to create a grand civic space that would act as a focal point for drawing people to downtown Bellevue. A park's access adjacent to the Grand Connection and near the ERC/Public Transit would be a huge asset for Bellevue's constituents. 1 I think it will be wonderful to have a new start of the art aquatic center in this area. If city of Lynwood can do it, I don't see why Bellevue isn't able to make it happen. 1 I'm hoping for sucurity. As of now I don't feel comfortable letting my teenagers go beyond Bartell Drugs and Starbucks on foot and depending on the time of day at all. We are located on NE 2nd ST and 124th Ave NE. As for sucurity I mean heavy traffic and most importantly the pan-handerers. Having the concentration of homelessness that we have now would render the whole concept useless. 1 Include renew able energy lights. Some wind trees that are also art with the leaves blowing in the wind. The tressel should be a free tourist attraction to ride bike and walk. Inviting outside cafes and small music venues about music or puppet shows or story telling, not alcohol. No smoking of any kind. Open late. Beautiful light9lije Bellevue Park St night. Sick of sterile building monsters without charm or quaintness. Love red brick buildings and white wash with blue shutters. A bit beachy artsy and a bit lodge Rainer feel where the region comes to love life 1 It doesn't appear that the Arts And Culture Plan includes much in the way of historical references such as incorporating public space for visual storytelling about Bellevue's past. Please engage with Eastside Heritage Center right away. They have a new excecutive director by the name of Josh Grannis. He can be reached at director@eastsiderheritagecenter.org. Thanks Bradley. Good outreach. Stu Vander

Hoek

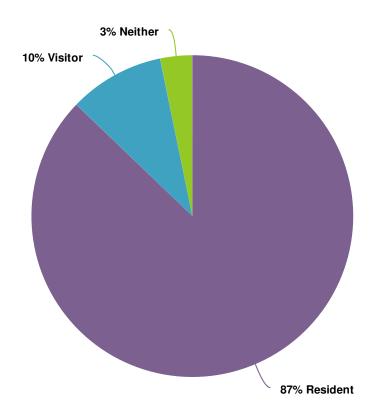
- It needs to bring Bellevue Park, Bellevue Botanical Garden, all the wonderful beautiful parks together. Also medium size housing won't bring so many new families with children...as of right now we are not sustainable to provide school for all the residents.
- It's really, really important to me that the public space be real, public, city-owned space. Private development is awesome, and it's great to include privately-owned "public spaces," but these types of pseudo-public spaces have caused downtown to become sterile, poorly-programmed, and institutional, simply as a result of the structures that have been put in place to govern the use of "public" space. Please make development of publicly-owned public space a priority; don't sell it to developers. There's enough right of way in Wilburton to create cool linear public spaces and plazas that could be programmed by the Parks Department or an independent organization similar to the Bellevue Downtown Association (BID?). Do not neglect the governance of these spaces! I see this area developing as a counterpoint to downtown and BelRed, which have experienced explosive growth but don't have the human, pedestrian-scale that makes places enjoyable to live. Main Street in Bellevue is still the onl
- 1 Keep it Auto Friendly.
- Large Park in crossroads of grand connection and erc would be great. There is a big hill there, so a park there could make that hill easier for new bikers if it is designed for that. It could be a big meeting area for groups before they bike to Kirkland or woodinville!

 Separate out the pedestrians, bikes, and cars for safety please!
- Love the vision of an area of some pedestrian-only streets! Huge quality of living boost, unique to the area. Would love to have it!
- 1 Make it livable for all, not just the rich and young.
- 1 Make sure to remember that residents need to feel good about the area--make it walkable and pretty!
- 1 NO ARENAS.
- No new development except for single Family single level (rambler) houses. We need to keep the evergreen trees and grass. We need to keep the sun anything over 1 story tall blocks sun from people and vegetation. No development of condos, midrises, or highrises. There is too much traffic as it is and the traffic for the development that is already started hasn't even hit the streets of Bellevue yet. The City of Bellevue has used terrible planning and hasn't gone to bat for its residents.
- 1 Park/Open Space on City Property (Lincoln)

- 1 People that bike and walk and take light rail must be the focus, NOT cars. Cars are done. Should focus on solar, wind energy. Solar windows, roofs, paint. Hidden alleys with shops and flower surprises to sit and hear musicians. Games for adults, a piano. No smoking of any kind. Safe warm night lighting. No NEON tacky bilboard signage. Places for community murals -where we all paint. 1 Please daylight the the creek that runs through the commercial district. I would love to see Lake Bellevue surrounded by green space too. Although it would require major changes, if buildings were set back from the lake front instead of hanging over it, many more buildings could face onto the lake and look over the green space to the water. 1 Please make sure that access to and emphasis on the Bellevue Botanical Garden, on the edge of the Commercial Area, remains a priority. 1 Prioritize the Bellevue Botanical Garden just off the eastern edge of the Commercial area. 1 Quiet green space for outdoor weight lifting, running and walking, with coffee shops and art galleries 1 Quit spending our tax dollars on this stupid stuff! All this is used for is to check a box that you asked the taxpayers to choose our poison. Density is ruining Bellevue. 1 Since the rail trail will be in this area that should suffice for bike use but incorporate it into the overall design 1 Stop increasing density!!! We cannot handle the amount of density that currently exists. Please stop making work for yourselves and wasting our tax dollars. 1 Strong supporter for medium size buildings. As is we are not able to provide education for all the kids we have in Bellevue...so adding tons more would make the matter worst. 1 The County owned rail corridor holds tremendous potential for Wilburton, down town, the city and East Side. The trestle is a magnificent icon. It seems to me that the potential has been been overlooked. I hope to see far greater consideration by the professional team undertaking the Wilburton Plan The car dealerships do not serve the area well. They should be located out of the 1 Willburton Commercial area.
- 1 Underground all utilities and avoid canyon look of office towers

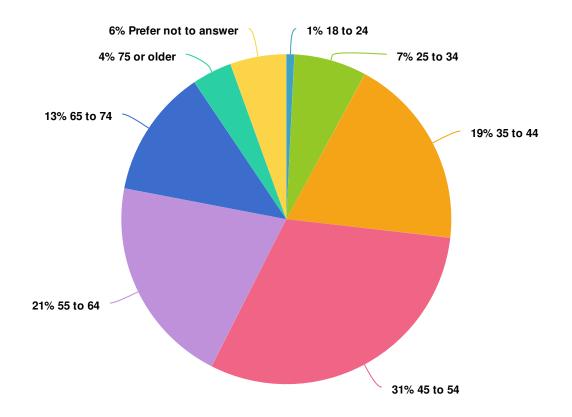
- Work with Mountains to Sound Greenway Partnership to interpret lumber, farming, railroad history of Bellevue. Railroad trestle is an iconic structure that can be an important part of the interpretive plan.
- You need to be realistic about vehicle traffic. People who live within Bellevue still need to be able to travel via car. Given the number of medical offices in the area I don't believe citizens will be able to convert to mass transit.
- don't muck it up with giant parking lots.
- less big box stores, more boutiques, need drive through restaurants and gas stations, desperately need a PCC grocery store. ban homelessness, pan handling, and outdoor camping. wouldn't it be great if we could ban cars all together and make it a massive walking/biking only area literally 5sq miles like Europe but better!

1. Are you a resident or visitor to Bellevue?



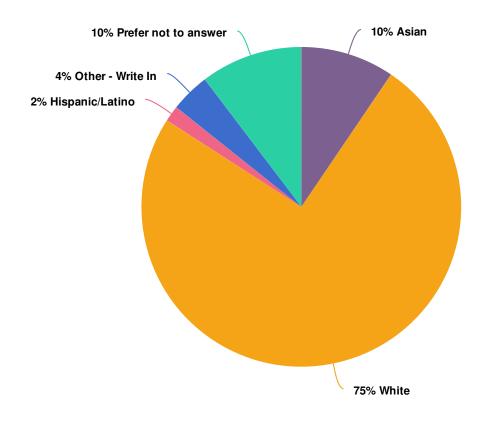
Value	Percent	Responses
Resident	87.2%	109
Visitor	9.6%	12
Neither	3.2%	4

2. What is your age?



Value	Percent	Responses
18 to 24	0.8%	1
25 to 34	7.1%	9
35 to 44	18.9%	24
45 to 54	30.7%	39
55 to 64	20.5%	26
65 to 74	12.6%	16
75 or older	3.9%	5
Prefer not to answer	5.5%	7

3. What ethnicity do you identify as?



Value	Percent	Responses
Asian	9.5%	12
White	74.6%	94
Hispanic/Latino	1.6%	2
Other - Write In	4.0%	5
Prefer not to answer	10.3%	13

Other - Write In	Count
American	1
Caucasian	1
Human	1
Mixed	1
White, Hispanic, American Indian	1
Totals	5

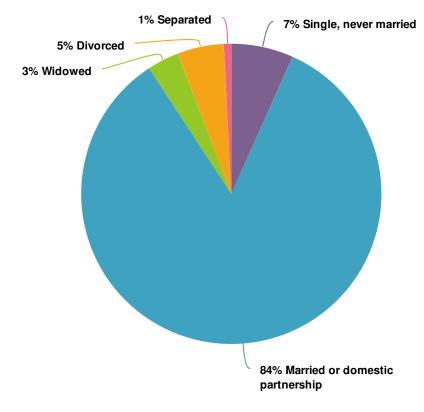
4. In what neighborhood do you live?

Count	Response
14	Wilburton
12	Woodridge
6	Lake Hills
3	Downtown
3	Enatai
3	Surrey Downs
3	West Bellevue
2	Eastgate
2	Redmond
2	Rockwood
2	Seattle
2	downtown
2	wilburton
1	Ardmore
1	Ashwood - Northtowne
1	Bel-Red
1	Bridle Trails
1	Bridle trails
1	Clyde Hill

Count	Response
1	College Hill
1	Crossroads
1	Crossroads/tamoshanter vicinity
1	Dogwood park
1	Eastgate/Horizon East
1	Factoria
1	Former Phantom Lake resident, now Belltown, Seattle
1	Green Lake, Seattle
1	I work in Bellevue
1	Kelsey Creek
1	Kirkland
1	Lakemont Ridge
1	Lochleven/west Bellevue
1	Lochmoor
1	Medina
1	Meydenbauer Bay
1	NE Bellevue
1	Newport Hills
1	Newport hills
1	Northtown
1	Northtowne

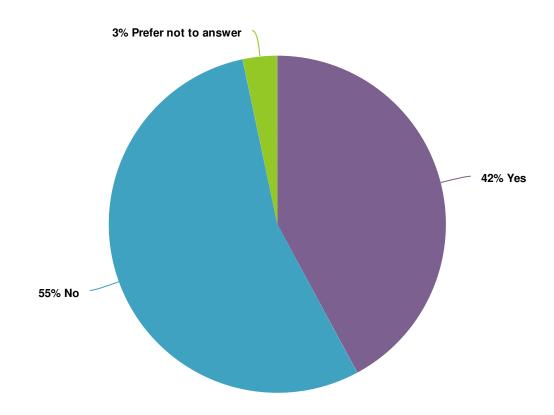
Count	Response
1	Northwest - adjacent to but outside downtown
1	Not telling, you'll come pave us over too!
1	Overlake
1	Phantom Lake
1	Seattle Queen Anne
1	Skyridge
1	Somerset
1	South Downtown
1	Spiritridge
1	Spring Hill
1	Surry Downs
1	Tom O'Shanter
1	Vuecrest
1	Whispering Heights
1	Wilberton
1	Wilbutron
1	Woodridgr
1	enatai
1	surrounding dntn
1	west lake sammamish

5. What is your household composition?



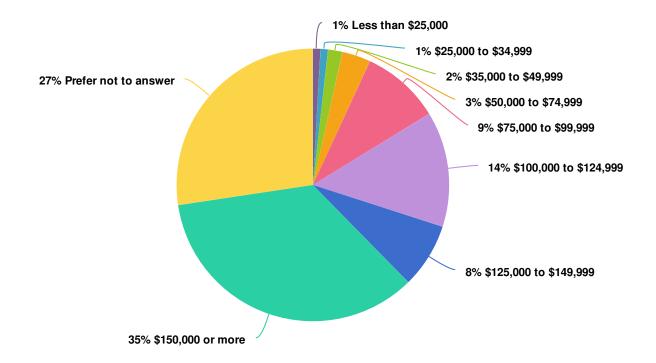
Value	Perce	ent Responses
Single, never married	6	5.7% 8
Married or domestic partnership	84	100
Widowed	3	3.4% 4
Divorced	5	6.0%
Separated	0	1.8%

6. Do you have children under 21 living at home with you?



Value	Percent	Responses
Yes	42.1%	51
No	54.5%	66
Prefer not to answer	3.3%	4

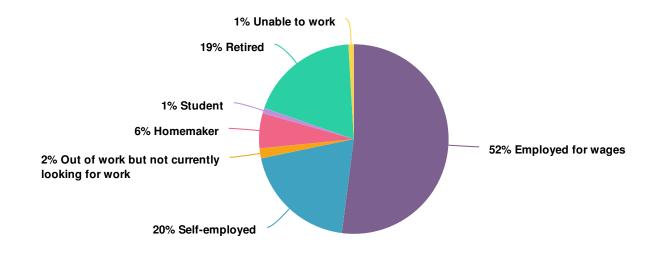
7. What is your household income?



Value	Percent	Responses
Less than \$25,000	0.9%	1
\$25,000 to \$34,999	0.9%	1
\$35,000 to \$49,999	1.7%	2
\$50,000 to \$74,999	3.4%	4
\$75,000 to \$99,999	9.4%	11
\$100,000 to \$124,999	13.7%	16
\$125,000 to \$149,999	7.7%	9
\$150,000 or more	35.0%	41
Prefer not to answer	27.4%	32

Totals: 117

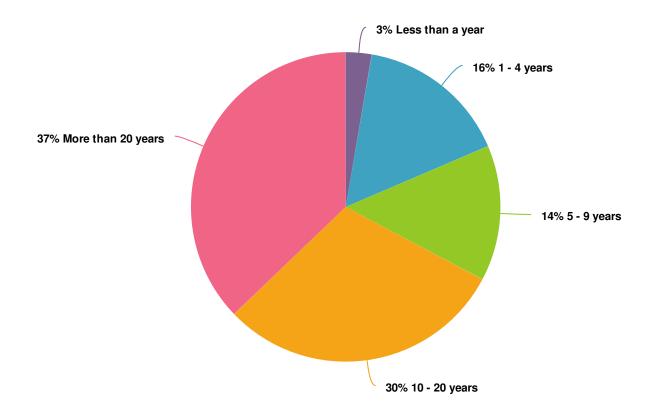
8. What is your employment status?



Value	Percent	Responses
Employed for wages	52.1%	61
Self-employed	19.7%	23
Out of work but not currently looking for work	1.7%	2
Homemaker	6.0%	7
Student	0.9%	1
Retired	18.8%	22
Unable to work	0.9%	1

Totals: 117

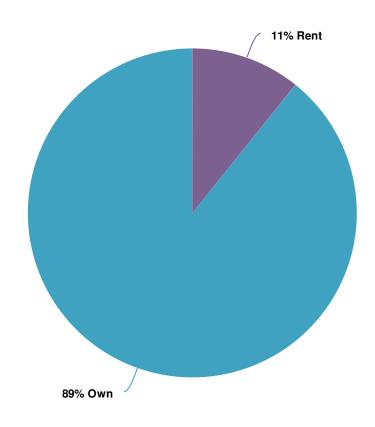
9. How long have you lived in Bellevue?



Value	Percent	Responses
Less than a year	2.7%	3
1 - 4 years	15.9%	18
5 - 9 years	14.2%	16
10 - 20 years	30.1%	34
More than 20 years	37.2%	42

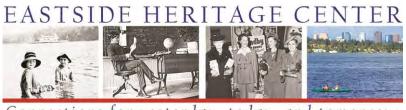
Totals: 113

10. Do you own or rent your own home?



Value	Percent	Responses
Rent	10.8%	13
Own	89.2%	107

Totals: 120



Connections for yesterday, today, and tomorrow.

Wilburton Service Area of Eastside Rail Corridor Historical Themes and Points of Interest Historical Context Statement prepared by Eastside Heritage Center August 29, 2017

The historic nature of the area immediately surrounding the Wilburton section of the Eastside Rail Corridor lends itself to the interpretation of broader historic trends in the development of Bellevue, in addition to more localized stories, detailed below. The expansion of the Northern Pacific Railroad to the Wilburton area in 1904 encouraged people to relocate to the eastside to work in the lumber mill, the coal mines or as labor on the railroad. The town of Wilburton was a company town, and had a larger population than Bellevue. Once the land had been logged off and the mill closed in 1919, former industrial workers and a new generation of Japanese and Eastern European immigrants transitioned to farming, growing bountiful crops, and shipping them to market in Seattle. After World War II, the old farms were developed in residential areas and shopping districts. 116th Ave NE, between Main and NE 8th St. was known as Auto Row, due to the large number of car dealerships there in the 1960's. Immigration, labor, and logging are all a part of the Wilburton story.

I. The town of Wilburton and the Hewitt-Lea Lumber Mill

During their years of operation the Hewitt-Lea Lumber Mill removed 100 million board feet of lumber, one million board feet of small cedar logs an somewhere between 24,000-36,000 pilings from the Wilburton mill site. In 1905 the Hewitt-Lea Lumber Company took over operations of Wilbur's lumber mill in Wilburton, just southwest of the intersection of Main Street and 116th Ave NE. The mill closed in 1919, likely due to the lack of nearby lumber. However the company sued King County, claiming it was the lowering of Lake Washington, and the subsequent loss of the Mercer Slough as navigable water source, which prevented them from getting their lumber to market. After the mill closed, the once thriving company town began to fade away, with the closing of the Wilburton School and a fire at the grocery store and rail depot. Some remnants of the old logging town can be found, with a few existing company buildings (on private property). The Wilburton Trestle was built in 1904 by the Northern Pacific Railroad and is the most prominent reminder of the areas logging history. Many of the workers at the Hewitt-Lea Mill were immigrants, coming from Japan, Sweden, Finland and Ireland, to work and live in the Bellevue area.





2002.147.004 – Hewitt-Lea locomotive at Wilburton Mill EHC Reference Collection – Ad for the Hewitt-Lea Mill

II. Wilburton Trestle

The Wilburton Trestle was built in 1904 by the Northern Pacific Railroad, as a part of the eleven mile Hewitt-Lea lumber spur, which was completed in 1906. The trestle and spur were built to support the logging activities in Wilburton, and connected the remote forests of the eastside to Seattle. During the logging era, there was a mill pond underneath the trestle, created by the damming of nearby Kelsey Creek. Cut timbers would be splashed down and then hauled out by scows to Lake Washington. Prior to the lowering of Lake Washington, the Mercer Slough was a navigable waterway and extended much further inland. Just past the Trestle, there was a dock that serviced the area near the Wilburton mill.

The trestle and rail line remained in use intermittently after regular service tapered off in the 1920's. The last freight load went across the trestle in 2008, and passenger service ended in 2007 when the Spirit of Washington Dinner Train route was disrupted by I-405 construction. During times when the rail was not used by trains, mischievous neighborhood children would play on the trestle, though there were no safety barriers on the side of the trestle. "That was off limits. It was too far from home. My brother, sister, their friends and I, we'd walk across the trestle....but I don't think our parents knew that we were doing that!" *Excerpt from Pat Sandbo's 1997 oral history, recalling growing up in Bellevue in the 1920's*.



 $2002.147.002 - View of the Kelfner Vineyards at <math>108^{th}$ Ave SE, Wilburton Trestle visible in background, N/D



RD2007.022.018, from the King County Journal Collection – view of the Wilburton Trestle, 1979

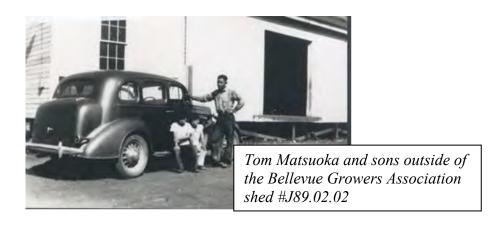
III. Midlakes

One of the earliest white settlers in Bellevue was Clark Sturtevant, a civil war veteran from Vermont, who used his veteran's homestead claim to settle 160 acres in the wilderness near Lake Sturtevant (now known as Lake Bellevue) around 116th Ave NE and NE 8th St. At that time the lake was drained by a small stream. The construction of the Northern Pacific rail in 1904 connected this once remote area to Seattle, allowing for easier access to goods and supplies. L.D. Godsey soon opened and expanded a grocery store, near the rail stop at Lake Sturtevant, and named the area Midlakes, for its location between Lake Washington and Lake Sturtevant. It quickly developed into a commercial hub.

As Bellevue grew as an agricultural community, more farms sprung up in this area, including many operated by Japanese families. In 1933 the Bellevue Growers Association packing shed (future site of the Sound Transit Midlakes Light Rail Station) opened, which helped farmers transport their goods to market quicker using refrigerated rail cars. Over 60 families belonged to BGA, most of who were sent to Japanese incarceration camps during World War II.



Clark Sturtevant was a civil war veteran, who used his veterans land claim to homestead in Bellevue, near Lake Sturtevant (now known as Lake Bellevue) in 1873. #OR/L79.79.246





1994BHS.024.001 – Japanese farms at Midlakes, along a farm road which is now 117th NE between NE 11th St. and Bel-Red Road, 1939. Lake Bellevue is on the right.

IV. Lowering of Lake Washington and the draining of the Mercer Slough

In 1916, Lake Washington dropped an average of nine feet when construction began on the Lake Washington Ship Canal. This drastic change in the water level had many effects, both good and bad, around the lake. When the lake dropped, many of its surrounding tributaries were drained, including the Mercer Slough. Prior to 1916, the Slough was up to 5 feet deep in places and navigable by small boats and ferries when waters were high. Surrounded by several hundred acres of wetland, the Slough extended two miles inland from the lake shore. Native Americans used the Mercer Slough for fishing and hunting, as did the white settlers that began arriving in the 1860's. A community of longhouses existed along the Slough, near present day Factoria. Captain John Anderson, of the Anderson Steamship Company, operated the Lake Washington ferry Mercer, with service to the Wilburton dock, near the Hewitt-Lea Lumber Mill. Mill owners Wade Hewitt and Charles Lea were regular passengers, taking the ferry from Wilburton to Seattle daily. When the mill closed Hewitt-Lea claimed the draining of the Slough had a negative impact on their business and sued the King County. Once the slough was drained, it revealed very fertile soil, which was quickly taken advantage of by floral and vegetable farmers. Bellefields Office Park and the Bellefields Nature Park are built on top of the peat bog (which is up to 70 feet deep in places) that was revealed as the Slough drained.



L88.023.005 - The Reece daffodil farm in the Mercer Slough, c. 1925



Map excerpt showing the historic Lake Washington shoreline at the Mercer Slough (in black), prior to 1916 lowering. Map by Michael Chrzastowski, 1983.



2013.004.015 – The ferry Mercer in the Mercer Slough, c. 1906. The ferry served the mill dock in Wilburton, where the water was approximately four feet deep.

V. McDowell House and Agriculture

The McDowell House (11660 Main Street), currently home to the Eastside Heritage Center, was built in 1918 by John and Ella McDowell, who also maintained an orchard on the surrounding property. The architecture is typical of the Craftsman style, featuring multi-paned wood windows, overhanging eaves, and a river-rock chimney. It was probably one of the last structures to use lumber from the nearby Wilburton Mill which was going bankrupt in 1918. Originally, the structure was part of a five-acre parcel, surrounded by fruit trees, berries, and grapes. Although most of the orchard has disappeared, the house itself remains almost unchanged since its construction. The McDowell House contributes to the agricultural legacy of the Wilburton area. After the closure of the mill, the cleared land was ideal for those looking to establish small farms, both on the hill and in the area along what is now 116th Ave NE. There were Lebanese and Armenian communities in the area, as well as smaller "gentleman farmer" plots established on Wilburton Hill.



2005.005.001 – McDowell House (current home of Eastside Heritage Center), c. 1918



2014.032.033 – Armenian community dinner at the Davajian home near Cottonwood Hill (at approximately 124th Ave NE and NE 8th St.), c. 1940. Mehran and Satenik Davajian immigrated to Bellevue around 1918, and their home was the hub of the local Armenian community. The Davajian's leased additional land along the Mercer Slough and grew grapes. The Davajian family once lived in the Sharp Cabin, which was moved to the Bellevue Botanical Garden.



MEMORANDUM

Date:	August 30, 2017	TG:	1.17339.00
То:	Andrew Coates and Steve Kramer, KG Investment Properties Jack McCullough, McCullough Hill Leary		
From:	Michael Swenson, PE, PTOE & Kassi Leingang, PE, Transpo G	iroup	
Subject:	NE 8th Street At-Grade Trail Crossing Analysis		

This memorandum summarizes the results of the initial analysis evaluating the potential impacts of adding an at grade pedestrian crossing along NE 8th Street at the Eastside Rail Corridor between 116th Avenue NE and 120th Avenue NE in Bellevue. The operational impacts of the at grade crossing, including level of service and vehicle queueing are summarized below. Further analysis and coordination with the City of Bellevue traffic engineering staff will be required to validate the traffic forecasts and operations methodology utilized in this analysis.

As noted in this analysis, queuing along the corridor could be managed through the signal coordination and eastbound/westbound queuing would not impact the traffic signal operations at 116th Avenue NE or 120th Avenue NE.

NE 8th Street Pedestrian Crossing

The NE 8th Street pedestrian crossing would be provided for the Eastside Rail Corridor (see Figure 1). The Eastside Rail Corridor is a previously used rail corridor that is to be converted to a multimodal trail extending from Renton to Redmond and connect to the Centennial Trail in Snohomish County. The crossing at NE 8th Street is currently proposed as an elevated trail crossing. Alternatively, this memorandum evaluates the operations of the NE 8th Street corridor if the trail crossing were to be an at grade controlled via a traffic signal. The at-grade pedestrian crossing is assumed to be signalized and coordinated with the adjacent signals at 116th Avenue NE and 120th Avenue NE.



Figure 1 - Site Vicinity

Traffic Volume Forecasts

In order to estimate the operational impacts of the proposed at-grade trail crossing, future 2019 traffic volumes from a past City of Bellevue model run¹ were used for the NE 8th Street corridor. Figure 2 summarizes the volumes used from the previous concurrency model runs.



Figure 2 – 2019 Model Run Weekday PM Peak Hour Traffic Volumes

Vehicle Queuing

Future 2019 vehicle queues both with and without the proposed trail crossing were evaluated using SimTraffic 9, a microsimulation traffic operations tool. A *Synchro* network for the 2019 horizon year with CIP projects included was previously provided by the City of Bellevue and utilized for the analysis for the without trail crossing condition. The future with trail crossing condition included an additional signal at the crossing and was coordinated with the NE 8th Street corridor.

Existing queues along the corridor were observed during the weekday PM peak hour in July 2017 in order to validate the results. A summary of the observations are included in Attachment A. The worst observed queue within each 5-minute period was documented. The observations showed that the existing westbound queues at the 116th Avenue NE / NE 8th Street intersection range between 255 and 575 feet and an average queue of 375 feet. In the eastbound direction at the 120th Avenue NE / NE 8th Street intersection, queues lengths had a greater variation with queues ranging between 105 and 855 feet and an average queue of 345 feet. As noted above, these queues are the worst queues for the observed 5-minute interval. Based on the reporting methodology in SimTraffic, these maximum queue lengths shown in the graphic may not necessarily occur at the same signal phasing interval.

The average of the peak observed queues and future 2019 95th percentile queues, both with and without the trail crossing are shown in Attachment B. Detailed future queueing worksheets are included in Attachment C.

Attachment B shows that future 2019 without the rail crossing would increase by approximately 5 vehicles westbound at the 116th Avenue NE / NE 8th Street intersection and by approximately 2 vehicles eastbound at the 120th Avenue NE / NE 8th Street intersection relative to the existing

75

¹ The model run was conducted in October 2013 for the target development. The volumes assumed do not include the trips associated with the Target as this proposal has changed since the model run. It is recognized that these traffic volumes are not the most recent; however, there is little noticeable difference in traffic levels along NE 8th Street between 116th Avenue NE and 120th Avenue NE.

observed queues. With the addition of the trail crossing signal and the coordination of the NE 8th Street corridor, although the overall queues along the corridor increase, the anticipated queues eastbound and westbound at the new trail crossing signal would not extend to the adjacent intersections and the queues to from the adjacent intersections would not extend to the trail crossing. Therefore, the 95th percentile queues with the addition of a signalized trail crossing across NE 8th Street are anticipated to be accommodated under future 2019 conditions.

Intersection Level of Service

Level of service (LOS) analyses were performed at the intersections with and without the at-grade crossing to determine the impact of the proposed trail crossing. The LOS analysis was evaluated using the *Highway Capacity Manual* (HCM), Transportation Research Board methodology using the Synchro software version 9.1. The level of service analysis reflects the same traffic network as used for the gueueing analysis above.

The operational characteristics of an intersection are determined by calculating the intersection level of service (LOS). Level of service for intersection operations is described alphabetically (A through F). LOS is based on the calculated average control delay per vehicle and is typically reported for the whole intersection for signalized. A more detailed explanation of LOS criteria is provided in Attachment D.

The LOS results for the future 2019 conditions are shown in Table 1. LOS worksheets are included in Attachment C.

Table 1. Future 2019	9 LOS Summary			
	Futu	re 2019	Future 2019 W	ith Trail Crossing
Intersection	LOS¹	Delay ²	LOS	Delay
116th Avenue NE / NE 8th S	treet D	53	D	46
Trail Crossing / NE 8th Stree	t No Trai	il Crossing	Α	0.2
120th Avenue NE / NE 8th S	treet D	51	D	53
 Level of service, based on 2 Average delay in seconds p 	010 Highway Capacity Manual methor vehicle.	odology.		

Table 1 shows that both with and without the proposed at-grade signalized trail crossing, the 116th Avenue NE and 120th Avenue NE intersections along NE 8th Street would operate at LOS D. The trail crossing would operate at LOS A.

Summary

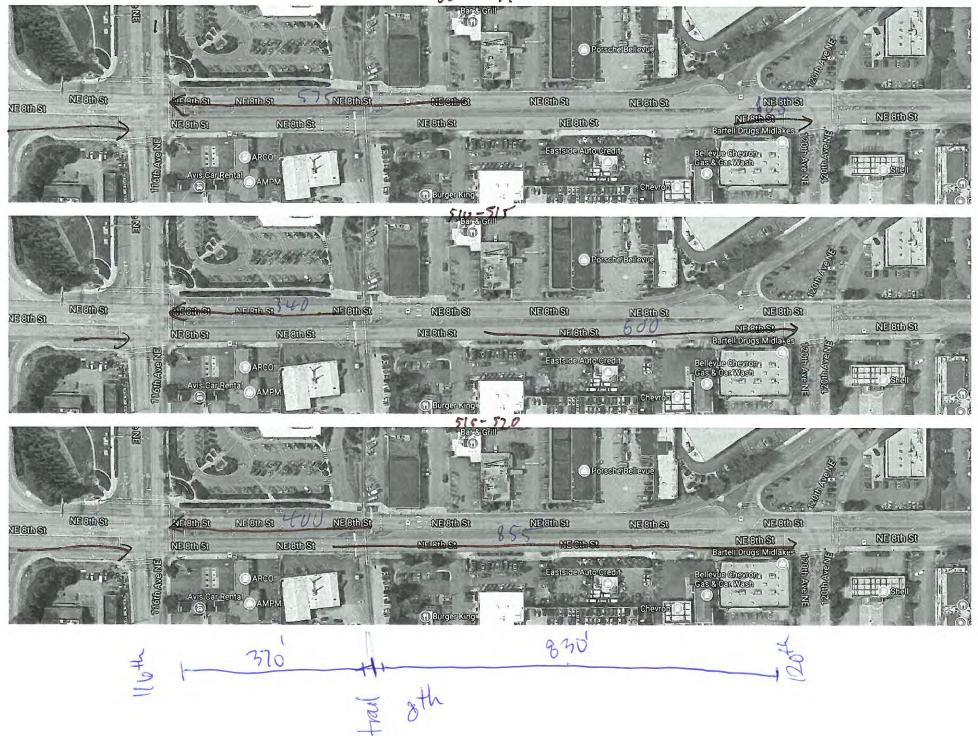
The operations along NE 8th Street corridor was analyzed both with and without an at-grade trail crossing under future 2019 weekday PM peak hour conditions. The 95th percentile queues with the addition of a signalized trail crossing across NE 8th Street are anticipated to be accommodated under future 2019 conditions with minimal increases in queues relative to no trail crossing. Additionally, the 116th Avenue NE and 120th Avenue NE intersections along NE 8th Street are forecast to operate at LOS D both with and without the proposed at-grade signalized trail crossing and the signalized trail crossing is forecast to operate at LOS A. Overall, the addition of the signalized trail crossing along the NE 8th Street corridor would result in minimal increases in queues and little to no change in level of service operations.

Updated traffic volumes were not requested from the City for this analysis, but will be available once the concurrency model is completed by the Bellevue South project. At that time, the results presented here in should be verified.



Attachment A: Observed Queues

505-510



Ave

520-525



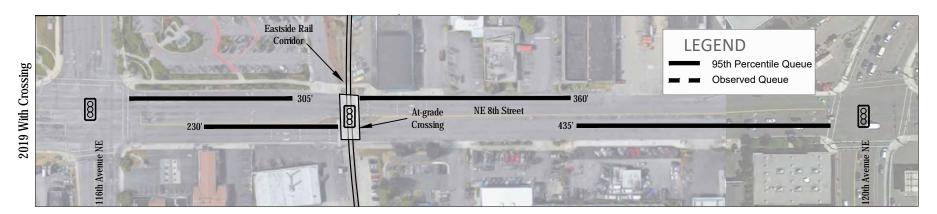
WB Are: 376.9 Max: 575 MM: 265 EB Are: 346.3 Max: 855 MM: 105 535-540



Attachment B: Observed and Future (2019) Queues







Observed and Future (2019) Queues

Attachment

transpogroup 7/



Attachment C: Queue and LOS Worksheets

Intersection: 30: 116th Ave & NE 8th

Movement	EB	EB	EB	EB	EB	EB	B8211	B8211	B8211	B8212	WB	WB
Directions Served	L	L	T	T	T	R	T	T	Т	T	L	L
Maximum Queue (ft)	169	223	276	318	339	175	27	206	322	10	97	349
Average Queue (ft)	79	104	129	177	271	136	1	25	91	0	35	75
95th Queue (ft)	146	183	255	312	402	233	20	119	257	7	79	208
Link Distance (ft)			251	251	251		669	669	669	881		
Upstream Blk Time (%)		0	1	3	18							
Queuing Penalty (veh)		0	0	0	0							
Storage Bay Dist (ft)	350	350				150					325	325
Storage Blk Time (%)		0	1		27	2						0
Queuing Penalty (veh)		0	1		86	7						0

Intersection: 30: 116th Ave & NE 8th

Movement	WB	WB	WB	B33	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	T	T	TR	T	L	T	T	R	L	L	T	T
Maximum Queue (ft)	440	484	507	3	392	521	507	51	323	365	406	470
Average Queue (ft)	289	334	351	0	145	340	338	14	156	232	245	234
95th Queue (ft)	444	486	501	3	272	461	461	42	300	340	355	389
Link Distance (ft)	862	862	862	255		1513	1513				623	623
Upstream Blk Time (%)												0
Queuing Penalty (veh)												0
Storage Bay Dist (ft)					450			600	350	350		
Storage Blk Time (%)	6					1	0		0	1	1	3
Queuing Penalty (veh)	5					1	0		0	3	2	16

Intersection: 30: 116th Ave & NE 8th

Movement	SB	SB
Directions Served	R	R
Maximum Queue (ft)	275	262
Average Queue (ft)	225	171
95th Queue (ft)	305	285
Link Distance (ft)		
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	250	250
Storage Blk Time (%)	5	0
Queuing Penalty (veh)	12	1

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Intersection: 233: 120th Avenue NE & NE 8th Street

Movement	EB	EB	EB	EB	B33	B33	B33	B33	WB	WB	WB	WB
Directions Served	L	L	T	TR	T	T	T	T	L	L	T	TR
Maximum Queue (ft)	304	318	339	347	16	26	145	177	202	225	786	750
Average Queue (ft)	202	214	243	265	1	2	22	37	96	192	516	476
95th Queue (ft)	286	308	370	389	19	21	95	132	178	282	809	756
Link Distance (ft)	255	255	255	255	862	862	862	862			1247	1247
Upstream Blk Time (%)	4	6	12	16								
Queuing Penalty (veh)	12	20	37	50								
Storage Bay Dist (ft)									200	200		
Storage Blk Time (%)									0	1	45	
Queuing Penalty (veh)									2	6	137	

Intersection: 233: 120th Avenue NE & NE 8th Street

Movement	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R
Maximum Queue (ft)	289	500	583	123	414	358	303
Average Queue (ft)	95	248	369	55	268	224	125
95th Queue (ft)	191	421	559	113	369	325	237
Link Distance (ft)		568	568	536	536	536	536
Upstream Blk Time (%)		0	1				
Queuing Penalty (veh)		0	0				
Storage Bay Dist (ft)	300						
Storage Blk Time (%)		1					
Queuing Penalty (veh)		1					

Intersection: 8211: Bend

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	4	6
Average Queue (ft)	0	0
95th Queue (ft)	4	6
Link Distance (ft)	251	251
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 400

Intersection:	30.	116th	Δve	ጲ	NE	8th
THE SCOUNT.	JU.	11001	\neg	LX.	114	CILII

Movement	EB	EB	EB	EB	EB	EB	B8211	B8211	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	T	Т	L	L	T	T
Maximum Queue (ft)	155	206	288	325	383	175	118	244	100	250	283	291
Average Queue (ft)	77	97	126	187	295	144	7	45	32	66	231	249
95th Queue (ft)	137	162	239	314	424	234	67	183	78	165	299	302
Link Distance (ft)			291	291	291		669	669			258	258
Upstream Blk Time (%)		0	0	1	14					0	10	15
Queuing Penalty (veh)		0	0	0	0					0	49	77
Storage Bay Dist (ft)	350	350				150			325	325		
Storage Blk Time (%)		0	0		29	1				0	10	
Queuing Penalty (veh)		0	0		92	4				0	8	

Intersection: 30: 116th Ave & NE 8th

Movement	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB	SB	
Directions Served	TR	L	Т	Т	R	L	L	Т	T	R	R	
Maximum Queue (ft)	283	304	437	438	53	332	360	452	436	275	259	
Average Queue (ft)	256	124	291	284	12	176	253	229	202	212	164	
95th Queue (ft)	298	224	403	395	39	346	369	392	361	287	265	
Link Distance (ft)	258		1510	1510				624	624			
Upstream Blk Time (%)	21							0	0			
Queuing Penalty (veh)	105							0	0			
Storage Bay Dist (ft)		450			600	350	350			250	250	
Storage Blk Time (%)		0	0			0	5	0	1	3	0	
Queuing Penalty (veh)		0	0			0	12	0	3	7	1	

Intersection: 33: NE 8th

Movement	EB	EB	EB	EB	WB	WB	WB
Directions Served	T	T	T	T	Ţ	T	T
Maximum Queue (ft)	226	249	279	274	379	404	410
Average Queue (ft)	57	66	96	100	141	177	198
95th Queue (ft)	154	183	225	227	313	344	358
Link Distance (ft)	258	258	258	258	812	812	812
Upstream Blk Time (%)	0	0	0	1			
Queuing Penalty (veh)	0	0	2	2			
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

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Intersection: 233: 120th Avenue NE & NE 8th Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	L	T	TR	L
Maximum Queue (ft)	377	374	483	494	199	225	711	694	324	547	600	164
Average Queue (ft)	244	243	235	242	100	196	455	417	106	292	402	71
95th Queue (ft)	358	359	418	431	181	275	675	628	224	474	600	155
Link Distance (ft)	812	812	812	812			1247	1247		572	572	534
Upstream Blk Time (%)										1	3	
Queuing Penalty (veh)										0	0	
Storage Bay Dist (ft)					200	200			300			
Storage Blk Time (%)					0	1	39		0	3		
Queuing Penalty (veh)					2	6	119		0	4		

Intersection: 233: 120th Avenue NE & NE 8th Street

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	412	374	292
Average Queue (ft)	280	235	130
95th Queue (ft)	380	339	238
Link Distance (ft)	534	534	534
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8211: Bend

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	6	13
Average Queue (ft)	0	1
95th Queue (ft)	6	11
Link Distance (ft)	291	291
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 494

	•	→	•	•	—	•	•	†	~	/	+	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	ተተተ	7	1,1	↑ ↑₽		7	^	7	ሻሻ	^	77
Traffic Volume (veh/h)	205	980	320	85	1385	30	140	790	25	220	495	595
Future Volume (veh/h)	205	980	320	85	1385	30	140	790	25	220	495	595
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1937	1863	1863
Adj Flow Rate, veh/h	216	1032	337	89	1458	32	147	832	26	232	521	626
Adj No. of Lanes	2	3	1	2	3	0	1	2	1	2	2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	292	1978	616	392	2311	51	355	925	626	311	696	763
Arrive On Green	0.08	0.39	0.39	0.15	0.45	0.45	0.20	0.31	0.31	0.09	0.20	0.20
Sat Flow, veh/h	3442	5085	1583	2661	5121	112	1774	2980	1583	3579	3539	2217
Grp Volume(v), veh/h	216	1032	337	89	965	525	147	832	26	232	521	626
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1331	1695	1843	1774	1490	1583	1790	1770	1108
Q Serve(g_s), s	11.0	28.0	22.8	5.3	39.3	39.3	13.0	48.1	1.8	11.4	25.0	20.0
Cycle Q Clear(g_c), s	11.0	28.0	22.8	5.3	39.3	39.3	13.0	48.1	1.8	11.4	25.0	20.0
Prop In Lane	1.00		1.00	1.00		0.06	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	292	1978	616	392	1530	832	355	925	626	311	696	763
V/C Ratio(X)	0.74	0.52	0.55	0.23	0.63	0.63	0.41	0.90	0.04	0.75	0.75	0.82
Avail Cap(c_a), veh/h	344	1978	616	392	1530	832	355	1126	733	358	1101	1016
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	80.4	42.2	25.1	67.7	37.9	37.9	62.7	59.4	33.5	80.2	68.1	54.0
Incr Delay (d2), s/veh	5.3	1.0	3.5	0.1	2.0	3.6	0.3	7.7	0.0	5.7	0.6	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	13.3	10.6	2.0	18.8	20.8	6.4	20.8	0.8	5.9	12.3	6.4
LnGrp Delay(d),s/veh	85.7	43.2	28.6	67.8	39.9	41.5	63.0	67.1	33.5	86.0	68.7	57.0
LnGrp LOS	F	D	С	Е	D	D	Е	Е	С	F	Е	Е
Approach Vol, veh/h		1585			1579			1005			1379	
Approach Delay, s/veh		45.9			42.0			65.7			66.3	
Approach LOS		D			D			Е			Е	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	29.5	73.0	18.6	58.9	18.3	84.2	39.1	38.4				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	10.0	68.0	16.0	66.0	16.0	62.0	28.0	54.0				
Max Q Clear Time (g_c+l1), s	7.3	30.0	13.4	50.1	13.0	41.3	15.0	27.0				
Green Ext Time (p_c), s	0.2	8.2	0.2	3.8	0.2	8.0	4.0	6.5				
Intersection Summary												
HCM 2010 Ctrl Delay			53.4									
HCM 2010 LOS			D									
			-									

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Lane Configurations		۶	→	•	•	←	•	1	†	<i>></i>	/	+	1
Traffic Volume (veh/h) 505 910 140 305 935 10 130 420 500 55 650 499 Number 1 6 6 16 5 2 12 7 7 4 14 3 8 8 18 Initial O(bb), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Movement		EBT	EBR		WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (veh/h) 505 910 140 305 935 10 130 420 500 55 650 499 Number 1 6 6 16 5 2 12 7 7 4 14 3 8 8 11 Initial Q (Ob), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lane Configurations	16.56	ħβ		ሻሻ	ħβ		ሻ	ħβ		7	^	7
Number 1 6 16 16 5 2 12 7 4 14 3 8 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Traffic Volume (veh/h)	505		140			10	130		500	55		495
Initial Q (Ob), veh	Future Volume (veh/h)	505	910	140	305	935	10	130	420	500	55	650	495
Ped-Bike Adj(A_pbT)	Number	1	6	16	5	2	12	7	4	14	3	8	18
Parking Bus, Adj			0	0	0	0			0	0	0	0	0
Adj Sat Flow, weh/hn/ln 1863 1863 1900 1863 1863 1900 1863 1863 1900 1863 1863 1863 1866 Adj Flow Rate, weh/h 532 958 147 321 984 11 137 442 526 58 684 52 7 140 180 180 180 180 180 180 180 180 180 18													1.00
Adj Flow Rate, veh/h													1.00
Adj No. of Lanes													1863
Peak Hour Factor 0.95 0.98 As 0.83 35.9 0.8 3.1 0.05 0.03 0.33 0.03 0.05 0.85 35.9 35.9 6.8 31.0 46.2 4.5 23.0 35.1 79.0 10.0 10.0 10.0 10.0											58		521
Percent Heavy Veh, %													1
Cap, veh/h 579 1279 196 560 1157 13 269 594 532 79 1116 760 Arrive On Green 0.17 0.42 0.42 0.09 0.32 0.31 0.08 0.34 0.35 0.04 0.32 0.33 Sat Flow, veh/h 3442 3077 472 3442 3585 40 1774 1770 1583 1774 3539 1583 Grp Volume(v), veh/h 532 551 554 321 486 509 137 442 526 58 684 527 Grp Sat Flow(s), veh/h/ln 1721 1770 1779 1721 1770 1856 1774 1770 1583 1774 1770 1583 O Serve(g_s), s 21.3 37.0 37.0 8.5 35.9 35.9 6.8 31.0 46.2 45.5 23.0 35.5 Prop In Lane 1.00 0.07 0.7 75.0 560 571													0.95
Arrive On Green 0.17 0.42 0.42 0.09 0.32 0.31 0.08 0.34 0.35 0.04 0.32 0.33 Sat Flow, veh/h 3442 3077 472 3442 3585 40 1774 1770 1583 1774 3539 1583 Grp Volume(v), veh/h 532 551 554 321 486 509 137 442 526 58 684 527 Grp Sat Flow(s), veh/h/ln 1721 1770 1721 1770 1856 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 179 1856 171 1770 1783 179 1856 1879 6.8 31.0													2
Sat Flow, veh/h 3442 3077 472 3442 3585 40 1774 1770 1583 1774 3539 1583 Grp Volume(v), veh/h 532 551 554 321 486 509 137 442 526 58 684 527 Grp Sat Flow(s), veh/h/ln 1721 1770 1779 1770 1786 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1782 1882 1782													766
Grp Volume(v), veh/h 532 551 554 321 486 509 137 442 526 58 684 522 Grp Sat Flow(s), veh/h/ln 1721 1770 1770 1771 1770 1856 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 1774 1770 1583 31.0 46.2 4.5 23.0 35.2 590 6.8 31.0 46.2 4.5 23.0 35.2 Prop In Lane 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00													0.32
Grp Sat Flow(s), veh/h/ln 1721 1770 1779 1721 1770 1856 1774 1770 1583 1774 1770 1583 O Serve(g, s), s 21.3 37.0 37.0 8.5 35.9 35.9 6.8 31.0 46.2 4.5 23.0 35.5 Cycle O Clear(g_c), s 21.3 37.0 37.0 8.5 35.9 35.9 6.8 31.0 46.2 4.5 23.0 35.5 Prop In Lane 1.00 0.02 1.00 0.02 1.00 1.00 1.00 1.00 Lane Grp Cap(c), veh/lh 579 735 740 560 571 599 269 594 532 79 1116 766 V/C Ratio(X) 0.92 0.75 0.75 0.57 0.85 0.85 0.51 0.74 0.99 0.73 0.61 0.66 Avail Cap(c_a), veh/lh 615 735 740 572 571 599 432 594 532 <td>Sat Flow, veh/h</td> <td>3442</td> <td>3077</td> <td>472</td> <td>3442</td> <td>3585</td> <td>40</td> <td>1774</td> <td>1770</td> <td>1583</td> <td>1774</td> <td>3539</td> <td>1583</td>	Sat Flow, veh/h	3442	3077	472	3442	3585	40	1774	1770	1583	1774	3539	1583
O Serve(g_s), s 21.3 37.0 37.0 8.5 35.9 35.9 6.8 31.0 46.2 4.5 23.0 35.5 Cycle Q Clear(g_c), s 21.3 37.0 37.0 8.5 35.9 35.9 6.8 31.0 46.2 4.5 23.0 35.5 Prop In Lane 1.00 0.27 1.00 0.02 1.00 1.00 1.00 1.00 Lane Grp Cap(c), veh/h 579 735 740 560 571 599 269 594 532 79 1116 766 V/C Ratio(X) 0.92 0.75 0.57 0.85 0.85 0.85 0.51 0.74 0.99 0.73 0.61 0.66 Avail Cap(c_a), veh/h 615 735 740 572 571 599 432 594 532 89 1116 766 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 <td< td=""><td>Grp Volume(v), veh/h</td><td>532</td><td>551</td><td>554</td><td>321</td><td>486</td><td>509</td><td>137</td><td>442</td><td>526</td><td>58</td><td>684</td><td>521</td></td<>	Grp Volume(v), veh/h	532	551	554	321	486	509	137	442	526	58	684	521
Cycle Q Clear(g_c), s 21.3 37.0 37.0 8.5 35.9 35.9 6.8 31.0 46.2 4.5 23.0 35.5 Prop In Lane 1.00 0.27 1.00 0.02 1.00 1.	Grp Sat Flow(s),veh/h/ln	1721	1770	1779	1721	1770	1856	1774	1770	1583	1774	1770	1583
Prop In Lane	Q Serve(g_s), s	21.3	37.0	37.0	8.5	35.9	35.9	6.8	31.0	46.2	4.5	23.0	35.5
Lane Grp Cap(c), veh/h 579 735 740 560 571 599 269 594 532 79 1116 760 V/C Ratio(X) 0.92 0.75 0.75 0.57 0.85 0.85 0.85 0.51 0.74 0.99 0.73 0.61 0.66 Avail Cap(c_a), veh/h 615 735 740 572 571 599 432 594 532 89 1116 760 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Cycle Q Clear(g_c), s	21.3	37.0		8.5	35.9	35.9	6.8	31.0	46.2	4.5	23.0	35.5
V/C Ratio(X) 0.92 0.75 0.75 0.57 0.85 0.85 0.51 0.74 0.99 0.73 0.61 0.68 Avail Cap(c_a), veh/h 615 735 740 572 571 599 432 594 532 89 1116 766 HCM Platoon Ratio 1.00 1	Prop In Lane	1.00		0.27	1.00		0.02	1.00		1.00	1.00		1.00
Avail Cap(c_a), veh/h 615 735 740 572 571 599 432 594 532 89 1116 766 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Lane Grp Cap(c), veh/h	579	735		560	571	599	269		532		1116	766
HCM Platoon Ratio	V/C Ratio(X)	0.92	0.75	0.75	0.57	0.85	0.85	0.51	0.74	0.99	0.73	0.61	0.68
Upstream Filter(I)	Avail Cap(c_a), veh/h	615	735	740	572	571	599	432	594	532	89	1116	766
Uniform Delay (d), s/veh 57.3 34.7 34.7 29.7 44.3 44.3 28.4 41.2 45.3 66.0 40.7 27.8 Incr Delay (d2), s/veh 17.8 6.9 6.9 0.8 14.7 14.1 0.6 4.5 36.2 19.3 0.7 2.0 Initial Q Delay(d3), s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incr Delay (d2), s/veh	Upstream Filter(I)												1.00
Initial Q Delay(d3),s/veh	Uniform Delay (d), s/veh	57.3	34.7		29.7	44.3	44.3	28.4	41.2	45.3		40.7	27.8
%ile BackOfQ(50%),veh/ln 11.6 19.5 19.6 4.0 19.9 20.7 3.3 15.8 25.5 2.6 11.3 15.8 LnGrp Delay(d),s/veh 75.1 41.6 41.6 30.5 59.0 58.4 29.0 45.7 81.4 85.3 41.4 29.9 LnGrp LOS E D D C E E C D F F D C Approach Vol, veh/h 1637 1316 1105 1263 Approach Delay, s/veh 52.5 51.8 60.6 38.7 Approach LOS D D E D Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 28.6 48.2 11.3 52.0 15.5 61.2 14.1 49.1 Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Max	Incr Delay (d2), s/veh		6.9		0.8		14.1			36.2			2.0
LnGrp Delay(d),s/veh 75.1 41.6 41.6 30.5 59.0 58.4 29.0 45.7 81.4 85.3 41.4 29.9 LnGrp LOS E D D C E E C D F F D C Approach Vol, veh/h 1637 1316 1105 1263 Approach Delay, s/veh 52.5 51.8 60.6 38.7 Approach LOS D D E D Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 28.6 48.2 11.3 52.0 15.5 61.2 14.1 49.1 Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0<	Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0			0.0	0.0		0.0
LnGrp LOS E D D C E E C D F F D C Approach Vol, veh/h 1637 1316 1105 1263 Approach Delay, s/veh 52.5 51.8 60.6 38.7 Approach LOS D D E D Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 28.6 48.2 11.3 52.0 15.5 61.2 14.1 49.1 Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Max Green Setting (Gmax), s 25.0 41.0 7.0 47.0 11.0 55.0 22.0 32.0 Max Q Clear Time (g_c+l1), s 23.3 37.9 6.5 48.2 10.5 39.0 8.8 37.5													15.8
Approach Vol, veh/h 1637 1316 1105 1263 Approach Delay, s/veh 52.5 51.8 60.6 38.7 Approach LOS D D E D Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 28.6 48.2 11.3 52.0 15.5 61.2 14.1 49.1 Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Max Green Setting (Gmax), s 25.0 41.0 7.0 47.0 11.0 55.0 22.0 32.0 Max Q Clear Time (g_c+l1), s 23.3 37.9 6.5 48.2 10.5 39.0 8.8 37.5 Green Ext Time (p_c), s 0.3 2.5 0.0 0.0 0.1 8.9 0.4 0.0		75.1	41.6	41.6	30.5		58.4	29.0		81.4	85.3	41.4	29.9
Approach Delay, s/veh 52.5 51.8 60.6 38.7 Approach LOS D D E D Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 28.6 48.2 11.3 52.0 15.5 61.2 14.1 49.1 Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Max Green Setting (Gmax), s 25.0 41.0 7.0 47.0 11.0 55.0 22.0 32.0 Max Q Clear Time (g_c+l1), s 23.3 37.9 6.5 48.2 10.5 39.0 8.8 37.5 Green Ext Time (p_c), s 0.3 2.5 0.0 0.0 0.1 8.9 0.4 0.0	LnGrp LOS	E	D	D	С	E	E	С	D	F	F	D	С
Approach LOS D D E D Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 28.6 48.2 11.3 52.0 15.5 61.2 14.1 49.1 Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Max Green Setting (Gmax), s 25.0 41.0 7.0 47.0 11.0 55.0 22.0 32.0 Max Q Clear Time (g_c+l1), s 23.3 37.9 6.5 48.2 10.5 39.0 8.8 37.5 Green Ext Time (p_c), s 0.3 2.5 0.0 0.0 0.1 8.9 0.4 0.0	Approach Vol, veh/h		1637			1316			1105			1263	
Timer 1 2 3 4 5 6 7 8 Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 28.6 48.2 11.3 52.0 15.5 61.2 14.1 49.1 Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 Max Green Setting (Gmax), s 25.0 41.0 7.0 47.0 11.0 55.0 22.0 32.0 Max Q Clear Time (g_c+l1), s 23.3 37.9 6.5 48.2 10.5 39.0 8.8 37.5 Green Ext Time (p_c), s 0.3 2.5 0.0 0.0 0.1 8.9 0.4 0.0	Approach Delay, s/veh		52.5			51.8			60.6			38.7	
Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s 28.6 48.2 11.3 52.0 15.5 61.2 14.1 49.1 Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Max Green Setting (Gmax), s 25.0 41.0 7.0 47.0 11.0 55.0 22.0 32.0 Max Q Clear Time (g_c+l1), s 23.3 37.9 6.5 48.2 10.5 39.0 8.8 37.5 Green Ext Time (p_c), s 0.3 2.5 0.0 0.0 0.1 8.9 0.4 0.0	Approach LOS		D			D			Е			D	
Phs Duration (G+Y+Rc), s 28.6 48.2 11.3 52.0 15.5 61.2 14.1 49.1 Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Max Green Setting (Gmax), s 25.0 41.0 7.0 47.0 11.0 55.0 22.0 32.0 Max Q Clear Time (g_c+I1), s 23.3 37.9 6.5 48.2 10.5 39.0 8.8 37.5 Green Ext Time (p_c), s 0.3 2.5 0.0 0.0 0.1 8.9 0.4 0.0	Timer	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s 28.6 48.2 11.3 52.0 15.5 61.2 14.1 49.1 Change Period (Y+Rc), s 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Max Green Setting (Gmax), s 25.0 41.0 7.0 47.0 11.0 55.0 22.0 32.0 Max Q Clear Time (g_c+I1), s 23.3 37.9 6.5 48.2 10.5 39.0 8.8 37.5 Green Ext Time (p_c), s 0.3 2.5 0.0 0.0 0.1 8.9 0.4 0.0	Assigned Phs	1	2	3	4	5	6	7	8				
Change Period (Y+Rc), s 5.0 32.0 32.0 32.0 32.0 8.8 37.5		28.6		11.3	52.0			14.1	49.1				
Max Green Setting (Gmax), s 25.0 41.0 7.0 47.0 11.0 55.0 22.0 32.0 Max Q Clear Time (g_c+I1), s 23.3 37.9 6.5 48.2 10.5 39.0 8.8 37.5 Green Ext Time (p_c), s 0.3 2.5 0.0 0.0 0.1 8.9 0.4 0.0													
Max Q Clear Time (g_c+l1), s 23.3 37.9 6.5 48.2 10.5 39.0 8.8 37.5 Green Ext Time (p_c), s 0.3 2.5 0.0 0.0 0.1 8.9 0.4 0.0	• • • •												
Green Ext Time (p_c), s 0.3 2.5 0.0 0.0 0.1 8.9 0.4 0.0													
Intersection Summary	, 0 _ ,												
	Intersection Summary												
HCM 2010 Ctrl Delay 50.7	HCM 2010 Ctrl Delay			50.7									
HCM 2010 LOS D				D									

08/02/2017 Synchro 9 Report
Transpo Group Page 4

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1,1	ተተተ	7	1,1	ተተኈ		Ţ	^	7	ሻሻ	^	77
Traffic Volume (veh/h)	205	980	320	85	1385	30	140	790	25	220	495	595
Future Volume (veh/h)	205	980	320	85	1385	30	140	790	25	220	495	595
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1937	1863	1863
Adj Flow Rate, veh/h	216	1032	337	89	1458	32	147	832	26	232	521	626
Adj No. of Lanes	2	3	1	2	3	0	1	2	1	2	2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	304	2000	623	327	2191	48	348	935	637	322	736	733
Arrive On Green	0.09	0.39	0.39	0.12	0.43	0.42	0.20	0.31	0.31	0.09	0.21	0.21
Sat Flow, veh/h	3442	5085	1583	2661	5121	112	1774	2980	1583	3579	3539	2217
Grp Volume(v), veh/h	216	1032	337	89	965	525	147	832	26	232	521	626
Grp Sat Flow(s), veh/h/ln	1721	1695	1583	1331	1695	1843	1774	1490	1583	1790	1770	1108
Q Serve(g_s), s	9.2	23.2	18.2	4.6	34.2	34.2	10.9	39.9	1.5	9.5	20.5	21.1
Cycle Q Clear(g_c), s	9.2	23.2	18.2	4.6	34.2	34.2	10.9	39.9	1.5	9.5	20.5	21.1
Prop In Lane	1.00		1.00	1.00		0.06	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	2000	623	327	1451	789	348	935	637	322	736	733
V/C Ratio(X)	0.71	0.52	0.54	0.27	0.67	0.67	0.42	0.89	0.04	0.72	0.71	0.85
Avail Cap(c_a), veh/h	321	2000	623	327	1451	789	348	1093	720	334	1109	967
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.5	34.6	19.3	59.7	34.3	34.3	52.9	49.0	27.3	66.4	55.2	46.8
Incr Delay (d2), s/veh	5.6	1.0	3.4	0.1	2.2	4.0	0.3	7.6	0.0	6.0	0.5	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	11.0	8.5	1.7	16.4	18.2	5.4	17.4	0.7	4.9	10.1	6.9
LnGrp Delay(d),s/veh	72.1	35.6	22.6	59.9	36.5	38.4	53.2	56.5	27.3	72.4	55.6	51.5
LnGrp LOS	Ε	D	С	Ε	D	D	D	Ε	С	Е	Е	D
Approach Vol, veh/h		1585			1579			1005			1379	
Approach Delay, s/veh		37.8			38.4			55.3			56.6	
Approach LOS		D			D			Е			Е	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.4	62.0	16.5	50.1	16.2	67.2	32.4	34.2				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	8.0	57.0	12.0	53.0	12.0	53.0	20.0	45.0				
Max Q Clear Time (g_c+l1), s	6.6	25.2	11.5	41.9	11.2	36.2	12.9	23.1				
Green Ext Time (p_c), s	0.9	8.0	0.1	3.2	0.1	7.3	2.8	6.1				
Intersection Summary												
HCM 2010 Ctrl Delay			45.8									
HCM 2010 LOS			D									

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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	LUL	1111	↑	WER) T	JDK *
Traffic Volume (veh/h)	0	1390	1530	0	0	0
Future Volume (veh/h)	0	1390	1530	0	0	0
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	-	-	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863
Adj Flow Rate, veh/h	0	1463	1611	0	0	0
Adj No. of Lanes	0	4	3	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	6230	4944	0	1	1
Arrive On Green	0.00	0.97	0.97	0.00	0.00	0.00
Sat Flow, veh/h	0	6929	5421	0	1774	1583
Grp Volume(v), veh/h	0	1463	1611	0	0	0
Grp Sat Flow(s), veh/h/ln	0	1602	1695	0	1774	1583
Q Serve(g_s), s	0.0	1.5	2.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.5	2.3	0.0	0.0	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	6230	4944	0	1	1
V/C Ratio(X)	0.00	0.23	0.33	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	6230	4944	0	365	325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.86	0.63	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.1	0.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.9	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.2	0.2	0.0	0.0	0.0
LnGrp LOS		Α	Α			
Approach Vol, veh/h		1463	1611		0	
Approach Delay, s/veh		0.2	0.2		0.0	
Approach LOS		А	А			
Timer	1	2	3	4	5	6
Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		180.0		0.0		180.0
Change Period (Y+Rc), s		5.0		5.0		5.0
Max Green Setting (Gmax), s		133.0		37.0		133.0
Max Q Clear Time (g_c+l1), s		3.5		0.0		4.3
Green Ext Time (p_c), s		44.7		0.0		44.6
Intersection Summary						
HCM 2010 Ctrl Delay			0.2			
HCM 2010 LOS			Α			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1,1	∱ ⊅		44	ħβ		ň	ħβ		Ţ	^	7
Traffic Volume (veh/h)	505	910	140	305	935	10	130	420	500	55	650	495
Future Volume (veh/h)	505	910	140	305	935	10	130	420	500	55	650	495
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	532	958	147	321	984	11	137	442	526	58	684	521
Adj No. of Lanes	2	2	0	2	2	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	577	1369	210	583	1254	14	254	566	507	75	1051	736
Arrive On Green	0.17	0.44	0.44	0.09	0.35	0.34	0.08	0.32	0.33	0.04	0.30	0.30
Sat Flow, veh/h	3442	3077	472	3442	3585	40	1774	1770	1583	1774	3539	1583
Grp Volume(v), veh/h	532	551	554	321	486	509	137	442	526	58	684	521
Grp Sat Flow(s),veh/h/ln	1721	1770	1779	1721	1770	1856	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	22.8	37.6	37.7	8.7	36.9	36.9	7.5	34.0	48.0	4.9	25.3	39.4
Cycle Q Clear(g_c), s	22.8	37.6	37.7	8.7	36.9	36.9	7.5	34.0	48.0	4.9	25.3	39.4
Prop In Lane	1.00		0.27	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	577	787	792	583	619	649	254	566	507	75	1051	736
V/C Ratio(X)	0.92	0.70	0.70	0.55	0.78	0.78	0.54	0.78	1.04	0.77	0.65	0.71
Avail Cap(c_a), veh/h	619	787	792	608	619	649	397	566	507	83	1051	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.5	33.6	33.6	29.0	43.7	43.7	32.5	46.2	50.0	71.1	46.0	32.0
Incr Delay (d2), s/veh	17.5	4.9	4.9	0.5	9.6	9.2	0.7	6.3	50.2	28.1	1.1	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.3	19.4	19.6	4.1	19.7	20.6	3.7	17.6	28.0	3.0	12.5	17.7
LnGrp Delay(d),s/veh	79.0	38.5	38.5	29.5	53.3	52.9	33.2	52.6	100.2	99.2	47.1	34.7
LnGrp LOS	E	D	D	С	D	D	С	D	F	F	D	<u>C</u>
Approach Vol, veh/h		1637			1316			1105			1263	
Approach Delay, s/veh		51.7			47.4			72.8			44.4	
Approach LOS		D			D			Е			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.1	55.5	11.4	53.0	15.9	69.7	14.8	49.5				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	27.0	48.0	7.0	48.0	12.0	63.0	22.0	33.0				
Max Q Clear Time (g_c+I1), s	24.8	38.9	6.9	50.0	10.7	39.7	9.5	41.4				
Green Ext Time (p_c), s	0.3	6.0	0.0	0.0	0.2	10.8	0.3	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			53.3									
HCM 2010 LOS			D									

Attachment D: LOS Definitions

Highway Capacity Manual 2010

Signalized intersection level of service (LOS) is defined in terms of a weighted average control delay for the entire intersection. Control delay quantifies the increase in travel time that a vehicle experiences due to the traffic signal control as well as provides a surrogate measure for driver discomfort and fuel consumption. Signalized intersection LOS is stated in terms of average control delay per vehicle (in seconds) during a specified time period (e.g., weekday PM peak hour). Control delay is a complex measure based on many variables, including signal phasing and coordination (i.e., progression of movements through the intersection and along the corridor), signal cycle length, and traffic volumes with respect to intersection capacity and resulting queues. Table 1 summarizes the LOS criteria for signalized intersections, as described in the *Highway Capacity Manual 2010* (Transportation Research Board, 2010).

Table 1. Level of Service Criteria for Signalized Intersections		
Level of Service	Average Control Delay (seconds/vehicle)	General Description
Α	≤10	Free Flow
В	>10 – 20	Stable Flow (slight delays)
С	>20 – 35	Stable flow (acceptable delays)
D	>35 – 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 – 80	Unstable flow (intolerable delay)
F ¹	>80	Forced flow (congested and queues fail to clear)

Source: Highway Capacity Manual 2010, Transportation Research Board, 2010.

Unsignalized intersection LOS criteria can be further reduced into two intersection types: all-way stop and two-way stop control. All-way stop control intersection LOS is expressed in terms of the weighted average control delay of the overall intersection or by approach. Two-way stop-controlled intersection LOS is defined in terms of the average control delay for each minor-street movement (or shared movement) as well as major-street left-turns. This approach is because major-street through vehicles are assumed to experience zero delay, a weighted average of all movements results in very low overall average delay, and this calculated low delay could mask deficiencies of minor movements. Table 2 shows LOS criteria for unsignalized intersections.

Table 2. Level of Service Criteria for Unsignalized Intersections		
Level of Service	Average Control Delay (seconds/vehicle)	
A	0 – 10	
В	>10 – 15	
С	>15 – 25	
D	>25 – 35	
E	>35 – 50	
F ¹	>50	

Source: Highway Capacity Manual 2010, Transportation Research Board, 2010.

^{1.} If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0 LOS F is assigned to the individual lane group. LOS for overall approach or intersection is determined solely by the control delay.

If the volume-to-capacity (v/c) ratio exceeds 1.0, LOS F is assigned an individual lane group for all unsignalized intersections, or minor street approach at two-way stop-controlled intersections. Overall intersection LOS is determined solely by control delay.



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feetfirst.org

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@FeetFirst_WA @FeetFirstWA @FeetFirstWalks August 29, 2017

Wilburton – Grand Connection Citizens Advisory Committee c/o Bradley Calvert, Community Development Program Manager City of Bellevue

Dear Citizens Advisory Committee Members:

Feet First is a statewide nonprofit organization representing people of all ages looking for safe, accessible, and inviting ways to go by foot. Walking is a vital transportation mode that strengthens communities, reduces pollution, and promotes good health.

Through our Sound Access for All program, we have been promoting pedestrian accessibility at future Sound Transit Link light rail stations throughout the region. As a result we have been attending the meetings of the Wilburton – Grand Connection Citizens Advisory Committee. We have a few comments that we would like to share you.

Mixing Bicycles and Pedestrians on 116th Avenue NE:

During the discussions regarding potential future streetscape profiles for 116th Avenue NE, there was some consideration of creating a boulevard with a shared pedestrian and bicycle sidewalk. We are **strongly opposed** to combining bicycles and pedestrians on the same sidewalk. Although mixing bikes and pedestrians works reasonably well on regional trails, this is not a good option for sidewalks. Unlike people walking on a trail, those walking on sidewalks don't necessarily walk in predictable straight lines. They are coming in and out of storefronts, window shopping, grabbing a newspaper from a vending machine, or getting in and out their parked car. These walking patterns create a significant potential for conflict with bicycles. Additionally, some pedestrians going to and from Overlake Hospital and associated medical facilities will have limited mobility – people limping, on crutches, or using a wheelchair. Encouraging bicycles to use sidewalks along 116th Avenue NE creates particularly problematic potential for conflict with these users.

Eastside Rail Corridor Trail Crossings at NE 4th and NE 8th Streets:

We support providing at-grade crossings of the future Eastside Rail Corridor Trail where it will cross NE 4th and NE 8th Streets. An at-grade crossing at NE 8th Street is particularly important in that it would provide direct access to and from the future Wilburton light rail station from future TOD south of the street as well as the eastbound Rapid Ride bus stop at that location. Long approach ramps associated with tunnels and bridges can force people to walk considerably out of their way to simply cross the street; they do not provide a convenient place for people to cross. The busy intersections with 116th Avenue NE are simply not adequate substitutes for crossings at the trail itself; they are hazardous for pedestrians, require long waiting times at the signal, and would force walkers to go considerably out of their way.

Pedestrian Grid Network:

We applaud the CAC's support for improving pedestrian connectivity in the study area by breaking up existing superblocks with parallel walking routes including mid-block walking paths and alleyways. As pedestrian connectivity increases, travel distance decreases and route options increase. The end result is a more walkable community. Many sources recommend that parallel walking corridors should ideally be no more than 300 to 600 feet apart, including the Kentucky Division of Planning, the Portland area's Metro Council, and the Victoria Transport Policy Institute. Therefore, we recommend that the city set a long-term policy goal of ensuring parallel walking facilities no more than 600 feet apart (and preferably less) throughout the Wilburton study area.

Sincerely,

Maggie Darlow,

President, Feet First

Mazgie Darlow





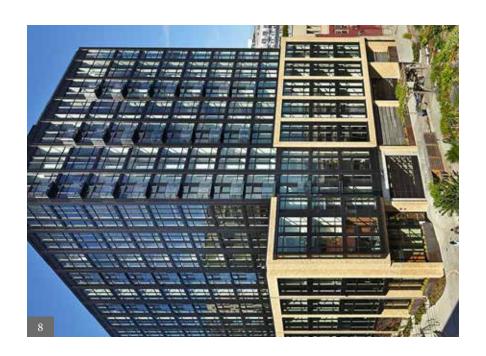






















































































































































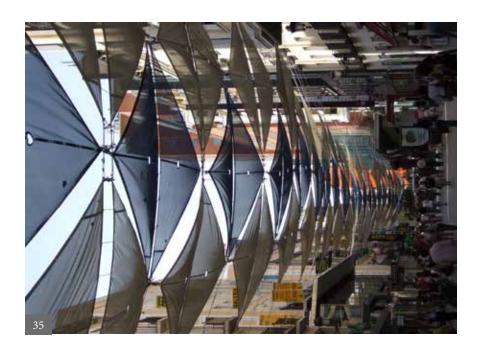










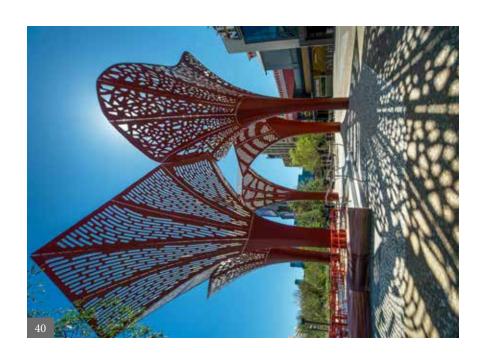
























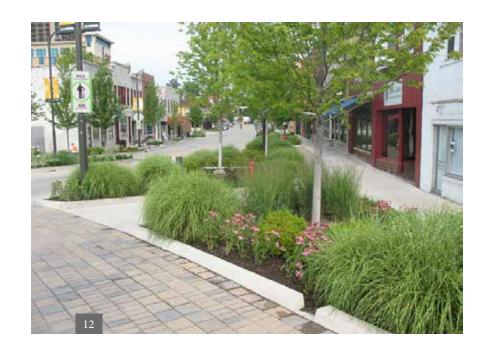






















































































Instruction:

Using your contact sheets and the assigned numbers to the images (lower left corner each image) think about the type of aesthetic qualities that would be applicable to the Wilburton Commercial Area. Assign the numbers in general areas where you believe the aesthetic quality or typology represents your vision and priorities for the study area. This is to allow you to have concepts and ideas prior to the Committee worksession. There is also a comment sheet to make additional notes that may not be represented in the example graphics. Additional graphics will be provided at the meeting.

Wilburton Commercial Area Urban Design Considerations

-	
-	What type of opportunities do you see to incorporate the history of Wilburton (see packet materia
	he Eastside Heritage Center)?
-	
-	
-	
-	
-	
\ \ - \ - \ - \ - \ - \ - \ - \ - \ - \	Wilburton Commercial Area?
\ \ - \ - \ - \ - \ - \ - \ - \ - \ - \	Wilburton Commercial Area?
	What other cities, developments, or buildings do you see as applicable to your vision and prioritie Wilburton Commercial Area? General Comments for discussion during the worksession:

Wilburton Commercial Area CAC

Meeting #7 July 6th, 2017









Tonight's Topics

- Updated Height and Density Graphics
- 116th Avenue NE and Block Permeability
- Performance Measures







Group Exercise Review

STREETSCAPE: 116th Ave NE Cross-section

PERMEABILITY:
Study Area Grid Network



Precedents: Improved Streetscape on Major Arterials





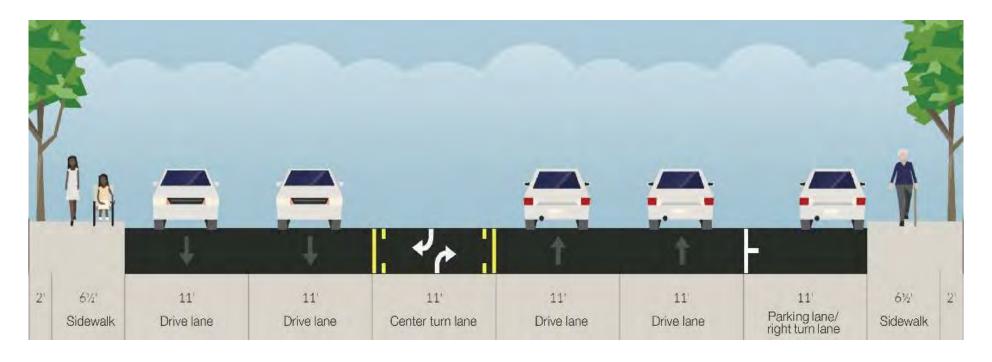


Precedents: Improved Streetscape on Major Arterials





116th Ave NE – Existing Cross-section





116th Ave NE Streetscape Plan (2015)





112 feet total

116th Ave NE - CAC Worksession





116th Ave NE Cross-section

Group Discussion













Pedestrian Path

Alley with Addresses

Local Street

Festival Street



Pedestrian Path

Various pathways in Bellevue







13th Street Promenade, Santa Monica







Dan Corson, City of Oakland



Local Street







Alley with Addresses





Dunn+Hobbes



Chaphouserow.com

Canton Alley, Seattle



sticklab.org

Rendering provided by City of Bellevue





Festival Street

NW Davis Street, Portland (during festival and on a typical day)



Fai Chong, Flickr



portlandpublicart.wordpress.com

Triangle Festival Street, Seattle



West Seattle YMCA

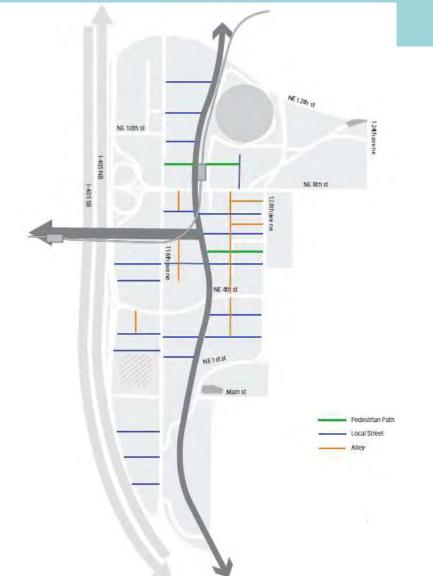
"Woonerf" or shared street, Batavia, IL

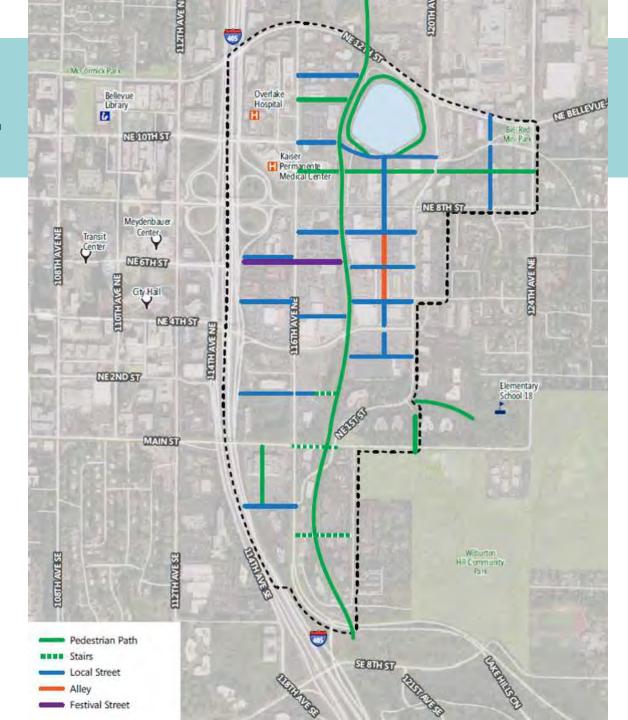


Altamanu



CAC Worksession





Group Discussion



Performance Measures & DEIS



Alternatives for EIS

The Environmental Impact Statement (EIS) will study three alternatives.

No Action Alternative 1

 Future Baseline under Current Plans Action Alternative 2

Action Alternative 3



An alternative describes a different means of achieving a proposal. Proposal is to develop plan, zoning, and code changes that help City achieve vision:

"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."



Potential Features of Alternatives

FEATURE	NO ACTION ALTERNATIVE 1	ACTION ALTERNATIVE 2	ACTION ALTERNATIVE 3
Growth: Market Level	Low-Moderate	High	Very High
Form/Floor Area Ratio	Low	Moderate	High
Transportation	Planned Network	New Connections & MM Improvements	New Connections & MM Improvements
Public Realm / Open Space	Current Plans	Test Compatibility of Diff Concepts with Land Use of Elements	



Evaluation of Alternatives

EIS Topics

geology and soils

water resources

air quality/greenhouse gas

ecosystems

land use and economic activity neighborhoods and population

aesthetics

transportation

noise

energy

environmental health

public services and utilities

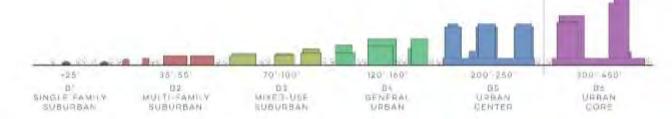
Transportation & Environmental Performance Measures

See Attachment B of CAC memo/packet

DRAFT Matrix Evaluation Framework

	Performance Measure	Alternati No Actio		Alternative 2	Alternative 3
Measure X					
Measure Y					
•	Strong emphasis	Moderate emphasis	·	₩e	eak emphasis

Land Use-TOD



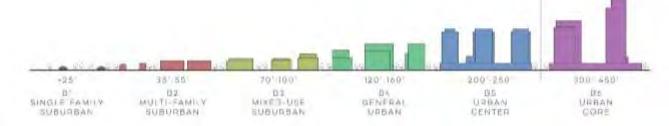






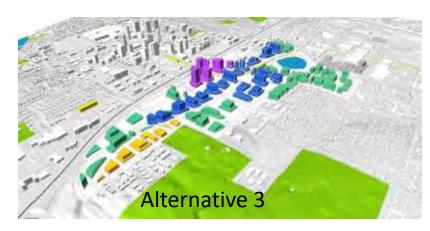
Performance Measure	Alternative 1 No Action	Alternative 2	Alternative 3
Character, intensity, and extent of transit-oriented mixed- use development around Wilburton station	-		

Perimeter



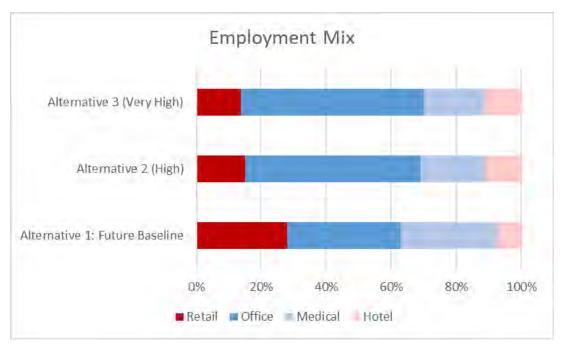


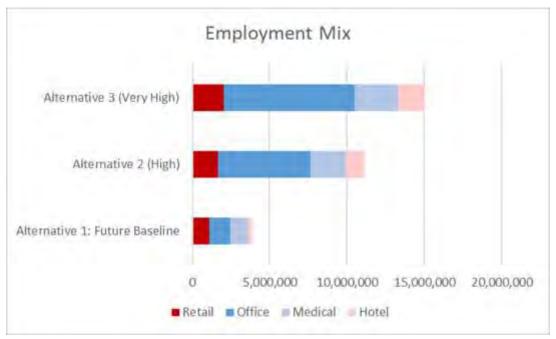




Performance Measure	Alternative 1 No Action	Alternative 2	Alternative 3
Concentration of [compatible] development and activity at perimeter of neighborhoods			

Job Diversity & Capacity



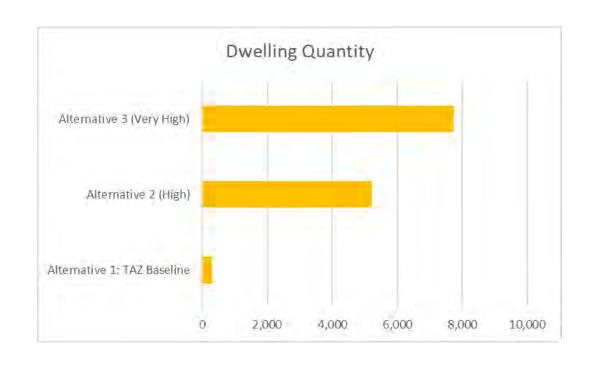




Housing

Diversity of Forms

	Alt 1	Alt 2	Alt 3
B2 (Multi-Family Suburban)			
B3 (Mixed Use Suburban)			
B4 (General Urban)			
B5 (Urban Center)			
B6 (Urban Core)			





Transportation Performance Measures

				Cit	y Cor	neil	Princi	<u>ples</u>			
Preliminary Performance Measure	Grand Vision	Special Nide	Grand Connection	Neighborhood Identity	Emerging Opportunities	Integrated Station Area Plaming	Community Benefit	Affordable Housing Opportunities	Impact Mitigation	Economic Vitality	Timing
Transportation											
Connectivity index and map	•				•	•	•				
Access to services (parks, schools etc.)						•	•				1
Multimodal level of service performance measures	•		•					•	•		
Increase in walk and bike trips			•		•			•			
Transportation engineering complexity, cost, and funding availability											•



Connectivity Index



Route Directness



Sidewalk/Walkway Density



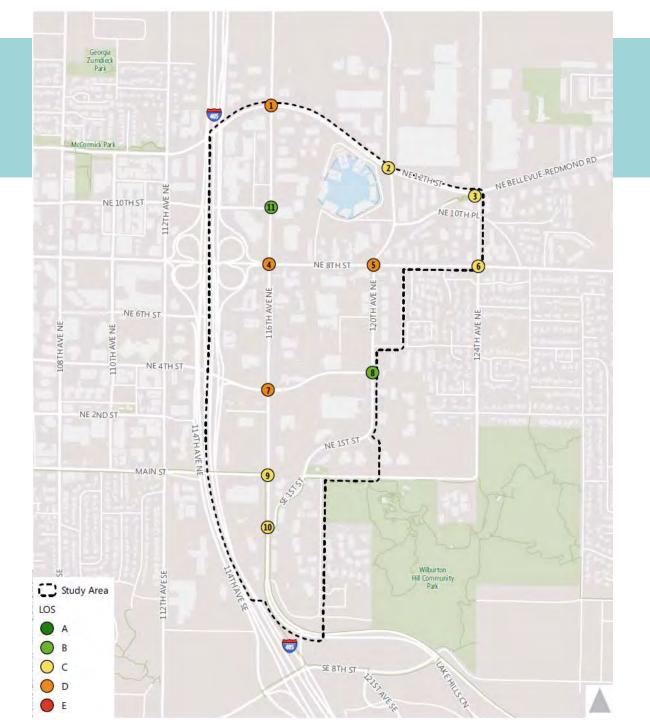
Arterial Crossing Density



Vehicle LOS – Intersections

Level of Service	Average Intersection Control Delay
Α	≤ 10
В	> 10 to 20
С	> 20 to 35
D	> 35 to 55
E	> 55 to 80
F	> 80





Vehicle LOS – Corridors

LOS	Percent of Typical Urban Travel Time on Corridors Based on 40% of the Posted Speed Limit
	Less than 90% of Typical Urban Travel Time
	90-110% of Typical Urban Travel Time
	110-155% of Typical Urban Travel Time
	155-200% of Typical Urban Travel Time
	More than 200% of Typical Urban Travel Time



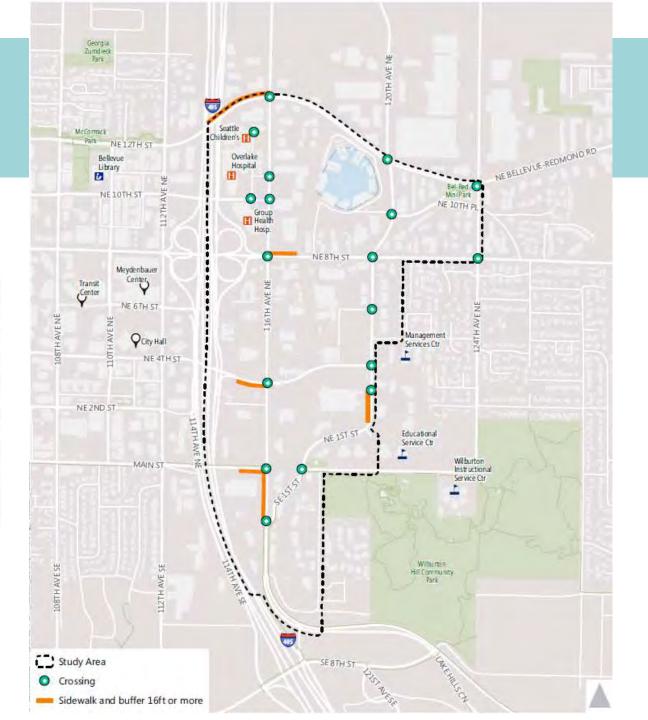


Pedestrian LOS

PEDESTRIAN LOS

Context:	Downtown	Activity Center	Neighborhood Shopping	Pedestrian	Elsewhere	
Component			Center	Destination		
Sidewalk Width Landscape Buffer	Downtown Land Use Code	16 feet	13 feet	13 feet	Transportation Design Manual	
Signalized Intersection Design	Downtown Transportation Plan	Downtown Transportation Plan "Enhanced"	Transportation Design Manual	Transportation Design Manual	Transportation Design Manual	
Arterial Crossing Frequency	Downtown Transportation Plan	600- 800 feet	600 feet	300-600	N/A	





Bicycle LOS - Level of Traffic Stress

BICYCLE RIDER LTS/LOS

	adway acteristics	Guideline			ity Componer evel of Service		raffic Stress
Speed Limit (mph)	Arterial Traffic Volume*	No Marking	Sharrow Lane Marking	Striped Bike Lane	Buffered Bike Lane (Horizontal)	Protected Bike Lane (Vertical)	Physically Separated Bikeway
	<3k	L	1	1	1	1	1
≤25	3-7k	3	2	2	2	1	1
	≥7k	3	3	2	2	1	1
	<15k	4	3	2	2	1	1
30	15-25k	4	4	3	3	3	1
	≥25k	4.	4	3	3	3	1
25	<25k	4	4	3	3		1
35	≥25k	4	4	4	3	3	1
40	Any	4	4	4	4	3	1



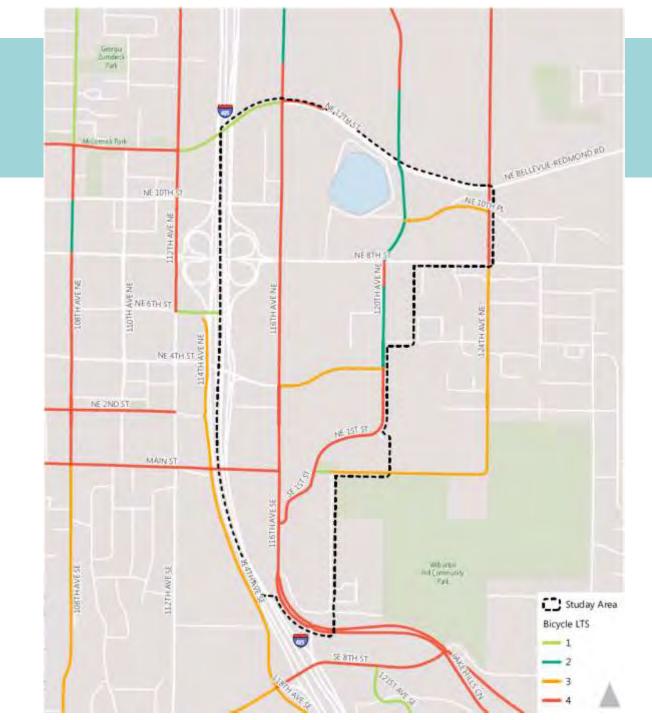
BICYCLE RIDER LEVEL OF TRAFFIC STRESS (LTS)



BICYCLE LOS INTERSECTION COMPONENTS

Intersection Treatment Bike LOS	entment Bike Signal Street Crossing Intern		Approach to Intersection	Approach to Intersection with Right Turn Lane
	Bike signal	Green solid or skip stripe	Green bike box	Curb ramp to wide sidewalk
2	Bike signal	Skip stripe	Bike box	Green bike lane to left
3	Green cycle length	Sharrows Signal actuation		Bike lane to left
Trail or Mid-Black Crossing	Full signal or HAWK or RRFB	Green solid or skip stripe	N/A	N/A

Bicycle LTS





Transit LOS

TRANSIT PASSENGER LOS COMPONENTS

Context	Local	Primary	Frequent	
Component	Stop	Stop	Transit Network Stop	
Weather Protection	Yes	Yes	Yes	
Seating	Yes	Yes	Yes	
Paved Bus Door Passenger Zone	15-30'	40'	60'	
Wayfinding	Optional	Yes	Yes	





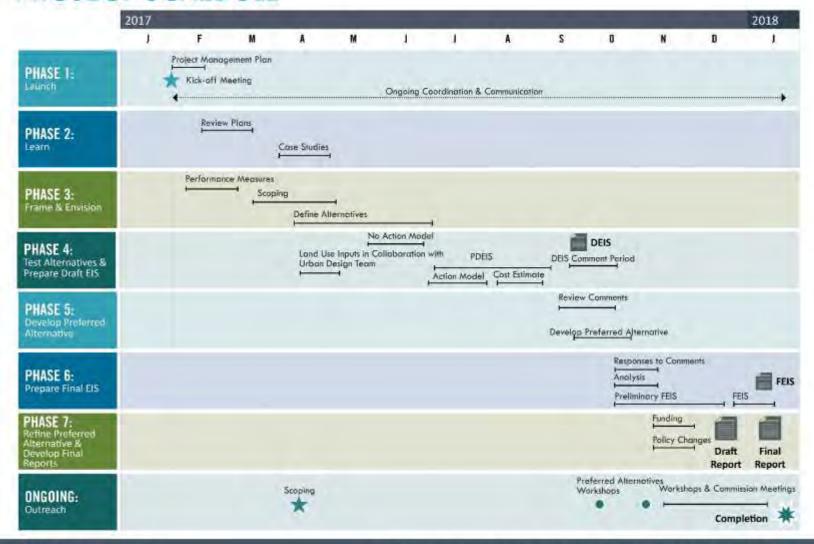
CAC Input – Performance Measures

- Council Principles
- Vision Statement
- Parks and Open Space
- Character
- Continuity with:
 - Grand Connection
 - Eastside Rail Corridor
- What else?

Schedule



PROJECT SCHEDULE



After the break.....

- Parks and Open Space
- Urban Design
 - Building Typologies
 - Streetscapes
- Implementation
- Draft Environmental Impact Statement
- Assignment for the break.....



City of Bellevue Wilburton Commercial Area Citizen Advisory Committee Meeting Minutes

July 6, 2017
6:00 p.m.
Bellevue City Hall
Room 1E-108

MEMBERS PRESENT: Jeremy Barksdale, Sarah Chong, Shari Einfalt, Jay

Hamlin, Matt Jack, Chris Johnson, Debra Kumar, James McEachran, Andrew Pardoe Daniel Renn,

Alison Washburn, Don Weintraub

MEMBERS ABSENT: Glen Griswold, Maria Lau Hui, Lei Wu

OTHERS PRESENT: Bradley Calvert - Department of Planning and

Community Development, Kevin McDonald – Transportation Department, Ariel Davis – Fehr & Peers, Chris Brieland – Fehr & Peers, Lisa Grueter

- BERK Consulting

RECORDING SECRETARY: Audio Recording, transcribed by Bradley Calvert

1. Call to Order and Approval of Agenda

The meeting was called to order at 6:06 p.m. by Co-chair Barksdale.

Co-chair Barksdale asked if there was a motion to approve the agenda.

Action Item: *Mr. Pardoe motioned to approve the agenda. The motion was seconded by Mr. Hamlin. The agenda was unanimously approved.*

2. Approval of Meeting Minutes

Co-chair Barksdale asked if there were any comments regarding the meeting minutes from the June 1st, 2017 meeting. There were no comments.

❖ Action Item: Mr. Pardoe made a motion to approve the meeting minutes from the June 1st, 2017 meeting. The motion was seconded by Mr. Hamlin. The meeting minutes were unanimously approved.

3. Communication with Boards, Commissions, Stakeholders, Public, and Meeting Updates

Mr. Calvert stated that staff would be presenting at City boards and commissions over the coming weeks regarding the release of the Draft *Grand Connection Framework Plan* for sequence one of the work. He stated that the plan was available online for review. Ms. Kumar asked if staff would be sharing feedback about the plan with the Committee. Mr. Calvert responded that staff would share following the Committee's August break. Ms. Kumar asked if the comments were posted online. Mr. Calvert responded that they were not and were received via mail or email.

4. Public Comment

Ian Morrison stated that he was present on behalf of the Morelli family and the Eastridge Corporate Center. He stated that he wanted to follow up on the discussion on the height and density concepts south of Main Street. Mr. Morrison stated that they supported the Committee's desire to create a southern node in support of transit oriented development opportunities. He stated that the Committee seemed concerned about height. Mr. Morrison stated that Eastridge Corporate Center site could satisfy the Committee's needs and concerns regarding this portion of the study area.

Mr. Morrison stated that the site (Eastridge Corporate Center) was in the walkshed of two light rail stations. He stated that it was a site that would really leverage a transit oriented development investment. Mr. Morrison referenced the southern edge of the property and the Committee's concern on the impact of building height. He stated that the topography would allow the building height to nestle into its change of grade and could support the vibrancy of residential uses compatible with the park and walkability of the Eastside Rail Corridor. Mr. Morrison asked the Committee to consider the heights of 120' to 160' for their area within the Wilburton Commercial Area in support of a southern node, leveraging transit-oriented development, and taking advantage of topography.

Gardner Morelli stated that he was speaking on behalf of the Morelli family. He stated that they believed that their property could achieve the goals and objectives of the Committee while mitigating concerns. Mr. Morelli stated that their property has the topography that would allow a building height and scale that still supports the vision of the Committee. He stated that they heard the Committee's concerns about the perception of height east of 118th Avenue NE, and that they agreed it may not be appropriate for taller buildings. Mr. Morelli stated, however, the Eastridge Corporate Center site was unique because of its topography and vegetation. He stated that the sloping site would allow them to take advantage of greater heights that would be less perceptible. Mr. Morelli stated that at the September Committee meeting they would present additional information on how they would develop the property in line with a future vision.

Steve Kramer stated that he represented KG Investment Properties and owned the sites between NE 6th Street and the Trader Joes. He stated that they have had several meetings about making the case for at grade crossings for the Eastside Rail Corridor with the County and the City. Mr. Kramer stated that he wanted to talk about throughputs on sites. He stated that their concept included the Grand Connection bisecting their site and a 40' elevation change between 116th Avenue NE and the Eastside Rail Corridor. Mr. Kramer stated that their goals were to activate the Eastside Rail Corridor and that the Grand Connection should meet the goals of connecting through the site.

Mark Woerman stated his comments regarded block permeability. He stated that the KG site provides unique opportunities to allow the Grand Connection to meet the Eastside Rail Corridor. Mr. Woerman stated that the grade change between 116th Avenue NE and the Eastside Rail Corridor created challenges and their concept of the Grand Connection flying over and meeting their potential podium and Eastside Rail Corridor could create the hallmark location in the study area. He stated that he sees the connection being activated on both sides with retail and plazas. Mr. Woerman stated that the relationship with 116th Avenue NE will also be very important. He stated that additional block permeability on their property would only diminish the vitality that is possible with the Grand Connection and Eastside Rail Corridor.

T.J. Woosley stated that he represented Brierwood Center across from the Spring District. He stated that their property is within the walkshed of two light rail stations. Mr. Woosley stated that he wanted to encourage the Committee to consider all of the potential transportation projects that could occur as part of the performance measures and the SEPA process. He stated that included changes to I-405, 124th Avenue NE, NE 2nd Street and more. Mr. Woosley encouraged that these projects be included so to not constrain the opportunities in the Wilburton Commercial Area.

5. Tactical Urbanism Projects

Co-chair Barksdale stated that he wanted the Committee to discuss their ideas in greater depth and to assess feasibility. He stated that he wanted to narrow the projects down to one project per team. Mr. Pardoe stated that he was inspired by the Bicycle Sunday event on Lake Washington Boulevard in Seattle. He stated that the event allows users to bicycle along the I-90 corridor and down to Seward Park and would close Lake Washington Boulevard to car traffic. Mr. Pardoe stated that these events attract people from all over and that a similar opportunity existed in linking the Downtown Bellevue Park to the Eastside Rail Corridor in some form of a protected route. He stated that getting across the highway would be the biggest challenge due to the unfriendly crossings.

Mr. Jack stated their idea was to activate the Eastside Rail Corridor just south of NE 8th Street. He stated that bringing in food, seating, and music could create a vibrant experience that is desired for the study area. Mr. Jack stated that it would also present an opportunity to consider the crossing of NE 8th Street by creating a temporary at grade crossing and provide their feedback on how to navigate the crossing. Mr. Hamlin stated that their second idea was to use one of the parcels such as the school district bus parking lot for food trucks and other community oriented activities. Mr. Renn stated that he believed anything that happened just south of NE 8th Street would need to happen pretty rapidly because the area would turn into a construction site soon for light rail. Co-chair Barksdale asked when construction would begin. Mr. Hamlin stated that some fencing has already gone up, but there could still be time. Co-chair Barksdale stated that he would categorize the ideas based on opportunities to learn and opportunities to generate excitement to develop a priority list of ideas.

Ms. Washburn stated that her and Ms. Kumar's idea was based on the *Enliven Wilburton!* event that was held in the fall of 2016 and built upon the ideas developed by Mr. Jack and Mr. Hamlin. She stated that the team could replicate the concept to talk about what could come from the project, and the ability to overlook much of the Committee's topics. Ms. Washburn stated it would be fairly easy to execute and could earn multiple wins. Ms. Kumar stated that it could be done on different weekends at different locations. She stated that there could be food trucks, music, and local vendors that could be tied into temporary improvements along 116th Avenue NE. Co-chair Barksdale asked if it would be one event or multiple. Ms. Washburn stated that it was a question of feasibility, and what is most effective and engaging with the community. Mr. McEachran stated that he saw an opportunity for inter-generational activity.

Ms. Chong stated that her and Ms. Lau Hui's idea was to install five to eight art installations throughout the study area. She stated that it encouraged collaboration and could encourage people to visit more parts of the study area. Co-chair Barksdale stated that it wouldn't need to be an event but could be a temporary installation.

Mr. Johnson stated that his team's idea could include ongoing engagement and encounters. He stated that the idea developed from the Grand Connection charrette. Mr.

Johnson stated it would be nice to break the events methods that would break the study area down to a human scale through design concepts. He stated their goal would be to create spaces along the corridor that could break the corridor into small pieces that could encourage chance encounters. Co-chair Barksdale stated that he could see that relating to the art installation as well. Mr. Weintraub stated it would be interesting to incorporate speakers as well to help them see the full vision.

Mr. Renn stated that his team wanted to distribute information to local neighborhoods. He stated that there was an upcoming newsletter for the Wilburton Hill neighborhood and he would like to get something out to them to describe both the goals of the planning effort as well as the Eastside Rail Corridor. Mr. Renn stated that they could effectively reach over 900 residents. He stated that he was also wanting City staff to set up an informational table at the September 10th Wilburton Hill community picnic. Mr. Renn stated it was a chance to speak with 100 to 150 residents. He stated it would also be nice if a member of the Committee were also present.

Co-chair Barksdale stated that the other idea developed by him and Mr. Pardoe was to temporarily close the NE 6th Street bridge to help people better understand the Grand Connection. He stated this could be done over the weekend for a day and could include activities to better understand user expectations of the Grand Connection.

Co-chair Barksdale stated that Mr. Calvert could be a resource for teams, and that there was some synergy to merge ideas. Mr. Calvert stated that the teams could think about what the next steps would be and what resources would be needed. Ms. Kumar stated that she was curious as to when King County would begin rail removal. Mr. Calvert stated that he believed that some locations would potentially see removal later this year. He stated that the Wilburton area would be later because of Sound Transit construction.

Co-chair Barksdale stated it would be a good idea to decide if there were opportunities to combine projects, at the meeting. Ms. Kumar stated that some of the ideas seemed to be transportation improvements and others could be placemaking improvements. Mr. Jack stated that his and Mr. Hamlin's idea would work well to address the Committee's big question of how to cross NE 8th Street. Mr. Hamlin stated that could be linked with the other Eastside Rail Corridor ideas. Mr. Pardoe stated that images could be used to show everyone what the concepts are. Mr. Renn stated that the lights would need to be synchronized due to traffic concerns from the neighborhood if an at grade crossing were to be pursued. Mr. Pardoe stated that a train used to cross there and NE 4th Street didn't exist before and there were no issues. Co-chair Barksdale stated it would make sense for Mr. Jack's teams and Ms. Washburn's teams to merge.

Ms. Washburn stated she liked these ideas because it could really inform the public. She stated that many of the Committee members' ideas have been formed by walking the study area. Ms. Washburn stated that these ideas could get the public walking and think about what could be in the same manner. Co-chair Barksdale asked which of the other ideas could be formed into near term projects. Mr. Renn asked Mr. Calvert if he felt that he could produce the flyers for the neighborhood newsletter. Mr. Calvert stated that the City could produce them. He stated that if thinking about timing and resources the teams should focus on Mr. Jack's idea first. Ms. Kumar stated that it would also be interesting if some of the parking lots would be willing to open up to activation such as food trucks and live music. Co-chair Barksdale stated that seemed like a longer range idea as it is based on excitement. Mr. Johnson stated that the removal of the rails could also create a nexus for a special event.

6. Transportation Discussion on Block Permeability and 116th Avenue NE

Mr. Calvert stated that staff was going to present some updated graphics regarding height and density. He stated that the graphics had been refined and will be part of the Environmental Impact Statement. Mr. Calvert provided a brief overview of the additional topics for the evening.

Mr. Calvert referenced a graphic that showed the refinements based on the discussion from the prior meeting. He acknowledged the Medical District and that despite the color on the graphic it represented a no change from existing built conditions. Mr. Calvert stated that under this concept the entire study area would represent just under 13 millions square feet of development potential.

Mr. Calvert referenced a second graphic, and that the entire study area would represent just under 21 million square feet of development. He stated that these would be the bookends that staff would begin working with for the EIS. Mr. Calvert stated that staff was preparing to launch a second public survey that would pursue responses regarding height, density, character, and other topics. He stated that staff would provide the results of the survey to the Committee at the next meeting. Mr. Hamlin stated that the retail numbers in the charts the Committee received seemed surprising. Mr. Calvert stated that the numbers worked off of the economic analysis and that it represented the market forecast. He stated that Ariel Davis and Chris Breiland would now recap the Committee's last work session on block permeability and 116th Avenue NE.

Mr. Breiland gave a recap of the work session from the last meeting regarding 116th Avenue NE and block permeability and connectivity. He stated it helped the design team develop concepts for the EIS and the sub area plan. Mr. Breiland stated that 116th Avenue NE is a major thoroughfare but there is a strong desire to make it multi-modal in response to future mixed-use development. He referenced a graphic that showed bicycle separation and wide sidewalks that creates a boulevard concept. Mr. Breiland stated that there is 83' of city owned right of way to work with. He stated that a 2015 city plan is a much grander vision at a width of 112'. Mr. Breiland stated that it provides bike lanes and on street parking, creating a boulevard concept. He referenced the work session graphic and that it blended concepts and attempted to fit within the existing right of way. Mr. Breiland stated that the Committee wanted to maintain a left turn lane to provide access to future developments, but also wanted to ensure planted medians were included as much as possible. He stated that the Committee wanted to create a 12' wide multi-use pedestrian and cyclist path. Mr. Breiland stated that the configuration does fit within the right-of-way, but acknowledged that there is precedent for the City to condition developments to provide pedestrian space outside of the right of way. He stated that it was very common in downtown for most sidewalks to be accommodated, in part or in whole.

Mr. Hamlin stated that he continued to consider Mr. Pardoe's previous comment about the trail not serving as a commuting route for cyclist through Wilburton. He stated that he didn't feel as if the Committee had considered that when developing a concept for 116th Avenue NE. Mr. Hamlin stated that it felt like it was a repeat of the Eastside Rail Corridor. He stated that the Committee should consider that the Eastside Rail Corridor will likely support slower biking and that 116th Avenue NE could support faster commuting cyclists. Mr. Pardoe stated that he agreed with that statement. Ms. Kumar stated that she believed that the existing plan looked great, and that if they could

encourage protected bike lanes she would be in support of the existing plan. Mr. Hamlin expressed concern about the width of 116th Avenue NE and asked if it was approximately the same as Bellevue Way. Mr. Breiland stated he would have to check, but he believed that Bellevue Way was slightly narrower. Mr. McDonald stated that NE 8th was likely wider than Bellevue Way.

Ms. Einfalt asked if the Committee believed on street parking was necessary. She stated she had concern when I-405 was backed up and the impact on street parking would have on traffic flowing through 116th Avenue NE. Ms. Kumar stated that if they wanted people to visit the study area parking would be necessary. Ms. Einfalt stated that she would hope they would plan for underground parking. Mr. Pardoe stated that the difference with underground parking is that it is private and there are no walk offs. He stated that if he goes to Seattle he can park on the street for a few hours, visit a store, a bookstore, and had breakfast in three hours without driving to each location. Mr. Pardoe stated that if he wanted to do that in Bellevue he would have to go to REI and park in their lot, and then if he wanted to go to a bookstore he would have to get back in his car and drive again. He stated that Bellevue has almost no common parking and requires users to drive between each business they visit. Ms. Einfalt stated that if the blocks were broken up they could also provide on street parking. She stated she had concern over the access of emergency vehicles when combining parking and traffic congestion.

Mr. Renn stated concern over the lack of access to the Wilburton Commercial Area from the Eastside Rail Corridor if it was intended for most bicycle traffic to be accommodated on the Eastside Rail Corridor. Mr. Hamlin clarified that a multi-use path could still accommodate cyclists. Mr. Renn stated that a shared 12' path wouldn't be sufficient. Ms. Washburn stated that she felt they could provide more space by having the property owners contribute to the public space, and that there was precedent for that in Downtown Bellevue. She stated that she agreed with Mr. Pardoe and that users will still want to get off of the Eastside Rail Corridor and still want to cycle. Ms. Washburn stated more connections would be needed through the neighborhood.

Mr. Weintraub stated that he wanted to see the automobiles slowed down the most. He stated that if he were to be using the area with his child he would want to see the area much different from its current status of car being dominated. Mr. Weintraub stated he liked a wide multi-use path. He asked how the cars can be slowed down for a better shared space. Mr. Breiland stated that the narrower the pavement profile, and the more elements on the edge such as trees, traffic could be slowed.

Mr. Calvert stated that there is precedent for creating more public realm similar to the building sidewalk relationship of downtown. He stated that requirements can be established for sidewalks, planting strips, vegetation, and other urban amenities as a condition of development. Mr. Renn asked if walk off parking could also be required for developments. Mr. Calvert responded that it isn't something that can necessarily be required, but it could be incentivized. Mr. Johnson stated he felt the CAC concept for 116th Avenue NE was a good compromise, and that not all non-motorized transportation had to be accommodated on each street. He stated that some trips could take place between and on parcels and not all require the use of 116th Avenue NE. He stated that 116th Avenue NE and NE 8th Street still had throughput considerations and that speed and reliability needed to be considered.

Co-chair Barksdale stated the bike lane could be accommodated on other levels so that it could accommodate all levels of riders. As an example he stated that the shared path could exist, and there could also be a bike lane in the street. Ms. Kumar stated she

would like to see the streetscapes greener. Mr. Jack agreed with the comment, and that it could assist in calming traffic. Mr. Pardoe stated that raised crosswalks could also help slow traffic at key locations.

Ms. Davis stated that the next topic was block permeability. She stated that the density of connections and how frequent the connections occur was important. Ms. Davis stated that the type of connections were also important in addition to the quantity and density. She stated that they could be pedestrian pathways, alleys that have uses facing upon them, and shared spaces for multiple modes of transportation. Ms. Davis stated that they refined the initial graphic that the Committee generated at the June meeting to accommodate opportunities and challenges in the study area. She described a number of the options that were possible for new connections.

Ms. Davis referenced the updated graphic to address topography and likely development scenarios. She stated that they maintained many of the internal local streets at the heart of the study area that the Committee defined as important. Ms. Davis stated that many of the streets would stop at the Eastside Rail Corridor so to not create additional conflicts. She stated that there was a limited market for the alleys with addresses concept so they were consolidated in a specific location to assist in creating a specific character. Ms. Davis stated that the NE 1st right of way was just outside of the study area, but they considered a pedestrian connection through there to access the elementary school. She asked the Committee if there was feedback to the concepts.

Mr. Pardoe stated that he really liked the alleys with addresses concept. He cited a handful of examples in Bellevue and wanted to really encourage the concept. Mr. Pardoe stated that many of the pedestrian connections in Downtown Bellevue function as private spaces for offices and businesses. He cited the location at NE 2nd and 108th Avenue NE and conflicts with the existing business and obtaining access through the space. He said this was an important element to keep in mind. Mr. Breiland stated that the alleys with addresses were really to be without automobiles and focused on pedestrians to create an intimate and unique space.

Mr. Jack asked how to incentivize a developer to create uses along an alley. Mr. Pardoe stated that they could provide additional density or amenities for creating the alleys with addresses. Mr. Calvert stated that they will address this in implementation and that there are several methods to accomplish these goals, particularly if there is a specific character in a location that is desired. He stated that for this conversation it was important to identify where these things could happen and then discuss how to make them happen.

Ms. Davis asked if the Committee had any thoughts on the path to the school. Mr. Pardoe stated that he really liked the idea and that it could encourage more children to walk to school. Mr. Renn stated that a road through NE 1st would be better to provide access for the students coming from Downtown Bellevue. He stated that he has approached Bellevue City Council and the school district about the street. Mr. Hamlin stated that it is under consideration but cost is prohibitive.

Mr. Pardoe stated that current connectivity is not conducive to pedestrians. He stated to get from directions east or west of the Eastside Rail Corridor a pedestrian would need to walk to NE 8th Street or NE 4th Street and around. He stated right now there was no reason for that connectivity, but the future vision would need better access. Mr. Pardoe stated that until the future vision is further developed it would be difficult to say exactly where those connections could go and what the destinations would be.

Ms. Kumar stated that there is significant change in grade along the Eastside Rail Corridor and asked if stairs to connect had been considered. Mr. Calvert responded that there were certain locations where stairs could provide access to the Eastside Rail Corridor in addition to the Grand Connection. He stated that the grade change is more extreme south of NE 4th Street so it should be considered strategically where those connections occur. Mr. Pardoe highlighted the I-405 cloverleaf, despite it being out of their scope. He stated that it was a great opportunity to create more land by having a more urban interchange. Mr. Calvert stated that was a great point to bring up, and that just because it is beyond the study area that the Committee could not comment or make a recommendation on it.

7. Performance Measures

Mr. Calvert introduced Lisa Grueter from BERK Consulting to talk about performance measures. Ms. Grueter stated that the height and density alternatives that were generated are being incorporated as part of the Draft Environmental Impact Statement. She stated it will include a number of issues such as design and views, but that they would also need to be screened against objectives such as the vision statement.

Ms. Grueter stated that one of the alternatives is a no action, which serves as the baseline under current plans. She stated that it would be compared and contrasted against the two CAC generated alternatives. Ms. Grueter stated that the environmental analysis would be broad, and does not analyze individual sites. She stated that key areas would be considered but not individual properties, or project level review.

Ms. Grueter stated that the three alternatives will be studied for form, open space, growth, and transportation. She provided a description of the growth, building forms, and the transportation improvements that would be analyzed consistent with the citywide Comprehensive Plan. Ms. Grueter stated that all three alternatives will be evaluated with and without a similar transportation system to understand the impacts of growth.

Mr. McDonald stated that the planning horizon is 2035. He stated that for both land use and transportation they will develop a reasonable foreseeable transportation network. Mr. McDonald stated that these projects include roadway capacity projects. He stated that the team looked at projects that have design investment and some level of financial commitment to demonstrate their feasibility to be completed by 2035. He stated that for the Downtown plan the City used a 2030 analysis, and for Wilburton they considered the next sequence of potential projects for 2035. Mr. McDonald stated that there could be other projects the Committee would like to consider, or they could choose not to include certain projects that may not be consistent with their vision for the study area. He stated that the NE 6th Street extension could be one of those projects. Mr. McDonald stated that they did not consider full build out capacity for transportation, as assumptions become unreasonable the further the forecasting goes out, which can include changes in transportation technologies.

Mr. Calvert stated that the Committee will likely hear from many stakeholders why specific transportation projects may or may not be included. He stated that Mr. McDonald explained the need for a reasonable commitment to a project and that the Committee should keep that in mind.

Ms. Grueter stated that since the Committee is still at a high level of evaluating public open space, the team elected to compare some of the concepts to the building form

alternatives as they have been evaluated further. She stated they did not want to try and align a specific strategy as they are still being evaluated, which is also similar to their approach with the Grand Connection.

Ms. Grueter stated that each alternative would also test the impacts on the natural and built environment. She stated that in their original briefing book they had the scope for the EIS. Ms. Grueter stated they were also asked to consider performance measures to bridge back to the Council principles and the subarea plan to evaluate how well the alternatives are meeting these principles. She stated that the performance measures are partially quantitative and partially qualitative. Ms. Grueter highlighted some of those measures and asked if the Committee wanted to provide input on the measures. This included design standards, development intensity, transportation level of service, transit access, and more.

Mr. Calvert stated there would be no meeting in August. He stated that when they return from the break they would be investigating character and aesthetic of the study area including buildings, streets, and open space. Mr. Calvert stated they would also begin discussing implementation. He stated that during their break he encouraged the Committee members to photograph their travels and places they like and don't like, and to bring that back for the September meeting.

8. Adjourn

Co-chair Barksdale adjourned the meeting at 8:01 p.m.