Bellevue Lake to Lake Trail: Analysis and Recommendations

CEP 498: Planning Studio

December 9, 2019

1

Team Members

Hannah Wetter: hjw96@uw.edu

Emily Forsberg: emilydf@uw.edu

Colton Brailsford: coltonb@uw.edu

Cameron Miller: sidmil@uw.edu

Yaly Aguilera: issamar.aguilera.larch@gmail.com

Project Background

Objectives of CEP 498

- Studio class focused on urban planning issues
- Team of 5 students, analyzing the Lake to Lake Trail as it currently exists, beginning at Meydenbauer Bay park, extending slightly past I-405

Our Assignment from the City

- We have been working with the City of Bellevue to assess the Lake to Lake Trail.
- Our analysis has covered topics from the history of Bellevue to the importance of wayfinding and programming.
- Through this presentation, we hope to show you what we have learned about the trail itself and in what directions to go to improve the trail and its image.

Table of Contents

Lake to Lake Trail Network
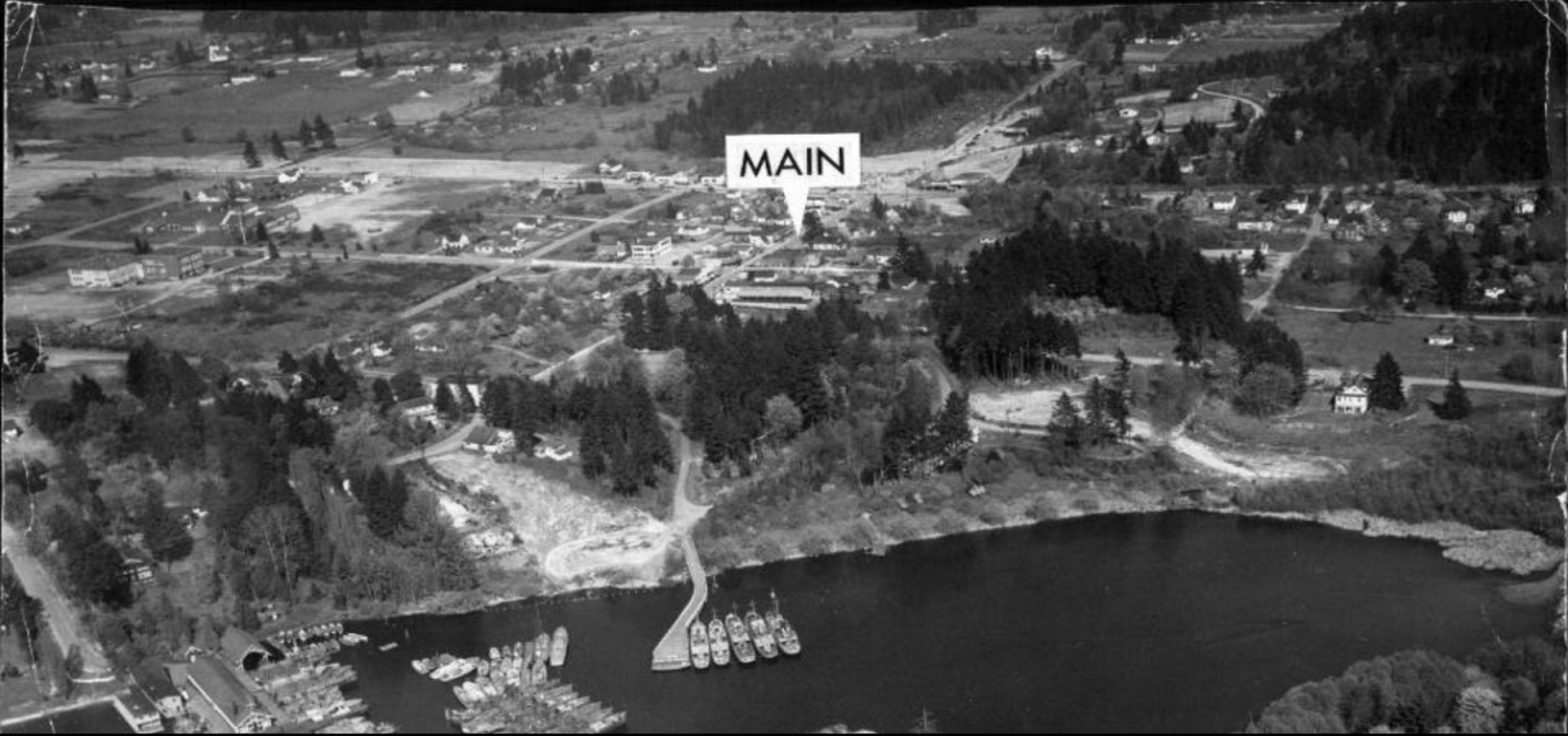
Background and History of the City of Bellevue

Medina 1916

Bellevue schoolhouse, 1909, which
later became the first city hall

History of Bellevue, Early 1900's

Aerial View of Downtown Bellevue/Meydenbauer Bay, viewed to the East, 1944

Built in 1956 and seen here in 1957, this was Bellevue's 'skyline', its tallest building for a number of years!

Bellevue 1960's Postcard mailed November 1963

Bellevue, 1950's

Bellevue Place/Bellevue Hyatt under construction.
Bellevue, WA March 1987.
Facing Meydenbauer Bay.

Bellevue 2019

Bellevue, 1987 to Today

Vision and Current State of the Lake to Lake Trail

Nature Trails

- Ardmore Trails
- Coal Creek Natural Area
- Downtown Park Trails
- Eastgate Park Trail
- Kelsey Creek Park Nature Trails
- Lake Hills Greenbelt Trails
- › Lake to Lake Trail and Greenway
- Lakemont Park Trails
- Lewis Creek Park Trails
- Mercer Slough Nature Park Trails
- Newcastle Beach Park Nature Loop Trail
- Phantom Lake Loop
- Robinswood Park Trails
- South Bellevue Greenway
- Spiritridge Trail
- Tam O'Shanter Park Trail
- Viewpoint Park Trails
- Weowna Park Trail
- Wilburton Hill Park Trail
- Woodridge Open Space

Lake to Lake Trail and Greenway

Like pearls on a necklace, Bellevue's Lake to Lake Greenway Trail captures the very essence of Bellevue's vision of a "City in a Park." The trail connects Lake Sammamish to Lake Washington and is accessible from many parks. A hike along the trail will delight visitors and deepen their sense of appreciation for the city's park and open space system. Meandering through boggy wetlands, towering forests, and historic farms, the trail explores over 800 acres of parkland. While hiking the trail you might spot great blue herons in Mercer Slough, salmon in Kelsey Creek, or possibly deer in Weowna Park.

Exploring the Lake to Lake Trail can be done all at once or in segments. Between parks, the trail follows sidewalks and asphalt pathways. The route is marked by blue City of Bellevue directional bollards. Enjoy exploring the trail and all it offers!

The Lake to Lake Trail connects nine parks across Bellevue. Walking **east to west**, the trail starts at Weowna Park next to Lake Sammamish. From Weowna Park, the trail heads to the Lake Hills Greenbelt via SE 24th St or SE 16th St. After meandering through the Lake Hills Greenbelt, the trail leads to Main St. and 140th Ave SE towards Kelsey Creek Park. Then it's a short walk over to Wilburton Hill Park and the Bellevue Botanical Garden. At Wilburton Hill Park there are two options to continue on the Lake to Lake Trail. Heading west on Main St., the trail visits Downtown Park and terminates at Meydenbauer Beach Park on Lake Washington. Or by heading south on 116th Ave SE from Wilburton Hill Park, the trail explores Mercer Slough Nature Park and terminates at Enatai Beach Park. (Of course, you could always walk west to east on the trail too).

- 10 miles (estimated)
- Detailed map of the Lake to Lake Greenway Trail
- Trail Guide information page

Suggested Trailheads:

- Winters House Visitor Center

  in Mercer Slough Nature Park, 2102 Bellevue Way SE

- Wilburton Hill Park & Bellevue Botanical Garden

  12001 Main St

- Lake Hills Greenbelt

  15500 SE 16th St

Vision from Website

Trail Details	- The trail connects parks "like pearls on a necklace" "City in a Park" "Boggy wetlands, towering forests, and historic farms" - Inclusion of wildlife
Trail Logistics	- Entrances mentioned are all east of our section - Explanation of trail route is east to west, briefly mentions our study area

Vision from City of Bellevue Staff

Inspiration
Frederick Law Olmsted: "Neo-Olmsted" system

Function
A non-motorized, multi-purpose trail system.

Aesthetics
The trail acts as a string connecting community gems (parks) together like the "pearls on a string".
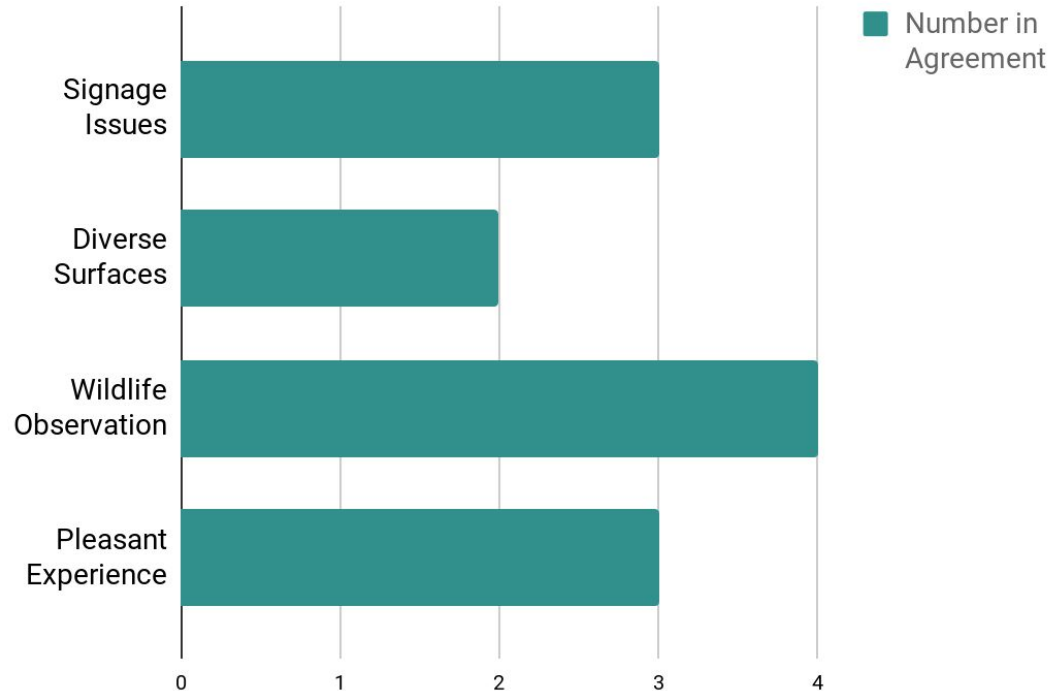
Emphasis
Progressive environmental conservation efforts to protect Bellevue's forests, stream and wetlands.
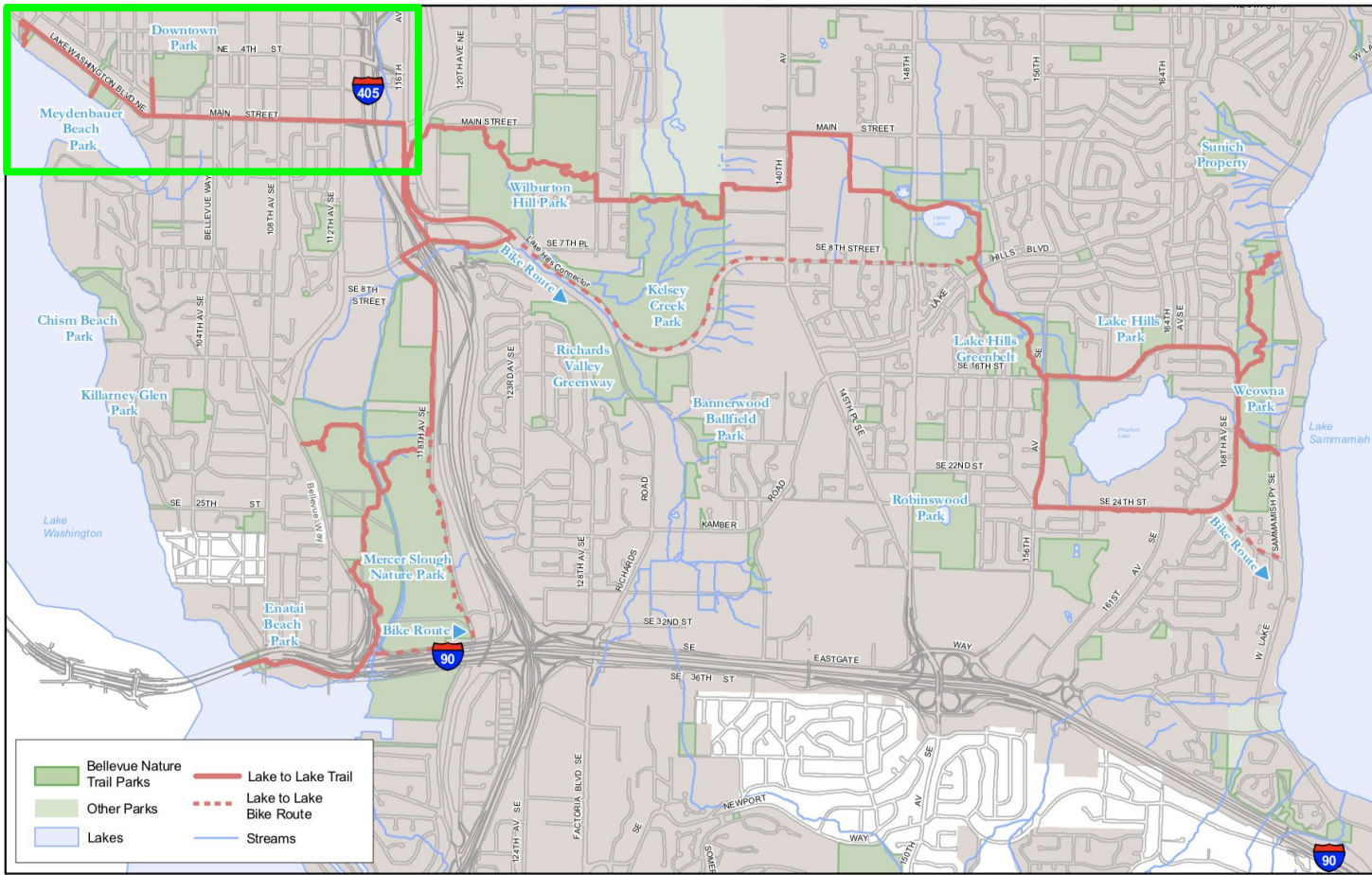
Winter Quarter
The next CEP 498 cohort will be coordinating with Betsy to meet and establish strong relationships with key departments to collect more data.

Vision from the Community:
Reviews of L2L Trail - (6 total)

Trail Network

Current L2L Trail – Segment Start

Current L2L Sidewalk Conditions

Current Signage on L2L

Current L2L Signage (continued)

Case Studies of Notable Trails
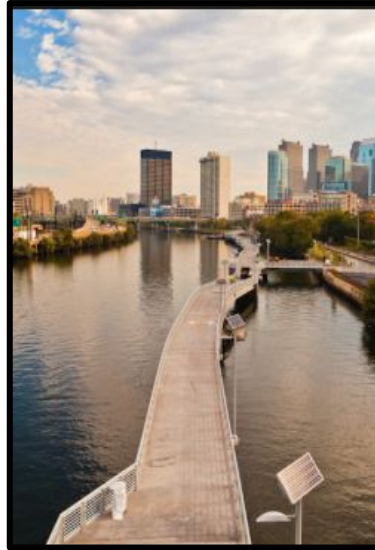
Selected Case Studies

MKT Trail Columbia, MO	High Line New York, NY	Schuylkill River Trail Philadelphia, PA	The Bloomingdale Trail Chicago, IL	Atlanta Beltline Atlanta, GA

Case Study Summary

LEGEND: YES ⬤ | NO ⬤

	Uses	Website w/ Map	Art Elements	Landscaping	Accessibility
MKT	Recreation	🔵 YES	🟠 NO	🟠 NO	🔵 YES
Highline	Recreation	🔵 YES	🔵 YES	🔵 YES	🔵 YES
Schuylkill River Trail	Recreation/ Commute	🔵 YES	🟠 NO	🟠 NO	🔵 YES
Bloomingdale Trail	Recreation	🔵 YES	🔵 YES	🔵 YES	🔵 YES
Atlanta Beltline	Recreation/ Commute	🔵 YES	🔵 YES	🔵 YES	🔵 YES

Demographics

Demographic Analysis of Bellevue

Population: 139,014

Median age: 38.2
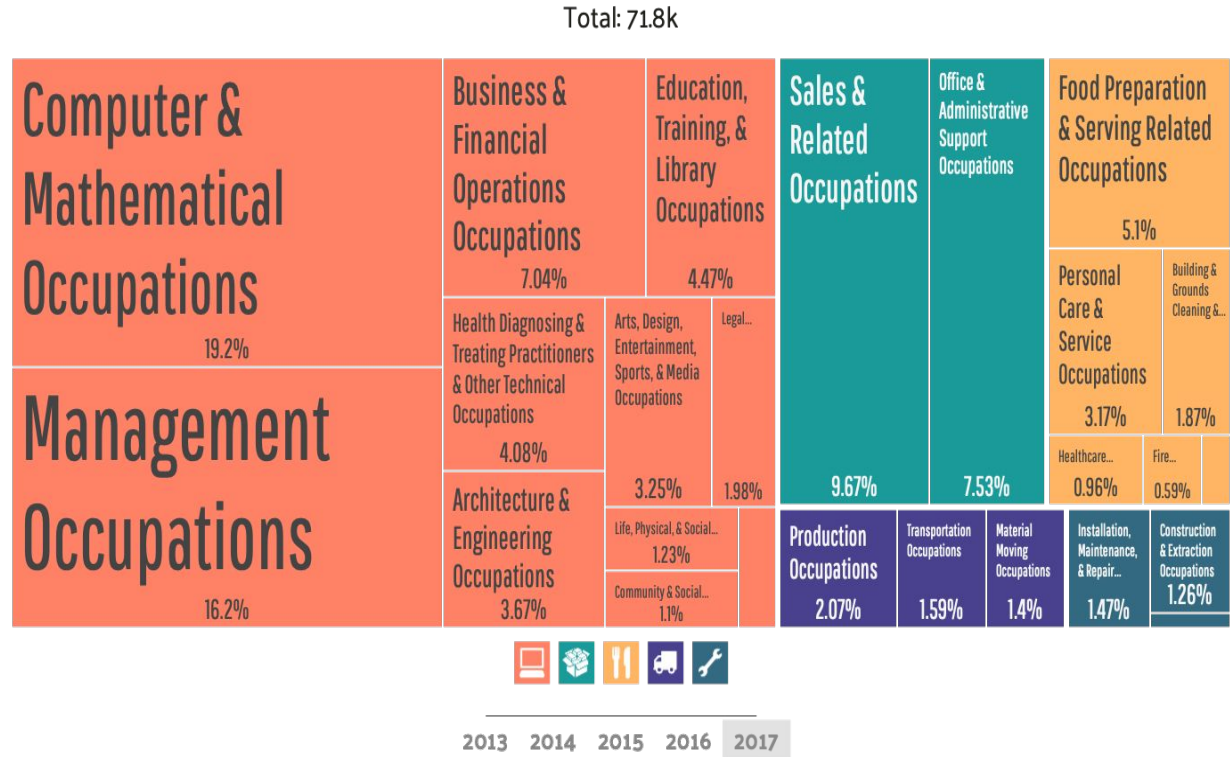
Median household income: $105,402

Poverty rate: 7.37%

Number of employees: 71,799
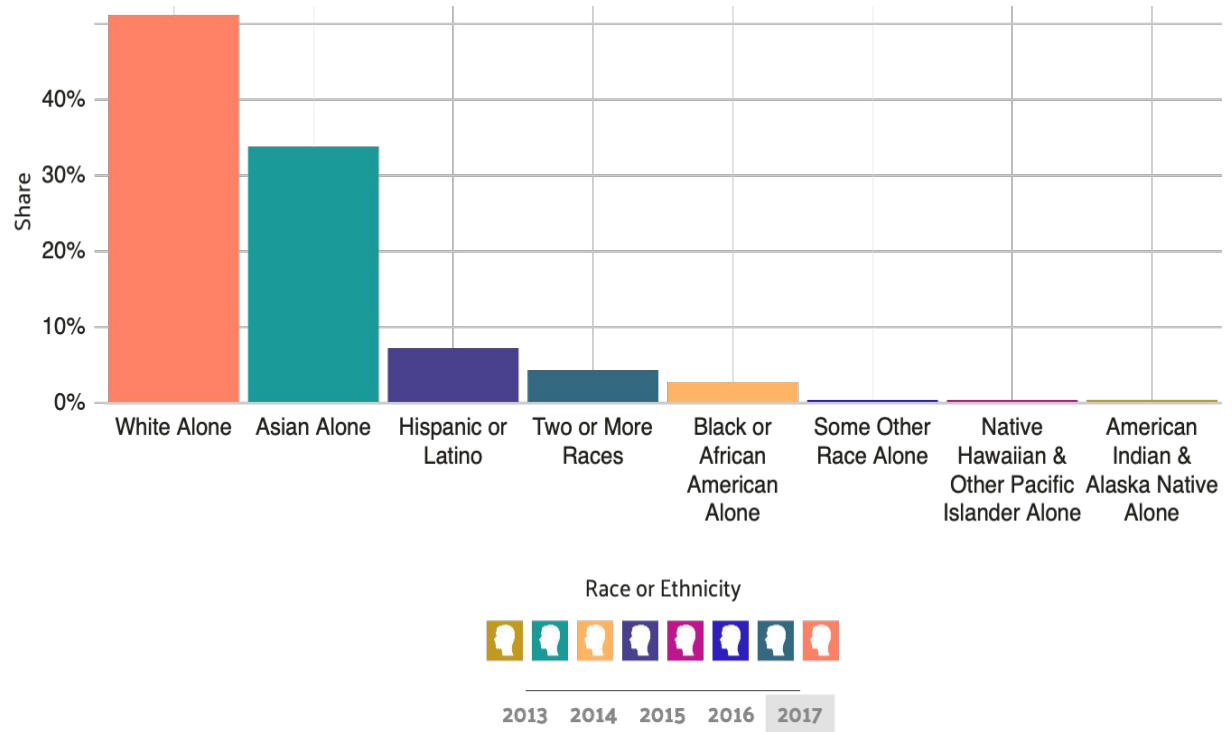
Median property value: $665,700

Employment in Bellevue

- The majority of employment in Bellevue is related to tech companies - total 44,670 people.

- This is something to explore for trail usage and integrate into programming.

Total: 71.8k

Computer & Mathematical Occupations 19.2%

Management Occupations 16.2%

Business & Financial Operations Occupations 7.04%

Health Diagnosing & Treating Practitioners & Other Technical Occupations 4.08%

Architecture & Engineering Occupations 3.67%

Education, Training, & Library Occupations 4.47%

Arts, Design, Entertainment, Sports, & Media Occupations 3.25%

Legal... 1.98%

Life, Physical, & Social... 1.23%

Community & Social... 1.1%

Sales & Related Occupations 9.67%

Office & Administrative Support Occupations 7.53%

Food Preparation & Serving Related Occupations 5.1%

Personal Care & Service Occupations 3.17%

Building & Grounds Cleaning &... 1.87%

Healthcare... 0.96%

Fire... 0.59%

Production Occupations 2.07%

Transportation Occupations 1.59%

Material Moving Occupations 1.4%

Installation, Maintenance, & Repair... 1.47%

Construction & Extraction Occupations 1.26%
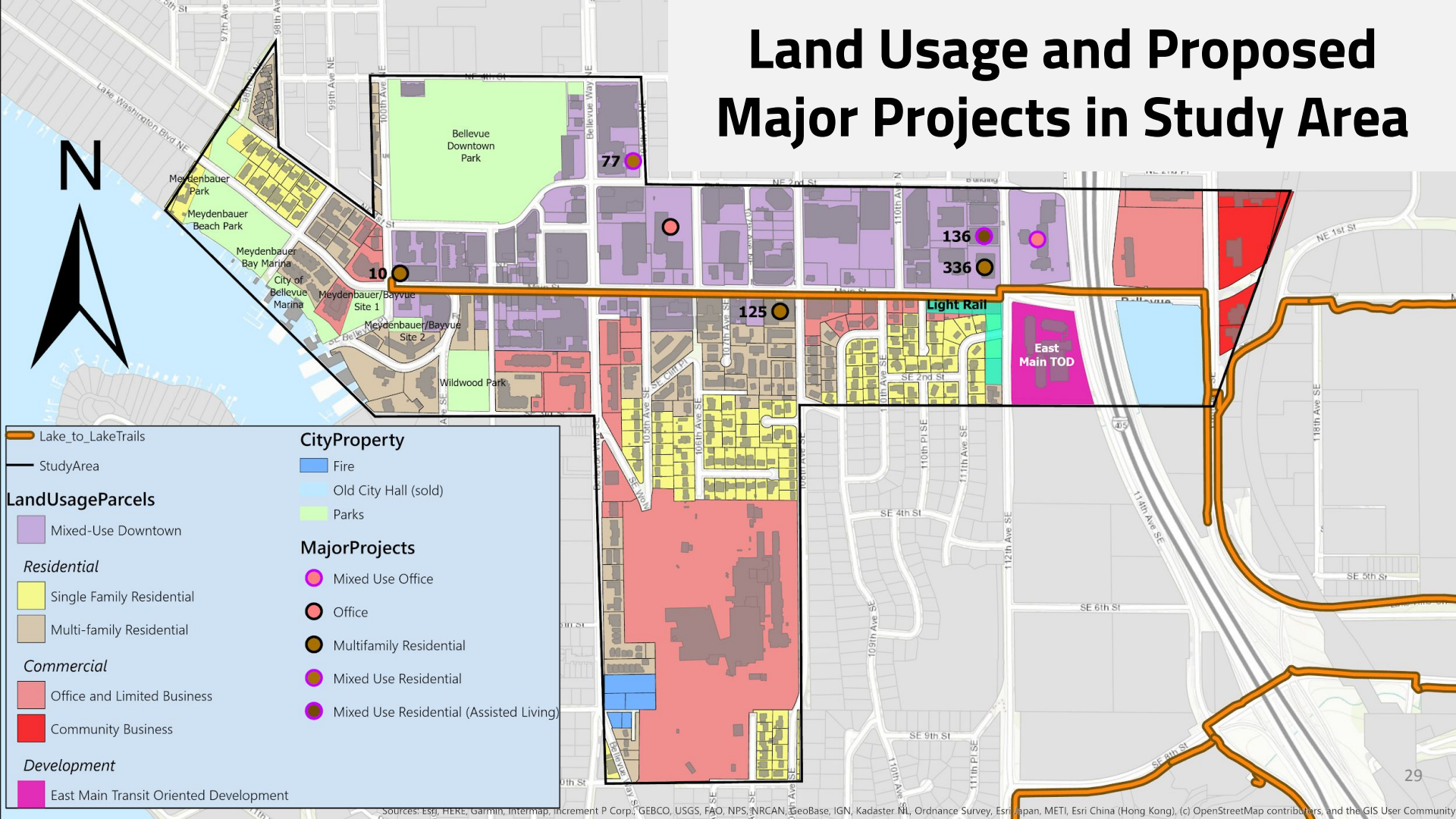
2013 2014 2015 2016 2017

Diversity in Bellevue

- The City of Bellevue is extremely diverse in terms of race and ethnicity.
- Similar to occupation, diversity is important to integrate into wayfinding, aesthetics, and programming.
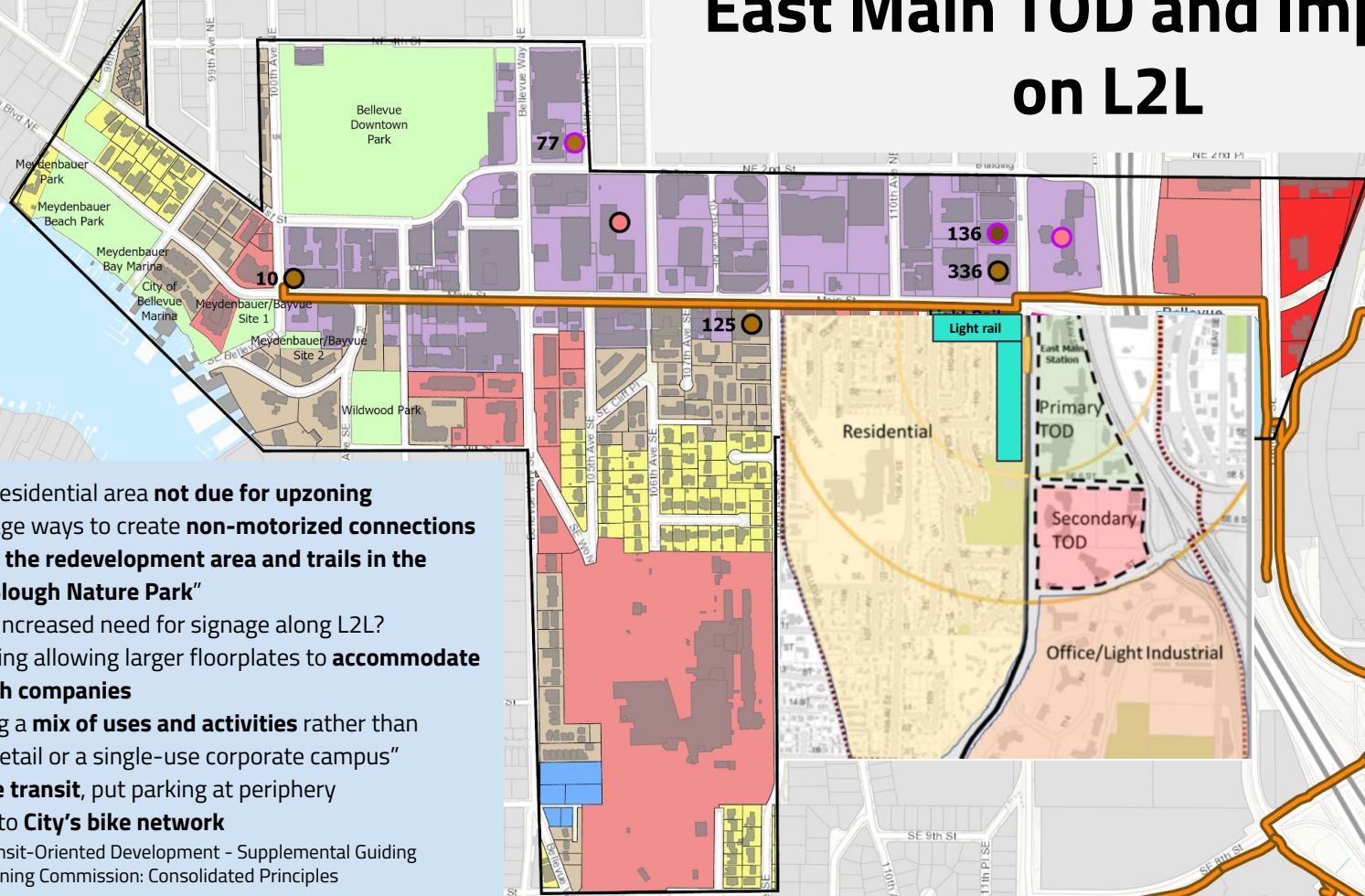
Trail Usage

Land Usage and Proposed Major Projects in Study Area

East Main TOD and Impacts on L2L

- Marked residential area **not due for upzoning**
- "Encourage ways to create **non-motorized connections between the redevelopment area and trails in the Mercer Slough Nature Park**"
  - Increased need for signage along L2L?
- Considering allowing larger floorplates to **accommodate large tech companies**
- "Including a **mix of uses and activities** rather than big-box retail or a single-use corporate campus"
- **Prioritize transit**, put parking at periphery
- Connect to **City's bike network**

Source: East Main Transit-Oriented Development - Supplemental Guiding Principles for the Planning Commission: Consolidated Principles

Estimated length of 4 unique walks along the trail

0.9 miles 20 minutes

1.1 miles 25 minutes

0.6 miles 15 minutes
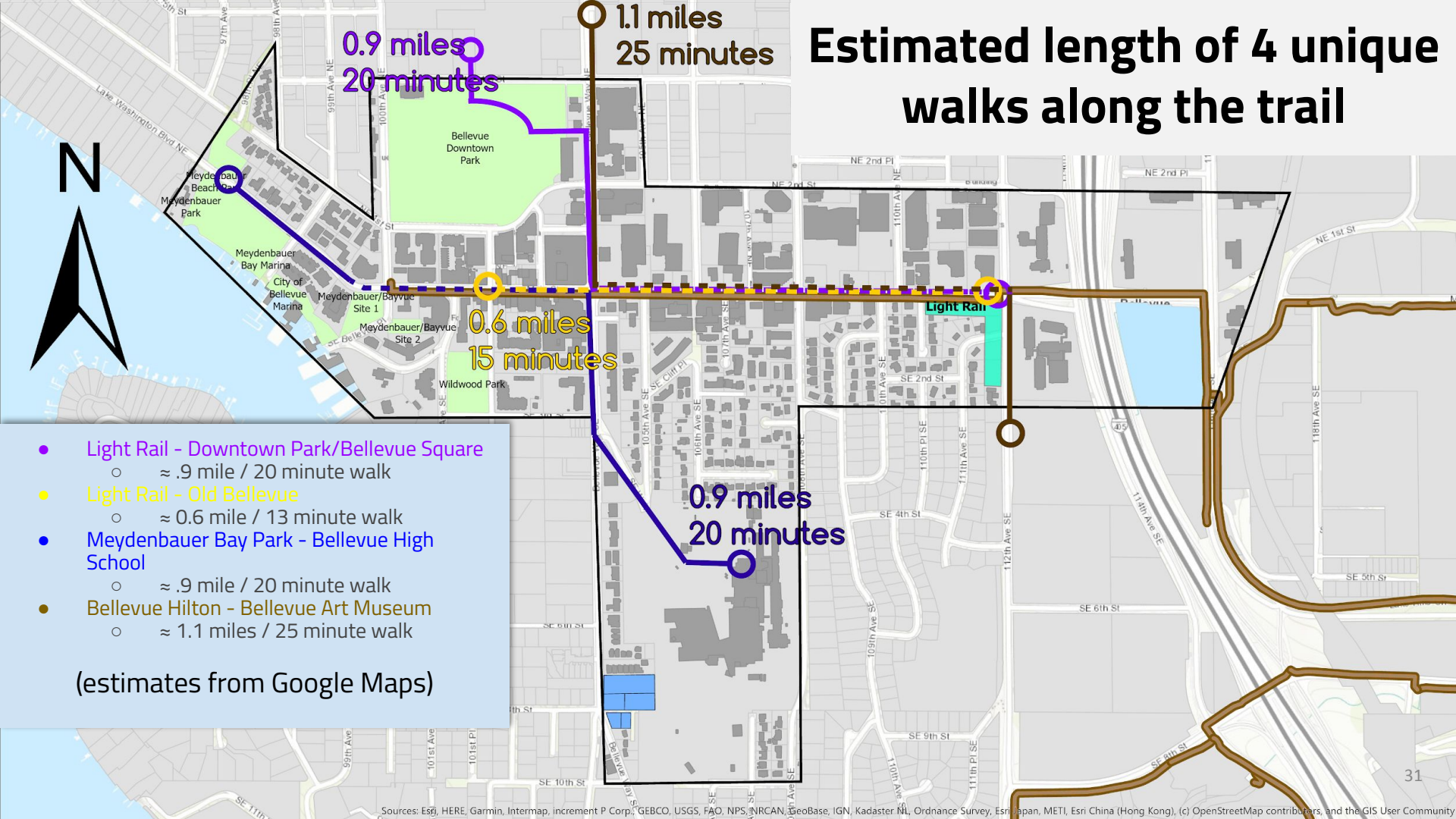
0.9 miles 20 minutes

- Light Rail - Downtown Park/Bellevue Square
  - ≈ .9 mile / 20 minute walk
- Light Rail - Old Bellevue
  - ≈ 0.6 mile / 13 minute walk
- Meydenbauer Bay Park - Bellevue High School
  - ≈ .9 mile / 20 minute walk
- Bellevue Hilton - Bellevue Art Museum
  - ≈ 1.1 miles / 25 minute walk

(estimates from Google Maps)

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Contrasting Physical Constraints Between Trails

Current trail in Old Bellevue

Atlanta Beltline - Georgia

Bike lane - Roosevelt Way, Seattle

- For majority of segment, thin sidewalks
- Curb bulb outs
- Main Street averages 15,000-16,000 daily commuters (see appendix)

- Victim of own success
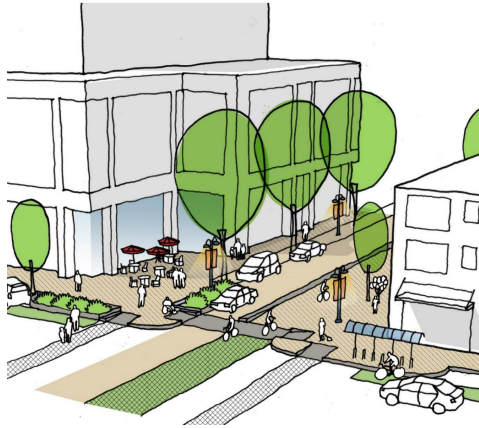- Competing uses

- Good example of multi-use road
- One way street

32

THE GREEN LOOP **DESIGN PRINCIPLES**

Physical Separation

Walking, Jogging, Biking

Connected Canopy

Branding / Identity

Creative Furnishing Design

Building Orientation

Design Concept

Green Loop – Portland, OR

- Similar urban/suburban/rural trail
- Early in design process
- Redesigning streets and building pedestrian bridges

Pedestrian Oriented Design: Seattle's University District

NE 43rd St (current day)

SDOT Proposal

UDistrict Mobility Proposal

The Project
- Massive development due to light rail opening in 2021 (left)
- 24,000 daily commuters projected to walk to and from light rail station (from UDistrict Mobility)
- Different groups favor different plans - public backs pedestrian priority (right)

Common elements of success in pedestrian malls
- Modest size (a few blocks)
- Tourist destination
- Density with mix of uses that bring in heavy foot traffic
- Incorporates transit
- Previous success with community events, such as farmer's markets

# Pedestrian Oriented Design: Physical Properties

- **Lighting** and high visibility at all times of day - **increases safety** and makes people **feel welcome**
- Improved crossings
  - Visibility
  - Refuge islands
  - Increased crossing times
  - Pedestrian crossing begins before car light changes (from KUOW News)
  - **Pedestrian Scramble** / Diagonal Crossing
  - Curb extensions / bulb-outs like in Old Bellevue
- Specific areas for **passenger loading/unloading** (from East-Main TOD Consolidated Principles)
- **Reduce speed limits** (Neighborhood Safe Streets bill allows for reductions to **20 MPH**)
  - Current speed limit along Main Street in study area is 30 MPH (from Bellevue Municipal Codes)

A Pedestrian Scramble at UW (15th Ave and NE 40th St)

Wayfinding and Aesthetics

Current Lake to Lake Trail Wayfinding
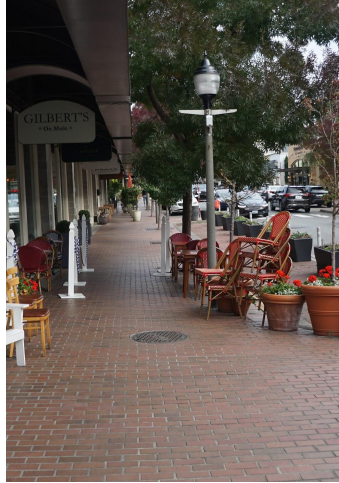
Lack of uniform signage within our study area

Nothing to indicate that users are still on the trail

Wayfinding - Logo

IMPORTANCE   CASE STUDIES   RECOMMENDATIONS

Importance of Logos

Logos Effect on Public Trail

Cross platforms

Reveals an Identity

Visual and Memorable

Separation from distractions

Overall recognition

The Highline, New York, NY

- Simple Logo
- Gives Trail an identity
- Creation of marketable products
- Recognizable

The Nicollet Mall, Minneapolis, MN

- **Background Info**

  - Main street of downtown Minneapolis.
  - Cultural and Commercial center
  - Underwent major renovation
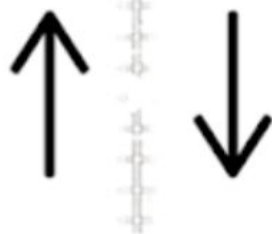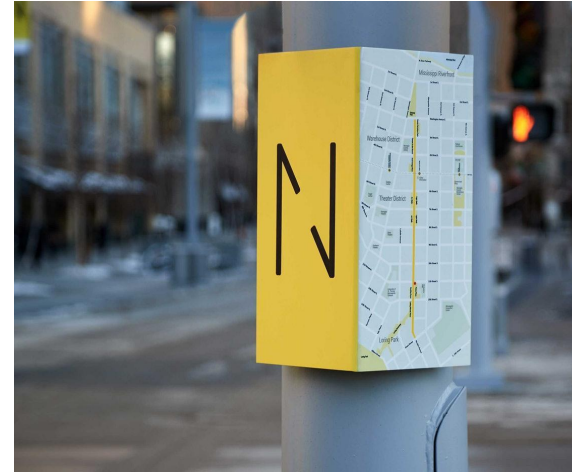 - Comprehensive signage and wayfinding

The Nicollet Mall, Minneapolis, MN
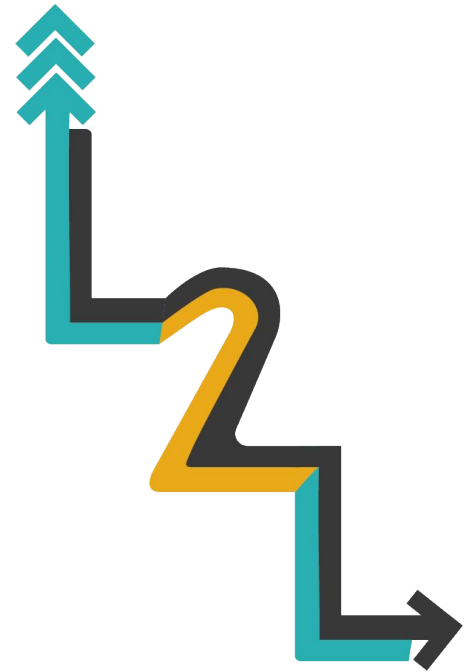
Design Principles for Logo Creation

Lettermark logo

Multipurpose Logo

Simplicity

Concept Ideas

Old Bellevue

Logo Impact

When implemented properly, logos can have a positive effect on public trails

Highline trail in NY and Nicollet Mall in Minneapolis have successfully implemented a logo

The ability for Bellevue to create and implement a logo is there

Current "Plant Palette" in Old Bellevue

Plant Palette

Perennials

Shrubs

Grasses

Trees

Left to right: *Anemone blanda, Camellia japonica, Camellia sasanqua, cerastium tomentosum, Thymus serpyllum, Matteuccia struthiopteris,polystichum setiferum, Polystichum polyblepharum, Helleborus x hybridus, and Hydrangea paniculata*

Left to right: *Choisya ternata, Aesculus parviflora, and Deutzia gracilis*
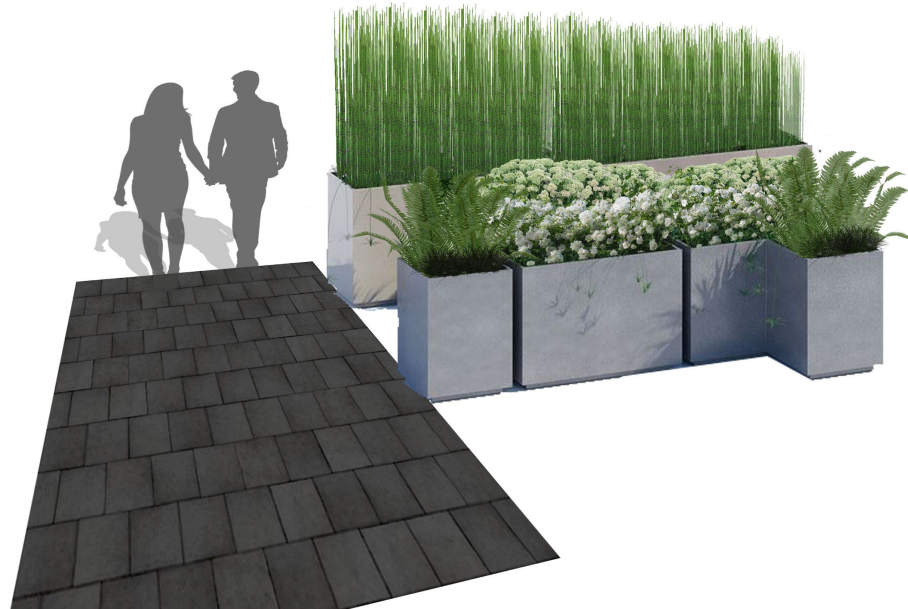
Left to right: *Equisetum, Ophiopogon planiscapus, and Hakonechloa*

Left to right: *Acer palmatum 'Ukigumo'*

Planting Design Rendering

Programming

Programming

"Research shows that recreation programs in parks can change the way that people interact with their environment." -NRPA

Importance of Programming

- Promotes a sense of place
- Fosters relationships
- Promotes community, stewardship, and engagement
- Allows for exploration and education for all ages

Bellevue Downtown Park Movie Night

Precedents in Programming

- Current Examples within the City of Bellevue:
  - Lake to Lake Bike Ride (annual event)
  - 'Connections' brochure
    - 'Nocturnal in November (owl watching at Mercer Slough)
  - TRACKS (teaching, recreation, adventure, competency, knowledge, stewardship)
  - Natural Resource Programs brochure

Pianos in the Parks: Bellevue Edition, 2015

Implementation of Programming

- Collaboration with other City of Bellevue departments
- Finding partnerships with businesses, nonprofits, etc
- Streamlining the website and associated pages.
- Creation of an annual schedule and opportunities
- Public Outreach

A Special Event in Downtown Park

Winter 2020

- Use our section as a "design workshop" for rest of trail
- Design comprehensive wayfinding system for our section
  - Develop theme
  - Propose concepts for signage and direct, physical wayfinding
- Compile and create different designs for details (e.g., seating, lighting)
- Research and recommend trail materials
- Create multiple concept drawings of our section, tying designs together into a unified vision
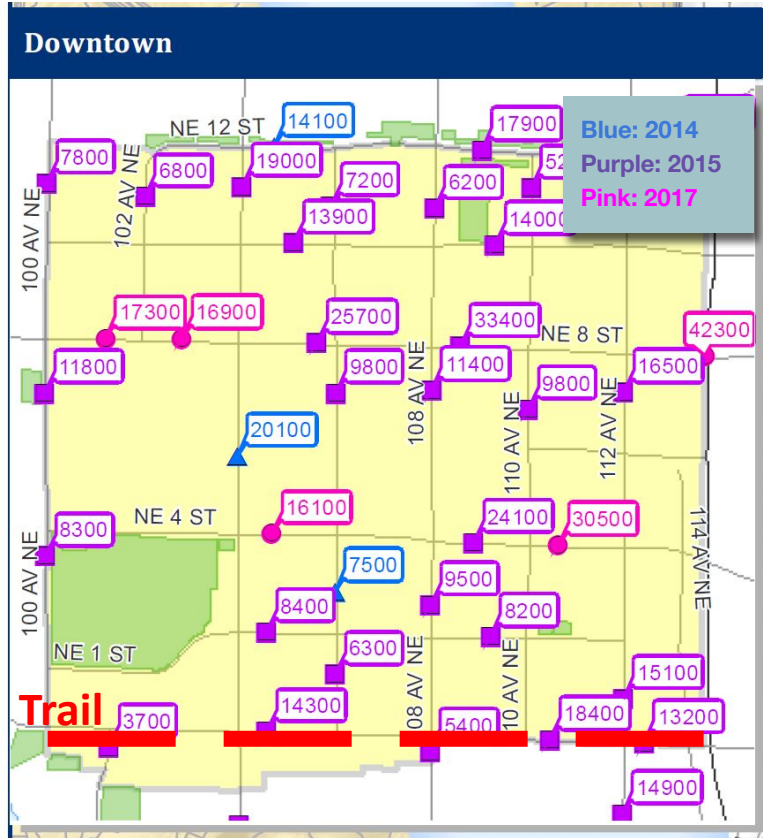
Spring 2020

- Expand work to larger parts of the trail
- Research how our design intersects and interacts with all modes of transportation
- Provide examples of how theme could apply to different parts of the trail
- Investigate social issues surrounding trail (e.g., racial equity, possible gentrification issues)
- Integrate into larger parks/trail networks in Bellevue

Sources

- Historic images of Bellevue
  - https://www.linkedin.com/pulse/look-back-history-bellevue-1900-1980s-photo-gallery-tim-savy/
- Balk, Gene. 2019. "Seattle Sees Nation's Biggest Drop in Solo Car Commuters as Transit, Walking Surge." *Seattle Times*, November 21, 2019. https://www.seattletimes.com/seattle-news/data/seattle-sees-nations-biggest-drop-in-solo-car-commuters-as-transit-walking-surge/.
- "East Main Transit-Oriented Development - Supplemental Guiding Principles for the Planning Commission." 2019. City of Bellevue. https://bellevue.legistar.com/LegislationDetail.aspx?ID=4054768&GUID=6E0EBD73-2C88-4B2A-B5B3-913AC1890E46.
- Atlanta Beltline Image: https://www.artsatl.org/wp-content/uploads/12303933_10153316530850983_9138341514994038931_o-759x500.jpg
- Bicknell, Natalie. 2019. "A Small Step Forward for the U District Mobility Plan." The Urbanist. April 4, 2019. https://www.theurbanist.org/2019/04/04/a-small-step-forward-for-the-u-district-mobility-plan/.
- Geenen, Hugh. 2019. "Turning Ballard Avenue Into A Pedestrian Mall." The Urbanist. February 12, 2019. https://www.theurbanist.org/2019/02/12/turning-ballard-avenue-into-a-pedestrian-mall/.
- "Survey on NE 43rd Street." 2019. U District Mobility. September 2019. https://www.udistrictmobility.com/43rd-survey.html.
- *Bellevue City Code - Title 11, Vehichles and Traffic - Ch. 11.32 Speed*. Accessed November 24, 2019. https://bellevue.municipal.codes/BCC/11.32.
- "Pedestrian Oriented Design." Puget Sound Regional Council. Accessed November 24, 2019. https://www.psrc.org/sites/default/files/pedestrian_oriented_design.pdf.
- Banwell, Katherine. 2019. *Crossing Seattle Streets Is Getting Safer*. KUOW News. Seattle. https://www.kuow.org/stories/crossing-the-street-is-getting-safer.
- https://www.nrpa.org/our-work/Three-Pillars/health-wellness/ParksandHealth/fact-sheets/park-programming-better-health/

Appendix – Average Daily Traffic in Study Area

The Lake to Lake trail's status as a commuting corridor: comparing Downtown traffic

- Main Street - averages 15,300 in 2015
  - My 2017 estimate: 15,600 (based on Seattle's average increase of 1%per year of rides, from Seattle Times)
    - From 2010 to 2018, the percentage of Seattle commutes done alone via car went from 53% to 44%. In Bellevue, it went from 61% to 53%.
- NE 4th Street - averages 23,300 in 2017
- NE 8th Street - averages 25,500 in 2017
- 108 Avenue NE - averages 8,125 in 2017
- Bellevue Way SE entering Downtown area from South- averages 26,100 in 2015, making it within the top 5 busiest intersections in Downtown and top 10 or so within the city

Image/Data from City of Bellevue -
http://apps.bellevuewa.gov/gisdownload/
PDF/Transportation/AAWT_11x17.pdf