

## CRC Tolls Will Produce Gridlock On I-205

### Analysis of CDM Smith Traffic Forecast

***Joseph Cortright, Impresa, Inc., September 2013***

Tolling I-5 for the Columbia River Crossing will cause nearly 50,000 vehicles daily to shift to the I-205 Bridge, which will be jammed to capacity, according to a previously undisclosed traffic study prepared for the CRC.

Starting in 2016, the CRC will impose peak hour tolls of \$2.50 on the existing I-5 bridges, plus a surcharge of another \$1.50 those who don't buy transponders. But the nearby I-205 Bridge will remain un-tolled. According to traffic studies prepared by CRC contractor CDM Smith, this will lead to 48,800 more vehicles crossing I-205 daily than is the case today. Meanwhile, traffic on the I-5 bridges will drop by more than 45,000 vehicles, to traffic levels not experienced since the early 1970s.

Daily Traffic on Columbia River Bridges, 2011 and 2016

Bridge	2011	2016, with tolls	Change from 2011
I-5	124,000	78,400	-45,600
I-205	138,700	187,500	+48,800
Total River Crossings	262,700	265,900	+3,200

Source: CDM Smith Estimates, Scenario 2.

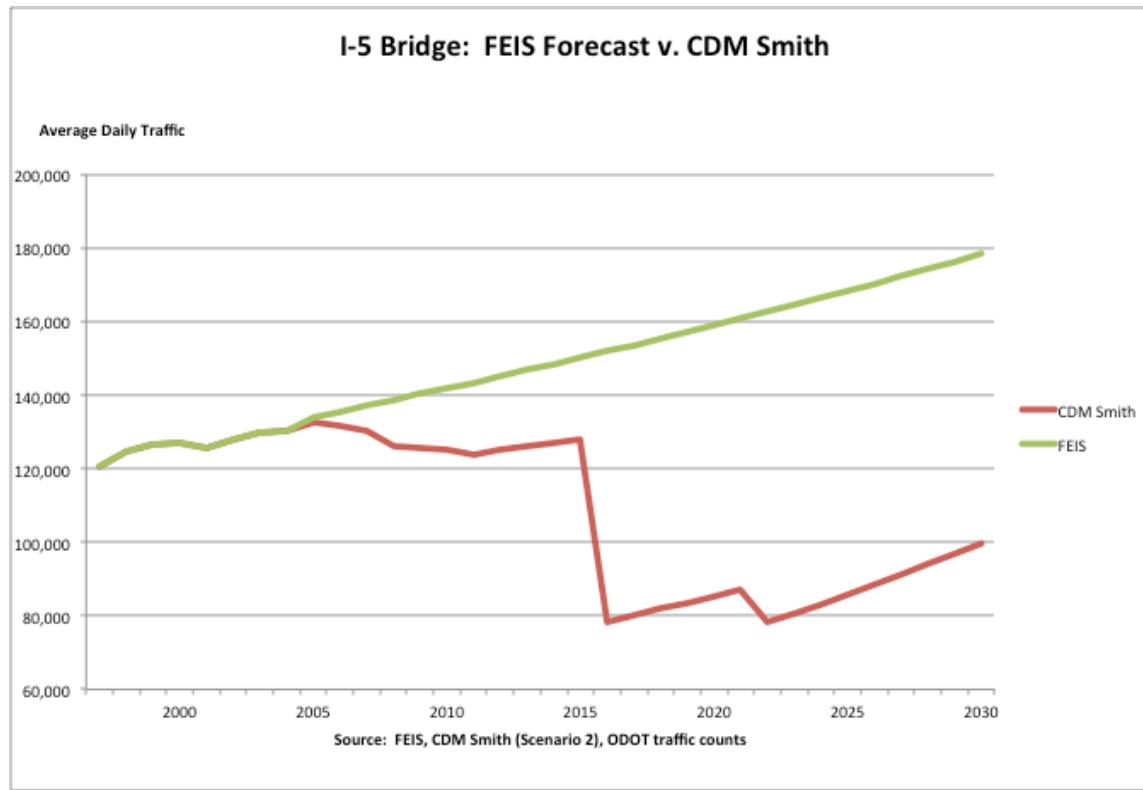
Currently, the I-205 Bridge handles about 139,000 vehicles per day. Tolling I-5 in 2016 will cause that total to jump to more than 187,000 vehicles each day.

When the new bridge opens in 2022, tolls will be raised further, to \$3.62 plus surcharges for peak travelers, causing even more vehicles to divert to I-205. CDM Smith predicts that traffic on I-205 will increase to more than 210,000 vehicles per day, up 70,000 from today's levels. Meanwhile, traffic on the new, widened I-5 bridges will fall to 78,200 per day (under Scenario 2), about the same level of traffic as in 1972, and just slightly more than half as many cars as use the existing bridges today. The new I-5 CRC crossing will be greatly underused, while at the same time, the I-205 crossing will be carrying two and a half times as much traffic as the new I-5 bridges.

Under all but the lowest traffic forecast, the CDM Smith analysis shows that the I-205 bridge will be jammed to its full capacity—about 210,000 cars per day, shortly after the new I-5 bridge opens in 2022. Once the I-205 bridge is saturated, the CDM Smith traffic model assumes that traffic congestion and delays on the I-205 bridge will force more traffic growth to travel on I-5—a critical factor in generating estimated toll revenues.

While the documents disclosing the CDM Smith projections show travel *volumes*, they do not show travel *times*— since I-205 will be at capacity, travelers on I-205 will doubtless face much longer travel times than they do today. In addition, filling I-205 to capacity will produce higher traffic volumes and slower travel speeds on routes connected to I-205, especially I-84 and State Route 14. The congestion on I-205 would be especially likely to increase travel times to and from Portland International Airport. CRC has not disclosed or evaluated the negative economic effects associated with degraded access to the region’s airport, arguably a much more time-sensitive destination for travelers and freight than truck trips on I-5.

These data show that the traffic projections contained in the project’s environmental impact statement are dramatically wrong. The Final Environmental Impact Statement (FEIS) claimed that the new I-5 bridges would carry 178,000 vehicles in 2030, and that there would be only minor diversion to I-205. The new CDM Smith analysis shows only slightly more than half as many vehicles will use a new I-5 bridge (99,000 under Scenario 2).



The new analysis confirms what Impresa has been saying about CRC traffic projections for more than five years: CRC completely missed the big decline in driving that has been underway in the U.S. for almost a decade, and they grossly under-estimated the diversion effects of I-5 tolling.

This forecast invalidates the transportation rationale for the CRC project. The CRC was based on the premise that a new, larger bridge is needed to accommodate growing traffic flows. But the CDM Smith forecasts show that with tolling, fewer

vehicles will use the new bridge than use it today. Under CDM Smith's highest forecast (Scenario 4) traffic on the new I-5 Bridges will be lower in 2030 (122,000 vehicles per day) than it is today (about 124,000 vehicles per day). The region will have spent nearly \$3 billion dollars to widen this freeway and increase its capacity—but fewer motorists will use it than do so today. And tolling will leave the new I-5 bridges grossly under-utilized, while overwhelming the existing I-205 bridges. The day the new bridge opens, I-205 will carry two and a half times as many vehicles (210,300), as the new tolled I-5 CRC (78,400).

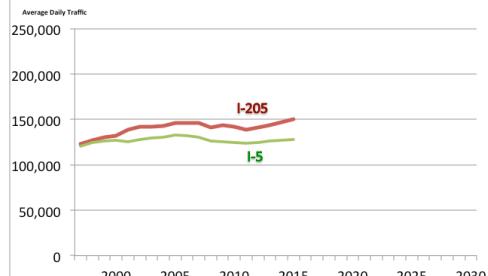
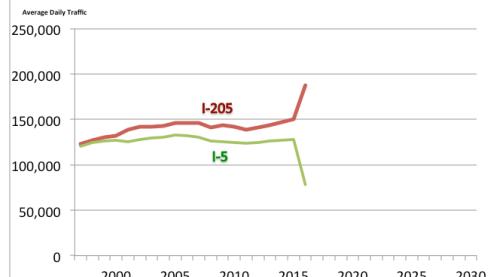
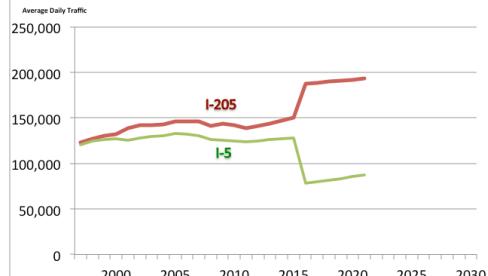
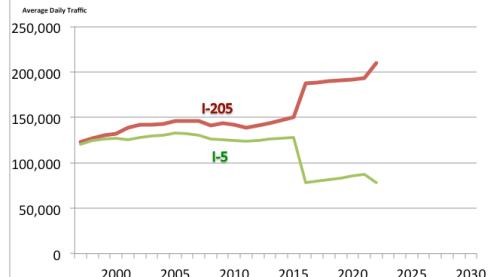
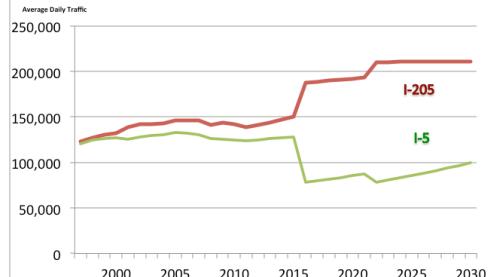
Even though much more realistic than the FEIS analysis, there are strong reasons to believe that the estimates created by CDM Smith still significantly over-estimate toll traffic on I-5 and underestimate the amount of diversion to I-205.

- The CDM Smith estimates are based on un-realistic forecasts of the underlying growth of cross-Columbia River traffic. The CDM Smith forecasts assume that between 2016 and 2036—in the absence of tolls—the total number of daily auto trips across the Columbia River will increase from 269,100 to 366,500, a rate of annual increase of 1.5% per year. Over the past decade, trips across the river have actually declined at a rate of -0.2% per year (from 270,000 in 2001 to 267,300 in 2011). Vehicle miles of travel are in long-term decline in the region and throughout the United States. The CDM Smith estimates provide no explanation of why this decline will reverse, and accelerate to this high rate, nor does it provide any sensitivity analysis that explains the revenue implications if this assumption is wrong. If traffic growth across the Columbia River fails to accelerate as dramatically as CDM Smith is forecasting, the CRC could experience a major shortfall in revenue.

Forecast/ Time Period	Annual Growth in Columbia River Crossings
Actual Growth Rate 2002-2012	-0.2% per year
CDM Smith “Toll Free” 2016-2036	1.5% per year
CDM Smith “with Tolls” 2016-2036	1.1 to 1.2% per year

- The CDM Smith estimates are not based on actual data on traveler value of time. While a key part of the CDM Smith work plan was to develop a customized estimate of the value of travel time, based on a survey of actual I-5 bridge users, the estimates developed so-far rely on a “back of the envelope” estimate travel time value based on secondary data about county-wide wage rates, and a “rule of thumb” relationship between travel time values and wage rates.
- The CDM Smith figures likely over-estimate truck traffic and the high sensitivity of truckers to tolled facilities.
- The CDM Smith estimates do not separately recognize the effect of tolls on shopping trips to Oregon by Washington residents seeking to avoid sales taxes.

## How CRC Tolls Force Traffic to I-205

	<p><b>1. Flat Traffic on I-5 and I-205</b></p> <ul style="list-style-type: none"> <li>For the past decade, traffic on the I-5 and I-205 bridges has been flat to decreasing, down an average of 0.2% per year.</li> <li>CDM Smith expects this trend to continue through 2015.</li> </ul> <p>(All data from CDM Smith; Scenario 2)</p>
	<p><b>2. 2016: Pre-Completion Tolling</b></p> <ul style="list-style-type: none"> <li>Tolling I-5 begins in 2016, and CDM Smith's Scenario 1 forecast says 43,000 more cars will use the I-205 bridge than today.</li> <li>Traffic on the I-5 bridges drops to 78,400 cars per day—the 1972 level of traffic.</li> </ul>
	<p><b>3. 2016 to 2021: Construction</b></p> <ul style="list-style-type: none"> <li>Diversion to I-205 continues.</li> <li>CDM Smith predicts some traffic growth on both I-5 and I-205.</li> <li>Traffic levels on I-5 remain well below pre-tolling levels.</li> </ul>
	<p><b>4. 2022: CRC Bridge Opens, Tolls Rise</b></p> <ul style="list-style-type: none"> <li>In 2022, the new CRC bridge opens, and tolls are increased to \$3.62 each way at the peak hour, plus surcharges.</li> <li>Even more vehicles will divert to the I-205 bridge as a result of these toll increases.</li> <li>I-5 traffic falls to 78,200 daily.</li> </ul>
	<p><b>5. 2023 to 2030: I-205 Saturated</b></p> <ul style="list-style-type: none"> <li>After 2023, the CDM Smith forecasts show that I-205 reaches its capacity limit of about 210,000 cars per day.</li> <li>The CDM Smith model forces all traffic growth to the tolled I-5 bridge.</li> <li>The wider new I-5 bridge is grossly underused.</li> </ul>

## Analysis

**Panel 1** shows the historical pattern of traffic on the I-5 and I-205 bridges since 1997. Traffic growth during this period ebbed and then went into reverse. Over the past decade, travel on the I-5 and I-205 bridges combined has declined by an average of 0.2% per year. CDM Smith expects flat to stagnant growth through 2015.

**Panel 2** shows CDM Smith's forecast of what will happen in 2016, when the CRC begins charging a toll for user's of the existing I-5 bridge, the so-called "pre-completion tolling." Tolls will range up to \$2.50 per peak hour crossing, plus a surcharge of \$1.50 for those who do not buy a transponder.

**Panel 3** shows that from 2016 through 2021, while the new bridge is constructed, that CDM Smith projects that the pattern of diversion to I-205 will persist, but that there will be growth in traffic on both I-5 and I-205.

**Panel 4** shows what CDM Smith expects to happen when the new CRC Bridge is opened to traffic—and tolls are increased to \$3.62 per peak hour crossing (plus surcharges of up to \$1.77 for those who do not purchase transponders). The further increase in tolls serves to divert additional traffic to I-205. When the new bridge opens, it is expected to carry just 78,200 vehicles per day, the same level of traffic that crossed the bridge in 1969.

**Panel 5** shows what is projected to happen after 2023. Critically, the CDM Smith forecasts project that I-205 will be saturated to full capacity—about 210,000 vehicles per day or about 50% higher than current traffic levels (this is shown as I-205 "flat-lining" after 2023. Once I-205 is saturated, CDM Smith assumes that traffic growth will shift to the tolled I-5 bridges. This assumption is a key driver of increased toll revenues in the post-completion period.

### The CDM Smith model contradicts and invalidates the traffic projections used in the CRC planning and environmental impact reports over the past 7 years.

These new forecasts for traffic levels on a tolled I-5 bridge completely contradict the forecasts the CRC has used for the past seven years, and cast serious doubt on the project's environmental impact statement, the need for the project, supposed transit benefits and also pose the risk of extreme traffic diversion.

These forecasts are dramatically different than those in the Columbia River Crossing Final Environmental Impact Statement (FEIS), which claimed that traffic would be 178,000 vehicles per day if a new, tolled CRC were built. The CDM Smith estimates show that the FEIS overstated 2030 traffic levels on the I-5 bridge by between 45 percent and 104 percent. Despite the fact that it forecasts 80,000 fewer I-5 trips daily in 2030; the CDM Smith report is the basis for an assertion that tolling will

produce nearly as much revenue as was forecast in the FEIS. Neither the CDM Smith report, nor the Parsons Brinkerhoff report that accompany it provide any explanation of how so much smaller traffic flows generate nearly as much net revenue.

In sum, the results of the CDM Smith report show:

- The unintended consequences of tolling just one bridge will likely produce even worse traffic congestion on alternate, non-tolled routes, especially those leading to the Portland airport (which are arguably far more time-sensitive and economically important than truck or commuter traffic across the present I-5 bridges).
- With tolling, no additional cross-river capacity is needed. Although the project is supposedly needed to expand capacity, tolling the I-5 bridges will reduce demand for the foreseeable future to a level that could easily be accommodated by the existing structure.
- A high fraction of current bridge users do not value the trip highly enough to pay the toll; this is critical, since toll revenues are expected to cover perhaps a third of the cost of the project.

Long-term growth rates assumed for the CRC with tolls have not been validated by the experience of other tolled facilities. The CDM Smith analysis assumes that in the long term, growth rates on the I-5 bridges *with tolls* will range from 1.1 percent to 1.2 percent per year. In the past decade, *with no tolls*, the growth rate of traffic across the Columbia River on the I-5 and I-205 bridges combined has averaged -0.2 percent per year and has exceeded 0.5 percent in only one year (2005). Yet the CDM Smith figures assume that traffic will grow faster on a tolled bridge than it has grown on the existing non-tolled bridges, and it will do so on a sustained basis. The materials submitted with the CDM Smith forecast do not explain what factors will cause this historical reversal in bridge traffic. As the Bain Report to the Treasurer noted in the face of an unsubstantiated claim that traffic growth would accelerate after 15 years of slowing, such a projection requires "strong, evidence-based arguments to support such a 'story.'"

### **The CDM Smith Forecasts Invalidate the Traffic Forecasts Contained in the FEIS**

The traffic projections contained in the DEIS are the foundation of many of the key conclusions about the project's environmental, economic and social impacts. The newly released CDM Smith projections show the estimates used in the FEIS are incorrect—the amount of traffic that will be carried on the I-5 bridges will be dramatically less in 2030 than the 178,000 vehicles estimated in the FEIS, and this invalidates many of the conclusions contained in the FEIS.

Although the CDM Smith estimates omit the critical No-Build no-toll baseline, it is evident that their estimates and the past seven years of stagnant to declining traffic volumes on the I-5 totally discredit the FEIS estimate of 184,000 vehicles per day for the No-Build alternative. There is no evidence that traffic levels on I-5 in the No-Build case will ever reach the level of 184,000 vehicles per day forecast in the Draft and Final Environmental Impact Statements. The bridges currently carry about 124,000 vehicles per day, and in fact, traffic levels have actually declined over the past five years. Previous CRC documents have omitted information showing the steady decline in traffic: the project's vintage 2006 projections were not updated in the FEIS, issued in September 2011; the FEIS contains no post-2005 data on actual traffic levels on the bridges.

The No-Build estimates contained in the FEIS create a fictional and exaggerated baseline that makes the proposed project seem more necessary and environmentally benign than it actually is. In effect, the traffic levels ascribed to the No-Build scenario have served to create a high traffic, high delay, high pollution straw man against which the build alternatives could be claimed to have better performance.

A corrected baseline No-Build forecast, coupled with lower estimates of traffic and higher estimates of diversion associated with tolling the proposed new I-5 bridges would produce dramatically different results from those portrayed in the CRC Environmental Impact Statement. Specifically, such changes would:

- **Invalidate traffic congestion analysis.** The FEIS claims that toll driven diversion to I-205 will be minimal. The CDM Smith figures show that many more vehicles will divert away from I-5 because of tolls—about 45,000 trips in 2016, according to its Scenario 2 forecast. This diversion will also produce additional traffic and congestion on other key routes (I-84, SR-14 and other East-West connectors). The FEIS does not analyze the effects of this congestion, and is therefore invalid.
- **Invalidate the freight analysis.** Similarly, the FEIS claims that freight travel will face increasing congestion and delay on the I-5 bridges. These forecasts hinge on a comparison with the inaccurate baseline. In fact, traffic levels have not been increasing on the I-5 bridges, and the fraction of the cross-river truck traffic carried by I-5 has decreased dramatically in the past five years.
- **Invalidates safety analysis.** The FEIS claims that the number of crashes on the I-5 bridges will increase—but this figure is based on a faulty forecast of future traffic levels. A realistic baseline would show far fewer crashes.
- **Invalidates cost-benefit analysis.** The CRC has published a cost-benefit analysis, which is based on assumed travel savings for the 178,000 vehicles

estimated to cross the bridge in 2030 under the FEIS. Since far fewer vehicles will use the bridge, there will be far smaller benefits. Moreover, the cost-benefit analysis doesn't include an analysis of the costs associated with the delays from congestion on parallel and alternate routes because the FEIS traffic projects failed to accurately estimate these flows. This invalidates the cost benefit analysis.

- **Invalidates the analysis of transit benefits.** The comparison of bus service times under the No-Build analysis with light rail service times under the proposed project is strongly influenced by the high levels of traffic congestion in the No-Build. A more realistic No-Build scenario with less traffic congestion would show much smaller (and perhaps negative) transit travel time benefits with light rail.

It is not possible to reconcile the DEIS and FEIS forecasts with the forecasts provided by CDM Smith. CRC officials have made misleading claims about the nature of the forecasts. Officials have claimed that the numbers presented in the EIS are a "worst-case" for estimating environmental impacts, and that the project uses a different and lower set of traffic numbers to gauge financial feasibility.

To claim that a forecast with a higher or lower level of traffic on I-5 is better or worse, or represents a worst case analysis, is simply incorrect. Different projections necessarily imply different environmental impacts.

- Neither federal highway regulations nor federal environmental regulations authorize or direct using multiple, conflicting forecasts for a single project, or using one set of traffic numbers for one purpose, and a different set for another.
- The CRC FEIS projections of project traffic levels do not, in any case, represent an environmental worst-case because the CDM Smith estimates show that there will be a diversion of 45,000 vehicles to other routes/destinations with tolling; this is a far higher level than the minimal diversion estimated in the FEIS. This diversion has far larger and more negative environmental effects than previously disclosed.
- The CRC projections in fact, create a fictitiously bad "No-Build" scenario that serves to make the build alternatives seem less environmentally harmful than they actually are.
- Federal regulations require that CRC certify that it has used only a single, consistent set of forecasts as part of its application for federal transit funds. (Nancy Boyd, New Starts Certification of Technical Methods and Planning Assumptions September 7, 2012).

## **Important Questions Remain About the Reliability of the CDM Smith Forecasts**

The preliminary CDM Smith numbers show that even in the highest range of assumptions, traffic levels on I-5 will be dramatically lower than forecast in the FEIS. Even so, the CDM Smith preliminary estimates leave other important questions about specific traffic demand markets unanswered. As indicated earlier in this report, the entire set of CDM Smith forecasts assume levels of cross-river traffic growth that are at odds with trends over the past decade. In addition, the report doesn't show traffic effects by vehicle type, by trip purpose, time of day, or by income level. This is important because some trips are highly sensitive to toll levels. Each of these factors means that diversion could be greater, and adverse effects even worse than those implied in the preliminary estimates.

**Not Disaggregated by Vehicle Type:** According to the CRC financial plan, commercial trucks are expected to provide about 25 percent of gross toll revenue. Careful studies of trucker travel patterns and behavior conducted by the Transportation Research Board show that most truckers dislike tolls, and avoid tolled routes, especially independent truckers who are paid a fixed price on a per trip basis, and who are not reimbursed for tolls, and who have ample delivery windows. Already, without tolls, truck traffic on the I-5 bridges has fallen 23 percent since 2007, and a further decline in traffic would have major implications for toll revenue estimates.

**Not Disaggregated by Trip Purpose:** Journey-to-work trips across the two bridges account for almost half of all trips. But a high fraction of trips are shopping and personal/social trips. A significant fraction of these trips is Washington residents shopping in Oregon to avoid sales taxes. Many occasional and personal trips may divert away from I-5 because of the high cost of tolls: For those who do not purchase a transponder, the cost of a peak hour round trip when the new bridge opened in 2022 would be \$10.78: a \$3.62 base toll, plus a \$1.77 surcharge each way ( $\$3.62 + \$1.77 = \$5.39$ ;  $\$5.39 * 2 \text{ trips} = \$10.78$ ). This would more than negate the tax savings to the typical shopping trip to Jantzen Beach which averages about \$50 in purchases. Over the past two decades, cross-border retail activity has shifted substantially to the East, with the development of large scale retail at Cascade Station and other big box retail on Airport Way, both served by I-205. Activity at the Jantzen Beach Mall, served by I-5, has stagnated. Given the motivation of these trips (saving about \$8.50 per hundred dollars of taxable retail purchases), retail shoppers may be deterred from using the I-5 bridge and instead travel to the East. Also, the value of time of shoppers is likely to be much lower than the \$12.28 to \$17.24 estimates used by CDM Smith.

**Not Disaggregated by Time of Day:** Tolls charged vary by time of day, as does the attractiveness of alternative routes. The experience with the SR-520 Floating Bridge in Seattle shows that the biggest traffic drop off is in off-peak hours, when the non-

tolled route offers free traffic flow. Travelers are much less likely to choose a tolled route when there is no congestion on the un-tolled route.

**Not Disaggregated by Income Level:** The CDM Smith preliminary results do not show results by the income level of bridge users. Different income groups have very different values of time. Low income travelers generally have a much lower value of time, and will modify travel patterns to avoid tolls; while higher income travelers value time savings more highly than toll costs. The CDM Smith model uses a single value of time for each category of vehicle trips. If the results were disaggregated by income group, the model would likely show higher rates of diversion, especially for lower income groups.

**Model Not Demonstrated to Accurately Forecast Tolled Traffic.** The materials provided to document the findings do not show whether the CDM Smith model, which is based on the Metro transportation model, has addressed the methodological limitations identified by an ODOT-commissioned study which concluded that the current four-step traffic forecasting models used in the Portland area were incapable of accurately predicting traffic volumes on tolled facilities.

**The CDM Smith Report fails to present basic information about its traffic model and its results.** As part of constructing its model of traffic over I-5, CDM Smith would also have to forecast traffic speeds across the I-205 bridges and on other major connecting links. The CDM Smith preliminary report omits any data on traffic speeds or levels of service on these other routes.

### **About the CRC and CDM Smith Forecasts**

The CRC prepared traffic forecasts for the project's environmental impact statement in 2007. These forecasts were based on traffic data through 2005, and on transportation surveys that assessed traveler behavior in the early 1990s. These forecasts predicted very rapid growth in travel on I-5 through 2030—even if a new bridge was not built. CRC did nothing to revise these models when it published the Final Environmental Impact Statement in late 2011; in fact, the FEIS contains no post-2005 data on traffic levels—even though traffic declined significantly and showed CRC projections were fundamentally flawed.

In late 2012, CRC hired CDM Smith to undertake an “Investment Grade Analysis” of the CRC. An Investment Grade Analysis or IGA is a more detailed study of possible traffic levels and toll revenues that would be submitted to potential bond buyers who would be lending money to the project. The IGA will take more than a year, and is not expected to produce final results until December 2013.

In reports made public in March 2013 (to the Oregon Legislature) and in September 2013 (to the Oregon State Treasurer), ODOT has provided CDM Smith work products that summarize traffic data only on an annual transactions basis, and not on the average daily traffic (ADT) basis routinely used to describe traffic levels (and

used throughout the project's environmental impact statement). Also, these CDM Smith reports did not disclose traffic levels on other competing routes, i.e. I-205.

Impresa has repeatedly requested access to ADT level data. This traffic data in this report are taken from data prepared as part of the CRC's Investment Grade Traffic Analysis and was obtained by Impresa, Inc., through a public records request filed with the CRC. The data are contained in a spreadsheet prepared ("CRC Prelim ADT Summary File.XLSX") attached to an email from Eugene Ryan of CDM Smith to Steve Siegel, another CRC project consultant, and dated March 2, 2013. This spreadsheet contains estimates of daily traffic levels on I-5 and I-205 for the years 2016, 2022, 2036 and 2060, and also reports the estimated level of traffic under a "no-toll scenario" for both routes in 2016, 2036, and 2060. Impresa computed values for all intermediate years by interpolating a constant annual growth rate. This report uses values from Scenario 2 of the 4 scenarios presented by CDM Smith which corresponds to the middle of the range of CDM Smith estimates. Scenario 1 would produce even lower levels of utilization of the new I-5 bridges than shown here. Scenarios 1-4 were developed by CDM Smith for its document "Preliminary Gross Toll Revenue Estimates," submitted to the Oregon Legislature and dated February 22, 2013. The estimates presented in this document revealed only annual transactions, and did not report data for the I-205 crossing. This document is available on the State Treasurer's website:

<http://www.oregon.gov/treasury/AboutTreasury/Documents/CDM%20Smith%20memo%20on%20tolls%20Feb%202013.pdf>

Impresa has filed public records requests for this same information with the Columbia River Crossing, with the Washington Department of Transportation and the Oregon Department of Transportation, but has been provided with no additional information that addresses daily traffic levels since April 2013.

The ADT data contained in this report appear to be derived from the February preliminary traffic estimates presented to the Legislature. As noted, CRC has not provided ADT estimates consistent with the toll revenue projections provided to the State Treasurer in September. However, the range of annual transactions reported for the February forecasts in Scenarios 1-3 substantially overlap the range of reported annual transactions for the September toll revenue projections. For February Scenarios 1-3, annual transactions for 2030 range from 32 to 45 million; for September Scenarios A-F, annual transactions for 2030 range from 32 to 41 million. This implies that the ADT estimates for the September forecast would be in the same range as those presented here.

## Appendix: CDM Smith Documents

### Email from Eugene Ryan:

**From:** [Ryan, Eugene](#)  
**To:** [Siegel, Steve](#)  
**Cc:** [Francis, Cerley](#); [Slack, Terri](#); [Boesch, Timothy J.](#); [Davis, Ronald W.](#)  
**Subject:** CRCTR Preliminary ADT Estimates  
**Date:** Saturday, March 02, 2013 8:08:37 PM  
**Attachments:** [CRCTR Prelim ADT Summary File.xlsx](#)

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Steven,

Attached is an Excel file with our ADT estimates for the four scenarios for the key years. I have also included when we have them the ADT estimates for the toll free scenarios. These are labeled low and high corresponding to the socioeconomic forecast used. The actual ADTs for 2011 are 124,000 for I-5 and 138,700 for I-205.

If you would like the table in a different form or for us to work up some analysis using these figures please let me know.

You can call me on my cell number below if you have any questions.

**Eugene Ryan P.E.**  
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### Contents of Spreadsheet:

		ADT by Scenario												Toll Free Low				Toll Free High			
Year	Scenario 1	Scenario 2				Scenario 3				Scenario 4				Toll Free Low				Toll Free High			
		I-5	I-205	Total	I-5	I-205	Total	I-5	I-205	Total	I-5	I-205	Total	I-5	I-205	Total	I-5	I-205	Total	I-5	I-205
FY 2016 Forecasted	71,700	182,200	253,900	78,400	187,500	265,900	99,600	181,200	280,800	99,600	181,200	280,800	123,700	145,400	269,100	130,600	153,200	283,800			
FY 2022 Forecasted	66,600	204,300	270,900	78,200	210,300	288,500	109,300	207,100	316,400	102,000	212,000	314,000									
FY 2036 Forecasted	107,400	212,000	319,400	120,700	212,000	332,700	147,400	212,000	359,400	141,000	212,000	353,000	184,600	181,900	366,500						
FY 2060 Forecasted	124,700	212,000	336,700	140,100	212,000	352,100	172,400	212,000	384,400	164,900	212,000	376,900	214,258	211,124	425,382						