

Alaskan Way Viaduct **REPLACEMENT** PROGRAM



South Portal Working Group Meeting
Feb. 6, 2013

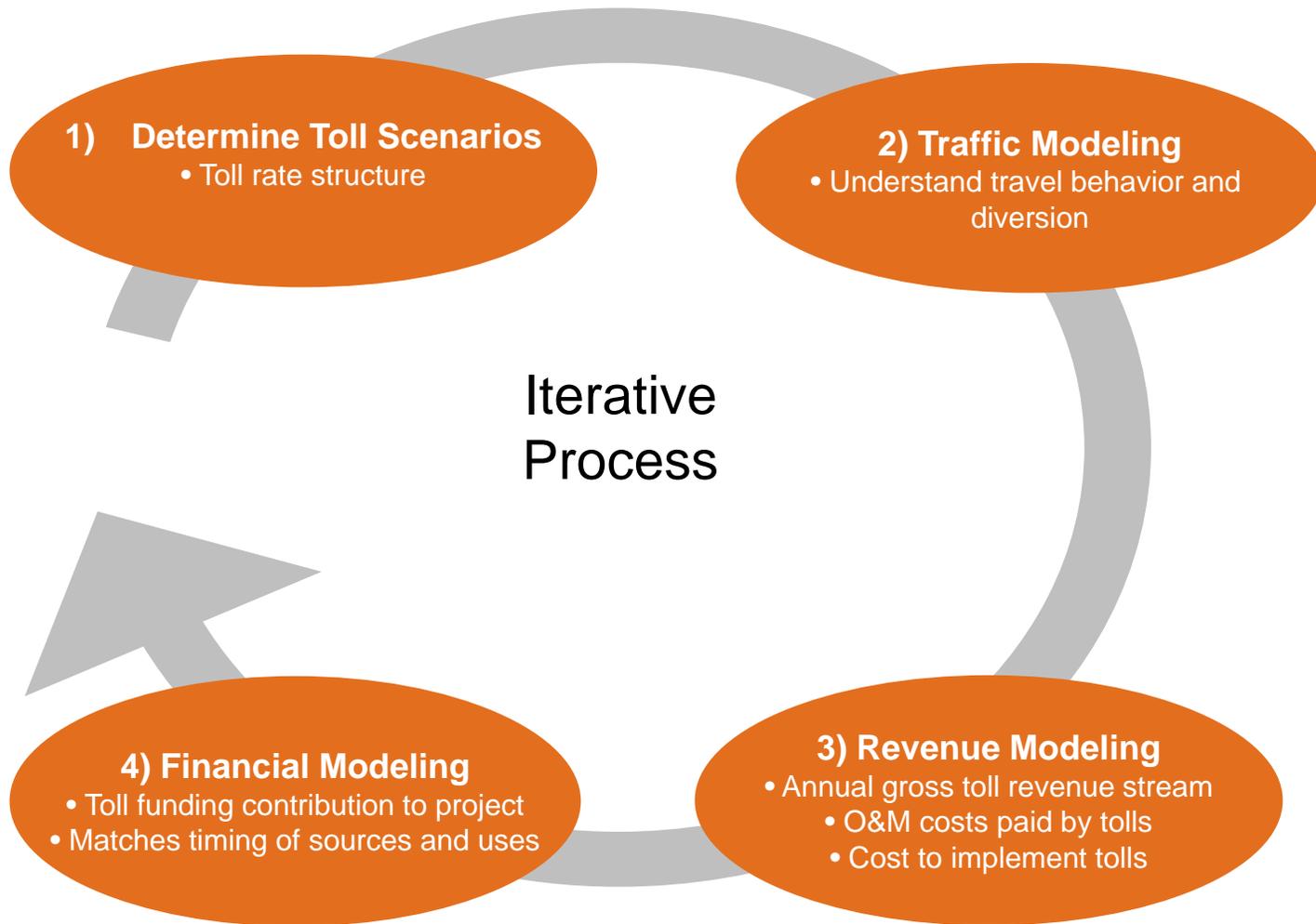
Program updates

Advisory Committee on Tolling and Traffic Management

Advisory Committee on Tolling and Traffic Management

- The committee's scope was established via:
 - Federal Highway Administration-issued Record of Decision.
 - Seattle Department of Transportation and WSDOT Memorandum of Agreement.
 - City of Seattle's resolution 31323.
- The committee will make advisory recommendations on strategies for:
 - Minimizing traffic diversion from the tunnel due to tolling.
 - Tolling the SR 99 tunnel.
 - Mitigating traffic diversion effects on city streets and I-5.

Four-Step Planning Process



Potential Toll Scenarios Being Analyzed

First round of analysis:

- No toll and high toll (\$1 - \$4) are being studied as benchmarks.
- Scenario 1 (\$1 - \$3.25): Objective is to achieve funding target.
- Scenario 2 (\$0.75 - \$2.25): Objective is to reduce diversion.
- Scenario 3 (\$0.75 - \$2.50): Objective is to balance funding and diversion.

Potential Toll Scenarios Being Analyzed

Second round of analysis:

- No toll and high toll (\$1 - \$4) are being studied as benchmarks.
- Scenario 4 (\$1 - \$2.25): Objective is to achieve funding target.
- Scenario 5a (\$0.50 - \$0.75): Objective is to reduce diversion.
- Scenario 5b (\$0 - 1.75): Objective is to reduce diversion.
- Scenario 6 (\$0.45 - \$3): Objective is to balance funding and diversion.

Stay Informed

- Meeting materials and December 2012 progress report available on website:
<http://www.wsdot.wa.gov/projects/viaduct/Library/Meetings/ACTTM>
- Committee meetings:
 - March 13
 - April 24
 - May 15
 - June 12
- Update at next working group meeting.
- Recommendations in mid-2013.

King County Metro Update

Alaskan Way Viaduct Coordination

**AWV Portal Working Groups
February 2013**



King County

METRO

We'll Get You There.

Service change goals

- Implement policy from service guidelines
 - Increase ridership
 - Increase productivity
 - Improve underserved corridors
 - Improve service quality
- Reinvest low productivity hours as required at the time the congestion reduction charge was adopted
- Implement RapidRide C & D Lines
- Implement “Pay on Entry”



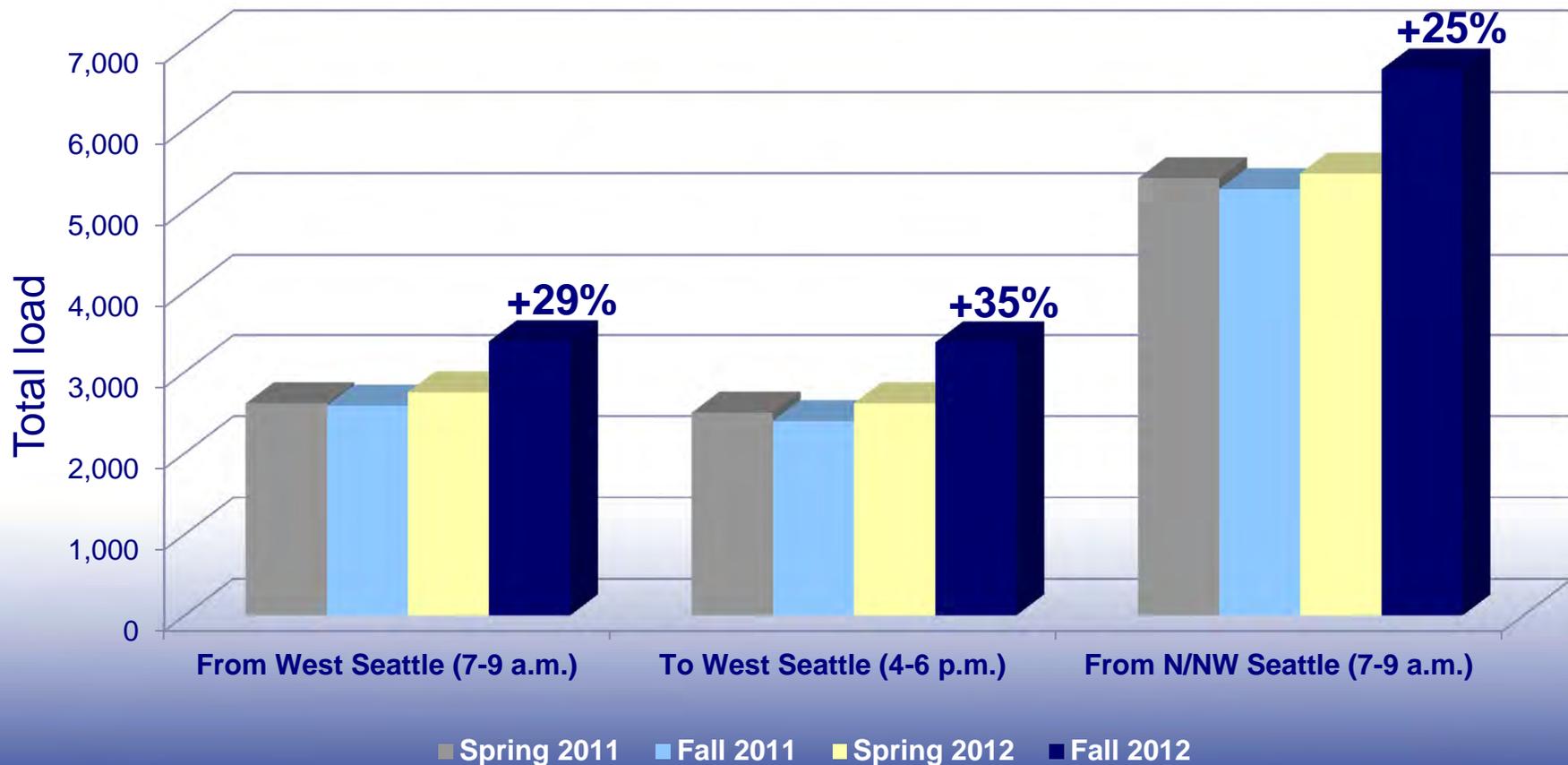
Service change update

- Majority of changes went well
- Main Issues:
 - RapidRide C and D Lines crowding and reliability
 - Increased downtown travel time on some routes
 - Crowding and pass ups on I-90 services
 - Reductions in coverage and/or span

Corrective actions taken

- Service added to RapidRide C and D Lines, Route 55 and Route 120
- Revised routings through downtown Seattle
- Stop removed from I-90 stop pattern

Change in passenger loads* to/from Downtown Seattle (Spring 2011-Fall 2012)

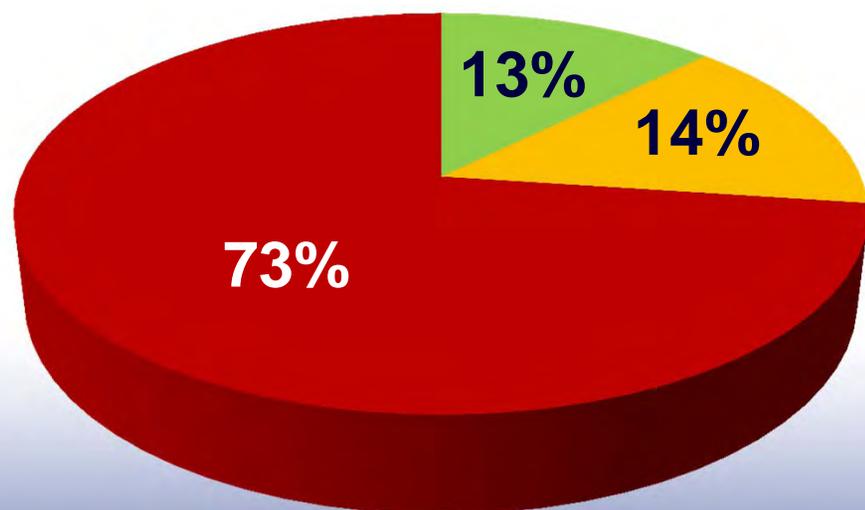


*Loads observed at various locations in Oct/Nov 2012. Not an official ridership estimate.

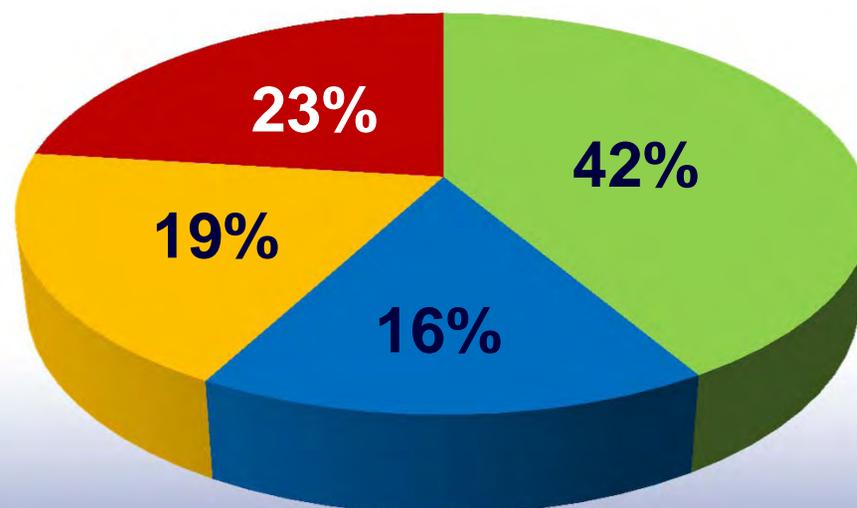
Impact of Metro actions

PM peak outbound loads on RapidRide C Line

October 4, 2012



November 13, 2012



Seats for
all

Some
standees

Many
standing

Crush
loaded

Downtown Seattle travel times

- Travel time reduced during tunnel closure
 - 29 percent southbound
 - 26 percent northbound

- Travel times mostly sustained through downtown Seattle
 - Approximately one minute increase

Third Avenue	Approx. number of buses and travel time (in min.)			
	Northbound		Southbound	
	# of buses	Travel time	# of buses	Travel time
Before tunnel closure (2005)	71	9.5	70	10.5
During tunnel closure (2007)	135	7	120	7.5
Since Sept 2012 service change	108	8.2	110	8.2

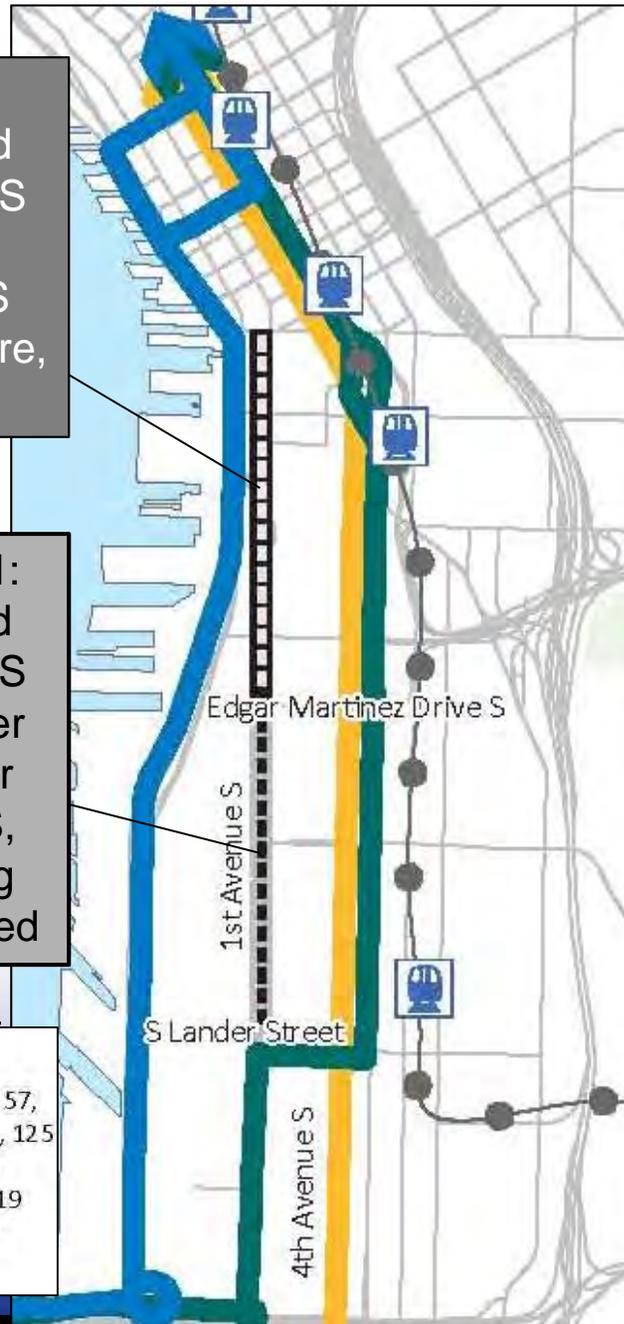
1st Avenue S service

February 2011:
Service removed from 1st Avenue S between Edgar Martinez Drive S and Pioneer Square, due to utility

September 2011:
Service removed from 1st Avenue S between S Lander Street and Edgar Martinez Drive S, due to increasing construction-related congestion and delays to transit

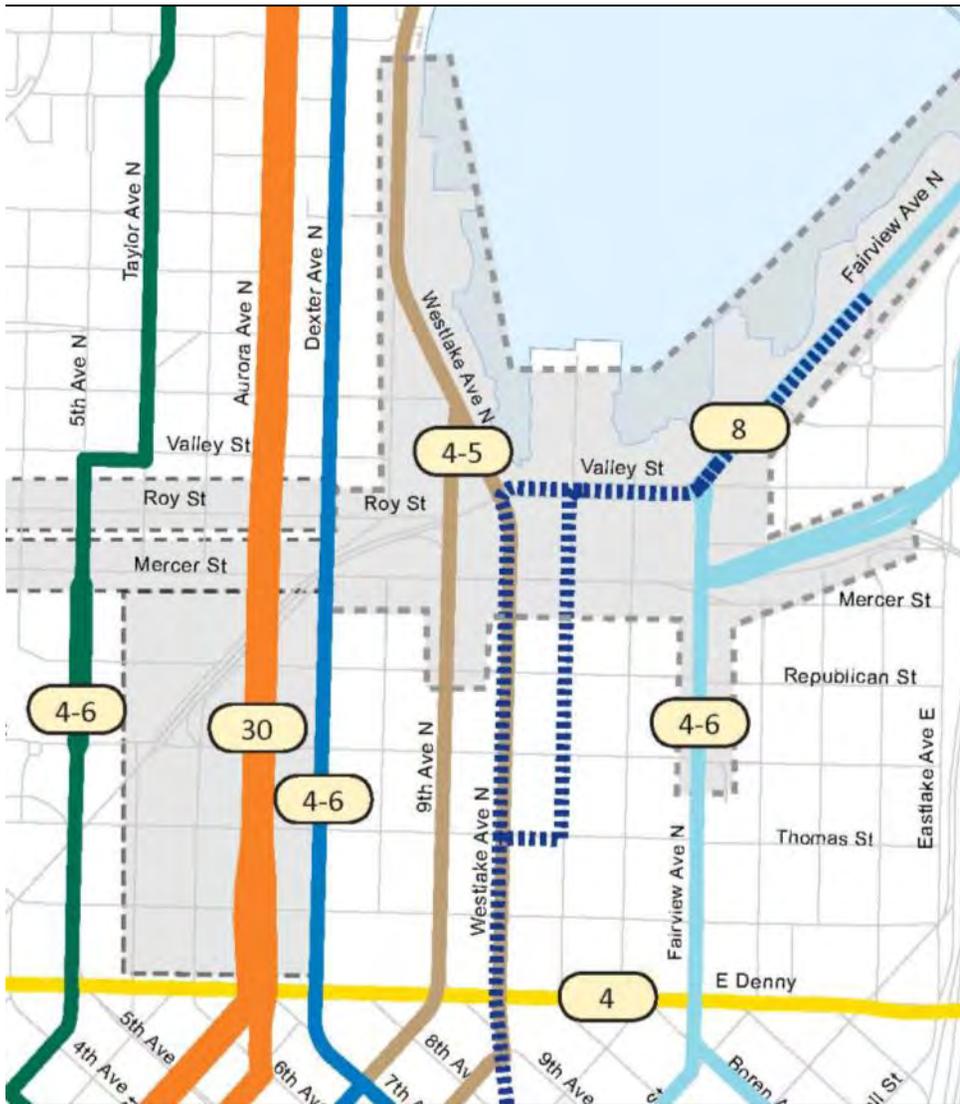
Routings through SODO

- Viaduct:** C, 21X, 55, 56, 57, 113, 120, 121, 122, 123, 125
- 1st to 4th Avenue S via Lander:** 21, 116, 118, 119
- 4th Avenue S:** 131, 132
- Deleted routings**

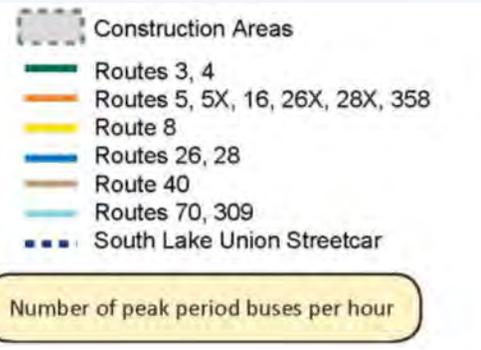


- Metro altered service through SODO due to AWW construction and related disruptions
- Metro will review options for putting service back on 1st Avenue S upon completion of construction

Mercer Corridor construction impacts



- Respond to closures and service delays
 - Shift service to Eastlake
 - Working with SDOT to make adjustments
- Spring 2013:
 - Aurora Lane Reduction
- Mercer West Possible Impacts:
 - RapidRide D Line
 - 5th Ave N buses



South End Construction Overview

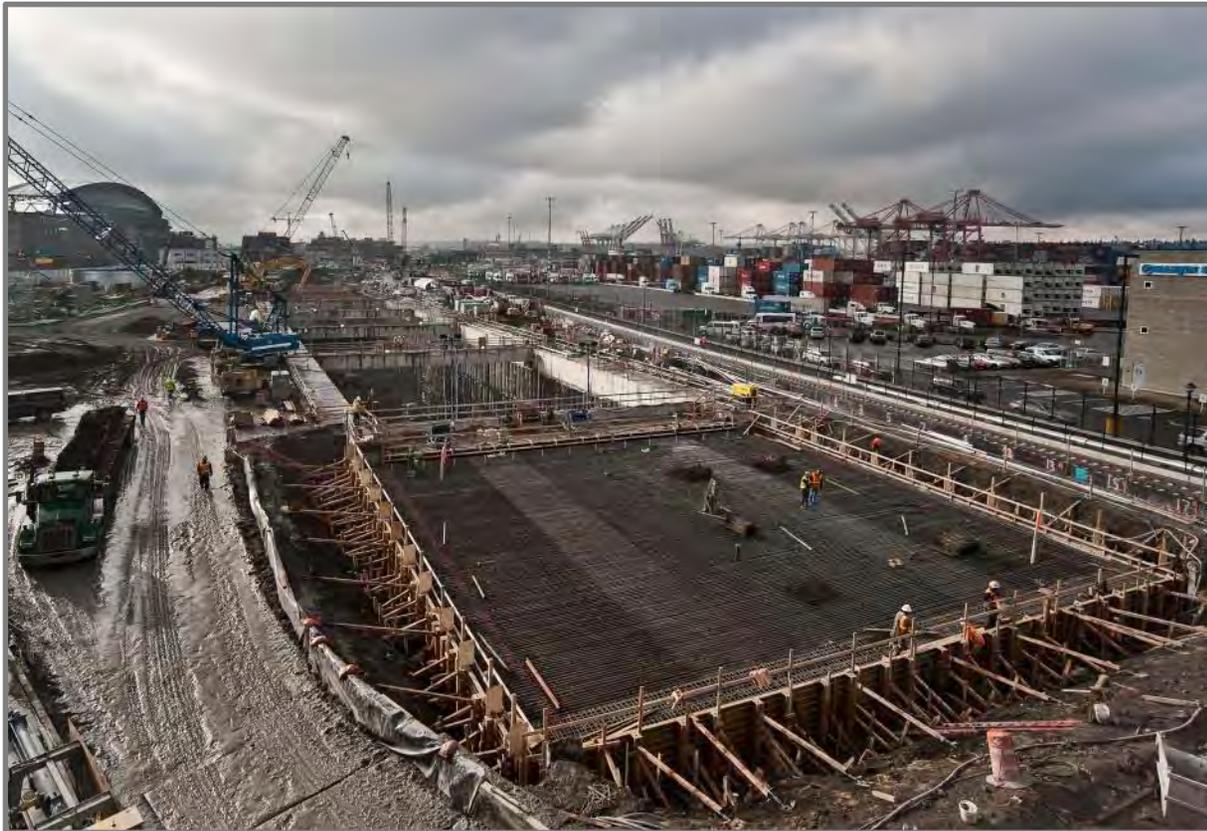


- A** Build tunnel launch pit
- B** Install facilities to support tunneling
- C** Build tunnel support walls
- D** Build South Atlantic Street overpass

North →

● = WSDOT work

A Preparing the Tunnel Launch Pit

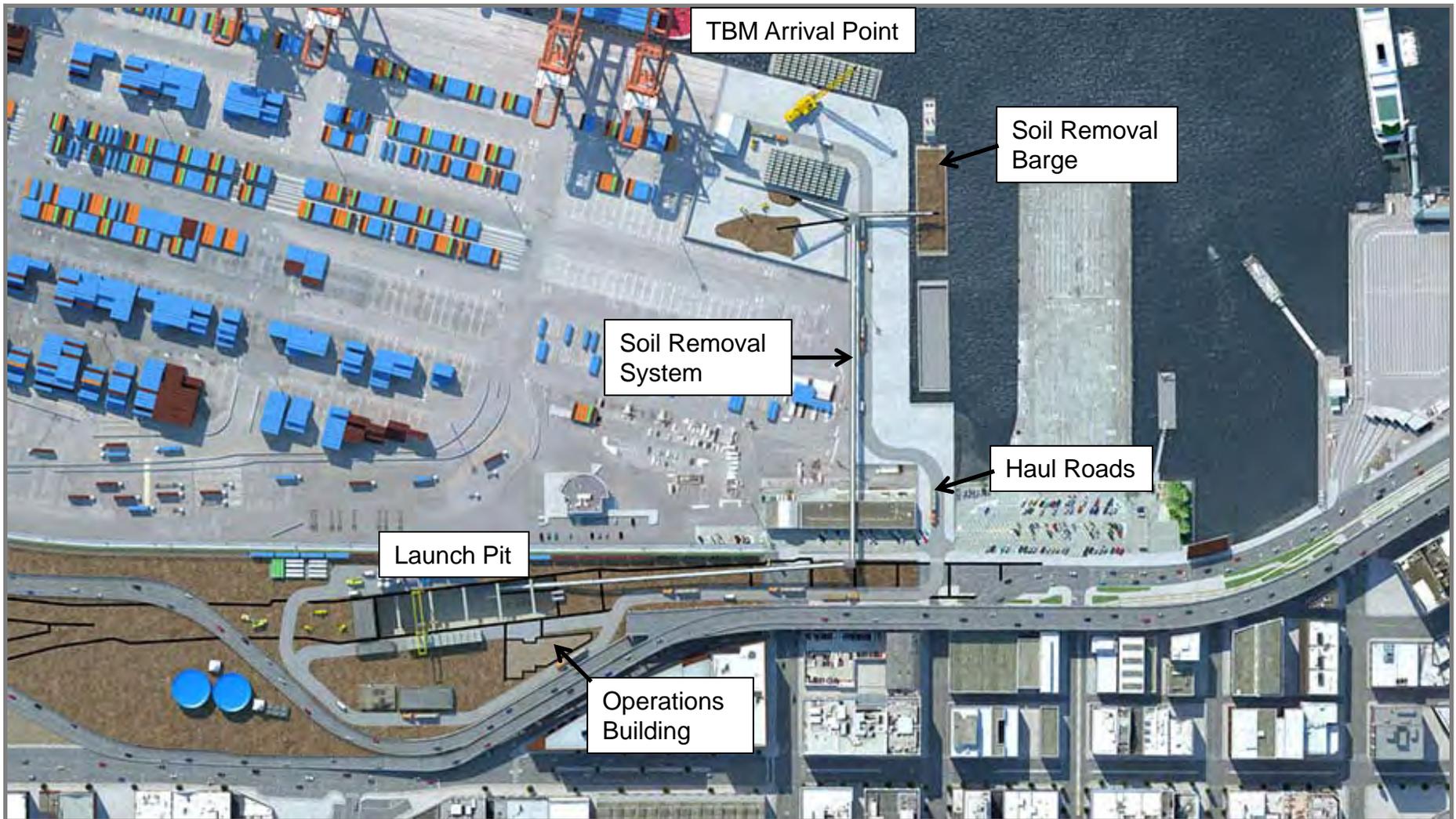


- Launch pit construction will continue through spring 2013.
- Additional equipment is arriving at work site to prepare for TBM arrival this spring.

B Jet Grout Plant at SR 99 Tunnel Work Site



B SR 99 Tunnel Project Work Site



B Tunnel Spoils Conveyor Belt



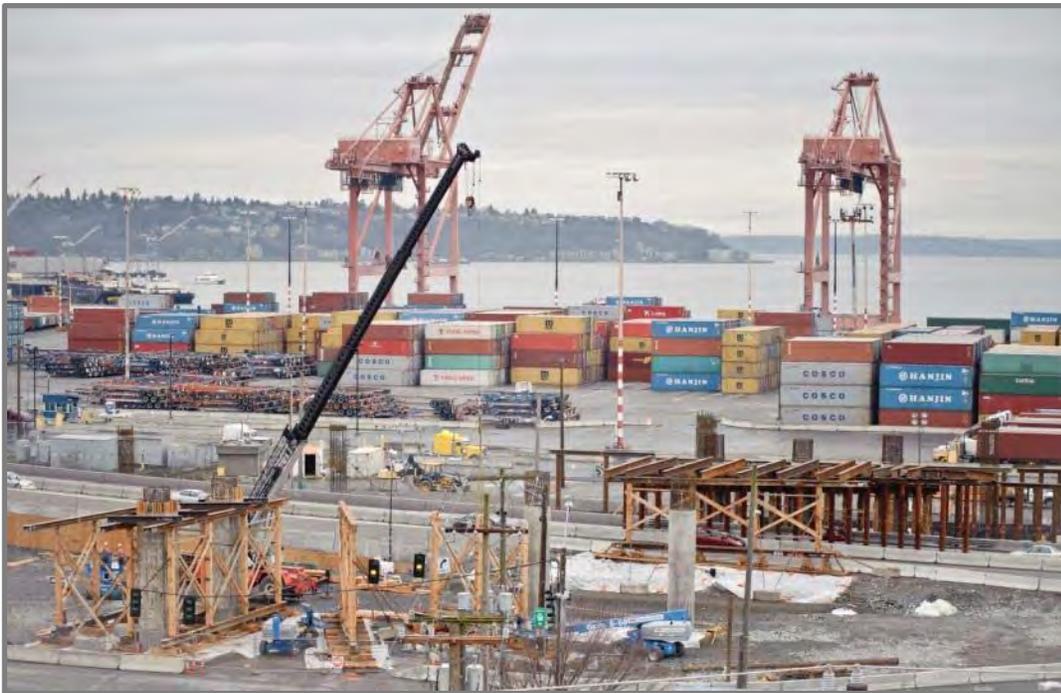
A similar conveyor belt system at a tunneling project in Asia.

C Building Tunnel Support Walls



- June 2012 to spring 2013.
- Secant piles form underground walls to provide a protected area where the TBM will start tunneling.
- Crews will use jet grouting to stabilize some areas.

D Build South Atlantic Street Overpass



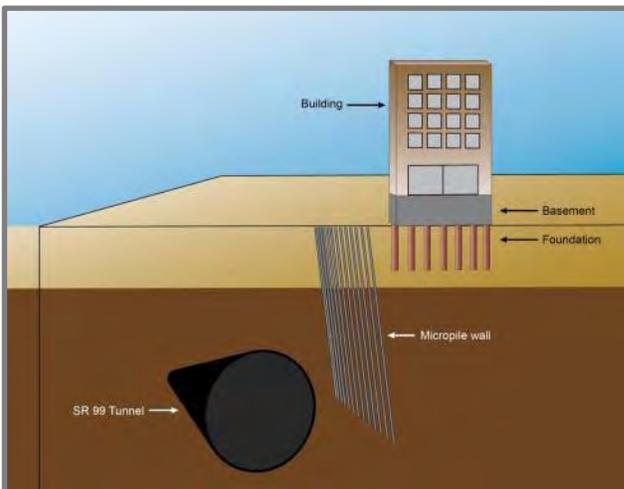
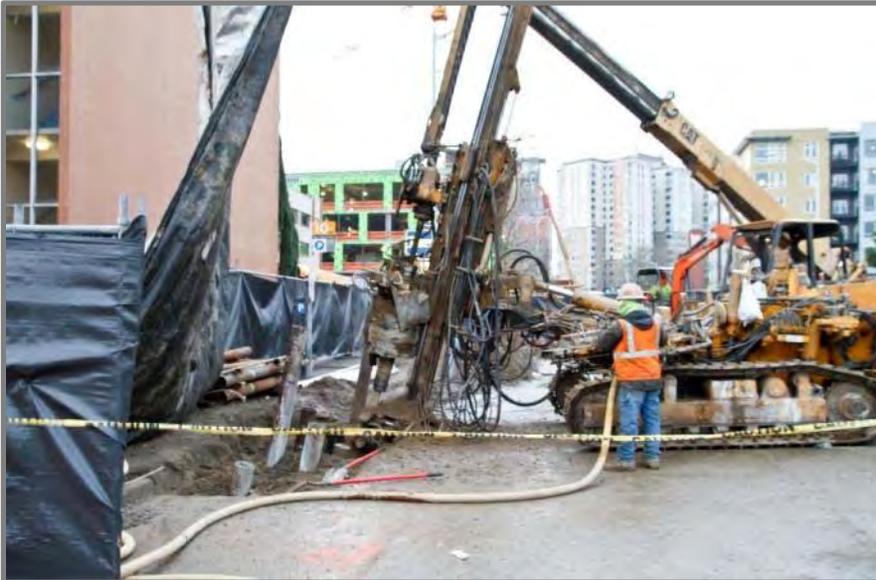
- July 2012 to December 2013.
- Upcoming work includes building bridge deck.
- Anticipate several closures of South Atlantic Street off-ramp.

North End Construction Overview



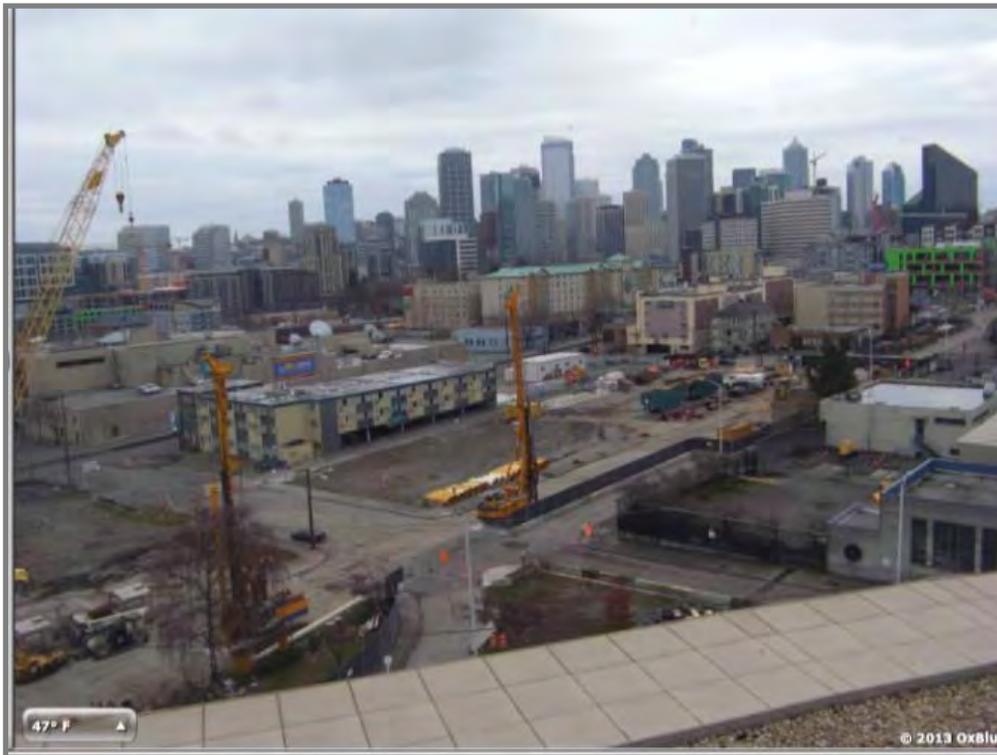
- A** Install micropile walls
- B** Build tunnel receiving pit
- C** Mercer East construction
- D** Mercer West construction

A Installing Micropiles



- January to early spring 2013.
- Crews are drilling micropile walls to protect several buildings near the tunnel's future north portal.
- Lane closures on Sixth Avenue North between John and Thomas streets.

B Build Tunnel Receiving Pit



- Early 2013 to summer 2013.
- Initial work includes drilling piles for receiving pit support walls.
- Excavation will begin following pile installation.



TBM Update

Meet Bertha, The SR 99 Tunnel Boring Machine

- Named after Bertha Knight Landes; elected mayor of Seattle in 1926 and was the first woman to lead a major American city.
- Follow Bertha on Twitter: [@BerthaDigsSR99](https://twitter.com/BerthaDigsSR99)



Bertha, the tunnel boring machine, is being fabricated in Japan.

Project Leaders in Japan



Project Leaders in Japan



Upcoming SR 99 Tunnel Milestones



- TBM completed (January 2013).
- TBM disassembled and shipped to Seattle (early 2013).
- Tunneling starts (summer 2013).

Other Project Updates



- A** Rebuild Airport Way South viaduct
- B** Replace gas line
- C** Rebuild SR 99 timber bridge

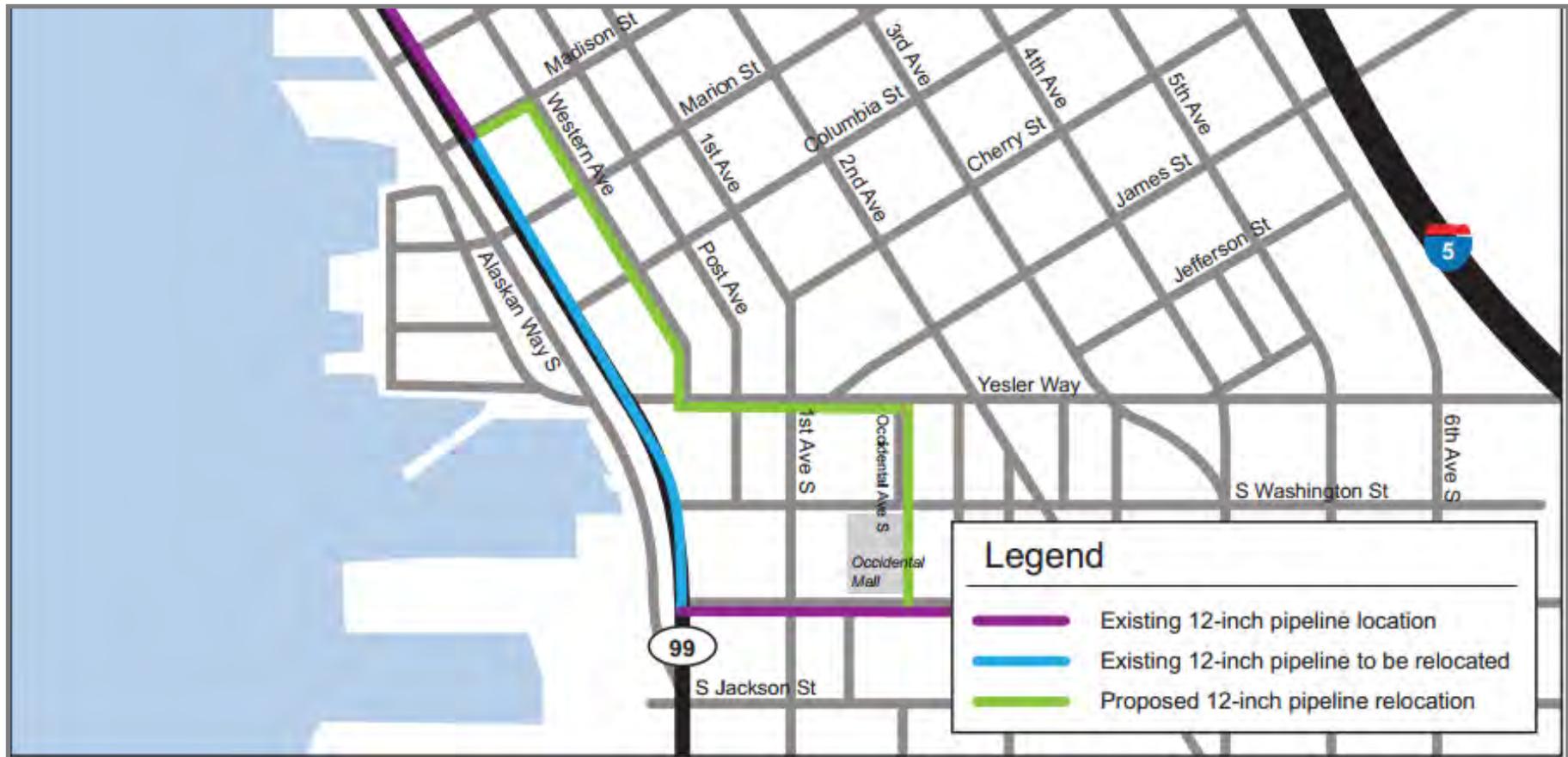
- D** Replace I-5 expansion joints
- E** Repave I-5 near University District

A Airport Way South Viaduct Open to Drivers

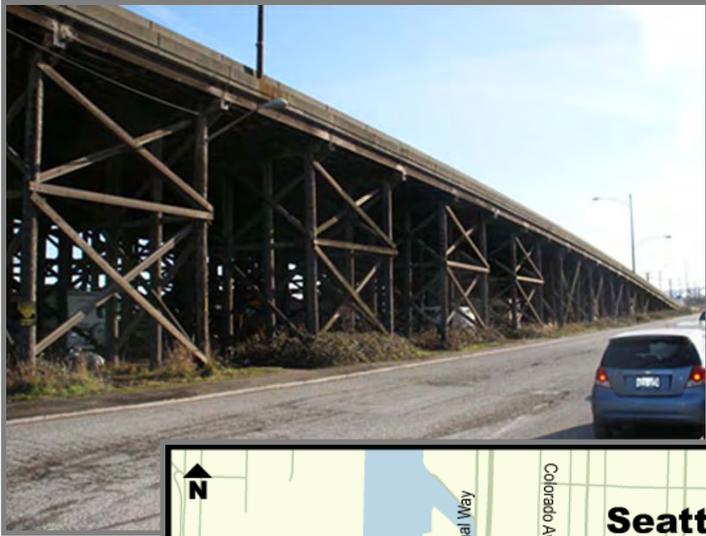


- The SDOT project to rehabilitate the Airport Way South Viaduct officially opened to traffic on December 21, 2012.
- Minor work such as remaining punchlist items, an ADA ramp installation on S. Lucille Street and final lane markings will continue into February or until weather is more favorable.

B Puget Sound Energy Gas Main Relocation

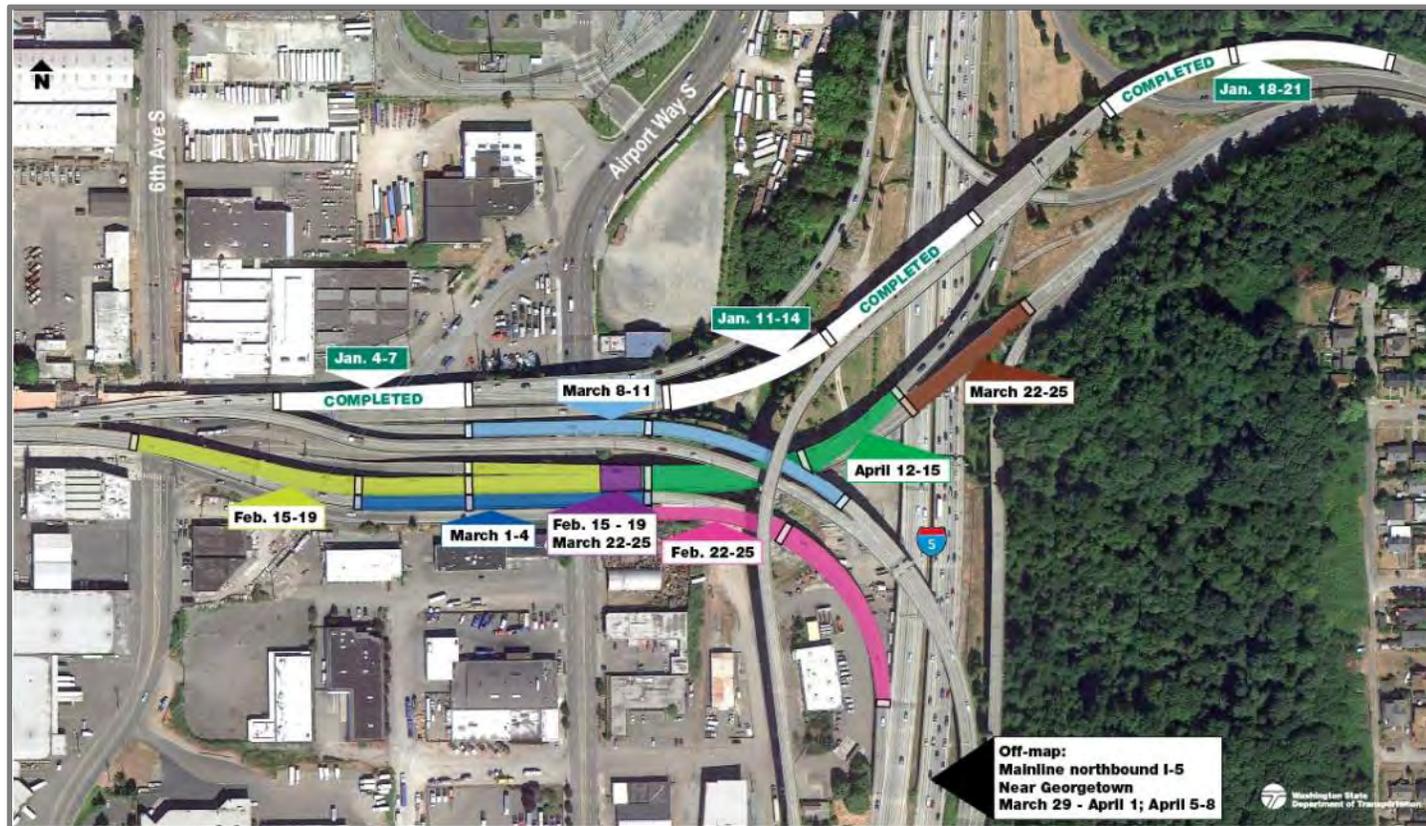


C SR 99 Spokane Street Overcrossing Replacement Project (Timber Bridge)



- Replace a 50-year-old timber-supported bridge with a concrete column supported structure.
- South of South Spokane Street, maintain two lanes of northbound and one lane of southbound SR 99 traffic throughout construction by rebuilding the east and west halves alternately.
- Feb. 25 2013 – July 2014.
- More than half the vehicles on southbound SR 99 exit to the West Seattle Bridge.

D I-5 Special Bridge Repair – under way



- Replace 26, 50-year-old expansion joints during 54-hour long weekend closures.
- Work area includes ramps that connect the West Seattle Bridge, Columbian Way and I-5.
- Work includes northbound I-5 near Corson/Michigan.
- Three of 11 closures are complete.
- Work complete by April 15.

E I-5 Concrete Repair

University District / Eastlake



- Southbound I-5 from NE 50th Street to Lakeview, excluding Ship Canal.
- 8 consecutive Friday nights from 10 p.m. to 10 a.m.
- 3 of 4 lanes closed.
- Express lanes remain open.
- Work complete by April 1.

mcp mercer corridor project

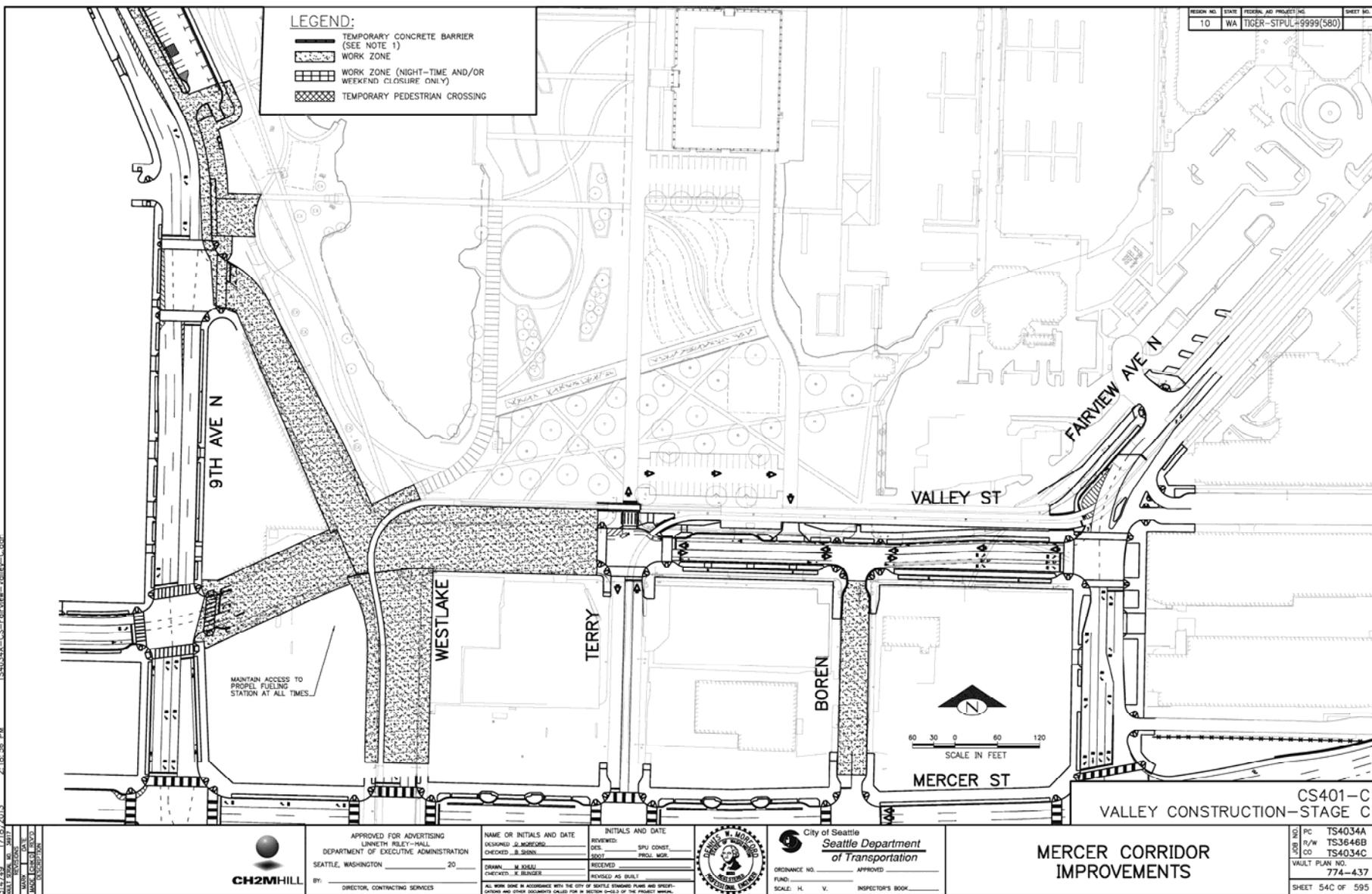


February 2013

Completing the Vision For Two-Way Mercer St.



Construction Staging on Valley St. (Part 3 of 3)



REGION NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.
10	WA	TIGER-STPUL#9999(580)	

LEGEND:

- TEMPORARY CONCRETE BARRIER (SEE NOTE 1)
- WORK ZONE
- WORK ZONE (NIGHT-TIME AND/OR WEEKEND CLOSURE ONLY)
- TEMPORARY PEDESTRIAN CROSSING

7/14/2013 1:17:08 PM
 2:18:58 PM
 TS40344-CS-Envelope-Valley-C.dwg
 7/14/2013 1:17:08 PM
 2:18:58 PM
 TS40344-CS-Envelope-Valley-C.dwg

CS401-C
VALLEY CONSTRUCTION-STAGE C

MERCER CORRIDOR IMPROVEMENTS



APPROVED FOR ADVERTISING
 LYNNETH RILEY-HALL
 DEPARTMENT OF EXECUTIVE ADMINISTRATION
 SEATTLE, WASHINGTON 20
 BY: _____
 DIRECTOR, CONTRACTING SERVICES

NAME OR INITIALS AND DATE
 DESIGNED: J. HIGGINS
 CHECKED: J. SONG
 DRAWN: M. SOKAL
 CHECKED: K. BUNGER

INITIALS AND DATE
 REVIEWED: _____
 DES. SPU CONST.
 SPOK. PROD. MGR.
 RECEIVED: _____
 REVISED AS BUILT

ALL WORK DONE IN ACCORDANCE WITH THE CITY OF SEATTLE STANDARD PLANS AND SPECIFICATIONS AND OTHER DOCUMENTS ON FILE IN SECTION OFFICE OF THE PROJECT SPECIAL.



City of Seattle
Seattle Department of Transportation
 ORDINANCE NO. _____ APPROVED _____
 FUND _____
 SCALE: H. V. INSPECTOR'S BOOK _____

PC TS4034A
 R/W TS3646B
 CO TS4034C
 VAULT PLAN NO.
 774-437
 SHEET 54C OF 595

What to Expect in 2013

March 2013: Start Construction

- Broad St. open with two lanes in each direction
- Mercer St. restricted to 2 eastbound lanes from Fifth Ave. N to Dexter Ave. N
- Sidewalk open on one side of Mercer St.
- SR 99 restricted to 2 lanes in each direction and no sidewalks at Mercer St.
- SR 99 northbound off-ramp to Mercer St./Dexter Ave. N closed
- SR 99 transit stops at Mercer St. closed

What to Expect in 2014

July 2014: Close Broad St.

- Mercer St. open with 2 lanes in each direction from Queen Anne Ave. N to Dexter Ave. N
- Roy St. open with 1 lane in each direction from Queen Anne Ave. N to Fifth Ave. N
- SR 99 restricted to 2 lanes in each direction and no sidewalks at Mercer St.

What to Expect in 2015 and Beyond

July 2015: End Mercer Corridor Construction, Continue SR 99 Tunnel Construction

- SR 99 restricted to 2 lanes in each direction and no sidewalks at Mercer St.

Following Mercer Corridor Project Completion:

- December 2015: Open SR 99 Tunnel (WSDOT)
- 2016: Construct surface street connections across Aurora Ave N (WSDOT)

Throughout Construction

Travelers can expect:

- Early warning signs and alternate route information in advance
- Coordination and outreach designed to reduce the duration of construction impacts to the traveling public and project neighbors
- Signal timing will be monitored and updated throughout the Mercer Corridor to improve efficiency
- Maintained southbound transit-only lane on SR 99

SDOT contact information

- **Email**

mercerinfo@seattle.gov

- **24-hour Hotline**
(206) 419-5818

- **Website**

www.seattle.gov/Transportation/ppmp_mercer.htm



mercercorridorproject
fixing the mercer mess

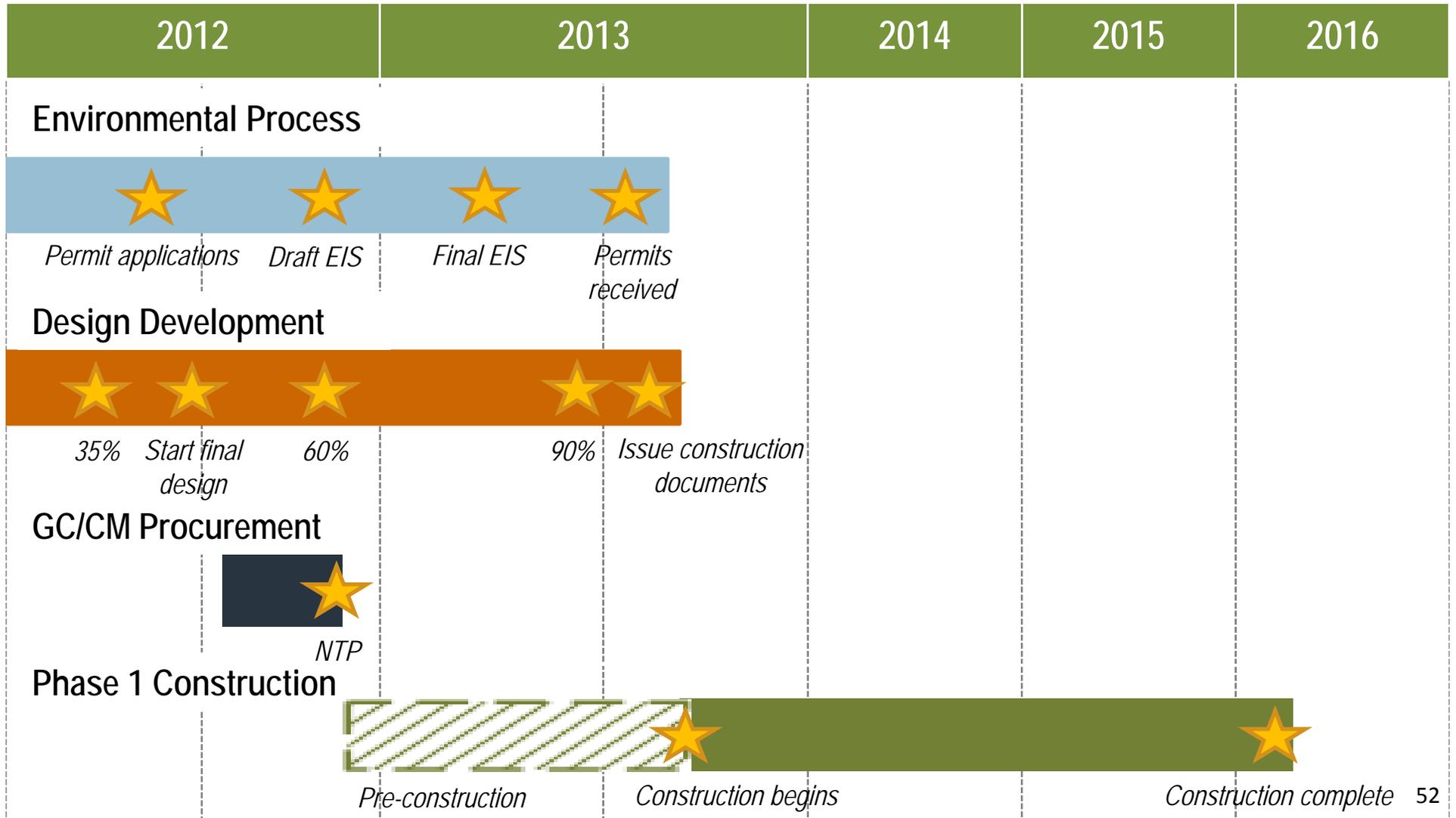
Project and Construction Information
Email: mercerinfo@seattle.gov
Phone: (206) 419-5818
Project Office: 330 Fairview Avenue North, Seattle, WA 98109
Website: www.seattle.gov/Transportation/ppmp_mercer.htm



Working Group Member Feedback

Elliott Bay Seawall Project

Project Milestones



Construction complete 52

Website:

www.alaskanwayviaduct.org

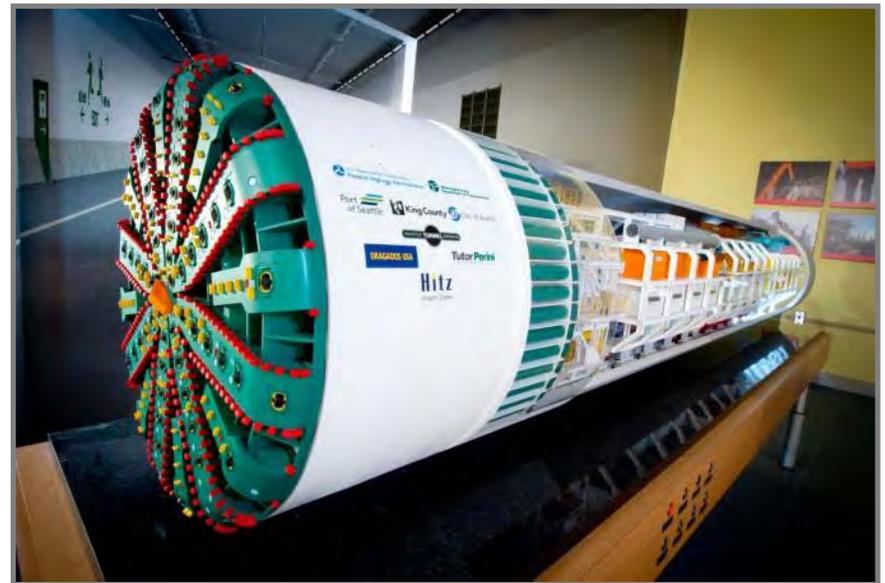
Twitter: @BerthaDigsSR99

Email:

viaduct@wsdot.wa.gov

Hotline:

1-888-AWV-LINE



Milepost 31 is located at 211 First Ave. S.