

Eastside Corridor

Tolling Study

Interagency Working Group
July 23, 2009



Washington State
Department of Transportation

Welcome

Craig Stone

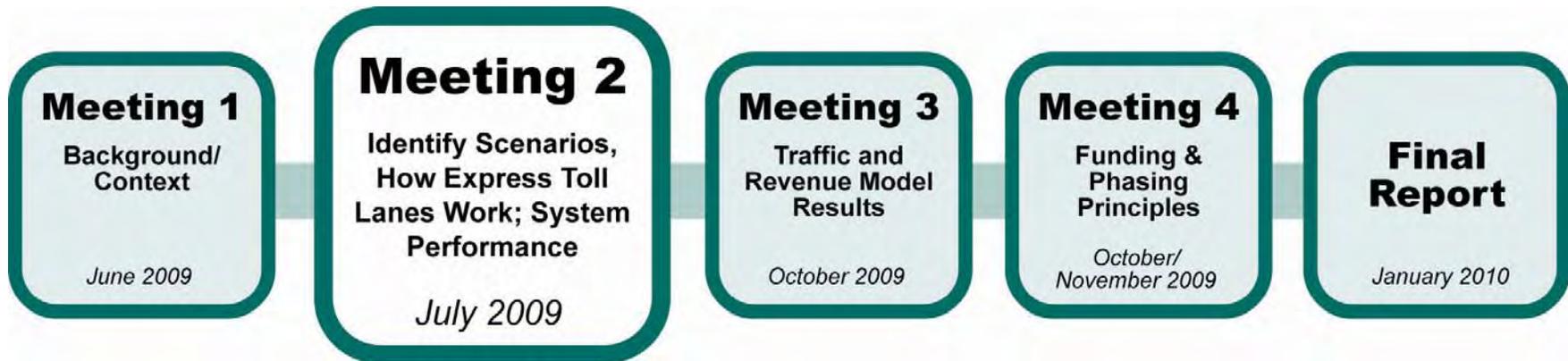
Director of WSDOT Toll Division



Agenda

- Introductions/Roles & Responsibilities
- Meeting Goals
- Express Toll Lanes Video
- HOV Performance and Funding
- Traffic Performance
- History of Managed Lanes Studies
- Proposed Study Options
- Public Outreach Planning

Meeting Goals



1. Understand why we should consider implementing a managed lanes system for the Eastside Corridor
2. Confirm study options
3. Update on public outreach to date and confirm public outreach plan and materials

Range of Considerations

- Should we develop a managed lane system on the Eastside Corridor?
- What is the balance between congestion management and revenue generation?
- How should the system operate?
 - A one-lane system? Two-lane system? Or, a mix of the two?
 - Should the HOV designation be 2+ or 3+ or be phased from 2+ to 3+ as it becomes necessary?
- How should we implement the system?



How do express toll lanes work?



Eastside Corridor Tolling Video

Why consider implementing express toll lanes? HOV Performance and Funding

Karl Westby

I-405 Team

David Hull

King County DOT

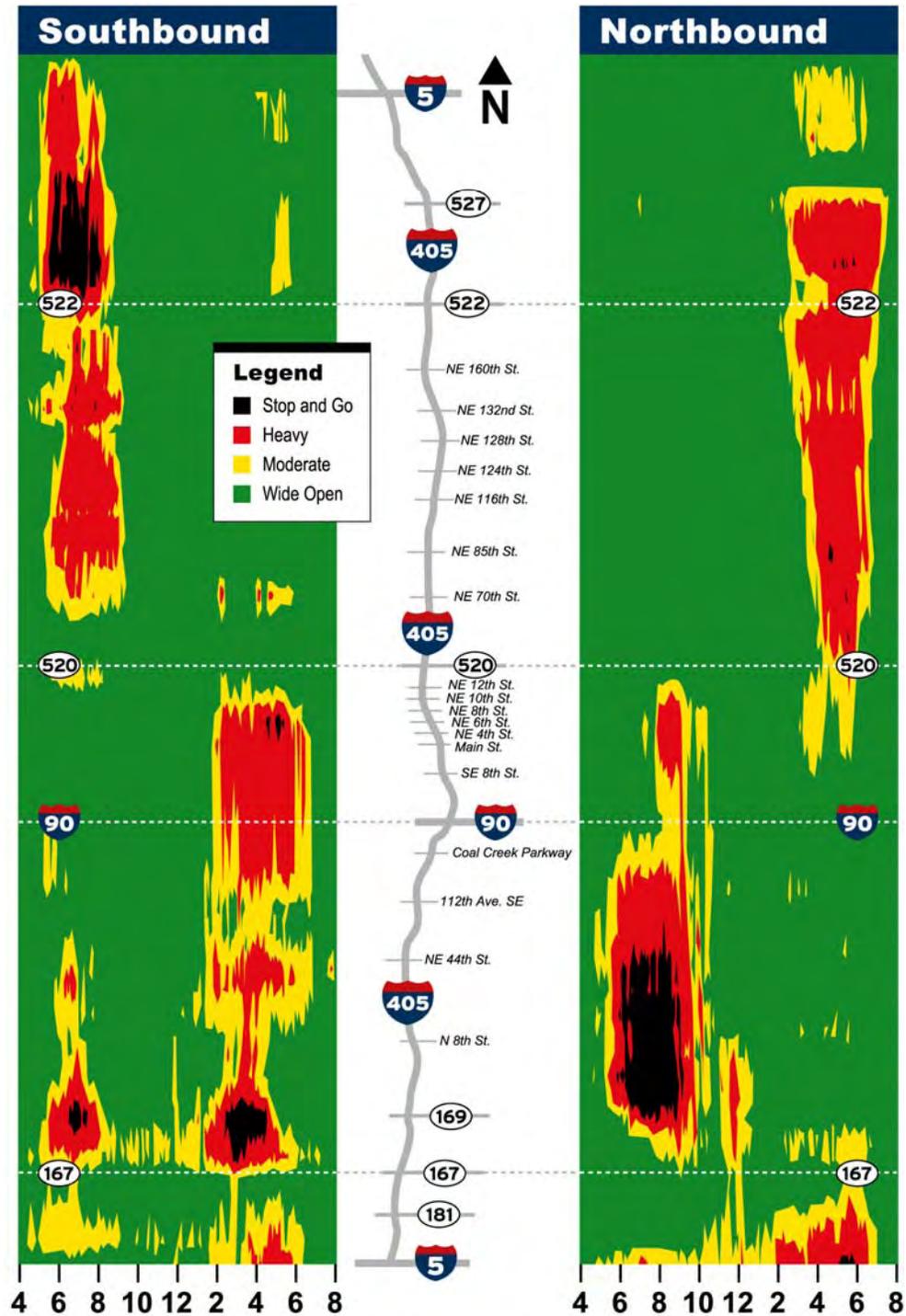
James Colyar

FHWA



**Washington State
Department of Transportation**

General Purpose Lane Performance



HOV Lane Operational Challenges

- HOV lanes should operate at 45 mph 90% of the time.

I-405:

- Current HOV lanes are not meeting performance targets.

SR 167:

- HOV lanes currently have capacity.
- HOT lane pilot project underway.

HOV Lane Congested Segments

AM Peak Period

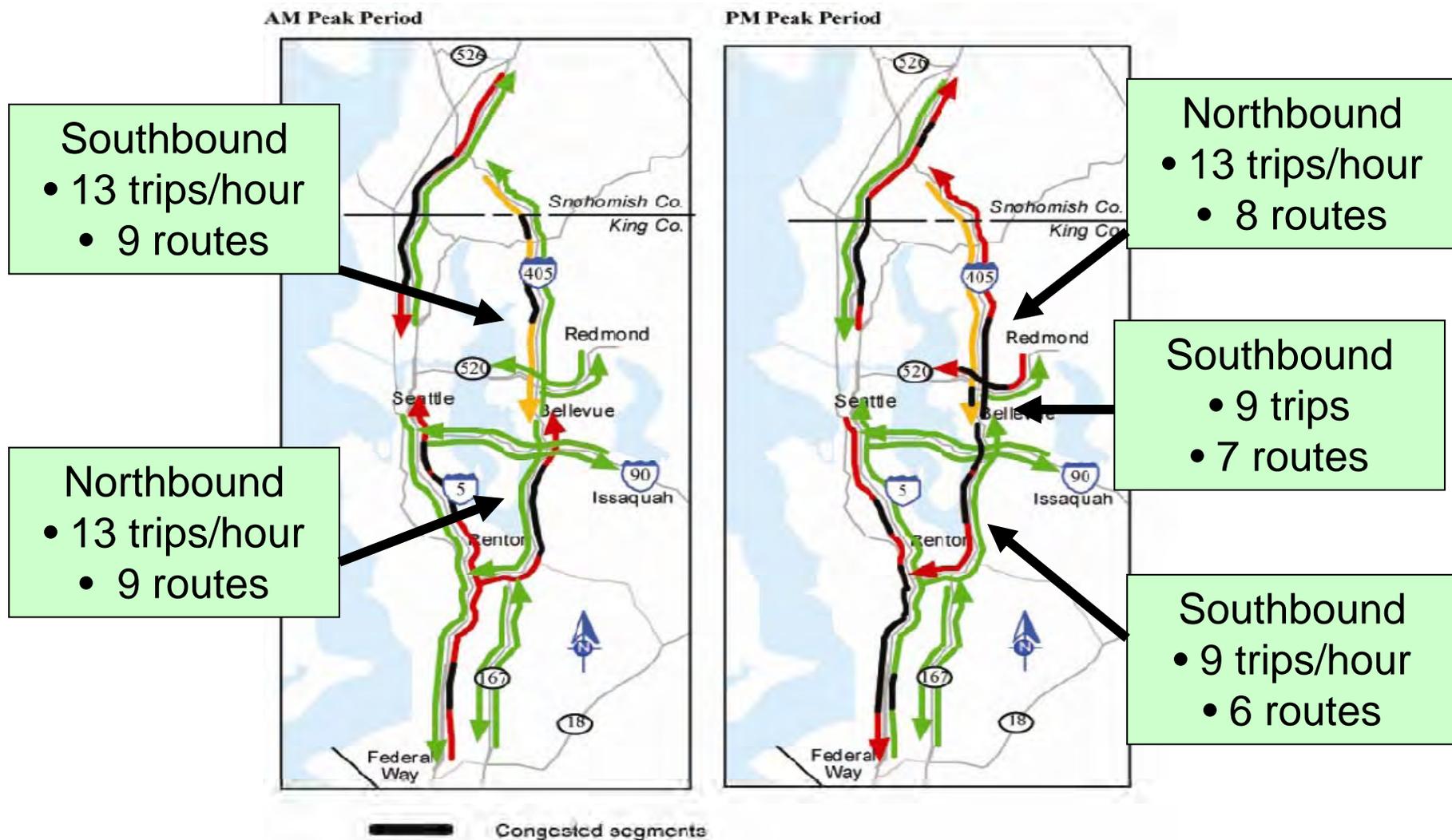


PM Peak Period



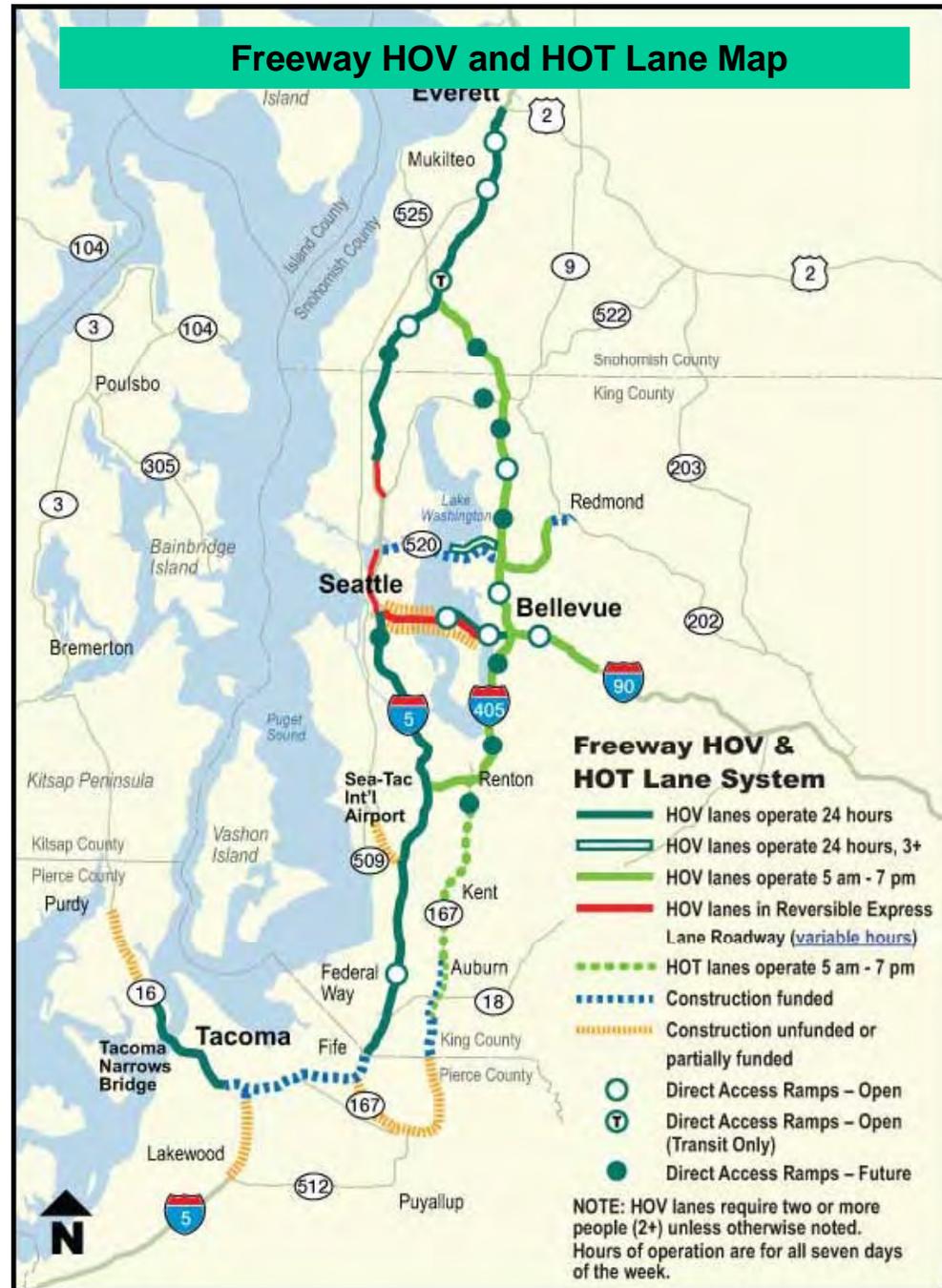
— Congested segments

Impact of HOV Congestion on Transit



HOV/HOT facilities:

“The primary and interrelated goals of HOV facilities are to provide buses, carpools, and vanpools with travel time savings and more predictable travel times, and to thereby induce individuals to choose a higher occupancy mode over driving alone.” (TCRP Report 95)



National Funding



Presentation by Brian Hasselbach, FHWA

Traffic Performance

Karl Westby
I-405 Team



How does traffic performance work?



45-55 MPH

1800
Vehicles
Moved



Optimal
Throughput: moving
the most vehicles at
rapid speeds



60 MPH



500 Vehicles
Moved



60 MPH



1000 Vehicles
Moved



45-55 MPH



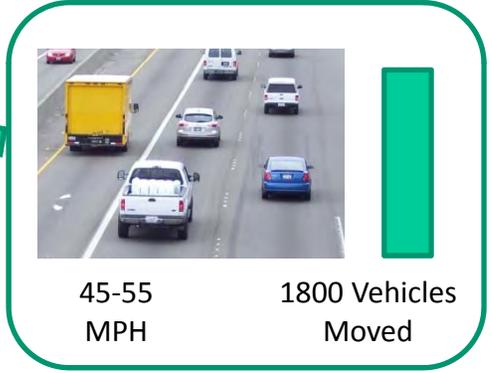
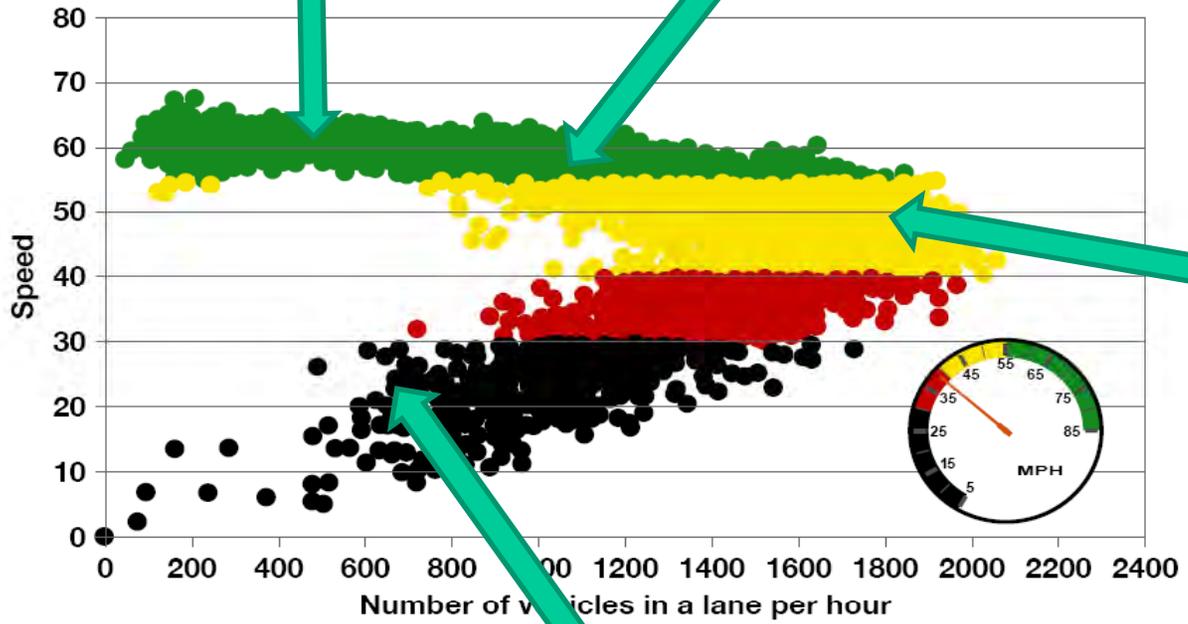
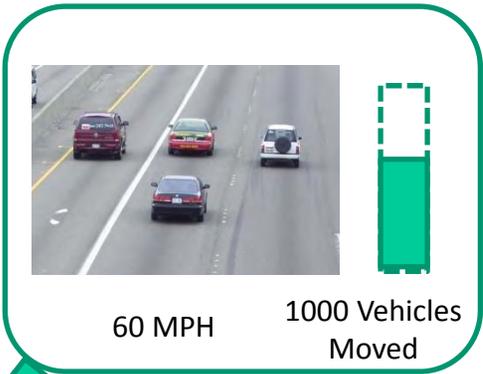
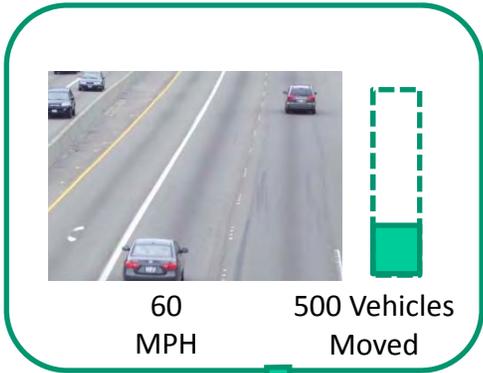
1800 Vehicles
Moved



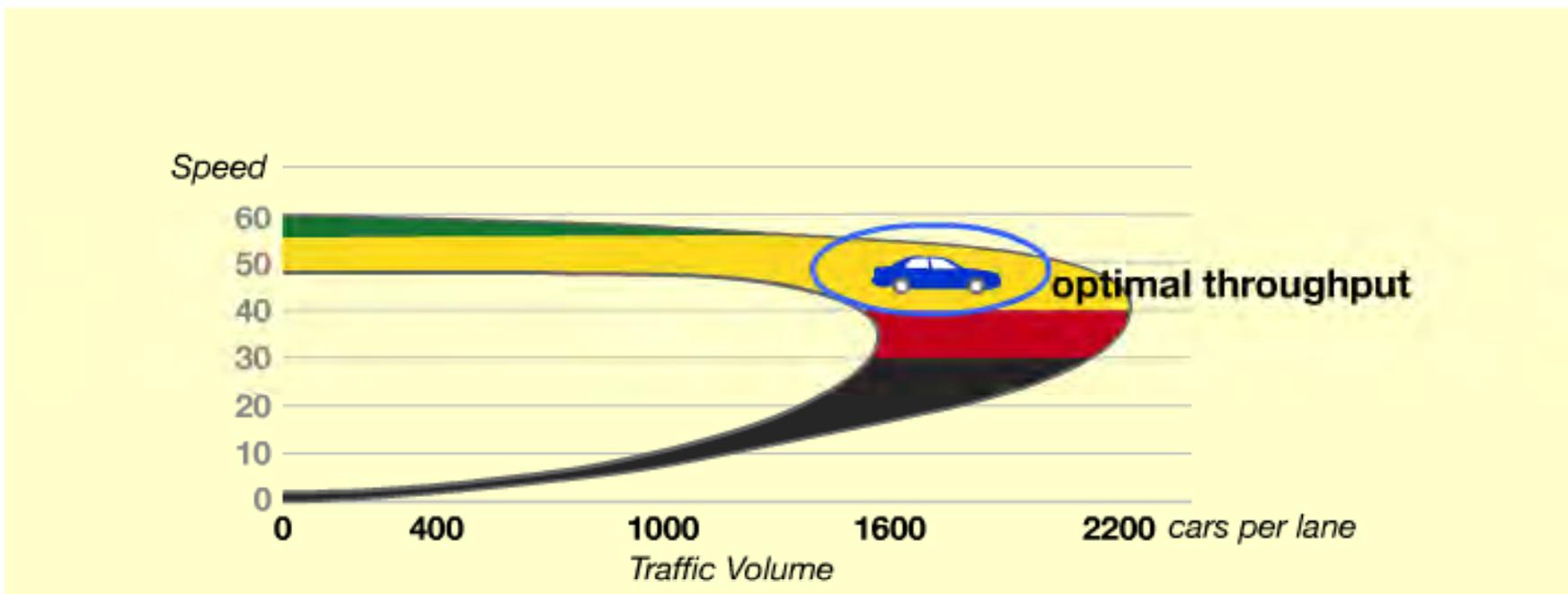
<35 MPH



700 Vehicles
Moved

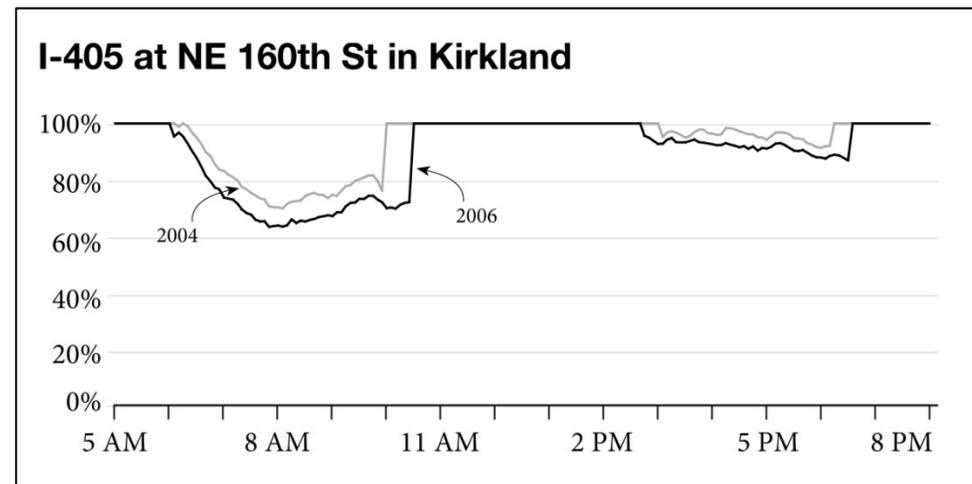
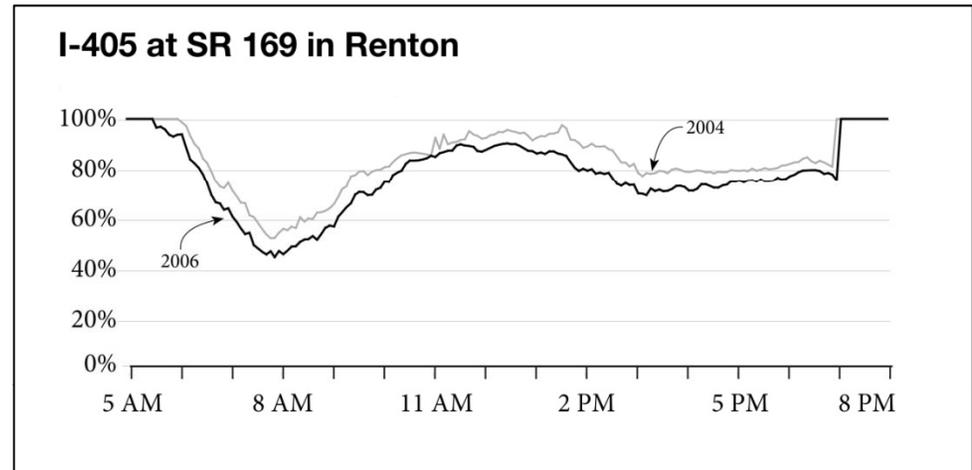


How does traffic performance work?



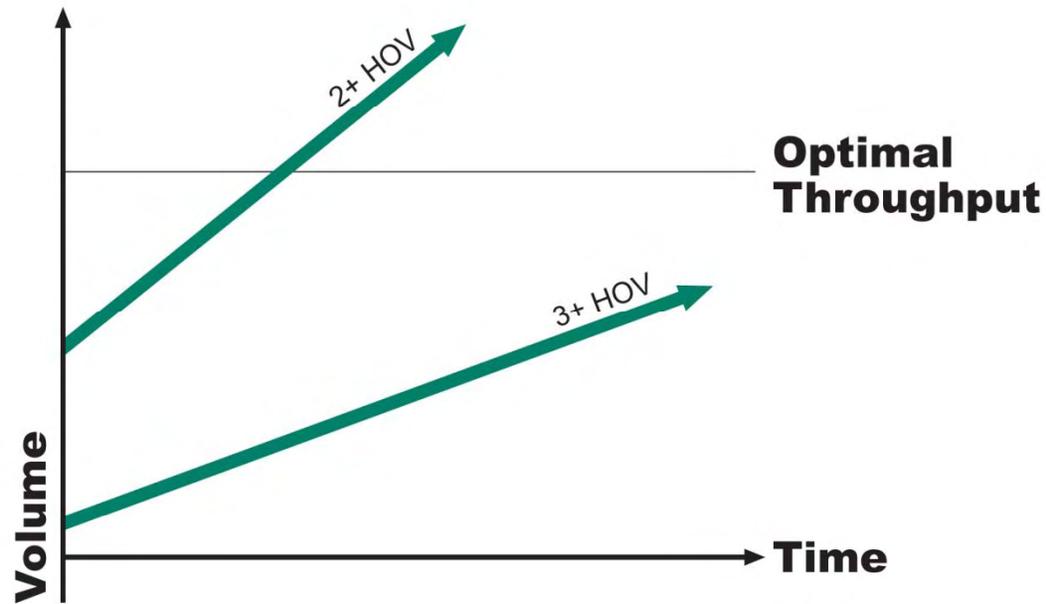
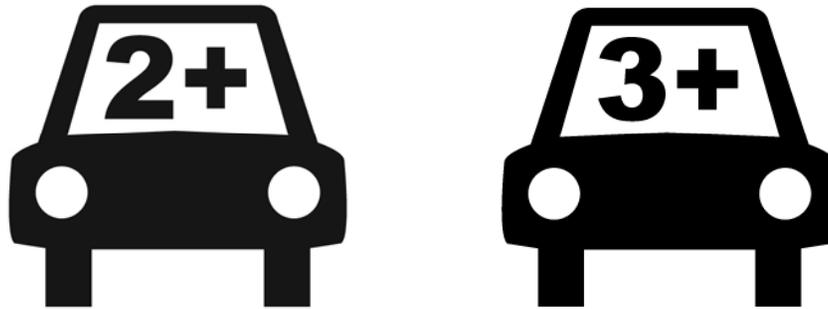
How could express toll lanes help improve traffic performance?

- Currently, when efficiency is needed most vehicle throughput is the worst.
- Express toll lanes are designed and operated to be efficient all the time to keep traffic moving.



Lost throughput productivity due to congestion (WSDOT Measures, Markers and Mileposts – September 30, 2007)

2+/3+ HOV Operations – How are they different?



Benefits of Express Toll Lanes

Challenges

- General purpose lanes perform poorly
- HOV-only is not a sustainable solution
- Transit is unable to guarantee reliable trips
- No new funding sources
- Idling vehicles stuck in traffic contribute to air pollution

Benefits

- Improves freeway operations and provides a reliable choice for all users.
- Manages demand and increases performance, providing a sustainable, reliable commute.
- Provides infrastructure to enhance reliability of existing transit service and implement a BRT system in the future.
- Generates revenue that could help fund future planned corridor improvements.
- Keeping traffic moving with faster, more reliable trips helps improve air quality.

Previous Studies

Kim Henry

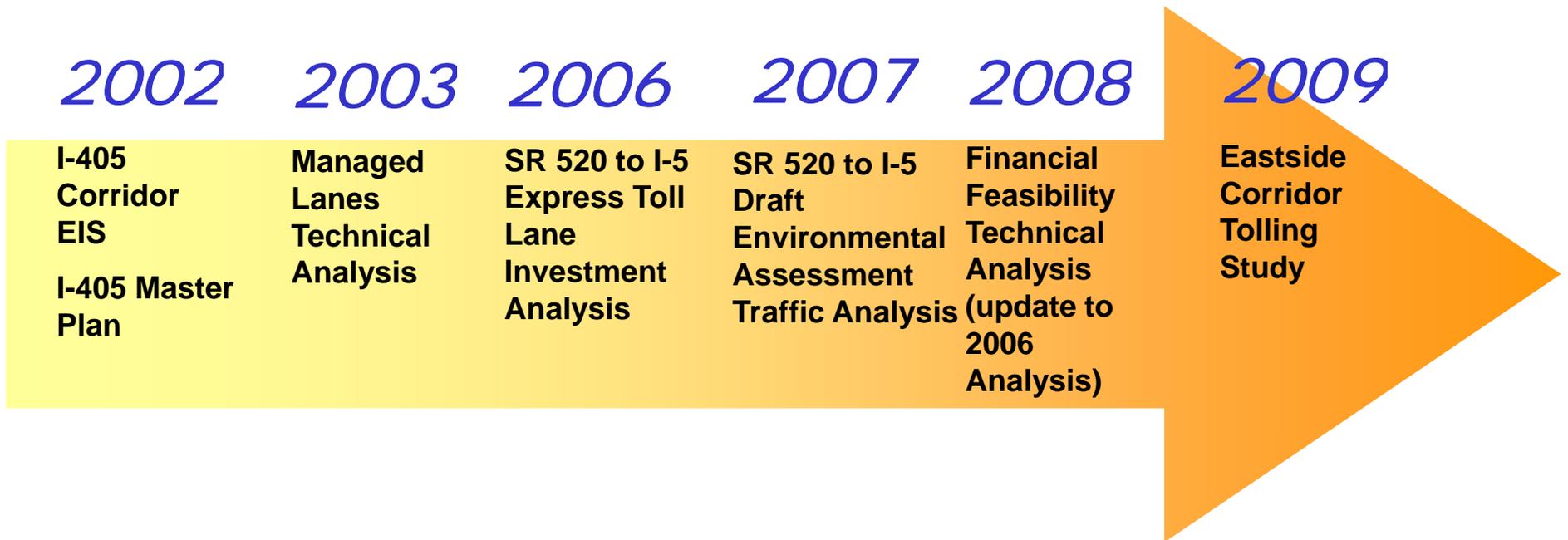
Eastside Corridor Project Director

Denise Cieri

Eastside Corridor Deputy Project Director

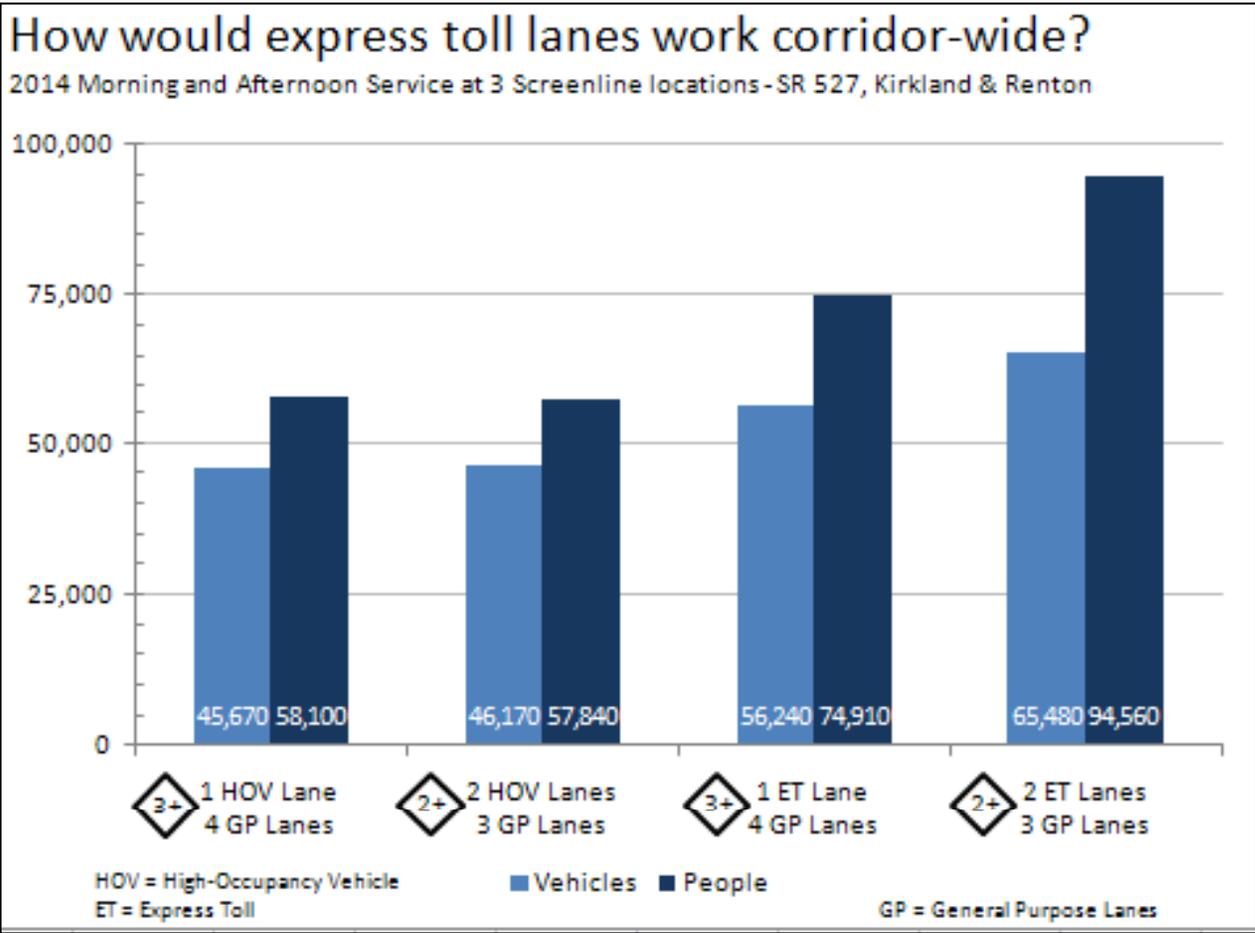


I-405 Managed Lanes Studies



2003 Managed Lanes Analysis

- Tolled lanes operate better than non-tolled lanes
- A two-lane system is better than a one-lane system

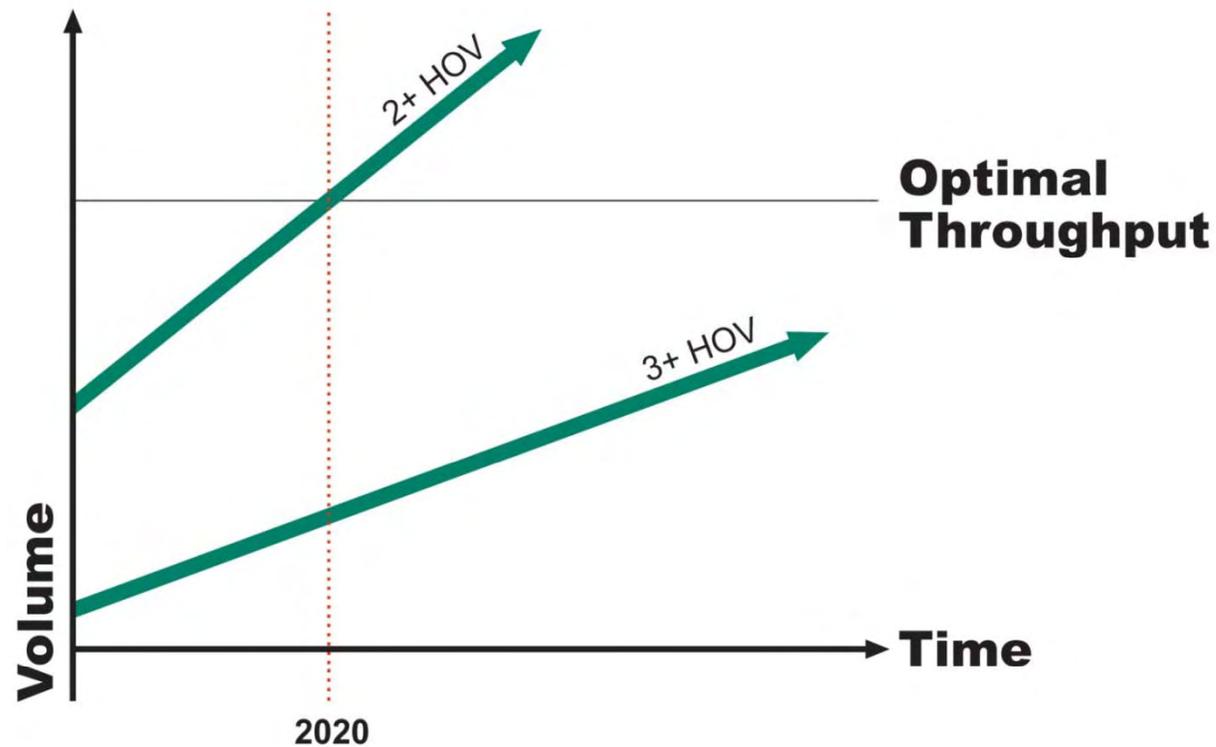


*Move more people,
 more vehicles,
 with less congestion*

What have we learned?

2006 I-405 (SR 520 to I-5) Express Toll Lane Investment Analysis

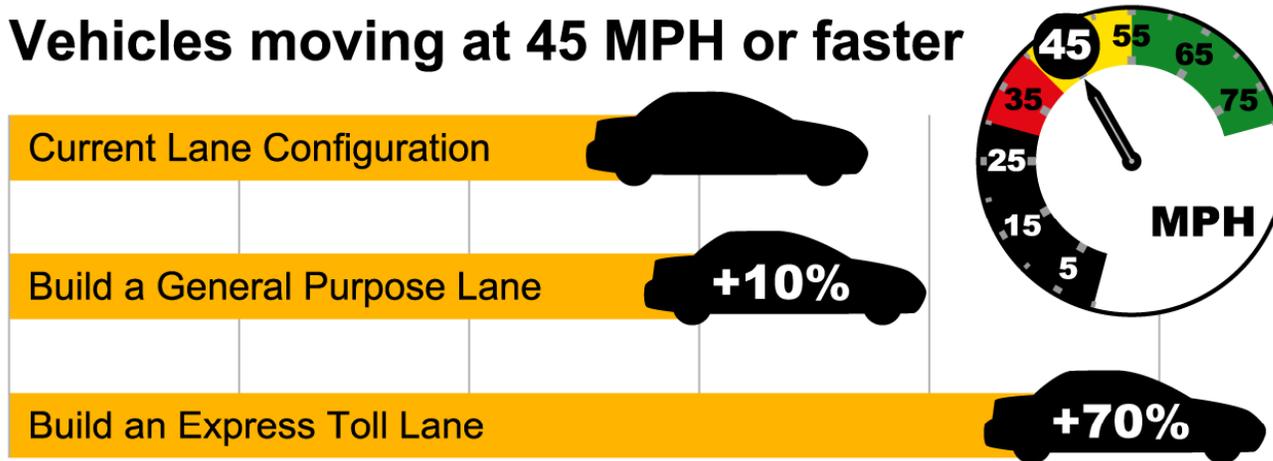
- Even with the addition of a new lane, the HOV 2+ system only works until 2020



2007 I-405 (SR 520 to I-5) Draft Environmental Assessment Traffic Analysis

- Confirms that tolled lanes perform better than new general purpose lanes.
- Confirms that HOV 3+ is sustainable

Vehicles moving at 45 MPH or faster



2008 Feasibility Technical Analysis

- Revenue findings:



- 2+ HOV has less buy-in opportunity, so toll rates are higher.
- 2+ HOV generates limited revenue.



- 3+ HOV has more buy-in opportunity, so rates are lower.
- 3+ HOV has greater revenue-generating potential.

- Study conclusion:

- I-405 (SR 520 to I-5) project is financially feasible.
- Other projects will likely require additional funding sources.

Break

Proposed Study Options

Kim Henry

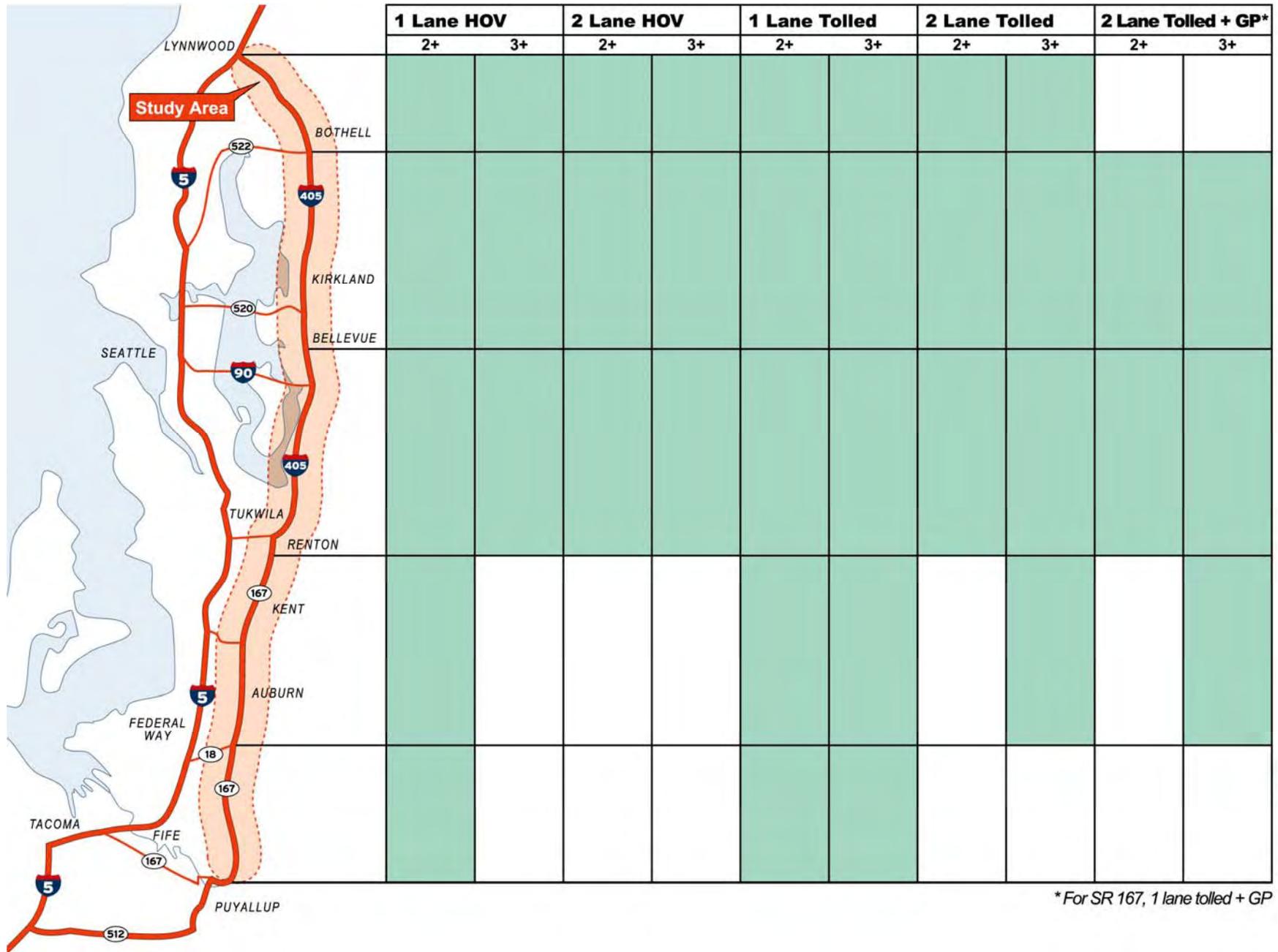
Eastside Corridor Project Director

Denise Cieri

Eastside Corridor Deputy Project Director



What have we studied?



Study Option #1

- Primarily funded projects

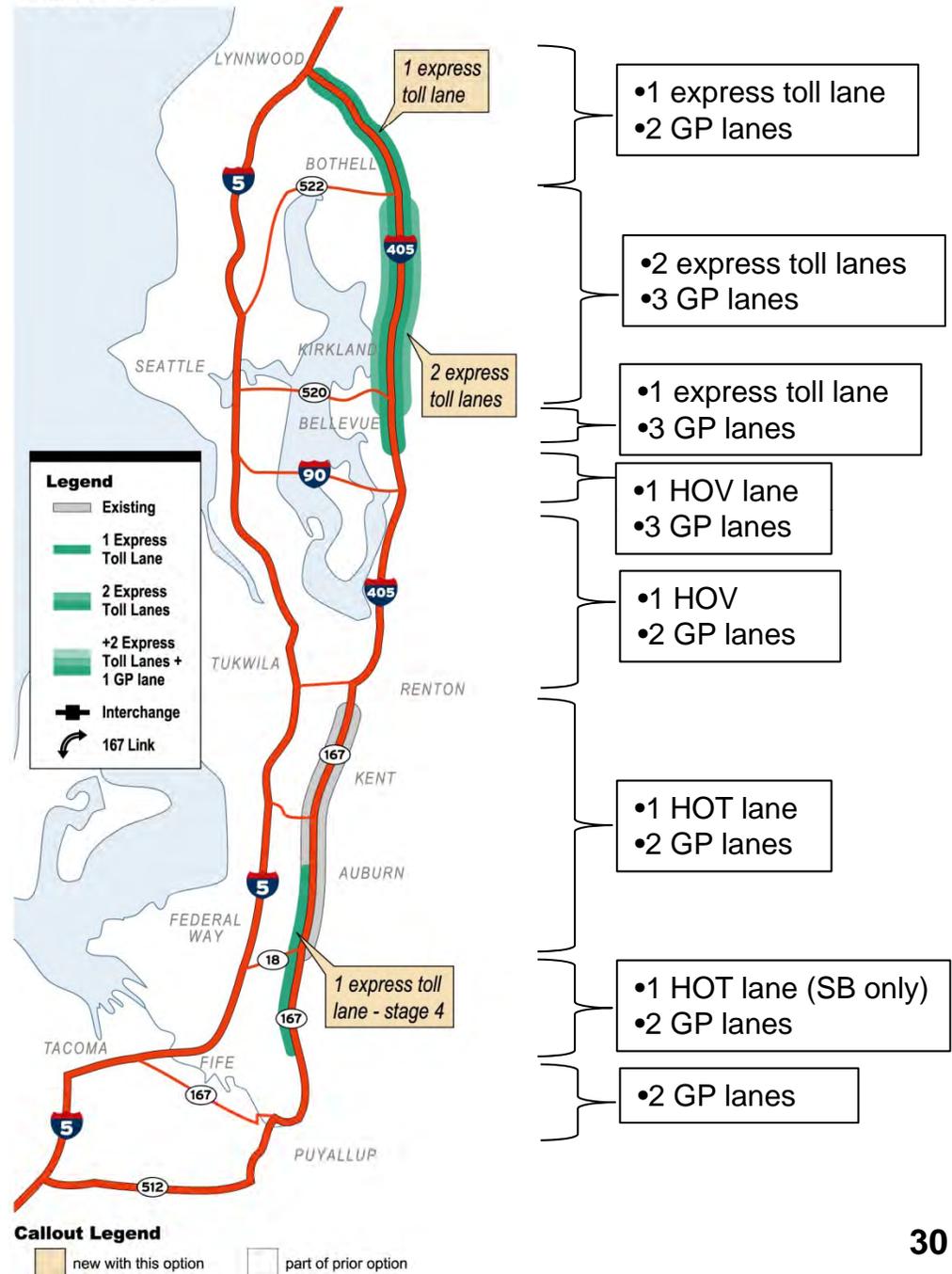
I-405

- 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)

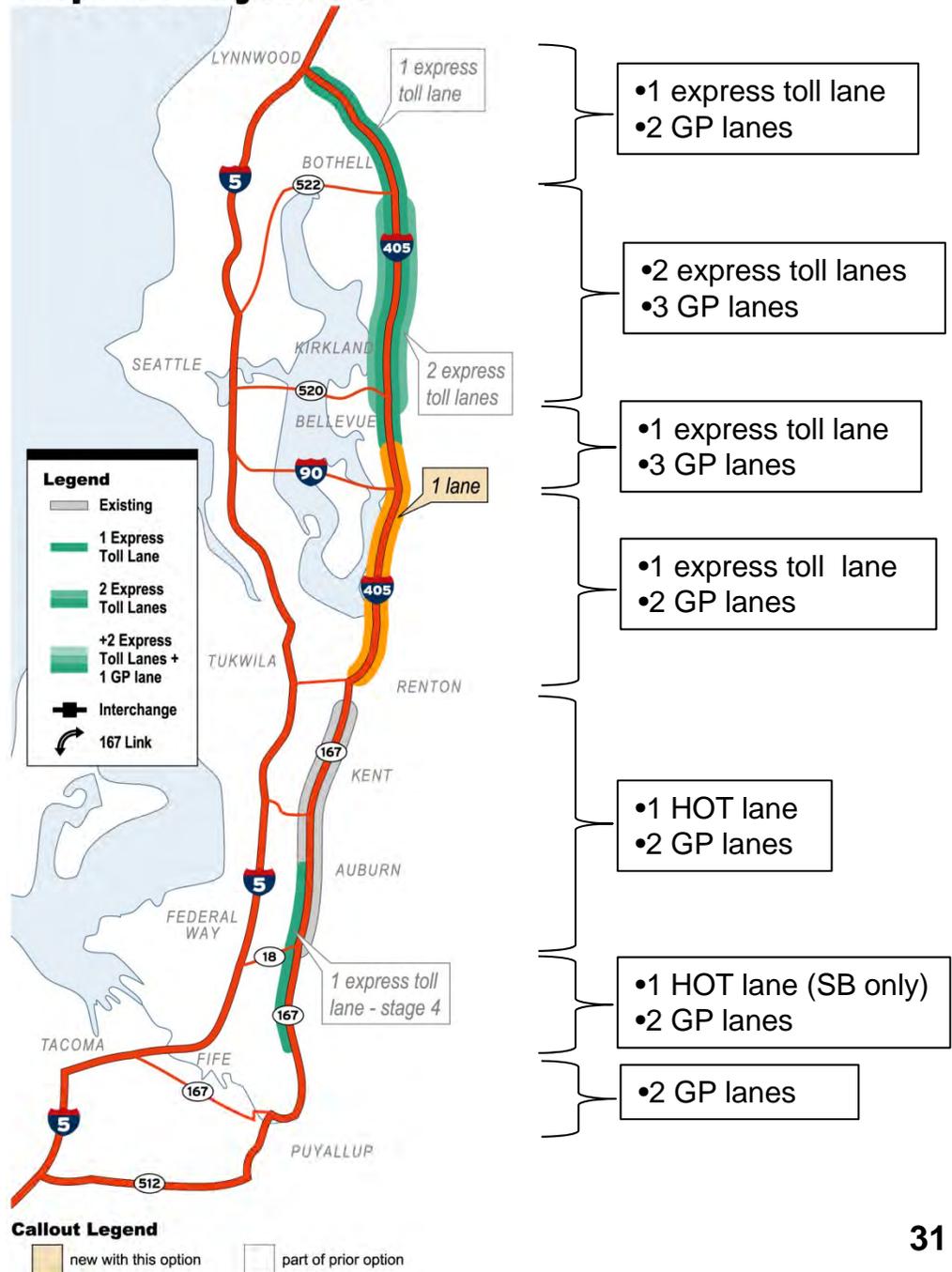
Study Option 1 Funded



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

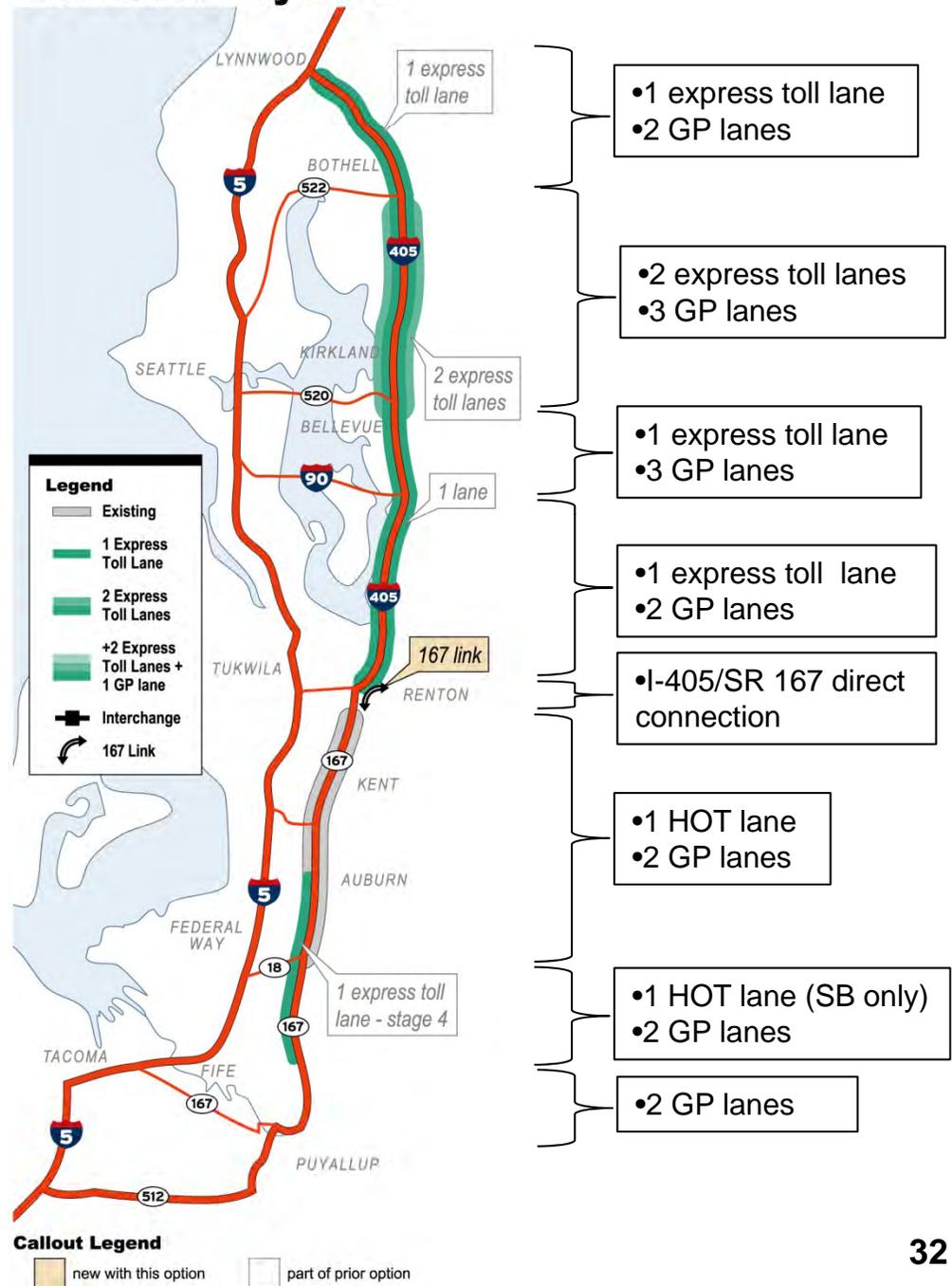
Study Option 2 Separate Systems



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

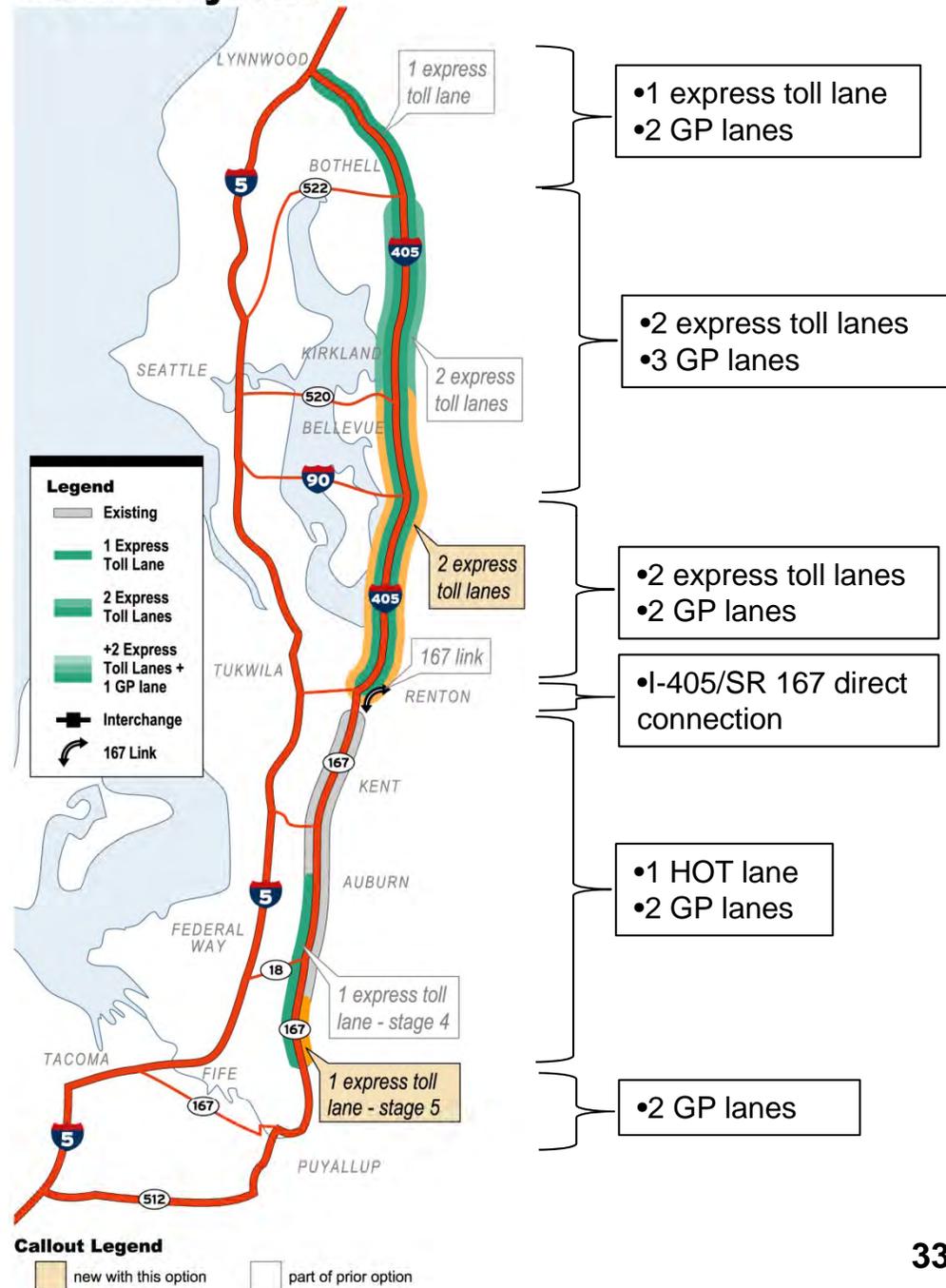
Study Option 3 Connected System



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

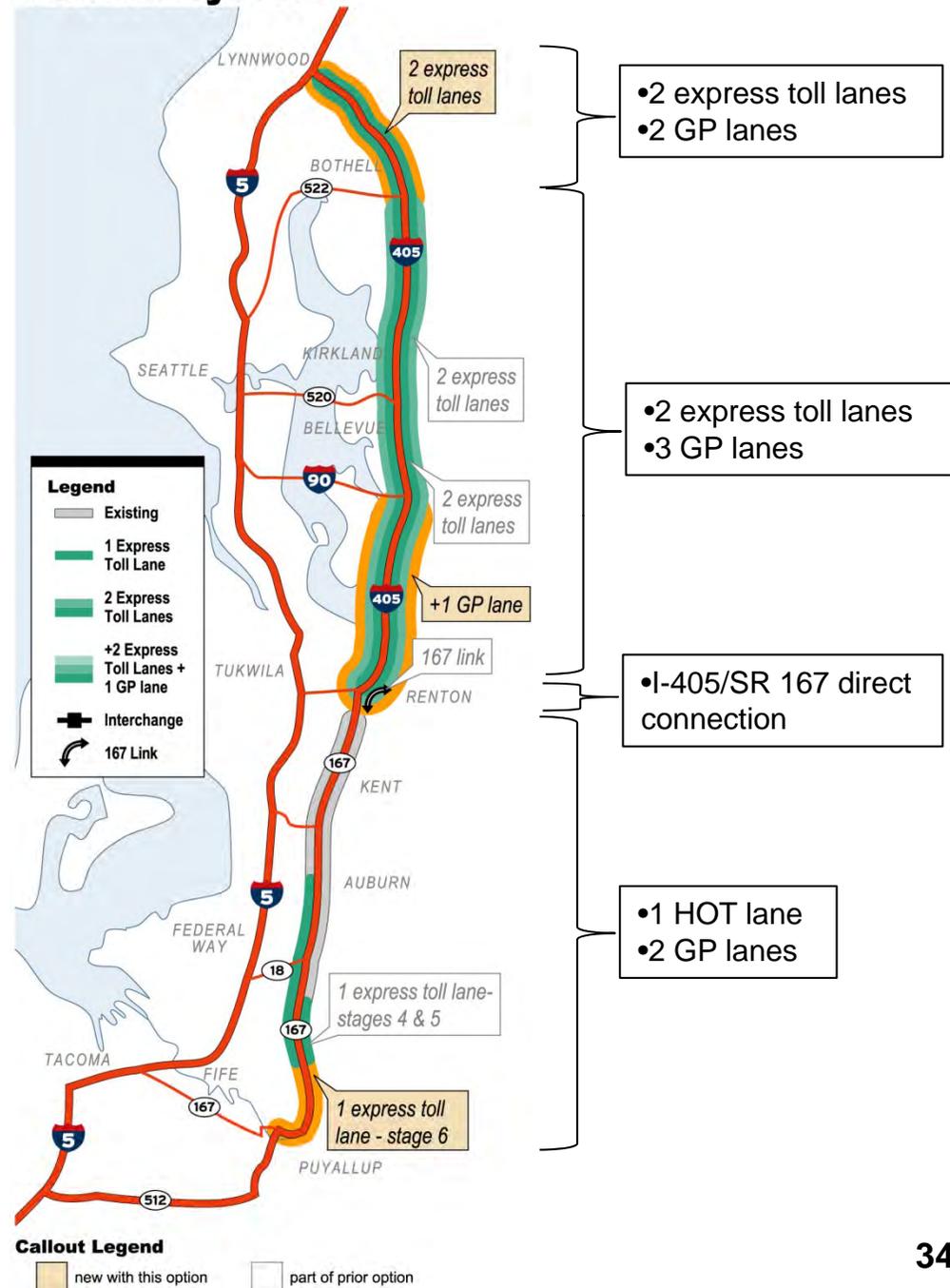
Study Option 4 40 Mile System



Study Option #5

- Includes all elements in Study Option #4
- Adds a general purpose lane between Renton and Bellevue on I-405, building 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



Proposed Study Options

**Study Option 1
Funded**



**Study Option 2
Separate Systems**



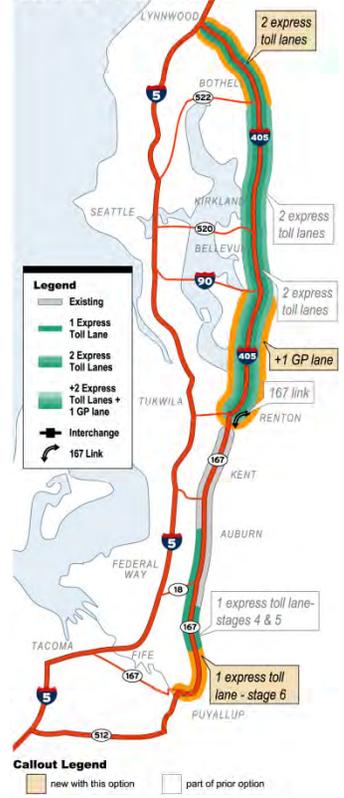
**Study Option 3
Connected System
1 Lane Renton to Bellevue**



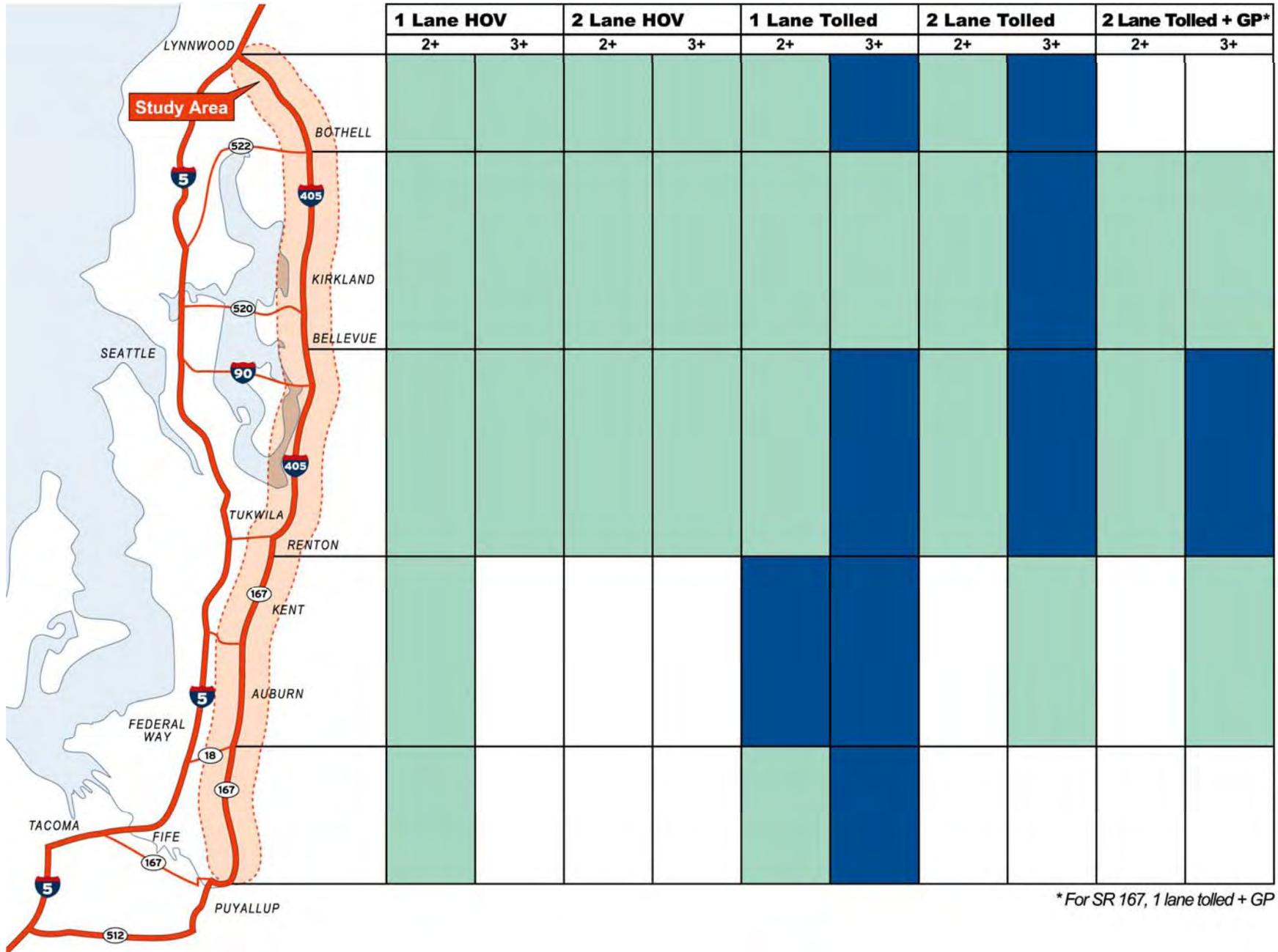
**Study Option 4
Connected System
2 Lanes Renton to Bellevue**



**Study Option 5
Connected System
Master Plan Renton to Bellevue**



What will this study focus on?



Access Points

Kim Henry
Eastside Corridor Project Director



System Overview

Fully-functioning System

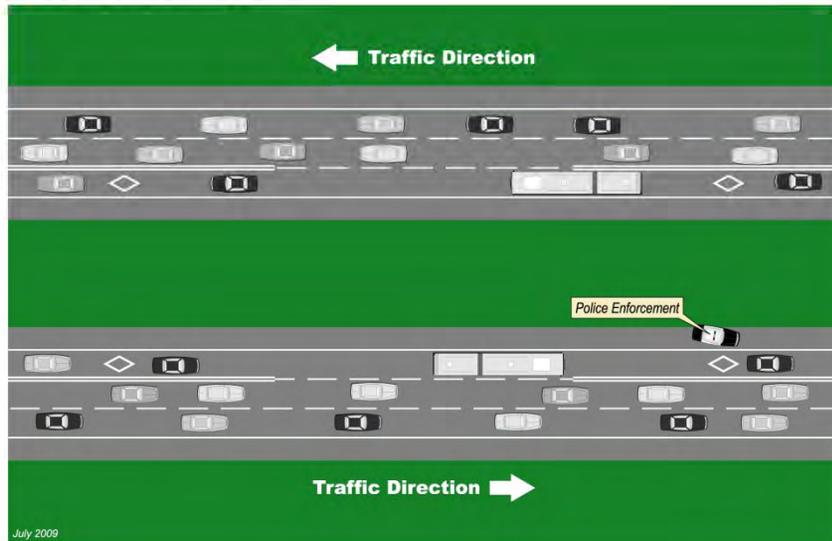
- Primarily, one lane on SR 167 that ties in with a two-lane system on I-405
- Balance of access points to maintain speeds and safety.

Eastside Corridor express toll lanes system with access points

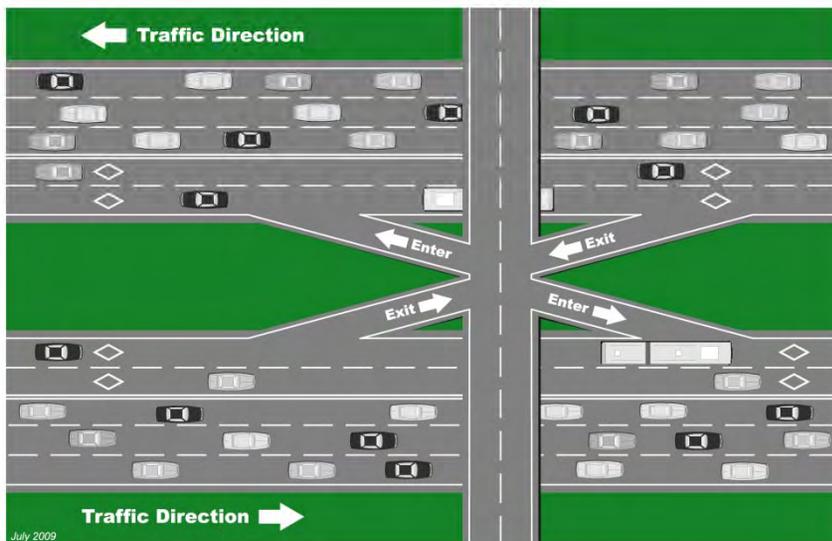


Types of Access Points We've Considered

One HOT Lane



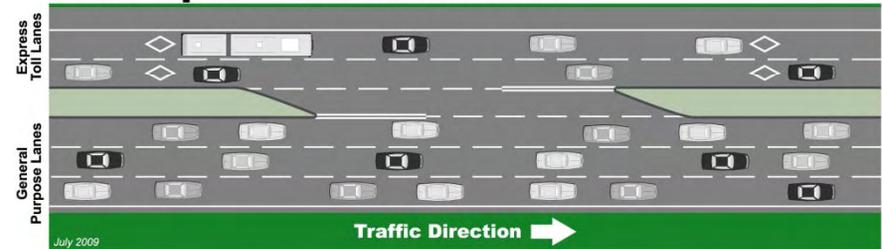
Direct Access



Two Express Toll Lanes-Entrance



Two Express Toll Lanes-Exit



Access Points: Fully-functioning System

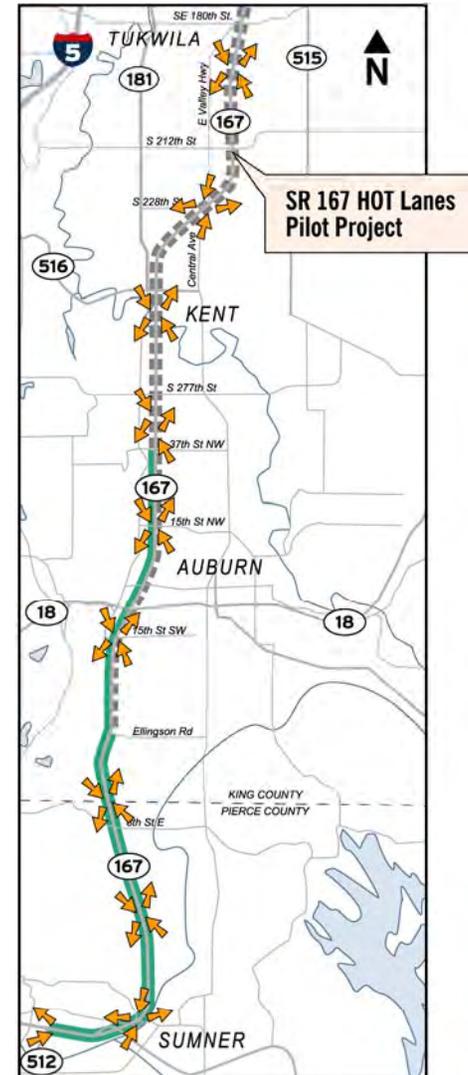
I-405 North



I-405 South



SR 167



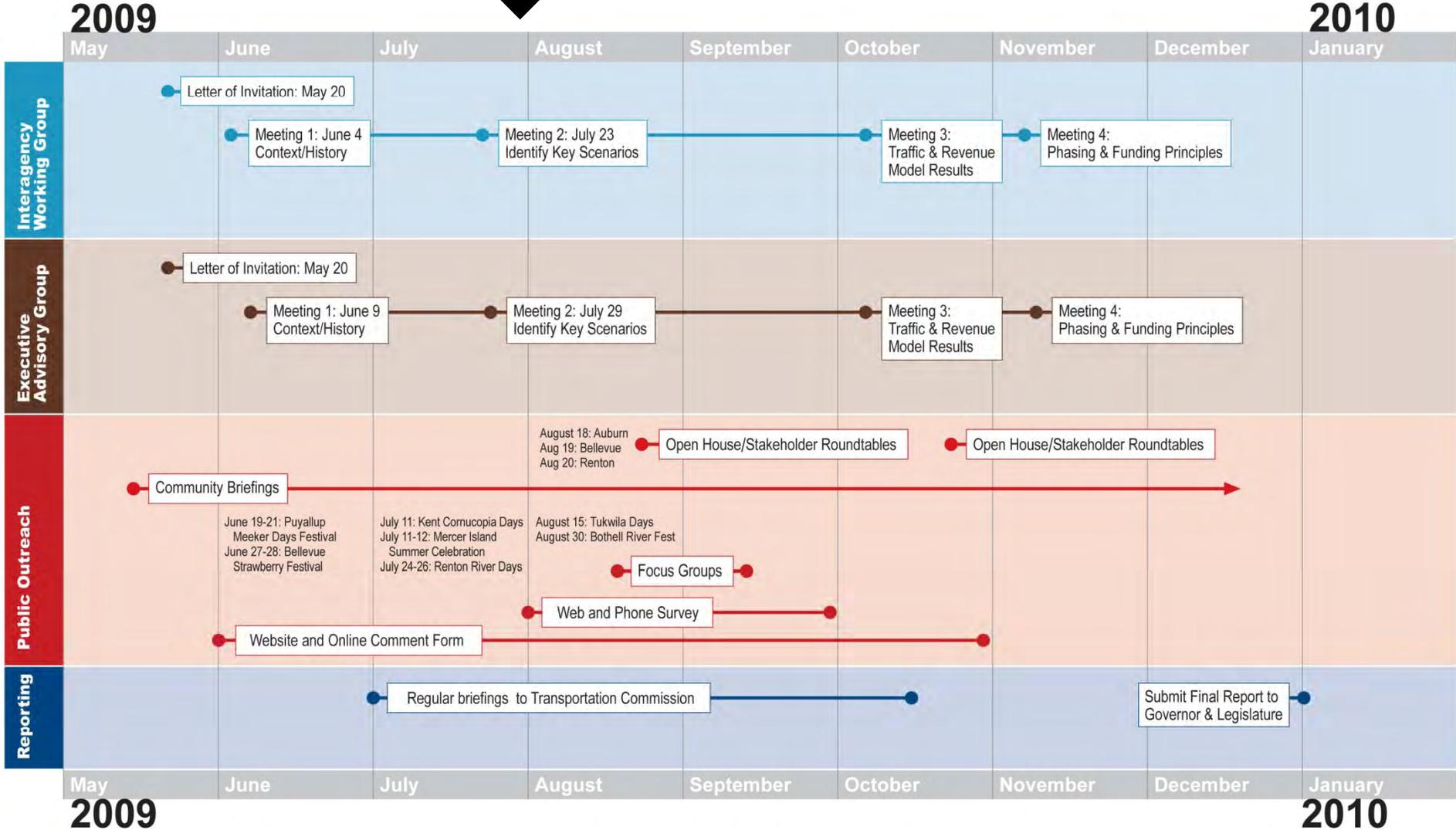
Public Outreach Planning

Colleen Gants
I-405 Communications



Ongoing Outreach

We are here



What have we heard so far?

“WSDOT is considering adding up to two express toll lanes on I-405 that could connect with HOT lanes on SR 167, creating a 50+ mile corridor from Puyallup to Lynnwood. These new lanes would be in addition to existing general purpose lanes.”

*Do you think this is a good idea?
Why/why not?*



Bellevue Strawberry Festival
57% Yes
24% No
19% Mix/Neutral

Mercer Island Summer Island Celebration
68% Yes
28% No
4% Neutral

Kent Cornucopia Days
67% Yes
25% No
8% Neutral

Puyallup Meeker Days
75% Yes
15% No
10% Neutral

Upcoming Outreach: August-September

★ Public Meetings:

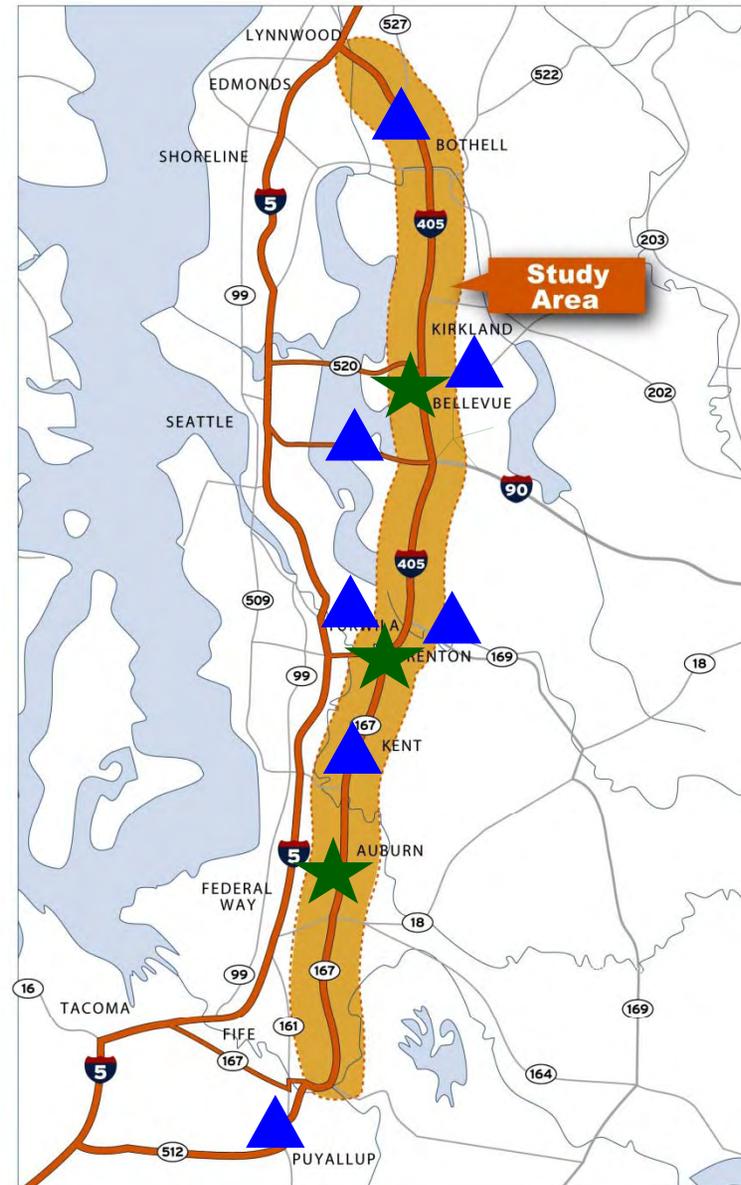
- August 18 – Auburn
- August 19 – Bellevue
- August 20 – Renton
- Statistically valid phone survey

- Web survey

- Focus groups

▲ Ongoing summer festivals

- Community briefings



Public Meeting Advertising

- Direct mail postcards announcing open houses to households in the Eastside Corridor and individuals on the project mailing list
- Distribute postcards and flyers at summer events, libraries, community centers and city halls throughout the study area
- Send email notification to local WSDOT project email lists
- Display advertisements in local newspapers and online advertising
- Post meeting details on the Web
- **Anything else?**



Public Comment

We're continuing to gather feedback on tolling options in the following ways:

- Email: ECTollingStudy@wsdot.wa.gov
- Web: www.wsdot.wa.gov/tolling/eastsidecorridor
- Comment forms at summer events and public meetings
- Mail to:

I-405 Public Information
600 108th Ave NE Suite 405
Bellevue, WA 98104

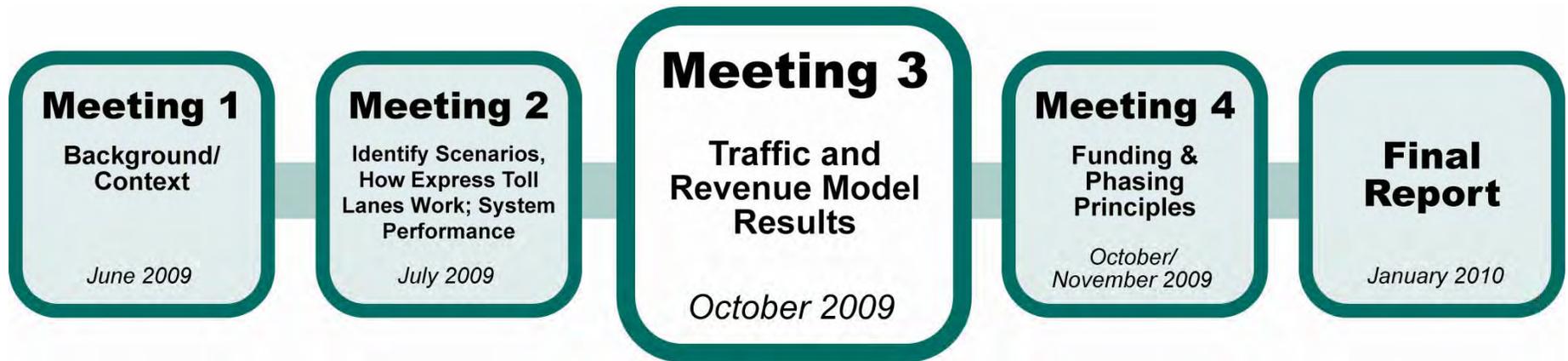
Wrap-up/Next Steps

Craig Stone

Director of WSDOT Toll Division



Next Steps: Meeting 3



Questions?

For more information please contact:

Denise Cieri, Eastside Corridor Deputy Project Director

CieriD@wsdot.wa.gov

425-456-8509

Meeting materials posted at:

www.wsdot.wa.gov/tolling/eastsidecorridor



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