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SUBJECT: I-405 HOT LANES HIGH OCCUPANCY TOLL LANES STUDY UPDATE

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POLICY ISSUE: The City of Bellevue continues to be a leader in advocating for expanding, enhancing, and reconstructing key regional transportation corridors and systems in a manner that optimizes regional and local travel. Tolling and pricing strategies are figuring prominently in state and regional discussions concerning Puget Sound corridors as a means for funding transportation improvements and better managing traffic congestion. As part of the 2009 session, the state legislature directed the Washington State Department of Transportation (WSDOT) to prepare a traffic and revenue study for I-405 that includes evaluation of funding for I-405 improvements and HOT lanes for traffic management along the corridor. The legislation (ESSB 5352) requires that WSDOT work closely with local officials to complete the study and report for the legislature by January 2010. Council was first briefed on the study in May of 2009. Since then, Mayor Degginger has participated in three meetings with other Eastside officials. While five HOT Lane options have been crafted for study purposes, no action has been taken with regard to recommendations.

**DIRECTION
NEEDED FROM
COUNCIL:**

WSDOT staff will present an overview of the I-405 HOT Lanes phasing and configuration options currently under review, including preliminary estimates of the level of bonding revenue that could be supported based on the estimated demand and toll revenue. WSDOT will show which phasing options could be implemented depending on the amount of bond revenue available. This is an opportunity for Council to provide feedback to WSDOT on policy issues surrounding the study that will be incorporated into the final report due to the legislature in January. Staff has developed proposed guiding principles as a starting point for Council policy feedback to WSDOT.

Proposed Guiding Principles for I-405 HOT Lanes Study and Next Steps

1. **Implement options that improve the performance of I-405 for all users:** Any HOT Lane option considered for the future should provide benefits related to travel speeds

and corridor reliability to would-be HOT lane users and should facilitate measurable improvements in general purpose traffic conditions for all lanes of I-405. Moreover, the mobility benefits to Bellevue and the region should measurably improve over time as more of the system comes on line, including reduced traffic congestion on local Bellevue streets.

2. **The State should seek the lowest cost financing option available to support HOT Lane implementation on I-405 to provide the highest value to users of the system:** The 2009 Study should fully examine all available funding approaches to implement the desired system at the most reasonable cost to the state and region. There exists a broad array of bonding approaches and all should be fully explored. If more time is needed to conduct this important work, the legislature should allow for and support this work in close collaboration with affected jurisdictions.
3. **Ensure that rigorous continued evaluation, public outreach and education occurs prior to moving forward:** Because tolling and pricing of corridors represents a paradigm shift in how the transportation system functions and how improvements are funded and constructed, it is critical that the state fully evaluates the benefits, performance and costs and that the public is fully aware of the options and potential changes. The state and regional partners should engage the public comprehensively to ensure the system plan is well understood well before any project implementation.
4. **The phasing options chosen should implement construction and system improvements that are consistent with the I-405 Master Plan and options that most expediently respond to Bellevue's downtown and Bel-Red mobility interests:** Extension of the NE 6th access ramp to the east and construction of the SB braided ramps at NE 8th are important projects to support mobility in the corridor and Bellevue, and for providing access to any future HOT Lane system on I-405. Authorization for tolling on I-405 should be conducted consistent with the Master Plan EIS completed in 2002 and all subsequent local environmental work conducted since that time related to or impacting I-405.
5. **Encourage WSDOT and the Legislature to develop a region-wide phasing plan that responds to the need to provide geographic balance and regional equity in the use of tolling and pricing to improve the highway system:** The State is looking to use a variety of tolling and pricing mechanisms to fund transportation improvements and ease congestion where opportunities exist. It is imperative that the State develop a phasing plan to ensure that the interdependence of key highway corridors are well-analyzed so that what evolves is truly regional in benefits and burden to users. Bellevue opposes over-reliance on tolling and pricing for system improvements in one geographic location.

BACKGROUND:

Washington State has a history of using tolls to construct bridges, including recent decisions to utilize tolling for the 520 corridor and the Narrows Bridge. An emerging new trend nationally is the deployment of charging fees for access into special highway lanes where the price of the trip is established dynamically at a rate based on a combination of factors - demand, optimizing the speed of travel in the lane and improving the functioning of the overall corridor.

Known conventionally as “high occupancy vehicle toll lanes,” several states—including California, Texas and Minnesota—have implemented these systems in recent years. There are usually two key objectives at play when pricing or tolling bridges and highway corridors: improving traffic flow through the metering affect of tolls/pricing (smoothing travel demand), and generating revenue to help augment funding of a new facility or improvements to an existing corridor.

With regard to I-405, in previous planning efforts, WSDOT and the I-405 corridor communities have considered various tolling scenarios a viable option for further consideration. The I-405 Master Plan and programmatic EIS completed in 2002 acknowledged the need for such a mechanism. Since that time, the new Tacoma Narrows Bridge was constructed using tolls as the funding mechanism, the SR 167 HOT lanes demonstration project continues to be tested and the existing SR 520 bridge is slated to be tolled beginning in 2010 to generate funds for replacement of the bridge and improvements to the corridor.

I-450 Toll Lanes Project History

2002: The I-405 program committees recognize benefits of managed lanes on I-405 and consider tolling as part of a broader regional traffic management and revenue generation strategy, deferring any tolling decisions until regional policies can be determined.

2003: Express toll lanes technical analysis is conducted by WSDOT; performance benefits warrant future consideration.

2005: Senate Bill 6091 passes, stating that tolls should be charged to offset or partially offset the costs of widening I-405, including a managed lane concept.

2006: Express toll investment analysis is conducted for the northern segment of I-405 (SR 520 to I-5 in Lynnwood).

2007: Senate Bill 1094 passes, stating that tolls should be charged to offset or partially offset the costs of widening I-405, and that a managed lane concept should be applied in the design and implementation.

2008: WSDOT started an evaluation of a two-lane express toll lane system for I-405 to determine tolling revenue potential.

2009: ESSB 5352 passes directing WSDOT to prepare a traffic and revenue study for I-405 tolling and to conduct public outreach.

Concept Plan

The legislation (ESSB 5352) requires the department [WSDOT] by January 2010 to: “prepare a traffic and revenue study for Interstate 405 in King County and Snohomish County that includes funding for improvements and high occupancy toll lanes, as defined by RCW 47.56.401, for traffic management. The department must develop a plan to operate up to two high occupancy toll lanes in each direction on Interstate 405.” The legislation also requires that WSDOT confer

with mayors and city councils in the project area and conduct public work sessions and open houses to provide HOT lane information and solicit citizen input.

Implications to Bellevue

Bellevue is centrally served by and relies upon the performance of I-405, I-90 and SR 520 and there are numerous local and regional projects in the design and construction queue for which HOT lanes on I-405 will be an important consideration. HOT lanes on I-405 may provide benefit to the City's traffic circulation to the extent that high-occupancy toll revenues in the future could be applied to Bellevue's transportation priorities that also meet regional objectives. This is especially true for the NE 6th Extension project, which would be the primary direct access point within Bellevue to the HOT lanes.

City staff is working collaboratively with WSDOT, Sound Transit and King County Metro to ensure that nearby transportation facilities that would be affected by the addition of I-405 HOT lanes are carefully analyzed for issues related to local traffic operations, project phasing and mitigation. Such facilities/projects include for example: I-90 Two-Way Transit/HOV project, I-90 East Link throughout the I-90 Corridor and Bellevue area, BNSF preservation and multiple interchange extensions along I-405 and SR 520.

ALTERNATIVES: NA

RECOMMENDATION: NA

ATTACHMENTS: 1) Overview of Options
2) Overview of Project Status

Eastside Corridor Tolling Study



Study Option #1

- Primarily funded projects

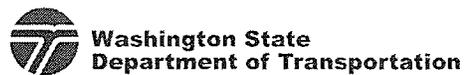
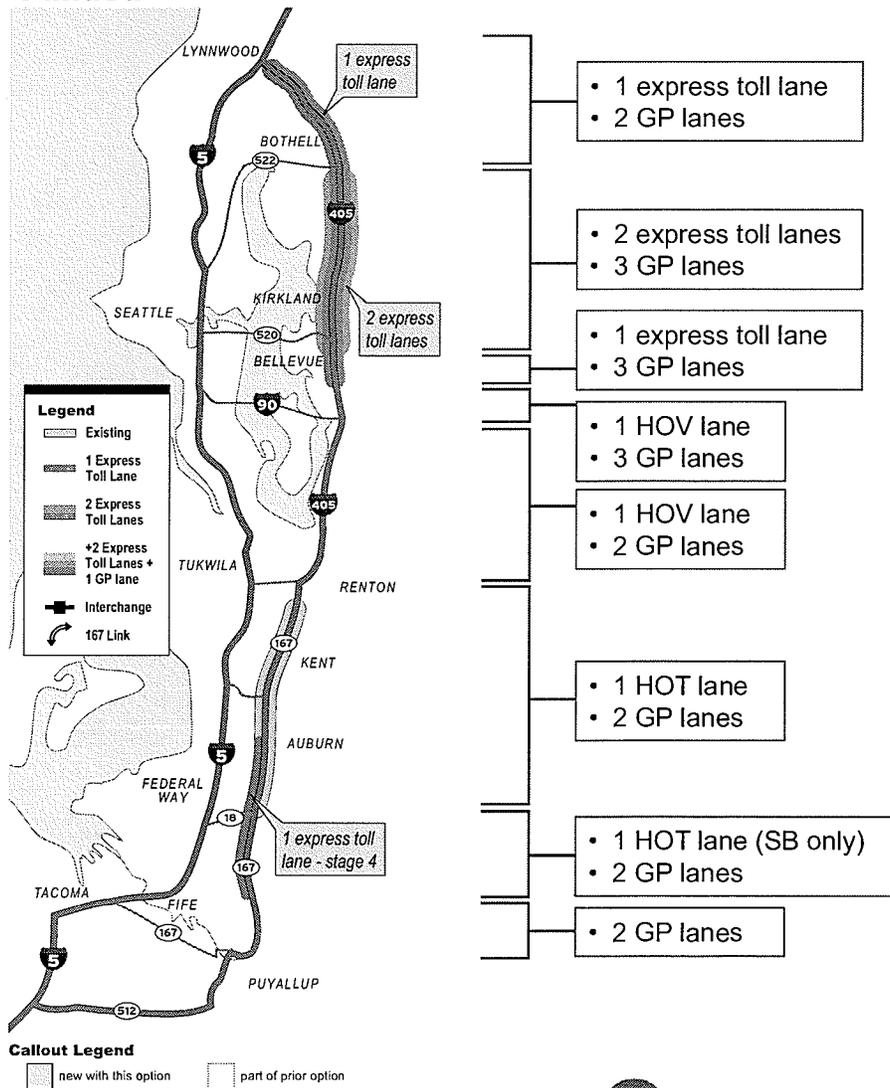
I-405

- Two lane express toll lane system from SR 520 to SR 522
- One lane SR 522 to I-5

SR167

- Adds one southbound HOT lane from 8th Street E to S 277th Street (Stage 4)

**Study Option 1
Funded**

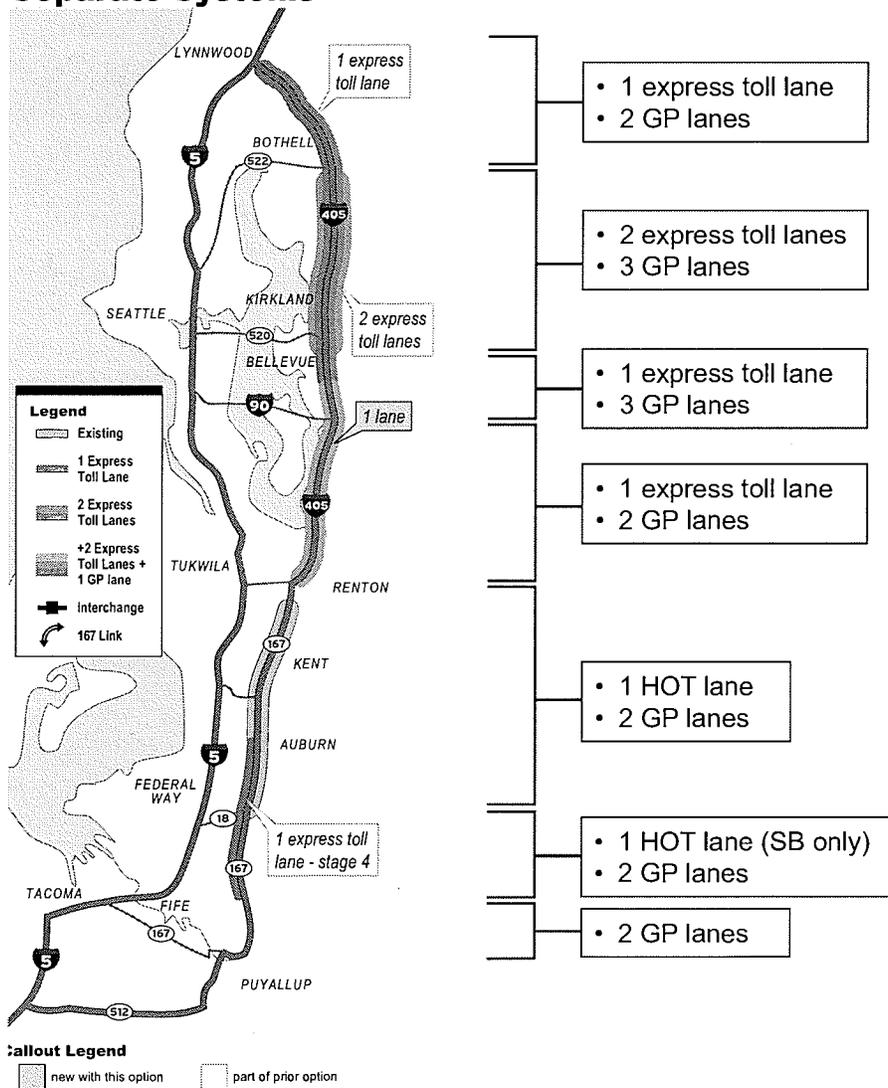




Study Option #2

- Includes all elements in Study Option #1
- Converts HOV lane on I-405 from Renton to Bellevue to a one lane express toll lane, creating a 30-mile tolled system on I-405

Study Option 2 Separate Systems





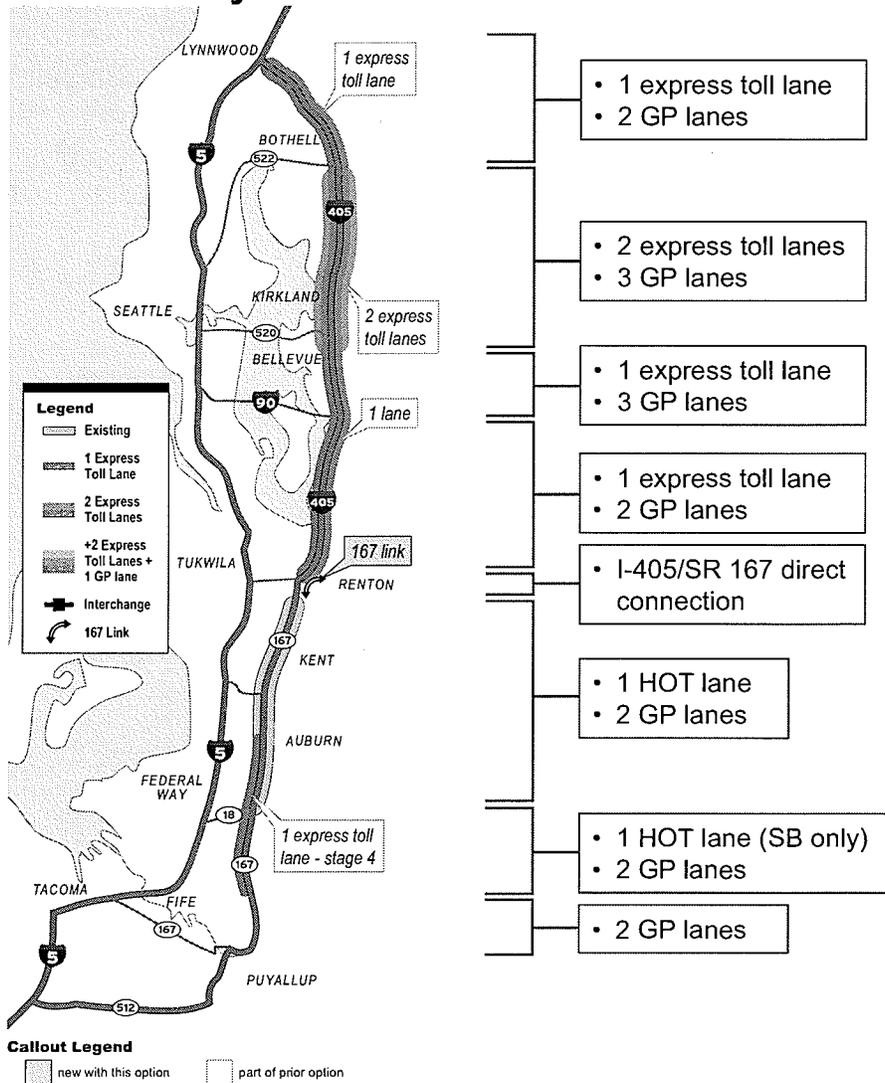
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Eastside Corridor Tolling Study

Study Option #3

- Includes all elements in Study Option #2
- Adds a direct connector between I-405 and SR 167, creating a continuous 40+ mile Eastside Corridor system

Study Option 3 Connected System





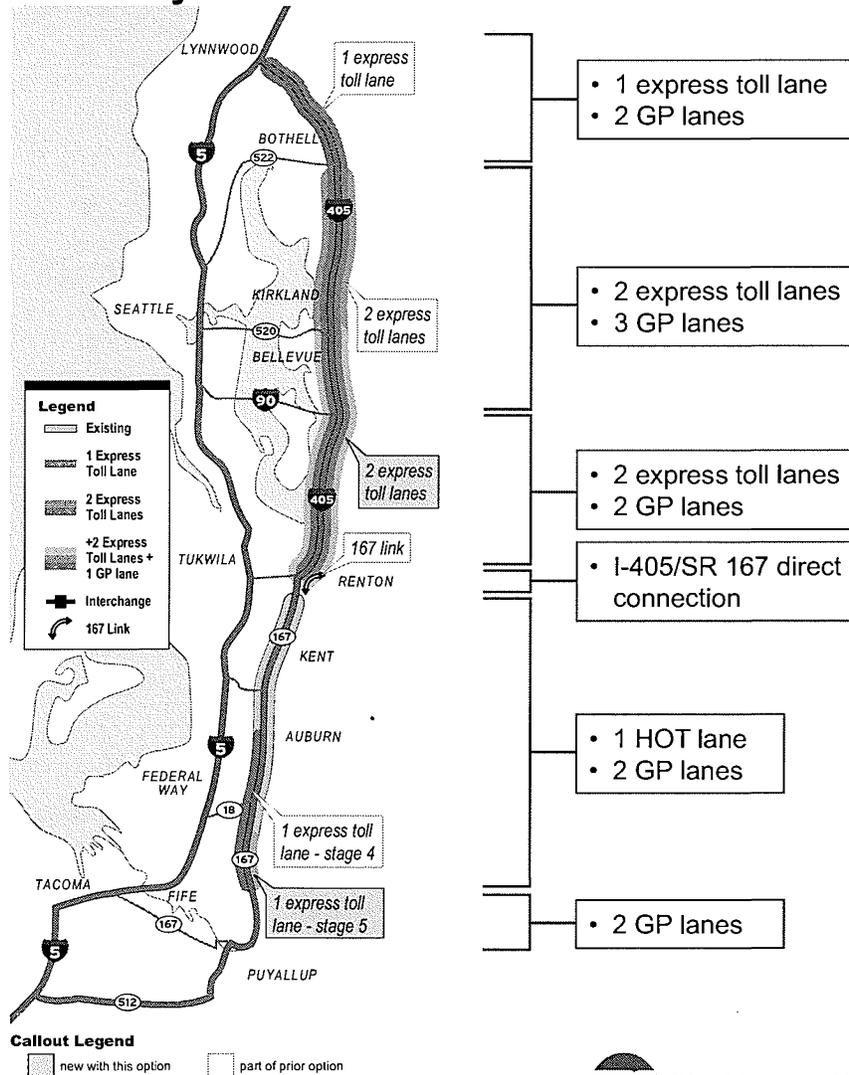
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Eastside Corridor Tolling Study

Study Option #4

- Includes all elements in Study Option #3
- A second lane is built between Renton and Bellevue, allowing for a 20-mile two lane express toll lane system on I-405 from SR 167 to SR 522
- A northbound lane is built on SR 167 from 8th Street E to 15th Street SW (Stage 5)
- Creates a more robust 40+ mile Eastside Corridor system

Study Option 4
40 Mile System

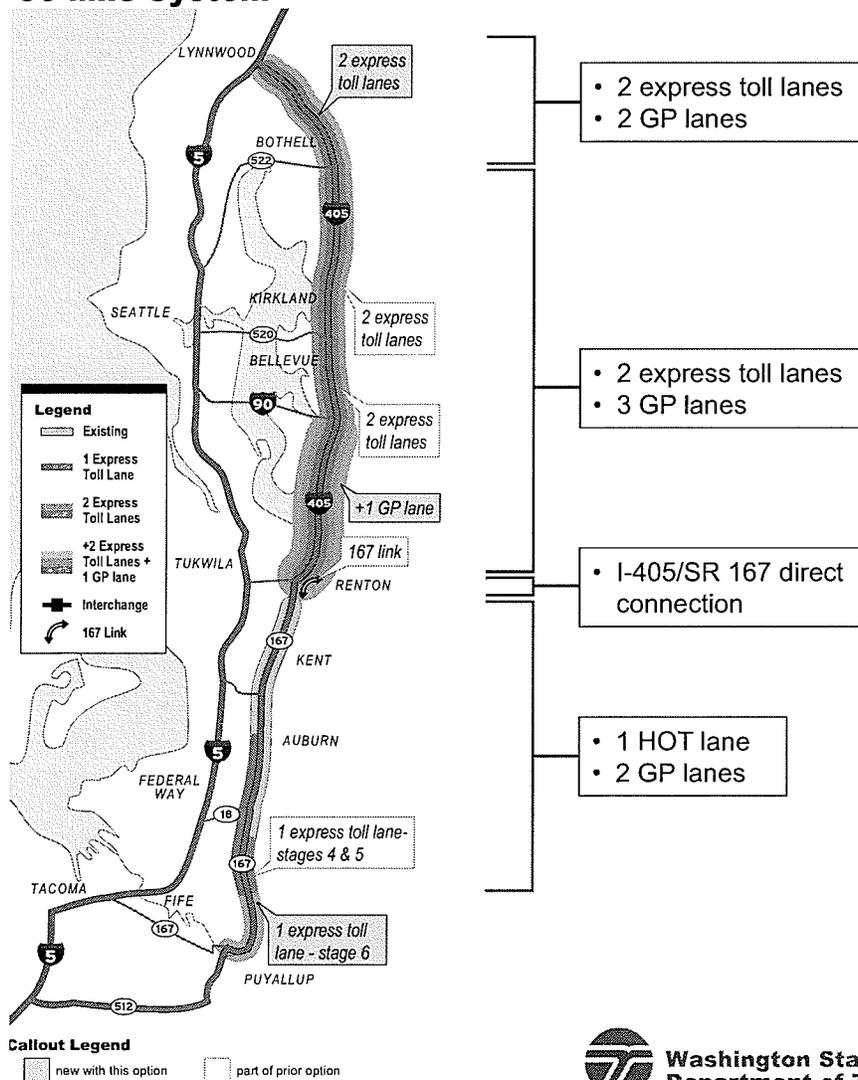




Study Option #5

- Includes all elements in Study Option #4
- Adds a general purpose lane between Renton and Bellevue on I-405, moving closer to the master plan
- Add a second express toll lane between SR 522 and I-5
- One HOT lane built on northbound and southbound SR167 between SR 512 and 8th Street E (Stage 6)
- Creates a 50+ mile Eastside Corridor managed lane system

**Study Option 5
50 Mile System**





What's the vision for I-405 and SR 167?

The Eastside Corridor is the only north-south freeway alternative to I-5 in the Puget Sound region. Today, Eastside Corridor travelers experience heavy congestion for much of the day, not just during the peak commuting hours. As part of WSDOT's *Moving Washington* strategic transportation plan to address congestion, we are studying the idea of adding up to two express toll lanes on I-405 that could connect with existing HOT lanes on SR 167 to form a seamless eastside corridor from Lynnwood to Puyallup. These new lanes would be in addition to the general purpose lanes.

These new toll lanes, similar to the SR 167 HOT lanes, could reduce congestion by moving some vehicles out of the general purpose lanes and into unused space in the express toll lanes. The result is 70 percent more vehicles could move through the corridor than we have today. And, those using the express toll lanes could have a more reliable trip of 45 mph or higher that is sustainable through 2030.

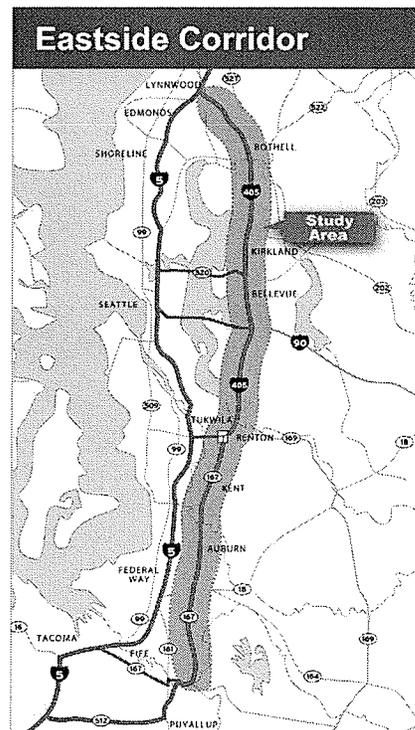
What are express toll lanes?

Express toll lanes provide toll-free express trips for carpools, vanpools and buses, and give solo drivers the option to pay a toll to use the lanes for a faster, more reliable trip when they need it most. The toll rates adjust electronically according to traffic levels to ensure that the express toll lane is free flowing (at least 45 miles per hour) even when the regular lanes are congested.

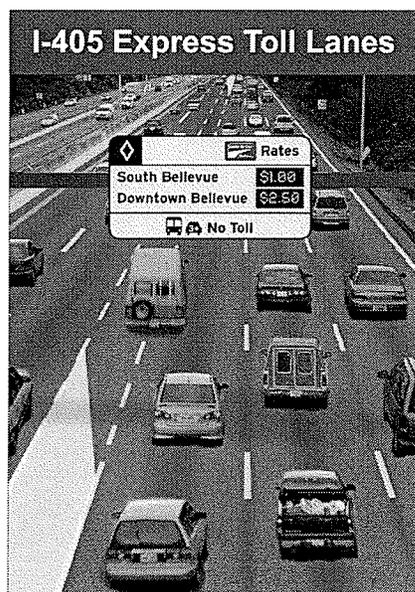
Why is WSDOT considering express toll lanes on I-405?

I-405 drivers experience heavy traffic for approximately eight hours each day. Express toll lanes help relieve congestion and generate funds that could help pay for future corridor master plan improvements. Connecting I-405 express toll lanes to the SR 167 HOT lanes creates a 50+ mile north-south Eastside Corridor Express Toll Lane System and a reliable bypass to I-5.

In 2009, the Washington State Legislature directed WSDOT to prepare a traffic and revenue study for the Eastside Corridor that includes a plan to operate up to two express toll lanes on I-405 and to seek input from the public. A report is due to the governor and legislature in January 2010.



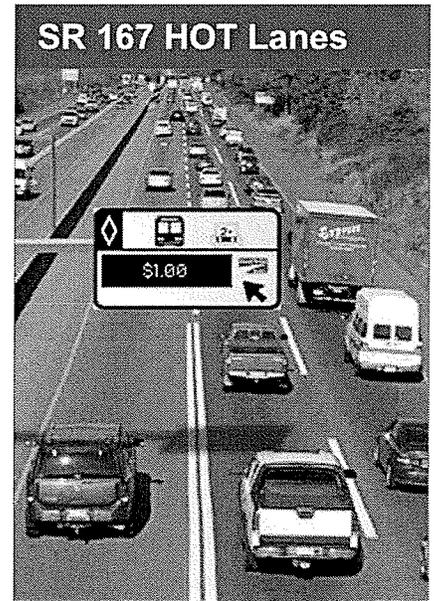
The Eastside Corridor is a vision of the Moving Washington program to keep traffic moving.



This visualization shows a two-lane express toll lane concept on I-405.

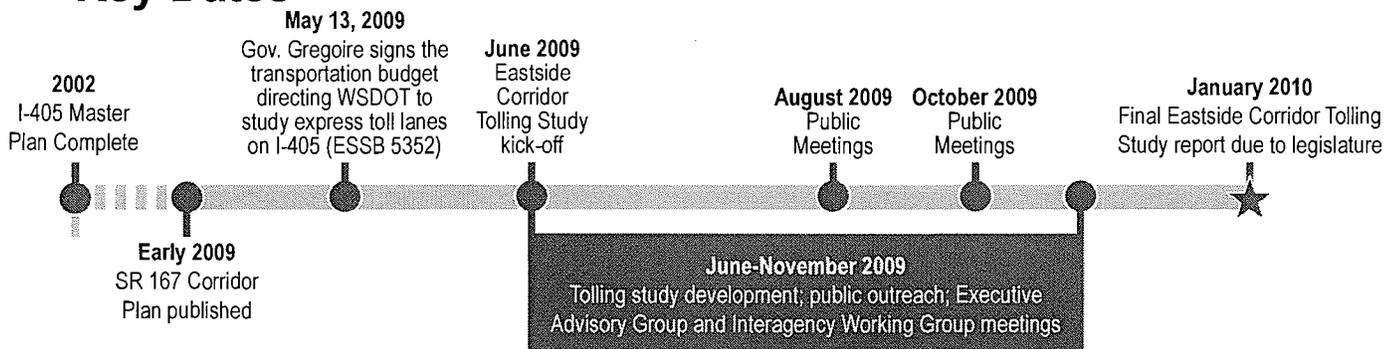
What are the benefits of express toll lanes?

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Higher performance and reduced congestion
 Provide a reliable, faster commute in the express toll lanes as well as the regular lanes.
- 
Improved transit service
 Enhance existing transit service reliability and facilitate a bus rapid transit system, where express buses come approximately every 10 minutes.
- 
Financing opportunities
 Express toll lanes generate revenue that could help fund future transportation improvements.
- 
Better air quality
 Keep traffic moving with less idling and air pollution.



The SR 167 HOT Lanes Pilot Project opened to traffic in May 2008.

Key Dates



What's next for Eastside Corridor tolling?

Proceeding with any work on express toll lanes on the Eastside Corridor will require legislative decisions and direction. Producing a finance plan for the corridor-wide express toll lane concept requires additional traffic, revenue and financial analysis.

Next steps include:

- Engaging the public and local elected officials and staff from Eastside Corridor communities.
- Submit traffic and revenue study to legislature and Governor Gregoire by January 2010.

Find Out More

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