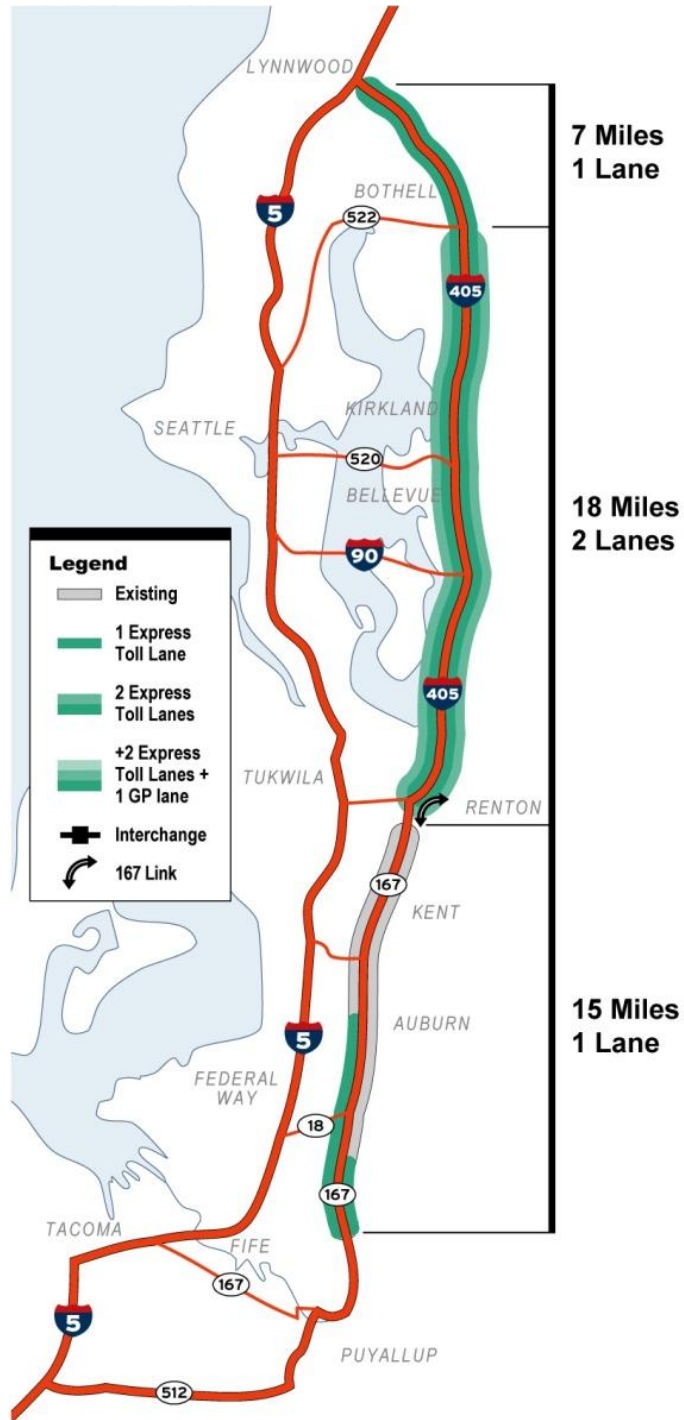


Project Information Summary

I-405/SR 167 Corridor Express Toll Lanes

July 21, 2011



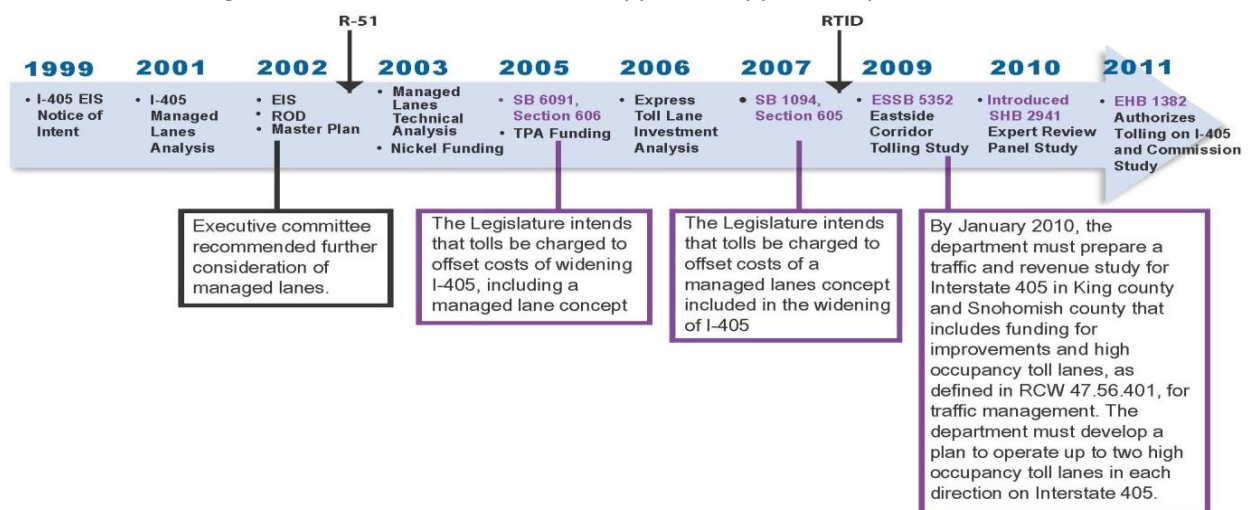
Project Genesis and history

Beginning in 2001, the I-405 team has evaluated the merits of a managed lane system on I-405. The early studies have analyzed the preferred alternative (master plan improvements of a 5-lane footprint) and evaluated operating these improvements as a 3+ HOV single lane compared to a 2 lane priced managed lane system with varying occupancy requirements. The managed lane system studied was comprised of 2 lanes separated by a buffer with controlled access and pricing as a strategy to optimally operate the system. The findings, which were presented to the I-405 technical and executive committees in 2002, were as follows:

- “Managed lanes provide improved overall corridor travel speeds along most segments of I-405, in comparison with an HOV 3+ option in a single lane.” (I-405 Managed Lane Evaluation Technical Memorandum pg. 3)
- “Managed Lanes are recommended for inclusion as an operational option at the project level design phase of the I-405 Corridor Program. Additional Analysis is required to fully define the optimum project level managed lane concept.” (I-405 Managed Lane Evaluation Technical Memorandum pg. 4)
- “It is recommended that managed lanes on I-405 be considered as an early action strategy with a phased implementation. This phased implementation could be by segment or with only a single managed lane with consideration of pricing.” (I-405 Managed Lane Evaluation Technical Memorandum pg. 4)

From this early analysis in 2001 and 2002, the I-405 Corridor EIS recommended managed lanes (express toll or HOT lanes) be further evaluated on I-405. The ROD specifically states, “The proposed I-405 freeway design includes a buffer separating the general purpose lanes and the high-occupancy vehicle (HOV) lane to provide safer and more reliable HOV and transit operations within the corridor. This design allows for future consideration of expanded managed lanes operations on I-405, which could include managing up to two lanes in each direction (pg. 5).”

Since this initial evaluation, subsequent studies and legislative direction have followed to further evaluate managed lanes on I-405. Below is a brief summary of the studies along with legislative direction over the years. Although we have studied managed lanes since 2001, each study analyzed a unique set of operational assumptions, traffic projections and corridor improvements. Successive reports have further developed and modified previous study information. Therefore it’s important to note that reviewing each of these studies is not an apples-to-apples comparison.



Purpose and Need (from EIS)

The following Purpose and Need statement guided the development of the Selected Alternative for the I-405 project.

The need is to improve personal and freight mobility and reduce foreseeable traffic congestion in the corridor that encompasses the I-405 study area from Tukwila to Lynnwood in a manner that is safe, reliable, and cost-effective.

The purpose of the proposed action is to provide an efficient, integrated, and multi-modal system of transportation solutions within the corridor that meets the project need in a manner that:

- Provides for maintenance or enhancement of livability for communities within the corridor;
- Provides for maintenance or improvement of air quality, protection or enhancement of fish bearing streams, and regional environmental values such as continued integrity of the natural environment;
- Supports a vigorous state and regional economy by responding to existing and future travel needs; and
- Accommodates planned regional growth.

Managed Lanes Language from ROD: Committee consensus was achieved ...and accommodation of future planning for expanded managed lanes in the corridor. (ROD pg. 5)

... This design allows for future consideration of expanded managed lanes operations on I-405, which could include managing up to two lanes in each direction. Expansion of managed lane operations beyond the single HOV lane proposed in the FEIS would be subject to further environmental analysis beyond the scope of the I-405 Corridor Program FEIS. (ROD pg. 5)

Project Mileposts

SR 167, MP 11 to MP 26, from 8th St. E to I-405 Interchange

I-405, MP 2 to MP 30, from Lind Avenue in Renton to I-5 Interchange in Lynnwood

Construction Requirements

SR 167 will require the construction of the following elements:

1. **SR 167/8th St E Vic to S 277th St Vic (Stage 4) – Southbound HOT Lane.** This project will extend the southbound HOT lane by constructing a new southbound HOT lane between 3rd Ave SW to 277th St. This project is funded for CN in 2015 with project budget of \$82M.
2. **SR 167/8th St E Vic to 15th St SW (Stage 5) – Northbound HOT Lane.** This project will extend the northbound HOT lane by construction a new northbound HOT lane between 3rd Ave SW to 15th St SW. This project is currently unfunded with project cost of \$36M.

These new lanes combined with the existing HOT lane will provide for approximately 10 miles of single HOT lane within the 40-mile system on the south-end of the corridor.

I-405 will require the construction of the following elements:

3. **I-405/SR 167 Direct Connector.** This project will construct a HOT/HOT connection both northbound and southbound from north I-405 to and from SR 167. This project is currently unfunded with project cost of \$490M.
4. **I-405/SR 169 to SR 520 – Widening & Express Toll Lanes.** This project will build 1 additional northbound and southbound lane when combined with the existing HOV lane will provide a 2

lane HOT system from SR 167 in the south to NE 6th St in downtown Bellevue. This project is currently unfunded with project cost of \$960M.

5. **I-405/SR 520 to I-5 – Widening & Express Toll Lanes (Bellevue to Lynnwood).** This project will build 1 additional northbound and southbound lane from NE 6th St in Bellevue to SR 522 in Bothell. This new lane when combined with the existing HOV lane will provide a 2 lane HOT system. From SR 522 to I-5 no new lanes will be constructed however, the HOV will be converted to a single lane HOT to complete the 40-mile system. RFP for this project was issued on Monday, July 25, 2011 with construction planned to start in January 2012.

Combined together, all of the above will create a 40+ mile express toll lane system from King/Pierce County line to Snohomish County.

Concept of Operations

Tolling is anticipated with the first phase receiving legislative direction in 2011 legislative session through Engrossed House Bill 1382. The concept to date has been dynamic tolling based on a 3+ free occupancy from 5 am to 8 pm. However, as part of EHB1382 an independent tolling analysis will investigate time of day tolling and flat fee tolling as well as 2+ free and a combined 3+ free peak and 2+ free off peak. O&M for tolled lanes to be paid out of tolls. The results will not be available until July 2012.

Status of Planning and Environmental Approvals

All of the projects for the 40-mile express toll lane system have a completed Environmental Assessment that fits under the overall I-405 Environmental Impact Statement. However, an update to include tolling authorization would be required to move tolling forward on the phase 2 elements between Renton to Bellevue.

The environmental document (NEPA/SEPA) for SR 167 Stage 4 project is complete. Permits will have to be extended or reissued for project advertisement. The environmental document for SR 167 Stage 5 is not complete, but the majority of the discipline reports are complete with several concurrence letters in hand. No other permits are in hand since construction is not funded.

Status of Right of Way Acquisition

Right of way acquisition is complete on the north end of the I-405 corridor, but not on the south end. However, 5% of the I-405 right of way engineering has been completed and about 50% has been completed on SR 167.

Right of way acquisition is being finalized on the SR 167 Stage 4 project. No right of way acquisition is needed on Stage 5 project.

Is the project included in a TIP or STIP?

Item #5 above is in the STIP, the rest are not. However, they can be added to the STIP once funding is secured.

Planning and Engineering Studies Performed to Date

2003/2004: The I-405 office evaluated a corridor-wide managed lanes concept, which resulted in the 2004 Managed Lanes White Paper (last updated in April of 2007). This effort was undertaken to help determine whether a one or two lane system would work best for the I-405 corridor and also whether tolled lanes make sense on I-405. This study found that a two-lane system had the highest performance

results for the corridor and that tolling those lanes resulted in even greater benefits. This study assumed all of the “I-405 Implementation Plan” improvements were constructed in each of the scenarios analyzed and therefore found a 2+ HOV toll free occupancy requirement would perform adequately.

2005: Senate Bill 6091, section 606 states that “Based on the anticipated outcomes of the tolling study, to be conducted under section 206 of this act, 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.” (pg. 49 ESSB 6091)

2006/2007: Following the findings of the 2004 Managed Lanes White Paper, we took a closer look at express toll lanes on the northern part of I-405 as the legislature had funded an additional lane in this area of the corridor. An initial study was completed in September 2007, which evaluated two express toll lanes between SR 520 and SR 522 and a single express toll lane from SR 522 to I-5. The analysis assumed a 2+ HOV toll free occupancy requirement and did not assume any of the other “Implementation Plan” improvements were in place.

The study found that the concept had merit and provided significant traffic and operational benefits. However as traffic grew beyond year 2014 projections, the study found that HOV 2+ toll-free occupancy limited the ability to manage the lanes effectively. In fact, beyond year 2020, traffic projections show the HOV 2+ vehicles filling up the express toll lanes, eliminating any ability to manage the lanes through pricing.

2007: Senate Bill 1094 Section 605 again states that “based on the anticipated outcomes of the tolling study, to be conducted under section 206 of this act, 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.” (p. 67 ESHB 1094)

2008: Based on the findings in the 2006/2007 study, the I-405 office initiated a planning level traffic and revenue study to develop these concepts further in the SR 520 to I-5 area. This study assumed a 3+ HOV toll free occupancy requirement. This planning level study concluded that with a HOV 3+ toll-free occupancy requirement, the express toll lanes can be a long term sustainable and reliable system. WSDOT executives reviewed the planning level study and directed further study of express toll lanes. These draft study materials were not formalized into a final report; however the traffic and revenue technical memorandum is available upon request.

2009: The Washington State Legislature directed WSDOT to conduct a traffic and revenue study and develop a plan to operate up to two HOT lanes in each direction on I-405. In addition to completing further traffic analysis, ESSB 5352 directed the I-405 office to confer with the public and elected officials within the corridor and report findings to the Governor and Legislature in January 2010. Traffic and Revenue analysis indicated more people and vehicles can be moved throughout the corridor with express toll lanes compared to operating the new lanes as general purpose lanes. In fact, 28 – 45% more people and vehicles can move at 45 miles per hour or faster with express toll lanes when compared to general purpose lanes.

2010: Department directed Expert Review Panel. Report delivered to the Governor and Legislature in January 2011, available at www.wsdot.wa.gov/Tolling/EastsideCorridor/Report

2011: The Washington State Legislature via EHB 1382 directed the Transportation Commission to retain appropriate independent experts to conduct a traffic and revenue analysis for the development of a 40-mile continuous express toll lane system on SR 167 and I-405. This analysis will be completed by June 2012. Along with this analysis, a Finance Plan and Project Management and Phasing Plan will be developed for the corridor.

Funding Context

A combination of 2003 and 2005 Washington State gas tax funds have been appropriated for the north end of the I-405 corridor (I-405/SR 520 to I-5 – Widening & Express Toll Lanes (Bellevue to Lynnwood). The SR 167/8th St E Vic to S 277th St Vic (Stage 4) – Southbound HOT Lane project is also funded with state funds. The balance of the I-405 and SR 167 projects remain unfunded.

Any red flags or major project constraints (in relation to approvals, funding, delivery or O&M)

Not yet determined

List of key stakeholders

Algona, City of	Pacific, City of
Auburn, City of	Pierce County Council
Auburn, City of	Puget Sound Regional Council
Bellevue, City of	Puyallup, City of
Bothell, City of	Renton, City of
Federal Highway Administration	Snohomish County Council
Federal Transit Authority	Sound Transit
Kent, City of	Sumner, City of
King County	Tukwila, City of
King County Council	State and Federal elected officials
Kirkland, City of	Business and Freight community
Newcastle, City of	

Political context including public interest and the perceptions of key stakeholders

WSDOT established the Executive Advisory Group (EAG), comprised of eastside elected officials, and the Interagency Working Group (IWG), comprised of technical and policy staff reporting to EAG members. The committees met throughout the study, advised WSDOT on its work, and developed a set of implementation principles that are focused on optimizing performance and managing congestion. The committees support implementing express toll lanes on the Eastside Corridor.

The most common reason people support I-405/SR 167 express toll lanes is congestion relief. Overwhelmingly, people support re-investing toll revenue in the I-405/SR 167 Corridor. People who do not support I-405/SR 167 express toll lanes either need additional information to understand the benefit or just do not like the concept of tolling. The most common concerns with express toll lanes were equity and fairness, preference for general purpose lanes, effects on transit and the environment, safety, and skepticism about express toll lane benefits. People were also concerned with changing the HOV requirement from 2+ to 3+ people.

Cost Estimates

In 2009, the Team held CEVP workshops for all of the above projects. The results (in YOY) are as follow:

1. **SR 167/8th St E Vic to S 277th St Vic (Stage 4) – Southbound HOT Lane**

PE	\$10M
RW	\$3M
<u>CN</u>	<u>\$58M</u>
Total	\$71M (Budget \$82M – assumes 2012 construction)

2. **SR 167/8th St E Vic to 15th St SW (Stage 5) – Northbound HOT Lane**

PE	\$1M
RW	\$0M
<u>CN</u>	<u>\$35M</u>
Total	\$36M (assumes 2012 construction)

3. **I-405/SR 167 Direct Connector**

PE	\$20M
RW	\$30M
<u>CN</u>	<u>\$440M</u>
Total	\$490M (assumes 2012/2013 construction)

4. **I-405/SR 169 to SR 520 – Widening & Express Toll Lanes.**

PE	\$40M
RW	\$70M
<u>CN</u>	<u>\$850M</u>
Total	\$960M (assumes 2013/2015 construction)

A CEVP for the I-405/SR 167 Direct Connector project is underway. An updated CEVP estimate for the project will be available at the end of August 2011.

The team is also in the process of updating the cost estimate for the SR 167 Stage 5 project.

No other CEVP update is planned for the other projects at this time.

Self supporting revenue forecasts or information

Eastside Corridor Tolling Study conducted in 2009, delivered to Legislature in January 2010. This report, along with an expert review panel's evaluation of the tolling study and substantial technical and financial information are available at <http://www.wsdot.wa.gov/Tolling/EastsideCorridor/Report>