

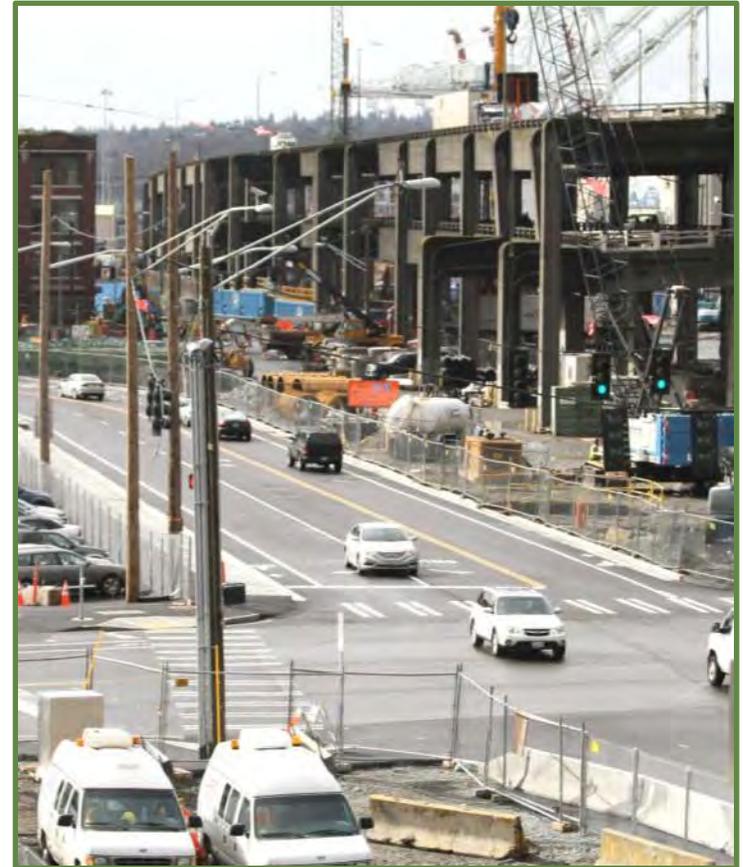
# Alaskan Way Viaduct & Seawall Replacement Program



**North Portal Working Group**  
**June 2, 2011**

## Agenda

- Program updates.
- Holgate to King viaduct replacement construction update.
- Mercer West update.
- Bored tunnel alternative update:
  - Project delivery.
  - Upcoming milestones.
  - Proposed construction schedule.



*Traffic on the new roadway (East Frontage Road S.) between S. Atlantic Street and S. Royal Brougham Way.*

# Program Updates

# East Marginal Way Grade Separation Project

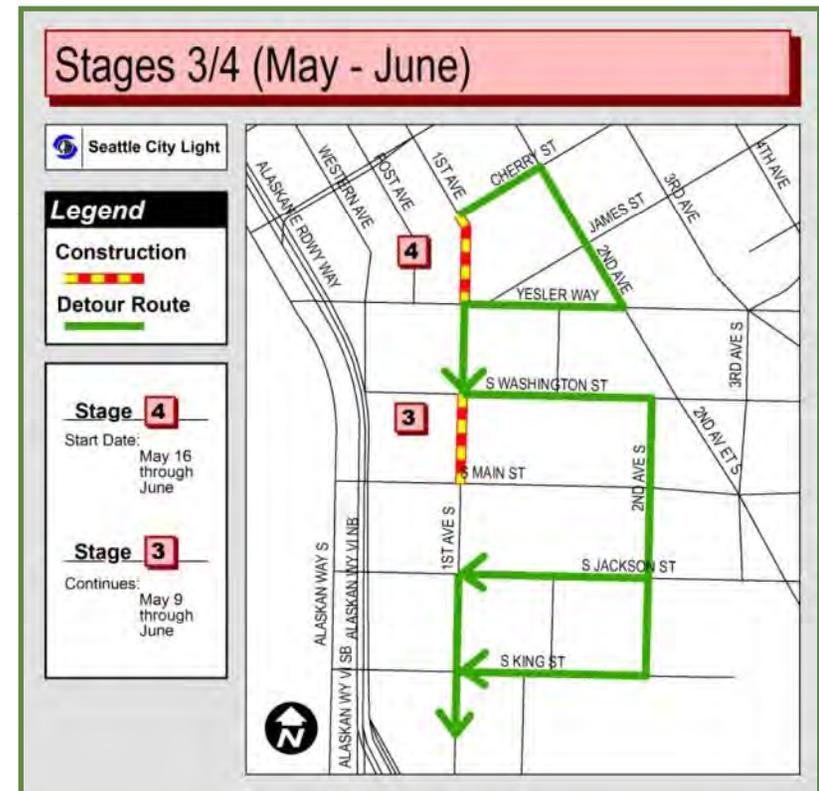


# SR 99 Intelligent Transportation Systems

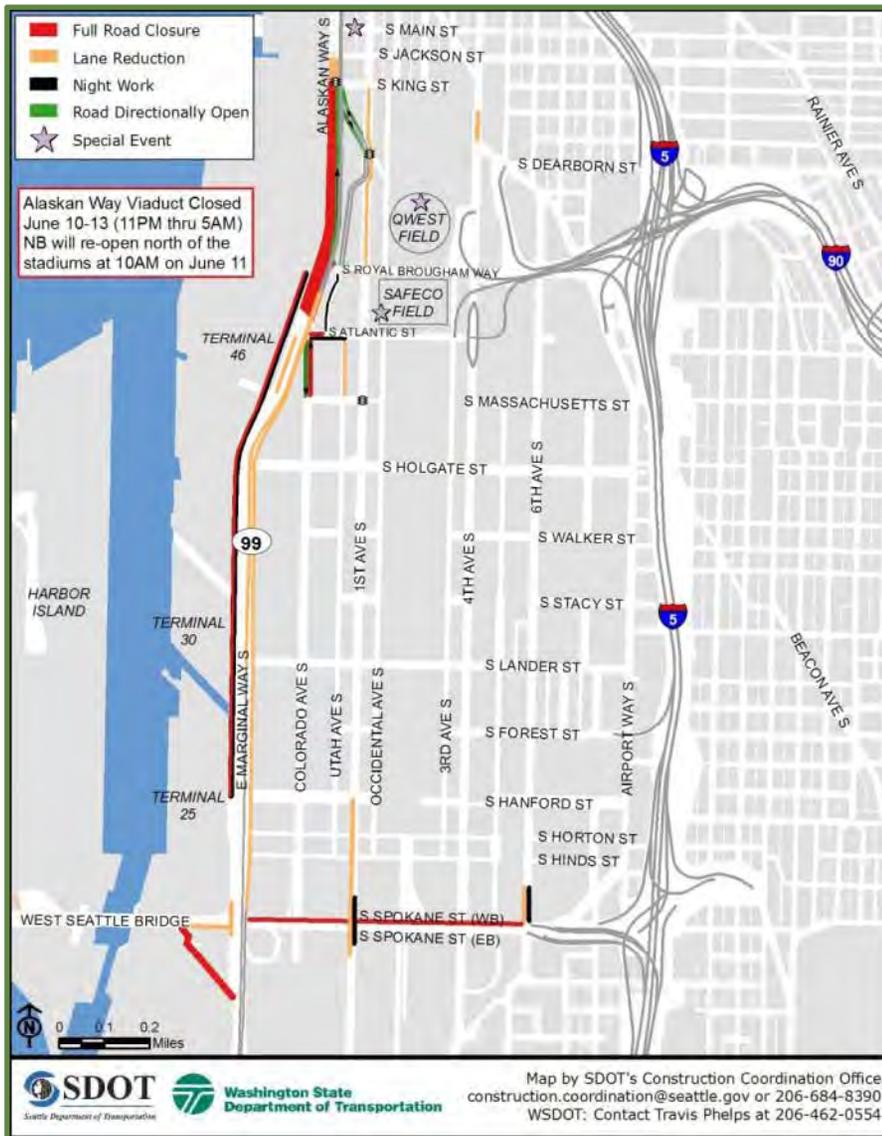


# Seattle City Light First Avenue S. Work

- Relocating power lines under First Avenue S.
- First Avenue S. closed between:
  - Cherry Street and Yesler Way.
  - S. Washington Street and S. Main Street.
- Work will be complete in June.



## Construction Coordination



SODO Planned Construction / Events		
Date(s) and Times	Project Name / Agency	Description of Traffic Impacts
Through May 26 10PM to 5AM	<a href="#">Lane closure on southbound Alaskan Way Viaduct overnight</a>	Southbound Alaskan Way Viaduct (SR 99) will be reduced to a single open lane between the stadiums and S Holgate St each night.
Through May 26 7PM to 5AM	<a href="#">S Atlantic St closed overnights</a>	S Atlantic St will be closed between Utah Ave S and Alaskan Way S each night. Local access to Colorado Ave S will be maintained via S Massachusetts St.
Through May 26 7PM to 5AM	<a href="#">Alaskan Way S closed overnights</a>	Alaskan Way S will be closed between S Hanford St and S Royal Brougham Way each night. Local access to S Massachusetts St will be maintained via S Hanford St.
Through May 26 7PM to 5AM	<a href="#">East Frontage Rd S closed overnights, south of S Royal Brougham Way</a>	East Frontage Rd S will be closed between S Royal Brougham Way and S Atlantic St each night. Access to I-5 and I-90 will be maintained via S Royal Brougham Way to 1st Ave S.
May 26-27 5AM to 3PM	<a href="#">1st Ave S reduced to one lane in each direction</a>	1st Ave S will be reduced to one lane in each direction between S Royal Brougham Way and S King St each day.
Through May 27 9AM to 3PM	Lane closure on 4th Ave S between S Weller St and Airport Way S	Expect northbound single lane closures on 4th Ave S between S Weller St and Airport Way S during the day for expansion joint repair. Crews will not work on May 19 due to an afternoon Mariners game.
May 27 7:10PM	Seattle Mariners versus New York Yankees	At Safeco Field
May 28 1PM	Mexico versus Ecuador Soccer match	At Qwest Field
May 28 7:10PM	Seattle Mariners versus New York Yankees	At Safeco Field
May 29 1:10PM	Seattle Mariners versus New York Yankees	At Safeco Field
May 30 1:10PM	Seattle Mariners versus Baltimore Orioles	At Safeco Field
May 30 12PM to 4PM	Homeless Veteran's Day	Event will close S Main St between Alaskan Way S and 1st Ave S between 8AM and 4PM.
May 31 7:10PM	Seattle Mariners versus Baltimore Orioles	At Safeco Field
May 31-June 2 7PM to 5AM	<a href="#">S Atlantic St closed overnights</a>	S Atlantic St will be closed between Utah Ave S and Alaskan Way S each night. Local access to Colorado Ave S will be maintained via S Massachusetts St.
May 31-June 2 7PM to 5AM	<a href="#">Alaskan Way S closed overnights</a>	Alaskan Way S will be closed between S Hanford St and S Royal Brougham Way each night. Local access to S Massachusetts St will be maintained via S Hanford St.
May 31-June 2 7PM to 5AM	<a href="#">East Frontage Rd S closed overnights, south of S Royal Brougham Way</a>	East Frontage Rd S will be closed between S Royal Brougham Way and S Atlantic St each night. Access to I-5 and I-90 will be maintained via S Royal Brougham Way to 1st Ave S.
June 1 7AM to 4PM	Northbound Utah Ave S closed	Northbound Utah Ave S will be closed between S Atlantic St and S Massachusetts St during the day. Two-way traffic will be maintained in the southbound direction during the closure.
June 1 12:40PM	Seattle Mariners versus Baltimore Orioles	At Safeco Field
June 2 7:10PM	Seattle Mariners versus Tampa Bay Rays	At Safeco Field
June 3 7:10PM	Seattle Mariners versus Tampa Bay Rays	At Safeco Field
June 3 8PM to 5AM	<a href="#">Overnight closures of northbound 1st Ave S at S Spokane St</a>	Northbound 1st Ave S will be closed at S Spokane St overnight to facilitate the construction of a new on/off-ramp to the eastbound Spokane Street Viaduct.

## Public Outreach and Engagement



## Early Waterfront Design Ideas

- New connections from downtown to the waterfront.
- New public spaces with opportunities to view and touch the water.
- Re-centering the city around Elliott Bay.



# Elliott Bay Seawall Project Alternatives



existing seawall

Elliott Bay  Seawall Project

# Elliott Bay Seawall Project Alternatives



alternative A

Elliott Bay  Seawall Project

# Elliott Bay Seawall Project Alternatives



alternative B

Elliott Bay  Seawall Project

# **Holgate to King Construction Update**

## SR 99 On- and Off-ramps



## East Frontage Road S.



## Building the New SR 99 Roadway



## Building the New SR 99 Roadway



## Building the New SR 99 Roadway

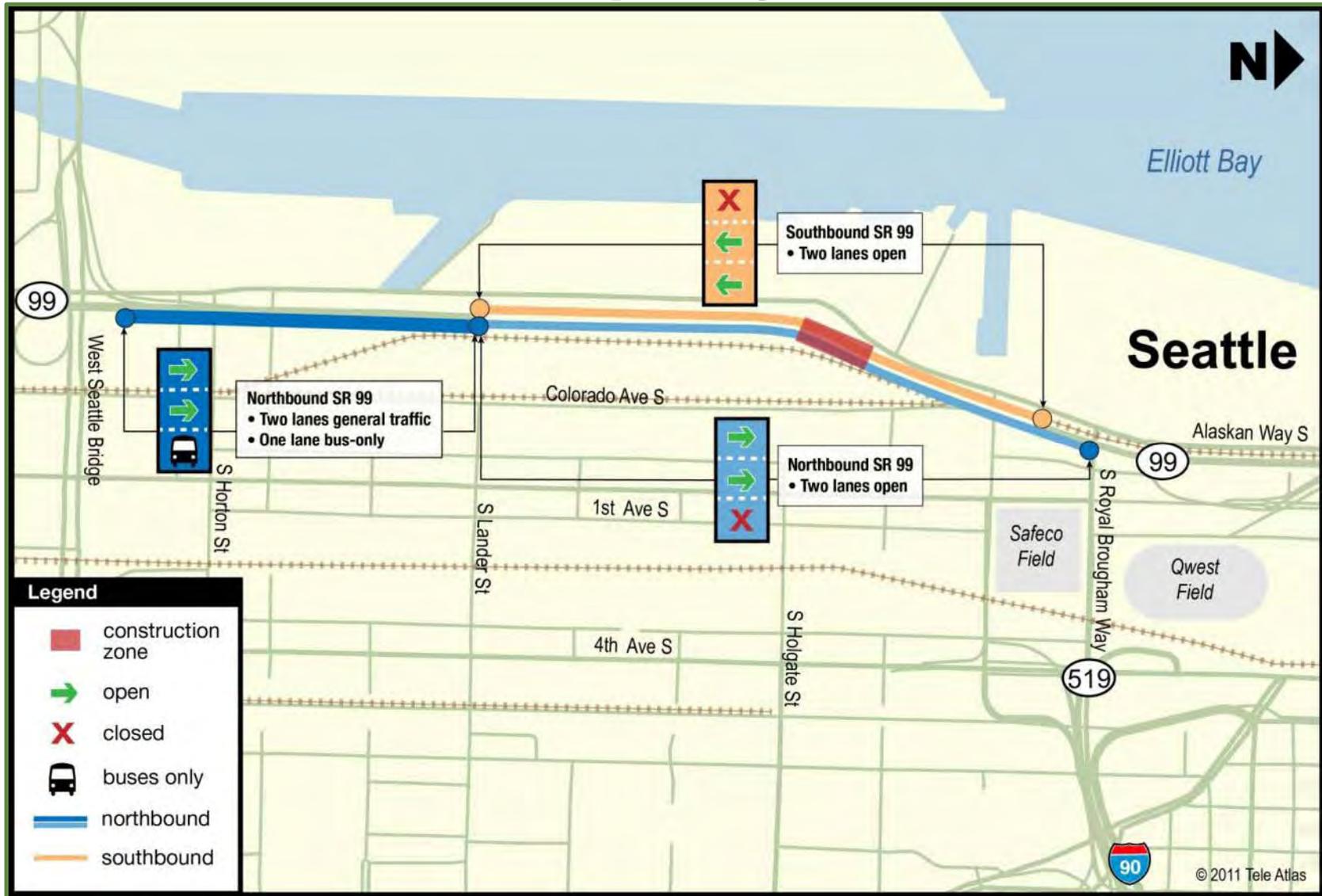


## Building the New SR 99 Roadway



# **Interactive Construction Simulation**

# Reduced Capacity on SR 99



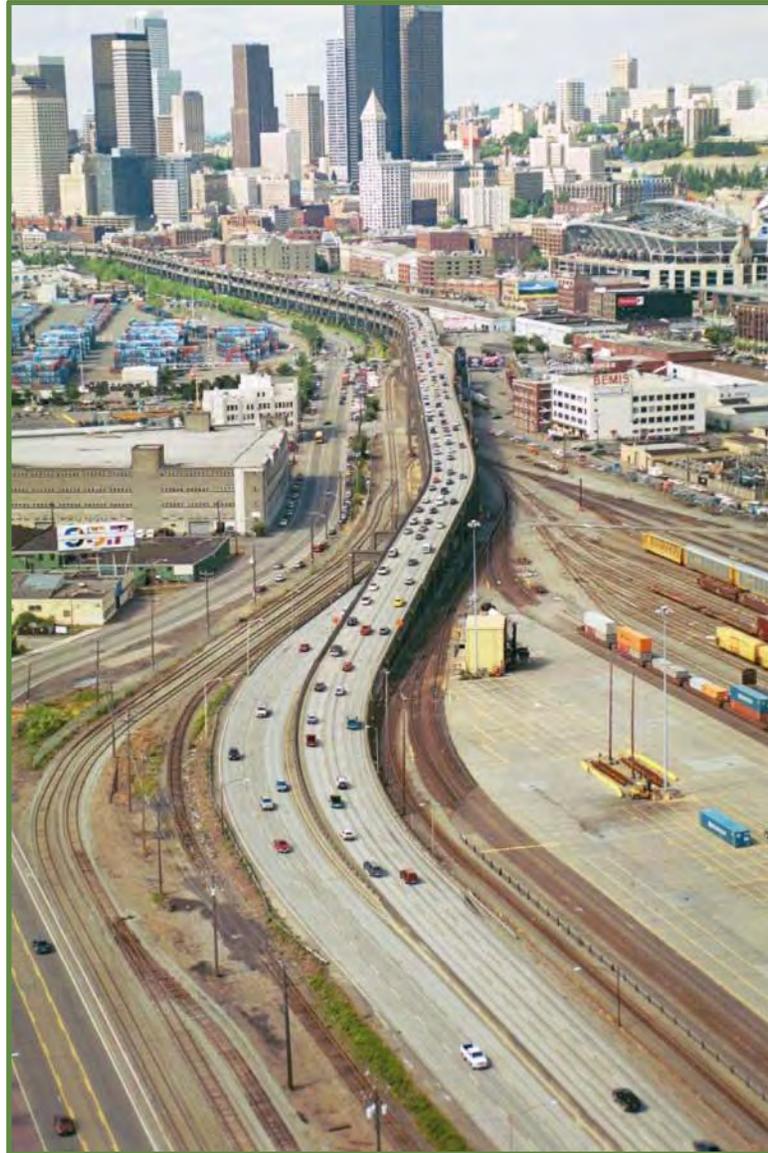
## Building the New SR 99 Southbound Roadway



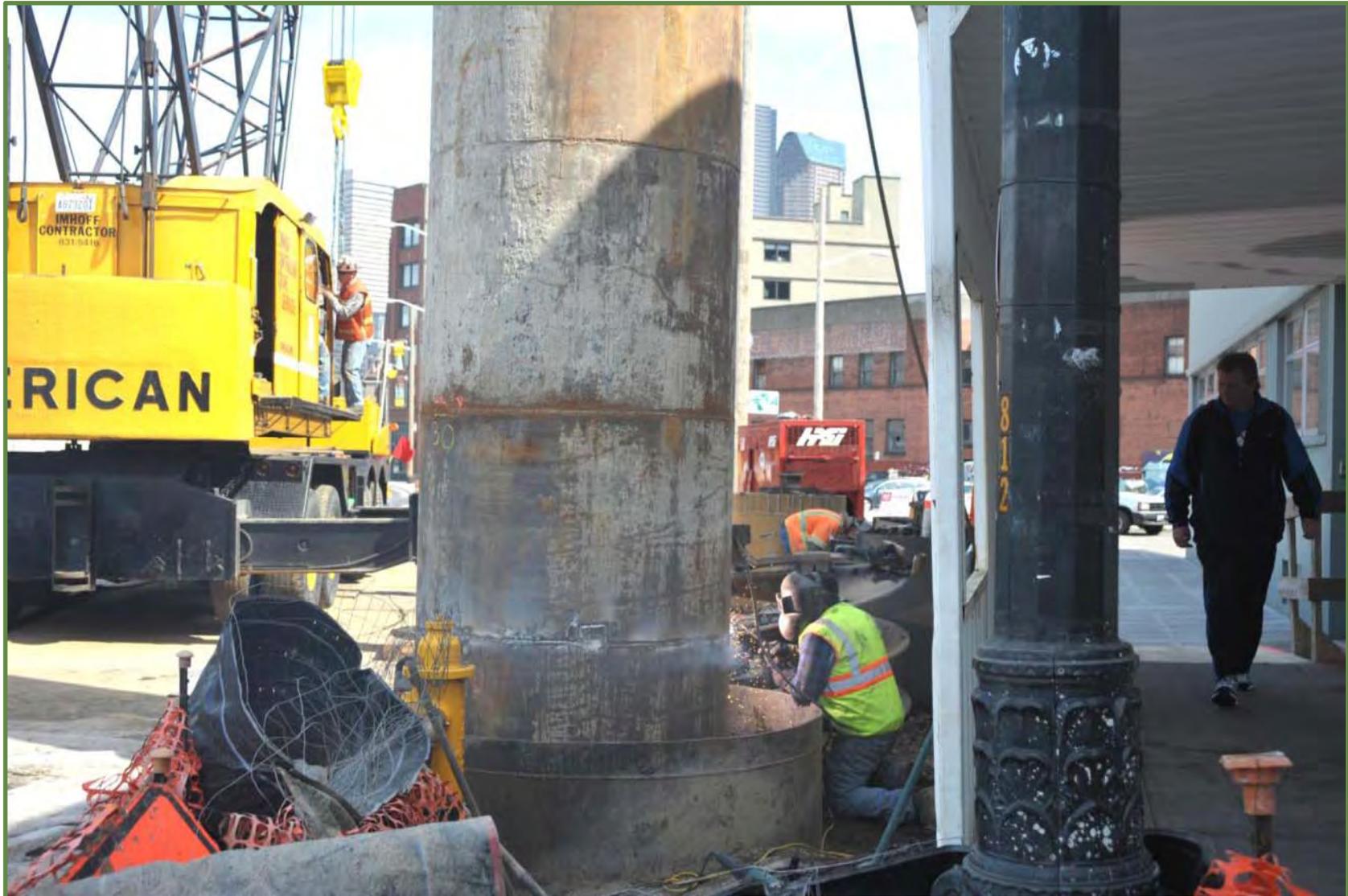
# Building the New SR 99 Southbound Roadway



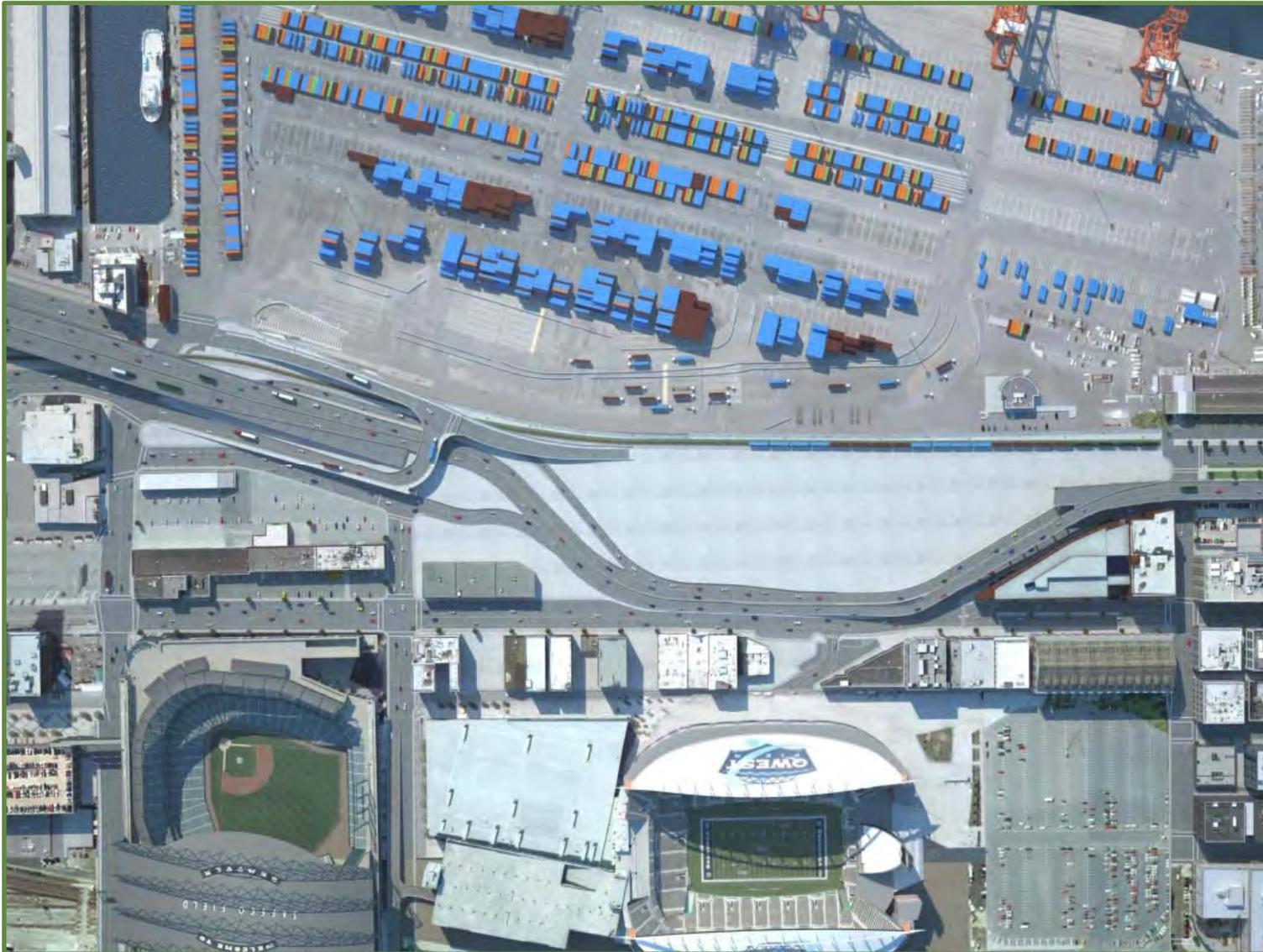
# Alaskan Way Viaduct



## Crews Installing Temporary Sign Bridge



## South End in 2013



# Closure on Alaskan Way S.



## Closure on Alaskan Way S.



## Building Railroad Track and Bicycle / Pedestrian Path



## **Feedback from Working Group Members**

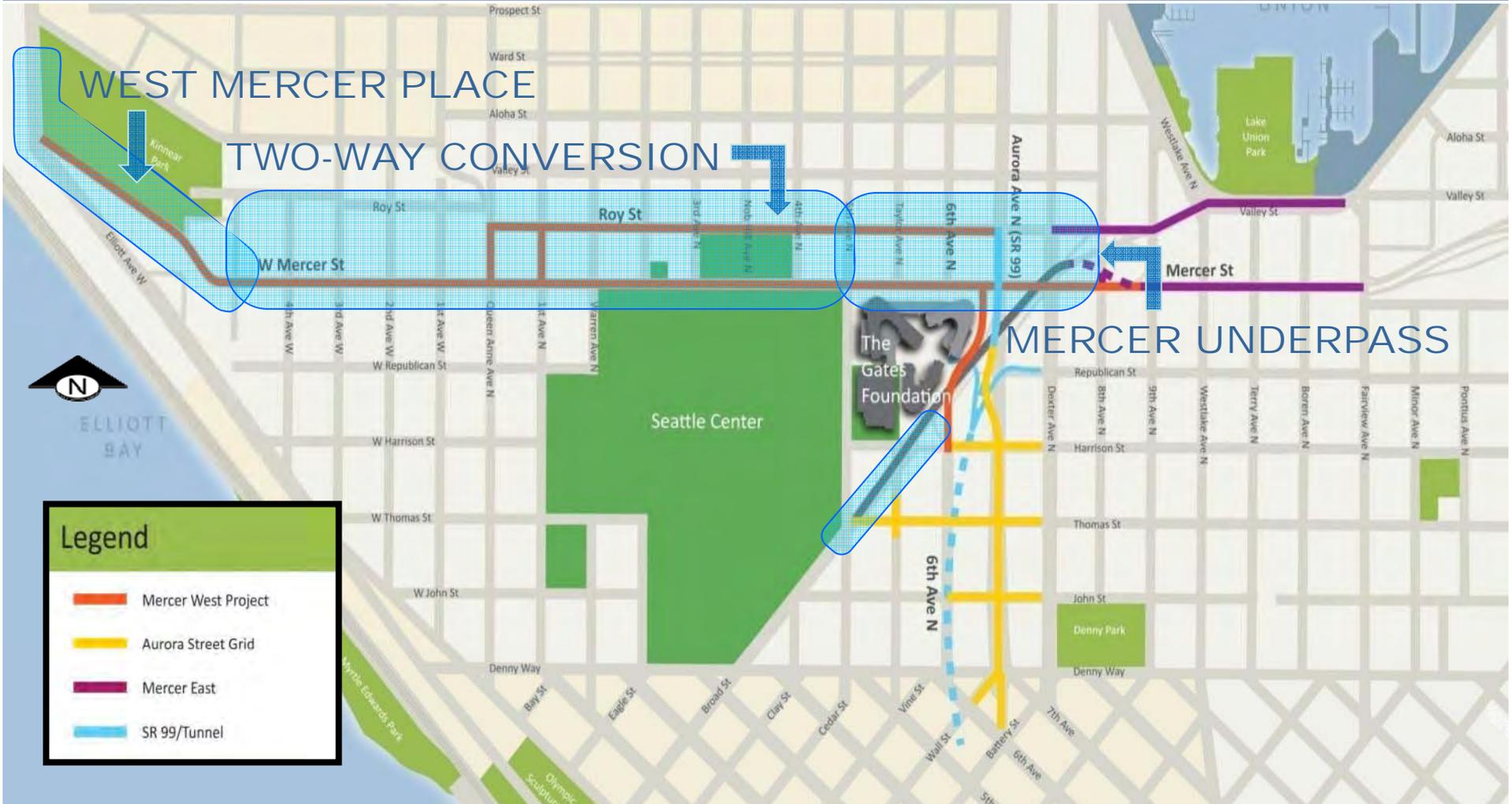
- Do you have any feedback regarding the way traffic has been managed during construction?

## **Mercer West Update**



# 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



# MERCER WEST

## Why consider changes to West Mercer Place?

### 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





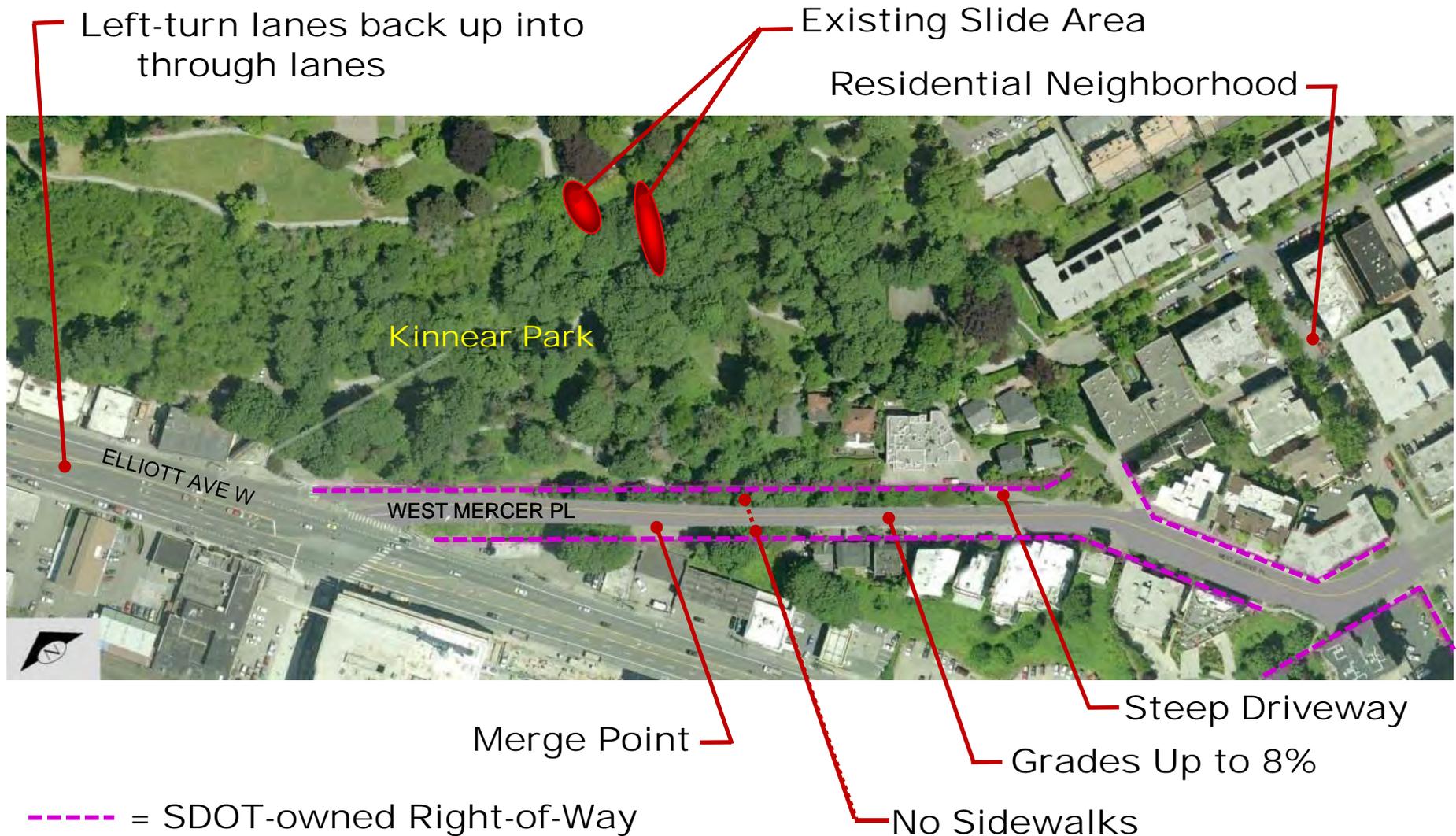
### Limited pedestrian and bicycle connections No sidewalks or bike lanes on West Mercer Place





# MERCER WEST

## Existing Conditions





### *Alternatives*

- 1. Sidewalk on south side of West Mercer Place*
- 2. Sidewalk and uphill bike lane*
- 3. Extend second lane half-way up the hill on W Mercer Pl*
- 4. Extend second lane to the top of the hill on W Mercer Pl*
- 5. Extend the southbound left-turn lanes 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



# MERCER WEST

## AWV AM Peak Hour Traffic Projections At Elliott / W. Mercer PI

# 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

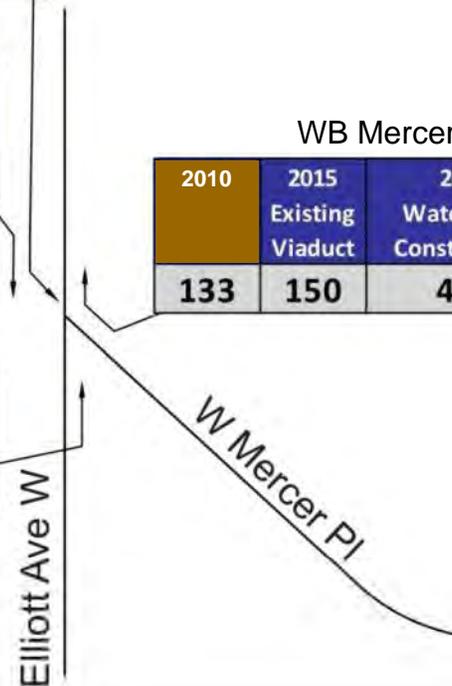
2010	2015 Existing Viaduct	2015 Waterfront Construction	2018 Program	2030 Program
2229	2200	2195	2395	2450

### 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

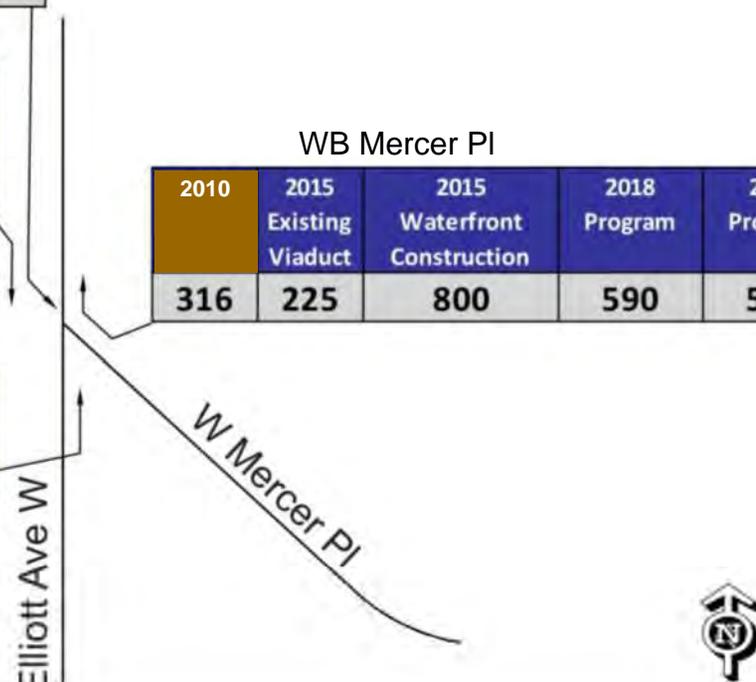
2010	2015 Existing Viaduct	2015 Waterfront Construction	2018 Program	2030 Program
1434	1300	1250	1600	1650

### 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

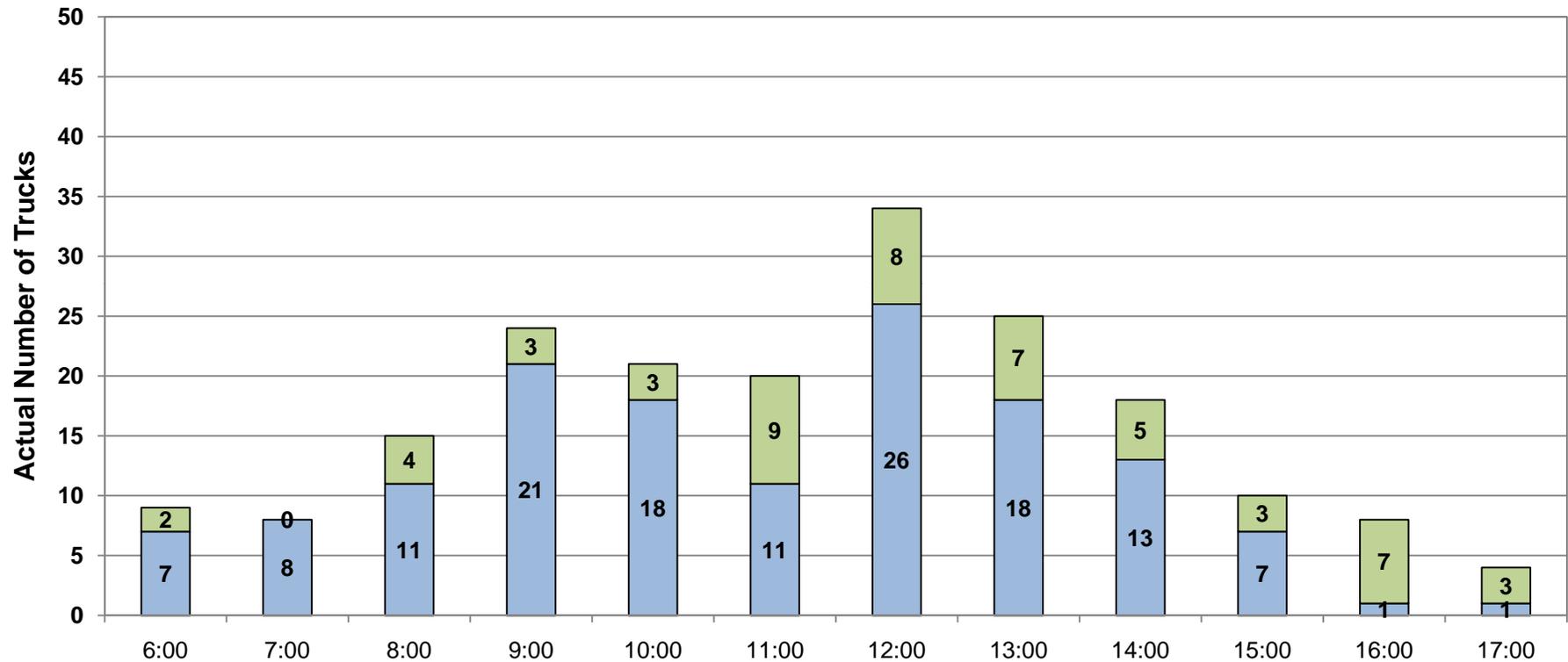


(1) "Waterfront Construction" = Tunnel is open to traffic. Construction on surface Alaskan Way.

(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



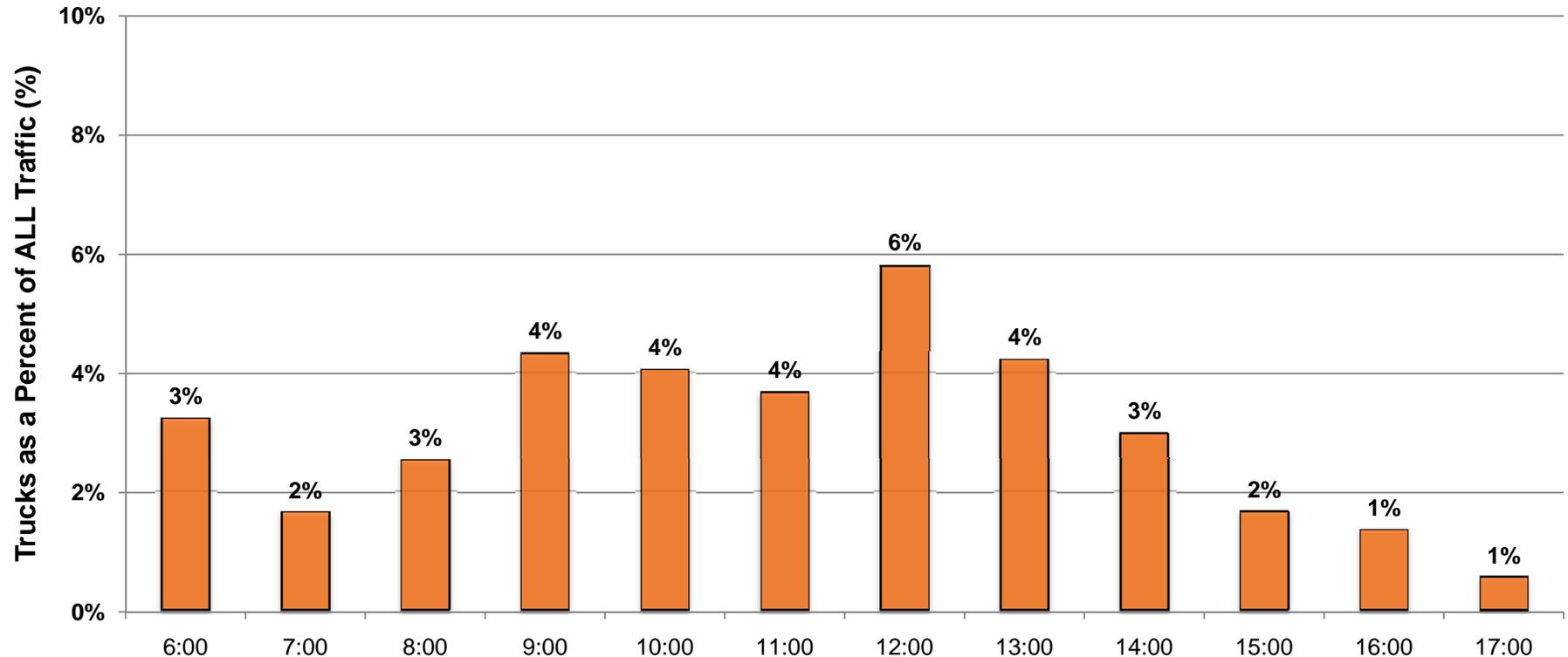
Single Unit Truck



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



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



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

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.  [Seconds saved]	Alternative 4: Extend merge lane <u>all</u> the way up the hill.  [Seconds saved]	Alternative 5: 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>2016: AM Peak</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>2018: AM Peak</b> Tunnel and Waterfront Complete.	Autos: Trucks:	0 (0) 0 (0)	3 (3) 5 (5)	4 (4) * 5 (5) *	
<b>2030: AM Peak</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



# MERCER WEST

# Alternatives Summary

	<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



**MERCER WEST**

# Elliott Avenue West Intersection Improvement

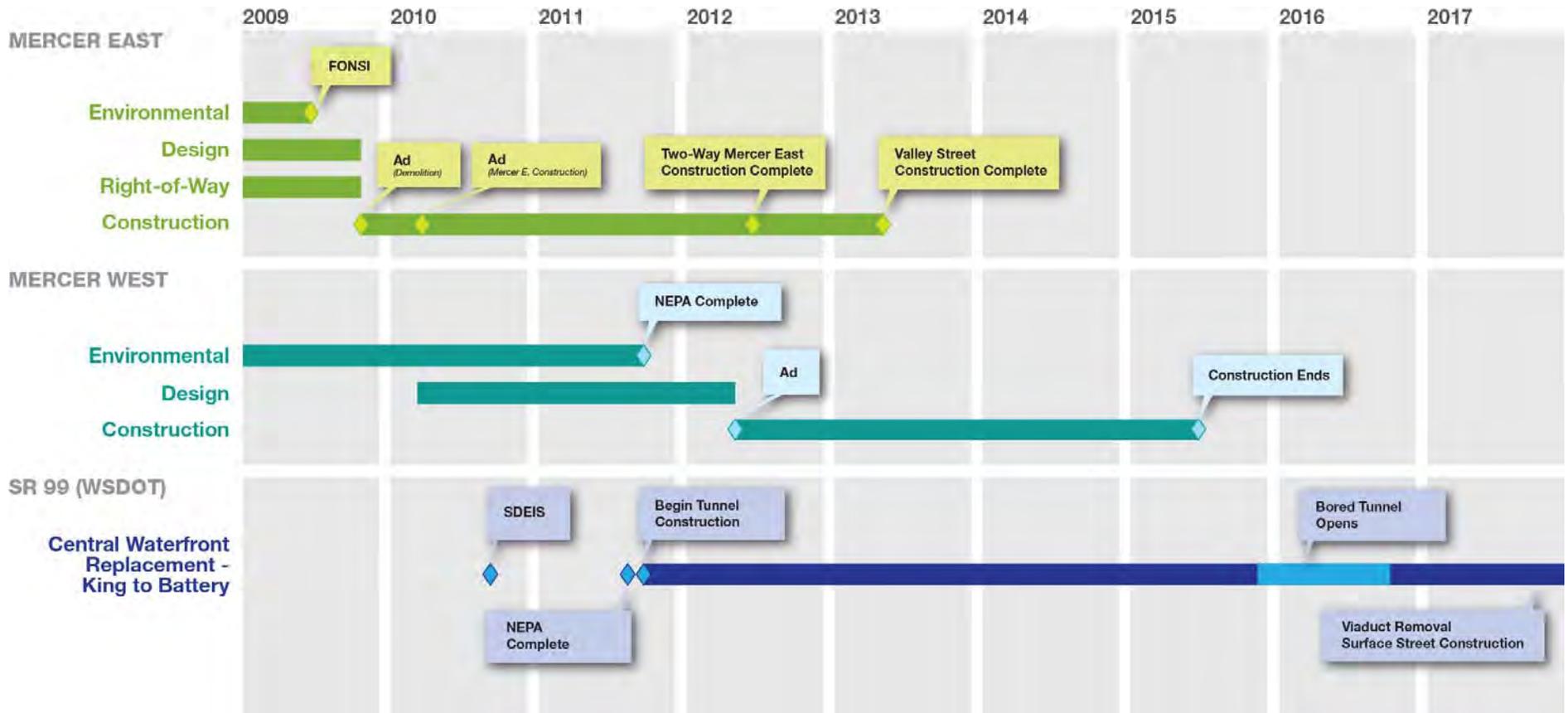


APRIL	MAY	JUNE
	<p><b>Design &amp; Outreach</b></p>	<p><b>Construction</b></p> <ul style="list-style-type: none"> <li>• Traffic Control</li> <li>• Remove raised median</li> <li>• Repave and restripe</li> <li>• Adjust signal timing</li> </ul>



# MERCER WEST

# Mercer Corridor Schedule

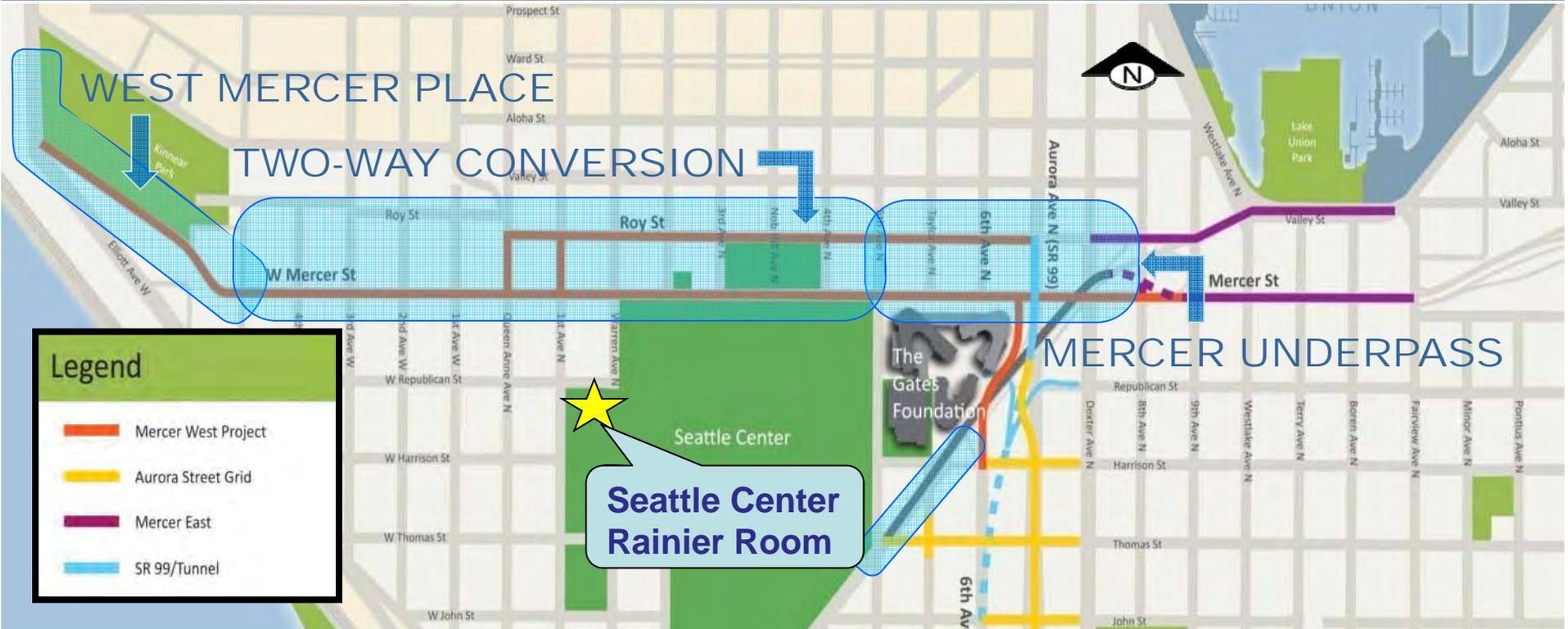


May 24, 2011



# MERCER WEST

**OPEN HOUSE**  
June 8, 4:30 – 7:00 pm



## Preliminary Designs

- Widened Mercer Underpass
- Two-way Conversion of Mercer St and Roy St

## Public Art Concepts

## Recommendation for West Mercer Place



**MERCER WEST**

If you have any questions, please visit:

[http://www.seattle.gov/transportation/mercerc\\_west.htm](http://www.seattle.gov/transportation/mercerc_west.htm)

Or contact:

**Eric Tweit**

Mercer West Project Manager

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

(206) 684-8834



QR code for the website

# **Bored Tunnel Alternative Update**

# Environmental Impact Statement

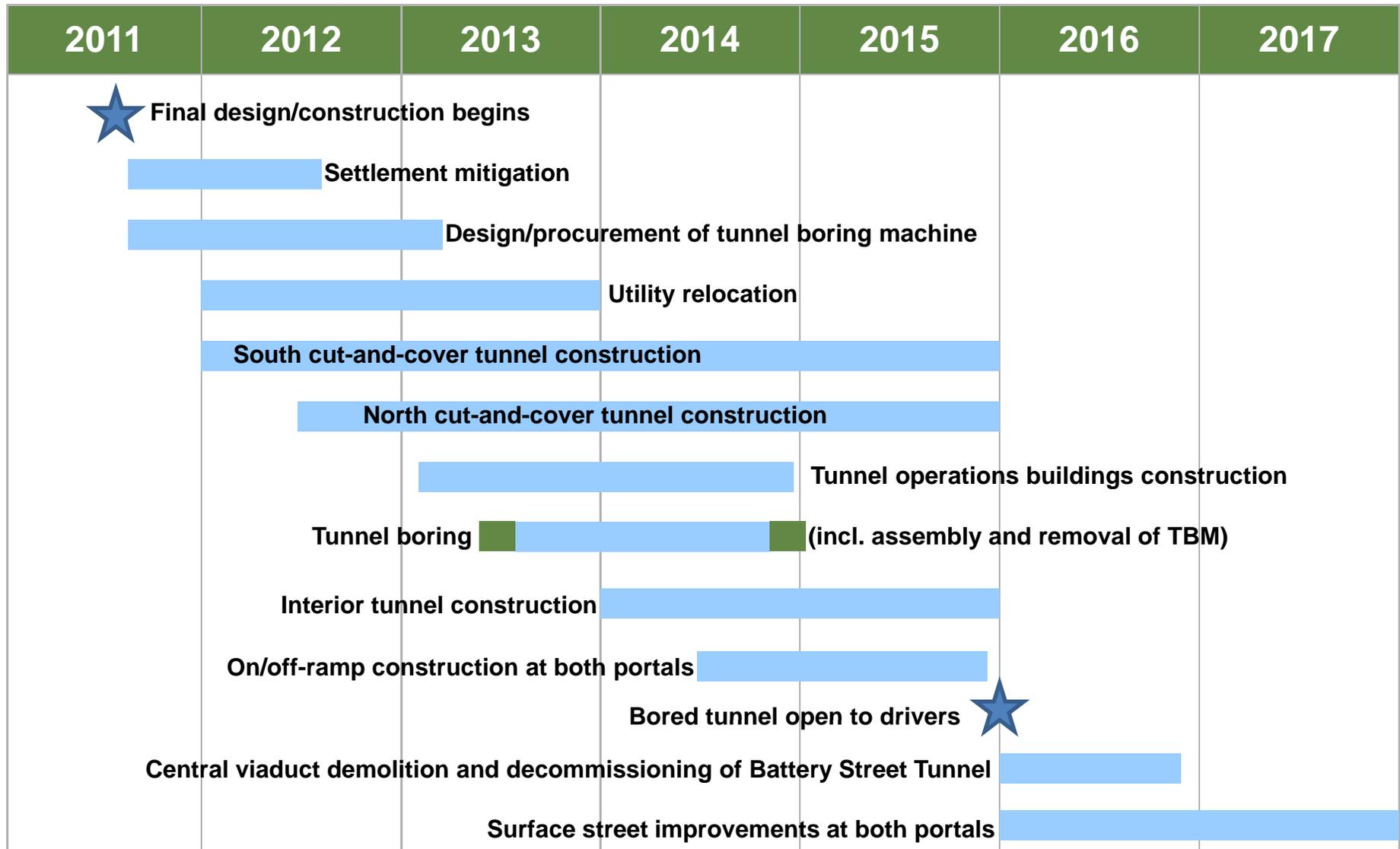
Final EIS will include:

- Responses to 2004, 2006 and 2010 draft EIS comments.
- Updated bored tunnel design to reflect Seattle Tunnel Partners' design-build proposal.
- Construction and operational effects for all build alternatives.
- Integrated tolling analysis for bored tunnel, cut-and-cover tunnel and elevated structure alternatives.
- Proposed mitigation measures.

## Environmental Timeline

January 2011	Feb-June 2011	July 2011	August 2011
<p>★ Signed design-build contract with Seattle Tunnel Partners</p>	<p>★ Issued design-build Notice to Proceed 1</p> <p><b>Preliminary design</b></p>	<p>Publish Final EIS ★</p>	<p>FHWA issues Record of Decision ★</p> <p>Issue design-build Notice to Proceed 2 ★</p>

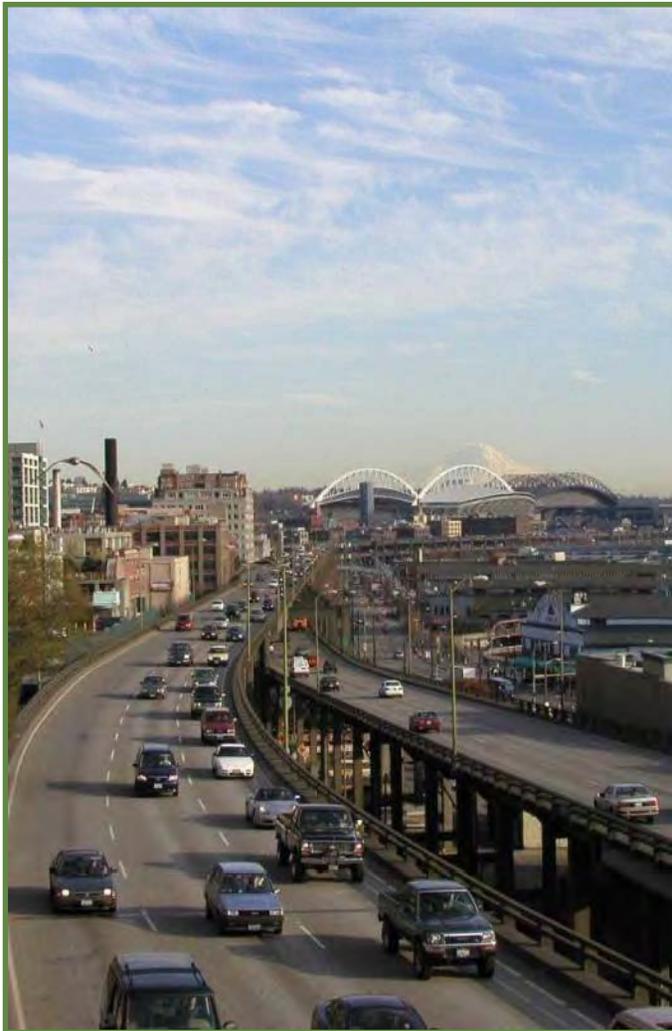
# Proposed Construction Timeline



## **Feedback from Working Group Members**

- Do you have any unresolved questions about the environmental process or construction schedule?

# Alaskan Way Viaduct and Seawall Replacement Program



**Web:**

[www.alaskanwayviaduct.org](http://www.alaskanwayviaduct.org)

**E-mail:**

[viaduct@wsdot.wa.gov](mailto:viaduct@wsdot.wa.gov)

**Hotline:**

1-888-AWV-LINE