



MERCER WEST

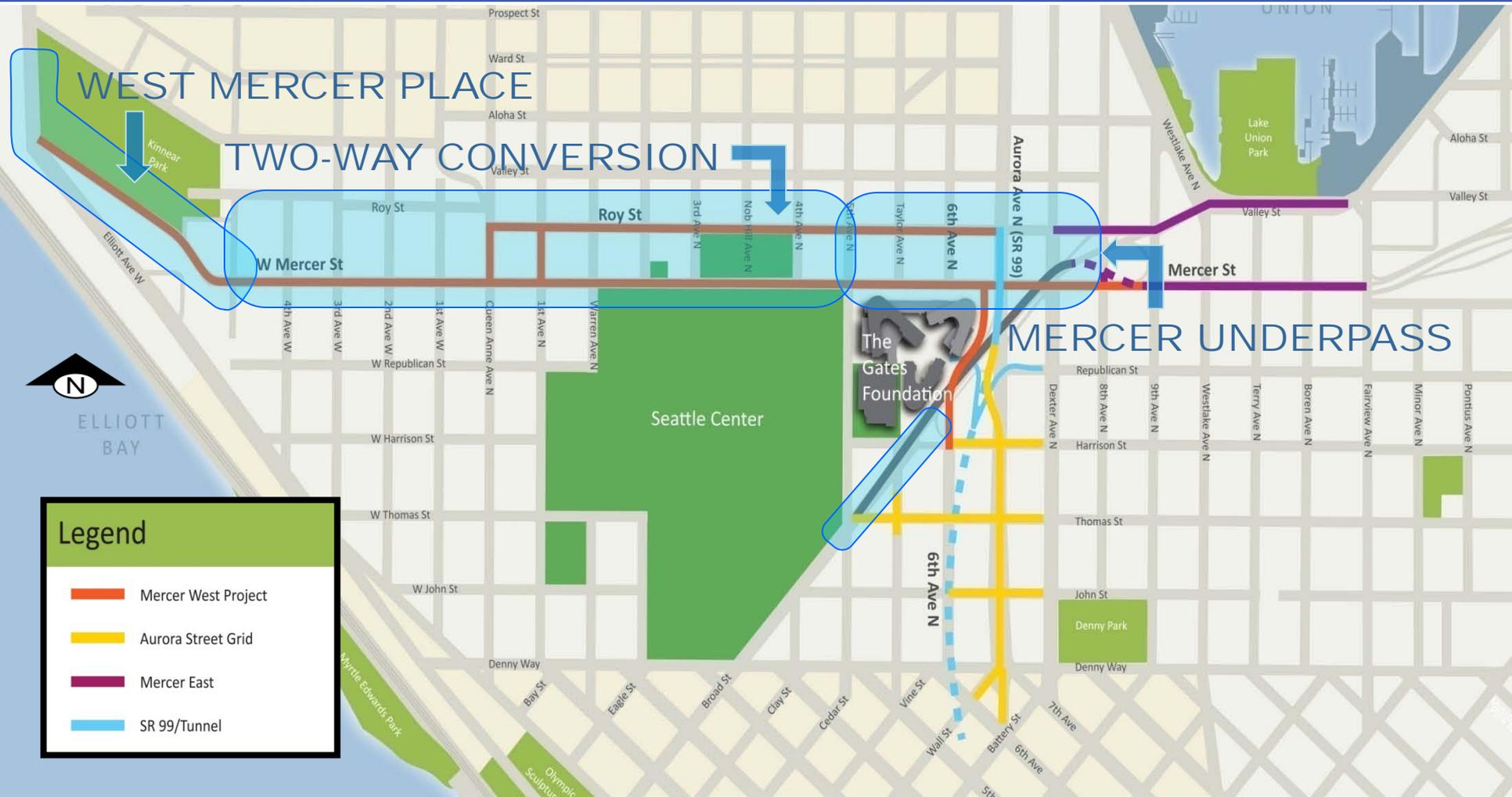
West Mercer Place

March, 2011



MERCER WEST

Completing the Vision For Two-Way Mercer St From I-5 to Elliott Ave W



- Create a direct connection from I-5 and SR 99 to Seattle Center, Uptown, Queen Anne, and Interbay
- Improve pedestrian and bicycle connection across SR 99

- Add a new option for freight from I-5 to Interbay
- Connect the Uptown and S Lake Union urban centers
- Enhance transit access



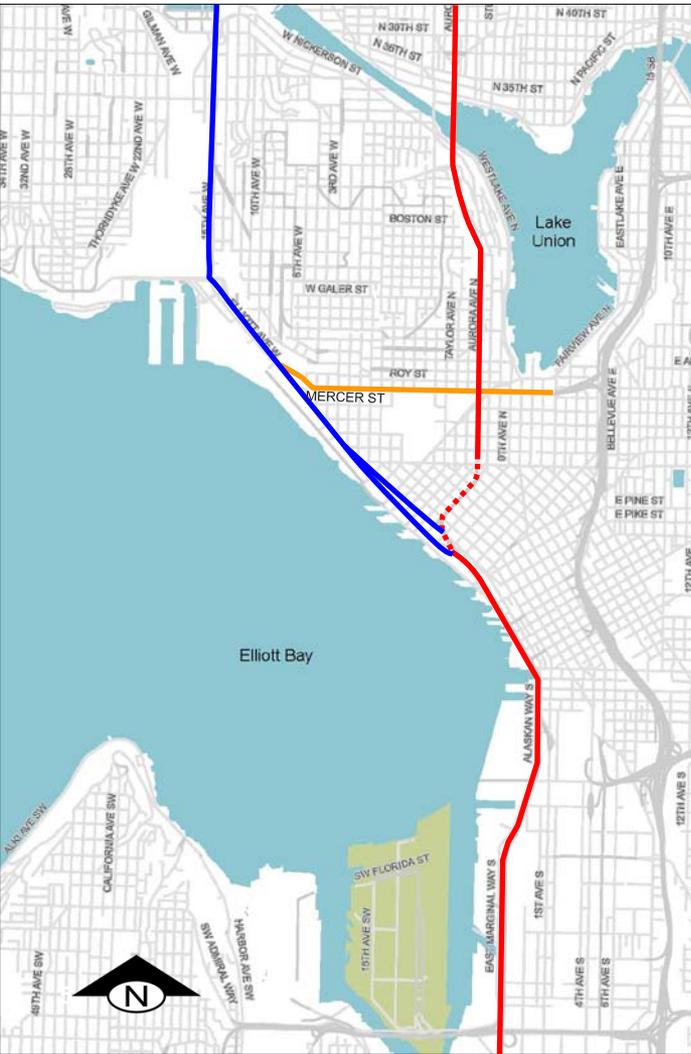


- **Evaluated feasibility and need**
 - **Sidewalk**
 - **Bike lane**
 - **Extend merge lane**
 - **Intersection of W Mercer PI and Elliott Ave W**
- **Project Coordination: Kinnear Park, RapidRide, Port of Seattle**



Existing Viaduct

- Mercer connects to I-5
- Elliott connects to SR 99 in Belltown



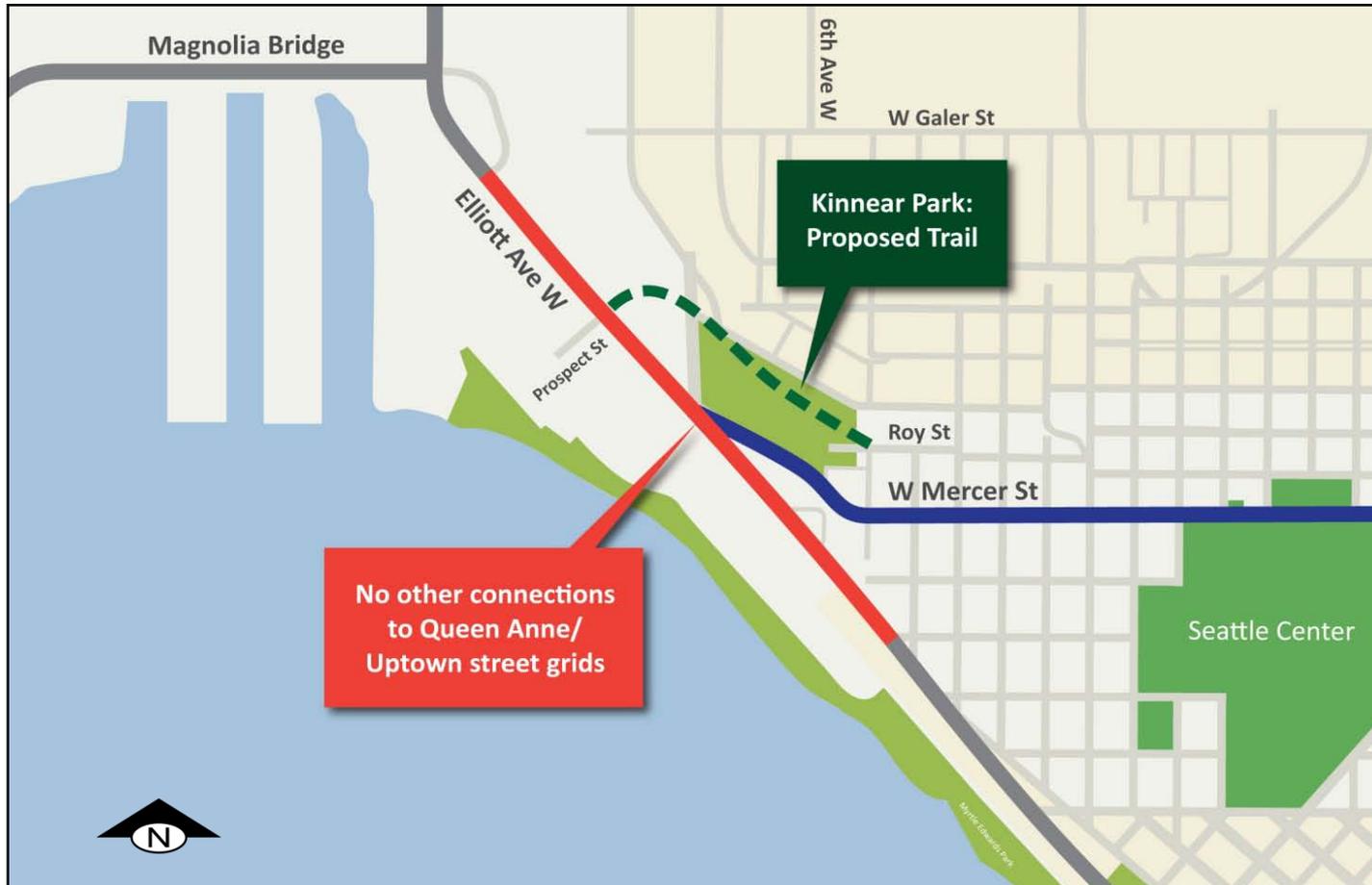
AWV Replacement / Bored Tunnel

- Mercer connects to SR 99 & I-5
- Elliott connects to Alaskan Way





Limited pedestrian and bicycle connections No sidewalks or bike lanes on West Mercer Place





Left-turn lanes back up into through lanes

Existing Slide Area

Residential Neighborhood

Kinnear Park

ELLIOTT AVE W

WEST MERCER PL

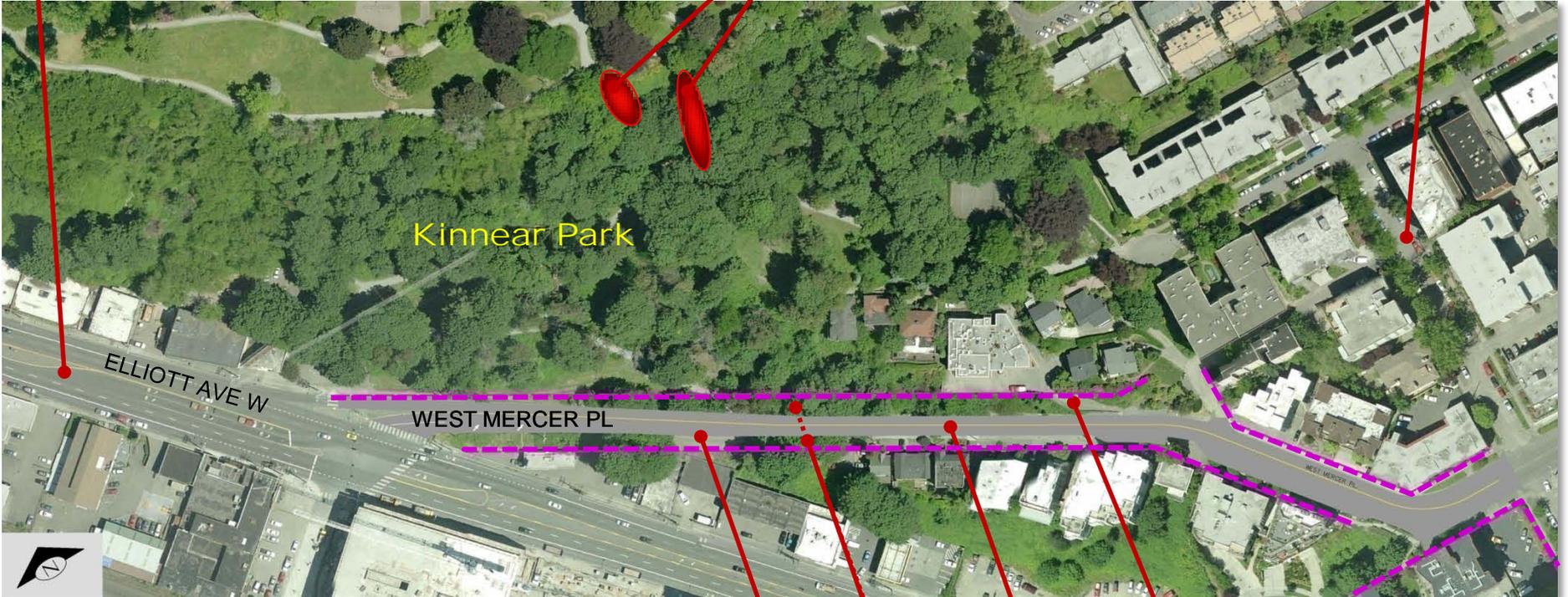
Steep Driveway

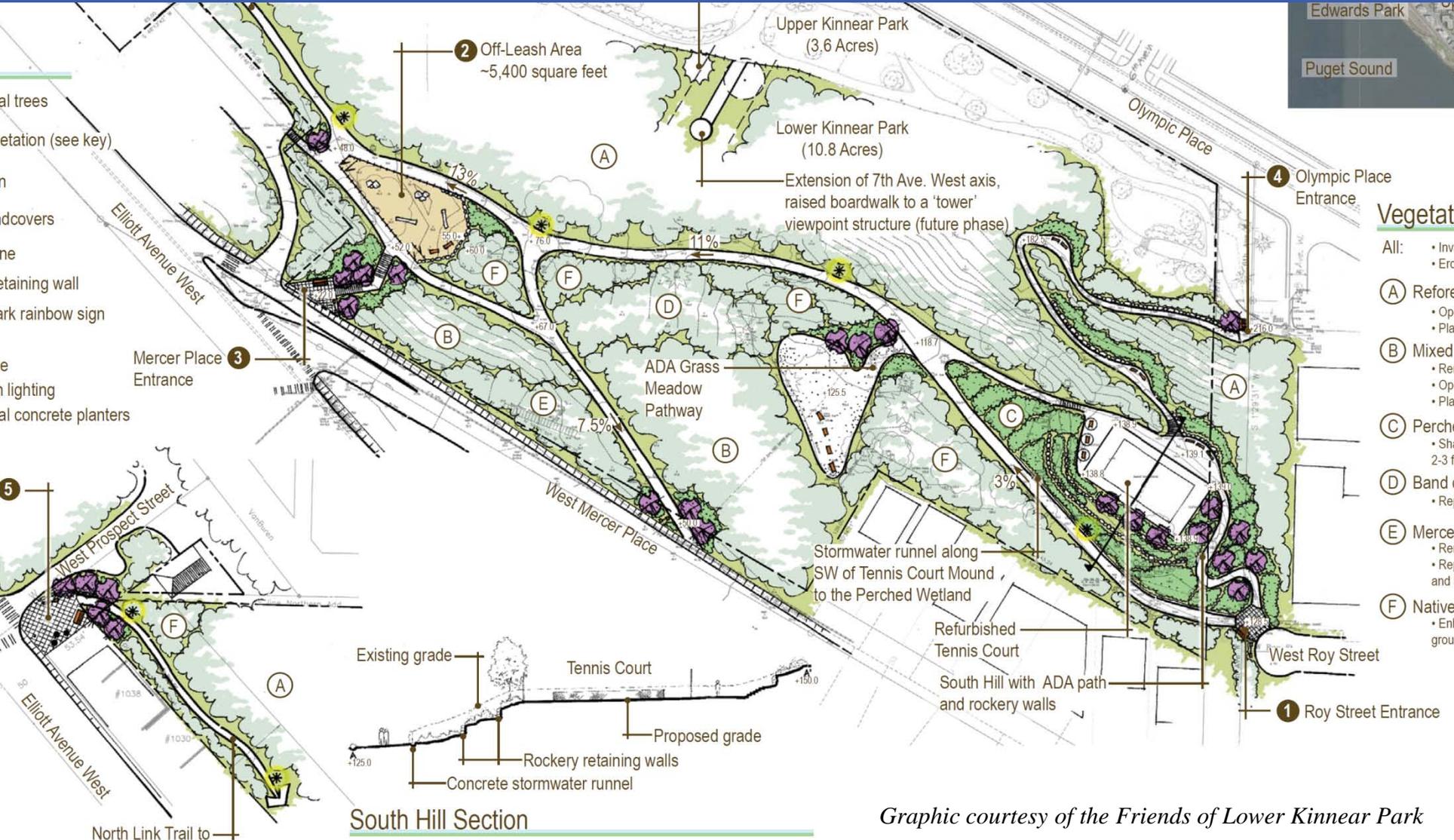
Grades Up to 8%

Merge Point

No Sidewalks

----- = SDOT-owned Right-of-Way





Graphic courtesy of the Friends of Lower Kinnear Park



Potential Benefits:

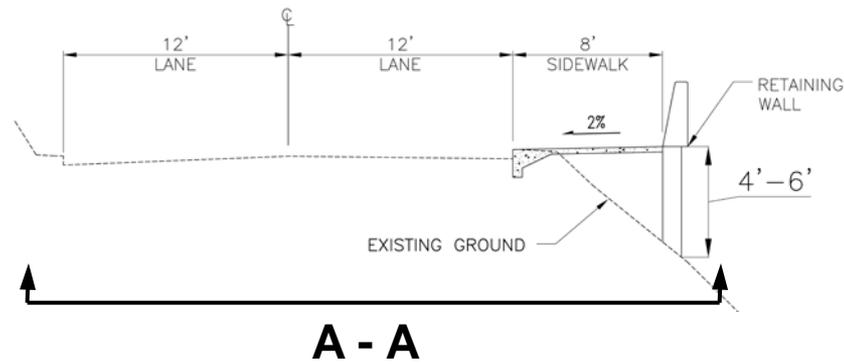
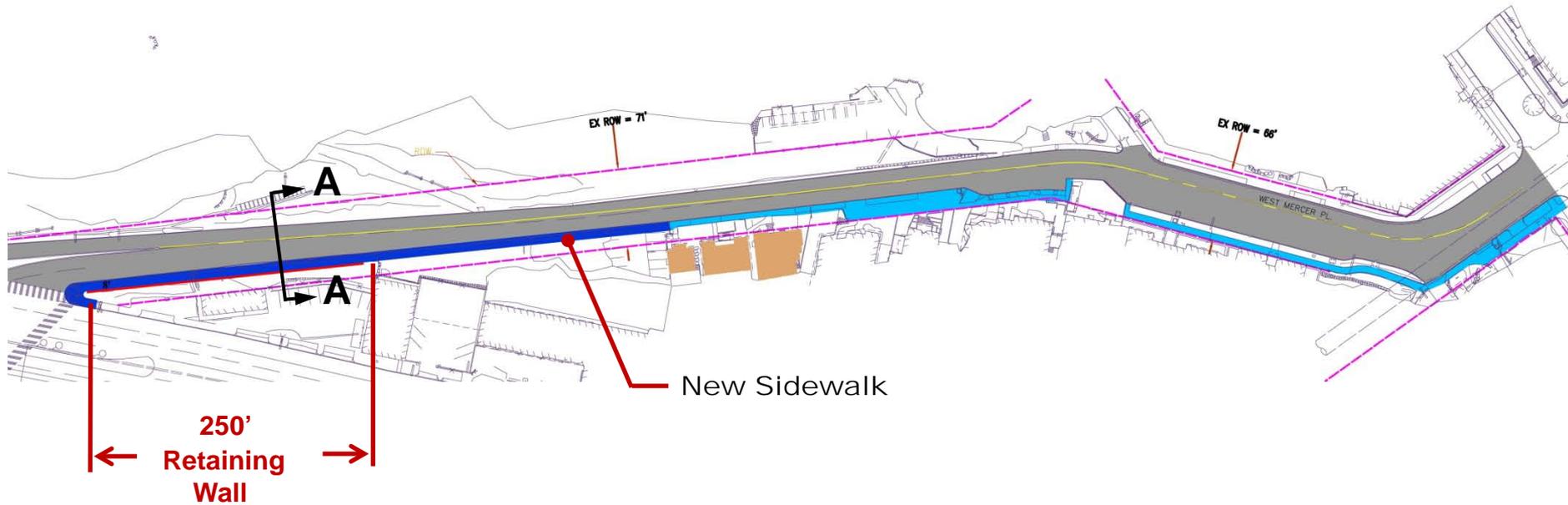
- Improve pedestrian and bicycle connection with Uptown
- Reduce Delay
 - Mercer Street
 - Elliott Ave W

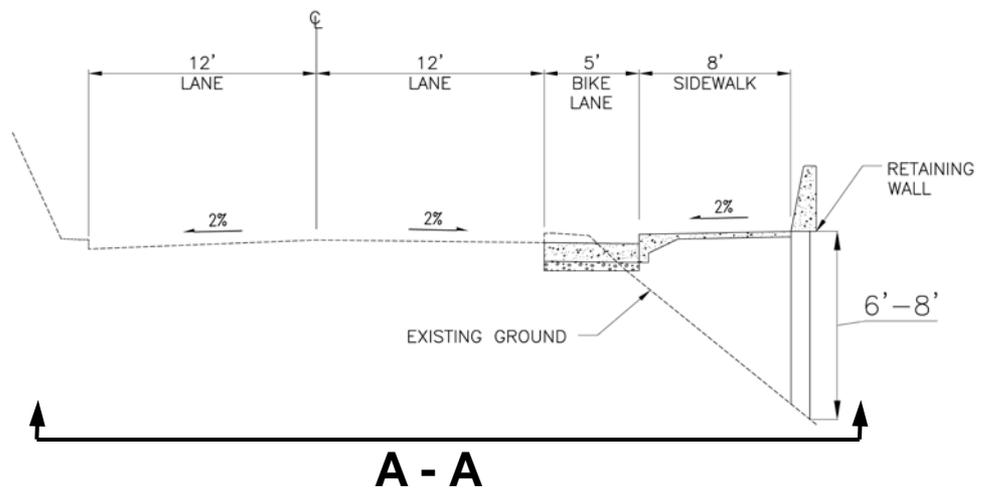
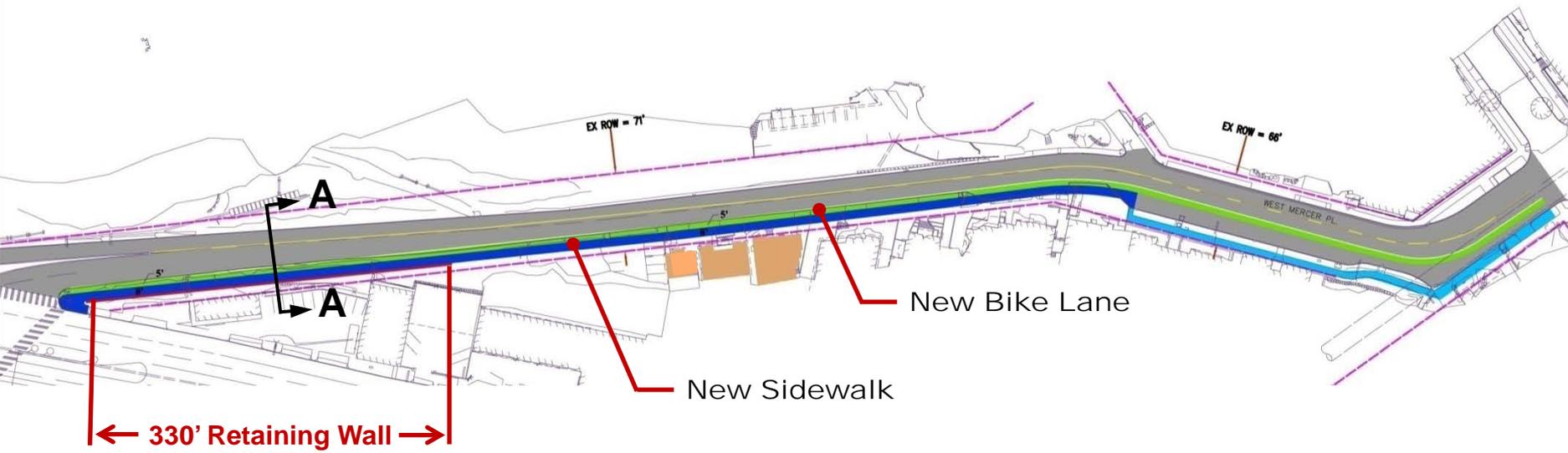
Potential Consequences:

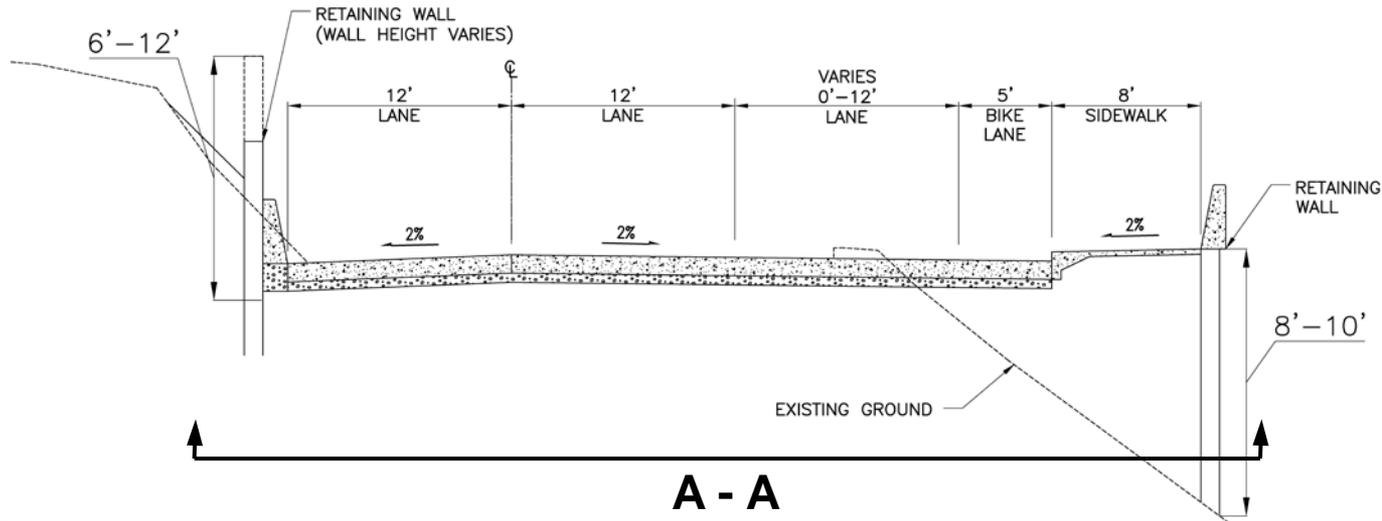
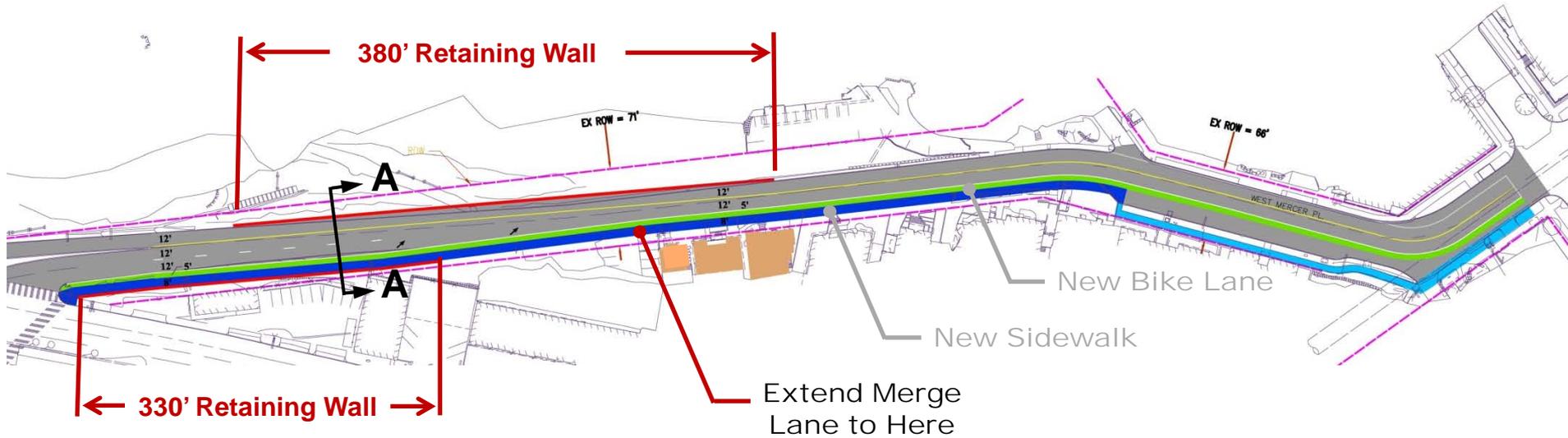
- Kinnear Park
- Parking and Access
- Walls
- Noise
- Cost

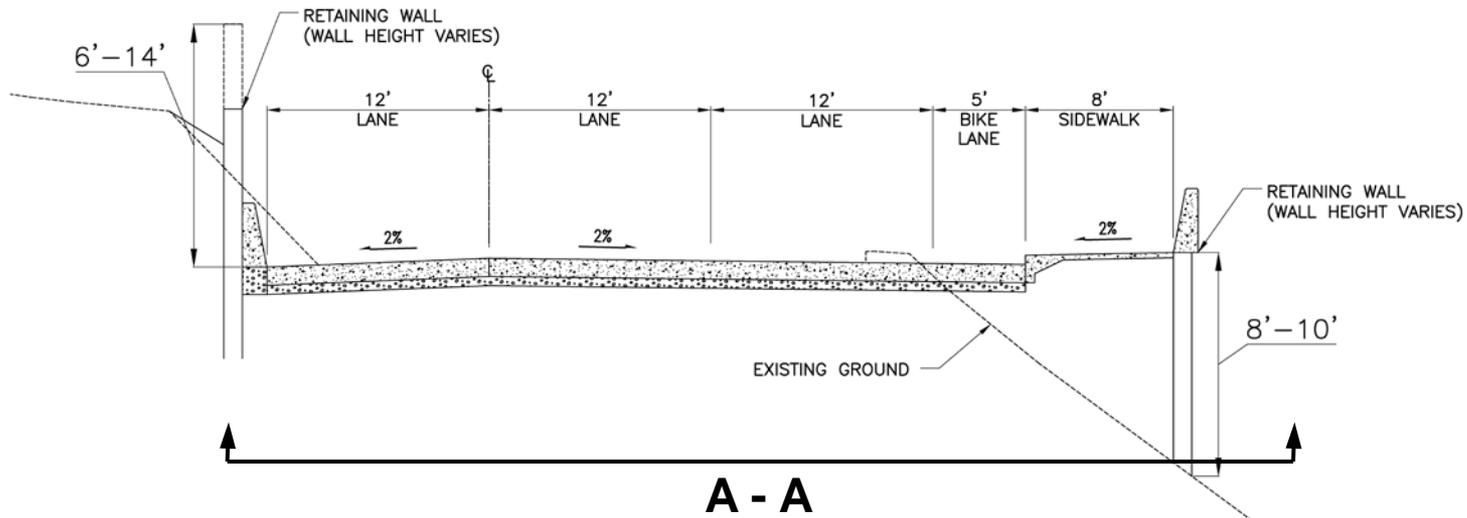
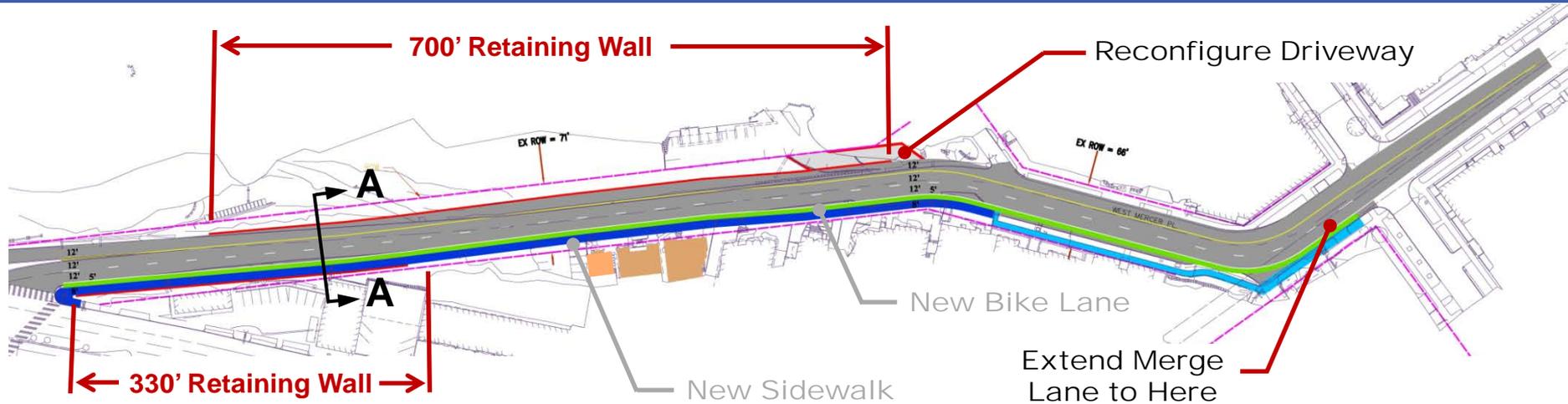


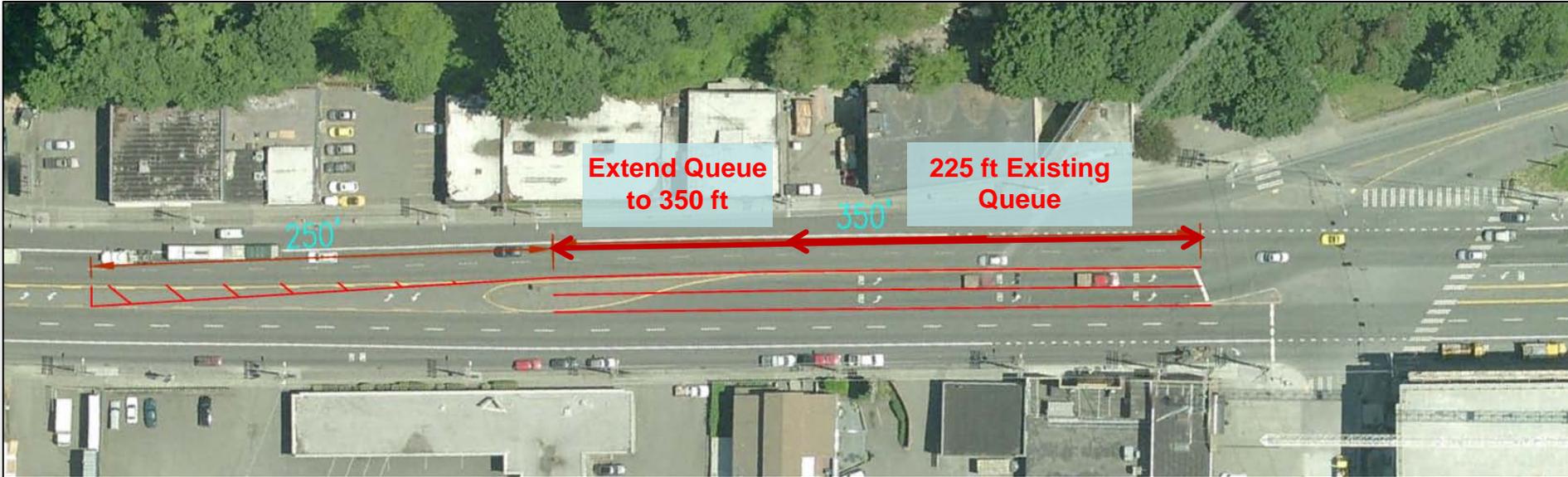












Extend the southbound left-turn lanes on Elliott Ave W

- Reduce delay
- Reduce back-up on Elliott Ave W



Traffic Modeling Includes:

SR 99 Bored Tunnel

- Waterfront construction with Tunnel open (2016-2017)
- Tunnel and Waterfront complete (2018)
- Twenty-year growth (2030)

Nickerson St / Dexter Ave N

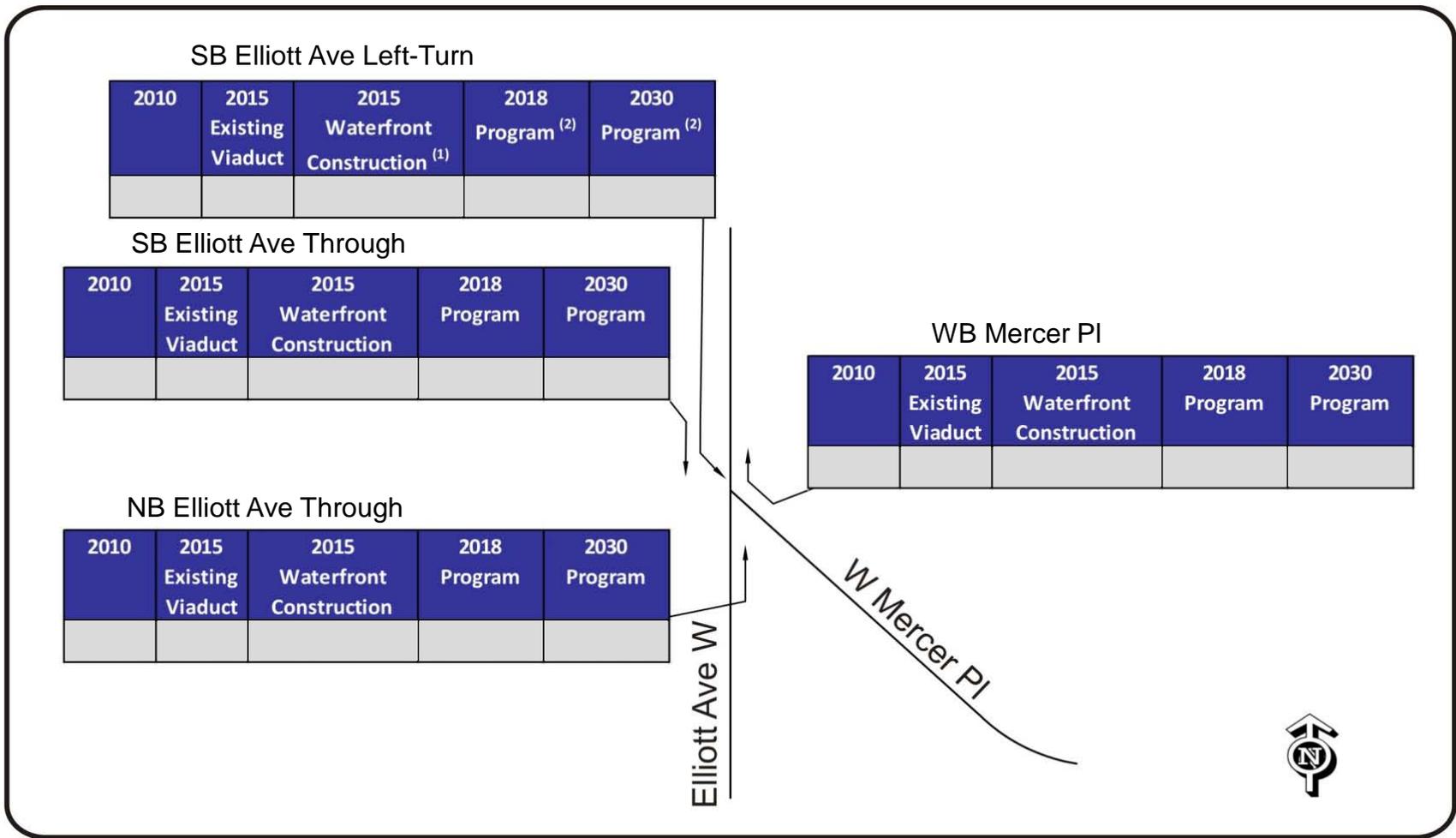
Population and Employment Growth

- Regional PSRC Forecasts
- Consistent with the Seattle Comprehensive Plan
- POS North Bay Alternative 4 (Industrial Development under existing zoning)
- 635 Elliott Ave

Truck Volumes

Cruise ship operations during the summer months

RapidRide



(1) "Waterfront Construction" = Tunnel is open to traffic. Construction on surface Alaskan Way.

(2) "Program" = Tunnel open with surface Alaskan Way, Elliott/Western, and Mercer West Two-Way Conversion completed.



AM

SB Elliott Ave Left-Turn

| 2010 | 2015 Existing Viaduct | 2015 Waterfront Construction ⁽¹⁾ | 2018 Program ⁽²⁾ | 2030 Program ⁽²⁾ |
|------|-----------------------------|---|--------------------------------|--------------------------------|
| 372 | 520 | 810 | 555 | 600 |

SB Elliott Ave Through

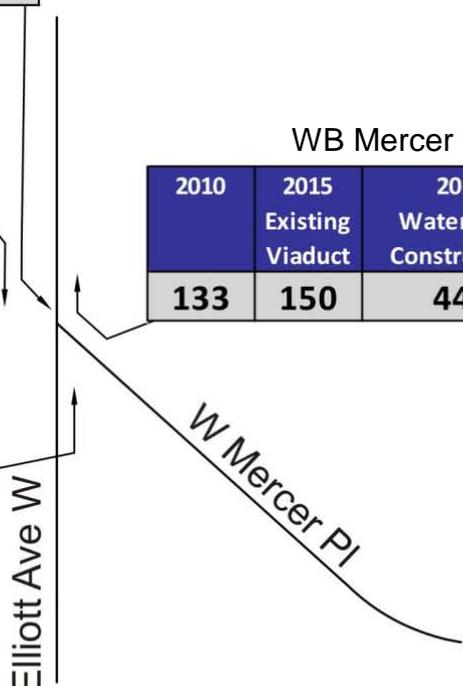
| 2010 | 2015 Existing Viaduct | 2015 Waterfront Construction | 2018 Program | 2030 Program |
|------|-----------------------------|------------------------------------|-----------------|-----------------|
| 2229 | 2200 | 2195 | 2395 | 2450 |

NB Elliott Ave Through

| 2010 | 2015 Existing Viaduct | 2015 Waterfront Construction | 2018 Program | 2030 Program |
|------|-----------------------------|------------------------------------|-----------------|-----------------|
| 1097 | 1580 | 1300 | 1300 | 1500 |

WB Mercer PI

| 2010 | 2015 Existing Viaduct | 2015 Waterfront Construction | 2018 Program | 2030 Program |
|------|-----------------------------|------------------------------------|-----------------|-----------------|
| 133 | 150 | 445 | 490 | 660 |



- (1) "Waterfront Construction" = Tunnel is open to traffic. Construction on surface Alaskan Way.
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PM

SB Elliott Ave Left-Turn

| 2010 | 2015 Existing Viaduct | 2015 Waterfront Construction ⁽¹⁾ | 2018 Program ⁽²⁾ | 2030 Program ⁽²⁾ |
|------|-----------------------------|---|--------------------------------|--------------------------------|
| 370 | 475 | 700 | 610 | 610 |

SB Elliott Ave Through

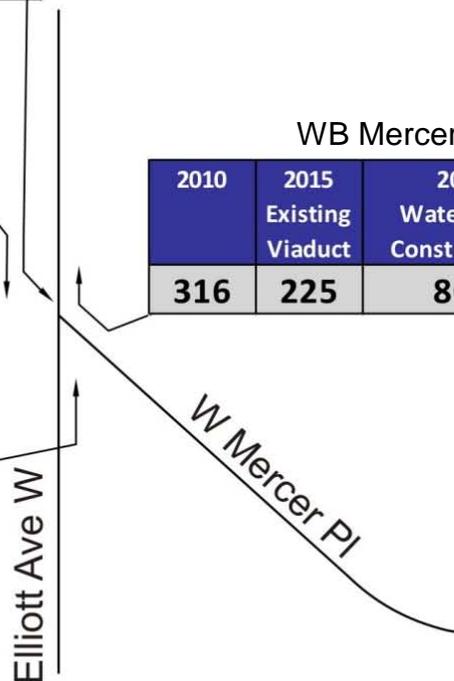
| 2010 | 2015 Existing Viaduct | 2015 Waterfront Construction | 2018 Program | 2030 Program |
|------|-----------------------------|------------------------------------|-----------------|-----------------|
| 1434 | 1300 | 1250 | 1600 | 1650 |

NB Elliott Ave Through

| 2010 | 2015 Existing Viaduct | 2015 Waterfront Construction | 2018 Program | 2030 Program |
|------|-----------------------------|------------------------------------|-----------------|-----------------|
| 2326 | 2550 | 2250 | 2450 | 2570 |

WB Mercer PI

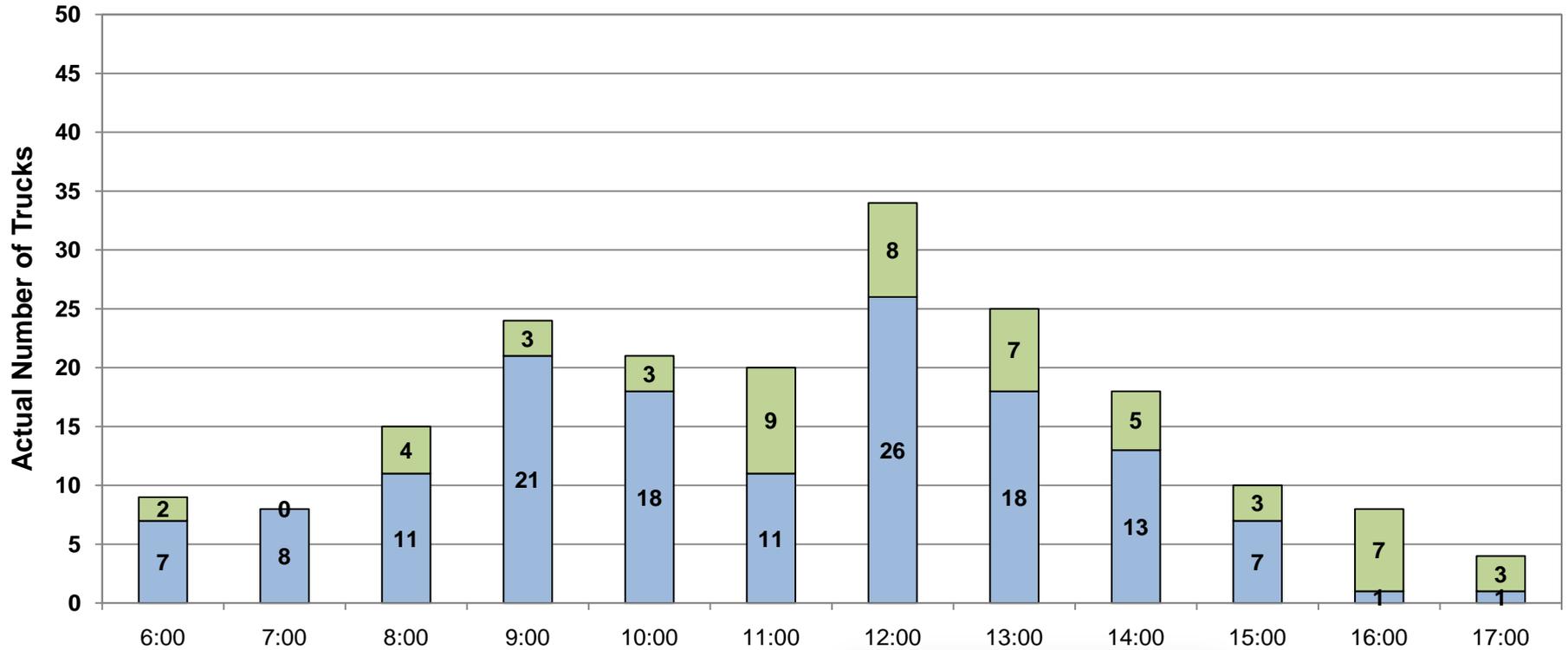
| 2010 | 2015 Existing Viaduct | 2015 Waterfront Construction | 2018 Program | 2030 Program |
|------|-----------------------------|------------------------------------|-----------------|-----------------|
| 316 | 225 | 800 | 590 | 590 |



- (1) "Waterfront Construction" = Tunnel is open to traffic. Construction on surface Alaskan Way.
- (2) "Program" = Tunnel open with surface Alaskan Way, Elliott/Western, and Mercer West Two-Way Conversion completed.



West Mercer Place / East of Elliott Avenue West



Trailer Truck



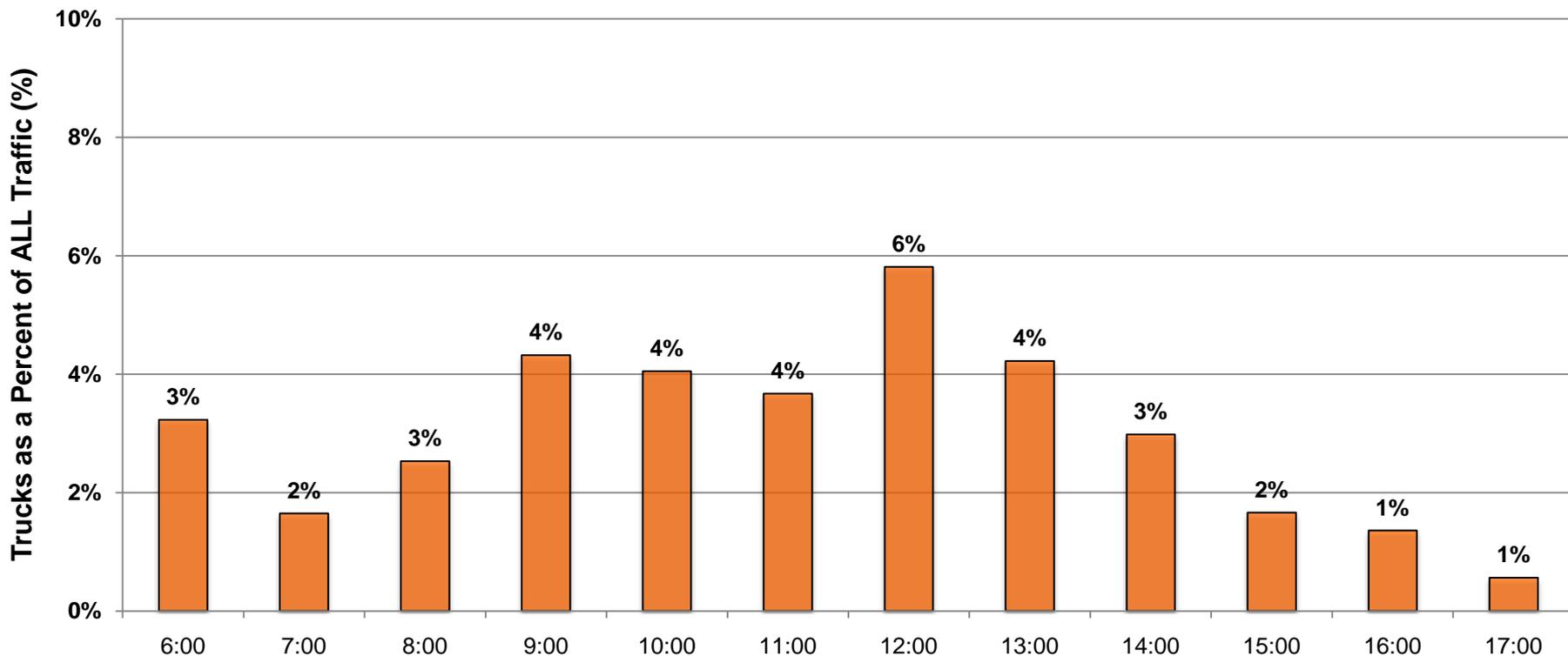
Single Unit Truck



Data Collected September 2010
(after the Nickerson St. road diet)



West Mercer Place / East of Elliott Avenue West



Data Collected September 2010
(after the Nickerson St. road diet)

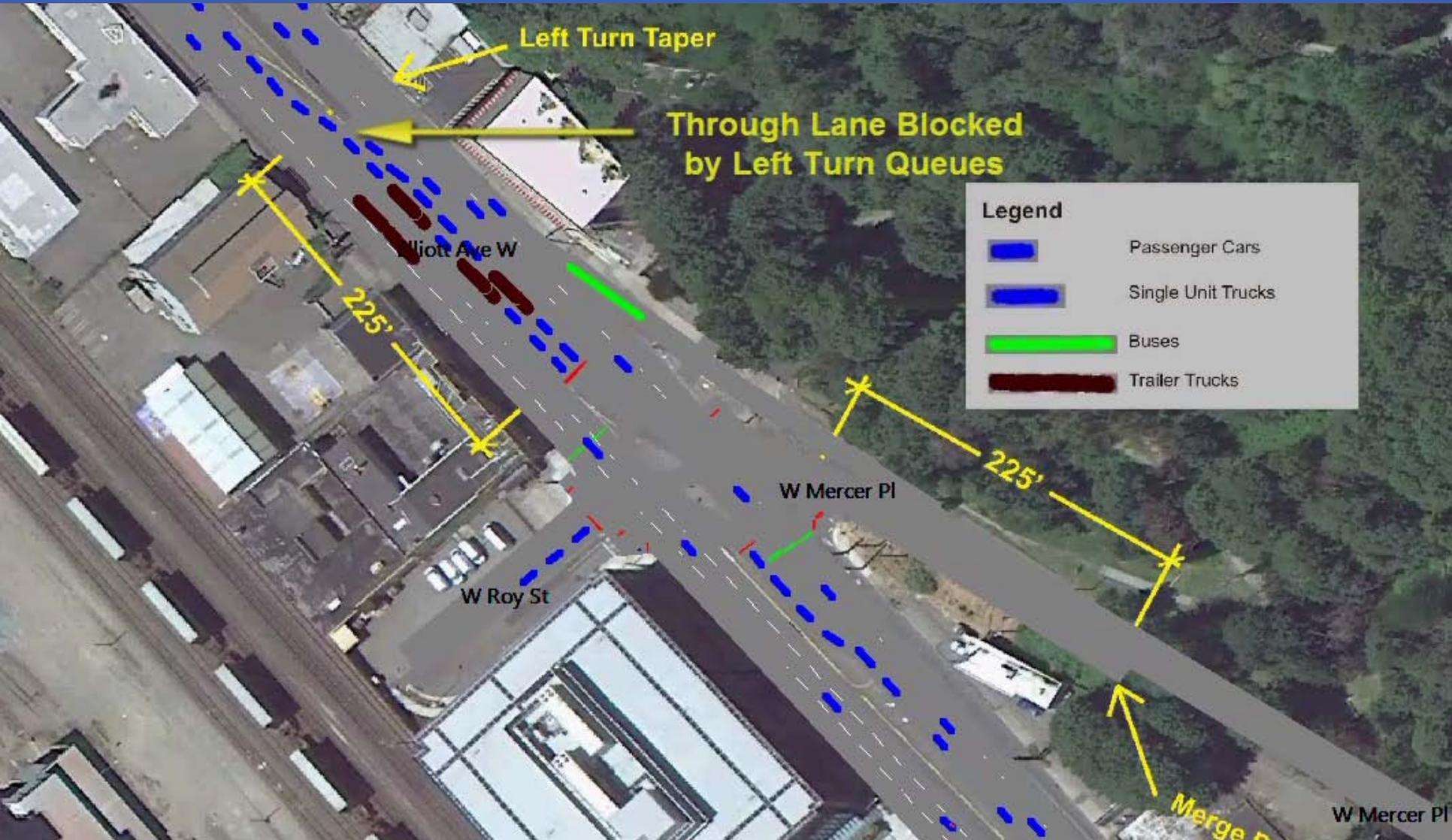
Assumption for analysis: Trucks make up 5% of future a.m. peak period traffic volume on West Mercer Place.



| Future Condition: | | Alternative 3: Extend merge lane <u>half</u> way up the hill. | Alternative 4: Extend merge lane <u>all</u> the way up the hill. | Alternative 5: Extend left-turn lanes on Elliott Ave W. * | Projected Travel Time: Elliott Ave W to I-5 <i>without improvements on West Mercer Place</i> |
|--|-------------------|---|---|---|--|
| | | [Seconds saved] | [Seconds saved] | [Seconds saved] | |
| 2016: AM Peak Waterfront construction with Tunnel open. | Autos: Trucks: | 0 (0) 0 (0) | 1 (1) 4 (3) | 43 (41) * 52 (41) * | 8 minutes (480 seconds) |
| 2018: AM Peak Tunnel and Waterfront Complete. | Autos: Trucks: | 0 (0) 0 (0) | 3 (3) 5 (5) | 4 (4) * 5 (5) * | |
| 2030: AM Peak Future condition. | Autos: Trucks: | 0 (0) 0 (0) | 2 (2) 5 (5) | 6 (7) * 13 (14) * | 7 minutes (420 seconds) |

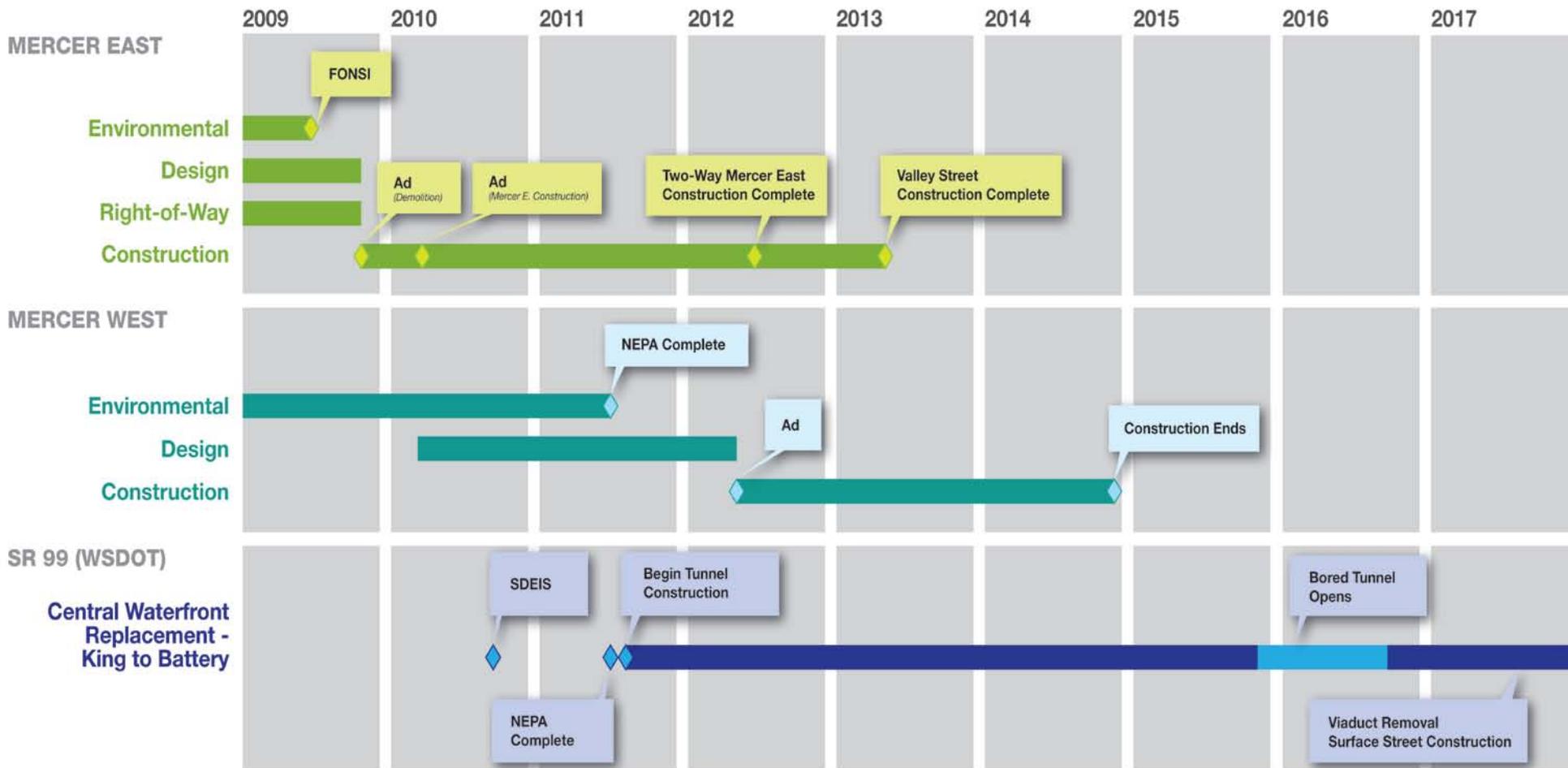
Cruise ship traffic volume travel time savings are shown in (parenthesis).

* Assuming existing merge condition on West Mercer Place.





| | Alternative 1: Add - 8 ft sidewalk. | Alternative 2: Add - 8 ft sidewalk, - 5 ft bike lane. | Alternative 3: Add - 8 ft sidewalk, - 5 ft bike lane, - Extend merge lane half way up the hill. | Alternative 4: Add - 8 ft sidewalk, - 5 ft bike lane, - Extend merge lane all the way up the hill. | Alternative 5: Extend left-turn lanes on Elliott Ave W |
|--------------------------------|--|---|---|--|--|
| Travel Time Reduction: | 0 seconds | 0 seconds | 0 seconds | 1-5 seconds | 4-52 seconds |
| Kinnear Park Vehicle Entrance: | - | - | Modified | Modified | - |
| Parking (approx # of spaces): | 4 | 11 | 11 | 23 / 4 | - |
| Wall length: | 250 ft south | 330 ft south | 330 ft south 380 ft north | 330 ft south 700 ft north | - |
| Noise: | - | - | Traffic lanes closer to homes | Traffic lanes closer to homes | - |
| Estimated Cost: | \$2.7 Mil | \$4.2 Mil | \$8.0 Mil | \$12.9 Mil | \$0.2 Mil |



July 28, 2010

If you have any questions, please visit:

http://www.seattle.gov/transportation/mercercer_west.htm

Or contact:

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(206) 684-8834



QR code for the web site