

# Tolling Updates

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**Washington State Transportation Commission**  
**February 16, 2011**

# Agenda

- SR 520 Tolling Activity Update
- I-5 Express Lanes Pre-Design Study
- Alaskan Way Viaduct Advisory Committee
- I-405/SR 167 Express Toll Lanes
- Tacoma Narrows Bridge Cashless Study
- Administrative Adjudication

# I-5 Express Lanes Pre-Design Study

# Presentation Outline

## Express Lane Pre-Design project

- The express toll lanes concept
- Project impetus and funding
- Study elements and issues
  - System planning and design issues
  - I-5 options
  - Program development issues
- I-5 express lanes tolling proviso
- Project status and timeline
- Coordination, and process to develop project recommendations



# Express Toll Lanes Strategy

- Moving Washington includes strategy to evolve the Puget Sound HOV lanes into tolled express lanes
  - Many current HOV lanes do not meet speed and reliability standard
  - 3+ HOV would leave lanes underused, while adding to congestion in other lanes
  - Express toll lanes allow paid users, using dynamic pricing to manage traffic volumes
  - Provides better performance for transit and carpools, while giving everyone a way to avoid congestion when it's most important
  - In some places a two-lane express facility could be provided
- PSRC Transportation 2040 also includes express toll lane strategy
- SR 167 HOT lane pilot project is early example, and I-405 express toll lanes are under development

# Express Lanes Pre-Design Study

- Funded by \$1.28M Federal Value Pricing grant
- Questions this project will address:
  - What are system objectives?
  - What users and user requirements should be accommodated?
  - What operating policies and design options should be used?
  - How could this concept be implemented on I-5?
  - How could implementation be funded and staged over time?
- Intent:
  - Develop approach that provides consistent customer experience
  - Clarify the concept before engaging in extensive public outreach

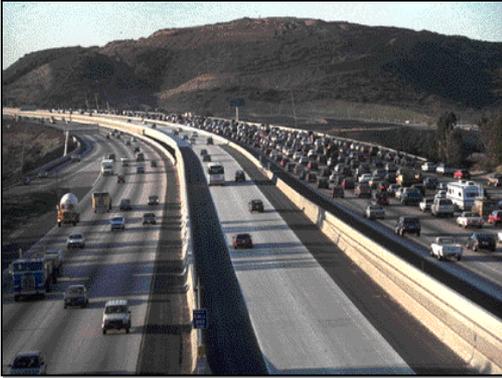
# User Requirements

- What transit service will be accommodated?
  - LRT expansion will reduce bus service in some corridors
  - Is BRT service anticipated, with direct access and intermediate stops?
- What trucks should be allowed?
  - Should a higher weight threshold be considered?
  - Are there segments where heavy trucks should be accommodated?
- What incentives to carpooling should be offered?
  - Allowing 2+ unlimited free access would not meet performance goals
  - What incentives could be offered to 2-person carpools, if any?
  - Should carpool registration be required?
- What is the market for paying customers?
  - Short trips or long? Commuter trips or through trips?

# Design Options

- How will lanes be priced, and how will the price be communicated?
- What toll technology will be used?
  - Will photo tolling be available, or Pay By Mail?
  - Will carpool users need a special transponder?
- Can access be continuous, like HOV lanes, or are dedicated entrances and exits needed?
- Can a lane be used as an express lanes at some times and a general purpose lane at others?
  - Are overhead signs adequate?
  - Can part-time shoulder use be used to provide the added lane?

# Examples From Other Cities



I-15 FasTrak (San Diego)



I-394 MnPASS Express Lanes  
(Minneapolis)



I-15 (Salt Lake City)



I-95 (Miami)



I-25 (Denver)

# Each City/Region has its Own Style

- 11 examples nationally, all considered successful
  - 10 are HOV conversions, most allow 3+ free use
  - Some are 2+ free, implemented as response to underutilization
- Single lane, double lane, reversible
- Continuous access, dedicated access
- Barrier-separated, buffers, pylons, paint stripe
- Fixed price schedule or dynamic
- Most use electronic tolling
  - One uses monthly price with sticker for unlimited use
  - No examples yet of photo tolls or declarable transponders
- Some require carpool registration
  - One requires carpoolers to live and work near each other
  - One lets users change their carpool status over phone or internet per trip

# I-5 Express Toll Lane Options

- Examining I-5 from south of Dupont to north of Everett
- Reversible lanes in Seattle and HOV lanes are considered together as a system
- In addition to converting HOV and express lanes, also asking:
  - Is a southbound contra-flow lane possible in the reversible lanes?
  - Can a second express lane be operated part time north of Northgate (in same direction as reversible lanes)
  - Could an extension of SR 509 and SR 167 be connected with a two-lane express lane segment?
  - Where are additional direct access ramps needed, and freeway-to-freeway connections?

# Program Development Questions

- Should active traffic management be integral to implementation?
- How much revenue is likely, given recommended policies and facilities?
- Could system be implemented in phases using toll revenues only?
- What is the best approach to evaluate environmental impacts?
- How might limited “excess” revenues be applied to corridor needs?
  - General purpose bottleneck improvements?
  - Contribute to completion of parallel or intersecting corridors?
  - Down payment towards preservation backlog?
  - Increased incident management service?
  - Transit or demand management programs?
- Use of revenues is legislative prerogative
  - Will be critical element of public acceptance

# I-5 Tolling Provision

- Prepare a comprehensive tolling study of the Interstate 5 express lanes to determine the feasibility of administering tolls within the corridor.
- Regularly report to the Washington Transportation Commission regarding the progress of the study.
- Include, at a minimum:
  - The potential for value pricing to generate revenues for needed transportation facilities;
  - Maximizing the efficient operation of the corridor;
  - Economic considerations for future system investments; and
  - An analysis of the impacts to the regional transportation system.
- Submit a final report on the study to the joint transportation committee by June 30, 2011.

# Project Status and Timeline

- To respond to legislative proviso:
  - Accelerating I-5 analysis
  - Beginning high-level traffic and revenue analysis
  - 2 options: express lanes only, and full express toll implementation
- Consultant work to date focused on system policy and design issues
- Beginning I-5 pre-design work
  - Conceptual analysis leading to project identification
  - Will continue into Summer 2011
- Express Lanes toll feasibility report due in June
  - Will consult with Transportation Commission before releasing final report
- Program development analysis during Fall of 2011
- Final project report due first quarter of 2012

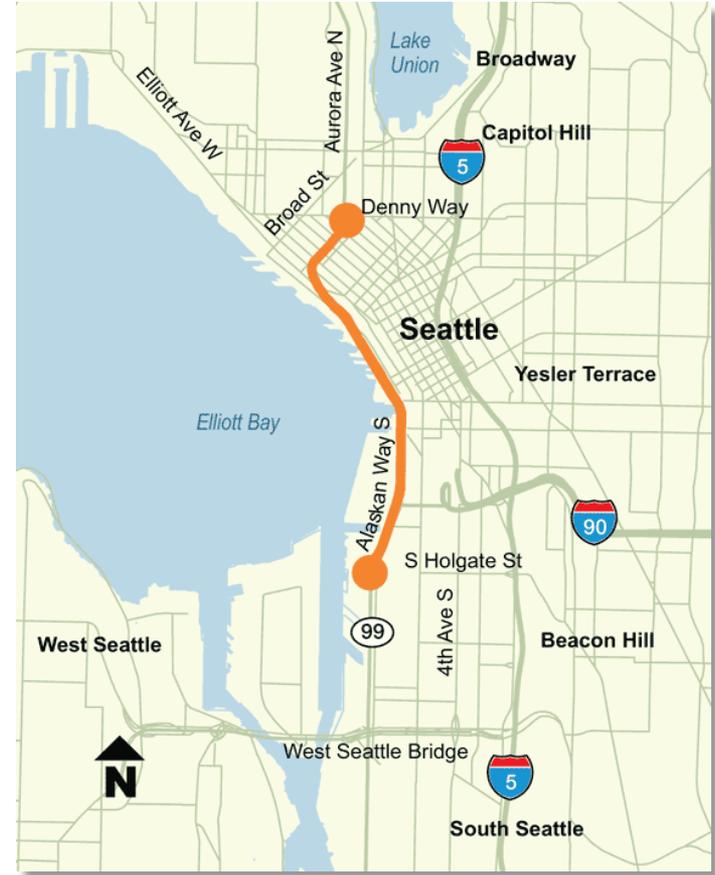
# Coordination and Decision Making

- Monthly coordinating meeting includes affected WSDOT offices, FHWA, transit agencies, ports, the State Patrol and PSRC
- Key challenge is to develop preferred approach within WSDOT
  - Requires input from multiple disciplines and interests
  - Affects ongoing projects
- Internal steering committee will forward recommendations to agency executives
- Commission will play critical role determining carpool policy
  - Toll discounts are primary carpool incentive
  - WSDOT will propose a preferred approach for Commission consideration
- Once initial recommendations are complete, a comprehensive public outreach effort will be needed

# **Alaskan Way Viaduct Replacement Advisory Committee on Tolling and Traffic Management**

# Alaskan Way Viaduct Replacement

- In 2009, the Washington State Legislature approved ESSB 5768, which identified a bored tunnel as its preferred option for replacing the SR 99 Alaskan Way Viaduct.
- The Legislature also directed WSDOT to prepare a study to determine the potential for tolls to contribute to the construction funding.



# Key Findings from Bored Tunnel Traffic Study

## About the study:

- In 2009, Legislature directed WSDOT to prepare a study to determine the potential for tolls.
- In January 2010, WSDOT released the study evaluating five tolling scenarios that include a range of toll rates and test tolling the tunnel by itself, as well as testing tolling in the corridor.

## Findings:

- Three of the five scenarios could raise \$400 million in toll funding. A fourth scenario comes close.
- Tolls would be collected all electronically, with no toll booths.
- Medium or high tolls shows some traffic diversion to local streets and I-5. Drivers are more likely to divert during off-peak periods.

## Next Steps

- Additional traffic and revenue analysis.

# SDEIS Bored Tunnel Alternative Transportation Analysis

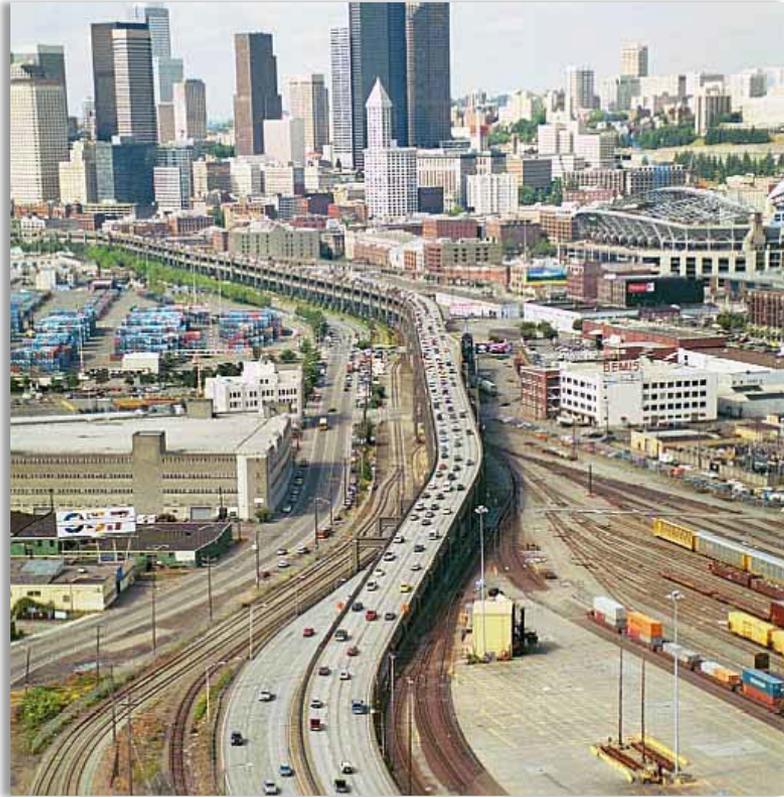
- Analysis primarily compares the transportation network with the existing viaduct (2015 traffic conditions) and the bored tunnel alternative in 2015 and 2030.
- SDEIS examines an untolled and tolled bored tunnel:
  - Untolled bored tunnel is an easier comparison with previous untolled alternatives.
  - Tolling operations will change based on additional analysis and public involvement.

# Overview of Tolling Analysis

## **SDEIS uses same tolling scenarios as cost and tolling report:**

- 2010 cost and tolling summary report determined up to \$400 million in funding could be generated.
- SDEIS describes potential environmental effects of tolling the bored tunnel alternative.
  - Tolling the tunnel resulted in undesirable traffic levels on downtown streets and Alaskan Way.
- During the next several years, WSDOT and SDOT will work together to refine and optimize toll scenarios and minimize diversion.
  - Effort will include convening a tolling advisory committee per City/State agreements.

# Traffic Volumes With Tolls



- During the next several years, WSDOT and SDOT will work with the Port and County and a tolling advisory committee to refine toll scenarios.
- Toll scenarios resulted in undesirable levels of diversion.
- For example, with a medium to high toll, projected daily trips could shift to:
  - I-5: 14,000 to 15,000 vehicles.
  - North-south downtown city streets (west of I-5): 16,000 to 18,000 vehicles.
  - North-south downtown city streets (east of I-5): 10,000 to 12,000 vehicles.
  - Alaskan Way (North of Seneca Street): 6,000 to 7,000 vehicles.

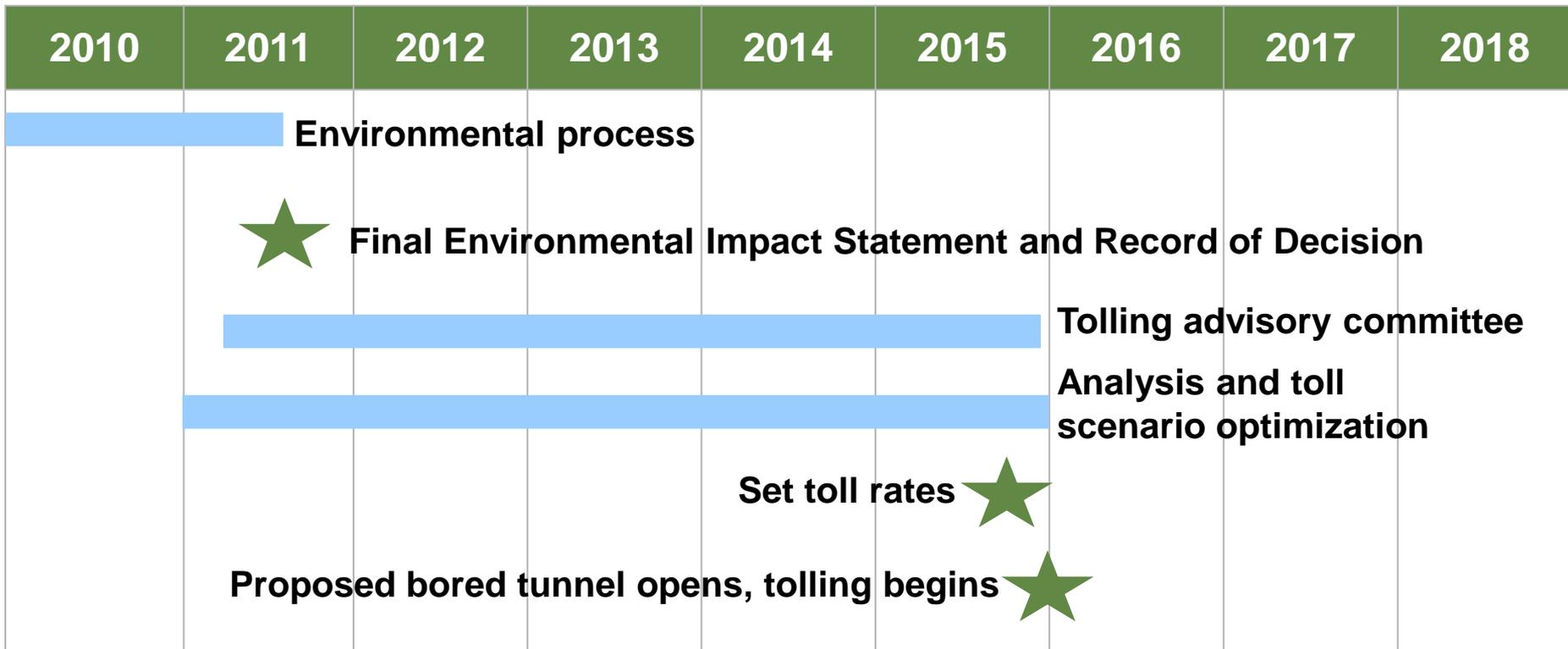
# Advisory Committee on Tolling and Traffic Management

- WSDOT and the Seattle City Council agreed to the creation of a tolling advisory committee.
- Committee will make advisory recommendations to WSDOT, the Governor, the Legislature, the Transportation Commission and the City on strategies for minimizing and mitigating traffic diversion effects on city streets and I-5.
- The committee will begin its work in March 2011, and it will submit its initial recommendations by June 2012.



# Next Steps for Tolling

- Washington State Legislature would provide tolling authority for SR 99.
- Tolling Advisory Committee will develop recommendations for minimizing and mitigating diversion.



# **I-405/SR 167 Express Toll Lanes**

# I-405/SR 167 Expert Review Panel

## **Academic**

Ginger Goodin, Texas Transportation Institute (TTI), Texas A&M University System

## **Transportation Policy**

Robert Poole, independent national transportation consultant (Los Angeles and Fort Lauderdale)

## **Transportation**

Chuck Fuhs with Parsons Brinckerhoff in Planning Houston

## **Express Toll**

Jennifer Tsien, working with the Florida Turnpike Operations Enterprise in Orlando and Miami

## **Financing**

Janet Lee of Public Resources Advisory Group in New York

# Expert Review Panel Charge/ Findings

**POLICY: Yes**, the proposed express toll lane concept is a viable and appropriate strategy for improving mobility on the I-405/SR 167 Eastside Corridor.

**METHODOLOGY: Yes**, the state used sound planning and engineering practices consistent with industry standards to analyze the operational performance of I-405/SR 167 corridor express toll lanes.

**PHASING: Yes**, moving forward with Phase 1 as a first step to implementing Option 4 makes sense and provides logical first segments to complement the existing SR 167 HOT lane pilot project.

- A more detailed plan is needed for future phases
- Do not lose sight of Option 4 as a corridor-wide solution in response to the Master Plan

**FINANCING: Yes**, Phase 1 provides necessary momentum and helps to fill the funding gap for future phases. An investment-grade analysis will be needed to produce a financial plan for a corridor-wide solution.

# Question 1: Policy

Is the state's strategic approach to implement express lanes on I-405/SR 167 viable, appropriate and consistent with emerging federal policy and current state and regional policies?

## ERP Response:

**The I-405/SR 167 corridor express toll lanes are aligned with federal, regional and state tolling, HOV, and livability policies.**

## **The corridor exemplifies the evolution of express toll lanes concept**

- First generation – represented by SR 167
- Second generation – represented by I-405 multiple toll lanes
- Corridor system – represented by the 50-mile system

## **The corridor – by segments and as a whole – is consistent with national practices and trends**

- The concepts proposed for the I-405/SR 167 corridor are viable from a general technical standpoint in comparison to similar projects
- Concepts are similar to other projects in physical characteristics and in the types of performance and financial objectives

**Table 2-3. Comparison of I-405/SR 167 Concept to Corridor System Projects**

I-405/SR 167 Project Objectives	Operating Projects		Projects Under Construction			
	San Diego I-15	Houston I-10	Ft. Lauderdale I-595	Dallas I-635/I-35E (LBJ FWY)	Fort Worth SH 183/I820 (NTE)	D.C./Virginia I-495 (Capital Beltway)
<b>Freeway Performance</b>						
Increase person throughput	•					
Improve speed and travel reliability to free flow (45 to 60 mph)	•	•	•	•	•	•
HOV2+ to HOV3+		•***	•	•***	•***	•
Transit priority	•	•		•	•	•
Reduce arterial diversion						
Mobility improvement for general purpose Lanes	•	•	•	•	•	•
Mobility improvement for freight			•	•	•	
<b>Leverage Toll Revenue</b>						
Retain tolling revenue in corridor	•	•	•		•	
Secure financing		•	•	•	•	•
Exempt transit and carpools from tolls	•	•	•**	•***	•***	•**
Prioritize funding to leverage toll revenue with other funding		•	•	•	•	•
<b>Express Toll Lane System</b>						
Incremental implementation beginning with funded projects	•					
Fit within LRP and regional tolling system	•		•	•	•	
Sensitivity to construction phasing on a regional level						

\*HOV2+ 50% discount peak periods only

\*\*HOV3+

\*\*\*HOV2+, to migrate to HOV3+ in future

# Interstate 95



# Question 2: Methodology

Are the technical analytical measures and results supporting the Eastside Corridor Express Toll Lanes Report valid? Were the right tools applied to the analysis? Are the report results reasonable? What outcomes are reasonable to expect based on industry experience?

## ERP Response:

**Primary measure of effectiveness (MOE)** - “vehicles and people moving at free-flow speed” - is unconventional

## Additional MOEs were requested to:

- (1) Ensure consistency with standard practices
- (2) Ensure objectivity in results
- (3) Provide a broader picture of overall corridor performance

## The additional MOEs:

- System performance metrics
- Screen line comparisons with non-toll option
- Corridor speed and volume profiles

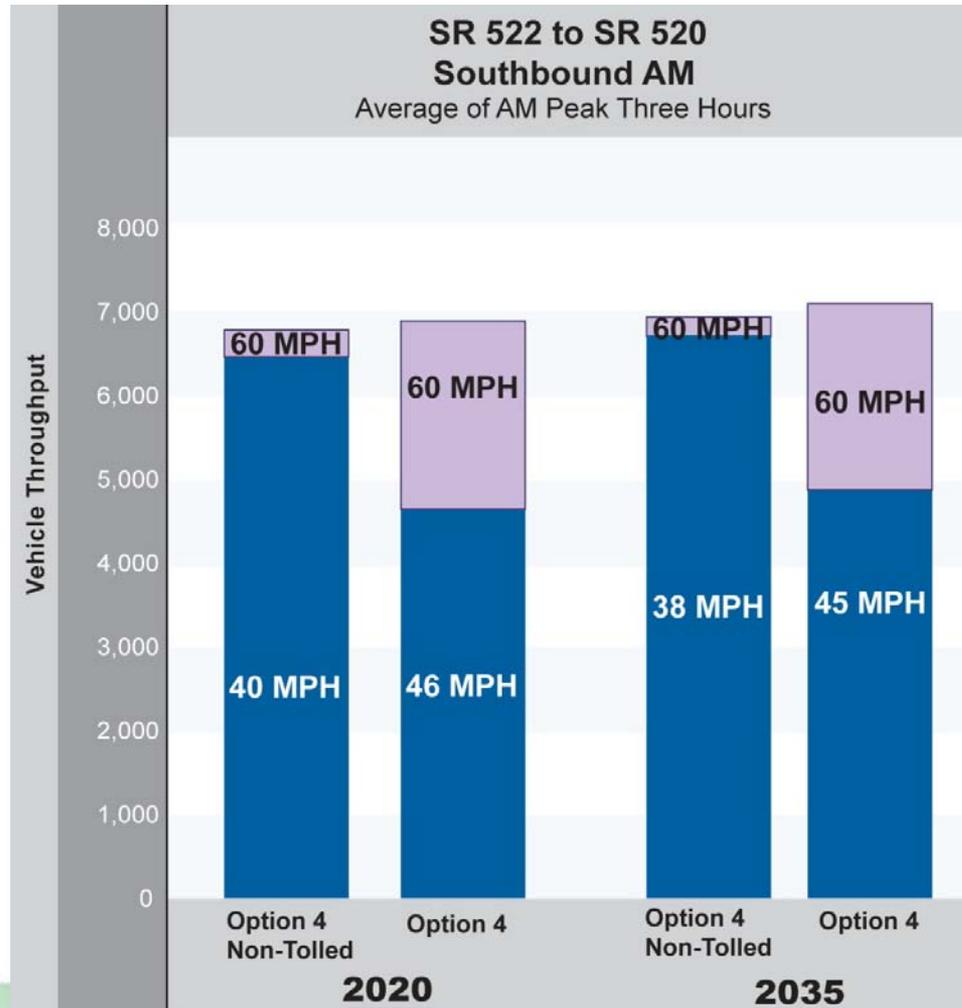
# 2035 Corridor Wide Performance Measures

*Table 3-1 Modeled Network Performance Measures for AM Peak Period in 2035*

	Option 4 Non-Tolled	Option 4 Tolled	% Difference
Vehicle Throughput (no. vehicles)	212,904	242,932	+14%
Average Speed (mph)	27.1	37.0	+36%
Total Travel Time (hours)	56,217	48,142	-14%
Average Delay per Vehicle (sec.)	430	241	-44%

# Northend Traffic Performance

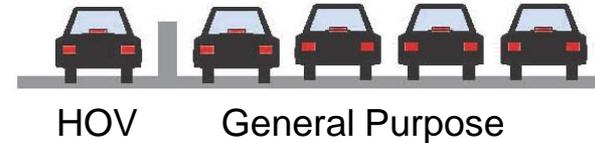
## *Non-tolled vs. Tolled for 2020 and 2035*



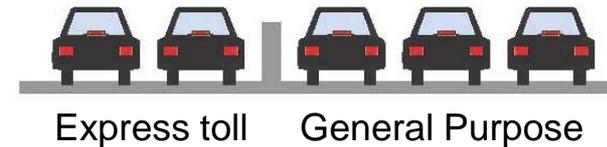
### Legend

- HOV (non-tolled) / express toll lanes
- General purpose (GP) lanes

### Non-tolled Lane Configuration

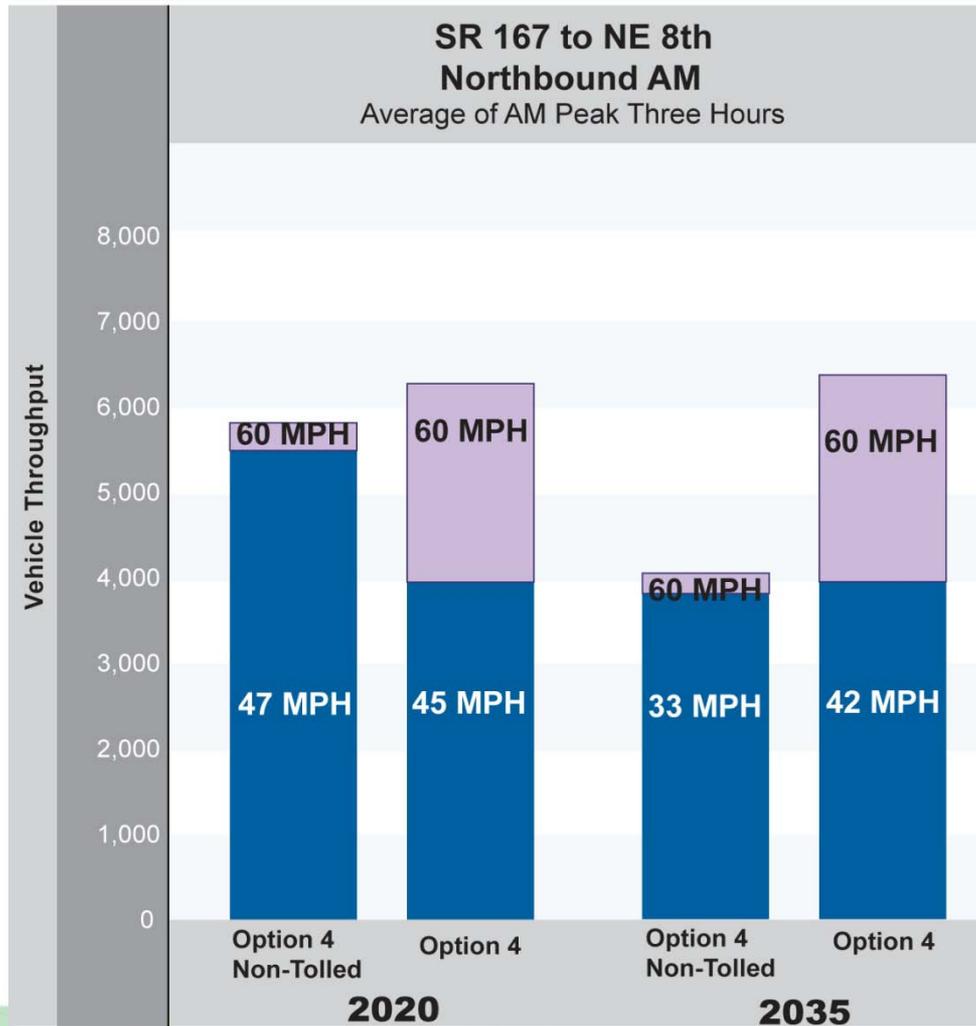


### Tolled Lane Configuration



# Renton to Bellevue Traffic Performance

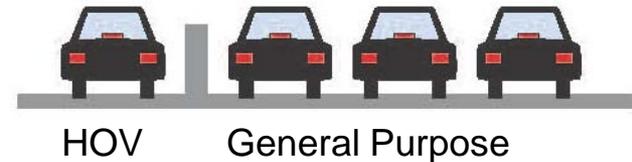
## *Non-tolled vs. Tolled for 2020 and 2035*



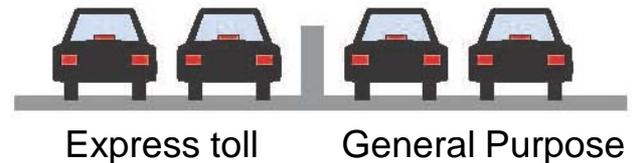
**Legend**

- HOV (non-tolled) / express toll lanes
- General purpose (GP) lanes

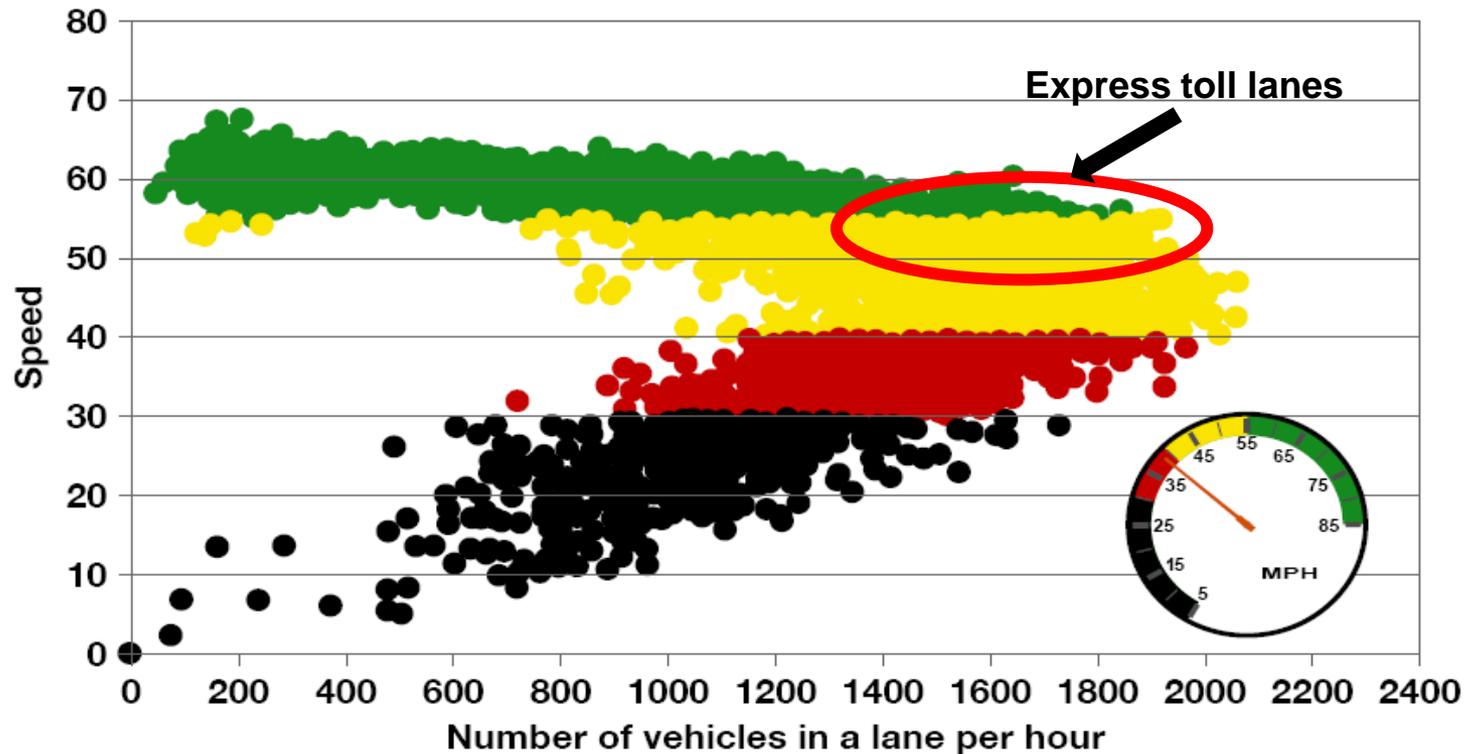
### Non-tolled Lane Configuration



### Tolled Lane Configuration



# Why Do Express Toll Lanes Perform Better?



*Pricing in response to changing demand (variable pricing) helps to improve performance by maintaining a constant flow rate that serves to manage the higher levels of demand and prevent the breakdown in flow.*

# Question 3: Phasing

Is the proposed phasing plan to implement an express toll lane system sensible, and provide for logical, usable segments towards a 50-mile Eastside Corridor system?

## ERP Response:

### Corridor system – “megaproject” approach

- Case study projects driven by finance and opened in entirety without phasing
- Move forward with Phase 1, but seek to implement the balance as a corridor-wide solution in response to the master plan framework

**Develop corridor-wide financial plan** to explore future phasing, project delivery, operational performance and managing risk associated with implementing and opening remaining portions of the corridor over the next decade.

### HOV 2+ to 3+ transition

- Address degradation of HOV lane as an early action item
- Supports financing and logical phasing

# Question 4: Financing

Are the Eastside Corridor Express Toll Lane Report financial assumptions, methods, and forecasts valid?

## **ERP Response:**

### **Perform investment grade traffic and revenue study**

- Provide a financial plan with more detailed review, supported by additional data collection and analysis, results in “certified” revenue forecasts to bond rating agencies and investors
- Identify phasing to optimize revenue and performance

### **Filling the funding gap**

- Identify potential funding sources
- Remain open to new operating policies and tools

### **Megaproject financing with alternative funding models**

- Consider successful models for corridor systems

# ERP Recommended Next Steps

- Move forward with Phase 1 (6 months)
- Address regional policy for HOV degradation and migration to HOT3+ (6 months)
- Seek FHWA tolling approval for corridor (6 months)
- Continue authorization of tolls on SR 167 HOT lanes pilot project (1 yr)
- Continue developing the components comprising a megaproject (project management plan, risk management plan, master schedule, phasing plan, and financial plan). Maintain momentum with current legacy team. (1 yr)
- Leverage completed environmental documents
- Address operating policies and design elements that support financing requirements (1 yr)
- Make the I-405/SR 167 interchange a higher priority by mobilizing critical path items like ROW and value engineering (2 yrs)
- Complete an investment grade traffic and revenue study (2 yrs)
- Address the funding gap through financing, user fees and delivery options (2 yrs)

# Executive Advisory Group Support

*Joan McBride*

Joan McBride  
Mayor of Kirkland

*Grant Degginger*

Grant Degginger  
Bellevue City Councilmember

*Sonny Putter*

Sonny Putter  
Newcastle City Councilmember

*Randy Corman*

Randy Corman  
Renton City Councilmember

*Jim Haggerton*

Jim Haggerton  
Mayor of Tukwila

*Suzette Cooke*

Suzette Cooke  
Mayor of Kent

*Peter Lewis*

Peter Lewis  
Mayor of Auburn

*David Hill*

David Hill  
Mayor of Algona

*Kathy R. Turner*

Kathy Turner  
Mayor of Puyallup

*Richard Hildreth*

Richard Hildreth  
Mayor of Pacific



I-405/SR 167 Direct Connector



**Legend**

- Phase 1 (Funded)
- Phase 2 (unfunded)
- Existing

## Regional Support

*Dave Gossett*

Dave Gossett, Snohomish County Councilmember, substituting for former EAG member and Councilmember Mike Cooper

*Reagan Dunn*

Reagan Dunn  
King County Council

*Richard Ford*

Richard Ford  
WA State Transportation Commission

*Sue Singer*

Sue Singer  
Puget Sound Regional Council

*Ronald J. Posthuma*

Ronald Posthuma  
King County Dept. of Transportation

*Roger Bush*

Roger Bush, Chair  
Pierce County Council

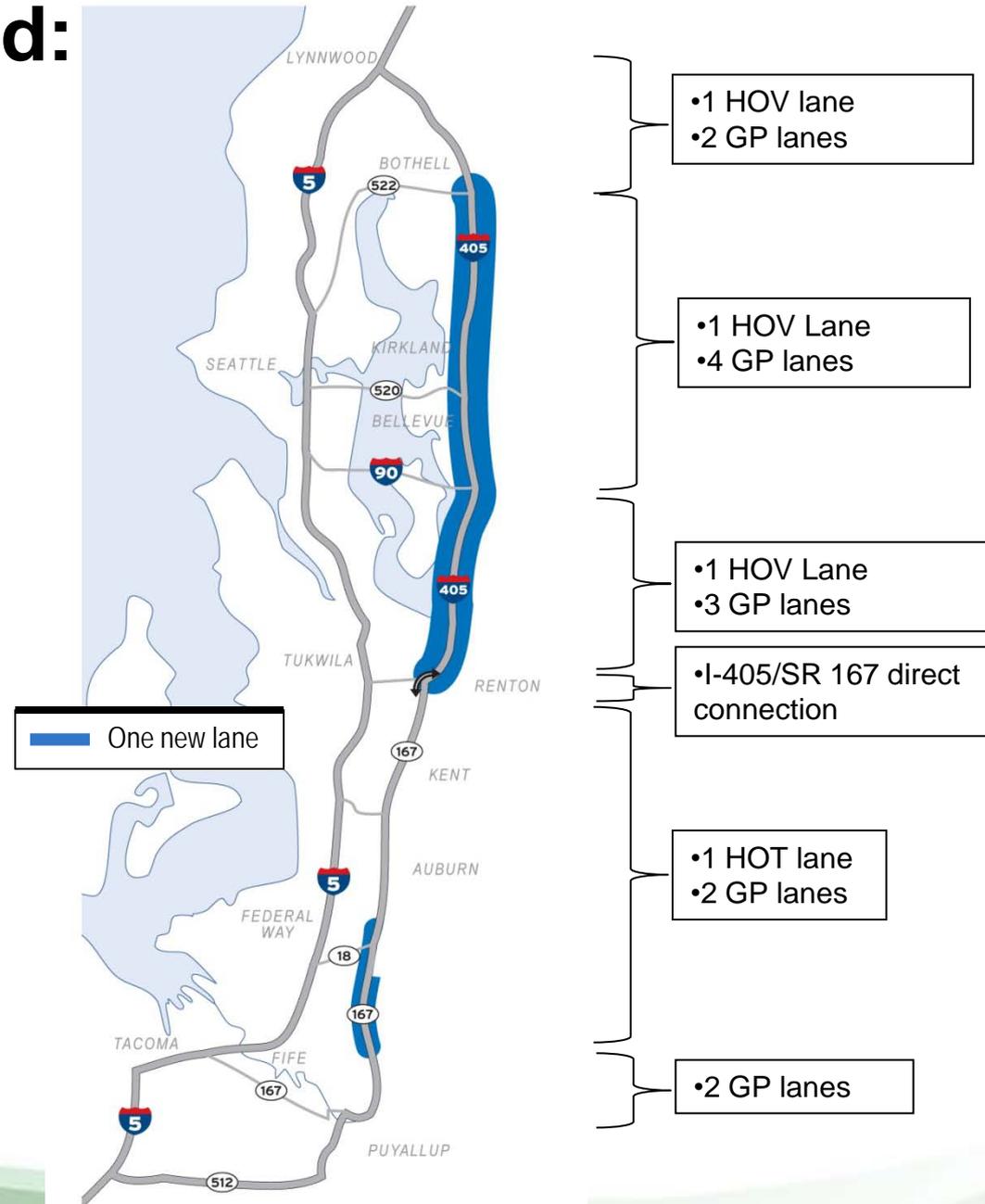
# I-405 Full Tolling Analysis

# Introduction and Objectives

- Examine options for tolling the “Eastside Corridor” general purpose lanes as an alternative to the Express Toll Lanes concept.
- Apply same widening assumptions as the Eastside Corridor Tolling Study, configured with one lane in each direction as 3+ HOV (toll-free).
- Provide preliminary draft analysis results.

# Improvements Tested: Option #4

- Footprint same as the Express Toll Lane Study Option 4
- Adds one lane each way on I-405 between Renton and Bothell
- Extends the HOV lane on SR 167 to 8th Street E
- Adds a direct connector between I-405 and SR 167, connecting the facilities



# Improvements Tested: Option #5

- Footprint same as the Express Toll Lane Study Option 5
- Adds two lanes each way on I-405 between Renton and Bellevue, building closer to the master plan
- Adds one lane each way on I-405 between I-90 and I-5 in Lynnwood
- Extends the HOV lane on SR 167 to SR410/512
- Adds a direct connector between I-405 and SR 167, connecting the facilities



- 1 HOV lane  
• 3 GP lanes
- 1 HOV lane  
• 4 GP lanes
- 1 HOV lane  
• 4 GP lanes
- I-405/SR 167 direct connection
- 1 HOV lane  
• 2 GP lanes

# Tolling Schemes Tested

- **Scenario A:** \$1.00 fixed toll beginning in 2020
  - Applied separately to three segments:
    - SR 167 (15 miles in Option 4, 19 miles in Option 5)
    - I-405 section South of NE 8<sup>th</sup> St (16 miles)
    - I-405 section North of NE 8<sup>th</sup> St (14 miles)
  - Does not vary by time of day or day of week
- **Scenario B:** Variable per-mile toll beginning in 2020
  - Ranges from \$0.15 to \$0.40 per mile based on time of day and day of week
  - Applied to all of I-405 and SR 167 as far south as SR 512 (up to 50 miles)

# Traffic Differences between Toll Scenarios

- Who pays?
  - Approximately 90% of vehicles pay with GP lane tolling, compared to 15% under Express Lane Tolling
- What happens to traffic with tolling?
  - More volume and VMT reduction with per mile toll (Scenario B)
  - Yet, higher rate of trip diversion with \$1.00 fixed toll (Scenario A)
- What explains this result?
  - Scenario A's \$1.00 fixed toll leads to longer average trip lengths (+25-45%) by disproportionately diverting short distance trips

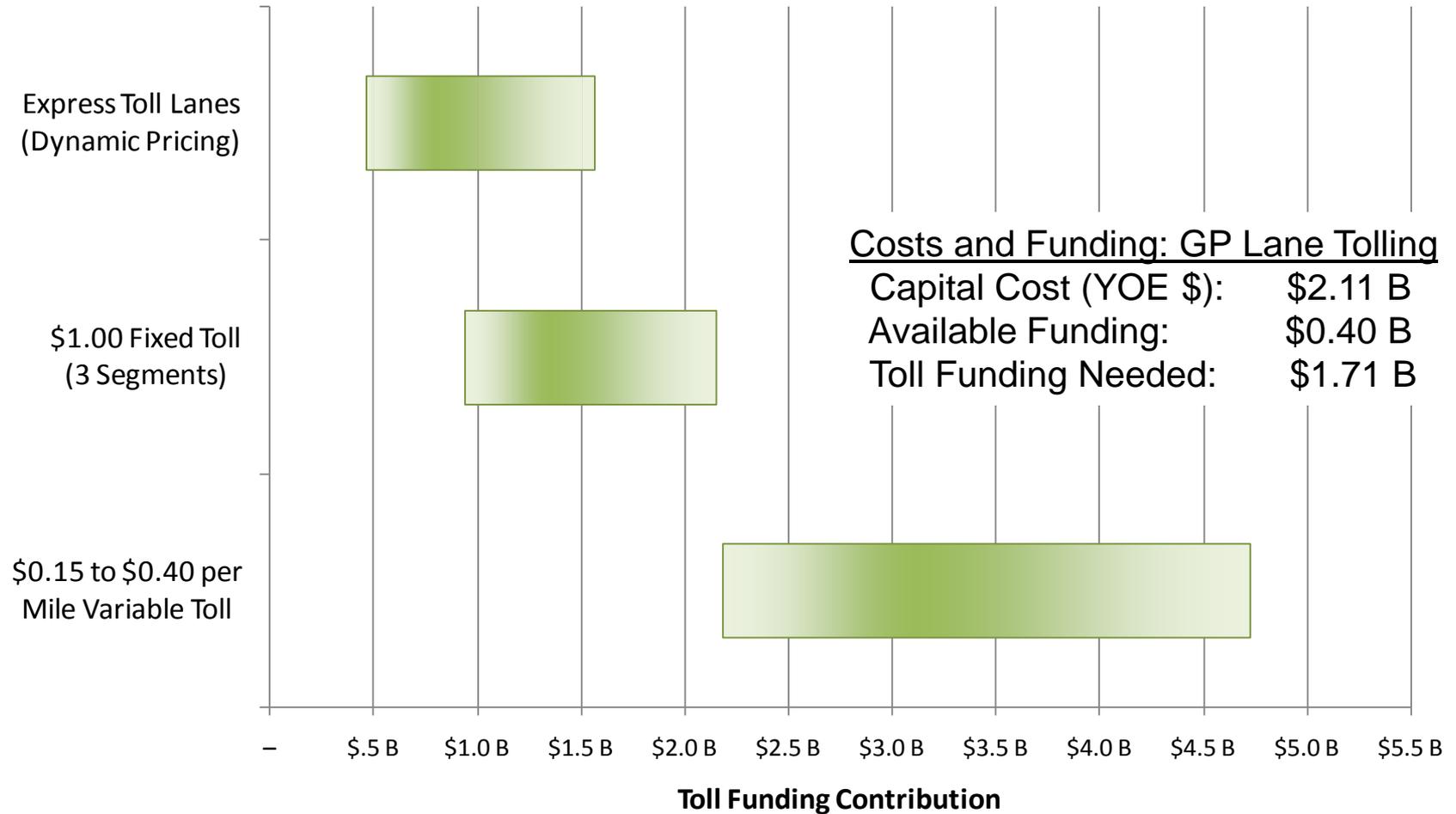
# Specific Traffic Observations by Toll Scenario

- Express Toll Lanes
  - Provide drivers with a choice to pay for time savings and predictability
  - Move the most vehicles in I-405 corridor, resulting in less congestion on arterial routes
- \$1.00 Fixed-Rate Tolling
  - Does not significantly reduce congestion on I-405
  - Improves speeds on GP lanes by less than 5 mph relative to toll-free
  - Improves “reverse direction” congestion on SR 167, but not in the “peak direction”
  - By diverting primarily short trips, may create localized peak period bottlenecks on I-405 and arterials.
- Distance-Based Tolling
  - Reduces the extent of peak period congestion on I-405 by up to 50%
  - Improves speeds on GP lanes by 5-15 mph relative to toll-free
  - Better manages demand by time of day and trip length to minimize congestion throughout the day
  - Keeps short trips within the corridor, minimizing bottlenecks on I-405 and arterial routes.

# Toll Funding Ranges: Option #4

## Comparison by Toll Scenario

Low End = Low Traffic + Low Financing • High End = High Traffic + High Financing



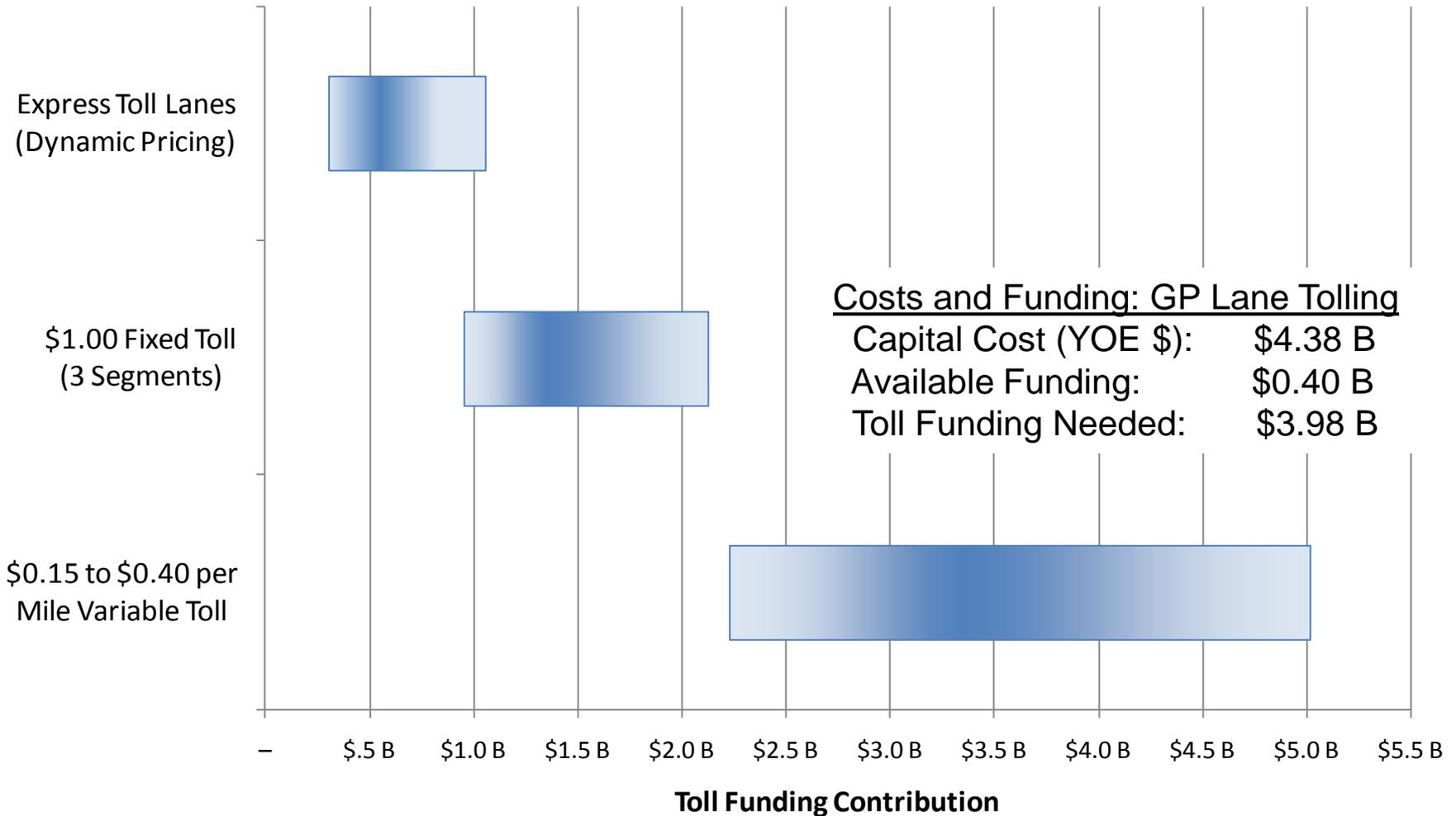
# Toll Funding Observations: Option #4

- \$1.00 fixed toll generates at least 35% more funding than Express Toll Lanes
- Per-mile toll generates at least 3 times more funding than Express Toll Lanes
  - More than double the funding with the fixed \$1.00 segment toll

# Toll Funding Range: Option #5

## Comparison by Toll Scenario

Low End = Low Traffic + Low Financing • High End = High Traffic + High Financing



# Toll Funding Observations: Option #5

- \$1.00 fixed toll generates at least 2 times more funding than Express Toll Lanes
- Per-mile toll generates at least 4 times more funding than Express Toll Lanes
  - More than double the funding with the fixed \$1.00 segment toll

# Tacoma Narrows Bridge Cashless Study

# Legislative Direction

“Consider transitioning to all electronic tolling on the Tacoma Narrows bridge toll facility and discontinuing a cash toll option.”

# Study Considerations

- Impact on Net Revenue
- Impact on Long Term Capital Cost
- Safety
- Customer Preference

# Study Components

- Customer Survey
- Comparative Analysis
- Preliminary Traffic Engineer Assessment
- Preliminary Toll Collection System Assessment
- Recommendations

# Phased Approach

	ETC	Cash	Photo Toll
Phase 1	●	●	
Phase 2	●	●	●
Phase 3	●		●

# Phased Approach Utilized

Facility	Approach	Considerations
E-470	Six months Video Billing with Cash → Cash Eliminated (July 2009)	Improved safety, speed and convenience, and reduced emissions
TxDOT (SH 121, Loop 49 and CTTS)	CTTS mix of cash and cashless; SH 121 and Loop 49 opened Cashless	Operations savings, savings on new construction; convenience to infrequent users
Golden Gate Bridge	Six months Video Billing with Cash → Cash Eliminated (September 2012)	Reduce costs, improve safety, reduce fuel and emissions

# Survey of Current TNB Customers

- Online survey conducted November 9-16, 2010
- 835 responses, statistically significant
- Advertised through variable message signs near the bridge and through handouts distributed at the cash plaza

# Adjusted Survey Results

- Survey results showed frequent users were more likely to take online survey
- Less frequent users were underrepresented in the survey sample
- Results indicate significant bias towards existing and potential *Good To Go!* customers
- Adjustments were made to account for infrequent users
  - Such as infrequent users during the summer months

# Trip Splits by Preferred Payment Method

Trips Split by Preferred Payment Method, from Survey Results

Payment Method	Revealed Preference	Stated Preference					
		Cash Option			No Cash Option		
	Existing	All Equal	\$4.25 PBM	\$5.50 PBM	All Equal	\$4.25 PBM	\$5.50 PBM
Cash	29%	13%	10%	12%	-	-	-
<i>Good To Go!</i> Transponder Account	71%	75%	78%	79%	78%	80%	81%
<i>Good To Go!</i> License Plate Account	-	4%	6%	8%	6%	7%	9%
Customer Initiated Payment	-	2%	3%	0%	3%	3%	2%
Pay By Mail	-	6%	3%	1%	7%	4%	3%
Leave	-	-	-	-	6%	6%	6%
	100%	100%	100%	100%	100%	100%	100%

# Comparative Analysis

For Five-Year Period Fiscal Year 2012 to 2016

- Net revenue at \$4.25 and \$5.50 Pay By Mail rates were compared for both cash and cashless operations
- Cashless operations analysis resulted in a small increase in net revenue over the five year period.
  - \$225 thousand (0.1%) at \$4.25 Pay By Mail
  - \$3.8 million (1.7%) at \$5.50 Pay By Mail

# Key Factors Driving Net Revenue Differences

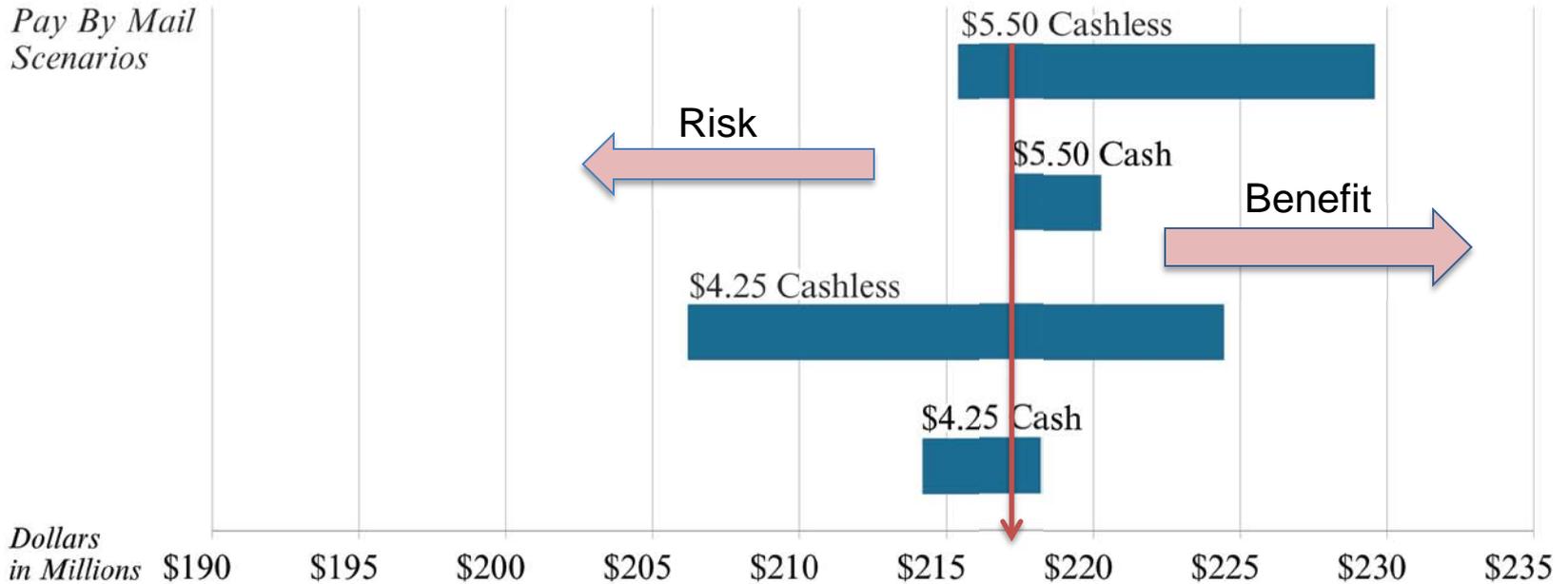
- Leakage and Uncollected Tolls
  - Bad plate images, no registered owner information, invalid addresses
  - Tolls processed as Pay By Mail, but unpaid
- \$5 Reprocessing Fee
- \$40 Civil Penalty Revenue

# Identified Risk with Analysis

- Leakage increases with number of photo bills
- Payment rate of toll bills and notice of civil penalties is based on estimates and having a material impact on net revenue
- Pay By Mail processing is scheduled for April 2011
- Sensitivity testing to evaluate the impact of various toll bill and civil penalty payment rates

# Sensitivity Testing

**Range of Net Revenue**  
5 Year Period FY 12 through FY 16

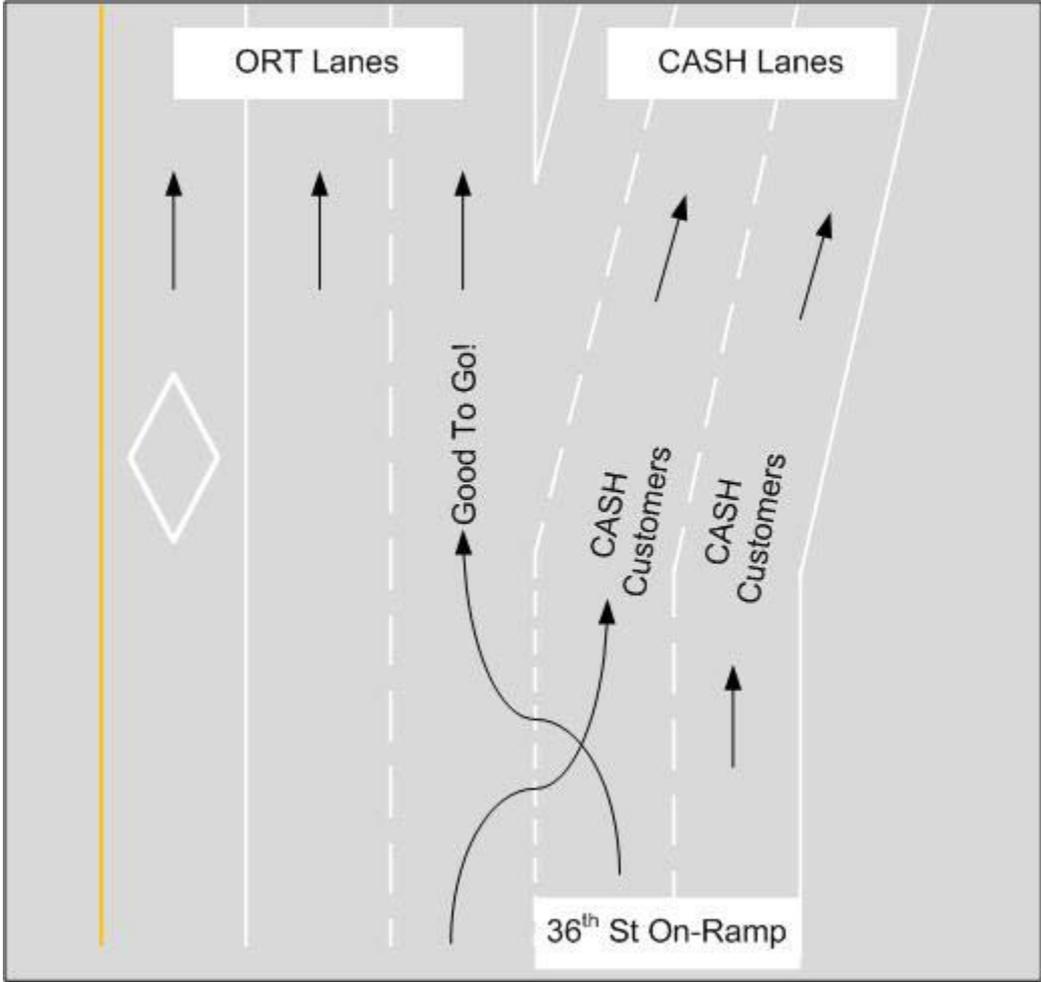


Source: Jacobs Cashless Analysis Net Revenue Model, January 2011

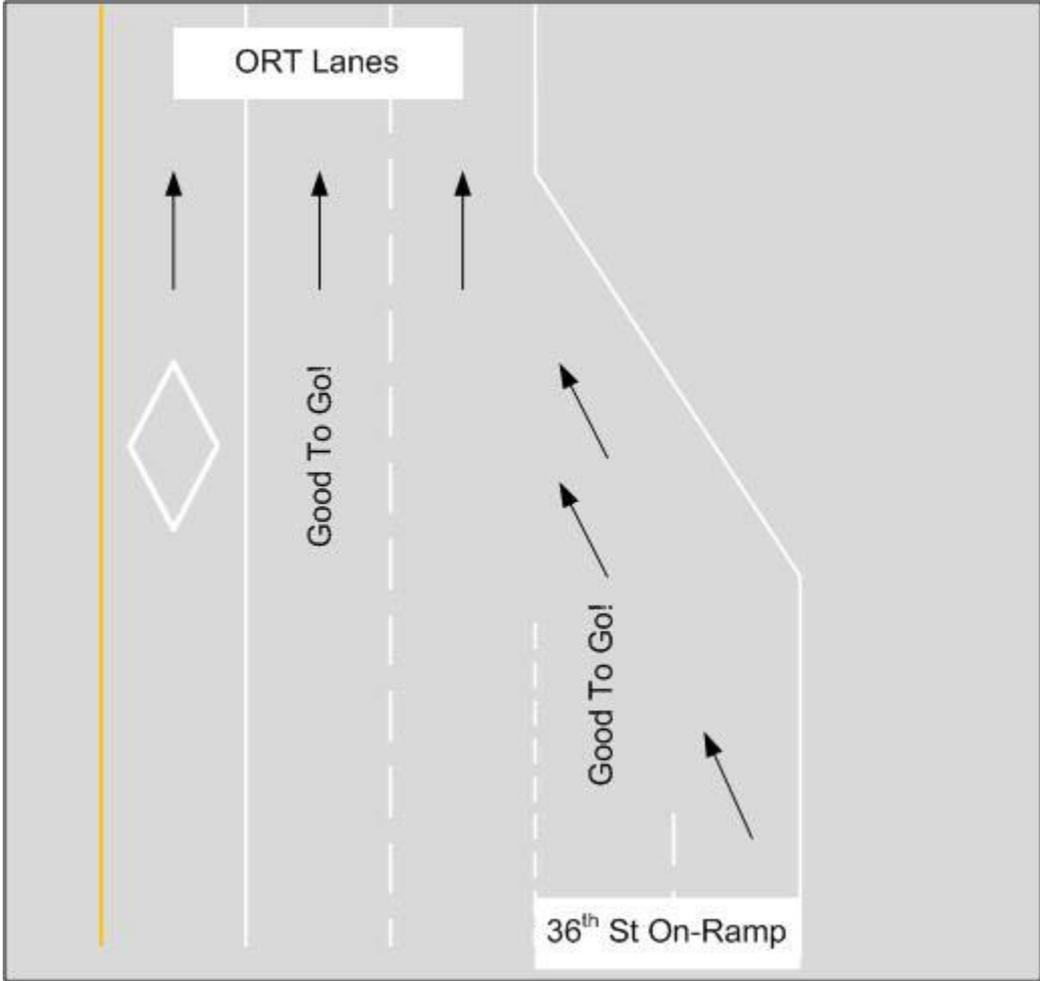
# Preliminary Traffic Engineer Assessment

- A “weaving” problem exists today with motorist merging into the toll plaza and motorist entering the 36<sup>th</sup> street ramp.
  - Elimination of cash operations would remove need to weave toward the toll booths
- 36<sup>th</sup> street ramp customers would have a shorter than ideal amount of distance to merge with the through traffic

# TNB Current Conditions



# TNB Cashless Conditions



# Preliminary Toll Collection System Assessment

- Concerns exist regarding the system's performance with regard to the capture of images for photo bill transactions and compatibility with 6C tags
- Integration with the new statewide back office will provide new metrics on performance

# Other Considerations

- Cash Operations contract is higher in cost than industry norms
- 11PM to 5AM low traffic volumes may warrant an alternate form of collection

# Next Steps

- Operate photo billing for twelve months
  - Analyze results
  - Update net revenue estimates
- Evaluate need for 24 hour toll booth staffing
- Evaluate, renegotiate or rebid of cash operations contract
- Evaluate performance of current toll collection system after integration into new statewide back office

# Administrative Adjudication

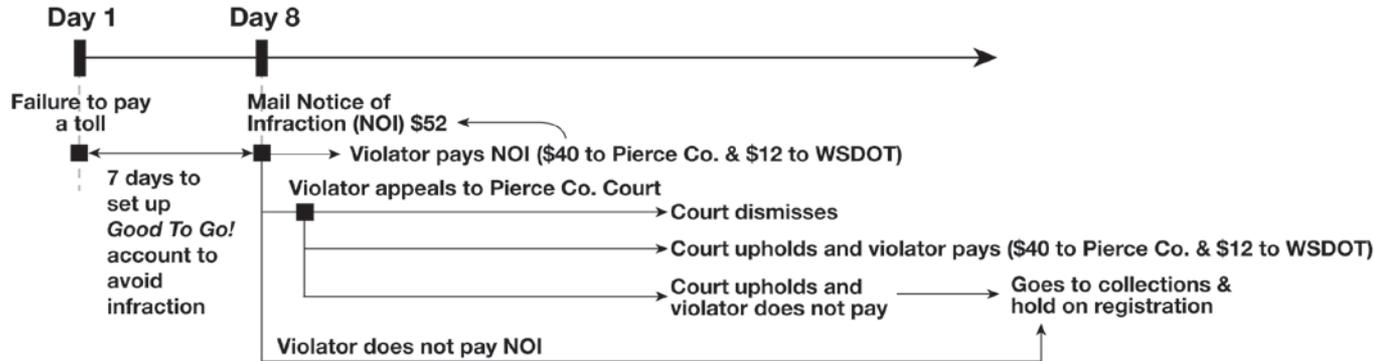
# Purpose of WAC Revisions

1. Repeal WAC 468-300-800
2. Replace it with WAC 468-305 which will amend:
  - Existing toll collection rules to implement the new statewide customer service center operations;
  - Photo toll collection;
  - Toll enforcement;
  - Toll exemptions;
  - Dispute resolution and adjudication.

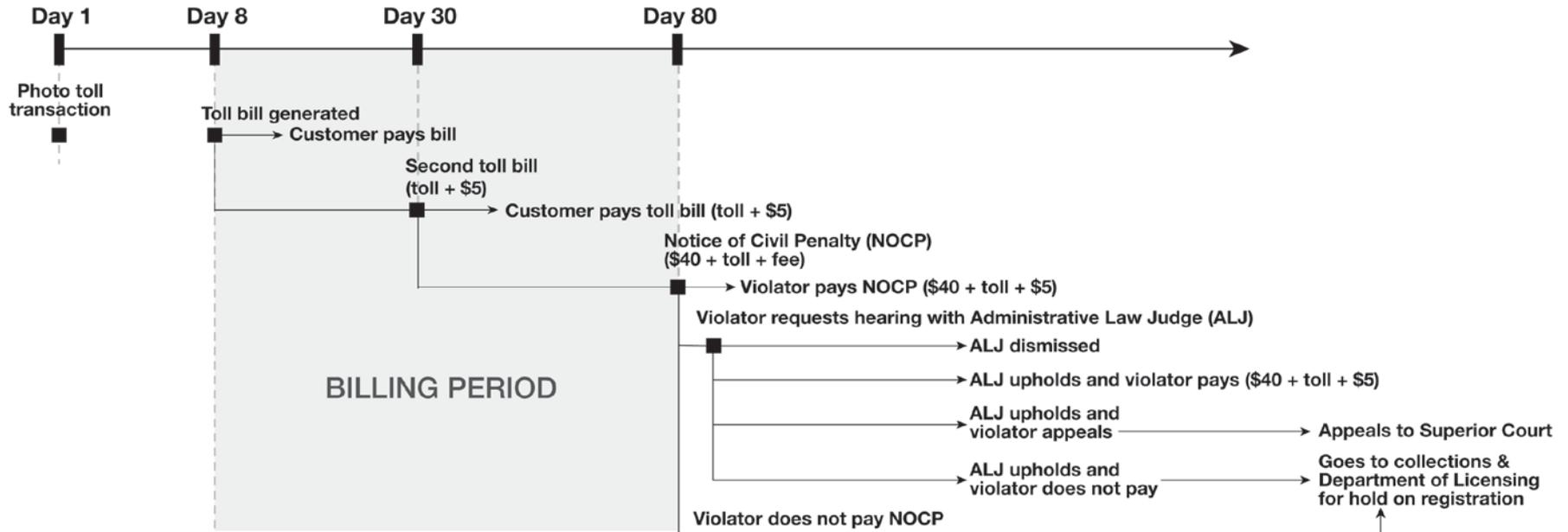
# New Violation Process

- As a result of ESSB 6499, current authorization to issue a traffic infraction for a toll violation through a photo enforcement system is removed. (RCW 46.63.030 RCW 46.63.160)
- Under the amended RCW 46.63.160 “A notice of civil penalty may be issued by the Department of Transportation when a toll is assessed through the use of a photo toll system and the toll is not paid by the toll payment due date, which is 80 days from the date the vehicle uses the toll facility and incurs the toll charge.” (RCW 46.63.160, subsection 3)
- One enforcement statute applies to all facilities: “Any registered owner of a vehicle traveling upon a toll facility operated under chapter 47.56 or 47.46 RCW is subject to a civil penalty.” (RCW 46.63.160, subsection 4)
- Under the amended RCW 46.63.160, which applies equally to all toll facilities, if photo tolling with a civil penalty is not implemented, there is no enforcement mechanism for toll violations and toll facilities would not receive any revenue from toll penalties.

# Current Notice of Infraction Process



# Toll Bills & Civil Penalty Process



# 2009 Notice of Infraction Results

- 113,000 NOI issued by Washington State Patrol
- \$40 to Pierce County Court
- \$12 to WSDOT
  - Pierce County Received           \$     2,737 *(in thousands)*
  - Pierce County Costs                 \$     (418)
  - Remitted to WSDOT                 \$     (623)\*
  - Net to Pierce County                \$     1,696
- 1 Pro Tem Judge & 5 Clerks

\*\$203 thousand paid to Washington State Patrol

# Projected for Fiscal Year 12

## Notice of Civil Penalty Process

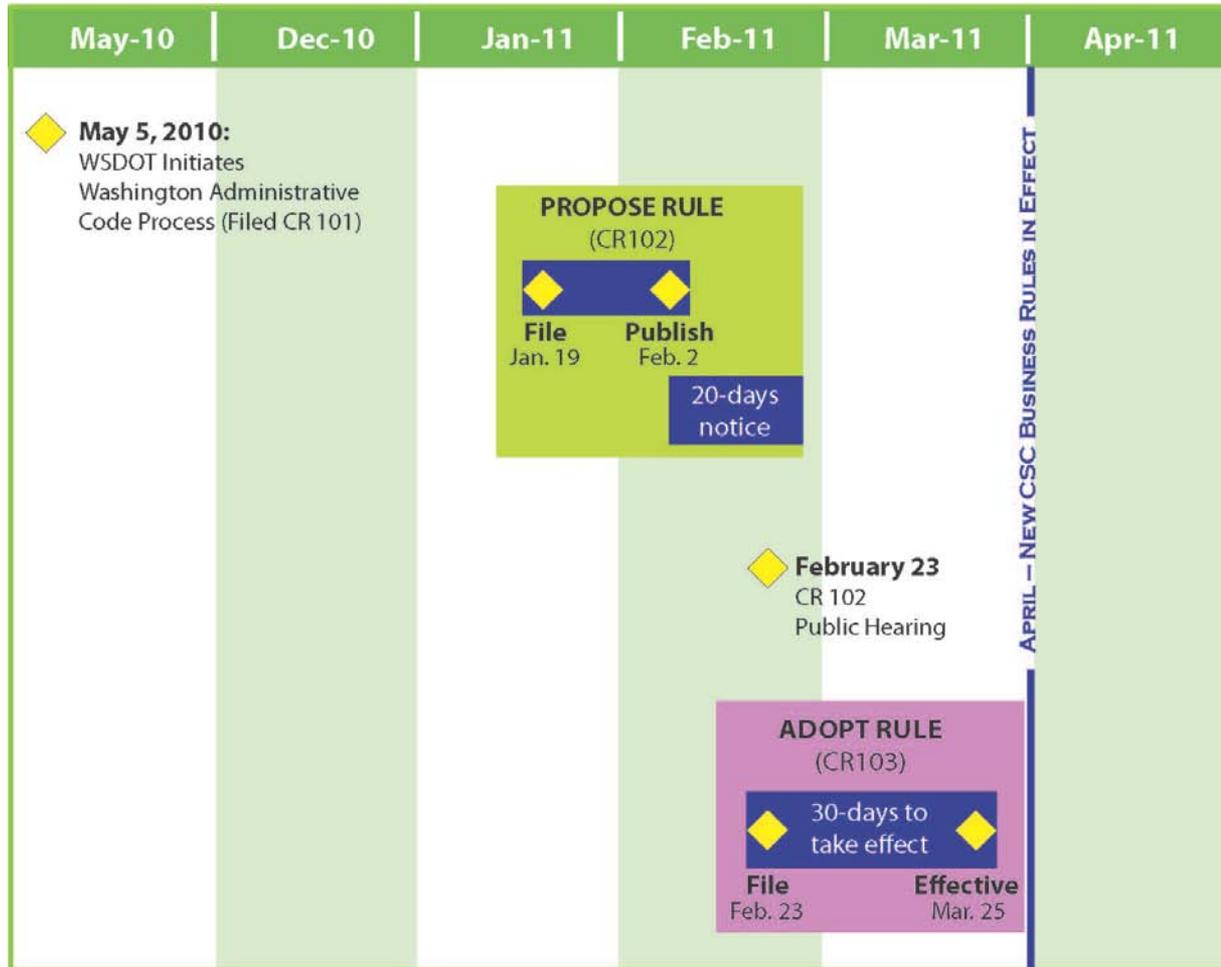
# of Transactions (in thousands)	SR 520	TNB	Total
Total	25,550	13,468	39,018
<i>Good To Go!</i>	17,571	9,888	27,459
Cash	-	2,597	2,597
Pay By Mail	7,979	983	8,962
Leakage	(2,503)	(226)	(2,729)
Paid	( 4,159)	(575)	(4,734)
Unpaid	1,317	182	1,499
Estimated Total Hearing Cases	68	8	76

520 AADT 70k, TNB AADT 37k Analysis performed 11/2010 for purposes of staffing calculations, Estimated Hearings includes written and in person requests.

# Fiscal Year 2012 Adjudication Staffing Estimates

- 5 Image Certifiers
- 2 Customer Service Representatives
- 6 Full-Time Equivalent Judges (1 for TNB)
  - Transactions converted to people (Cases)
  - 16% of the people will request a hearing
  - 75% of hearings will be via written request
  - 25% of hearings will be in-person
    - 15% of in-person will not show
  - One in-person case every 10 minutes, One written case every 6 minutes

# WSDOT WAC Process



Washington State Register filing dates

# Questions?

For more information on Washington State Tolling,  
please contact

**Craig Stone**

Director, Toll Division

at (206) 464-1222 or [StoneC@wsdot.wa.gov](mailto:StoneC@wsdot.wa.gov)