

ITEM NO: 7a\_supp

DATE OF  
MEETING: May 10, 2011

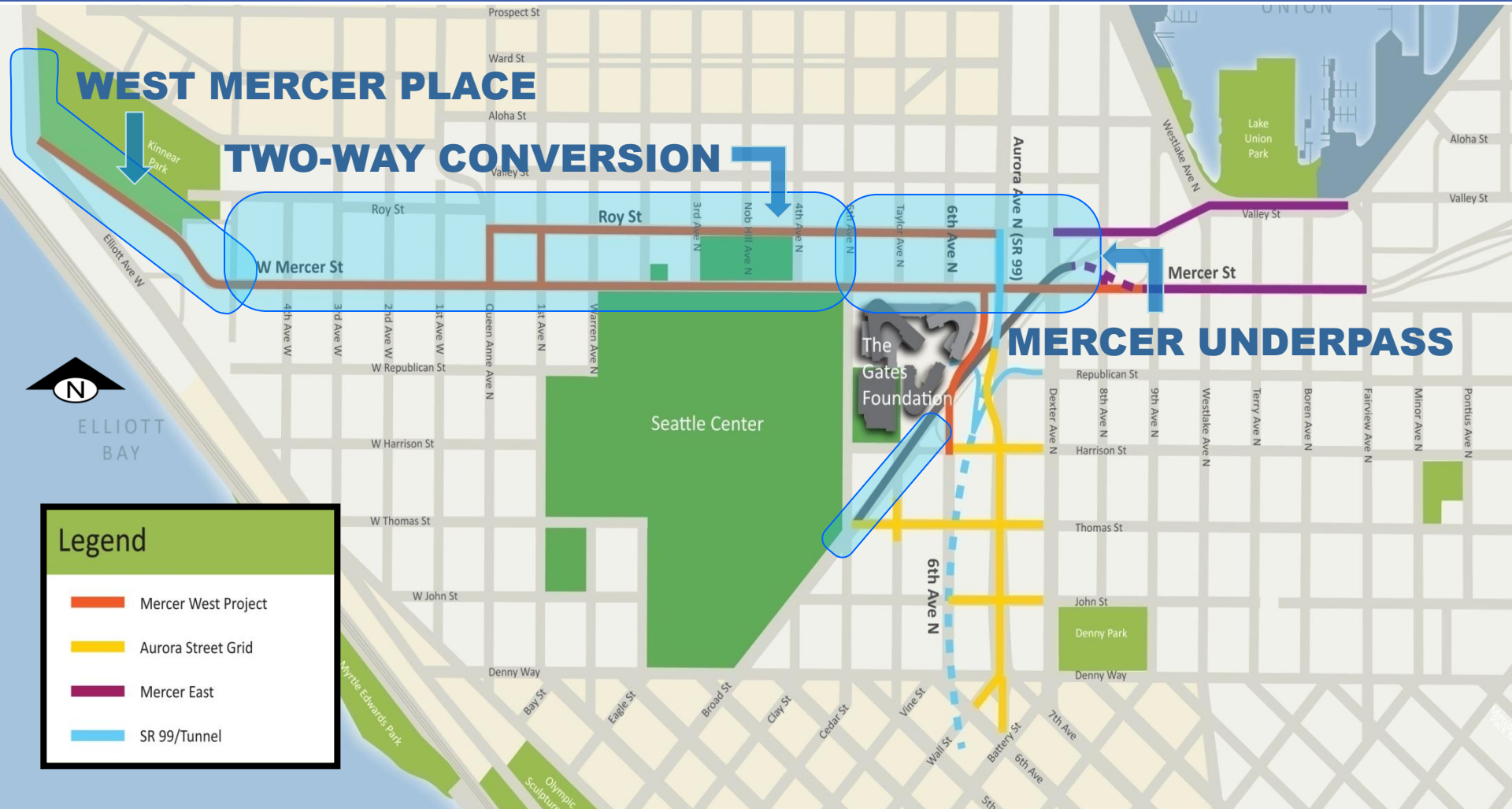


# MERCER WEST

West Mercer Place

Port of Seattle Commission

May 10, 2011



- 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



### 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

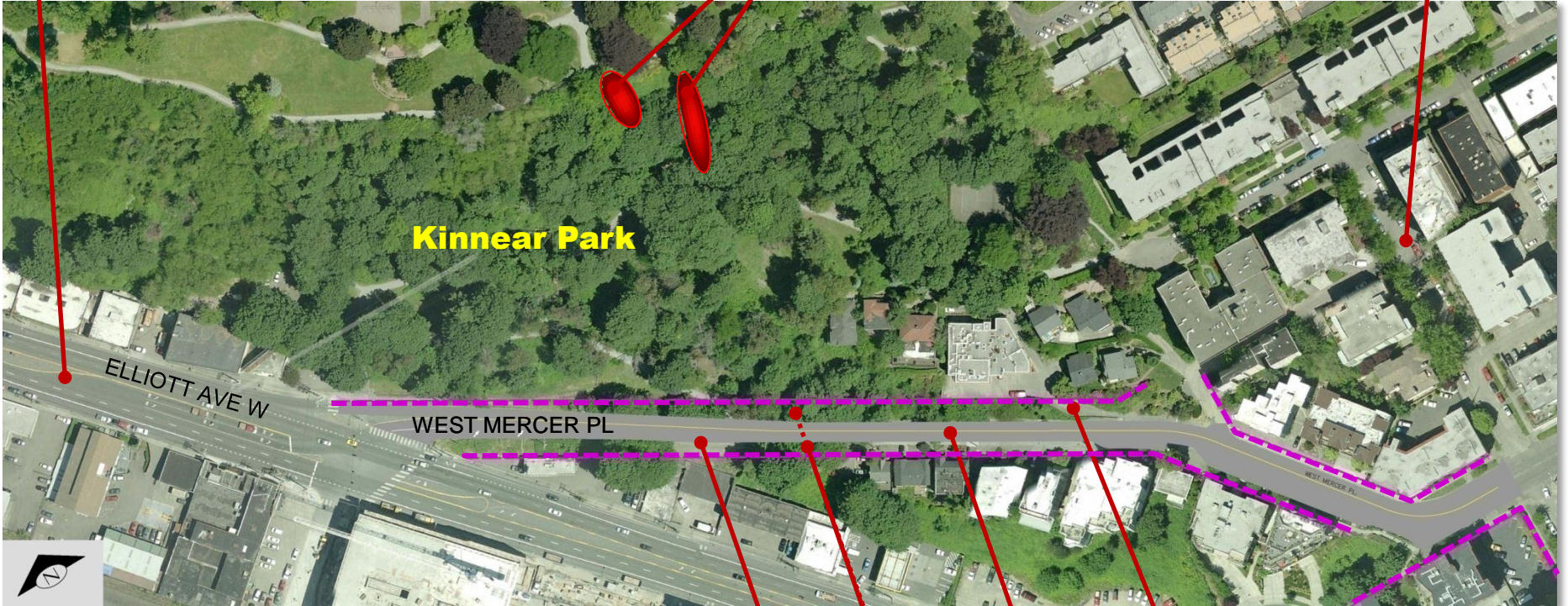
**Steep Driveway**

**Grades Up to 8%**

**Merge Point**

**No Sidewalks**

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





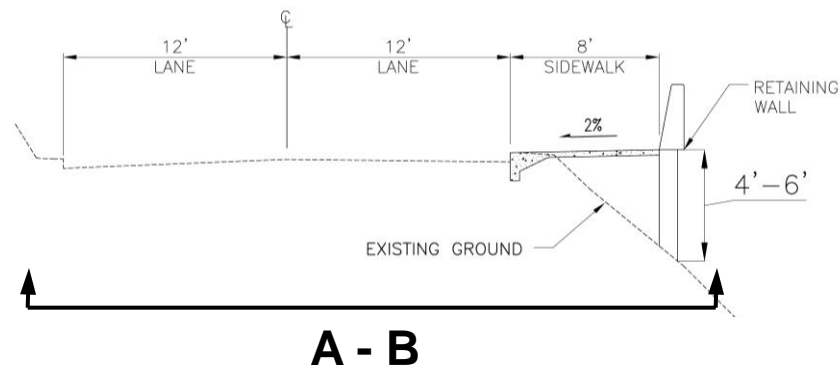
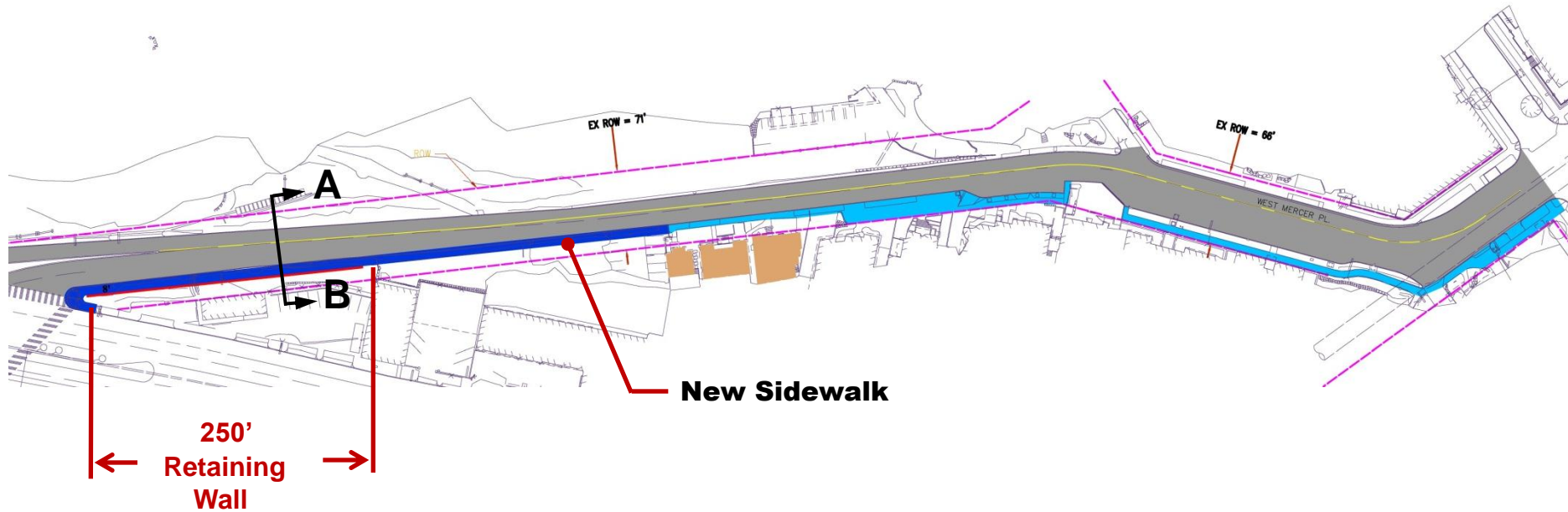


## Potential Benefits:

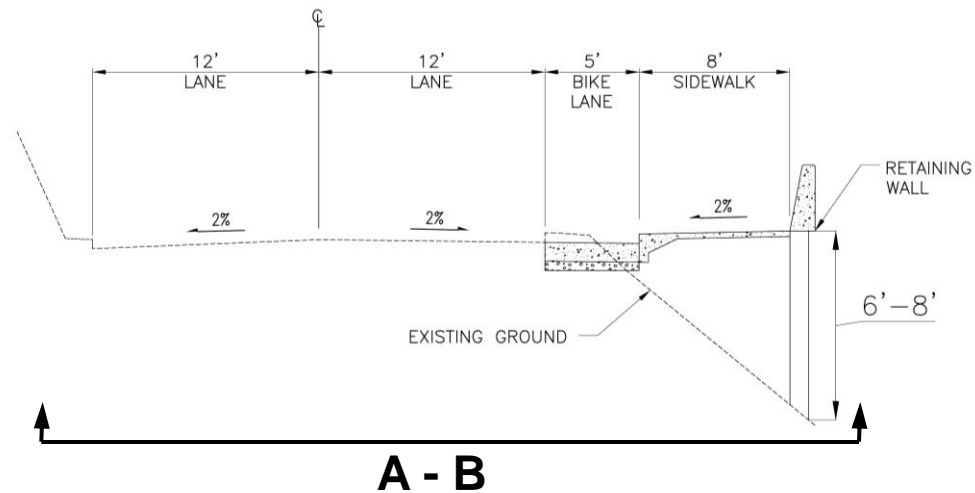
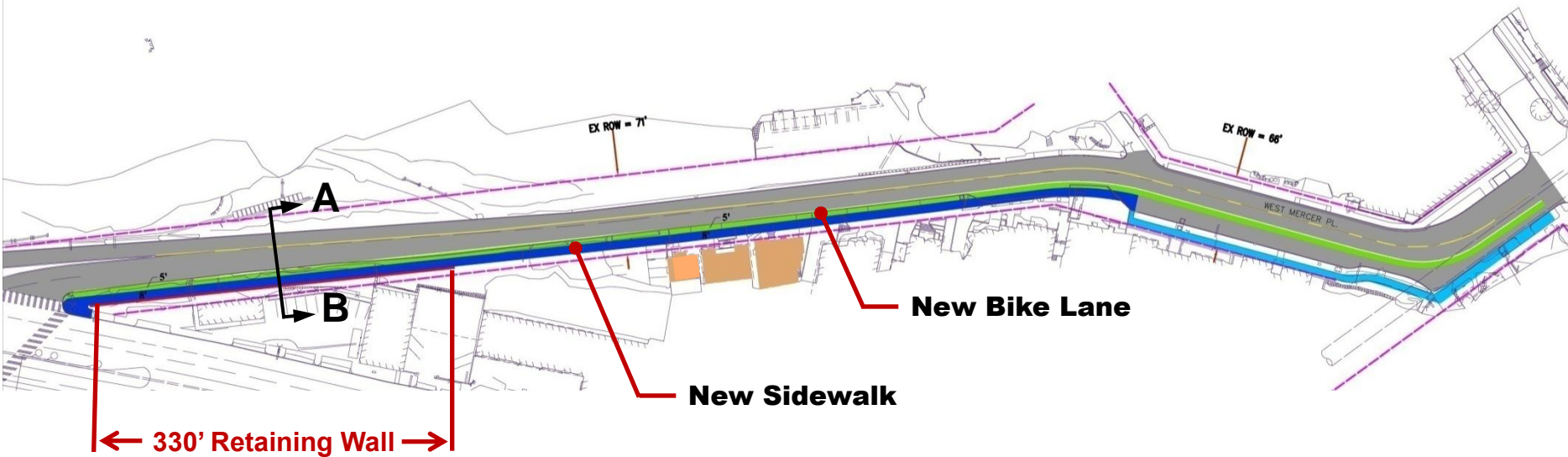
- **Improve pedestrian and bicycle connection with Uptown**
- **Reduce Delay**
  - **Mercer Street**
  - **Elliott Ave W**

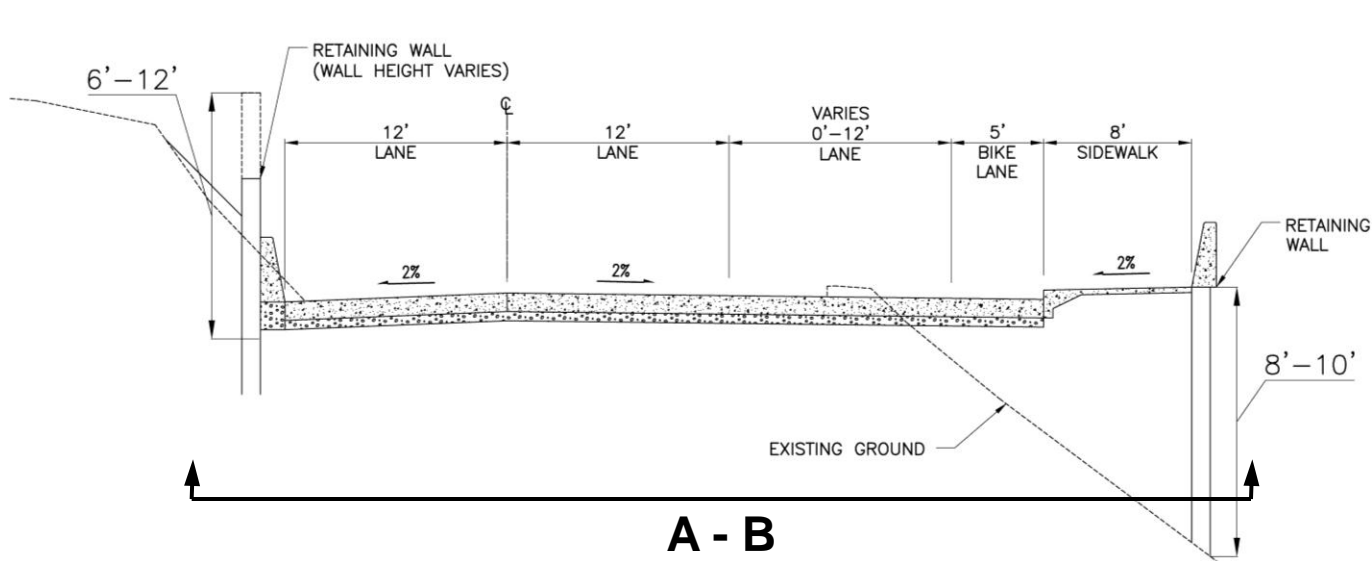
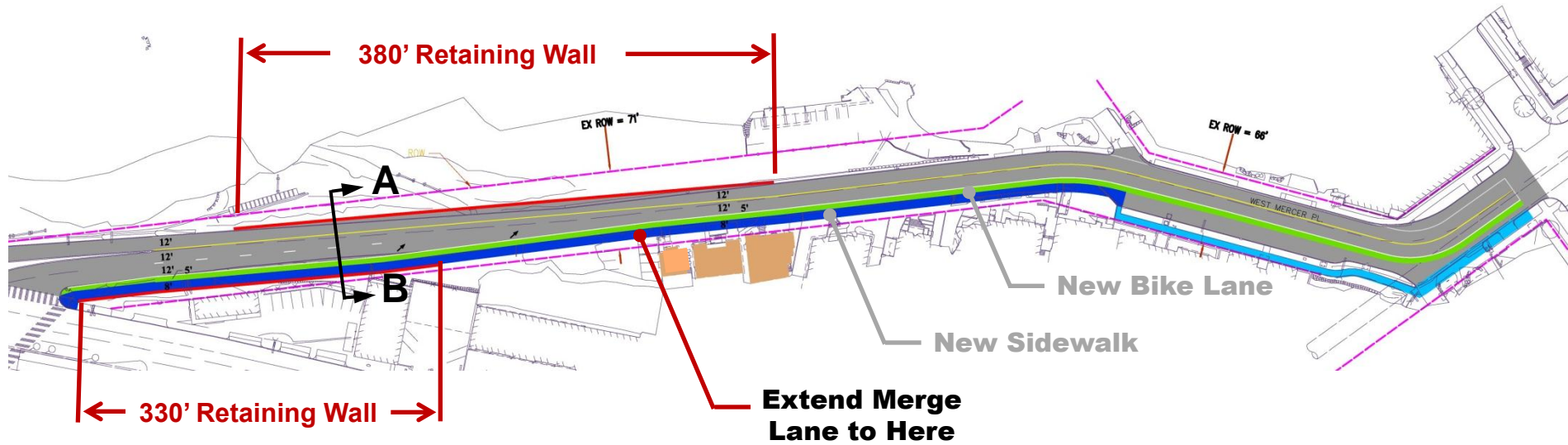
## Potential Consequences:

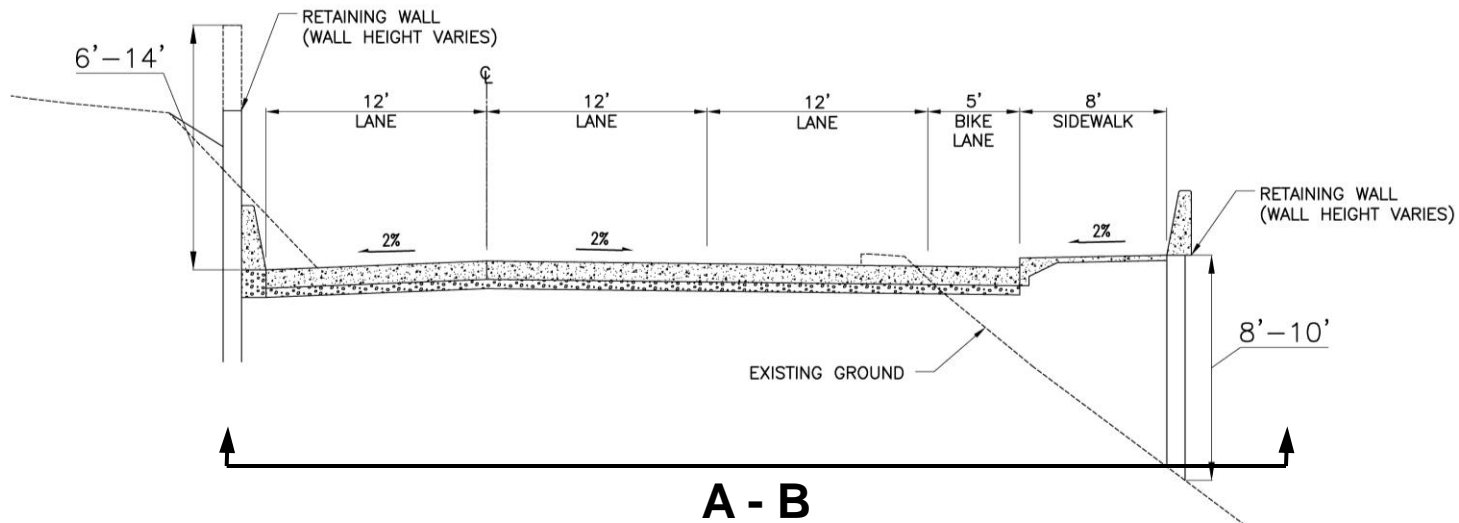
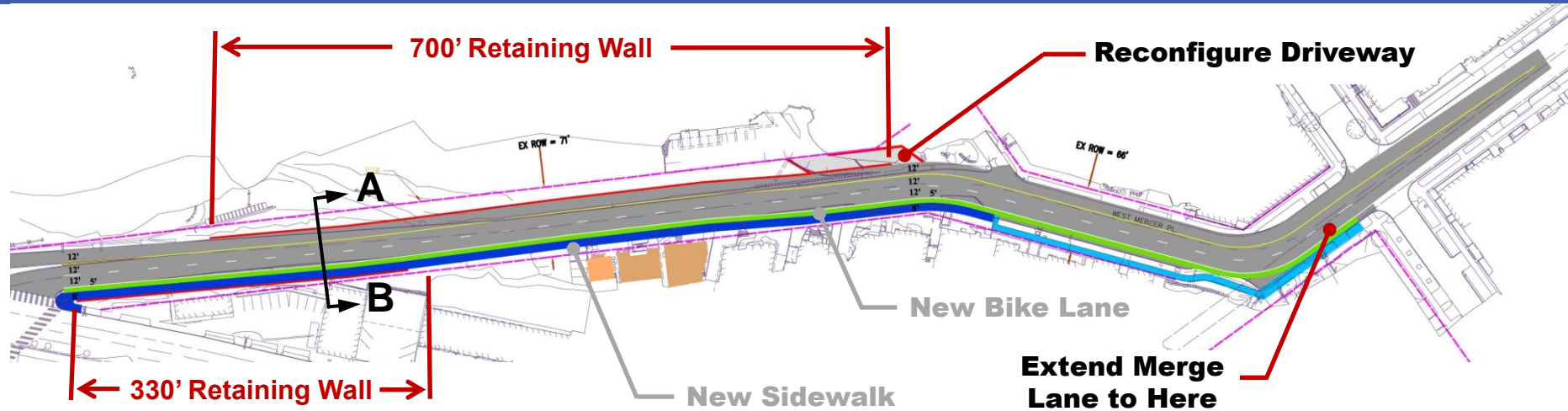
- **Kinnear Park**
- **Parking and Access**
- **Walls**
- **Noise**
- **Cost**

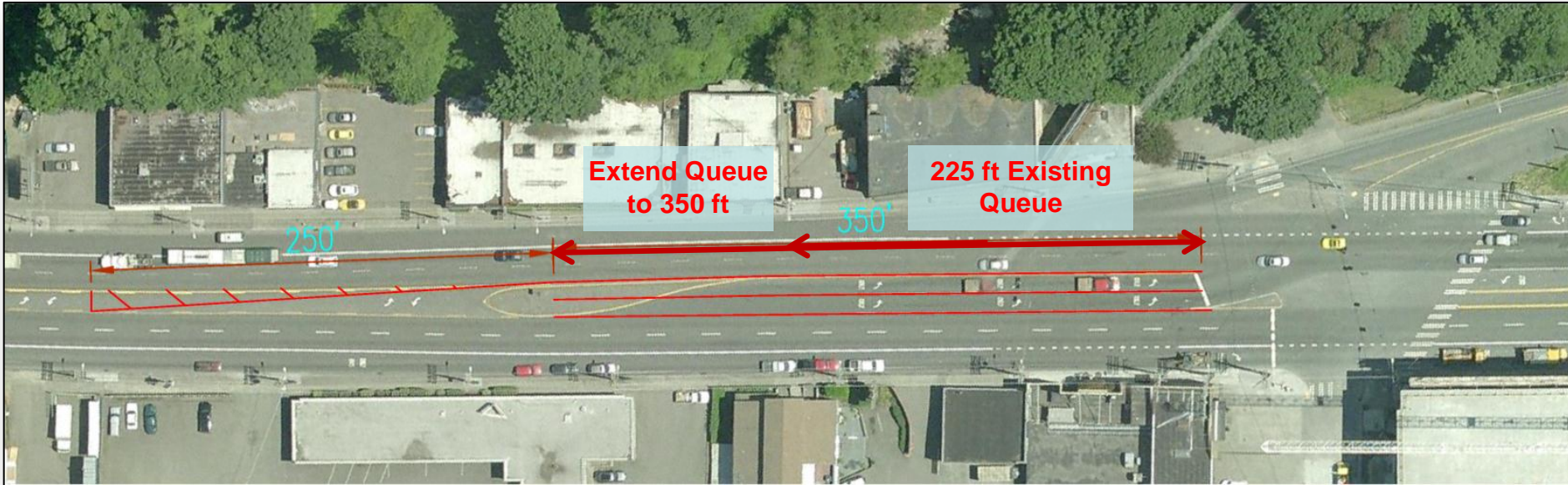












**Extend the southbound left-turn lanes on Elliott Ave W**  
Compatible with all alternatives, including existing condition

- 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

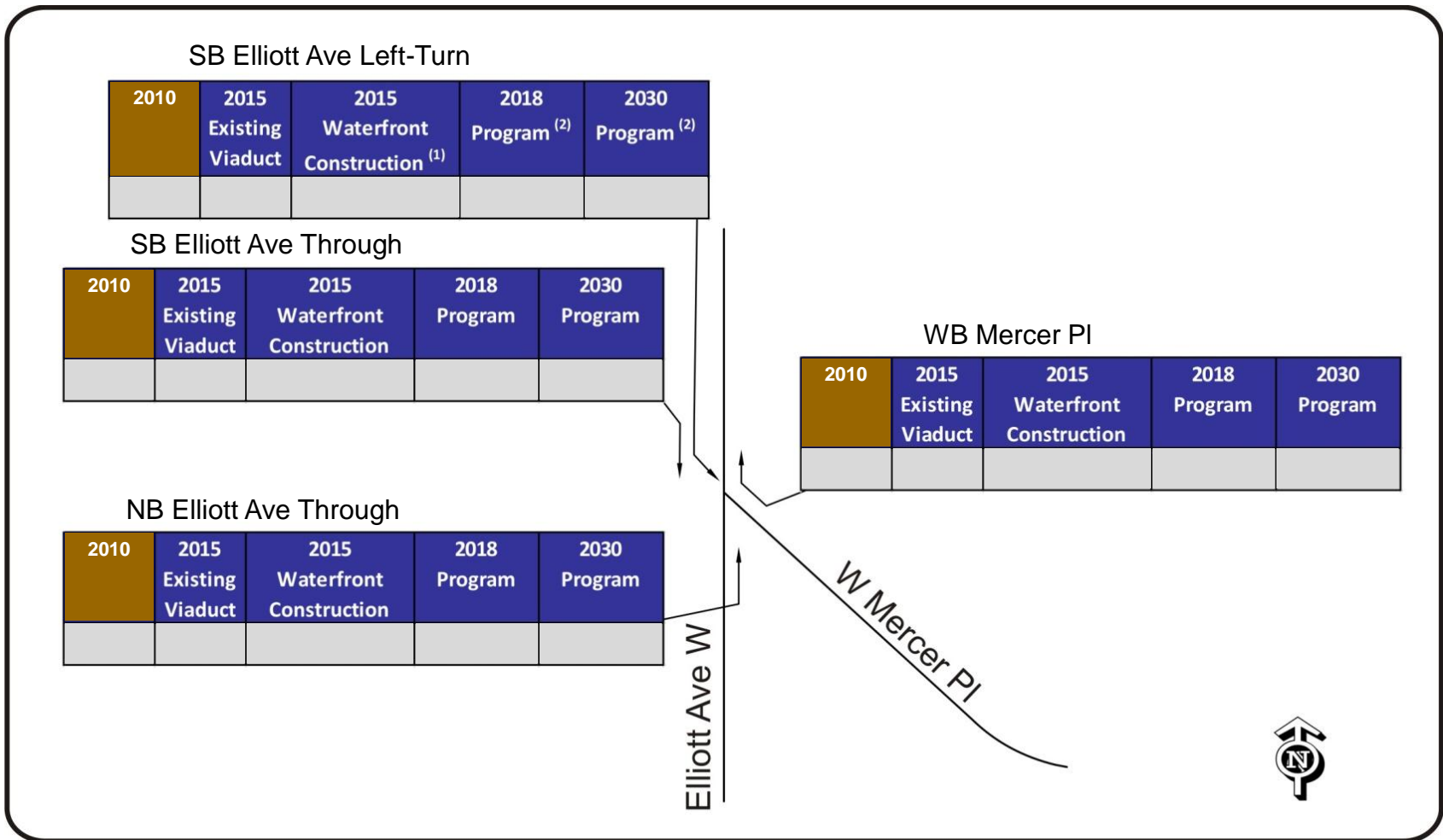
### Population and Employment Growth

- 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 <sup>(1)</sup>	2018 Program <sup>(2)</sup>	2030 Program <sup>(2)</sup>
372	520	810	555	600

### SB Elliott Ave Through

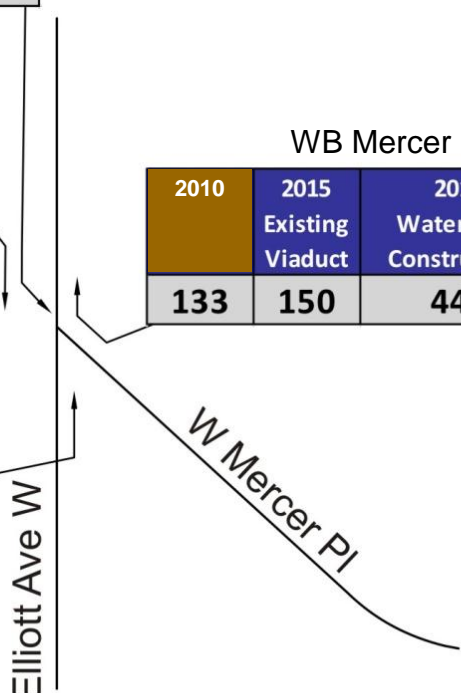
2010	2015 Existing Viaduct	2015 Waterfront Construction	2018 Program	2030 Program
2229	2200	2195	2395	2450

### 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.

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



# PM

### SB Elliott Ave Left-Turn

2010	2015 Existing Viaduct	2015 Waterfront Construction <sup>(1)</sup>	2018 Program <sup>(2)</sup>	2030 Program <sup>(2)</sup>
370	475	700	610	610

### SB Elliott Ave Through

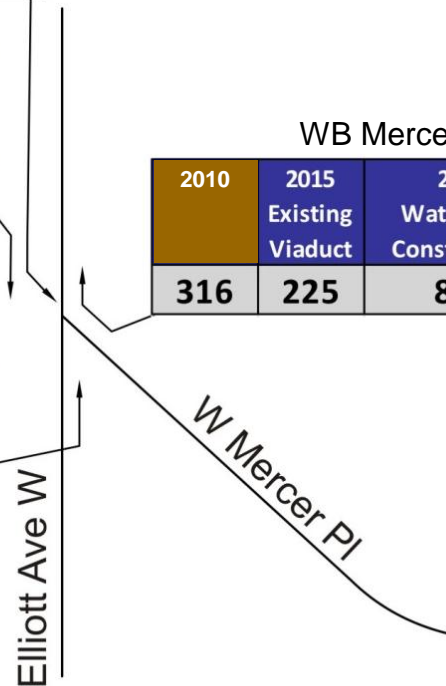
2010	2015 Existing Viaduct	2015 Waterfront Construction	2018 Program	2030 Program
1434	1300	1250	1600	1650

### 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



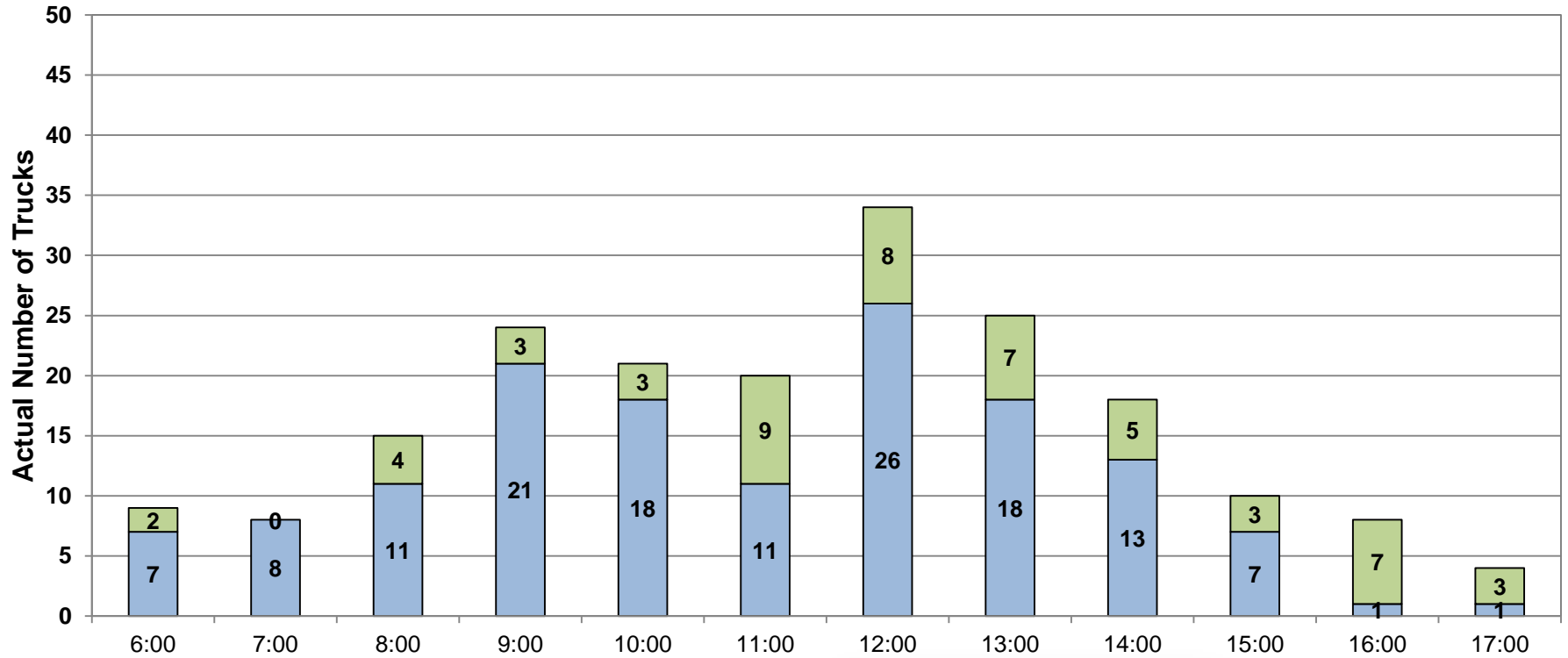
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### West Mercer Place / East of Elliott Avenue West



Trailer Truck



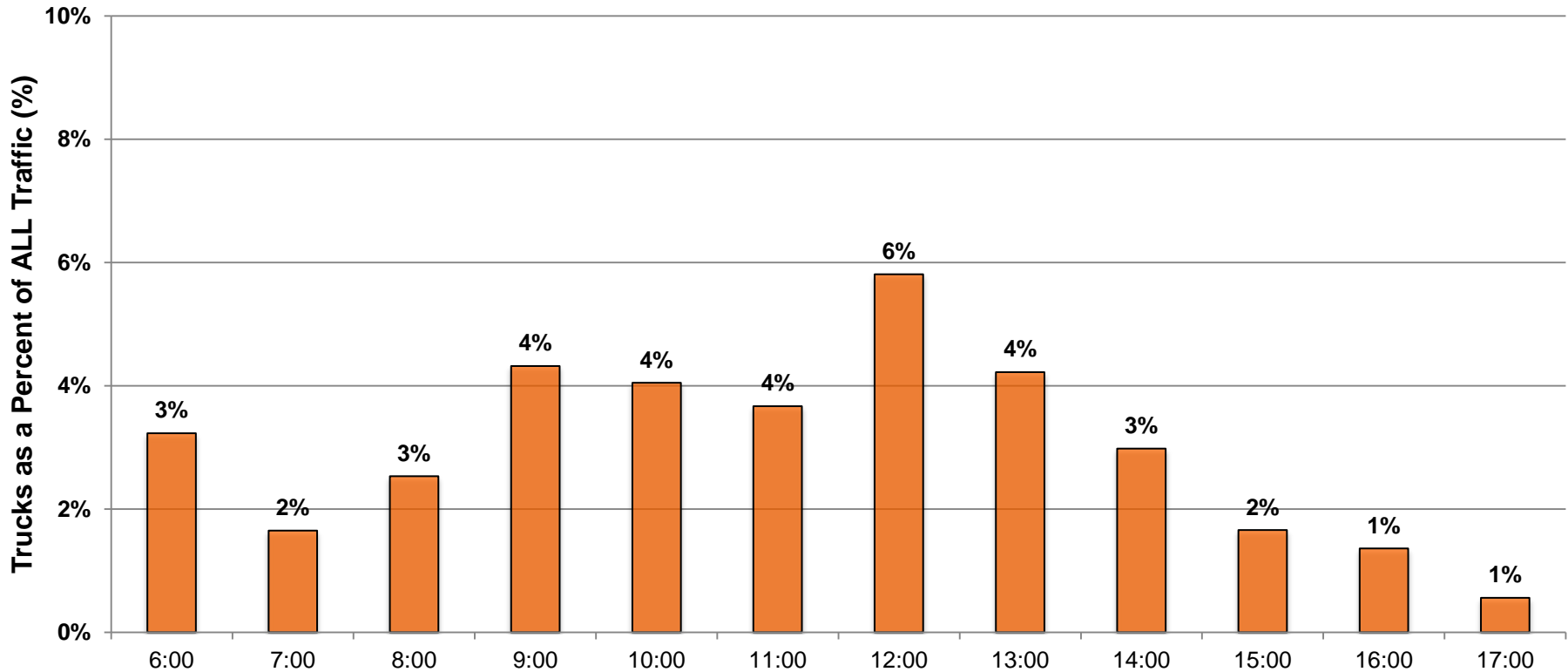
Single Unit Truck



Data Collected September 2010  
(after the Nickerson St. re-channelization)



## West Mercer Place / East of Elliott Avenue West



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

Data Collected September 2010  
(after the Nickerson St. re-channelization)

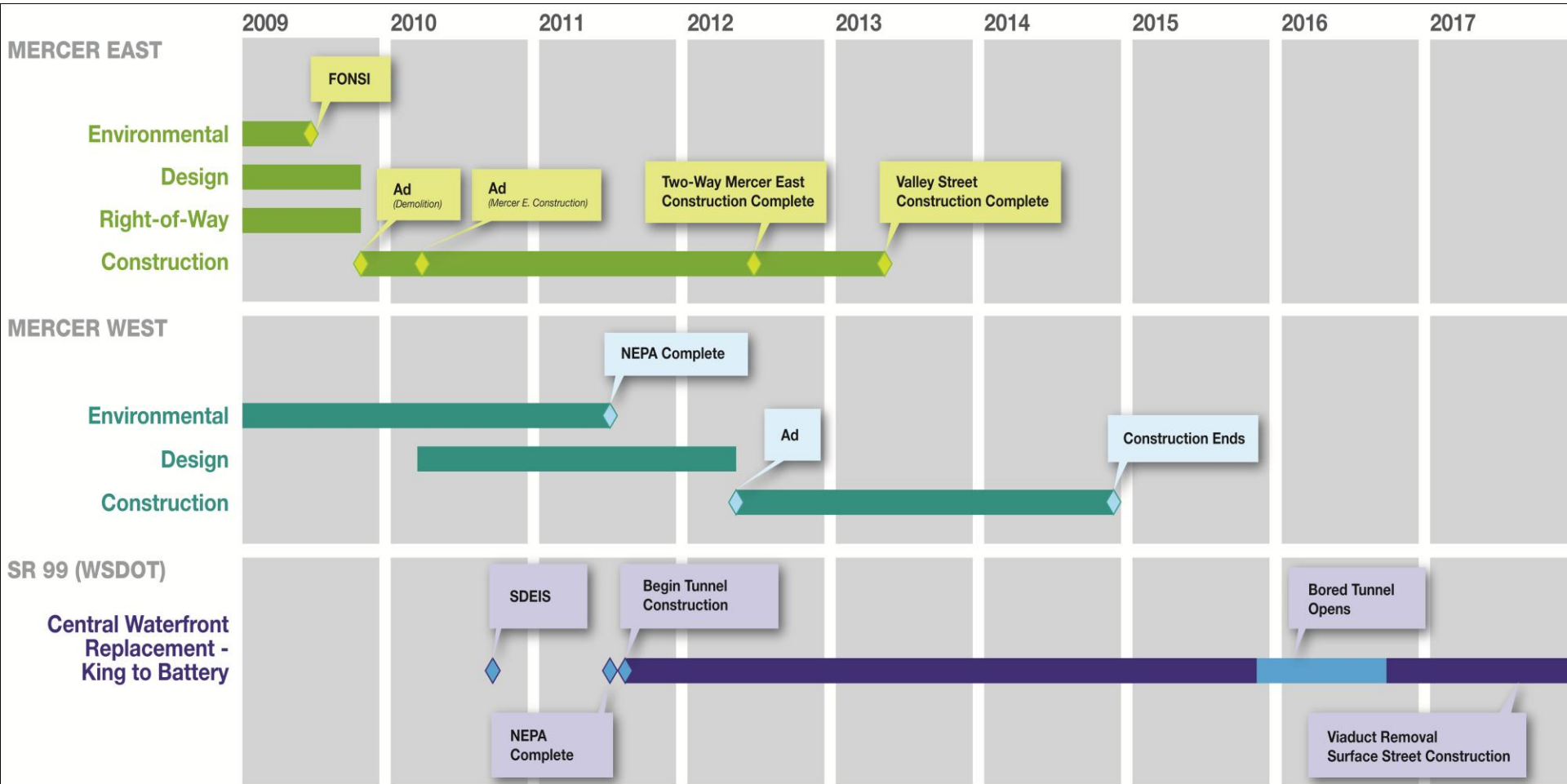
<b>Future Condition:</b>		<b>Alternative 3:</b> Extend merge lane <u>half</u> way up the hill.  [Seconds saved]	<b>Alternative 4:</b> Extend merge lane <u>all</u> the way up the hill.  [Seconds saved]	<b>Alternative 5:</b> Extend left-turn lanes on Elliott Ave W.  [Seconds saved]	Projected Travel Time: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

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

- Alternative 5 Travel Time saving is reduction in delay for the left turn to West Mercer Place at Elliott.
- Alternative 5 reduction in delay for southbound Elliott Ave would be 3 to 27 seconds



	<b>Alternative 1:</b> Add - 8 ft sidewalk.	<b>Alternative 2:</b> Add - 8 ft sidewalk, - 5 ft bike lane.	<b>Alternative 3:</b> Add - 8 ft sidewalk, - 5 ft bike lane, - Extend merge lane <b>half</b> way up the hill.	<b>Alternative 4:</b> Add - 8 ft sidewalk, - 5 ft bike lane, - Extend merge lane <b>all</b> the way up the hill.	<b>Alternative 5:</b> 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](http://www.seattle.gov/transportation/mercercer_west.htm)

Or contact:

**Eric Tweit**

Mercer West Project Manager

[mercercerwest@seattle.gov](mailto:mercercerwest@seattle.gov)

(206) 684-8834



QR code for the website

