

# RapidRide Roosevelt

## Eastlake Neighborhood Project Briefing

Oct. 23, 2018

Seattle Department of  
Transportation



City of Seattle

# Tonight's agenda

1. Welcome and introductions
2. Project background
3. Bicycle facilities evaluation
4. Curbspace management and parking study review
5. Next steps
6. Questions and answers
7. Adjourn



# Panel

- Garth Merrill – RapidRide Project Manager
- Maribel Cruz – Community Outreach
- Mike Estey – Manager of Parking Programs
- Penny Mabie – Facilitator



# Our mission, vision, and core values

**Mission:** deliver a high-quality transportation system for Seattle

**Vision:** connected people, places, and products

Committed to **5 core values** to create a city that is:

- Safe
- Interconnected
- Affordable
- Vibrant
- Innovative

For all



# Project purpose

The **purpose** of the RapidRide Roosevelt project is to improve transit travel times, reliability, and capacity to increase high-frequency, all-day transit service and enhance transit connections between Downtown Seattle and the Belltown, South Lake Union, Eastlake, University District, and Roosevelt neighborhoods, in order to:

- Address current and future mobility needs for residents, workers, and students
- Address capacity constraints in the transportation network along this north-south corridor
- Provide equitable transportation access to major institutions, employers, and neighborhoods
- Improve pedestrian and bicycle connections and access to RapidRide stops and improve safety along the corridor.

# Project needs

The Roosevelt corridor has been identified as a high-priority corridor for meeting the following transportation and community **needs**:

- Provide transit service to support housing and employment growth
- Provide neighborhood connections to future Link light rail stations
- Improve transit travel time and reliability throughout the corridor
- Reduce overcrowding of existing bus capacity
- Improve pedestrian and bicycle safety and connections to transit

# Project overview

## Project highlights:

- 6 mile project corridor length
- 26 new RapidRide stations
- 33 intersections with upgraded traffic signals (including TSP or transit queue jumps)
- 2.3 miles of new transit lanes
- 3.4 miles of new trolley-wire infrastructure
- 3.1 miles of paving improvements\*
- 5 miles of new protected bicycle lanes
- 200+ new ADA-compliant curb ramps and other pedestrian improvements

\*pending revised Levy workplan (December 2018)



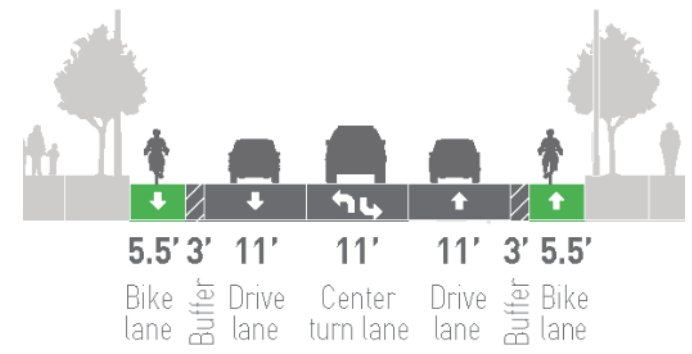
# Zooming in: Fairview; Eastlake

- Improved transit stations along corridor
- Widen Fairview Ave to add transit-only lane for buses and the streetcar from Mercer St to Aloha St
- Protected bike lanes on Eastlake Ave E to the University Bridge
- Improved pedestrian access to RapidRide stations including ADA accessibility improvements



- General purpose lane
- Transit-only lane
- New/upgraded station
- Existing protected bike lane
- ⋯ Funded or in-progress protected bike lane
- - - New protected bike lane

## TYPICAL SECTION





# Project background

- 2012: Identified in Transit Master Plan as high-priority, high-capacity transit corridor
- 2014-present: Public involvement
- Consistent with:
  - Transit Master Plan
  - Bicycle Master Plan
  - Pedestrian Master Plan
  - Freight Master Plan
  - Move Seattle 10-year Strategic Vision
  - Metro Connects Long-Range Transit Plan



City of Seattle Department of Transportation

## TRANSIT MASTER PLAN

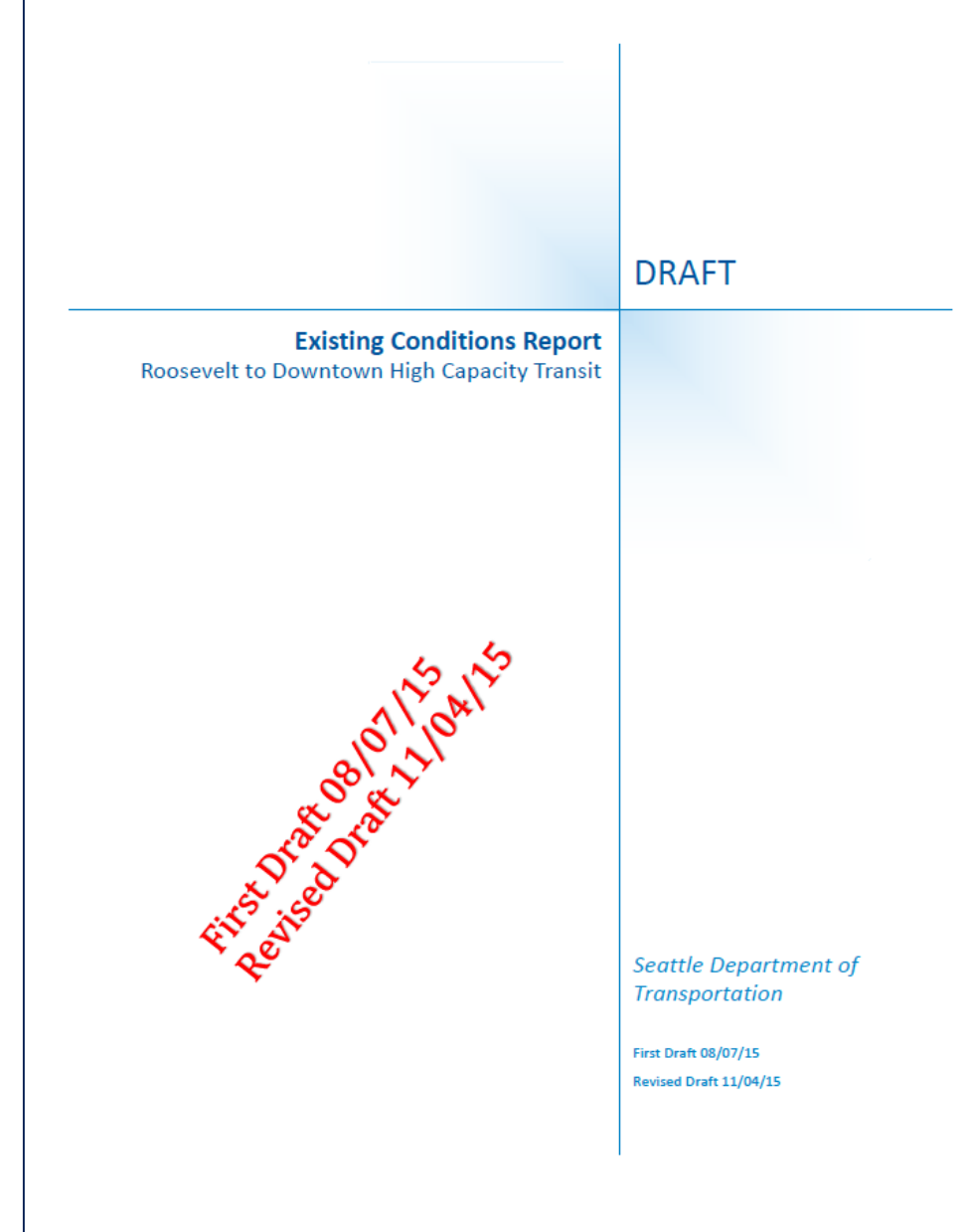
FINAL SUMMARY REPORT

ADOPTED 2012  
AMENDED 2016



# Project history - public involvement

- **Phase 1: Mode Analysis and Existing Conditions**  
(November 2014 - June 2015)
  - Focus on project goals, timeline, existing conditions, and transit modes being considered
  - Stakeholder interviews conducted
  - Public open houses in May 2015; approximately 100 attendees



# Project history - public involvement

- **Phase 2: Characteristics of BRT and Multimodal Components (June 2015 - March 2016)**
  - Focus on priority investments
  - Key stakeholder forums hosted
  - Public open houses in December 2015; approximately 120 people in-person, 300 online
  - Recommendation: targeted BRT investment. Project was included in Levy to Move Seattle

The Seattle Department of Transportation  
Roosevelt to Downtown HCT Study

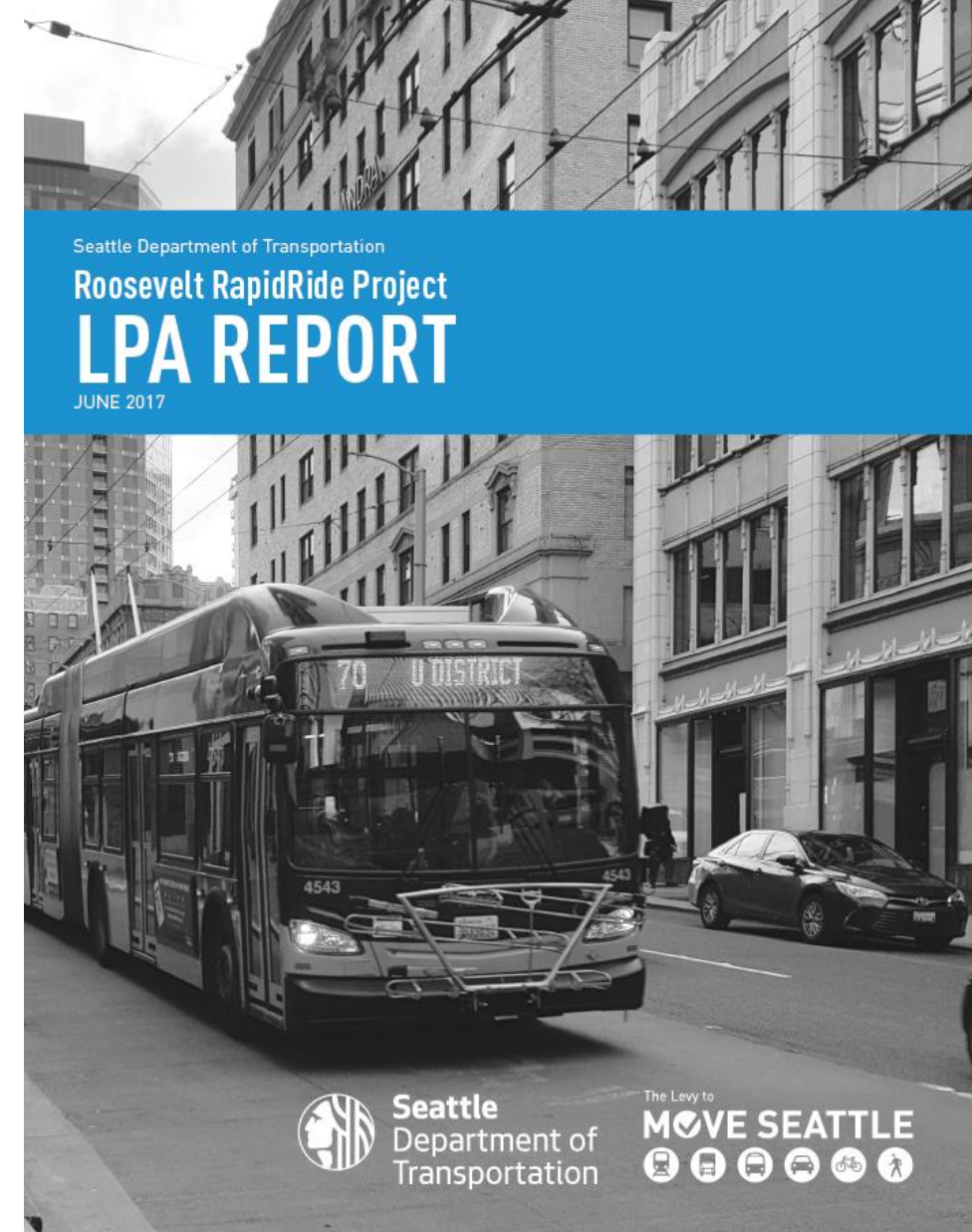
## CORRIDOR CONCEPT FINAL REPORT

August 2017



# Project history - public involvement

- **Phase 3: Recommended Corridor Concept**  
(May 2016 – Present)
  - Focus on conceptual engineering; submittal of Locally Preferred Alternative to Seattle City Council (approved in July 2017)
  - Public open houses in June 2016; environmental scoping meeting in December 2017
  - Prepared submittal for FTA Small Starts grant; completed NEPA scoping in January 2018 to inform development of NEPA Environmental Assessment



# Eastlake public involvement roll-up

- Attendance at Eastlake Community Council meetings (February 2015, October 2015, January 2016, March 2018)
- Stakeholder outreach (March/April 2015)
- Existing condition open houses (May 2015)
- Participated in walking audit with Cascade Bicycle Club (2015)
- Community forum meetings (September/November 2015, May 2016)
- BRT/Multimodal open houses (December 2015)
- Business access survey (March 2016)
- Recommended corridor concept open houses (June 2016)
- Environmental scoping meeting (December 2017)

# Bicycle facility analysis



# Bicycle facility analysis

- Why we did this study
- Dive into the details
- Our evaluation process
- Results of the analysis



# Why we did this study

During the environmental scoping process, we heard:

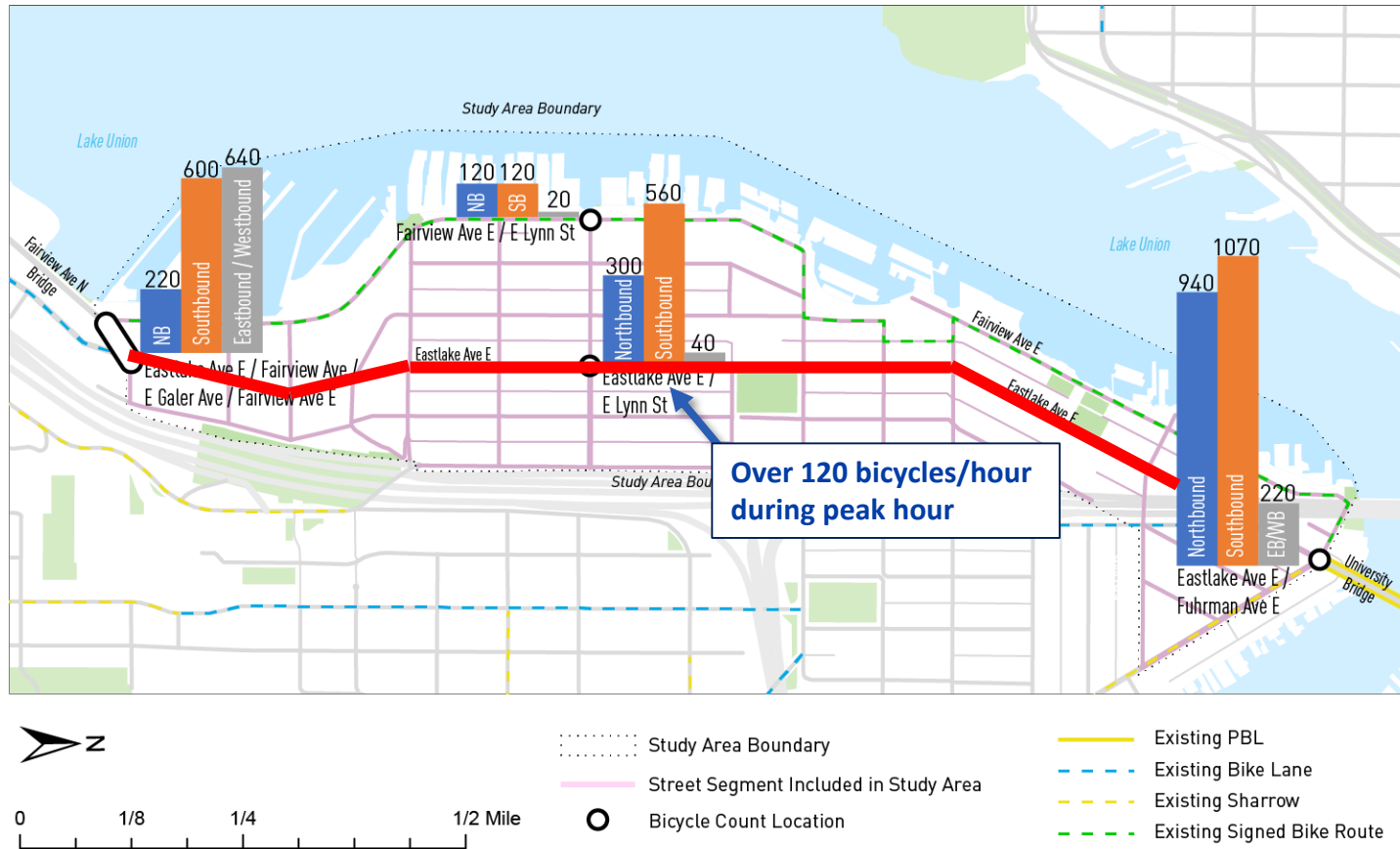
- General support for transit improvements
- Support for and objections to protected bicycle lanes on Eastlake
- Concern about parking loss
- Questions about considering alternative bicycle facility and route options

What we've done:

- This study – an evaluation of bicycle facility options in the Eastlake neighborhood



# Existing conditions in Eastlake



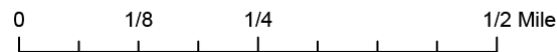
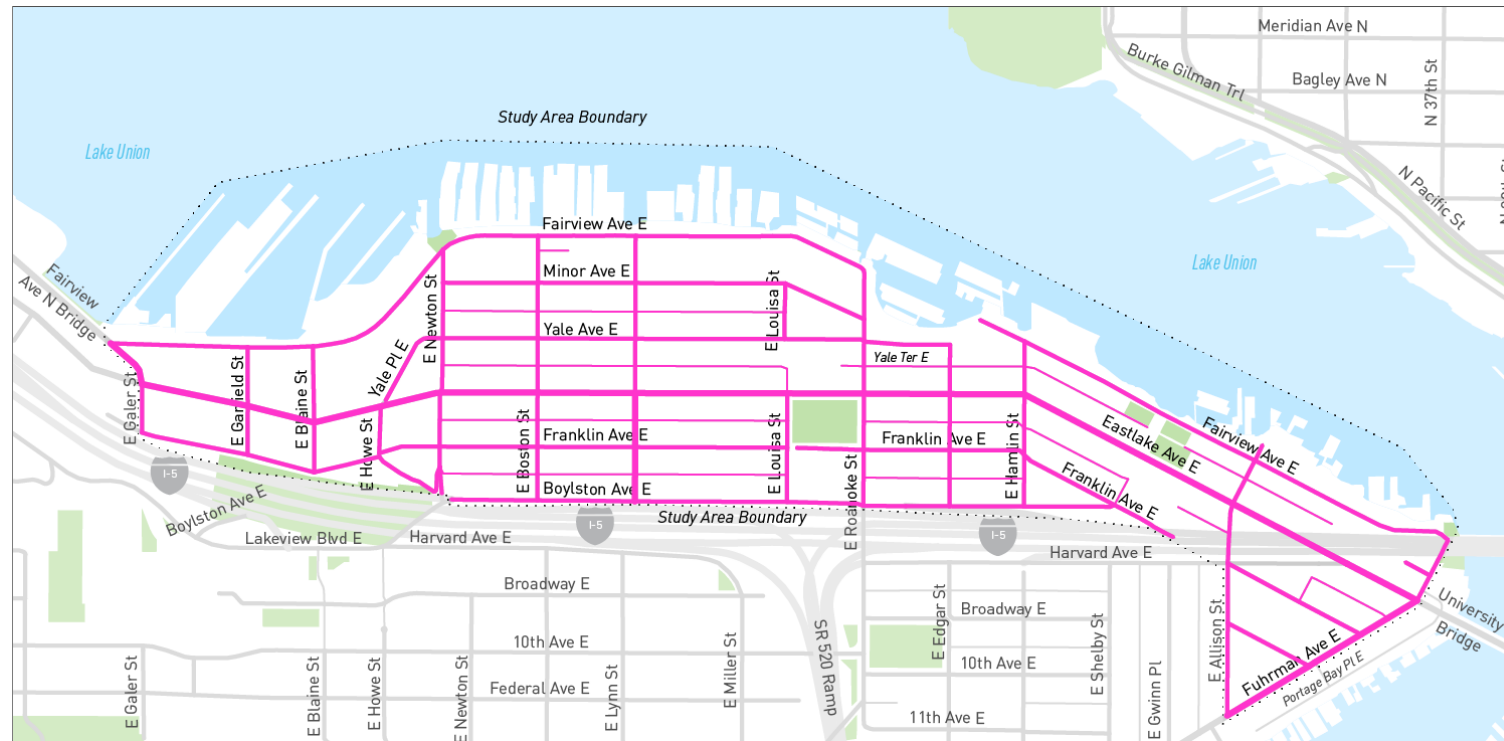
## Safety data

- From 2012-2017, 40 reported bicycle collisions in study area
- 39 of those incidents were on Eastlake Ave E
- Most were front-end angle collisions between cars and bicycles
- Topography is challenging through the community; Eastlake Ave E is generally a flat, direct route

# Streets reviewed for bicycle analysis

## Study area:

- Eastlake to Fairview
- E Galer St to University Bridge



- ..... Study Area Boundary
- Street Segment Included in Study Area
- Street Segment Not Included in Study Area

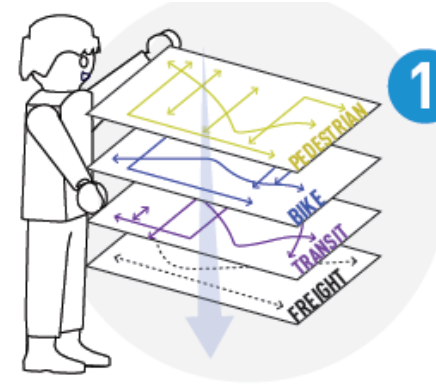


# How we developed options for the bicycle facility

- Provide continuous connection between University Bridge and Fairview Ave N bike lanes
- Connect to existing bicycle lanes on Eastlake Ave E south of Fairview Ave
- Meet all ages and abilities criteria outlined in Bicycle Master Plan:
  - Protected bike lanes
  - Off-street/multi-use trails
  - Neighborhood greenways
- Balance needs of other modes, including maintaining on-street parking where possible
- Meet City guidance for right-of-way allocation

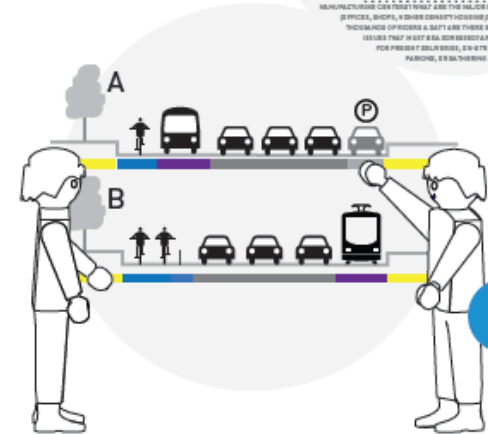
# Right of way allocation

- Comprehensive Plan identifies new framework ROW allocation decisions
- Streets Illustrated Manual
- Meeting all functions of ROW including access and activation (not just mobility)



**1** Step 1: Overlay the modal plans  
Overlay the needs in the modal plans to identify where priority corridors for many modes exist.

**2** Step 2: Identify the major purposes of the street  
Each street in our city is different and they serve different land uses, so the purpose and design of each project will be distinctive.



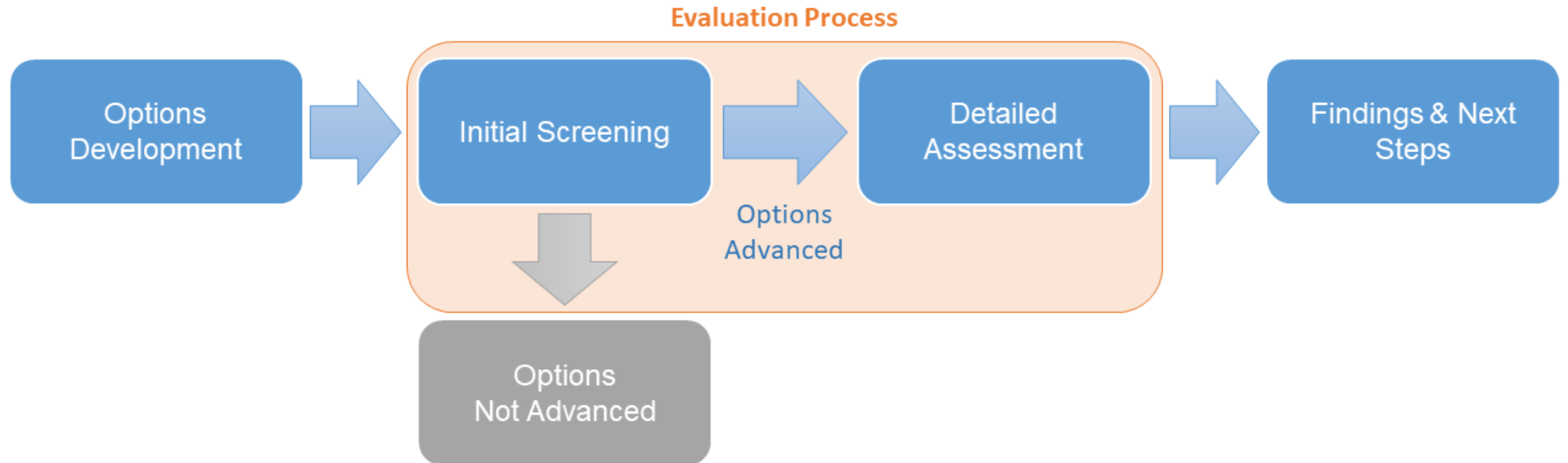
**3** Step 3: Develop alternatives  
We look at different ways we can allocate space in the street based on the users and needs identified.

# Options considered for the analysis

<b>Option 1:</b> No Build	<b>Option 6:</b> Multi-Use Trail on Fairview Ave E
<b>Option 2:</b> Protected Bicycle Lanes on Eastlake Ave E	<b>Option 7:</b> Greenway on Fairview Ave E (following the Cheshiahud Lake Union Loop)
<b>Option 3:</b> Two-Way Protected Bicycle Lanes on Eastlake Ave E	<b>Option 8:</b> Greenway on Minor Ave E and Fairview Ave E
<b>Option 4:</b> Northbound PBL on Eastlake Ave E and Southbound Greenway on Yale Ave E	<b>Option 9:</b> Greenway on Franklin Ave E
<b>Option 5:</b> Northbound PBL on Eastlake Ave E and Southbound PBL on Yale Ave E	



# Evaluation process overview



# Initial screening criteria

1. Does it meet project purpose and need?
2. Does it provide a level, relatively flat, bicycle route?
3. Does it meet SDOT's bicycle facility design standards?
4. Is it able to be constructed within existing right-of-way?



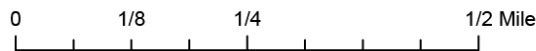
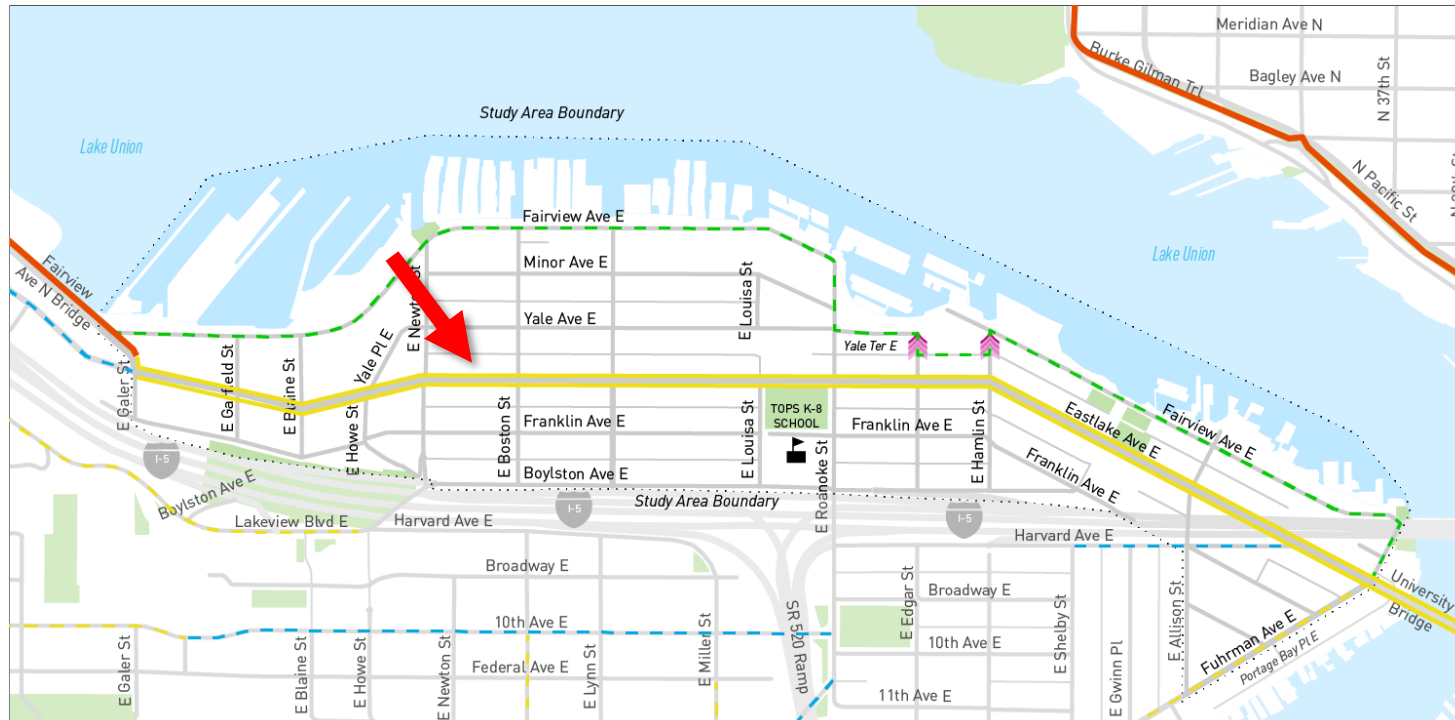
# Initial screening results - 4 options moved forward

Criterion	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9
Meets the project purpose and need	Fail	Pass	Pass	Pass	Pass	Fail	Fail	Fail	Pass
Provides a level bicycle route	Not applicable	Pass	Pass	Pass	Pass	Pass	Fail	Fail	Fail
Meets SDOT's bicycle facility design standards	Not applicable	Pass	Pass	Pass	Pass	Pass	Fail	Fail	Pass
Able to be constructed within available existing right-of-way	Pass	Pass	Pass	Pass	Pass	Fail	Pass	Pass	Pass
Result	Advanced for comparison	Advanced	Advanced	Advanced	Advanced	Not advanced	Not advanced	Not advanced	Not advanced





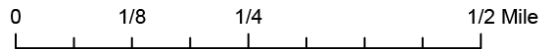
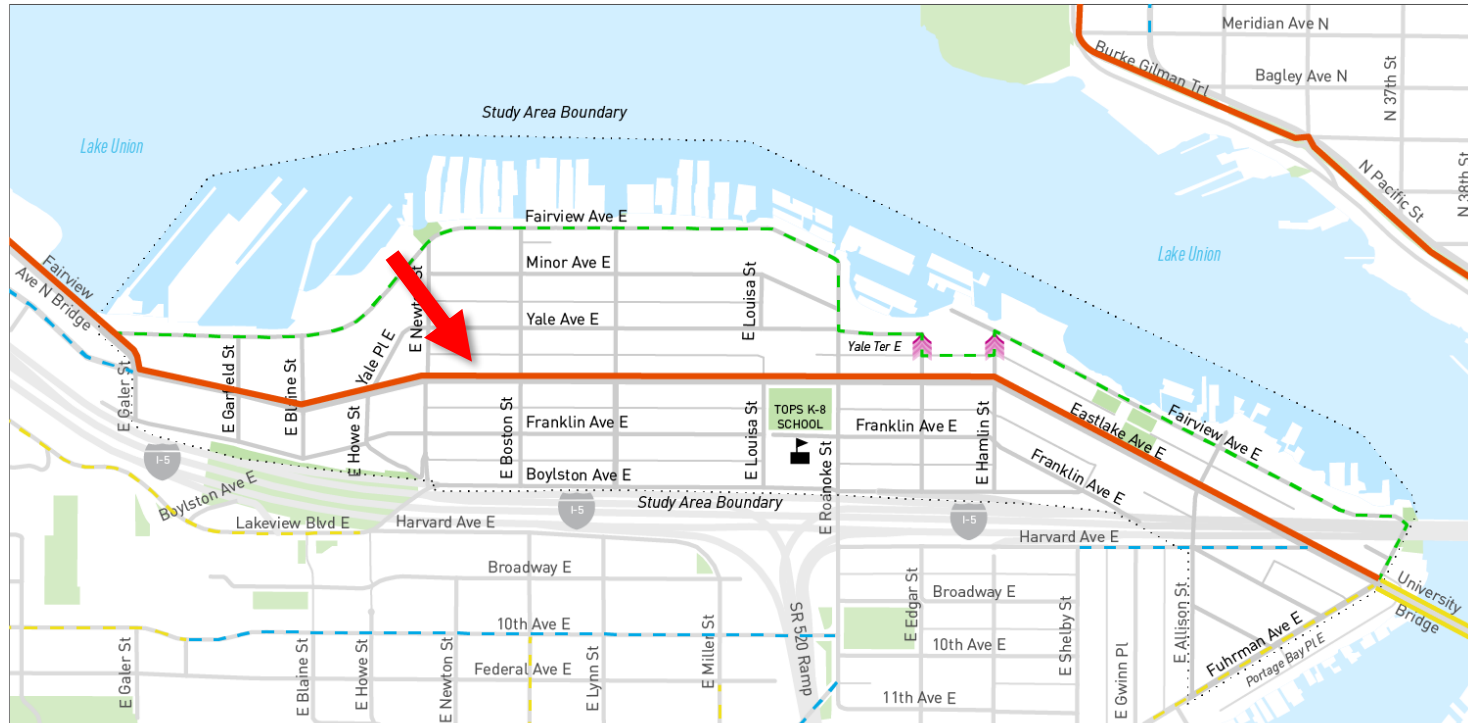
# Option 2: PBL on Eastlake Ave E



- Protected Bike Lane
- Two-Way PBL or Multi-Use Trail
- Neighborhood Greenway
- - - Bike Lane
- - - Sharrow
- - - Signed Bike Route
- Slope  $\geq 10\%$  (Points Downhill)



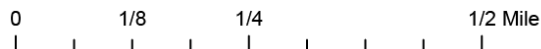
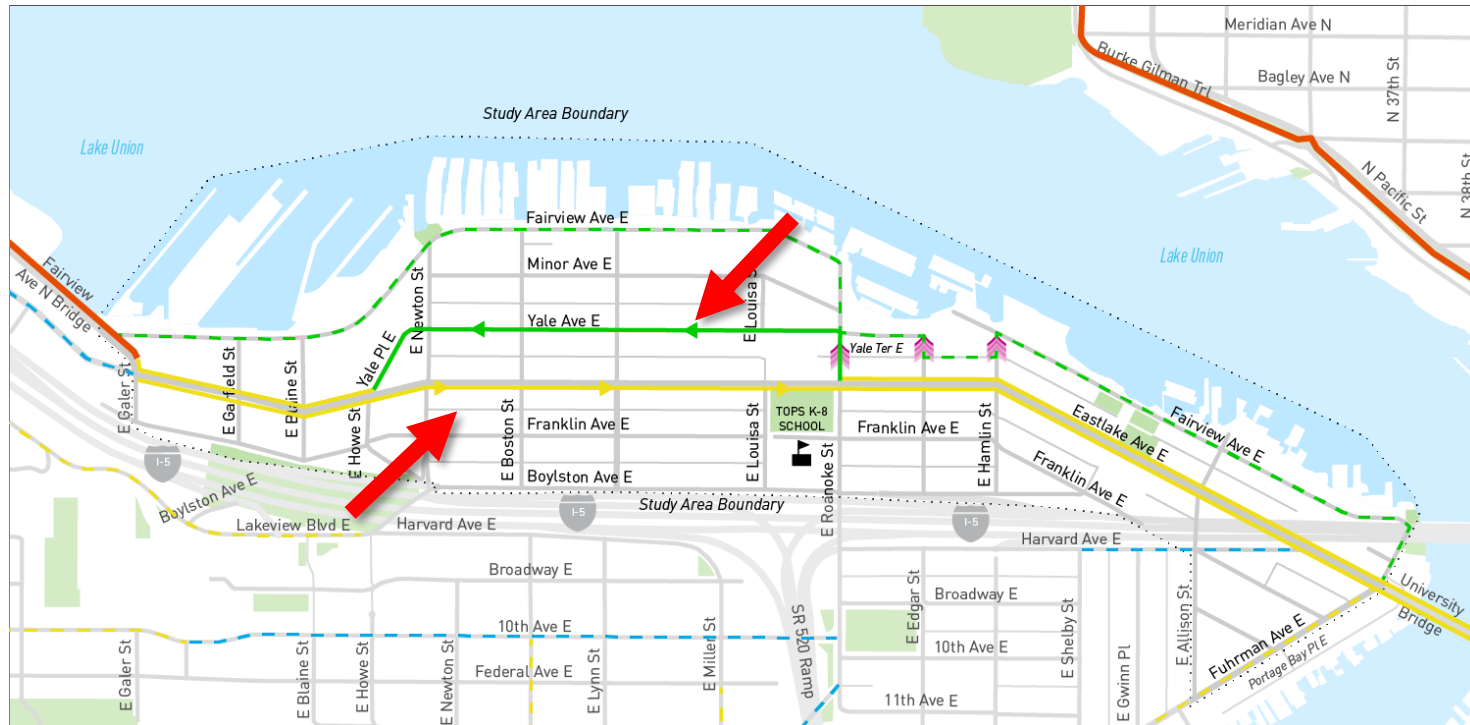
# Option 3: Two-way PBL on Eastlake Ave E



- Protected Bike Lane
- Two-Way PBL or Multi-Use Trail
- - - Neighborhood Greenway
- - - Bike Lane
- - - Sharrow
- - - Signed Bike Route
- ▶ Slope ≥10% (Points Downhill)



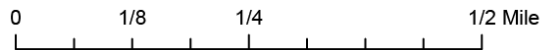
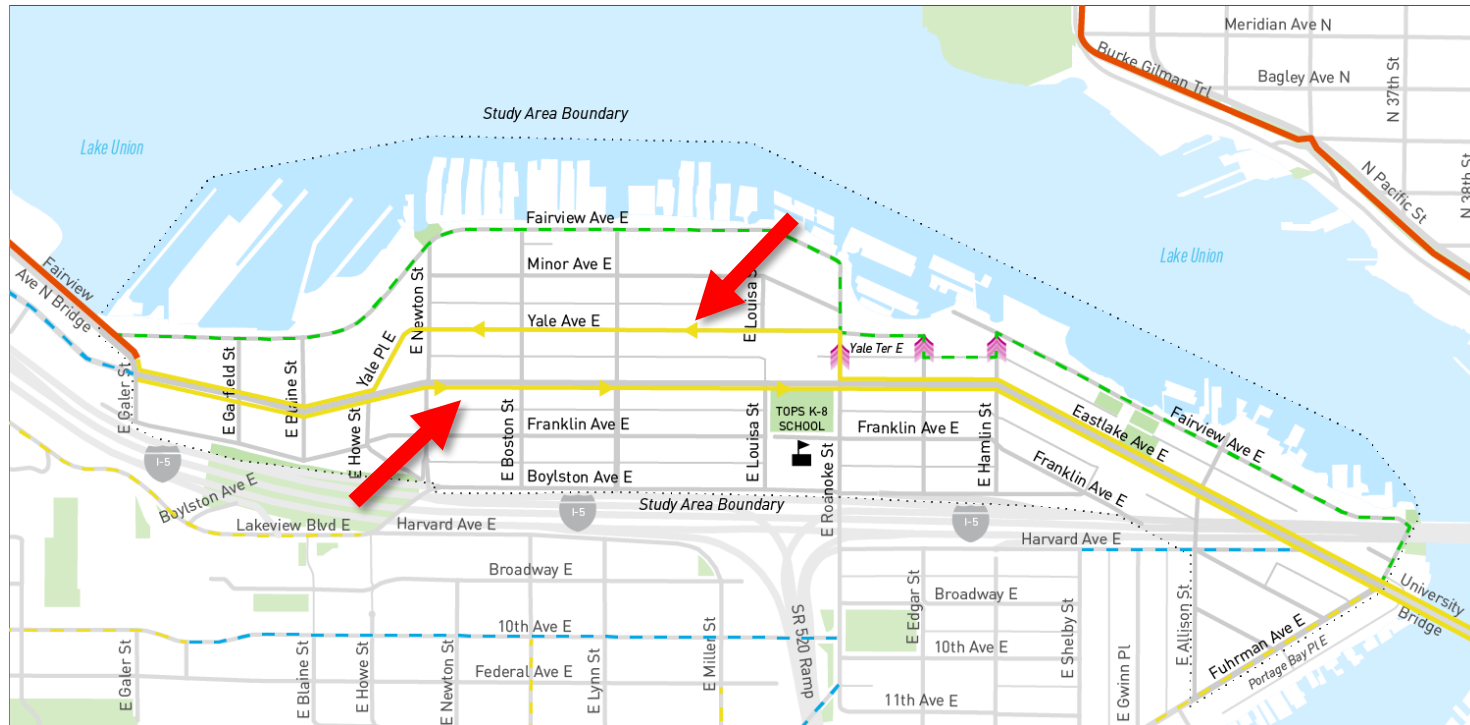
# Option 4: NB PBL on Eastlake; NGW on Yale



- Protected Bike Lane
- Two-Way PBL or Multi-Use Trail
- Neighborhood Greenway
- Bike Lane
- Sharrow
- Signed Bike Route
- ▶ Slope ≥10% (Points Downhill)



# Option 5: NB PBL on Eastlake; SB PBL on Yale



- Protected Bike Lane
- Two-Way PBL or Multi-Use Trail
- Neighborhood Greenway
- Bike Lane
- Sharrow
- Signed Bike Route
- Slope  $\geq 10\%$   
(Points Downhill)























# Next step: Detailed assessment screening criteria

- Does it improve bicycle safety and bicycle connections to transit?
- Is it consistent with City of Seattle policy guidance?
- Does it provide comfortable bicycle route conditions?
- Does it provide neighborhood access?
- What are the impacts to other transportation modes and elements?









# Detailed assessment results

Criterion	Option 2 PBLs on Eastlake Ave E	Option 3 Two-Way PBL on Eastlake Ave E	Option 4 NB PBL on Eastlake; NGW on Yale	Option 5 NB PBL on Eastlake; SB PBL on Yale
<i>Bicycle safety and connection to transit</i>				
Route safety	High	Medium	Low	Medium
Bicycle connection to transit	High	High	High	High
<i>City of Seattle policy guidance</i>				
Consistency with Bicycle Master Plan	High	High	Medium	Medium

# Detailed assessment results

Criterion	Option 2 PBLs on Eastlake Ave E	Option 3 Two-Way PBL on Eastlake Ave E	Option 4 NB PBL on Eastlake; NGW on Yale	Option 5 NB PBL on Eastlake; SB PBL on Yale
<b>Route conditions</b>				
Route distance	 1.42 miles NB/SB	 1.42 miles NB/SB	 1.42 miles NB 1.51 miles SB	 1.42 miles NB 1.51 miles SB
Elevation gain	 +49 feet NB +36 feet SB	 +49 feet NB +36 feet SB	 +49 feet NB +33 feet SB	 +49 feet NB +33 feet SB
Maximum uphill slope	 5% max uphill	 5% max uphill	 6% max uphill	 6% max uphill
Route legibility and directness	 1 turn NB 1 turn SB	 1 turn NB 1 turn SB	 1 turn NB 4 turns SB	 1 turn NB 4 turns SB
Number of arterial crossings required	 1 crossing NB	 1 crossing NB	 1 crossing NB	 1 crossing NB

# Detailed assessment results

Criterion	Option 2 PBLs on Eastlake Ave E	Option 3 Two-Way PBL on Eastlake Ave E	Option 4 NB PBL on Eastlake; NGW on Yale	Option 5 NB PBL on Eastlake; SB PBL on Yale
<i>Neighborhood Access</i>				
Access to businesses	 Direct bicycle access in both directions	 Direct bicycle access in both directions	 Direct bicycle access in NB direction	 Direct bicycle access in NB direction
Access to schools	 Direct access to TOPS in both directions	 Direct access to TOPS in both directions	 Direct access to TOPS in both directions	 Direct access to TOPS in both directions





# Detailed assessment results

Criterion	Option 2 PBLs on Eastlake Ave E	Option 3 Two-Way PBL on Eastlake Ave E	Option 4 NB PBL on Eastlake; NGW on Yale	Option 5 NB PBL on Eastlake; SB PBL on Yale
<i>Impacts to other transportation modes and elements</i>				
Transit performance	● Minimizes interactions over full corridor	● Minimizes interactions over full corridor	◐ Minimizes interactions over partial corridor	◐ Minimizes interactions over partial corridor
Auto traffic performance	● Minimizes interactions over full corridor	● Minimizes interactions over full corridor	◐ Minimizes interactions over partial corridor	◐ Minimizes interactions over partial corridor
On-street parking	○ 325 spaces removed on Eastlake Ave E	○ 325 spaces removed on Eastlake Ave E	◐ 250 spaces removed on Eastlake Ave E	○ 375 total spaces removed (250 on Eastlake)
Planted medians	● Does not require removal of medians	○ Requires removal of all medians	● Does not require removal of medians	● Does not require removal of medians



# Detailed assessment results

Criterion	Option 2 PBLs on Eastlake Ave E	Option 3 Two-Way PBL on Eastlake Ave E	Option 4 NB PBL on Eastlake; NGW on Yale	Option 5 NB PBL on Eastlake; SB PBL on Yale
<b>TOTAL SCORES</b>				
High 	11	9	5	5
Medium 	2	3	8	8
Low 	1	2	1	1

## Key takeaway

Option 2 (Current project design) best meets the evaluation criteria and is consistent with the Locally Preferred Alternative approved by Seattle City Council

# Summary of bicycle analysis

- By completing the bicycle facility assessment, we found Option 2 (the current design that includes protected bicycle lanes):
  - **Best meets the project purpose and need regarding safety and access to transit**, as well as contributing to transit speed and reliability
  - Best meets the evaluation criteria and **would provide the highest-quality bicycle facility in Eastlake**
- All protected bicycle lane options would have impacts to parking
- Option 2 is in the LPA approved by Seattle City Council

# Curbspace and parking



# Curbspace and parking discussion

- Why we did this study
- Overview of curbspace priorities
- Corridor parking study and results
  - Corridor wide
  - Eastlake
- Potential parking management tools
- Next steps



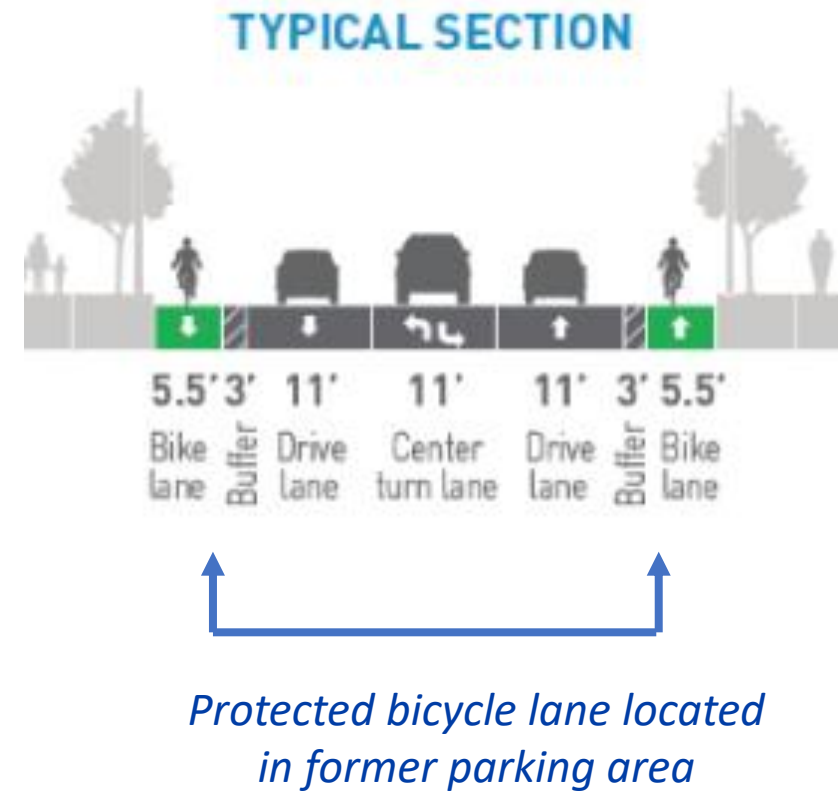
# Curbspace priorities

	RESIDENTIAL	COMMERCIAL + MIXED USE	INDUSTRIAL
1	Support for modal plan priorities	Support for modal plan priorities	Support for modal plan priorities
2	Access for people	Access for commerce	Access for commerce
3	Access for commerce	Access for people	Access for people
4	Greening	Activation	Long-term parking
5	Long-term parking	Greening	Activation
6	Activation	Long-term parking	Greening



# Parking impacts of RapidRide Roosevelt

- Curbspace and parking impacts on Eastlake Ave E (up to):
  - 324 parking spaces removed
  - 18 commercial vehicle loading zones removed
  - 4 passenger loading zones removed



# Corridor parking study

- Conducted for entire project corridor; focus on Eastlake Ave E
- Combination of inventory (how many spaces) and duration (how long people park)
- Counts in December 2017; study completed this fall

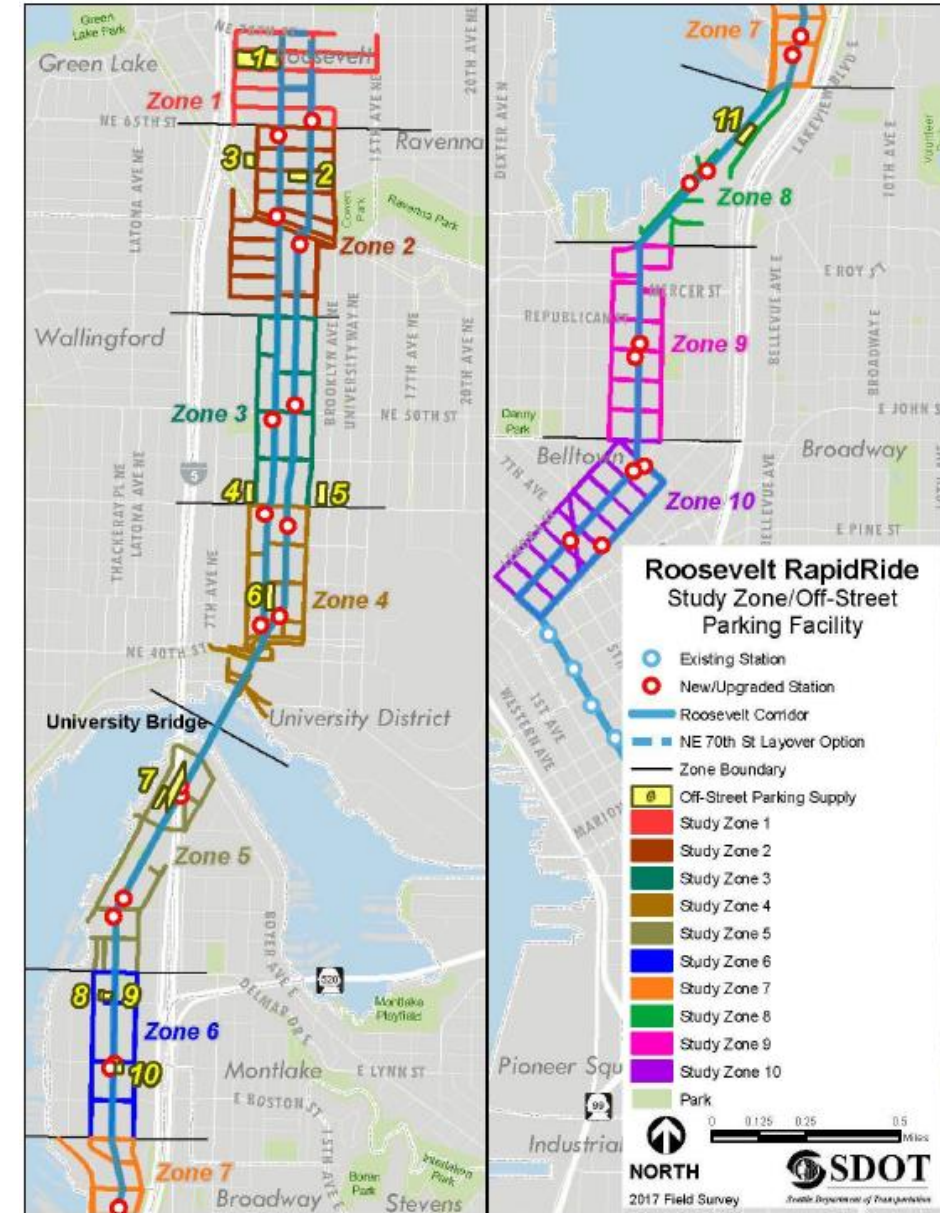


Figure 1. Curb Space Management Study Zones and Studied Off-street Parking Facilities



# Corridor parking study

- Inventory completed 12/7/17 and 12/12/17 throughout the corridor
- Three times of day:
  - 12 PM to 1 PM
  - 5 PM to 6 PM
  - 8 PM to 10 PM
- Locations and signed restrictions of all loading zones collected along the entire corridor

# Inventory results

## Eastlake parking inventory

	PARKING	OCCUPANCY	UTILIZATION
<b>Midday</b> <i>12-1 PM</i>	1,496	1,365	91%
<b>PM Peak</b> <i>5-6 PM</i>	1,334	1,031	77%
<b>Late evening</b> <i>8-10 PM</i>	1,496	1,056	71%



# Eastlake Ave E parking duration study

- Completed additional parking duration study for Eastlake neighborhood
- How it was done:
  - Completed 12/12/17 and 12/14/17
  - On-street parking duration surveyed hourly 7 AM to 7 PM
- Current restrictions:
  - 7 AM to 9 AM
  - 4 PM to 6 PM

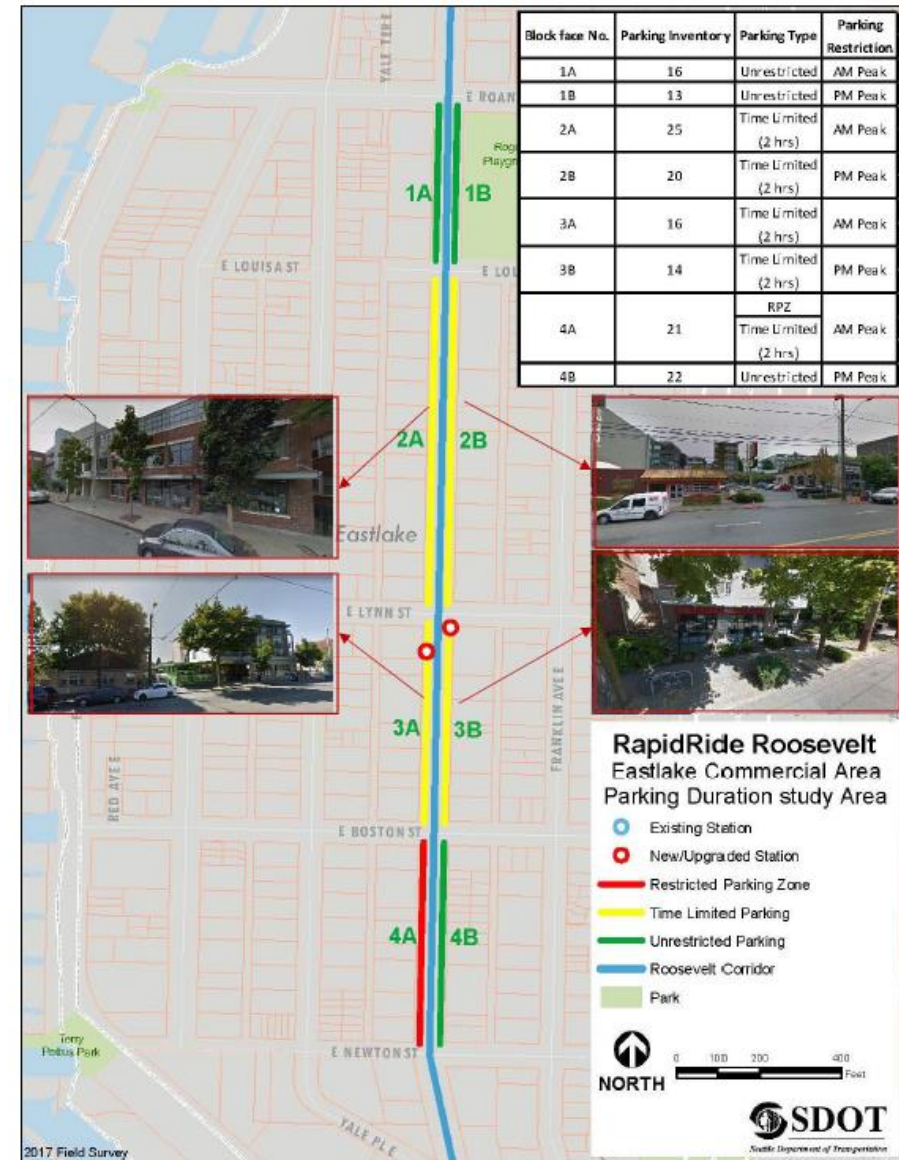
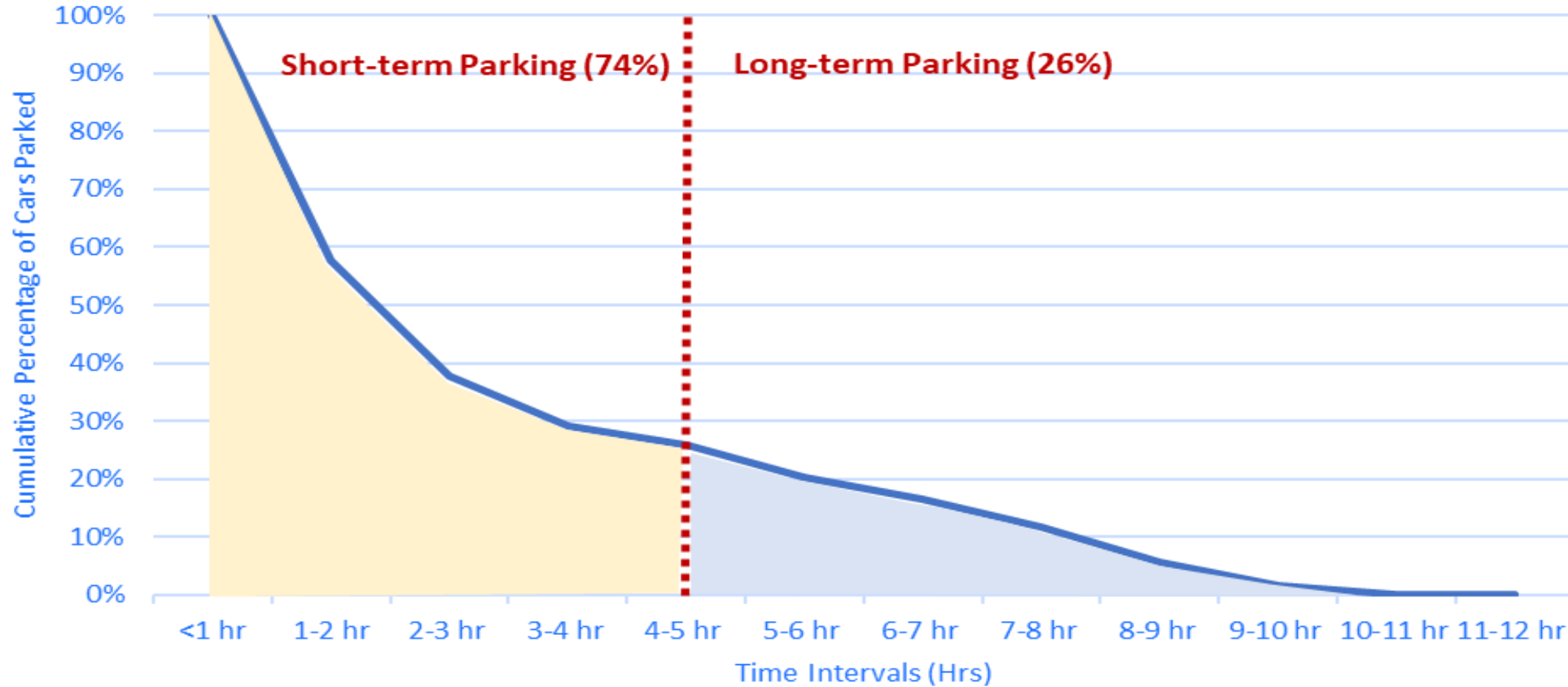


Figure 7. Eastlake Commercial Area Parking Inventory and Type of Parking per Block Face

# Eastlake Ave E parking duration study findings

- Overall, 26% of the cars were parked for 4 or more hours (i.e. long-term)
- In time-limited parking spaces, 16% of cars parked for longer than 2 hours
- In unrestricted parking spaces, more than half of cars parked for 2 hours or more with an average time of about 4 hours
- In the restricted parking zone (RPZ) area on Eastlake Ave E, more than half of cars were parked for 2 hours or more with average time of about 6 hours

# Eastlake Ave E parking duration study findings



# Eastlake off-street parking facilities inventory

- Limited off-street public parking facilities
- Some private parking areas/lots for individual business/commercial use



# Summary of findings for Eastlake Ave E

- RapidRide Roosevelt removes all on-street parking and loading zones along Eastlake Ave E between Fairview Ave N and Fuhrman Ave E for the implementation of a protected bike lane
- Limited on-street parking on adjacent streets; few off-street parking facilities
- About 25% of the vehicles parked on Eastlake Ave E are parking long-term (over 4 hours). It is likely they are employees or residents in the area
- Loading zones will be relocated

# Potential parking management strategies (slide 1 of 2)

- Beginning next year, SDOT proposes to conduct a community conversation in Eastlake to discuss potential parking management strategies
- The City will evaluate the costs, timing, issues, and opportunities with these potential mitigation strategies throughout the rest of the project design and development
- Sign up to stay involved





# Potential parking management strategies (slide 2 of 2)

- Work with businesses and the neighborhood to communicate parking regulations and available commute options
- Consider seeking funding to establish a transportation demand management (TDM) program, like the University District “Let’s Go!” program, as a way to work with the community on TDM strategies to reduce the parking demand
- Consider adjustments to the RPZ to better ease parking congestion in the residential area and better balance needs of all curbspace users in the area
- Facilitate a discussion to seek funding to work with private businesses that may be interested, or able to, allow parking lots to be shared parking for other uses

# Next steps



# Next steps

- Fall 2018: Continued coordination with Levy Oversight Committee
- 2019: Community parking discussions (timing TBD)
- 2019: Environmental Assessment/SEPA DNS/Checklist published
- 2021: Construction begins
- 2023-2024: Project complete

# Questions?



# Questions?

Garth Merrill | [RapidRide@seattle.gov](mailto:RapidRide@seattle.gov)

[www.seattle.gov/transportation/RapidRideRoosevelt](http://www.seattle.gov/transportation/RapidRideRoosevelt)

