

# ENVIRONMENTAL REVIEW AND ASSESSMENT



For the purpose of environmental review, the Renton to Bellevue program consists of two projects.

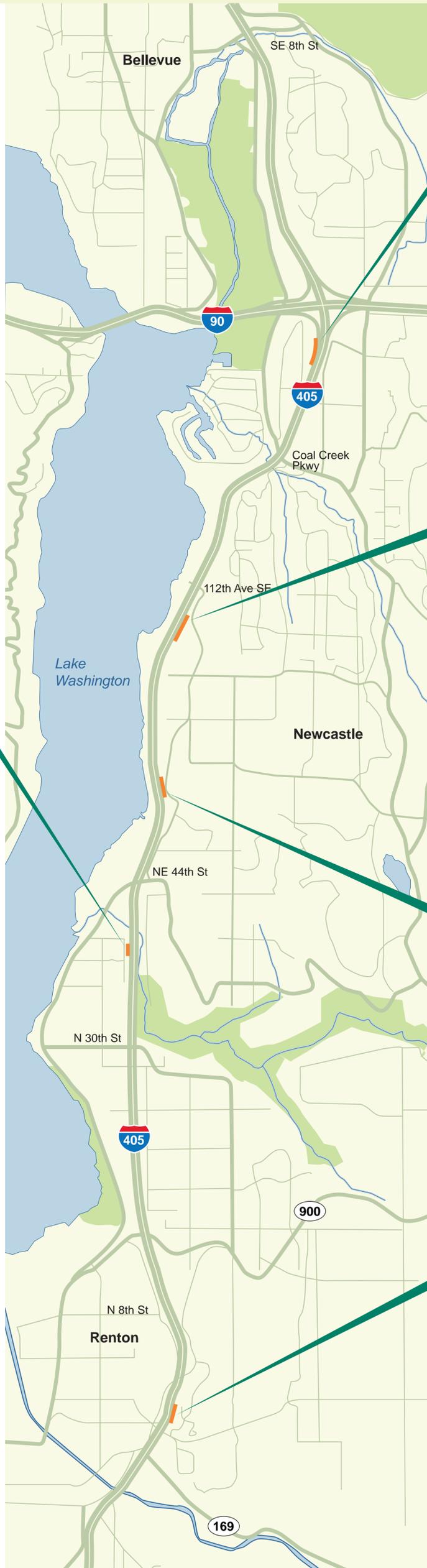
- For **SR 169 to I-90**, WSDOT is conducting an **environmental review** of design changes since the **2008 Finding of No Significant Impact**, including the incorporation of tolling.
- For **I-90 to Northeast 6th Street**, WSDOT is conducting an **environmental assessment**.

For both reviews, WSDOT will analyze the following disciplines:

- Air Quality
- Cumulative Effects
- Economic, Social, Public Services, and Utilities
- Ecosystems
- Energy
- Environmental Justice
- Geology and Soils
- Hazardous Materials
- Historic and Cultural
- Land Use
- Noise and Vibration
- Recreational, Section 4(f), and Section 6(f) Resources
- Transportation
- Visual Quality
- Water Resources



# PROPOSED NOISE WALL LOCATIONS



**Bellevue**  
Greenwich Crest area  
**PROPOSED WALL**

**Bellevue**  
Kimberlee Park area  
**PROPOSED WALL**

**Renton**  
Meadow Avenue area  
**RELOCATED WALL**

**Newcastle**  
Near SE 72nd Street  
**PROPOSED WALL**

**Renton**  
Monterey Terrace area  
**PROPOSED WALL**

# PROPOSED NOISE WALL LOCATIONS



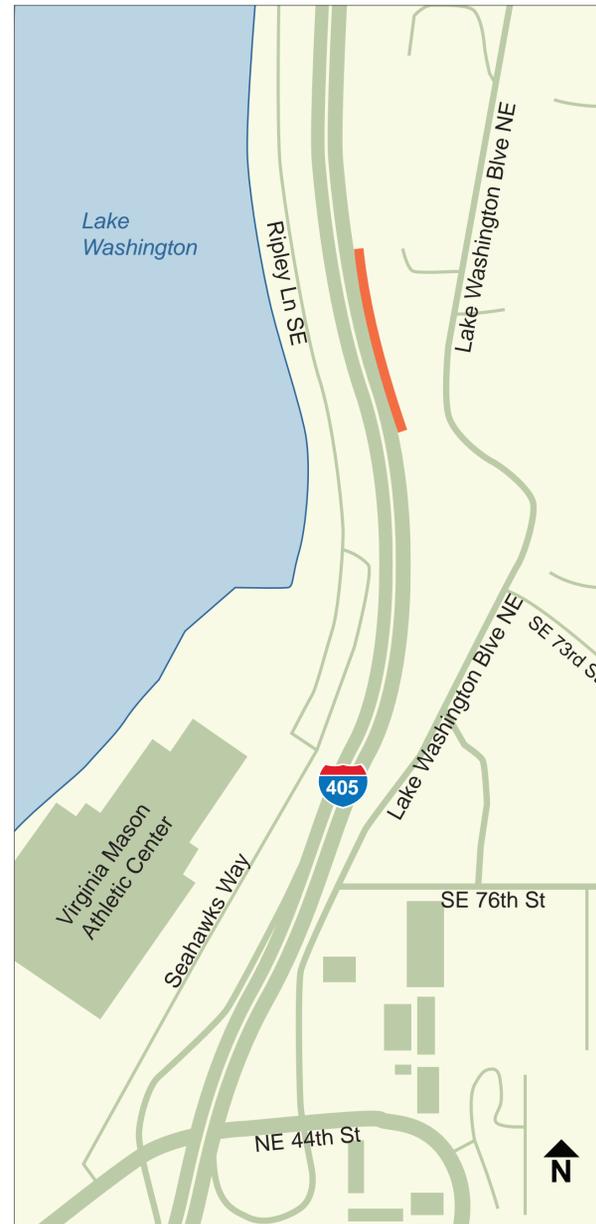
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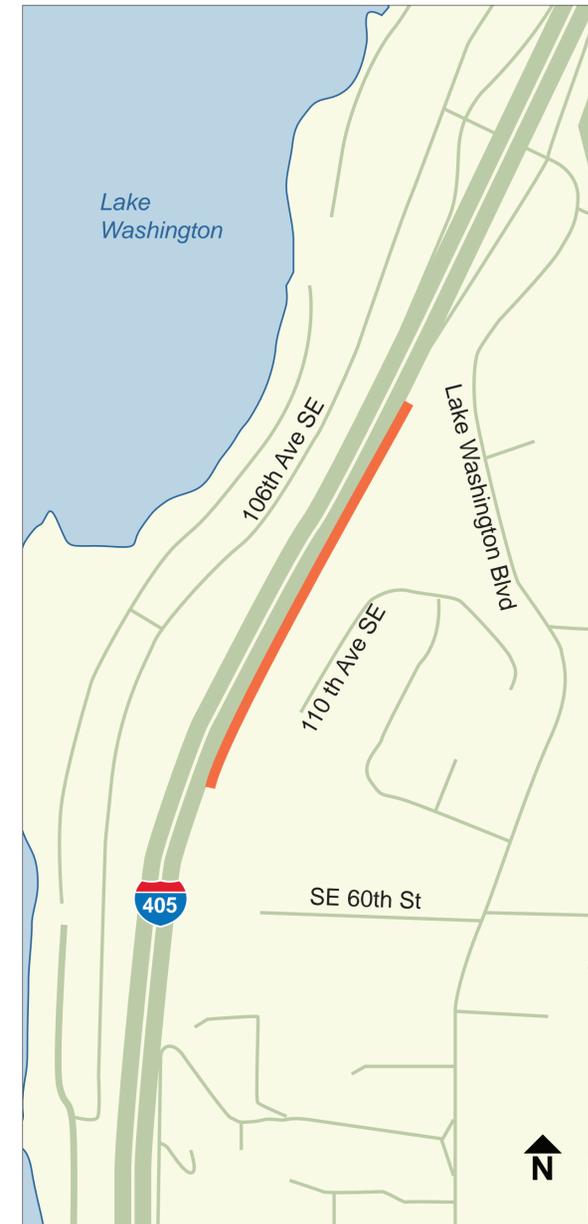
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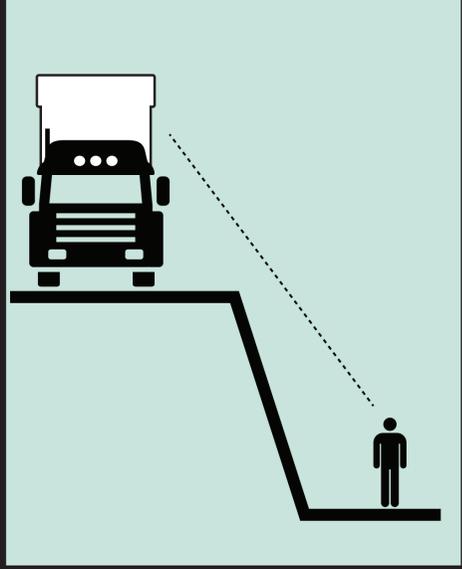
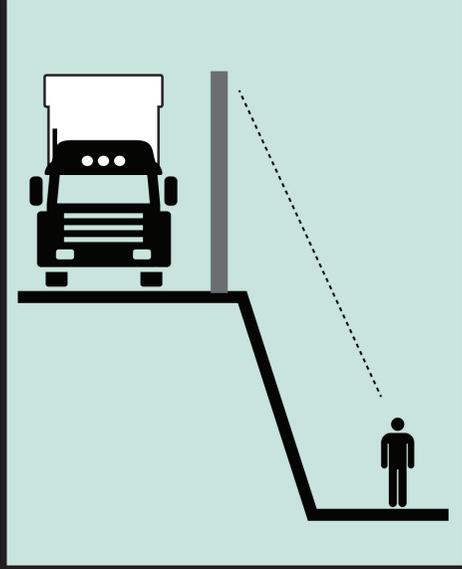
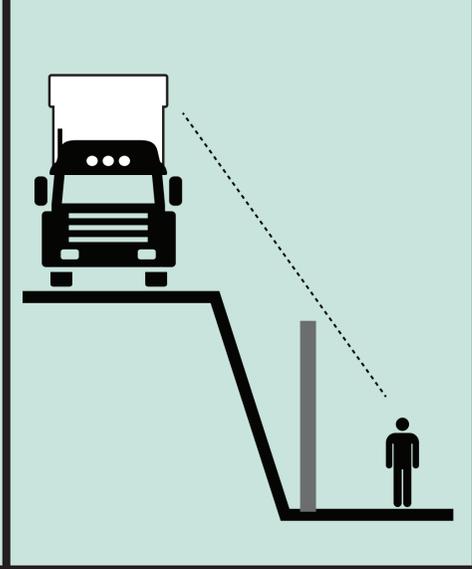
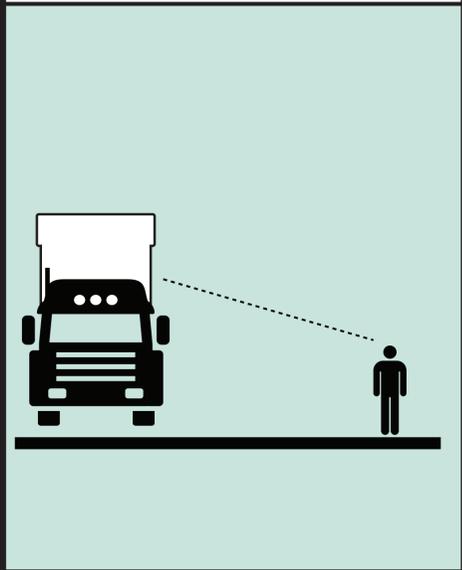
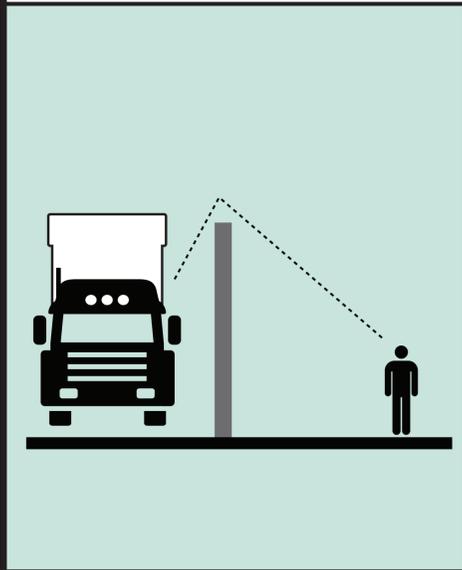
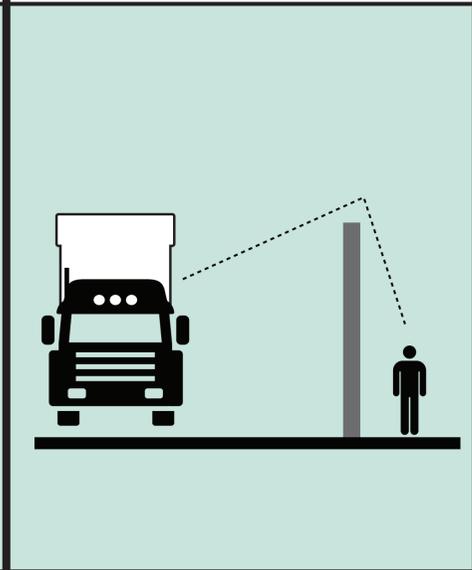
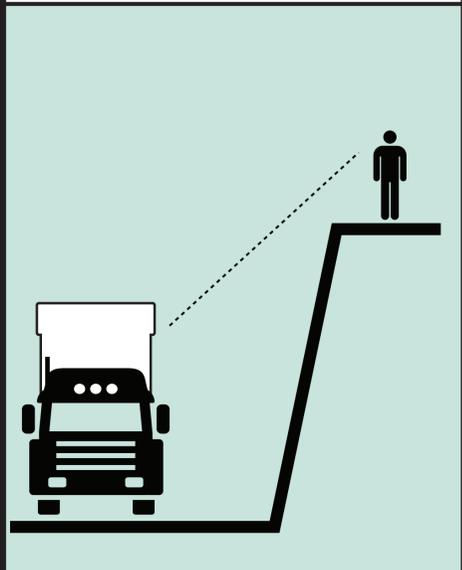
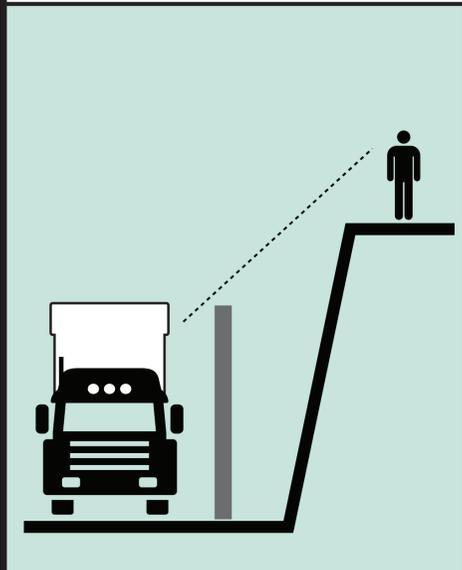
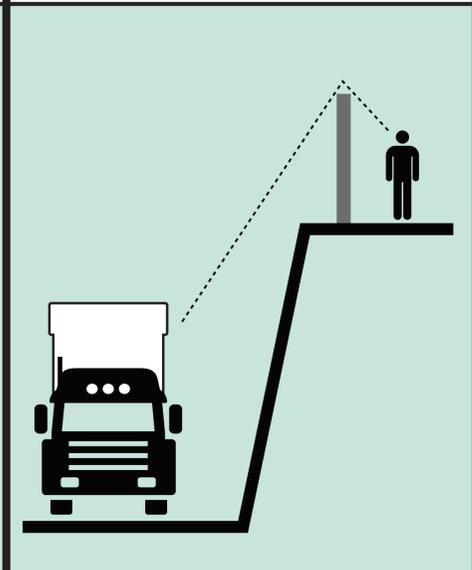


**Bellevue**  
Greenwich Crest area  
**PROPOSED WALL**



- Proposed Noise Wall
- Existing Noise Wall
- Relocated Noise Wall

# HOW DO NOISE WALLS WORK?

Barrier Roadway	NONE	NEAR SOURCE	NEAR RECEIVER
ELEVATED	May be some noise reduction by terrain	Barrier is very effective	Barrier has no effect
			
LEVEL	Noise travels directly to the receiver	Barrier is effective	Barrier is effective
			
DEPRESSED	May be some noise reduction by terrain	Barrier has no effect	Barrier is effective
			

# NOISE WALL REQUIREMENTS



*WSDOT complies with Federal Highway Administration (FHWA) regulations for noise walls, following a three-step sequential process guided to determine:*

- Whether a location has high enough future noise levels (exceeding 66 dBA) to warrant further consideration for a noise wall
- Whether it is feasible to construct the noise wall (i.e., whether the proposed noise wall will provide a substantial reduction in noise and other constructability issues; the home's distance from the highway and topography relative to the roadway can play a role in this factor)
- Whether it is reasonable to construct the proposed noise wall (based on the cost to construct the noise wall per residence affected; density of homes plays a role in this factor)

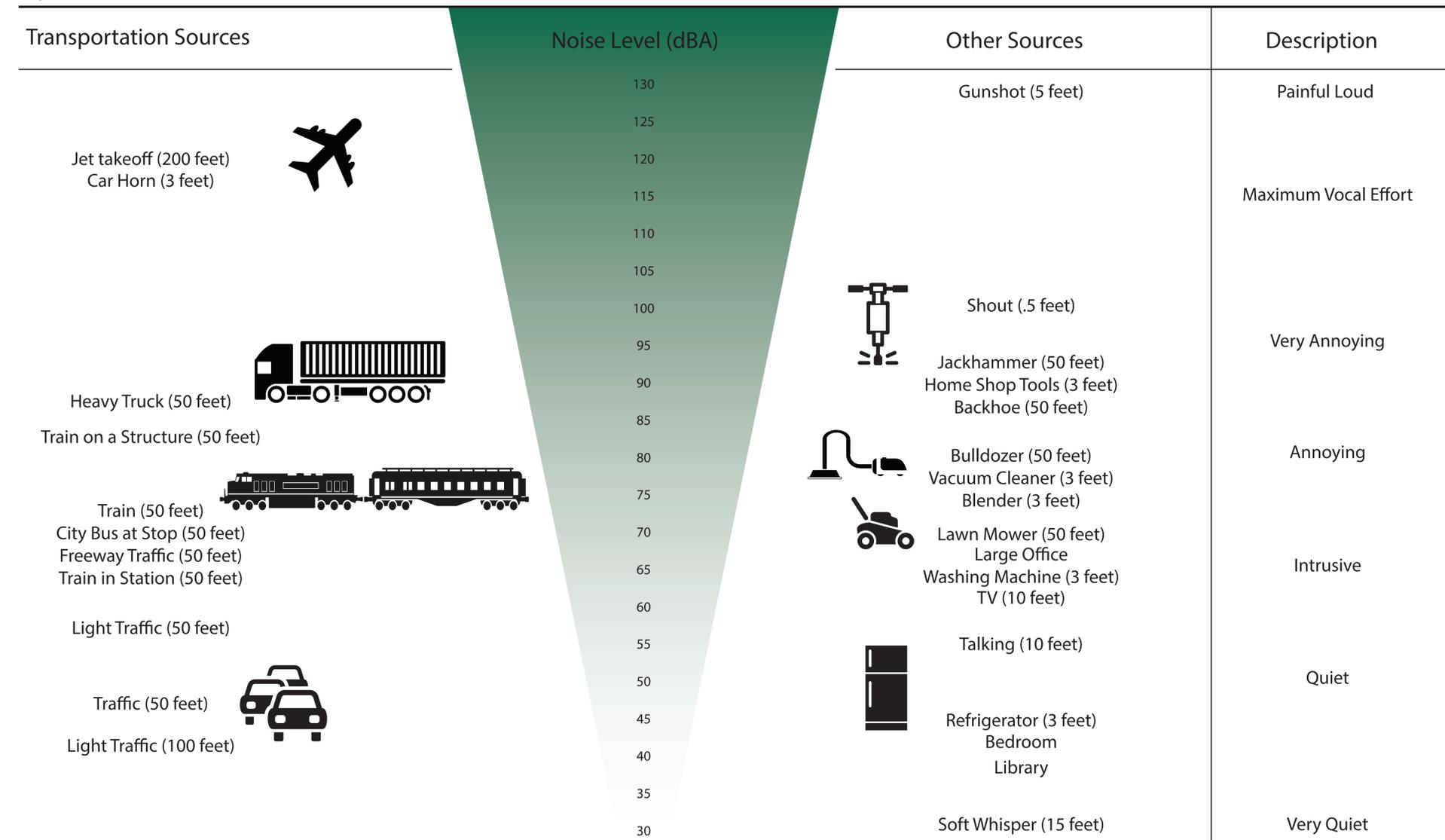


*The community side of a completed noise wall as part of the Bellevue braided ramps project*

# WHAT IS A DBA?

The first step in the noise wall evaluation process is to see whether a location has high enough future noise levels (exceeding 66 dBA) to warrant further consideration for a noise wall. But what is a dBA?

## Typical Sound Levels



Sources: USDOT 1995; EPA 1971, 1974

Note: dBA = A-weighted decibel

This project will work to minimize impacts on local waterways by cleaning and, in some cases, storing water that runs off the roadway.

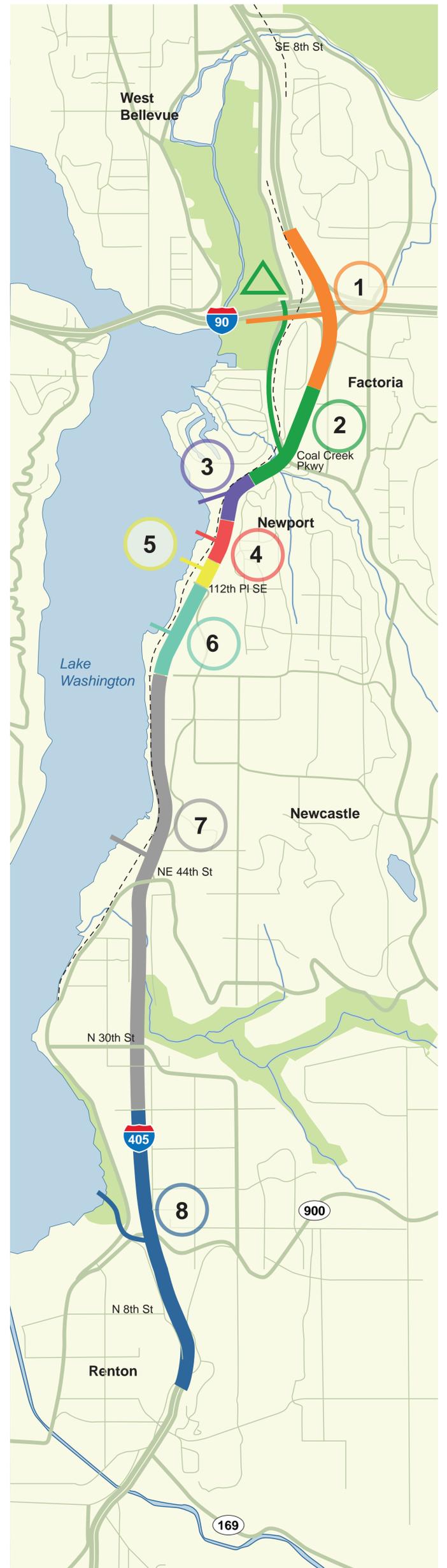
## Techniques include:

- **Flow control** protects nearby streams from changes in highway runoff related to widening. Flow control is not required where the project discharges to Lake Washington and Mercer Slough. Where feasible, some runoff will be diverted away from flood-prone areas to improve downstream conditions.
- **Runoff treatment** cleans pollutants from water according to WSDOT and Department of Ecology guidelines.
- **Downstream and wetland hydrological analyses** verify that properties and resources are not impacted.
- **Erosion control and monitoring** during construction protects resources and properties from impacts while the highway is under construction.

### Drainage Areas

- 1 - I-90/Mercer Slough
- 2 - Coal Creek\*
- 3 - Newcastle Beach Park\*
- 4 - Bagley Lane
- 5 - Lakehurst Creek\*
- 6 - Pleasure Point\*
- 7 - Gypsy Creek
- 8 - John's Creek
- △ - New discharge

\* No run-off increase

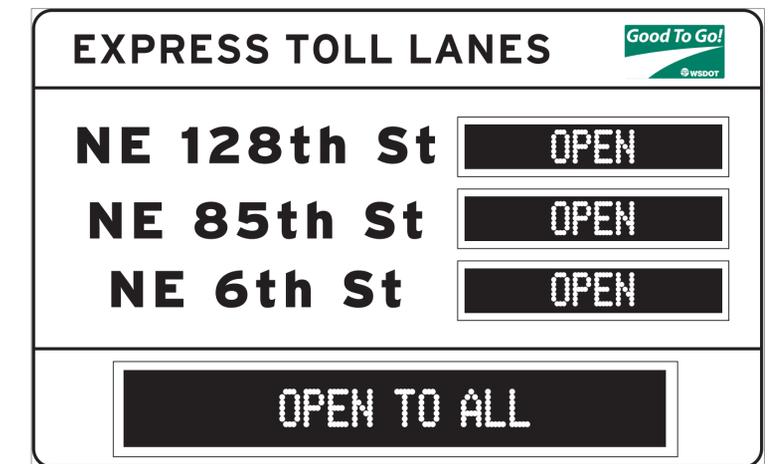
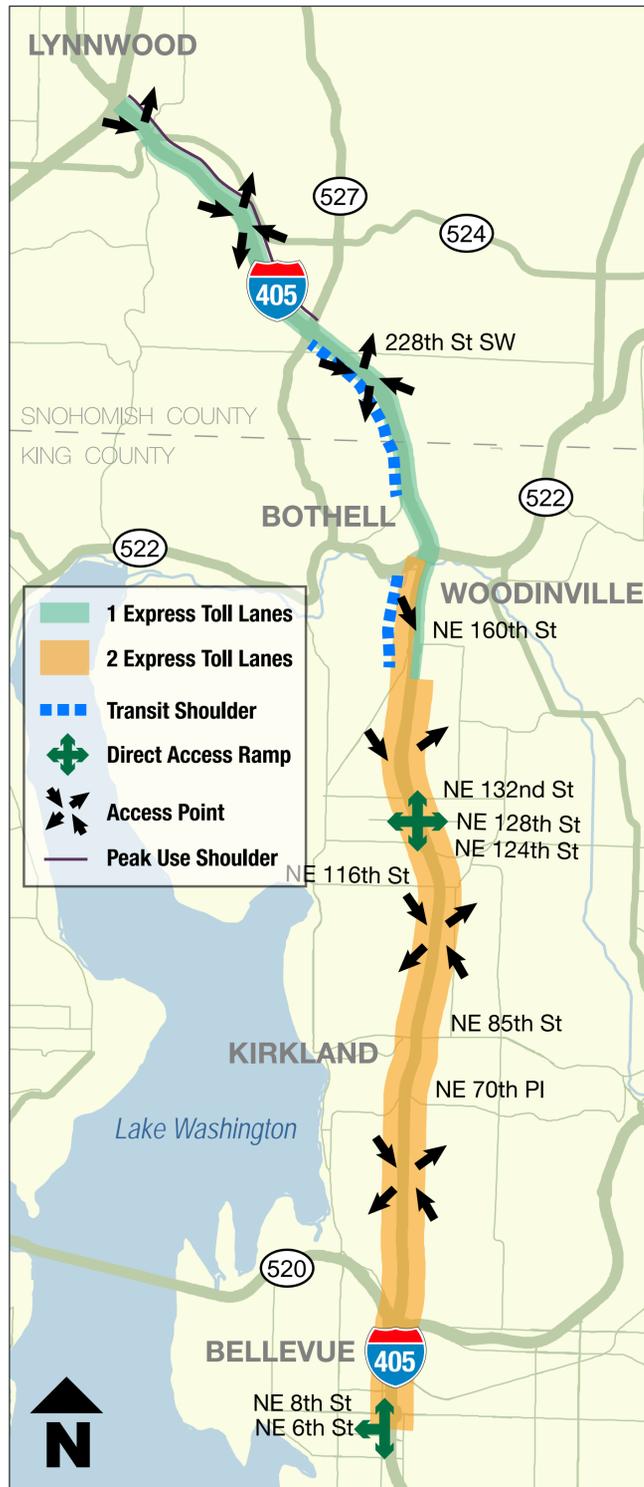


# I-405 EXPRESS TOLL LANES



## Quick Facts

- Opened Sept. 27, 2015
- 17 miles of express toll lanes
- Operation hours:  
5 a.m. to 7 p.m. Monday – Friday
- Toll Rates
  - Minimum Toll Rate \$ 0.75
  - Maximum Toll Rate \$ 10.00
- Carpool Policy
  - 3+ carpools with Flex Pass exempt at all times
  - 2+ carpools exempt except 5-9 a.m. and 3-7 p.m. on weekdays



# I-405 EXPRESS TOLL LANES



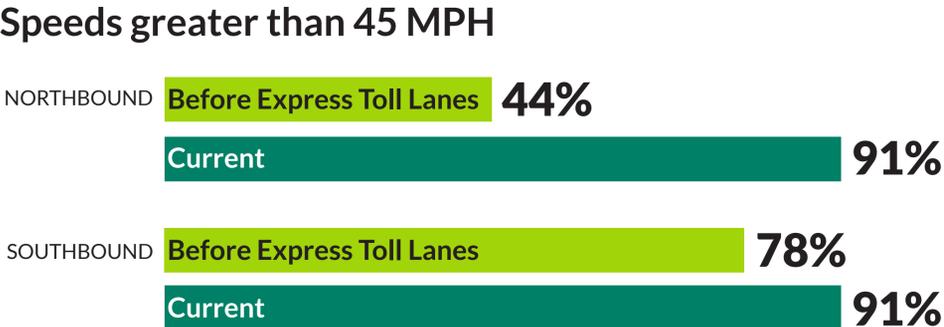
## Goals of express toll lanes

## Performance Update • Sept. 27, 2015 - June 30, 2016

○ Improve speed and reliability in the HOV lanes



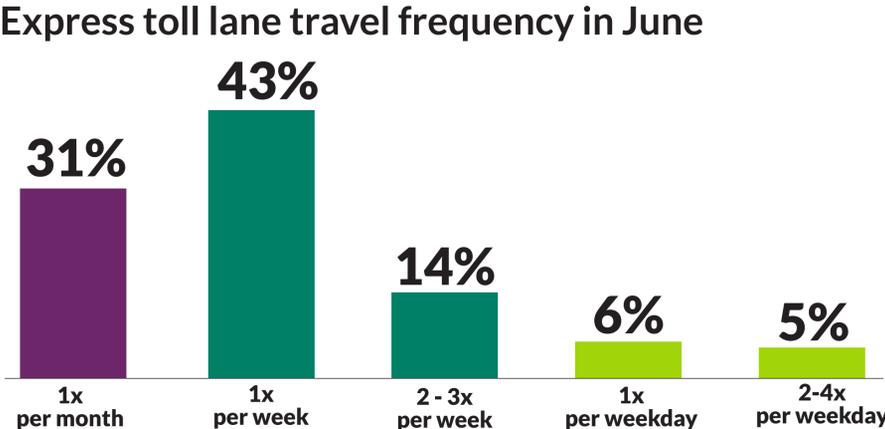
Drivers using the express toll lanes are **saving time**



○ Offer more choices to drivers



Drivers continue to **choose to use the express toll lanes** when they need them



**11 million trips**  
in the first nine months

**80%** of toll rates paid are at or below **\$4**

○ Fund future corridor improvements

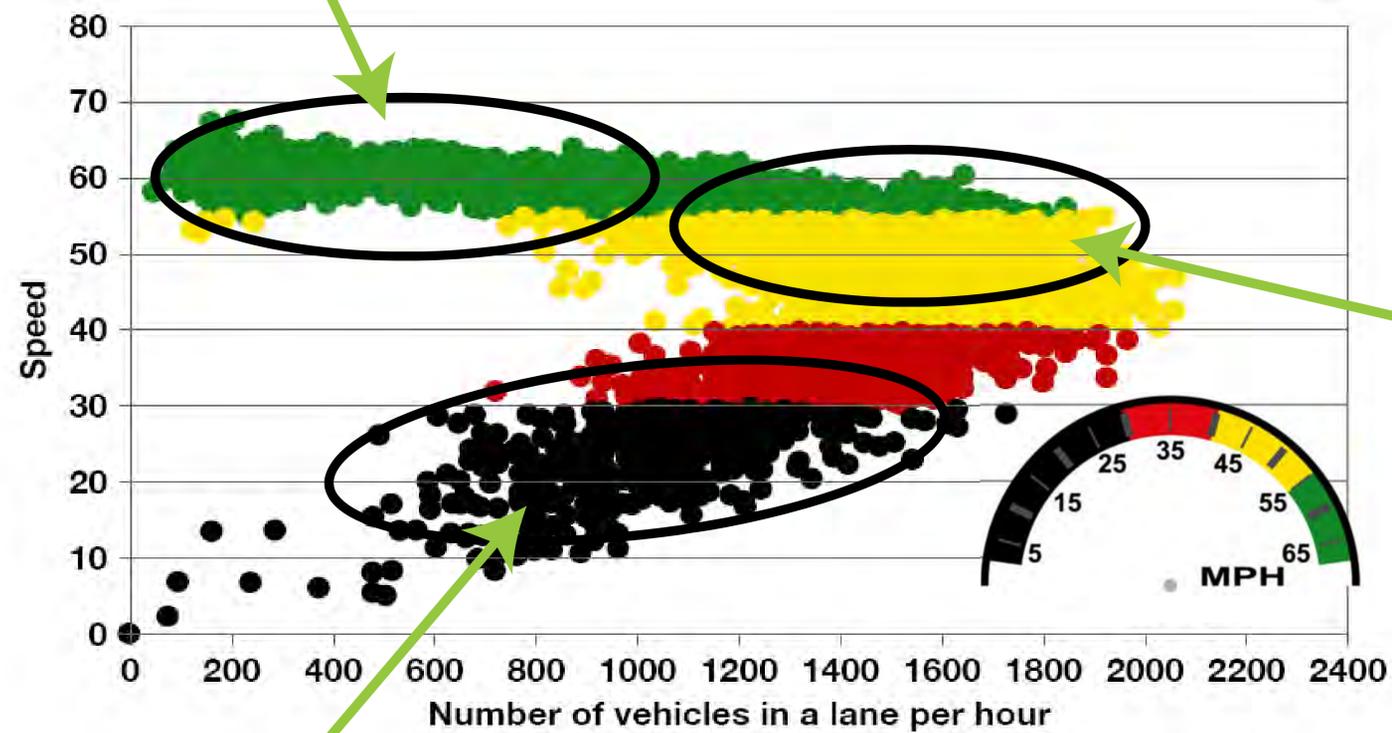


Funded **peak use shoulder improvement** within first year of operations

**\$10 million** reinvestment into the I-405 corridor

If the **price is too high**,  
the lane will be empty

**Dynamic Pricing Solution**  
*The most effective price to move  
the most traffic*



Allow the **users to  
determine the price**  
to keep consistent  
speeds

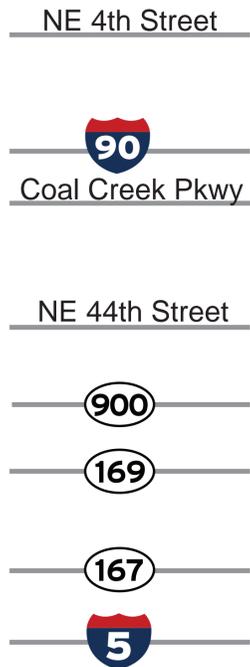
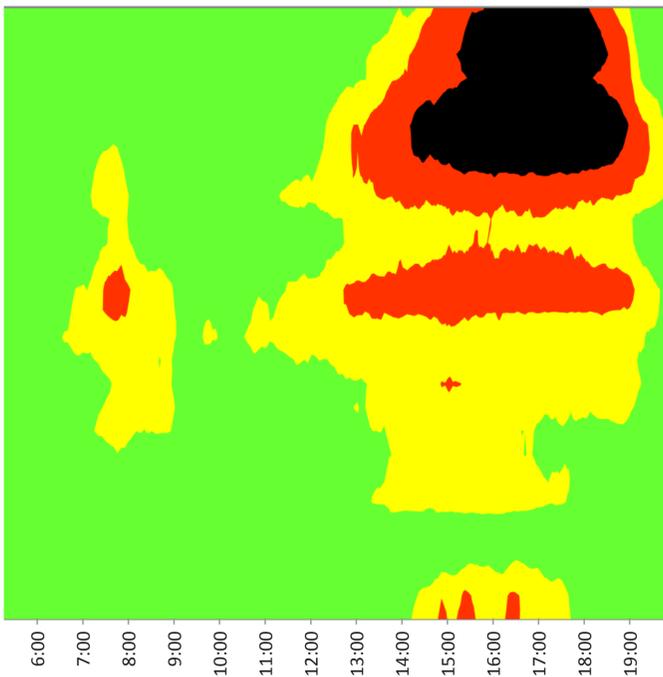
If the **price is too low**,  
the lane will be congested and  
slow moving

# CURRENT TRAFFIC CONGESTION I-405 RENTON TO BELLEVUE



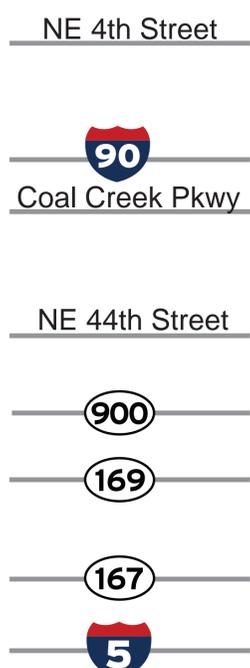
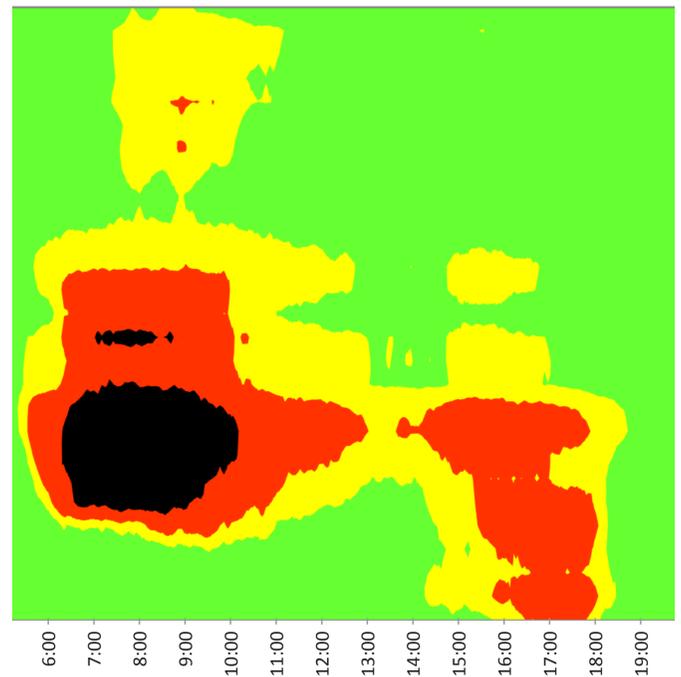
## SOUTHBOUND

### Regular lanes

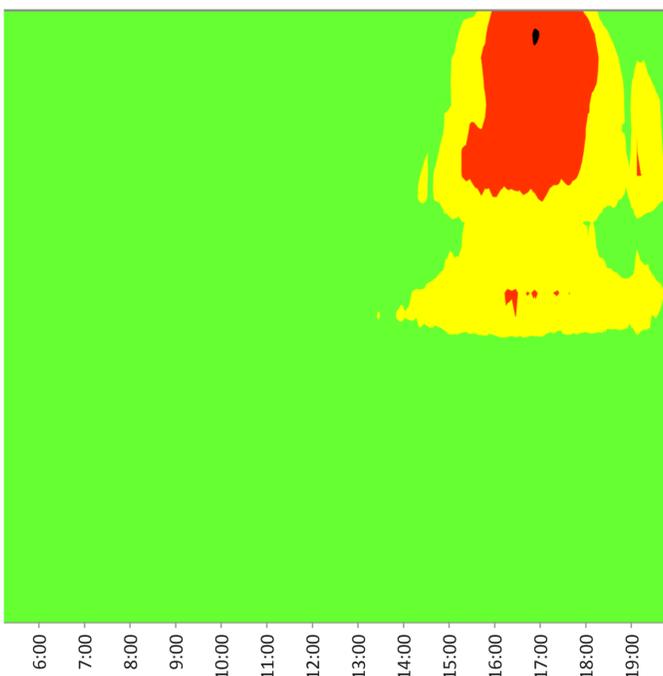


## NORTHBOUND

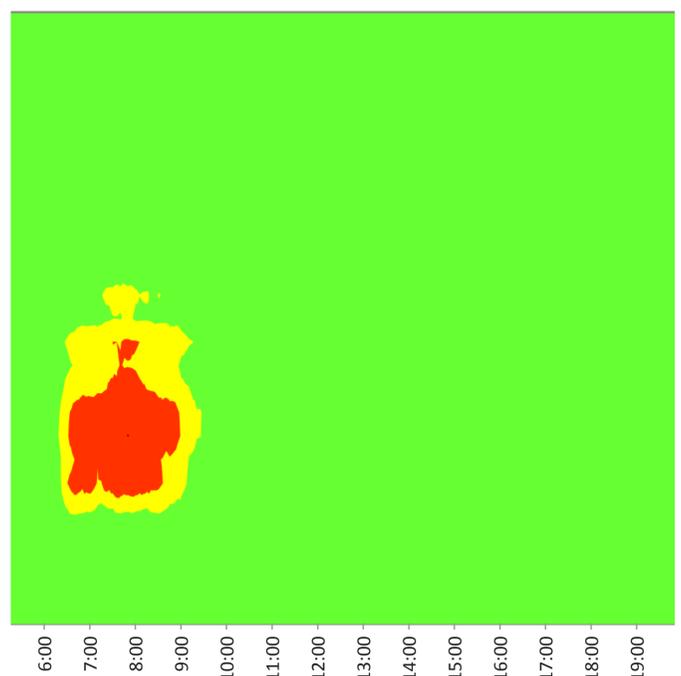
### Regular lanes



### Carpool lane



### Carpool lane



Data from average weekdays, April-June 2016

Heavy regular lane traffic most of the day, HOV congestion during peak periods