

I-405/SR 167 Express Toll Lanes

Corridor Operating Concepts

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Washington State Transportation Commission Meeting
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Agenda & Overview

Agenda

I-405/SR 167 Express Toll Lanes Corridor Operating Concepts

- Overview of 50-mile system and express toll lane goals
- Background of operating concepts
- How existing system operates
- What's new with 50-mile system



Overview of 50-mile I-405/SR 167 express toll lane system

The WSTC must set toll rate policies for the 50-mile system.

I-405 North (Bellevue to Lynnwood)

- Opened in 2015
- Dual-lane will be extended from SR 522 to SR 527

I-405 South (Renton to Bellevue)

- Under construction – scheduled to open in 2024

SR 167 (Renton to Pacific)

- Opened in 2008
- Equipment, signage and striping will be updated to be consistent with I-405



Goals for I-405/SR 167 express toll lane corridor

WSDOT's goals are:

1. Provide a choice for drivers
2. Provide a faster, more reliable trip
3. Raise revenue to reinvest in the corridor

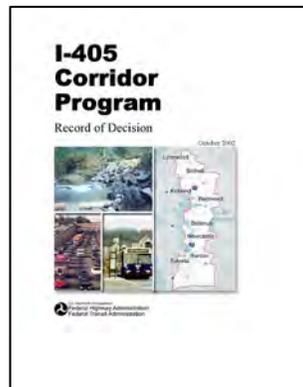


History of Express Toll Lanes Operating Concepts

I-405/SR 167 Executive Advisory Group and program activities

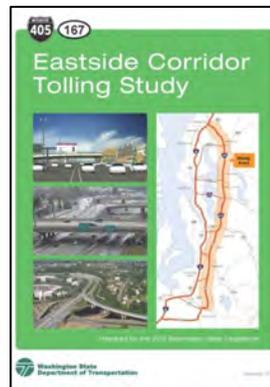


Executive Committee

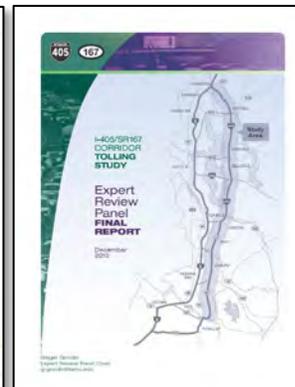


2002

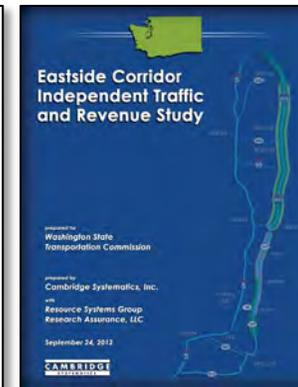
Executive Advisory Group



2009/2010



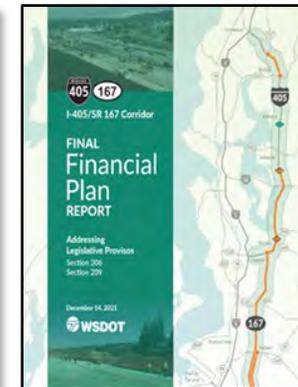
2010



2012

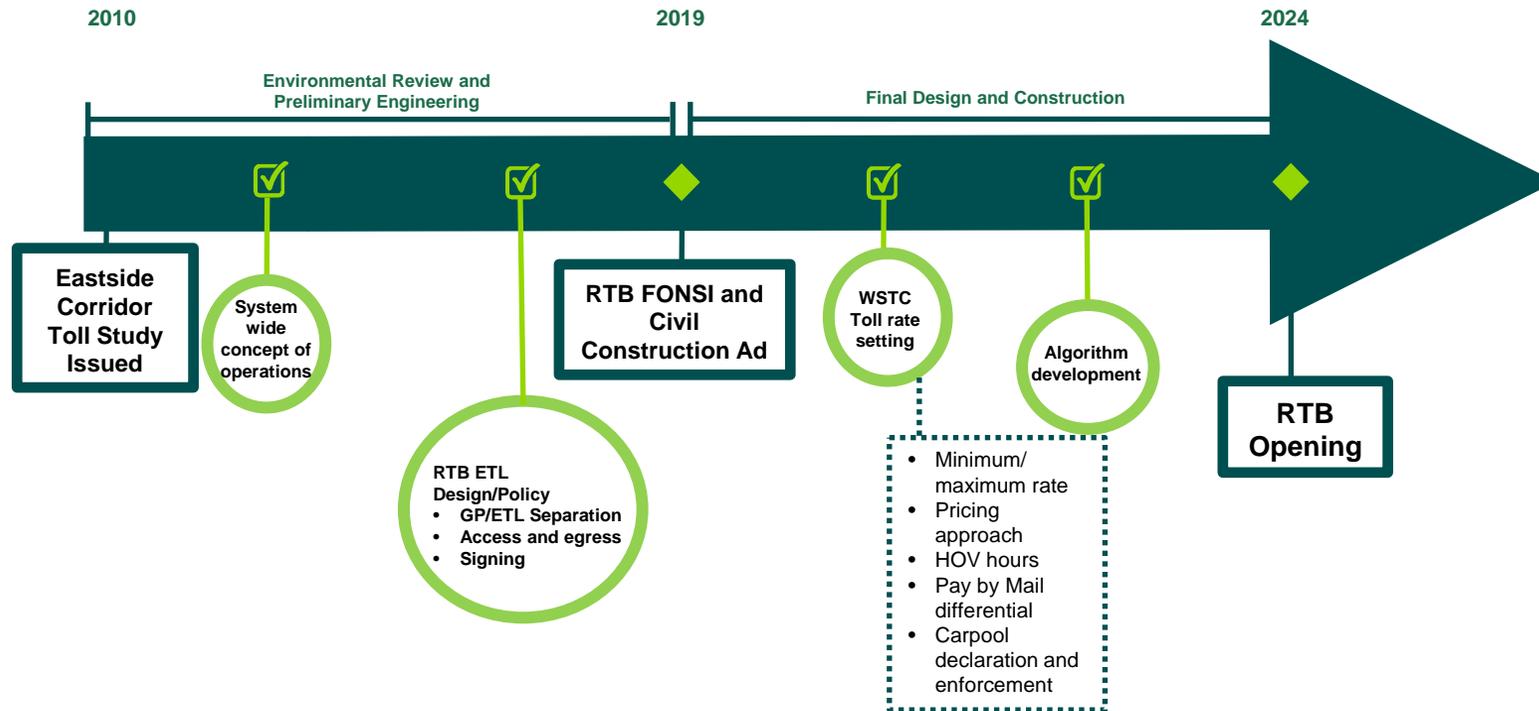


2014



2021

50-mile system — operating concept development



- **System wide concept of operations design decisions:**
 - Traffic and revenue analysis
 - Traffic design including destination pricing, signage and decision points
 - Toll system design including photo tolling

Signage and pricing considerations

- **In general, highway signage needs to convey information quickly**
 - Drivers need to know which signs to pay attention to
 - Most information is needed for occasional users
 - The best signs use colors and symbols consistently
- **Signage for express toll lanes needs to convey:**
 - Multiple toll rates
 - Carpool exemption policy
 - Entrance and exits
 - Payment options
- **Pricing needs to be simple and easy to understand**
 - What drivers pay needs to be clear
 - Drivers need to know what they will pay, prior to making the decision to enter a lane, or continue traveling in a lane
- **Pricing needs to manage traffic and provide a reliable trip**
 - Must manage varying levels of traffic along the 50-mile corridor, and multiple bottleneck locations

Public opinion has helped inform 50-mile express toll lane system design

What we've heard from focus groups and surveys:

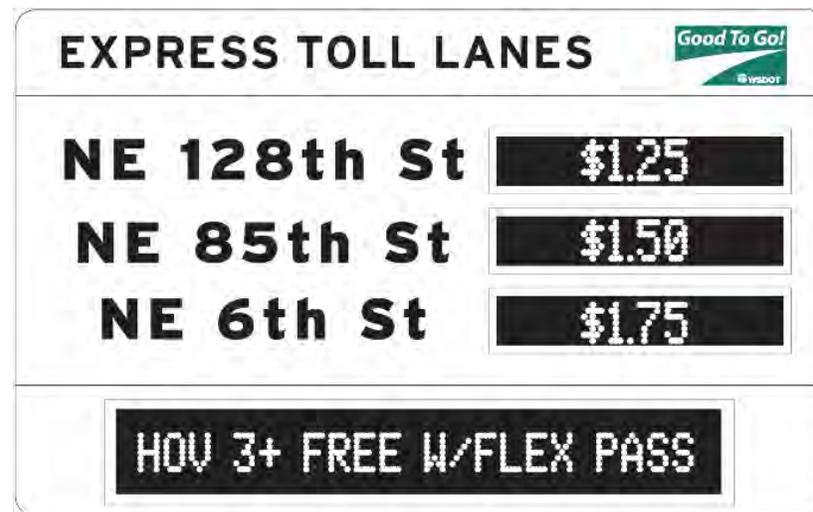
- **People prefer to know the cost for their entire trip** before entering the express toll lanes.
- People generally **understand the same toll is charged for all exits up to the listed exit.**
- People strongly **prefer street names/highways as destinations** instead of a place.
- People prefer a **maximum of three destinations** per sign.
- A **solid public education program** is needed to explain how to use ETLs.

How this input informed

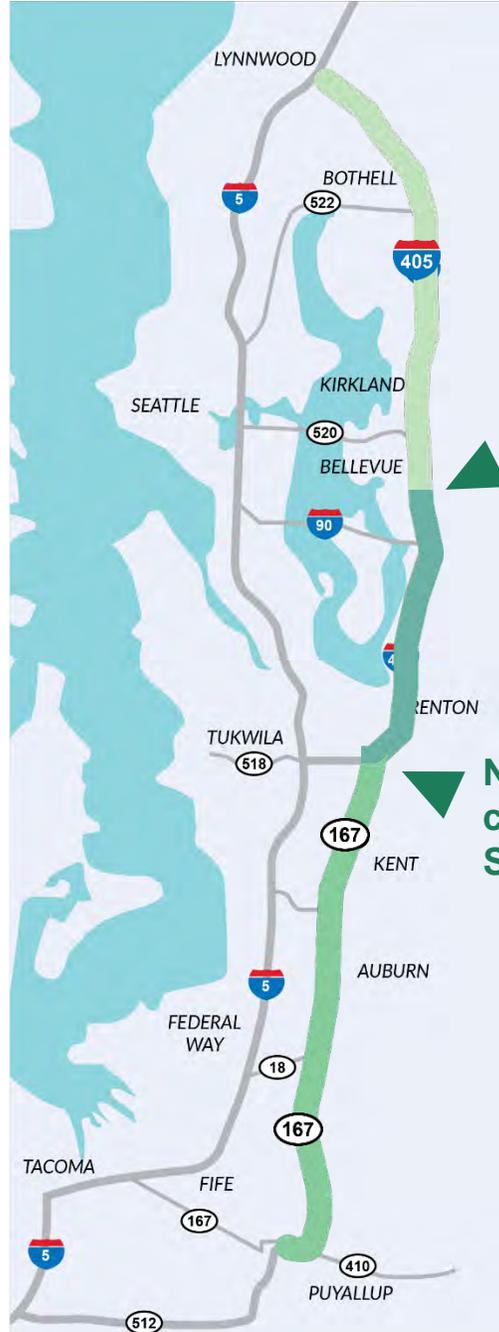
I-405/SR 167 Bellevue to Lynnwood

Display three destinations on a rate sign

- Responds to public feedback to use streets/highways as destinations and limit to three per sign
- Allows enough flexibility to manage multiple bottlenecks and varying demand through the corridor
- Avoids pricing too far in advance of arriving at traffic bottleneck locations



How this input informed I-405/SR 167 50-mile system



**New toll
charged in
downtown
Bellevue**

**New toll
charged at
SR 167/I-405**

There will be two locations in the 50-mile system where drivers will need to decide either to continue and pay a new toll; or exit the express toll lane.

Benefits

- Provides ability to manage traffic and provide a reliable trip
- Provides three destinations on each toll rate sign
- Avoids charging drivers a higher toll based on congestion they may not encounter
 - Alternative: If there was one toll rate for the entire corridor, drivers traveling north from Puyallup and exiting in Renton could be charged for a higher toll rate if there was congestion in Bellevue, even if they didn't travel that far.

Tradeoffs

- This approach balances the desire of drivers to know the price for their entire trip by providing a limited number of new toll points to effectively manage traffic and provide a reliable trip.

Drivers still have a choice

- Drivers will see toll rates first and have an opportunity to exit the express toll lane, prior to being charged a new toll. This allows drivers to make an informed decision whether to continue traveling.

Express Toll Lanes Operations for 50-Mile System

Features of a 50-mile express toll lane system

Operational features will be consistent with the existing I-405 express toll lanes which opened in 2015

- Dynamic toll rates
- Flex Pass required for HOV exemption
- Payment options:
 - *Good To Go!* (Pass or Pay By Plate)
 - Pay By Mail
- Destination pricing
- Multiple entry/exit points
 - General access
 - Direct access

What's new operationally with 50-mile system

- Given the length of the 50-mile system, there will be two locations where a new toll is charged if a driver chooses to continue driving in the express toll lane.



Sign shows example of destination pricing on existing system. WSTC is responsible setting toll rates and occupancy exemptions.



A Good To Go! Flex Pass is required to claim an HOV exemption.

Current signage on I-405 will be applied to 50-mile corridor



What's new operationally with the 50-mile system

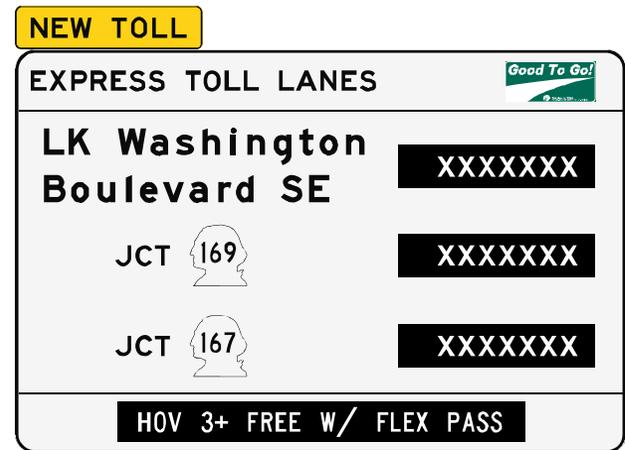


New toll charged in downtown Bellevue

New toll charged at SR 167/I-405

Given the length of the 50-mile system:

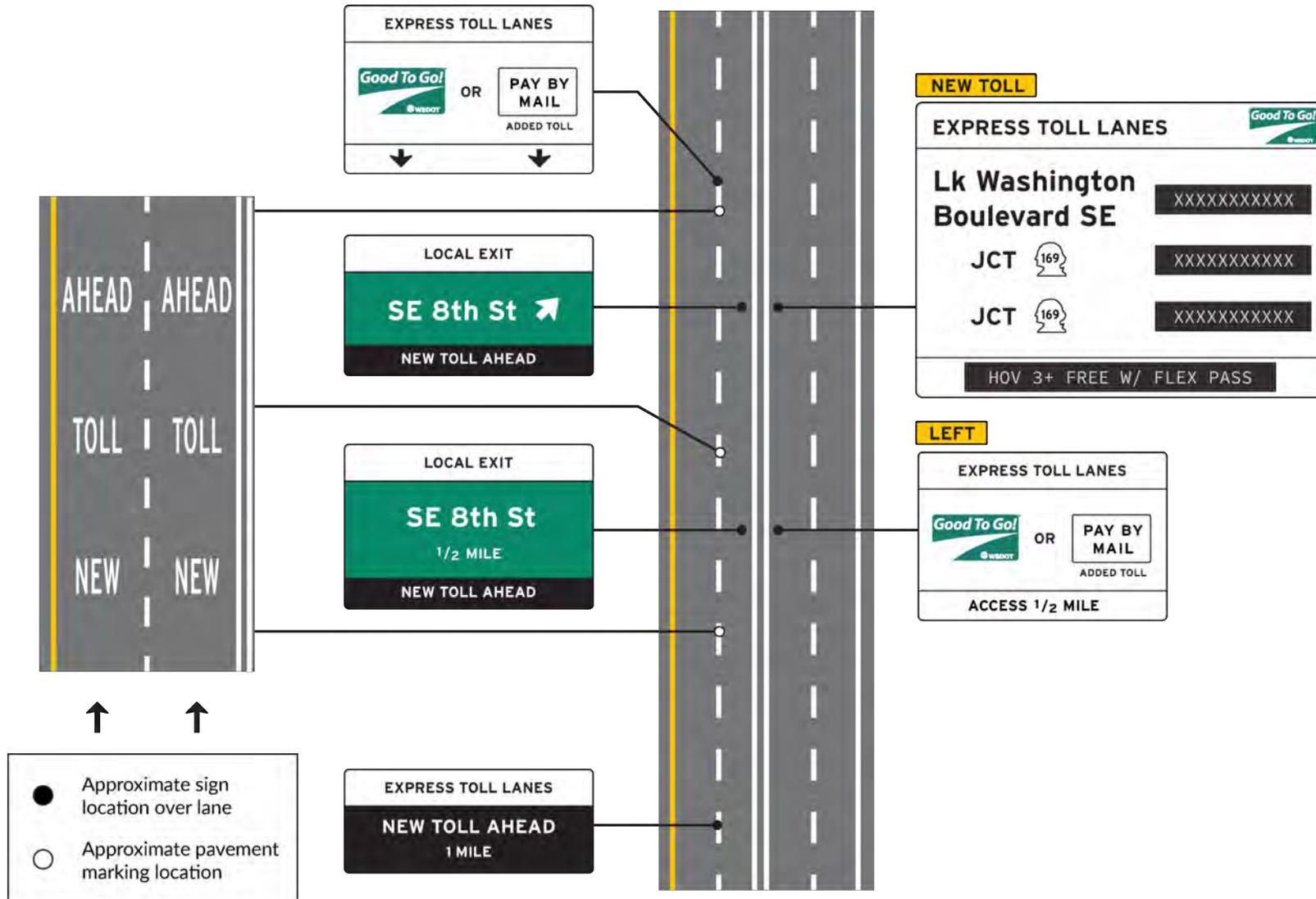
- There will be two locations where a new toll is charged if a driver chooses to continue driving in the express toll lane. If a driver prefers to not pay a new toll, they can exit the express toll lane.
- Since traffic conditions can change quickly, this design helps manage traffic and provides a more reliable trip for drivers choosing to use the express toll lane.



Shows example sign for Renton to Bellevue express toll lanes. WSTC is responsible setting toll rates and occupancy exemptions.

What drivers will see at new toll point

- A series of signs and pavement markings alert drivers that a new toll is ahead.
- In focus groups, **people generally understood 'New toll'** concept and that they would need to pay another toll.



Shows example sign for Renton to Bellevue express toll lanes. WSTC is responsible setting toll rates and occupancy exemptions.

How many drivers might travel in multiple sections of I-405/SR 167 in the same trip?



New toll charged in downtown Bellevue

New toll charged at SR 167/I-405

Traffic modeling shows a small percentage of trips might travel in all three sections of the I-405/SR 167 corridor in a single trip

Traffic modeling suggests the following trips will occur:

- **One section:** Majority of trips
- **Two sections:** Less than 25 percent of trips
- **Three sections:** 1-3 percent of trips

Sections on I-405/SR 167

- I-405 north of Bellevue
- I-405 south of Bellevue
- SR 167

Key takeaways

These concepts were developed after taking into consideration many factors

- The operating concepts for the I-405/SR 167 corridor were developed for the 50-mile corridor. They were developed with input from I-405/SR 167 executive advisory group, public opinion research and testing of concepts, and an evaluation of practices used nationally.

Drivers have become familiar with how these operating concepts work

- The concepts that will be applied to the 50-mile corridor have been used in the northern express toll lane system since 2015. While there are differences, many concepts have also been used on SR 167 since 2008.

A comprehensive public education campaign is important

- Given the significant changes an express toll lane system brings to a corridor and for drivers, a comprehensive public education campaign prior to opening is necessary.
- Even with a comprehensive education campaign, there will always be a learning curve and adjustment period when opening a new system.

Questions?

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