

# I-405/SR 167 Eastside Corridor

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**Transportation Commission**  
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# Agenda

- Moving Washington
- I-405 Master Plan
- SR 167 Corridor Plan
- Eastside Corridor
- Express Toll Lanes Analysis
- Westside Corridor



# I-405 Master Plan:

## Regional Consensus

- EIS Record of Decision, 2002

## Roadways

- 2 new lanes in each direction
- Local arterial improvements

## Transit & Transportation Choices

- Bus Rapid Transit system
- 9 new transit centers added
- 50% transit service increase
- HOV direct access ramps and flyer stops
- Potential managed lanes system
- 5000 new Park & Ride spaces
- 1700 new vanpools

## Environmental Enhancements



# I-405 Corridor Vision





# American Recovery and Reinvestment Act Funding

- I-405/NE 195th St to SR 527 - Northbound Auxiliary Lane Project
  - \$40 Million
- I-405 – NE 8th St to SR 520 Braided Ramps – Interchange Improvements Project
  - \$30 Million



# SR 167 Corridor Plan

## Regional Consensus

- Corridor plan published in early 2009.

## Roadways

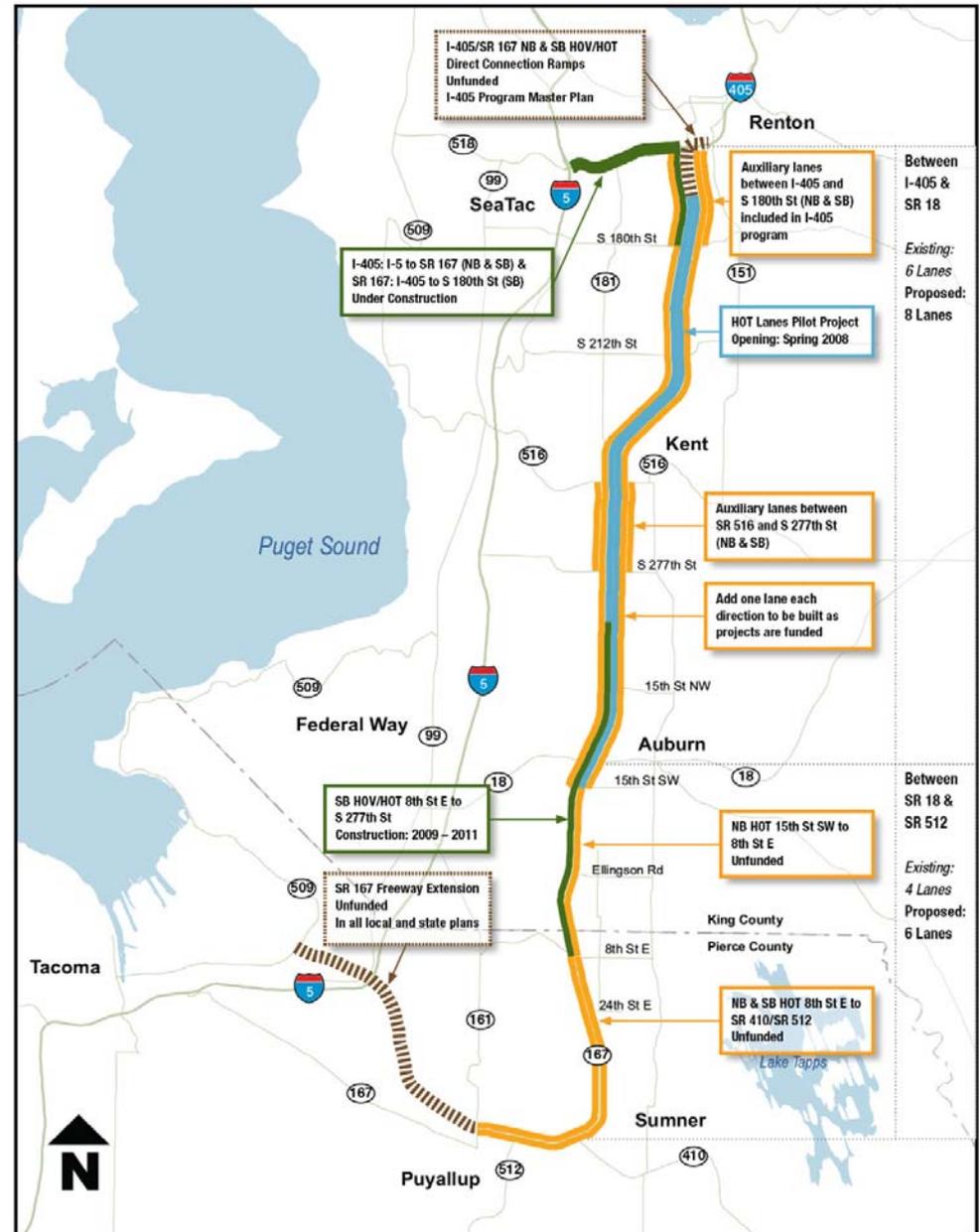
- Adds one to two lanes corridor-wide.

## Transit & Transportation Choices

- HOV lane extension.
- Includes corridor-wide HOT lanes.

## Environmental Enhancements

- Environmental mitigation projects.

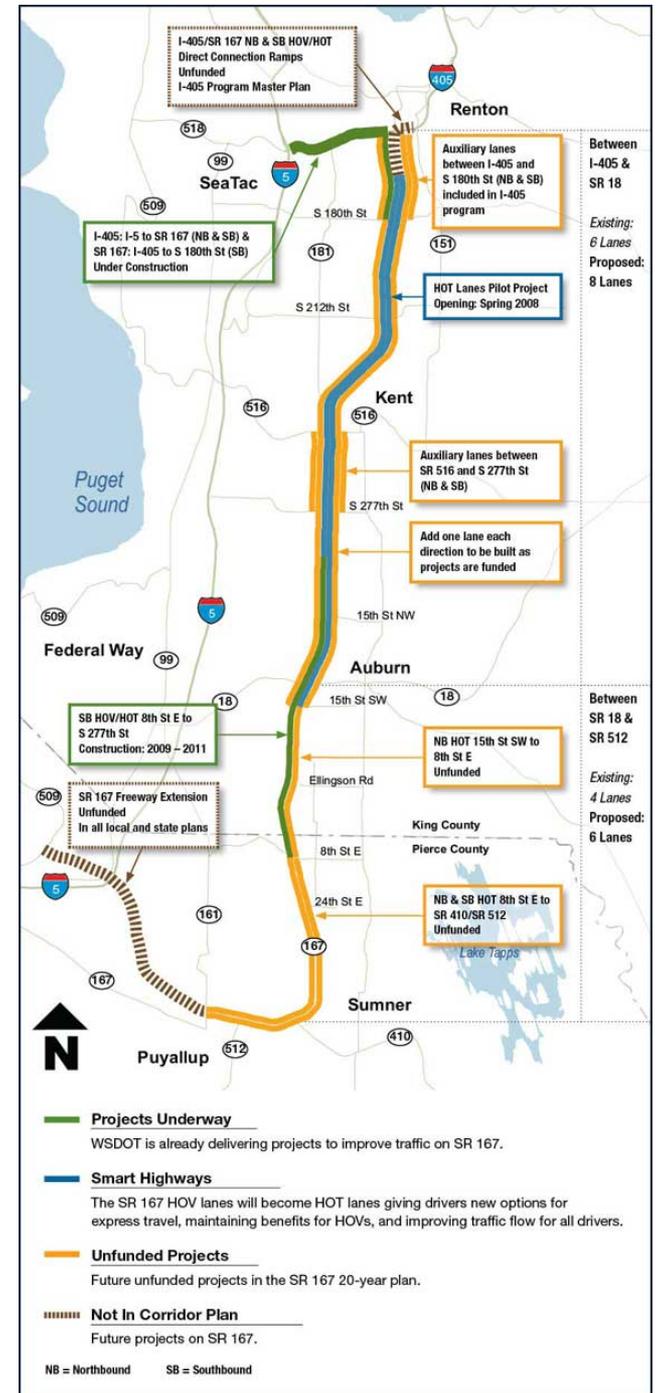


# SR 167 Corridor Vision



# SR 167 Funded Projects

| Project  | FHWA  | 03/ 05 Gas Tax   | Existing Funds | Other Agency Funding |
|--|-------|------------------|----------------|----------------------|
| I-405 to S 180 <sup>th</sup> St. SB                            |       | \$50 M           |                |                      |
| HOT Lanes Pilot Project  | \$5 M | \$12.75 M        |                |                      |
| SB HOV/HOT 8 <sup>th</sup> St. East to S 277 <sup>th</sup> St. |       | \$81.5 M         |                |                      |
| 15th Street SW to 15th Street NW - HOV                         |       | \$40 M           | \$1.8 M        | \$1 M                |
| <b>Total Investment</b>  |       | <b>\$192.3 M</b> |                |                      |



# Eastside Corridor



## Strategically Add Capacity

- I-405 Chokepoints Bothell, Kirkland, Bellevue, Renton, Tukwila
- SR 167 HOV Auburn
- Sound Transit HOV Direct Access Ramps

## Operate Efficiently

- Ramp Metering / ITS
- Incident Response Teams
- SR 167 HOT Lane Pilot expansion
- I-405 express toll lanes concept

## Manage Demand

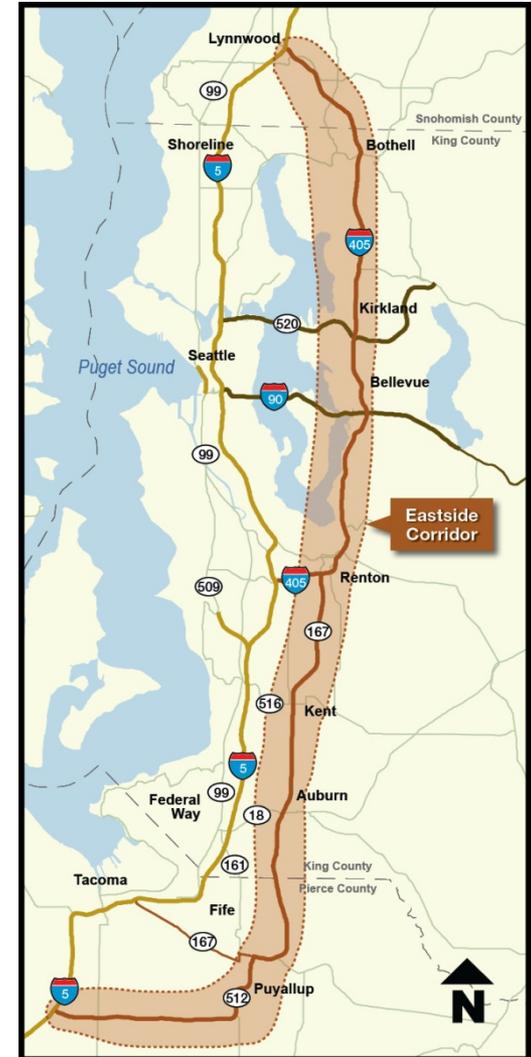
- Commute Trip Reduction
- Vanpools
- Express Bus/Bus Rapid Transit
- Sound Transit's Sounder





# Coordinated Corridor Plan Activities

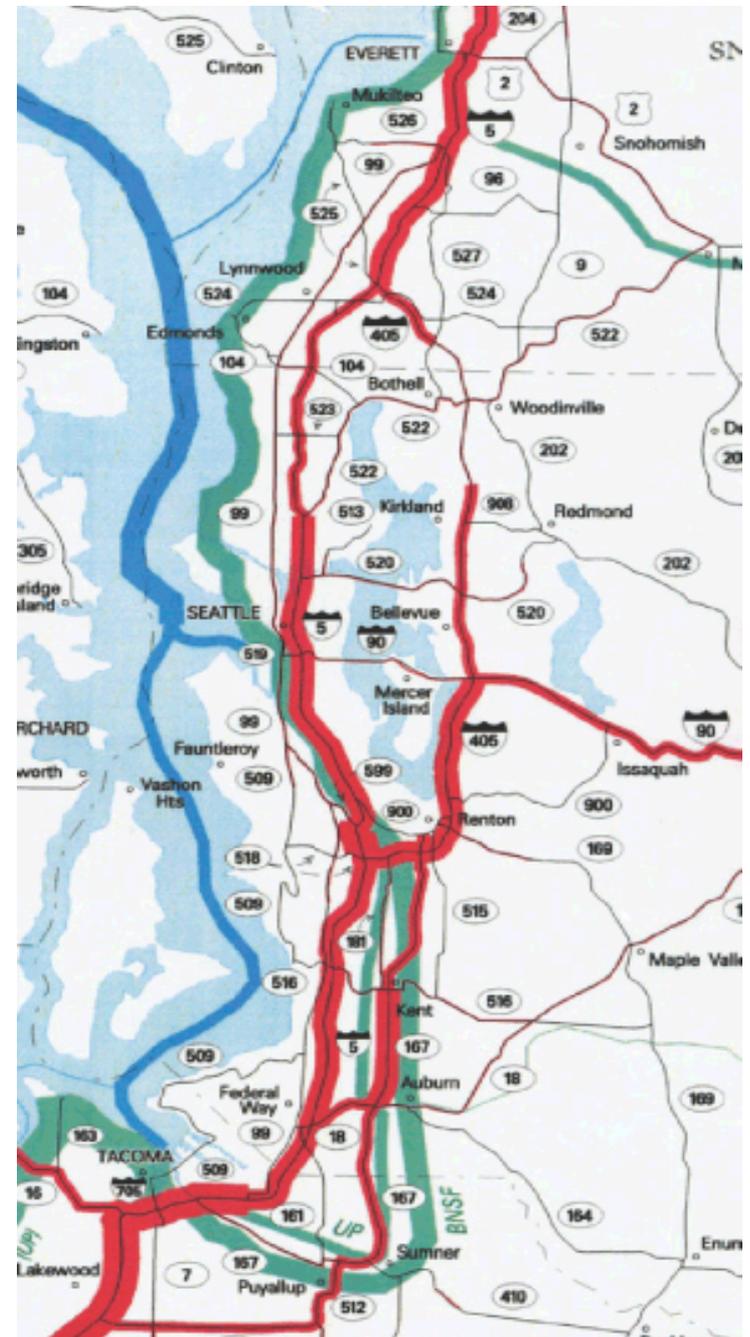
- Both corridor programs have long-range plans with concurrent implementation
  - I-405 Corridor Master Plan, 2002; implementation ongoing.
  - SR 167 Corridor Plan, 2009; implementation ongoing.
- Both corridor programs face the same challenges
  - Regional population growth.
  - Regional employment growth.
  - Increasing travel demand with insufficient means of managing demand.





# Freight Moved in the Region

- SR 167 serves the largest freight distribution center in the region.
- About one-third of the region's trucking storage facilities are located along the SR 167 corridor.
- I-405 carries twice the amount of freight shipped each year through the Port of Seattle; many of these trips originate on SR 167.



# The Evolution of the Express Toll Lane Concept

## 2002 Corridor EIS

- Program committees recommended further consideration of managed lanes.

2003

## Managed Lane Technical Analysis

- Based on \$4.8 B Implementation Plan.
- Showed performance benefit to merit future consideration.

2005

## Senate Bill 6091

- Section 606. The legislature intends that tolls be charged to offset or partially offset the costs for the Alaskan Way Viaduct, State Route 520 Bridge replacement and widening of Interstate 405 including a managed lanes concept.

# The Evolution of the Express Toll Lane Concept (continued)

## 2006 **Express Toll Lane Traffic and Revenue Analysis**

- Evaluated express toll lanes application between SR 520 and I-5.
- Study results showed merit.
- Environmental review began in 2006, including the analysis of an express toll lanes option.

## 2007 **Senate Bill 1094**

- Section 605. The legislature intends that tolls be charged to offset or partially offset the costs for the following projects, and that a managed lane concept be applied in their design and implementation: State Route 520 Bridge replacement and HOV project, and widening of Interstate 405.

## 2009 **Senate Bill 5352 and House Bill 1314 (*as currently proposed*)**

- Section 305. By January 2010, the department must 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 in 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.

# Why Express Toll Lanes?

- Current HOV lanes are not meeting performance targets.



I-405 HOV lanes are over-utilized

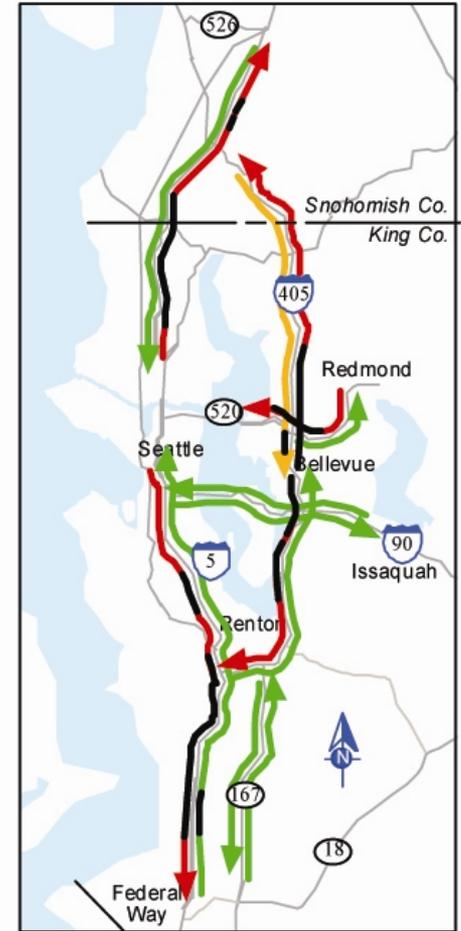


SR 167 HOV lanes under-utilized

AM Peak Period



PM Peak Period



— Congested segments

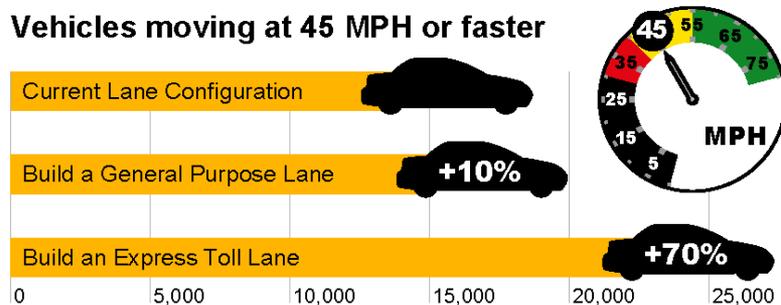
# Benefits of Express Toll Lanes



- Higher performance
  - Dynamically priced lanes improve speeds across all lanes.
- Sustainable benefits
  - HOV 3+ policy allows traffic benefits to remain through 2030.
- Regional transit mobility
  - Enhances existing transit while also providing infrastructure for BRT.
- Provides financing
  - Generates toll revenue to contribute funding toward future improvements.

## 2006 Managed Lanes Study shows improved throughput

Vehicles moving at 45 MPH or faster

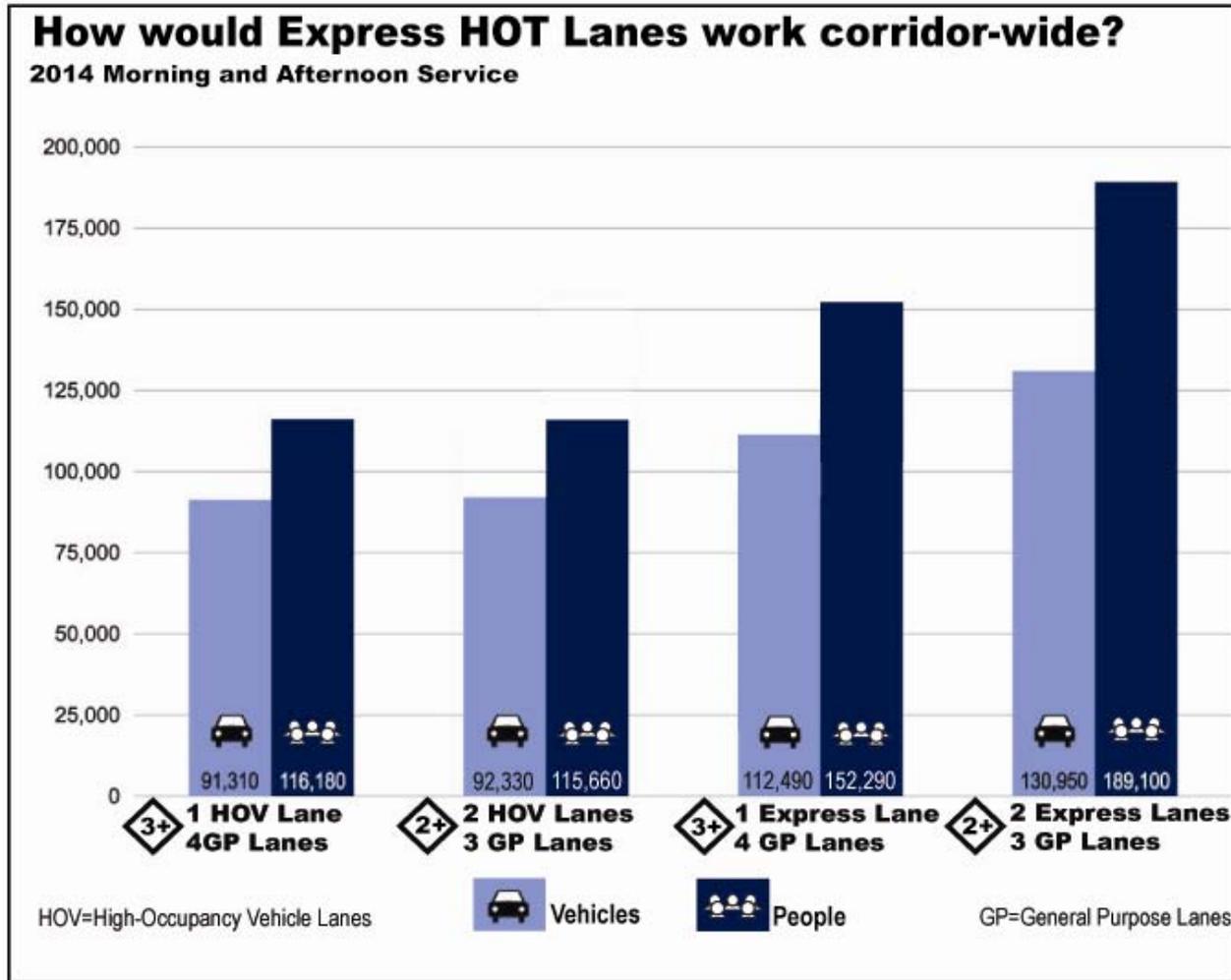


*Building an Express Toll Lane allows 70% more cars to travel at 45 MPH or faster.*

Numbers are across all lanes. Statistics apply to both general purpose and express toll lanes.

2014 peak hour • Peak direction number of vehicles with average speeds of 45 mph or greater • SR 520 to I-5 Phase 1 Analysis • 2 screenlines

# 2003 Managed Lanes Analysis Lays the Groundwork



*Move more people,  
more vehicles,  
with less congestion*

# Opportunity for a Sustainable Express Toll Lane System

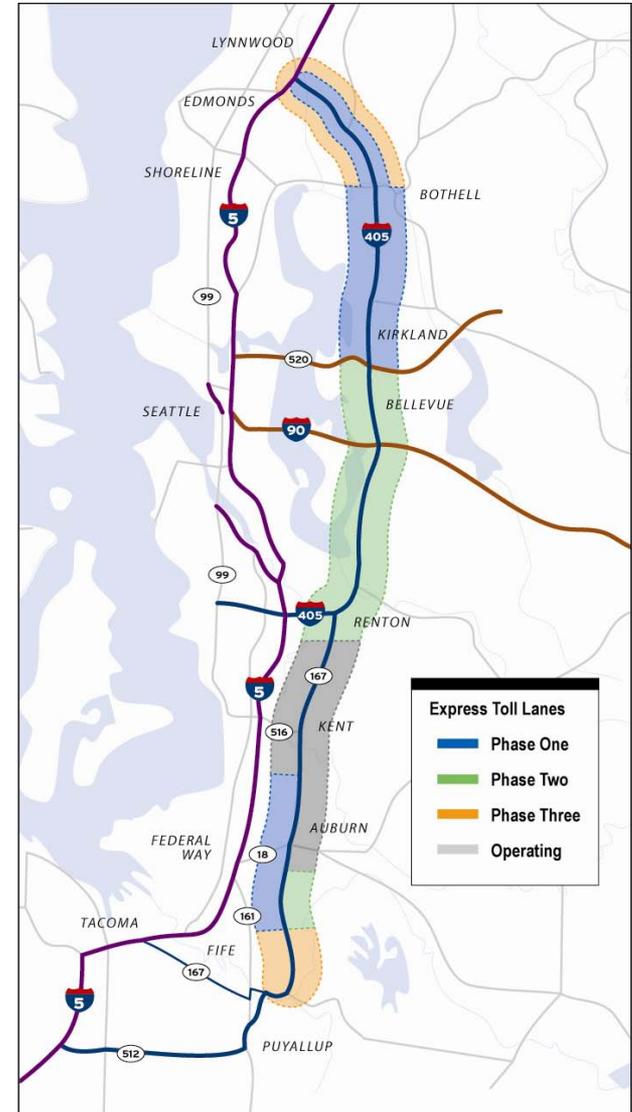
*...Creating an alternative beltway to I-5*

- *50+ mile Express Toll Lane system*
- *2 lane Express HOT on I-405*
- *1 lane HOT on SR 167*
- *3+ HOV toll free*
- *Electronically tolled, dynamically priced,*
- *Limited access points*

***Sustainable performance***

***Operational benefits***

***Generates revenue to pay for construction***



# Eastside Corridor Tolling Public Process

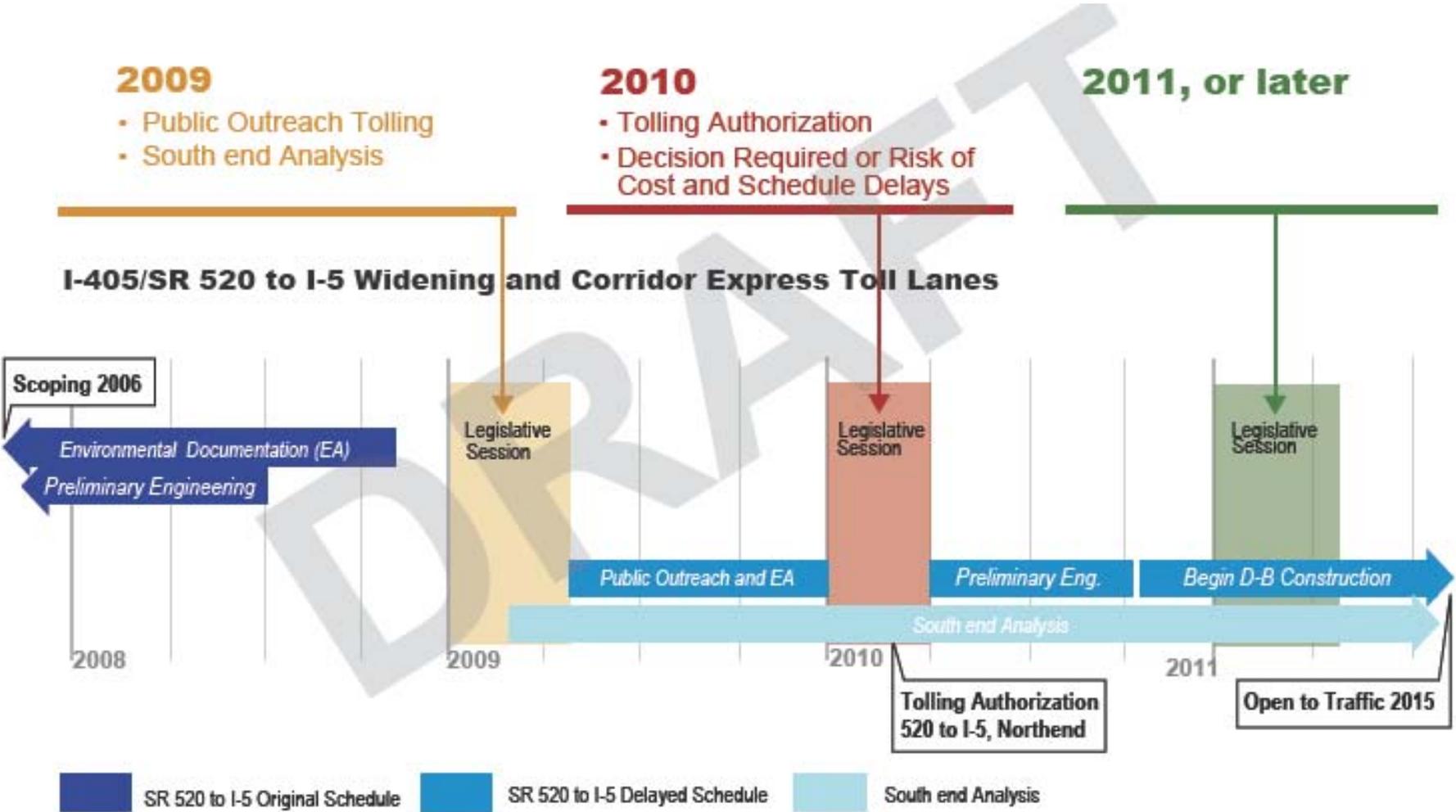
**2009** - WSDOT is seeking input from mayors and city councils of jurisdictions in the vicinity of the project, the public, local communities and agencies to:

- Reaffirm original I-405 master plan and the SR 167 corridor concepts;
- Build a regional consensus on parameters for express toll lanes; and
- Generate support for project funding/phasing.



*Visualization of express toll lanes on I-405*

# Timing of Decisions for I-405 Express Toll Lanes



# Westside Corridor



## Strategically Added Capacity

- I-5 HOV Lanes in Everett, Federal Way, Tacoma
- I-5 Shoreline auxiliary lane
- I-5 reconstruction projects
- SR 519 Phase II
- Alaskan Way Viaduct collaboration
- SR 518 third lane from Sea-Tac Airport
- I-5/SR 509 Corridor Completion
- I-5/SR 518/SR 161 interchange improvements



## Operate Efficiently

- Ramp Metering / ITS
- Incident Response Teams
- Active Traffic Management



## Manage Demand

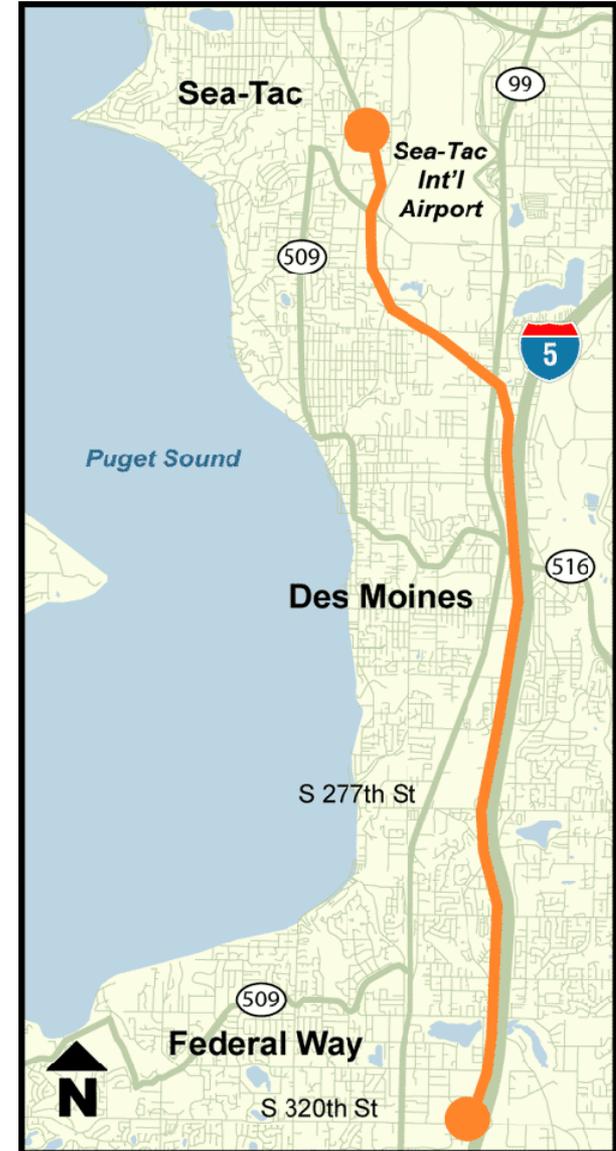
- Commute Trip Reduction
- Vanpools
- Express Bus
- Sound Transit's Link
- Sound Transit's Sounder



# SR 509 Extension

*...relieving congestion on I-5*

- Extending SR 509 will ease congestion on I-5; improve service between industrial districts by allowing general-purpose traffic and up to 9,000 trucks per day to bypass I-5, SR 99 and local streets; and provide for southern access to Sea-Tac International Airport.
- Building over 3 miles of new freeway to complete the SR 509 corridor.



# ‘Moving Washington’



- ✓ **Congestion is a priority:** Preservation, Safety, Mobility, Reliability and Stewardship are policy goals for Washington State. The success of WSDOT’s congestion relief strategy depends on meeting each of the goals.
- ✓ **Delivering on our commitment:** WSDOT is delivering crucial transportation projects. With a clear road map for the future, we can meet growing travel demands.
- ✓ **New tools, new challenges:** WSDOT is studying transportation innovations around the world and working to implement technologies such as active traffic management to ease congestion today and sustain added capacity into the future.



# Questions?

For more information on the  
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Washington State  
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