

# JOINT MEETING OF THE OREGON AND WASHINGTON TRANSPORTATION COMMISSIONS

## AGENDA

**September 19, 2012**

**Pendleton, Oregon**

### **Tuesday, September 18**

**6:00 PM** No-host dinner with Oregon and Washington Commissions. (Hamley Steakhouse, 8 SE Court Avenue, Pendleton, OR 97801)

### **JOINT MEETING OF THE OREGON AND WASHINGTON TRANSPORTATION COMMISSIONS**

***Pendleton, Red Lion Hotel***

***Walla Walla Room***

***304 SE Nye Avenue***

***Pendleton, Oregon 97801***

***(541) 276-6111, Fax (541) 276-2413***

### **Wednesday, September 19**

**8:00 AM** ODOT's regular monthly agenda review and briefing session with ODOT staff in the *Cayuse Room*.

### **Joint Meeting: Oregon and Washington Transportation Commissions**

- 9:00 AM** E) Introductions (*30 min., Oregon and Washington Commissions*)
- 9:30 AM** F) Economic ties between Washington and Oregon. Informational. (*40 min., Michael Fischer, Cambridge Systematics*)
- 10:10 AM** G) Receive an informational presentation of the Rail Corridor. Informational. (*30 min. John Sibold, WSDOT*)
- 10:40 AM** H) Receive an informational presentation of the Electric Highway. Informational. (*30 min. Jim Whitty, ODOT and Jeff Doyle, WSDOT*)
- 11:10 AM** I) Receive an informational presentation on Road Usage Fee/Charge efforts under way. Informational. (*45 min. Jim Whitty, ODOT and Jeff Doyle, WSDOT*)
- 11:55 AM** Working Lunch – break and pick up lunches in *Cayuse Room*.
- 12:10 PM** J) Working Lunch – Conduct an informational discussion about the Columbia River Crossing project, tolling governance, and legislative oversight efforts. Informational. (*2 hours, Kris Strickler, ODOT and Nancy Boyd, WSDOT*)

# JOINT MEETING OF THE OREGON AND WASHINGTON TRANSPORTATION COMMISSIONS

## AGENDA

September 19, 2012

Pendleton, Oregon

### Wednesday, September 19, (continued)

2:10 PM K) Wrap-up **Informational**. (20 min., Secretary Hammond and Director Garrett.)

2:30 PM ADJOURN

### **FORMAL MONTHLY MEETING**

**Pendleton, Red Lion Hotel**

**Walla Walla Room**

**304 SE Nye Avenue**

**Pendleton, Oregon 97801**

**(541) 276-6111, Fax (541) 276-2413**

### Regular Monthly Meeting: Oregon Transportation Commission

*Note: The Commission may choose to take agenda items out of order, pull, defer or shorten presentation time of agenda item(s) to accommodate unscheduled business needs. Anyone wishing to be present for a particular item should arrive when the meeting begins to avoid missing an item of interest.*

**Website address to view agendas/minutes on the Internet:** [http://www.oregon.gov/ODOT/COMM/otc\\_main.shtml](http://www.oregon.gov/ODOT/COMM/otc_main.shtml)

*The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired or for other accommodations for persons with disabilities should be made at least 48 hours before the meeting to Jacque Carlisle, Commission Assistant, at (503) 986-3450.*

2:45 PM B) Public Comments. (**Up to 15 min.**)  
(Public testimony is valued by the Commission, and those who wish to testify are encouraged to sign up on the public comment sheet provided at the meeting handout table. Note: This part of the agenda is for comments on topics not scheduled elsewhere on agenda. General guidelines: provide written summaries when possible and limit comments to 3 minutes. If you bring written summaries or other materials to the meeting, please provide the Commission Assistant with 10 copies prior to your testimony.)

3:00 PM C) Request to approve and receive public comments of the 2015-2018 Statewide Transportation Improvement Plan (STIP) Funding Allocation and Project Selection process for the **Enhance** category. **Approval/Informational**. (**60 min., Jerri Bohard and Paul Mather**)

# JOINT MEETING OF THE OREGON AND WASHINGTON TRANSPORTATION COMMISSIONS

## AGENDA

September 19, 2012

Pendleton, Oregon

### Wednesday, September 19, (continued)

- 4:00 PM**      D1)      Approve \$184,200 in Transportation Enhancement (TE) funds to construct wildlife fencing adjacent to I-5 in conjunction with project #16763 (I-5: Glendale-Hugo Paving and Climbing Lane). Approve amending the Statewide Transportation Improvement Program (STIP) to add the TE Discretionary funds.
- D2)      Approve a request to amend the Statewide Transportation Improvement Program (STIP) to add \$184,200 to construct wildlife fencing adjacent to Interstate 5 in conjunction with the Interstate 5: Glendale-Hugo Paving and Climbing Lane project in Region 3. The total estimate for this project is nearly \$50 million.
- Approval. (5 min., Jerri Bohard)
- 4:05 PM**      E)      Consider approving items on the Consent Calendar (See following page).  
                 Approval. (5 min., Matthew Garrett)
- 4:10 PM**      ADJOURN

## CONSENT CALENDAR

1. Approve the minutes of the August 15-16, 2012, Commission meeting in Baker City.
2. Confirm the next two Commission meeting dates:
  - Tuesday and Wednesday October 16-17, 2012, meeting in Silverton
  - Wednesday, November 14, 2012, in Salem
3. Adopt a resolution for authority to acquire real property by purchase, condemnation, agreement or donation.
4. Approve the following Oregon Administrative Rule:
  - a. Amendment of 734-020-0019 relating to advisory speeds.
  - b. Amendment of 735-063-0065, 735-063-0067 and 735-063-0070 relating to CDL "V" restriction.
  - c. Amendment of 735-070-0004 relating to cancellation of driving privileges for providing a false or fictitious address to DMV.

5. Approval a request to amend the 2012-2015 Statewide Transportation Improvement Program (STIP) to add the Preliminary Engineering (PE) phase for the Interstate 205: U.S. 26 to Clackamas River Seismic Retrofit project. This project will be funded by project savings realized in the State Bridge Financial Plan. The estimated cost of the PE phase of this project is \$750,000.

## **Your Action is Requested**

Whereas

Constructed 1917, we have the current I-5 bridge after decades of “political fighting”. The Clark County citizens and business leaders stood up and forced the Clark County Commissioners to take action to construct our bi-state bridge as a county to county bridge.

The Clark County Councilors have the unique responsibility of having the largest amount of Columbia River waterfront inside their boundaries. This includes several ports Woodland, Ridgefield, Vancouver, Camas, and Washougal. Your boundaries also include several cities, businesses, and all forms of property zoning. Plus you represent the citizens who will pay the largest portion of tolls on daily commutes when using the I-5 and I-205 freeway interstate bridges.

It is very important to have a full conversation on all the ramifications of putting tolls on the I-5 freeway system. This conversation must take place as hearings, with presentations to the Washington Transportation Commissioners and the local citizens. To date there have been no hearings solely on tolling, it's effects on the economy, or why would we suddenly change to tolling over a fuel tax by either the Washington Transportation Commission or Oregon Transportation Commission. The only hearing held on tolling the Columbia River Crossing project by the Transportation Commissioners took place 200-miles away in central Oregon, in the year 2012. Identified as an informational working lunch decision Item J. Approximately a dozen citizens show up at the Joint Washington and Oregon Transportation Commission Hearing. We were shut out of the room the “luncheon” was held in because no formal vote would be taken. (A violation of the Open Meeting Law) I am sure you understand how disrespected we felt! It was so insulting, rude, and unkind. We were not allowed the handouts for the two-hour meeting, and sat in the hearing room waiting for their return. We took time off from work, paid for hotel rooms, and had traveling expenses just to hear the tolling decision. Some of the Transportation Commissioners were unable to make the meeting, stating the distances and had phoned into the meeting. There have been NO Hearings by the Transportation Commissions of Washington and Oregon concerning converting **The I-5 interstate freeway system** into **The I-5 interstate toll-road system**.

The need to have several independent and joint commissioner hearings is extremely important on tolling and not tolling of the main lanes of the I-5 freeway system. Putting tolls on the extra lanes adjacent to the main lanes such as, HOV, HOT, to pay for an advantage in the traveling experience still keeps **the I-5 freeway system** intact choosing to pay an additional fee as a toll for use of an additional “non-freeway” lane or stay on the freeway system. While several seem to be singularly focus on a toll to finance ‘one’ bridge across the Columbia River they have lost sight of the fact every municipality between Canada and Mexico will have the right to place a toll on the new I-5 interstate toll highway system. Here are a few on the many questions and problems that must be thoroughly answered and verified.

1. The Federal Highway Administration funding does not come from tolls placed on I-5. The State of Washington has formerly stated \$650-\$850-million would be provided to SW Washington, large projects have been funding in other areas of State so it is SW Washington's turn. So is Oregon's lack of funding, is that why a toll is suggested?
2. Oregon receives \$30-million on 1-cent a gallon fuel tax annually. Ten cents a gallon fuel tax annually is \$300-million and ten years at ten cents is \$3 billion the entire amount that Oregon needs. Scenarios

showing differing fuel tax by counties, etc have not been provided. The price of fuel takes enormous leaps up and down as much as a dollar per gallon with no local benefit. The citizens want to see difference step tax scenarios. An example: Would 3 years of a 25-cent a gallon the closer you are to the I-5 FREEWAY system and 5 cents across the rest of the State of Oregon cover the money for a new I-5 crossing?

3. Fuel tax is 100% in compliance and 100% of funds collected goes directly into transportation funding
4. Toll tax is 70% in compliance and 60% of net funds collected go directly into transportation funding. Why would we consider changing to a tolling funding system that takes millions or billions of dollars annually from the taxpayers sending it directly to banks and away transportation funds?
5. Electric utilities currently collect taxes. Is the Department of Transportation working on diverting a percentage of these taxes to transportation funding? The utilities tax collect system currently in use works well.
6. Privacy issues with the new “toll tags” individual identification pings on every cell tower tracing all movements instead of a “responding tag” specific the each machine. The expensive toll tag ID system can be used every time another toll is placed on the former I-5 FREEWAY to easily track the movement of US Citizens.
7. Once the first toll is place on the main lanes of the I-5 permanent or not municipality between Canada and Mexico will have the right to place a toll on the new **I-5 interstate toll highway system**.  
Will there be a limit on how high the toll can be?  
What size community can place a toll on I-5?  
How many tolls can be on I-5 at one time?  
What can the toll money be use on now that it doesn't have to be solely for infrastructure?  
Can new town spring up along I-5 be allowed to immediately impose a toll?

### **Your Action is Requested**

Please send correspondence to the Washington and Oregon Governors asking them to immediately have the Transportation Commissioners provide presentations and listening posts inside the study area, boundaries of the I-5 Transportation and Trade Corridor. I am also asking you to seek the support of the Project Sponsor Agencies SW WA Regional Transportation Councils, and CTRAN having them require hearings to take place to receive their support on any project going forward considering a toll. It would be important to ask other elected bodies to join you in seeking responsible leadership in provide additional information concerning the consideration of placing a toll of any kind on **the I-5 Freeway Interstate System**. It might be necessary to involve California Transportation Commissioners in the enormous of change to the I-5 freeway interstate international system.

Thank you sincerely for you immediate attention on this important matter it is greatly appreciated.  
Former Chair of the Clark County **West County Bridge No-Tolls Advisory Vote 2013** committee,

Sharon Nasset

Sharon Nasset 503.283.9585

\*Agenda attached.

JOINT MEETING OF THE OREGON AND WASHINGTON TRANSPORTATION COMMISSIONS AGENDA

September 19, 2012 Pendleton, Oregon **Wednesday, September 19 12:10 J.)** Working Lunch – Conduct an informational discussion about the Columbia River Crossing project, tolling governance, and legislative oversight efforts. **(2 hours, Kris Strickler, ODOT and Nancy Boyd, WSDOT)**

## **An important Reason to Keep The I-5 Freeway System Toll-Free.**

The I-5 freeway system from Canada to Mexico carries billions of dollars of freight and millions of citizens enjoying the “free” movement of goods and services. The idea of pooling our money together to pay for our road system has always been very important. Oregon was one of the first States to have a gas tax used to up-keep the roads. The idea of toll roads and turnpikes was absolutely a freedom of movement issue and did not work for farm communities that only had cash after a crop. Always having to have money in your pocket to be picked isn’t what citizens wanted then, and they don’t want it now. The I-5 freeway-mainline has never had a toll on it since the “Freeway System” went in the 1960’s as a new model to the nation. The States of California and Washington have added additional lanes to the mainline that are pay for service however you can drive the entire transcontinental freeway and not pay a toll. The drag on the economy locally and nationally to siphon off billions of dollars by allowing a toll on the mainline of I-5 freeway would be an enormous mistake. Once Oregon does it in Portland at the I-5 bridges and the Rose Quarter every town on the “non” freeway system would do it too. If we have a right they would have a right to add tolling as well. The type of tolling suggested is not honest and over 40% goes to the company handling the machines and does the money transacting. They provide the machines, maintain the machines, they also take in the money, count the money, deposit the money, tell us what is our share, and have no responsibility to go after those who don’t pay the toll. If you do not know that, that is shady, you do not know accounting or business. Taking in the money, counting, deposit, and do the books, by “one/company” not a good business model.

The losing of our freeway system and the adding of tolls by any towns along I-5 freeway are unacceptable. The Federal Highway Administration should not allow the new extremely expensive adding in of the “banking system” and financially risky tolling scheme.

1. Fuel tax is 100% in compliance and 100% of funds collected goes directly into transportation funding
2. Toll tax is 70% in compliance and 60% of net funds collected go directly into transportation funding. Why would we consider changing to a tolling funding system that takes millions or billions of dollars annually from the taxpayers sending it directly to banks and away transportation funds?
3. Electric utilities currently collect taxes. Is the Department of Transportation working on diverting a percentage of these taxes to transportation funding? The utilities tax collect system currently in use works well.
4. Every property with 220 electrical service is a charging station needing only a receptacle outlet to access service. The addition of receptacle on most properties will enable limiting the need for diesel heavy equipment in residential areas. Smart Meters can distinguish between 110 and 220 electrical usage allowing a percentage of the utility taxes deviated to transportation funding viable.\* Asking utility companies to put out bonds to pay for the addition of 220 receptacle outlets for all properties, Smart Meters, and the ability to charge personal account with electrical usage in different location on one account would be an enormous game changer in converting to electrical energy usage.

**We have projects that are toll-free and lessen congestion tremendously those community projects have been block! Please look at to the alternative that can be funded without a toll.**

**Thank You,**

Paid for by Economic Transportation Alliance /Third Bridge Now a 501c3 Non-Profit Public Charity

[www.thirdbridgenow.org](http://www.thirdbridgenow.org) • Third Bridge Now 2114 Main St. PMB #154 Van. WA 98660 • 503.283.9585





# Tolling Has Exorbitant Cost and Privacy Issues

## Expensive Overhead

Today's "Modern" tolling systems are much more expensive than many people realize. For every dollar paid in a toll, 44% goes to pay overhead. So for every \$100 paid in tolls, **only** \$56 goes to pay for the actual bridge and "Other Uses" (as yet undefined).

## Loss of Privacy

To pay the **base** toll charge, drivers will have to have a transponder within their vehicle. The transponder can be used to **track** the vehicle's location via cell towers. The alternative, which allows you to retain your privacy, requires added fees to the base toll charge.

### "Pay As You Go" Peak Period Example

Fee Breakdown		Where the Fees Go	
Toll	\$6.00	Pay as You Go	\$3.00
License Plate Identification Fee	\$1.00	Toll Overhead 44%	\$2.64
Handling Charge	\$2.00	To Bridge and Other Uses	\$3.36
<b>Total One Way Expense</b>	<b>\$9.00</b>	<b>Total One Way Expense</b>	<b>\$9.00</b>

### "Transponder" Peak Period Example

Fee Breakdown		Where the Fees Go	
Toll	\$6.00	Toll Overhead 44%	\$2.64
		To Bridge and Other Uses	\$3.36
<b>Total One Way Expense</b>	<b>\$6.00</b>	<b>Total One Way Expense</b>	<b>\$6.00</b>

## Where are the Additional Fees Going?

Of the \$9.00 one way fee, only \$3.36 goes toward repayment of the bridge and "Other Uses."

## Alternative Payment Method

An EBT card, also known as a "food stamp card," will be able to be used to pay the toll. Imagine being at poverty level and having to use your EBT card to get to your job, (ETB is currently being used on the Tacoma Narrows tolling system). This form of payment maybe treated as the "pay as you go" system with a \$3.00 each way charge in addition to the toll payment.

## Some Don't Pay, Others Pay More

Approximately 10% of the systems users will not be charged do to a one time passing through the electronic system. It is too expensive to find them.

Businesses will pay for each axle on a truck, approximately four times the rate of the average vehicle unless the truck is larger, oversize, double, or triple trailer truck with more than 4 axles.

## Who else may not pay?

What happens to those who repeatedly drive though without paying?

# Tolling Will Damage Regional Economy and is Not Economically Prudent!

## **Appendix C – CRC Tolling Study Committee Report Travel Demand Forecasting, Revenue Projections, Determination of Net Revenues, and Financial Capacity Analysis**

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### **Travel Demand Forecasting**

Regional travel demand models are used to forecast how people may choose to travel in the future given projected growth patterns for population and employment as well as future transportation facilities. The Portland-Vancouver area regional travel demand model used for the Columbia River Crossing (CRC) project was developed jointly by the Portland-area Metro Regional Government (Metro) and the Southwest Washington Regional Transportation Council (RTC). The model, run by Metro and peer-reviewed by a national panel of experts in October 2008, applies a four-step process in estimating future travel demands:

Step 1: Person-trips are estimated from adopted regional growth projections and adopted regional transportation plans. Growth projections include population and employment forecasts throughout the metropolitan region. Transportation plans include future transportation facilities, including roadways, transitways, and bicycle and pedestrian facilities.

Step 2: Predicted person-trips are then distributed to zones across the metropolitan region. Over 25,000 network routes, or “links,” are used in the model, as well as over 2,000 transportation analysis “zones.” The model predicts how many people will want to travel from one zone to another via different links.

Step 3: Person-trips between each of the zones are broken down by mode of travel (drive alone, carpool, transit, bicycle, walking) based on each option’s attractiveness when considering travel time and cost, as well as each traveler’s socioeconomic characteristics. Travel costs include parking fees, transit fares, tolls, and automobile operating costs.

Step 4: The model assigns each trip to a specific routing in the model’s network. For the CRC’s tolling analysis work, the model predicts how many people are projected to cross the Columbia River on I-5 and I-205 via automobile and transit. The model is used to predict weekday peak period vehicle volumes across each bridge, which are later used to develop daily traffic demands.

The regional travel demand model is appropriate for comparing the relative weekday effects of travel across the Columbia River for different tolling scenarios. The model used for tolling analysis purposes allows relative generalizations to be made about I-5 and I-205, including vehicle and transit trips, and the duration of vehicular congestion experienced along each river crossing.

Daily and hourly traffic volumes in 2030 would vary for the I-5 bridge and the I-205 bridge with different tolling levels. Based on information included in the model regarding how much people value their time for different types of trips, lowering or raising toll rates affects how many people choose to pay the specific toll, divert to the alternative bridge, travel during another time of the day, take transit, or travel to a different destination altogether. The scenario analysis found:

- For most of the I-5 only toll scenarios, the majority of drivers would not change their travel patterns. Some would choose a new destination or a non-tolled route. Diversion to transit is minimal due to the already increased ridership associated with project improvements.
- Route diversion tends to increase as toll rates increase; however, the percentage of diversion tends to be lower during peak periods when travelers' willingness to pay tolls may be higher and/or alternative routes are congested, and thus, time consuming.
- For scenarios that toll both the I-5 and I-205 bridges, traffic levels would be higher on I-5 and lower on I-205 compared to tolling only the I-5 bridge. However, compared to the No Toll project scenario, total cross-river traffic demand would be less on both the I-5 and I-205 bridges as many trips would divert to transit or not be made across the Columbia River.

See the attached spreadsheet titled *Traffic Effects for Tolling Scenarios* for more detailed information about traffic diversion, average daily traffic volumes and hours of congestion predicted for each of the tolling scenarios.

Additional work refining one or two likely scenarios will be undertaken to inform financial planning and final rate setting prior to issuing toll revenue bonds. That analysis would independently review and refine many key assumptions, including land use projections, and also examine parts of the network beyond the I-5 and I-205 river crossings, such as key interchanges with these highways, and critical roadways and intersections. An updated and detailed toll traffic and revenue report is warranted before issuing debt, and would be required by the credit rating agencies if any of the bonds were to be backed solely by toll revenues.

## **Revenue Projections**

The annual traffic and revenue projections produced for the CRC project are derived from outputs of the Metro regional travel demand model. The Metro model employs inputs for users' values of time as a surrogate for the relationship of time and cost reflecting the potential toll on the I-5 bridge crossing. The regional model was further supplemented by the development of a corridor level traffic model (VISSIM) which provided traffic operation capabilities to estimate the effect of future congestion in the corridor. This became the basis for "post-processing" the model results to refine traffic demand projections. The traffic and revenue projections show both the annualization of the direct Metro model results and the refined post-processed results, the latter of which bracket the mid-range of anticipated traffic and revenue impacts.

Ten toll scenarios that vary toll rates and toll locations (I-5 only or both I-5 and I-205 bridges) were developed by the CRC team for analysis, in conjunction with the Oregon and Washington departments of transportation. Toll rates were assumed to vary by time of day according to a fixed schedule that applies higher toll rates in peak periods and lower rates during off-peak times when demand is less. Toll rates were originally specified in constant year 2006 dollars in the project's Draft Environmental Impact Statement (EIS); however the actual tolls paid are assumed to increase with expected inflation, projected at 2.5 percent per year. See Exhibit 1 for information about each scenario.

It is expected that the toll collection will be all-electronic, which allows tolls to be collected without toll booths causing drivers to slow down to pay tolls. Thus, drivers would either have a transponder, paying the rates noted in Exhibit 1, or the vehicle would be identified via the license plate, in which case a \$1.00 “pay-by-plate” processing fee would be added to each transaction. For example, a vehicle traveling during the peak period (6 am to 10 am) without a transponder would be charged \$2.00 plus the \$1.00 processing fee, or \$3.00 for their trip in one direction.

### Exhibit 1. Tolling Scenarios Evaluated

Scenarios Analyzed		Min/Max Toll Rate (2006\$)	Min/Max Toll Rate (2018\$)	Tolls Collected	Toll Schedule Type	Tolling Start Date
Tolling I-5 Only	<b>Scenario 1A</b> <i>DEIS Toll Rate</i>			Each Way	Asymmetric Variable Toll Schedule	July 1, 2016 (FY 2016)
	<b>Scenario 1B</b> <i>Lower than DEIS Toll Rate</i>					
	<b>Scenario 1C</b> <i>Flat Toll Rate</i>				Symmetric Fixed Toll Schedule	
	<b>Scenario 1D</b> <i>Additional Price Points</i>	\$1.00 / \$2.50	\$1.34 / \$3.36			
	<b>Scenario 1E</b> <i>1.5x DEIS Toll Rate</i>	\$1.50 / \$3.00	\$2.02 / \$4.03		Asymmetric Variable Toll Schedule	
	<b>Scenario 1F</b> <i>2x DEIS Toll Rate</i>	\$2.00 / \$4.00	\$2.69 / \$5.38			
	<b>Scenario 1G</b> <i>3x DEIS Toll Rate</i>	\$3.00 / \$6.00	\$4.03 / \$8.07			
	<b>Pre-Completion Tolling<sup>1</sup></b> <i>DEIS Toll Rate</i>			Each Way	Asymmetric Variable Toll Schedule	July 1, 2013 (FY 2014)
Tolling I-5 and I-205	<b>Scenario 2A</b> <i>DEIS Toll Rate</i>			Southbound Only <sup>2</sup>	Asymmetric Variable Toll Schedule	July 1, 2016 (FY 2016)
	<b>Scenario 2B</b> <i>Lower than DEIS Toll Rate</i>					
	<b>Scenario 2C</b> <i>Lower I-205 Toll</i>					

<sup>1</sup> Pre-Completion Tolling to be added to any other scenario

<sup>2</sup> A round-trip toll is collected on scenarios tolling Southbound only

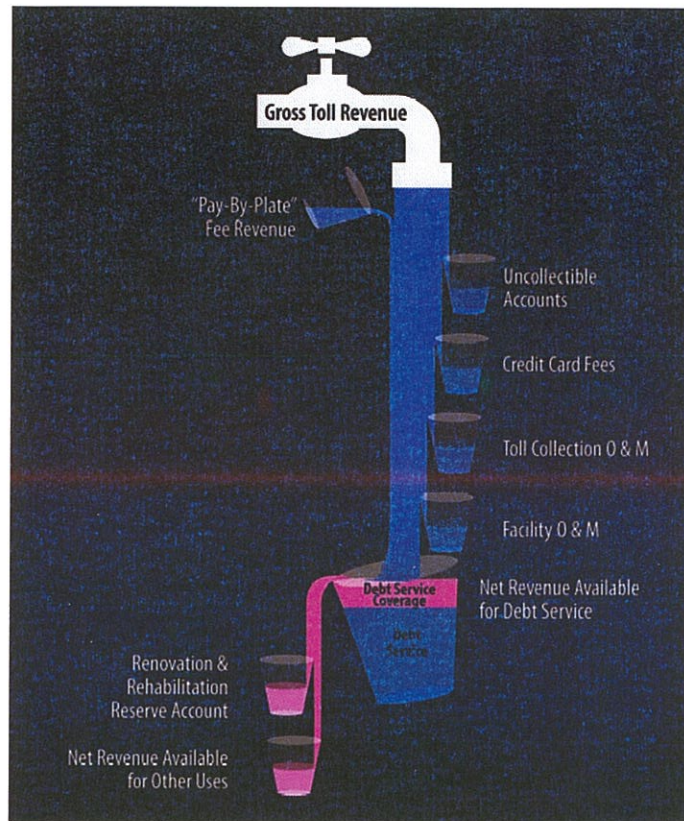
The rates for commercial vehicles are assumed to be proportionately greater than passenger cars, roughly as a function of the number of axles for a commercial vehicle. For the purposes of this analysis, it is assumed that commercial vehicles will pay on an N minus one basis based upon axles, that is, a five-axle truck would pay four times the passenger car rate (five minus one times the passenger rate). Model volumes were provided for medium (three-axle) and large (five-axle) trucks. The exact commercial toll schedule will be a function of the future development of the electronic toll collection system. Toll schedules assumed for each scenario are shown on the attached spreadsheets, *Toll Rate Schedules for I-5 Scenarios* and *Toll Rate Schedules for I-5 and I-205 Scenarios*.



## Determination of Net Revenues

To arrive at the portion of revenues available to support financing via the repayment of debt, several deductions must be made from gross toll revenues and fees. Key among these deductions is the obligation to pay for toll collection and facility operation and maintenance (O&M) costs for the bridge and roadway. The deductions from gross revenues include the following:

- Potential toll revenue lost due to uncollectable accounts
- Credit card and banking fees associated with toll payment and accounts
- Toll collection operations and maintenance costs, including maintenance, periodic replacement of equipment, back office costs and bridge insurance
- Routine operations and maintenance of the bridge and roadway facilities



Facility O&M costs include routine maintenance of the bridge and all roadways within the project area as well as incident response for the project area. After gross revenues have paid all of the above deductions, including toll collection and facility O&M costs, the remaining net revenue is available for debt repayment.

The net revenue stream represents the cash flow that can be used directly for financing to repay bonds, or to directly pay for construction if pre-completion tolling is implemented. In addition to bond repayment, there will be a periodic need for renovation and rehabilitation activities for the project. These costs are assumed to be funded out of excess net revenues after annual debt repayments that result from the debt service coverage requirement placed on net revenues. A reserve account may be created that would be funded from these excess net toll revenues.

## Financial Capacity Analysis

Tolling the I-5 bridge does not have the financial capacity to yield a funding contribution equal to the \$2.38 billion cost in year of expenditure dollars for the highway portion of the project. Rather, a number of funding sources will likely be needed to build the project, including federal and state (Oregon and Washington) funding sources combined with funding from tolls.

For the purposes of this analysis, the bridge is assumed to be substantially completed by the end of fiscal year 2018, with revenue operations beginning on July 1, 2018 (state fiscal year 2019). Toll bond proceeds are assumed to be received in the middle and latter years of construction to maximize their funding contribution, and other funding

sources are assumed to cover construction costs in the initial years. Other project improvements to the highway and interchanges would continue into 2019, and the last bonds needed to fund these completion activities are assumed to be issued after tolling has commenced.

The CRC toll bonds were assumed to be backed by other revenue sources, and the full faith and credit of one or both states to provide the bonds with a credit rating and interest costs equivalent to that of general obligation debt of either state.

The use of toll bonds will increase the total costs paid during and after construction due to the added interest and issuance costs. However, these financing costs are treated separately from the project capital cost during construction. Increased use of toll bonds will increase the total costs paid due to added interest and issuance. The construction cost does not increase as a result; rather it adds a financing cost both during and after construction.

State-backed bonds are limited by Washington State Constitution to a 30 year repayment period. Accordingly, debt with the maturity of up to 30 years was assumed to maximize the total proceeds that can be generated by the forecasted net toll revenue stream.

A minimum debt service coverage factor of 1.25 was assumed for state-backed debt whereby net toll revenues were maintained at 1.25 times the projected annual debt service. The intent of this is to provide some protection against draws on the revenue sources pledged to backup toll revenues, such as motor vehicle fuel tax revenues, in the event of lower-than-projected toll revenue performance.

Interest rates on state-backed bonds are assumed to be 6.00 percent for current interest bonds ("CIBs") and 6.50 percent for capital appreciation bonds ("CABs"), based on the current double-A credit ratings in both states. Issuance costs are assumed to be 0.2 percent of the total par amount of bonds issues for state-backed bonds. Additional costs would include 0.5 percent of the par amount for current interest bonds for underwriting (underwriter's discount) and 1.0 percent of the par amount for capital appreciation bonds.

Interest is assumed to be capitalized through the year before the project completion date, or up to two years after full toll collection commences. Earnings on invested funds (construction fund and capitalized interest fund) are assumed to be at an annual rate of 2.50 percent. While this might be higher than current yields on short-term investments, it is substantially less than the assumed future interest cost of borrowing, (between 6.0 and 6.5 percent for state-backed bonds), and thus represents approximately the same level of negative arbitrage currently being experienced by issuers of tax-exempt bonds.

### **Funding Range**

Based on the analysis done for this report, several preliminary conclusions can be reached:

1. Tolling can contribute a significant amount of funding to the project.
2. Tolling cannot be the only funding source for the project. Several funding sources, including state (Oregon and Washington) and federal, will be needed to supplement tolling funds.

3. Toll rates on I-5 can only be raised so high before total revenue and funding decrease. The limit is approximately two times the toll rate studied in the project's Draft EIS.
4. State backing of the debt is necessary to maximize the toll funding contribution. By essentially making the debt equivalent to general obligation bonds, state-backing affords the debt a high credit rating and relatively low interest rates. Non-recourse debt that is backed solely by toll revenues is anticipated to carry a lower or minimum investment-grade credit rating; which would entail higher interest rates, increased capitalized interest costs, and higher debt service coverage requirements.

Further study is warranted as the project design and cost of the project are refined, or as more information is available about other funding sources.



## Traffic Effects for Tolling Scenarios

Scenarios	Average Daily Traffic Volumes			Diversion to I-205 Compared to No Toll Scenario	Average SB I-5 Duration of Congestion	Average NB I-5 Duration of Congestion	Total Average I-5 Duration of Congestion
	I-5 Bridge Total	I-205 Bridge Total	Total River Crossings				
Existing Conditions (2005)							
No Build	134,000	146,400	280,400	-	2.0 hrs	4.0 hrs	6.0 hrs
No Toll Scenario	184,000	210,000	394,000	-	7.25 hrs	7.75 hrs	15.0 hrs
Scenario 1A	220,000	203,000	423,000	-	5.5 hrs	1.5 hrs	7.0 hrs
Scenario 1B	181,000	216,000	397,000	13,000	3.5 hrs	1.0 hrs	4.5 hrs
Scenario 1C	190,000	211,000	401,000	8,000	4.0 hrs	1.0 hrs	5.0 hrs
Scenario 1D	175,000	215,000	390,000	12,000	3.75 hrs	1.0 hrs	4.75 hrs
Scenario 1E	173,000	218,000	391,000	15,000	3.25 hrs	1.0 hrs	4.25 hrs
Scenario 1F	154,000	224,000	378,000	21,000	2.75 hrs	0.75 hrs	3.5 hrs
Scenario 1G	133,000	231,000	364,000	28,000	2.0 hrs	0.5 hrs	2.5 hrs
	89,000	240,000	329,000	37,000	1.0 hrs	0.0 hrs	1.0 hrs
Scenario 2A	198,000	177,000	375,000	-26,000	4.25 hrs	1.25 hrs	5.5 hrs
Scenario 2B	201,000	181,000	382,000	-22,000	4.5 hrs	1.25 hrs	5.75 hrs
Scenario 2C	192,000	185,000	377,000	-18,000	4.0 hrs	1.0 hrs	5.0 hrs

SB = southbound | NB = northbound

### Notes

1. Year 2030 results shown, except for Existing Conditions (2005).
2. Average duration of daily congestion levels shown.
3. All results are approximate.
4. The no toll scenario is included for comparison purposes. Tolling is needed to fund the project.



## Toll Rate Schedules for I-5 Toll Scenarios

Time Period	Studied for comparison purposes  Raises ~\$0	Scenario 1A	Scenario 1B	Scenario 1C	Scenario 1D	Scenario 1E	Scenario 1F	Scenario 1G	
		Draft EIS Variable Toll: Toll structure from the Draft EIS	Lower than Draft EIS Toll: Peak period tolls are lower than DEIS	Fixed Rate Toll: Same toll all day; rate based on weighted average of Draft EIS variable toll	Additional Price Points: Variable toll schedule; rates change more throughout day	1.5X Draft EIS Variable Toll: All tolls are 1.5 times the Draft EIS rates	2x Draft EIS Variable Toll: All tolls are twice the Draft EIS rates	3x Draft EIS Variable Toll: All tolls are triple the Draft EIS rates	
		Raises ~\$1.1 - \$1.4 billion	Raises ~\$0.9 - \$1.2 billion	Raises ~\$1.1 - \$1.4 billion	Raises ~\$1.2 - \$1.5 billion	Raises ~\$1.4 - \$1.8 billion	Raises ~\$1.6 - \$2.1 billion	Raises ~\$1.2 - 2.0 billion	
		One-Way Tolls	One-Way Tolls	One-Way Tolls	One-Way Tolls	One-Way Tolls	One-Way Tolls	One-Way Tolls	
		Collected Both Directions	Collected Both Directions	Collected Both Directions	Collected Both Directions	Collected Both Directions	Collected Both Directions	Collected Both Directions	
Midnight to 5 AM		\$1.00	\$1.00	\$1.65	\$1.00	\$1.50	\$2.00	\$3.00	
5 AM to 6 AM		\$1.50	\$1.25		\$1.50	\$2.25	\$3.00	\$4.50	
6 AM to 7 AM					\$2.00				
7 AM to 8 AM		\$2.00	\$1.50		\$2.00				
8 AM to 9 AM					\$1.75	\$2.25	\$3.00	\$4.50	
9 AM to 10 AM		\$1.50	\$1.25		\$2.00				
10 AM to 3 PM		\$2.00	\$1.50		\$2.50	\$3.00	\$4.00	\$6.00	
3 PM to 4 PM					\$2.00				
4 PM to 6 PM		\$1.50	\$1.25	\$2.21	\$1.50	\$2.25	\$3.00	\$4.50	
6 PM to 7 PM		\$1.00	\$1.00		\$1.00	\$1.50	\$2.00	\$3.00	
7 PM to 8 PM									
8 PM to midnight		\$1.00	\$1.00						
Midnight to 5 AM		\$1.34	\$1.34	\$2.21	\$1.34	\$2.02	\$2.69	\$4.04	
5 AM to 6 AM		\$2.02	\$1.68		\$2.02	\$3.02	\$4.04	\$6.05	
6 AM to 7 AM					\$2.69				
7 AM to 8 AM		\$2.69	\$2.02		\$3.36	\$4.04	\$5.38	\$8.07	
8 AM to 9 AM					\$2.69				
9 AM to 10 AM		\$2.02	\$1.68		\$3.36	\$3.07	\$4.04	\$6.05	
10 AM to 3 PM					\$2.69				
3 PM to 4 PM					\$3.36				
4 PM to 6 PM		\$2.69	\$2.02		\$3.36	\$4.04	\$5.38	\$8.07	
6 PM to 7 PM					\$2.69				
7 PM to 8 PM		\$2.02	\$1.68		\$2.02	\$3.02	\$4.04	\$6.05	
8 PM to midnight		\$1.34	\$1.34		\$1.34	\$2.02	\$2.69	\$4.04	

### Notes

1. These are toll rate schedules analyzed for planning and testing purposes. Actual toll rates will depend on a final finance plan and will be determined by the Oregon and Washington state transportation commissions to meet legislative funding direction.
2. Toll funding contribution ranges assume 30-year state-backed debt.
3. No Toll scenario included for comparison purposes. Tolling is needed to fund the project.
4. Assumes medium trucks pay 2x and large trucks pay 4x the auto toll rate using a transponder; administrative fee would be added to process payments not involving a transponder.
5. Tolls are assumed to escalate at 2.5% per year to match the expected rate of inflation.
6. Tolling during construction could be added to any scenario. Rates assumed to match Scenario 1A, except there would be no toll from midnight to 5am. Tolling early could provide about \$330 million in additional funds for construction.

## Toll Rate Schedules for I-5 & I-205 Toll Scenarios

No Tolls		Tolling I-5 and I-205							
		Scenario 2A		Scenario 2B		Scenario 2C			
Studied for comparison purposes  Raises ~\$0		Draft EIS Variable Toll on Both Bridges: Draft EIS tolls on both bridges  Raises ~\$2.8 - \$3.4 billion		Lower than Draft EIS Toll on Both Bridges: Peak period toll is lower than Draft EIS rate  Raises ~\$2.1 - \$2.5 billion		Lower Toll on I-205: Peak period toll is lower on I-205 than I-5; variable rate toll on both bridges  Raises ~\$2.4 - \$3.0 billion			
		Roundtrip Tolls		Roundtrip Tolls		Roundtrip Tolls			
		Northbound	Southbound	Northbound	Southbound	Northbound	Southbound I-5	Southbound I-205	
		No Toll Collected		\$2.00		\$2.00	No Toll Collected	\$2.00	\$2.00
				\$3.00		\$2.50		\$3.00	\$2.50
\$4.00				\$3.00	\$4.00	\$3.00			
\$3.00	No Toll Collected			\$2.50	\$3.00	\$2.50			
3 PM to 7 PM		\$4.00		\$3.00		\$4.00	\$3.00		
7 PM to 8 PM		\$3.00		\$2.50		\$3.00	\$2.50		
8 PM to midnight		\$2.00		\$2.00		\$2.00	\$2.00		
2018 Dollars		Midnight to 5 AM		Midnight to 5 AM		Midnight to 5 AM			

### Notes

- These are toll rate schedules analyzed for planning and testing purposes. Actual toll rates will depend on a final finance plan and will be determined by the Oregon and Washington state transportation commissions to meet legislative funding direction.
- Toll funding contribution ranges assume 30-year state-backed debt.
- No Toll scenario included for comparison purposes. Tolling is needed to fund the project.
- Assumes medium trucks pay 2x and large trucks pay 4x the auto toll rate using a transponder; administrative fee would be added to process payments not involving a transponder.
- Tolls are assumed to escalate at 2.5% per year to match the expected rate of inflation.
- Tolling during construction could be added to any scenario. Rates assumed to match Scenario 1A, except there would be no toll from midnight to 5am. Tolling early could provide about \$330 million in additional funds for construction.

## E-ZPasses Track Vehicles In NY Even Off Toll Roads

### New Yorkers may not realize they are being tracked

[http://autos.aol.com/article/e-zpasses-track-vehicles-ny-toll-roads/?icid=maing-grid7lmain5ldl6lsec1\\_inlk2%26pLid%3D375937](http://autos.aol.com/article/e-zpasses-track-vehicles-ny-toll-roads/?icid=maing-grid7lmain5ldl6lsec1_inlk2%26pLid%3D375937)

Posted: Sep 16, 2013

| By: AOL Autos Staff

New York's E-ZPass uses a radio-frequency identification sensor, or RFID tag, which allows residents of the Big Apple to pay road tolls electronically. But most drivers don't know that the state is using the passes to gather data far from toll booths, according to an article in Forbes.

Internet hacker "Puking Monkey" wanted to see where his RFID tag was being scanned. He rigged the E-ZPass so a light would turn on and a toy cow would moo every time the RFID tag was read. He found his pass being read several times on short trips around New York, far from any tollbooths.

While speaking at the hacker convention Defcon, Puking Monkey called his findings "intrusive and unsettling." Tag readers on the streets are part of New York's traffic initiative "Midtown in Motion", which uses the passes to track traffic movement to improve flow. The New York Department of Transportation wasn't forthcoming about the program, but TransCore, the manufacturer of the RFID tags used in E-ZPasses, told Forbes via email "The tag ID is scrambled to make it anonymous ... the system cannot identify the tag user and does not keep any record of the tag sightings."

Still, it's an unsettling reminder that if the state of New York can track drivers without notifying them, potentially anyone can. Puking Monkey told the crowd at Defcon that drivers can protect themselves by keeping their E-ZPasses in a bag and bringing them out when driving through tollbooths. Laws governing electronic information gathering are hazy and undefined in most states. Californians have their cars photographed and tracked by police, with no transparency on how that data is being used.

Gallery: Your Guide To The Cars Of 2014  
Acura MDX Acura RLX Audi R8 Audi RS7

Filed under: Driving Laws

[http://autos.aol.com/article/e-zpasses-track-vehicles-ny-toll-roads/?icid=maing-grid7lmain5ldl6lsec1\\_inlk2%26pLid%3D375937](http://autos.aol.com/article/e-zpasses-track-vehicles-ny-toll-roads/?icid=maing-grid7lmain5ldl6lsec1_inlk2%26pLid%3D375937)