# I-405/SR 167 Corridor Next Steps

Paula J. Hammond, P.E. Secretary

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Joint Transportation Committee November 14, 2012



# **Agenda**

- Corridor context
- Financial analysis
- Phasing
- Next steps



### **I-405 Master Plan**

### **Regional Consensus**

EIS Record of Decision, 2002

### Roadways

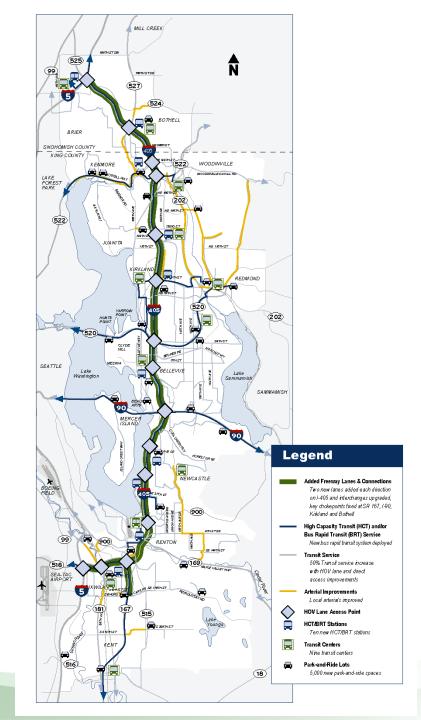
- 2 new lanes in each direction
- Local arterial improvements

### **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**





### 10 Year Implementation Strategy







	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Current Schedule	Bellevu	e to Lynn	wood	Or	ens 2015		Renton	to Bellevu	e &	Opens 202	21	
	Constru	uction (fur	nded)		Toll Col	lection	SR 167	Direct Co	nnector (c	mfunded)		



# **Executive** Advisory Group Support for **Express Toll** Lanes



#### **Regional Support**

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

Reagan Dunn

King County Council

Richard Ford

WA State Transportation Commission

I-405/SR 167 Direct Connector Critical Link

Lue Linger

Puget Sound Regional Council

Ronald Posthuma King County Dept. of Transportation

low Bush

Roger Bush, Chair Pierce County Council



Vashington Karry R. Surner Kathy Turner Mayor of Puyallup

Suzette Cooke Mayor of Kent

David Hill

Mayor of Algona



### **Legislative Direction**

#### 2011 – EHB 1382

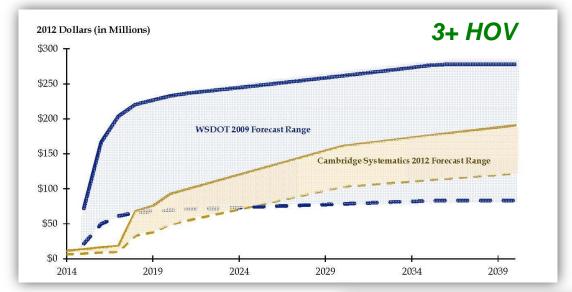
Construction of capacity improvements, including items that enable implementation of ETLs, such as conduit and other underground features, must begin as soon as practicable.
 WSTC to hire independent expert to conduct traffic and revenue analysis for 40-milie ETL system.
 With WSTC, WSDOT will develop corridor-wide project management plan for phasing and use information from traffic and revenue study to develop a finance plan to fund further I-405 and SR 167 improvements.
 Consult with a committee of local and state I-405/SR 167 corridor elected officials and transit agencies during development of studies/plans.
 Any tolling equipment contract terms may not take effect until 2012 appropriation authority.
 Conduct ongoing education and outreach.
 Submit both the traffic and revenue, and phasing and financing plans to the Governor and Legislature by January 2012.

#### 2012 – EHB 2190

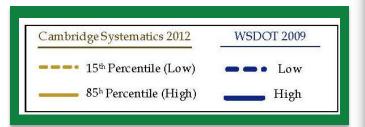


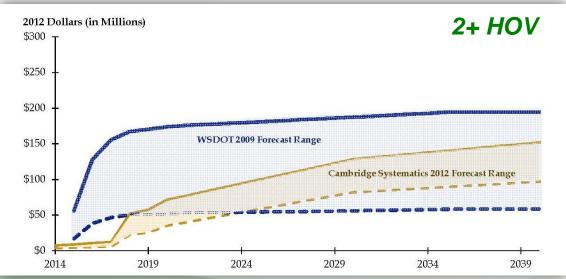
The department shall place amounts for tolling equipment into unallocated status until the traffic and revenue analysis required in [1382] is submitted to the Governor and Legislature. Once the report [T&R analysis] has been submitted, the office of financial management may approve the allotment of funds for tolling equipment only after consultation with the joint transportation committee.

# 2009 WSDOT and 2012 CS Gross Revenue Forecasts (constant 2012 dollars)



From the 2012 CS Report







# What's Changed Since 2009?

### Traffic and Gross Revenue

- Analysis input
  - Updated PSRC population and economic forecasts
  - Economic situation (recession)
  - Willingness to pay
- Start-up assumptions
  - Ramp-up
  - Opening date



### **Draft I-405 Net Revenue**

	T&R Scenario	Gross Toll Revenues	Adjusted Gross Revenues†	Toll Collection O&M	Facility O&M	Net Toll Revenues Before R&R	
	30-Year Totals (FY 2016-45)						
Cambridge	Low Forecast (15th Percentile)	\$3,146 M	\$2,674 M	(\$654 M)	(\$75 M)	\$1,945 M	
HOV 2+	Mid Forecast (50th Percentile)	\$4,077 M	\$3,466 M	(\$774 M)	(\$75 M)	\$2,617 M	
	<b>High Forecast</b> (85th Percentile)	\$5,048 M	\$4,291 M	(\$828 M)	(\$75 M)	\$3,388 M	
	Low Forecast (15th Percentile)	\$4,004 M	\$3,403 M	(\$769 M)	(\$75 M)	\$2,559 M	
Cambridge HOV 3+	<b>Mid Forecast</b> (50th Percentile)	\$5,172 M	\$4,396 M	(\$927 M)	(\$75 M)	\$3,394 M	
	<b>High Forecast</b> (85th Percentile)	\$6,370 M	\$5,415 M	(\$991 M)	(\$75 M)	\$4,349 M	
CDM Smith HOV 2+	Expected Value	\$1,694 M	\$1,440 M	(\$430 M)	(\$75 M)	\$935 M	
CDM Smith HOV 3+	Expected Value	\$4,348 M	\$3,696 M	(\$772 M)	(\$75 M)	\$2,850 M	

#### NOTES:

# **Financing Assumptions**

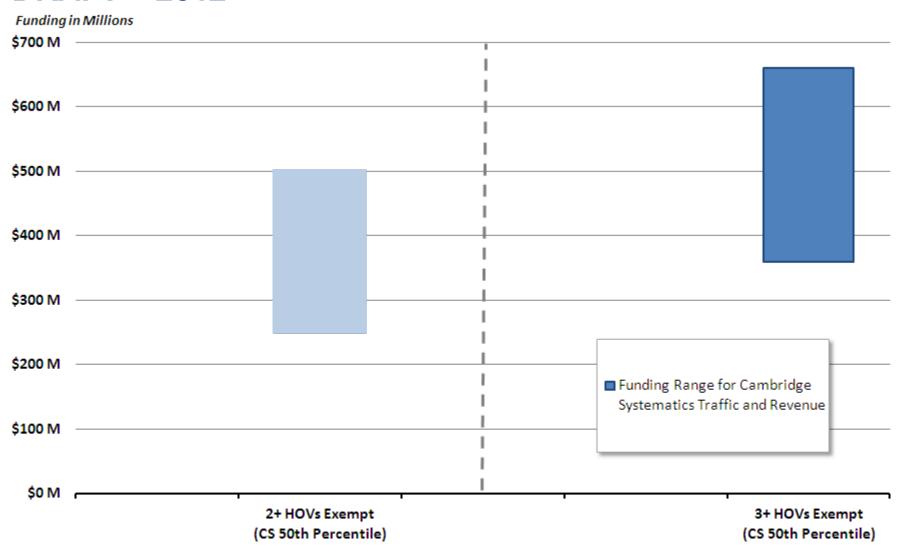
(unchanged from 2009 analysis)

Assumption Category	Lower Credit Rating	Higher Credit Rating
Bond Type / Maturity	Single issue of toll revenue bonds with 30 year maximum maturity	One or more annual issues of toll bonds which may have other backing sources; 30 year maximum maturity
Debt Service Coverage Ratio	Minimum of 2.0 times	Minimum of 2.0 times
Future Interest Rates	9.0 – 10.0%	6.0 - 6.5%
All-in Cost of Issuance	2.5% of bond par amount	1.2% of current interest bond par amount; 1.7% of capital appreciation bond par amount
Debt Service Reserve Account	Lesser of 10% of par value; maximum annual debt service; or 125% of the average annual debt service	Lesser of 10% of par value; maximum annual debt service; or 125% of the average annual debt service



### **Potential Toll Funding Contribution Ranges**

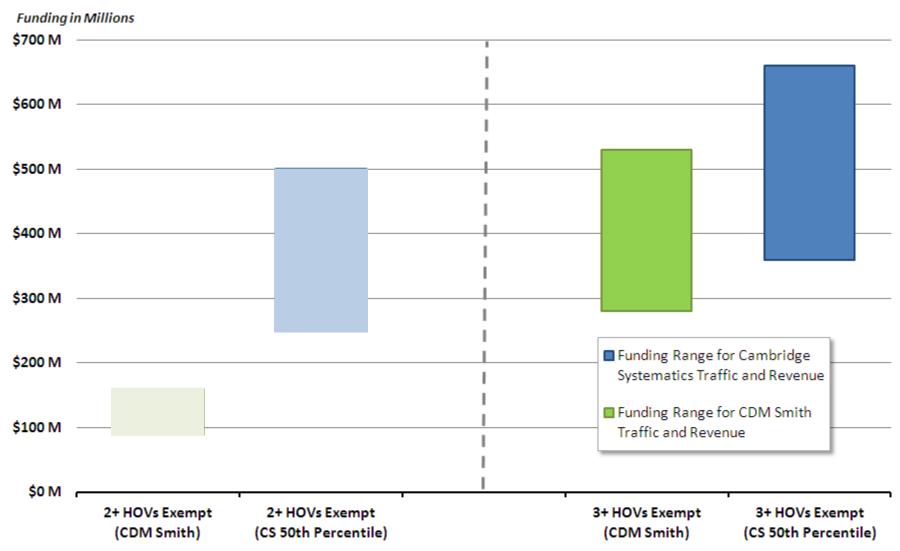
**DRAFT - 2012** 



Note: Funding ranges reflect variation in financing assumptions for the expected value forecasts for each toll traffic and revenue scenario.

### **Potential Toll Funding Contribution Ranges**

**DRAFT - 2012** 



Note: Funding ranges reflect variation in financing assumptions for the expected value forecasts for each toll traffic and revenue scenario.

# What's Changed Since 2009?

### Construction costs have gone down

- Good bidding climate
- Design refinement
- Reduced 40-mile system funding gap by \$300 million; current total funding need \$1.2 billion



# 40-mile system (Option 4)

# 1. Tukwila to Bellevue - \$1,353\* million (WSDOT: \$1,205 m; others: \$138 m)

Benefits • Benefit/Cost:	Renton to Bellevue	\$890m	Adds one lane in each direction
<ul><li>4.7</li><li>Approximately 50,000 vehicle hours of delay reduced every</li></ul>	SR 167 Direct Connector	\$325m (\$40M in PE/RW funded)	Builds a flyover ramp connecting the I-405 express toll lanes to the SR 167 HOT lanes
day which equates to	Sound Transit: N 8th St Direct Access	\$78m*	<ul> <li>Builds a direct access ramp at N. 8<sup>th</sup> St.</li> </ul>
annual travel time savings by drivers.	276 M in Access nnual travel me savings by  Access City of Bellevue: NE	\$60m*	Extends NE 6 <sup>th</sup> St. east across I-405 to 120 <sup>th</sup> Ave. NE

### 2. SR 167 HOT Lanes Extension - \$117 million

Benefits • Benefit/Cost: 2.3 • Increases	Stage 4 (SB)	\$82m (Funded)	Extends the existing southbound HOT lane to the King / Pierce County line.
capacity over 50% and extends the reliability and traffic benefits of the SR 167 HOT lanes.	Stage 5 (NB)	\$35m	Starts the northbound HOT lane at the King/Pierce County.

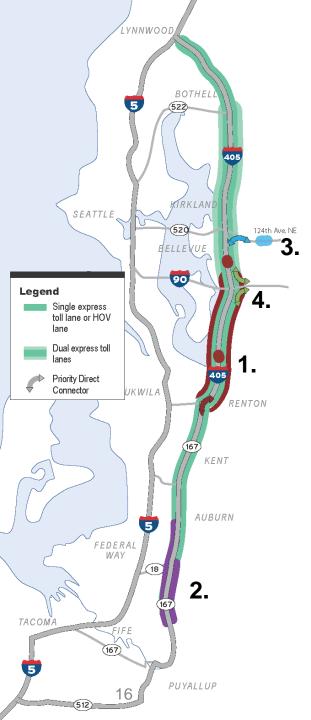
<sup>\*</sup> Includes funding from other sources

### LYNNWOOD. BOTHEL SEATTLE 124th Ave. NE 90 Legend Single express toll lane or HOV Dual express toll Priority Direct Connector UKWILA KENT **AUBURN** FEDERAL TACOMA **PUYALLUP**

### **Next Corridor Priorities**

# 3. I-405/SR 520 and SR 520/124<sup>th</sup> Ave NE Interchange - \$550 million

Benefits  • Benefit/Cost: 1.6  • Reduces delay by	SR 520 / 124th Ave NE New Interchange	\$235m	<ul> <li>Rebuilds the SR 520/124<sup>th</sup> Ave NE interchange to Master Plan configuration</li> </ul>
24,000 vehicle hours daily or \$136 M in annual travel time savings. Provides direct connection between I-405 and SR 520 and eliminates weaving in the general purpose lanes.	I-405 / SR 520 Bellevue to Redmond Direct Connector	\$315m	Builds flyover ramps connecting the express toll lanes on I-405 to the HOV lane on SR 520. Ramps will connect Bellevue to Redmond traffic.



# 4. I-405/I-90 Interchange Direct Connectors - \$535 million

#### **Benefits**

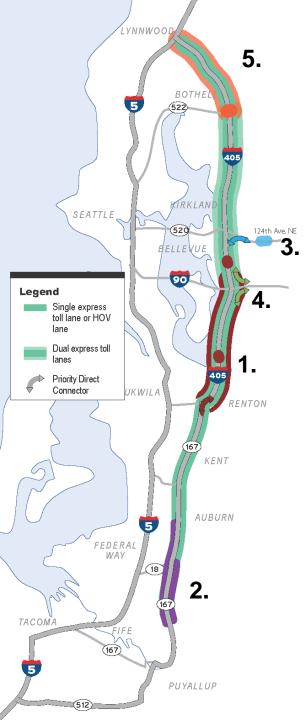
- Benefit/Cost: 1.6
- Reduces daily delay by 22,000 vehicle hours of \$112M in annual travel time savings. Reduces weaving and provides high speed reliable trips between the two interstate systems.

Issaquah Direct Connector	\$270m
I-405 / I-90 Bellevue to Issaquah Direct Connector	\$265m

I-405 / I-90

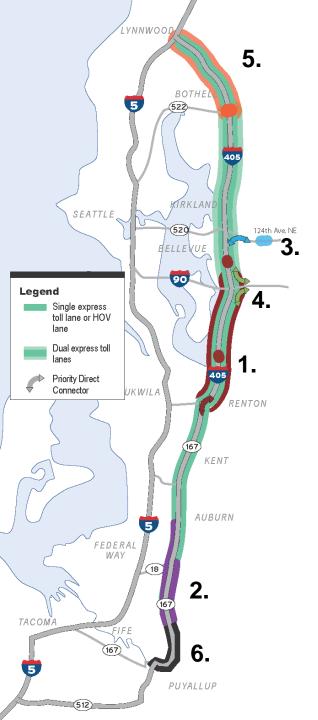
Donton to

- Builds a new flyover ramp between the express toll lanes on I-405 and the HOV lanes on I-90.
- The ramp would connect Renton to Issaquah.
- Builds a new flyover ramp between the express toll lanes on I-405 and the HOV lanes on I-90.
- The ramp would connect Bellevue to Issaquah.



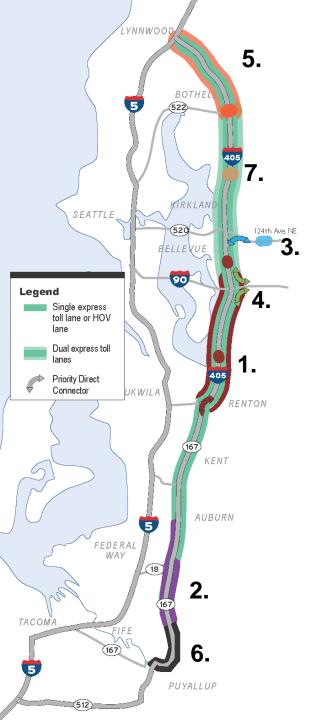
# 5. Bothell to Lynnwood Dual Express Toll Lanes - \$570 million

<ul> <li>Benefits</li> <li>Benefit/Cost: 1.7</li> <li>36,000 vehicle hours of delay reduced every day (\$211 M annual travel time savings). Provides</li> </ul>	SR 522 Interchange	\$315m	<ul> <li>Builds a new direct access connection to SR 522 and redesigns a new interchange.</li> <li>Replaces the northbound I-405 bridge over the Sammamish River and SR 522.</li> </ul>
a new direct access connection between SR 522 and I-405 express toll lanes eliminating weaving and improving operations for the general purpose lanes.	SR 522 to I-5 Dual Express Toll Lanes	\$255m	<ul> <li>Adds a new lane in each direction between SR 522 and I-5 in Lynnwood to be paired with the existing express toll lane to form a dual express toll lane system.</li> </ul>



### 6. SR 167 Stage 6

<ul> <li>Benefit/Cost: 2:5</li> <li>Reduces vehicle delay by 32,000 vehicles daily.</li> <li>Project connects regional facilities of SR 410, SR 512, and future SR 167 extension.</li> </ul>	SR 167 Stage 6	\$300m	Extends the SR 167 HOT lanes northbound and southbound to SR 410 / SR 512 interchange.



### 7. I-405/NE 132<sup>nd</sup> St. Interchange

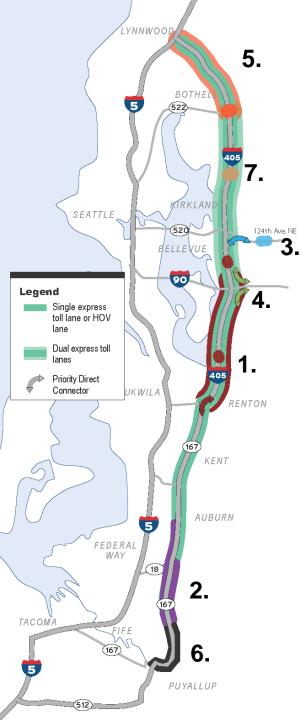
#### **Benefits**

- Benefit/Cost: 1.1
- Provides new access to and from north Kirkland area and complements 116th interchange which has recently been rebuilt.

NE	132 <sup>nd</sup>	St.
Inte	erchar	nge

\$75m

 Builds a new halfdiamond interchange at NE 132<sup>nd</sup> St. in Kirkland.



- 1. Tukwila to Bellevue \$1,353\* million (WSDOT: \$1,205 m; others: \$138 m)
  - Benefit/Cost: 4.7
  - Approximately 50,000 vehicle hours of delay reduced every day which equates to \$276
     M in annual travel time savings by drivers.

#### 2. SR 167 HOT Lanes Extension - \$117 million

- Benefit/Cost: 2.3
- Increases capacity over 50% and extends the reliability and traffic benefits of the SR 167 HOT lanes.

#### 3. I-405/SR 520 and SR 520/124th Ave NE Interchange - \$550 million

- Benefit/Cost: 1.6
- Reduces delay by 24,000 vehicle hours daily or \$136 M in annual travel time savings.
   Provides direct connection between I-405 and SR 520 and eliminates weaving in the general purpose lanes.

#### 4. I-405/I-90 Interchange Direct Connectors - \$535 million

- Benefit/Cost: 1.6
- Reduces daily delay by 22,000 vehicle hours of \$112M in annual travel time savings. Reduces weaving and provides reliable trips between the two interstate systems.

#### 5. Bothell to Lynnwood Dual Express Toll Lanes - \$570 million

- Benefit/Cost: 1.7
- 36,000 vehicle hours of delay reduced every day (\$211 M annual travel time savings). Provides a new direct access connection between SR 522 and I-405 express toll lanes, eliminating weaving and improving operations for the general purpose lanes.

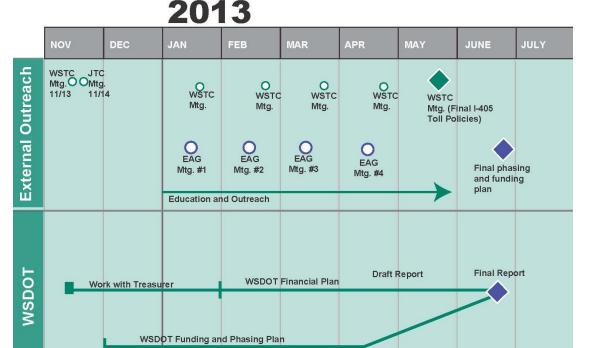
#### 6. SR 167 Stage 6 - \$300 million

- Benefit/Cost: 2:5
- Reduces vehicle delay by 32,000 vehicles daily.
- Project connects regional facilities of SR 410, SR 512, and future SR 167 extension.

#### 7. I-405/NE 132<sup>nd</sup> St. Interchange - \$75 million

- · Benefit/Cost: 1.1
- Provides new access to and from north Kirkland area and complements 116th interchange, which has recently been rebuilt.

### **Executive Advisory Group Schedule**



- Mtg. 1 Welcome back and set stage, introduce charge, set objectives for funding and phasing plan
- Mtg. 2 Introduce 2+, 3+ carpool policy, financing and phasing strategies
- Mtg. 3 Wrap up 2+, 3+ carpool policy and financing and phasing discussion
- Mtg. 4 Release draft phasing and funding plan and Next Steps



# **Finance Plan Next Steps**

- Nov Jan: Meet with treasurer on finance terms
- Jan Apr: Coordinate with EAG on toll policy
- Jan May: Meet with WSTC concurrently to finalize toll policy
- June: Finalize finance plan to fund and phase 40-mile Eastside Corridor Express Toll Lanes



### **Questions?**

For more information on the I-405/SR 167 Corridor, please contact:

Craig Stone, Director, Toll Division at (206) 464-1222 or <a href="mailto:StoneC@wsdot.wa.gov">StoneC@wsdot.wa.gov</a>

Kim Henry, I-405/SR 167 Corridor Program Director at (425) 456-8579 or <a href="https://example.com/HenryK@wsdot.wa.gov.">HenryK@wsdot.wa.gov.</a>

