



STATE OF OREGON  
OREGON STATE TREASURY  
159 STATE CAPITOL, 900 COURT ST NE  
SALEM, OREGON 97301-4043

January 9, 2014

The Honorable Peter Courtney  
Senate President  
S201 State Capitol  
Salem, Oregon 97301

The Honorable Tina Kotek  
Speaker of the House  
269 State Capitol  
Salem, Oregon 97301

Dear President Courtney and Speaker Kotek:

Improving the Columbia River Crossing on Interstate 5 is a public works imperative for the entire Pacific Northwest. It is a vital part of a larger transportation system that is currently subject to issues of congestion, safety, and future economic competitiveness not only for Oregon, but for the region as a whole.

The current plan to replace the bridge and interchange network would be the most expensive infrastructure project ever undertaken by the state. Therefore, we must have a full understanding of the financial risks associated with it. In short: While the project is badly needed -- it must also make sense from a financial perspective. It is Treasury's job to ensure that if the State decides to move forward with any plan, Oregon's financial interests remain protected.

Because I will not be able to attend next week's hearing on the CRC Project due to a longstanding commitment, I decided it would be helpful to give you Treasury's first impression of the findings of the investment grade analysis provided to us on January 7 by the CRC project managers and ODOT director, in collaboration with their consultants. I thought it would also be useful to give you an update on the status of financial requirements that must be met in order for the state to issue bonds for this project, as stated in my letter to legislative leadership of September 26, 2013 (attached).

As you recall, Treasury has been asked by the Legislature to offer an evaluation of the project financing plan because more than \$1.5 billion in state bonds may be issued to help finance the work.

My role as Treasurer is not to re-do the analysis of the professional consultants, but rather to consider the implications of the financial model and also to protect Oregonians' financial interests. In that capacity, my office has remained in regular contact with the Department of Transportation and the consultants, has asked questions, and has urged the authors to ensure that their assumptions were conservative in order to increase the likelihood of the massive bond sale

would be successful -- and that any State bonds issued for the project would be repaid with tolls so as to not impair other vital public programs or projects. We do not have the capacity or expertise at Treasury to predict future traffic patterns and toll elasticity, or even to deliberate the implications of such. As asked, we have provided perspective about the conservative parameters necessary to achieve investment grade ratings for any public debt, if it is ultimately issued in conjunction with this project.

Based on our review: **If the assumptions underlying the projections made by the project consultants are valid, the tolls will be sufficient to service the project bonds. That said, we need to be sure Oregon can collect them.**

While the key financial assumptions appear reasonable to us at Treasury, I would still encourage further evaluation among legislators and other experts if any potential legislation is drafted and considered.

In my September 26 memo to legislative leadership, I outlined several other legal and logistical requirements that must also be met before bonds for construction are approved. **A number of those items have been addressed, but others remain incomplete.**

These items have been satisfactorily addressed:

- An agreement with the State of Washington authorizing construction within the border of Washington State.
- Identification of funds to pay for the operation of an expanded light rail service into Vancouver, Washington.
- A bridge permit from the United States Coast Guard.

These items have not been fully addressed, and need further attention to reach a necessary level of assurance prior to the sale of any bonds for this project:

- A method of ensuring that sufficient tolls and surcharges incurred by Washington drivers who use the new bridge will be collected. Oregon's Transportation Commission must retain authority over the setting of future tolling rates to assure that they are sufficient to fund both upfront and on-going costs associated with the project.

A reliable method of collecting tolls from Washington drivers is crucial in light of the fact that an estimated two-thirds of the bridge traffic is projected to be vehicles registered in Washington. Although no formal agreements have yet been reached, the project is considering various options and we are waiting to review the Department of Justice's opinion on the enforceability of these options. Absent such an agreement with Washington, Oregon must ensure that it has both the technical means and statutory framework to unilaterally collect past-due tolls and surcharges from Washington drivers in an amount sufficient to pay debt service on the bonds and operate the tolled facility over time.

- An \$850 million Federal Transportation Administration grant to finance light rail components of the project.
- A \$900 million TIFIA loan from the Federal Highway Administration, repaid over the next several decades with toll revenue generated by the project.

As noted in previous communications, the financial risk to Oregon and its taxpayers is higher under an Oregon-led scenario and I recommend that state leaders continue to seek a partnership with the State of Washington. Sharing the oversight and financial risk would be a more advantageous position for both states. Absent that possibility, extra diligence is required to ensure that Oregon taxpayers are protected under an Oregon-led scenario, including ensuring Oregon can unilaterally set toll rates and can collect them.

Again, I want to thank both ODOT and CRC staff for their efforts to communicate with Treasury over the past few months as this latest option for building the CRC is considered. Thank you for your attention to the financial impacts as you deliberate the current iteration of this critical project.

Respectfully,



Ted Wheeler  
State Treasurer

Attachments:

Letter to Legislative Leaders, 9/26/13

CRC Investment Grade Study - Presentation to Oregon Treasurer, 1/7/14

c:

Senate Republican Leader Ted Ferrioli  
House Republican Leader Mike McLane  
Mike Bonetto, Chief of Staff, Governor's Office  
Matt Garrett, Director, ODOT

**TED WHEELER**  
**STATE TREASURER**



PHONE 503-378-4329  
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**STATE OF OREGON  
OREGON STATE TREASURY  
159 STATE CAPITOL, 900 COURT ST NE  
SALEM, OREGON 97301-4043**

September 26, 2013

Rep. Tina Kotek  
Speaker of the House  
Capitol Building, 269

Senator Peter Courtney  
Senate President  
Capitol Building, S-201

To: House Speaker Tina Kotek and Senate President Peter Courtney:

In accordance with House Bill 2800, the Oregon Treasury is required to complete a financial review of the Columbia River Crossing project co-sponsored by the states of Oregon and Washington. Subsequent to the Washington Legislature's failure to approve funding for the CRC project, we have also been asked to evaluate an Oregon-led approach. This memo, though preliminary, serves as a critical step toward that requirement.

I want to start by thanking you, as well as Governor Kitzhaber, for your strong leadership and support for a thorough evaluation of this important project. I believe we are all in agreement that the Columbia River crossing is critical to Oregon's economy. My job as State Treasurer is to make sure that if the Legislature makes a decision to move forward, it does so in a manner that is financially viable and protects Oregon taxpayers.

As we have discussed, the financial risk to Oregon and its taxpayers is higher under an Oregon-led scenario. Therefore, I recommend that we continue to negotiate a close partnership with Washington State.

If Oregon chooses to go forward with an Oregon-led financing proposal, I want to be clear that our financial interests are no longer as clearly aligned with Washington. Therefore, legal protections for Oregon and its taxpayers must be iron-clad and legally enforceable, especially the bi-state toll collection reciprocity agreement described in more detail below. In the event that the project does not unfold as planned, we must be able and willing to take any and all necessary steps to enforce such an agreement with Washington.

Key Question: Does the Oregon-led proposal work financially?

It is premature to conclude that the project can work, financially. The answer will ultimately depend on required negotiations and agreements that are not completed. Treasury staff has identified and shared requirements for the project to work financially (see attached). Bonds for

construction cannot and should not be approved and funds should not be expended until all requirements (listed below) are met.

Under an Oregon-led scenario, Oregon would be responsible for the collection of tolls, so I cannot over-state the importance of a legally enforceable tolling agreement with Washington that includes clear authority for Oregon to establish tolls, surcharges and late fees over the life of the bonds. These agreements must withstand economic and political changes over three decades. These provisions must be satisfied before an Oregon-led project could be considered financially viable.

### Viability Requirements

In summary, if the project is to proceed to the stage of financing, you will need the following in order to satisfy the rating agencies and financial markets:

- An executed, toll collection reciprocity agreement that ensures that tolls, surcharges and any associated late payment fees and penalties incurred by Washington drivers who use the new bridge will be collected in full on Oregon's behalf by the State of Washington. This agreement can recognize that Washington will be consulted as to toll rates, but must allow Oregon's Transportation Commission unilateral authority over the setting of future tolling rates to assure that they are sufficient to fund both upfront and on-going costs associated with the CRC project;
- An executed agreement with the State of Washington authorizing the construction of bridge, rail and interchange improvements related to the project within the border of Washington State;
- A dedicated source of annual funds to pay for the operation of an expanded light rail service into Vancouver, Washington
- A bridge permit from the United States Coast Guard for the new bridge at the now-proposed height over the main channel of the Columbia River;
- An \$850 million grant through the Federal Transportation Administration to finance the light rail components of this project; and
- A \$900 million TIFIA loan from the Federal Highway Administration, which would be repaid over the next several decades with toll revenue generated by the project.

It is important to note that the full “investment grade analysis” will not be completed until December. This summary and the attached reports are based on preliminary financial information provided to the Treasury by the CRC project staff and third-party consultants. We have used conservative financial data based on the “Level 2” data provided to Treasury since August 19.

If the project proceeds to the next phase, the CRC’s consultants will complete a sensitivity analysis of the impacts of the key factors underlying their projections of future traffic patterns for the Interstate 5 Bridge. This will better ensure that the remaining variables have been thoroughly

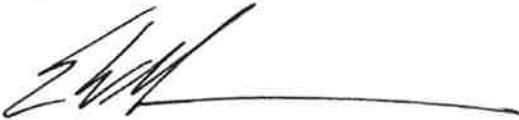
vetted, understood and planned for well in advance of the actual sale of state bonds. Projections show that the majority of traffic using the bridge and paying tolls will be Washington drivers.

I want to acknowledge and thank both ODOT and CRC staff for their efforts to supply information over the past few weeks.

Finally, as Oregon's Treasurer, I share the responsibility with you to protect Oregon's finances and taxpayers, and that means we need to ensure there is a high level of confidence with the underlying financial assumptions of an Oregon-led project, that there are appropriate contingencies in place if our estimates are nevertheless wrong, and that all of the necessary legal agreements are worked out and are executed prior to the expenditure of additional resources.

As you and your colleagues deliberate, please let me know if Treasury can provide additional guidance or analysis.

Respectfully,



Ted Wheeler

Attachments:

Letter to CRC project director, Aug. 16, 2013

Treasury memo to Treasurer Wheeler regarding CRC feasibility, Sept 3, 2013

Cc:

Senate Republican Leader Ted Ferrioli  
House Republican Leader Mike McLane  
Curtis Robinhold, Chief of Staff, Governor  
Matt Garret, ODOT

# CRC Investment Grade Traffic and Revenue Study

## First Phase Project

Eugene Ryan, CDM Smith  
Tim Boesch, CDM Smith

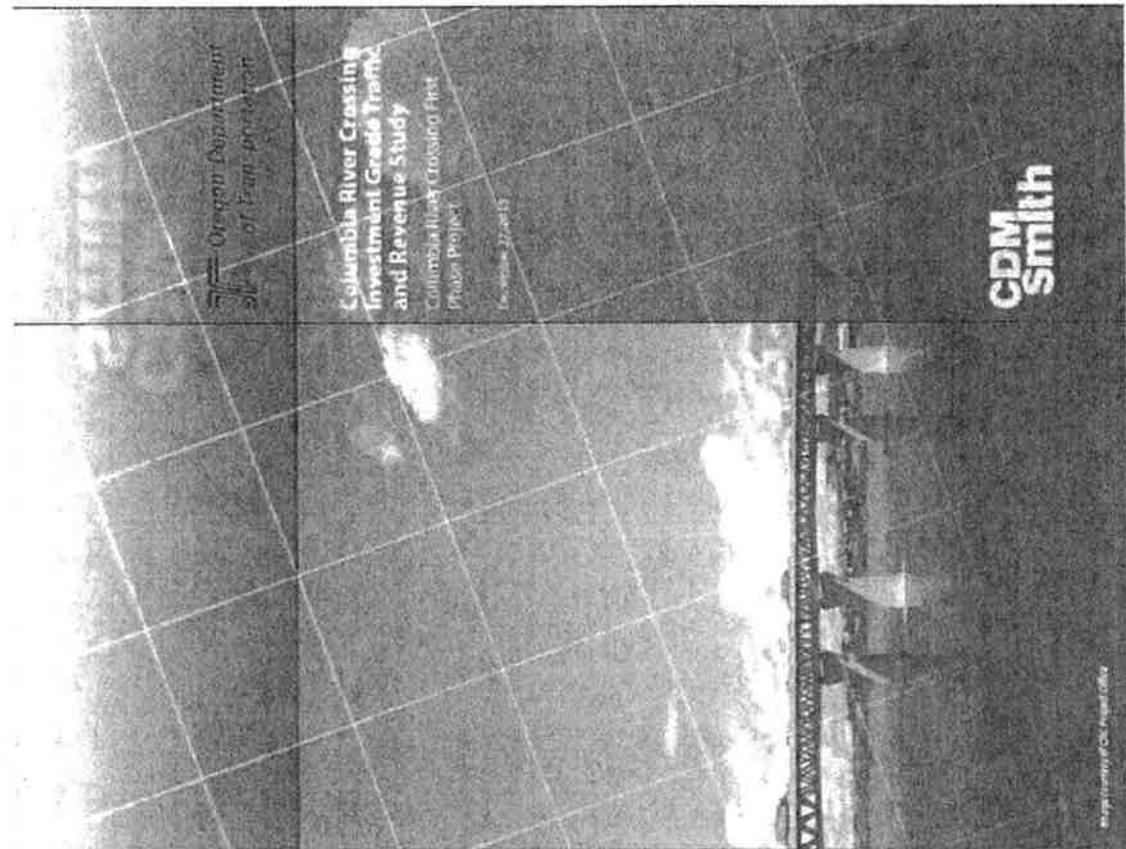
January 7, 2014

Presentation to  
State of Oregon Treasurer

FOR  
DISCUSSION  
PURPOSES  
ONLY

**CDM  
Smith**

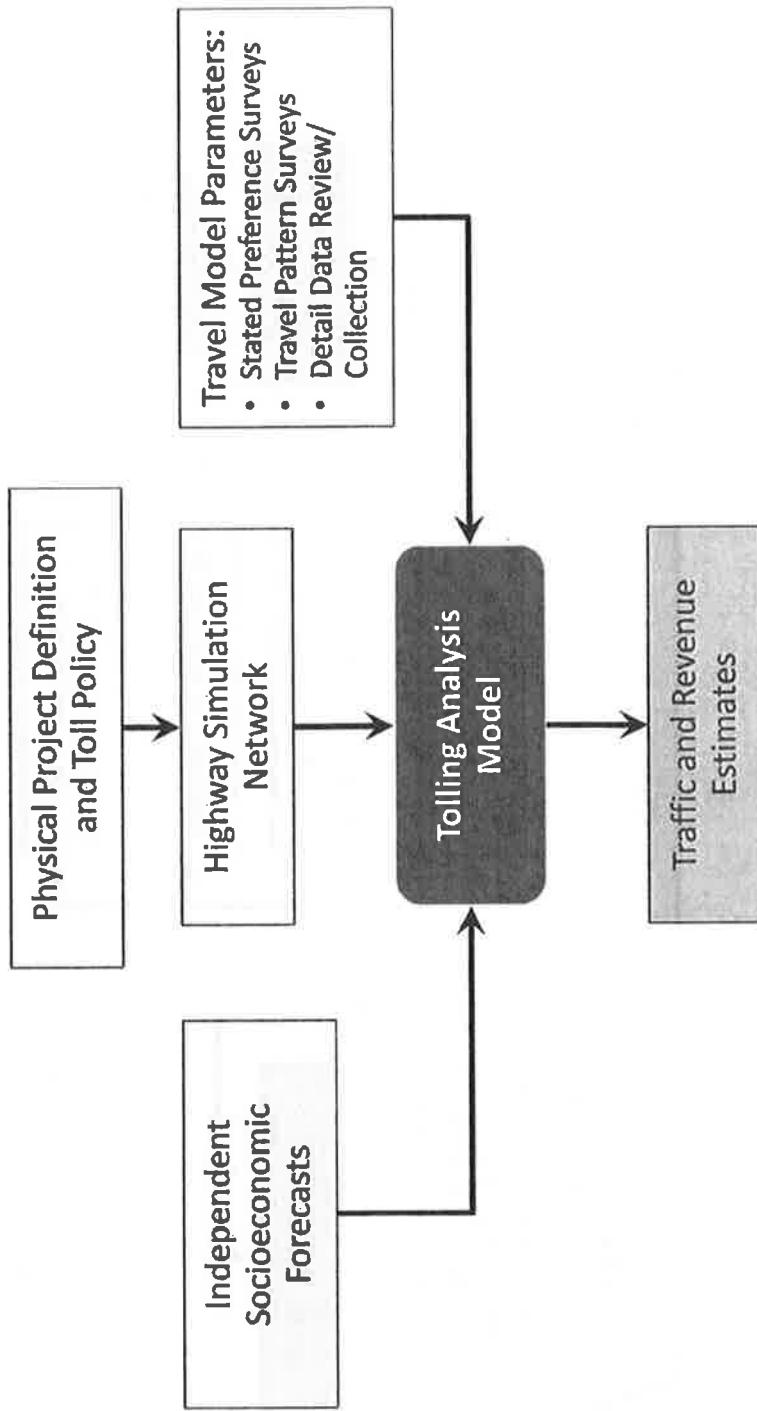
- Details are provided in the December 27, 2013 Report.



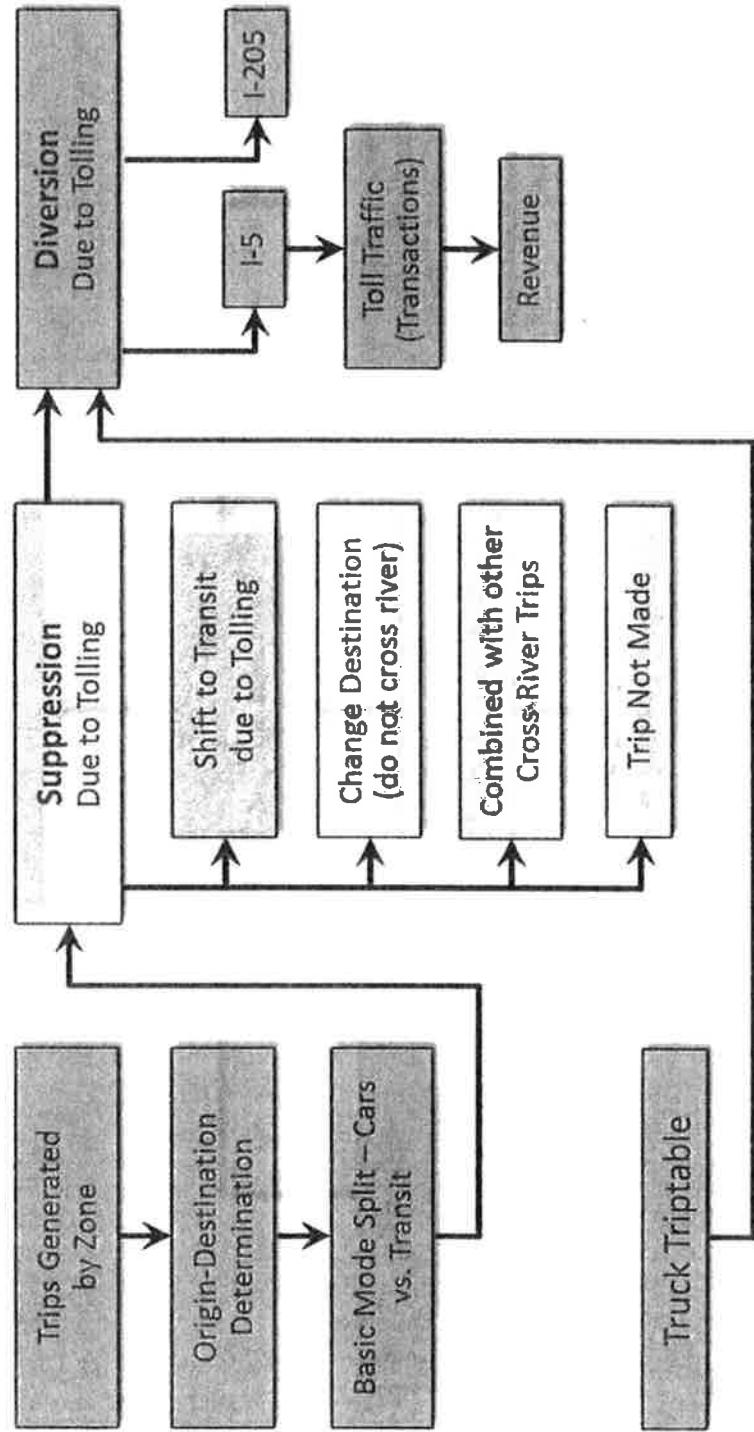
**CDM  
smith**

*For Discussion Purposes Only*

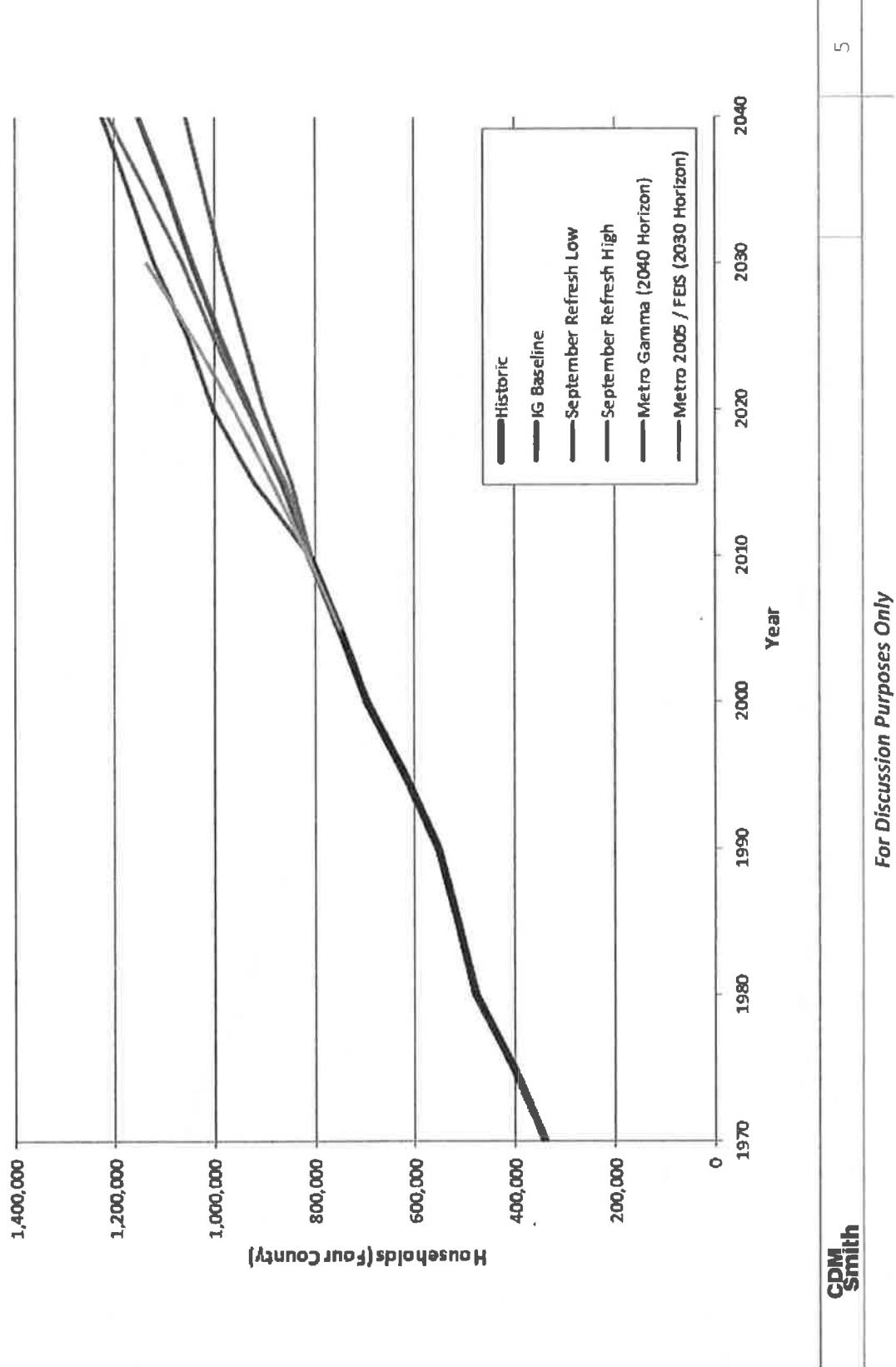
# Traffic and Revenue Modeling Structure



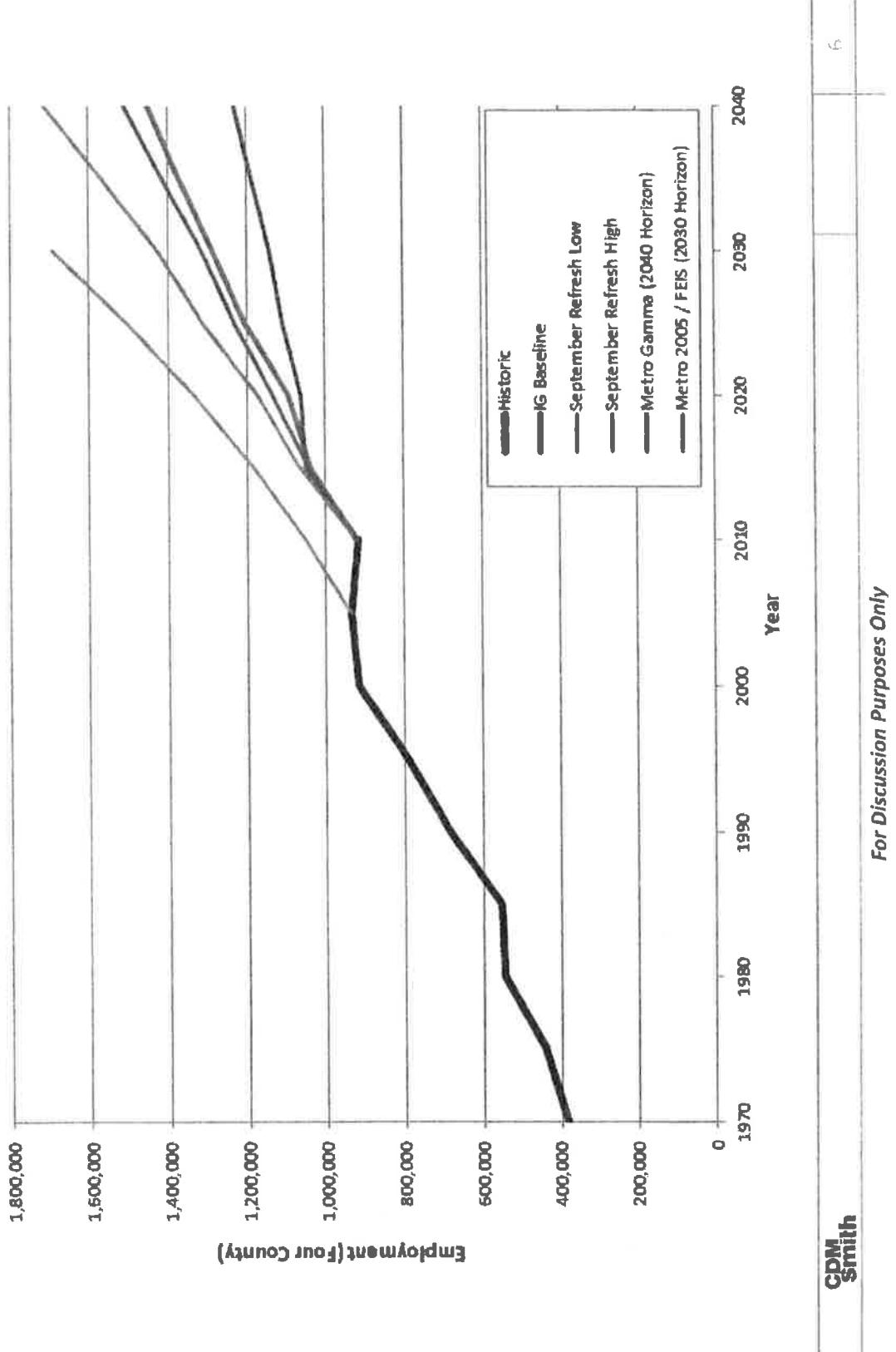
# Tolling Analysis Model



## Socioeconomics – Households



# Socioeconomics – Employment

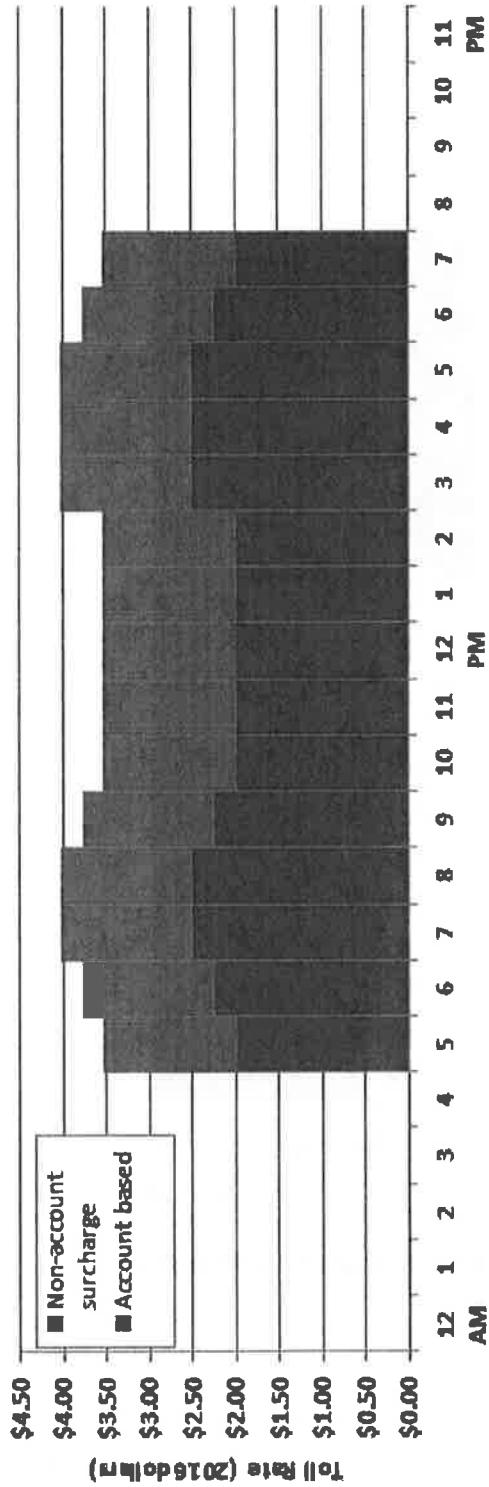


CDM  
Smith

*For Discussion Purposes Only*

# Toll Rate Weekday – FY 2016

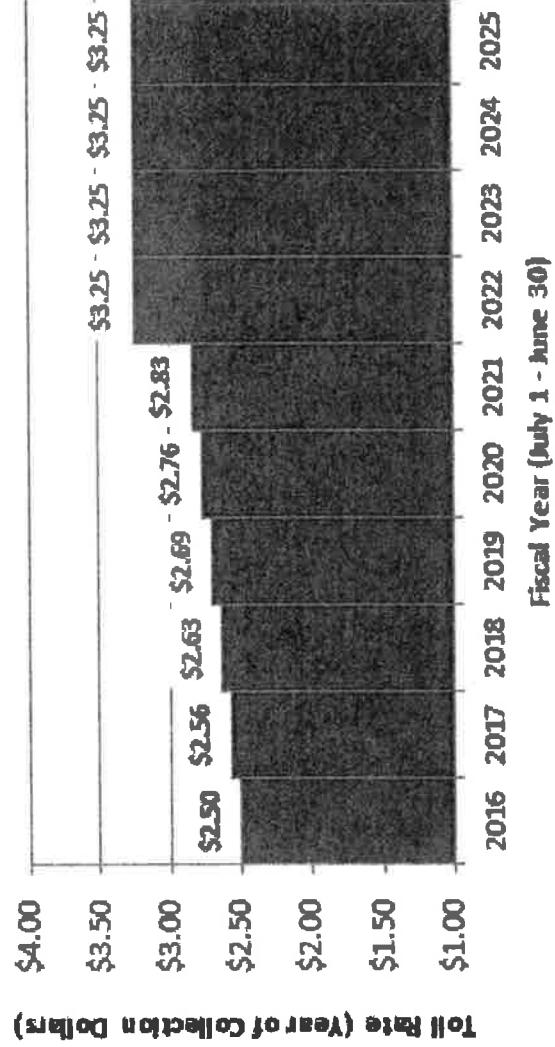
## Passenger Car / 2-Axle



CPM  
Smith

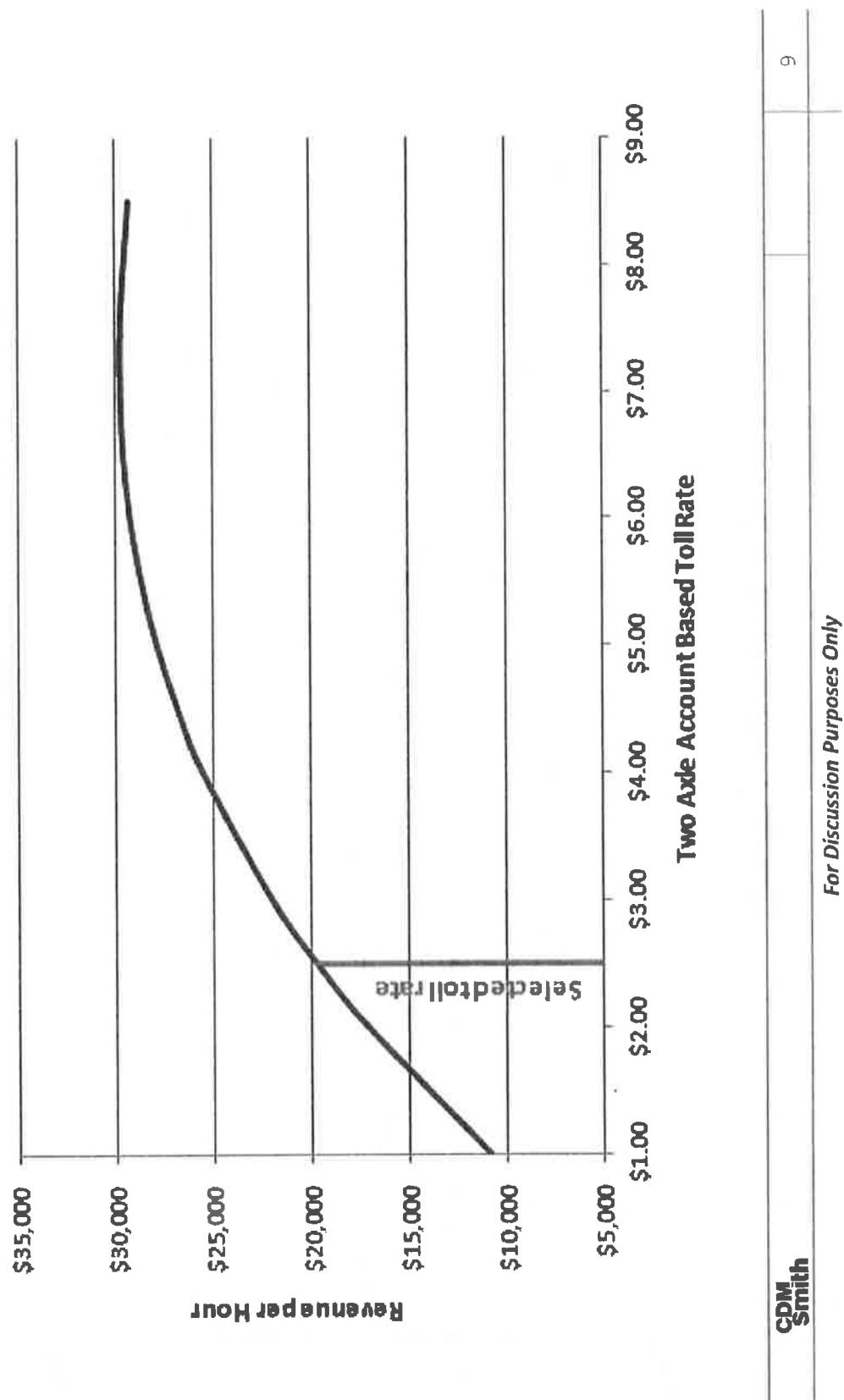
*For Discussion Purposes Only*

## Weekday Peak Period Car / 2-Axle Toll Rate

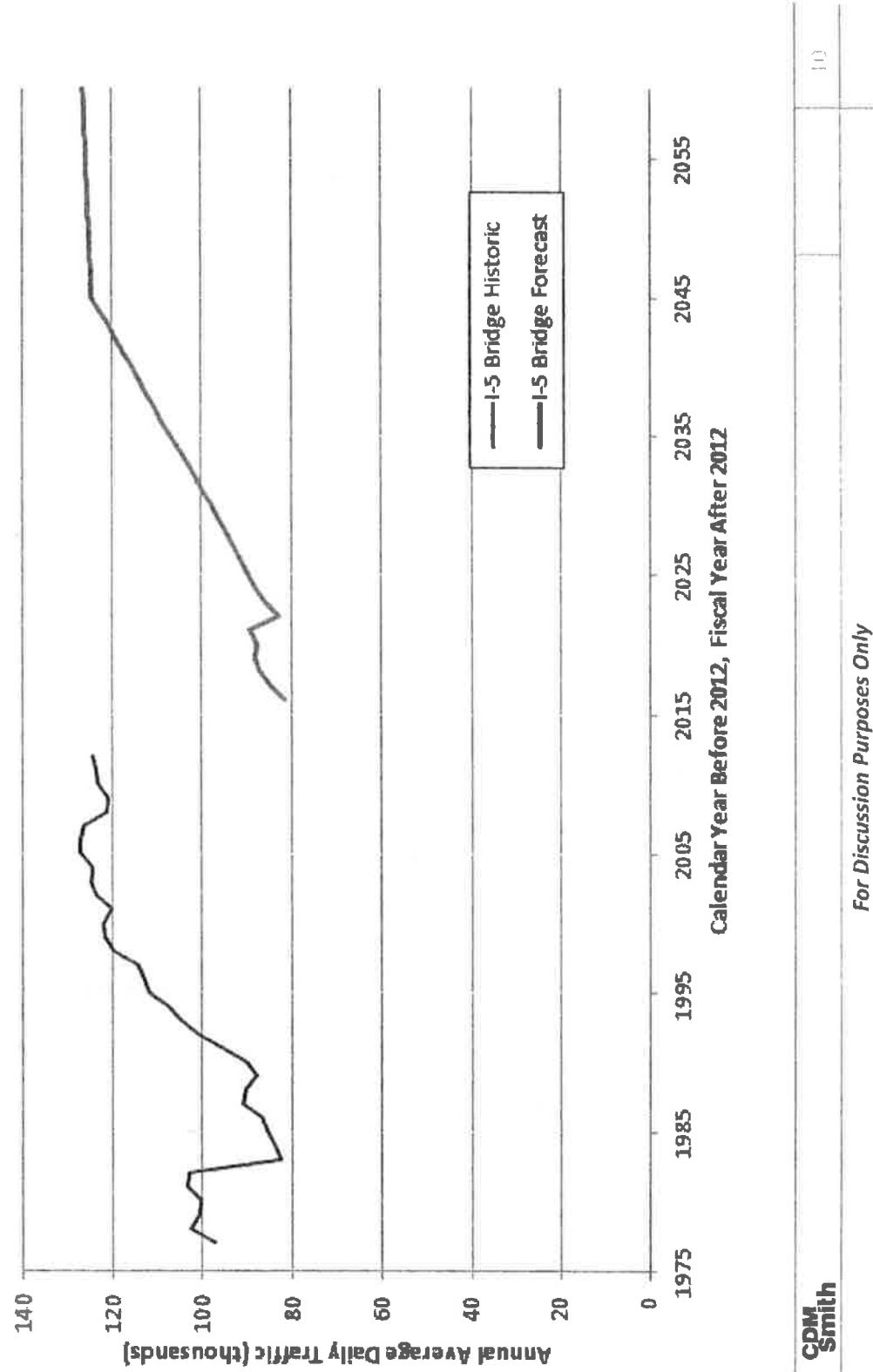


Account Based Toll Rate

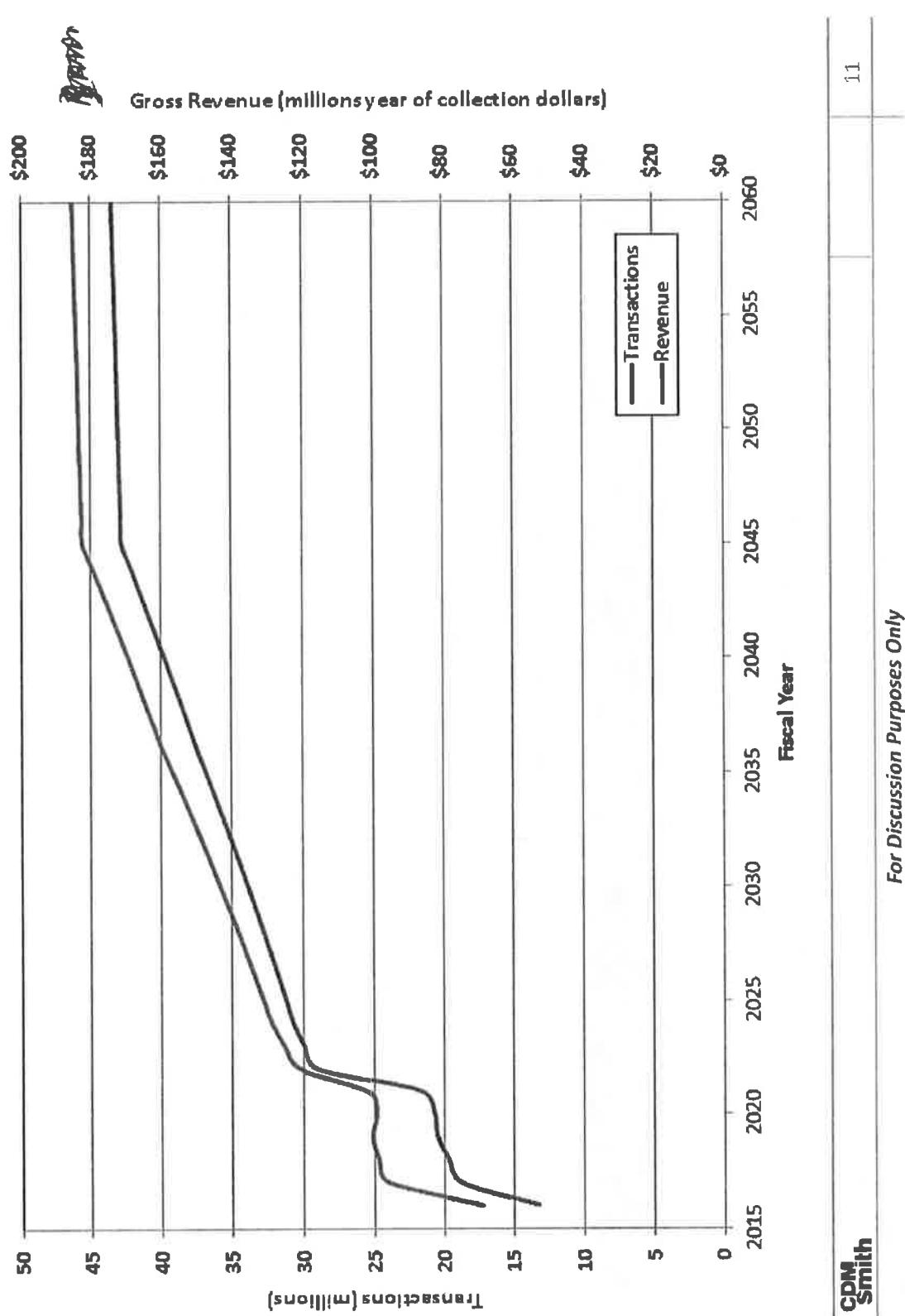
## Toll Sensitivity Curve



## Traffic Results I-5



## Transactions and Gross Revenue



# Sensitivity Test Results

Sensitivity Test	Transactions			Gross Revenue		
	FY 2016	FY 2022	FY 2036	FY 2016	FY 2022	FY 2036
20 Percent Lower Value of Time	-5.3%	-6.4%	-3.8%	-5.5%	-6.5%	-3.8%
Low Socioeconomic Growth		-4.8%	-3.8%		-4.4%	-3.4%
<u>Account Based Market Share</u>						
10 Percentage Points Higher (Input)	1.5%	1.7%	1.0%	-3.3%	-2.7%	-3.4%
10 Percentage Points Lower (Input)	-1.6%	-1.7%	-0.9%	3.3%	2.7%	3.6%
Higher Mode Shift to Transit		-6.8%			-6.0%	

# I-5 Columbia River Crossing Net Toll Revenue Projections

Presentation to Oregon State Treasurer

Brent Baker

January 7, 2014



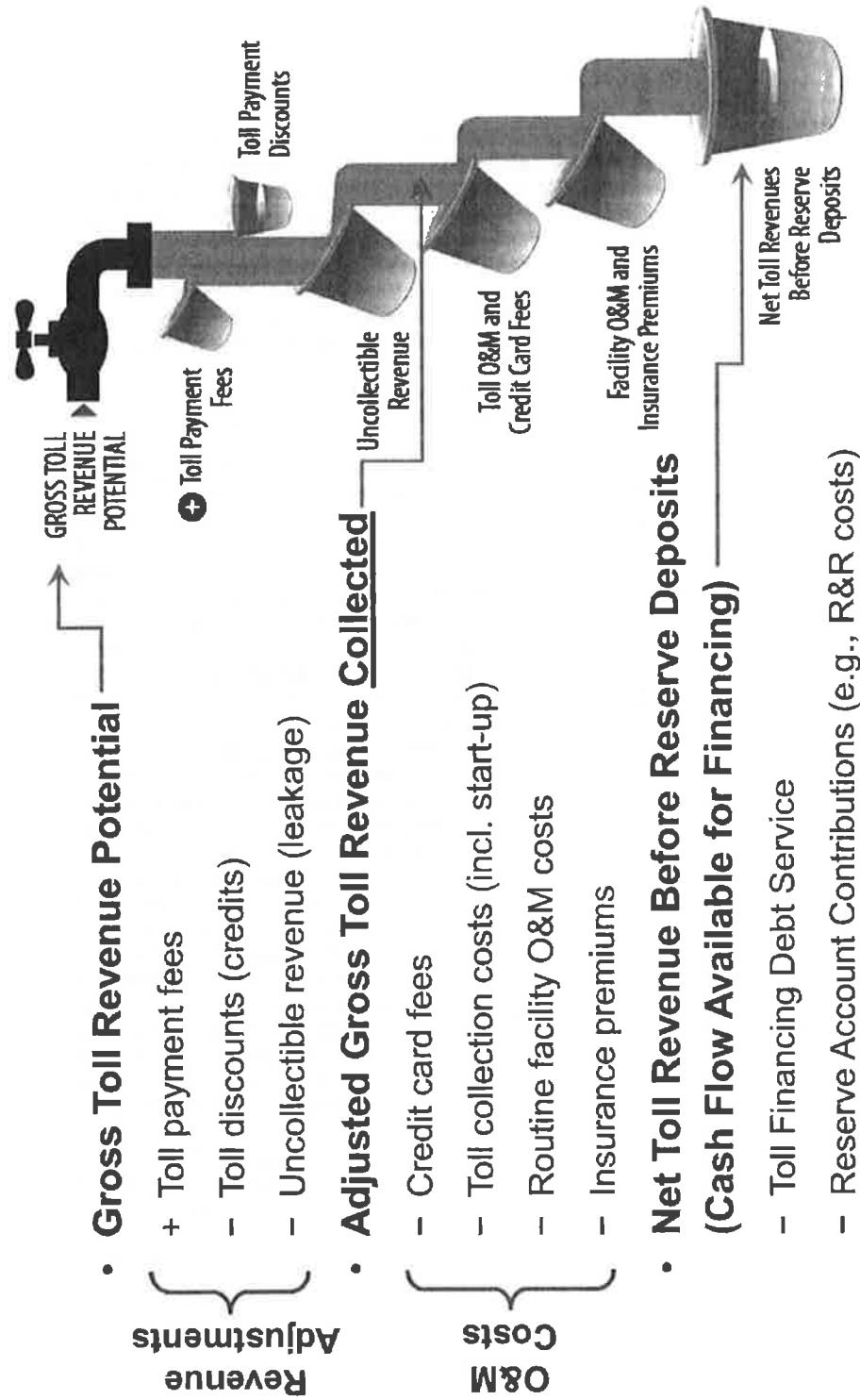
FOR DISCUSSION PURPOSES ONLY

**PARSONS  
BRINCKERHOFF**

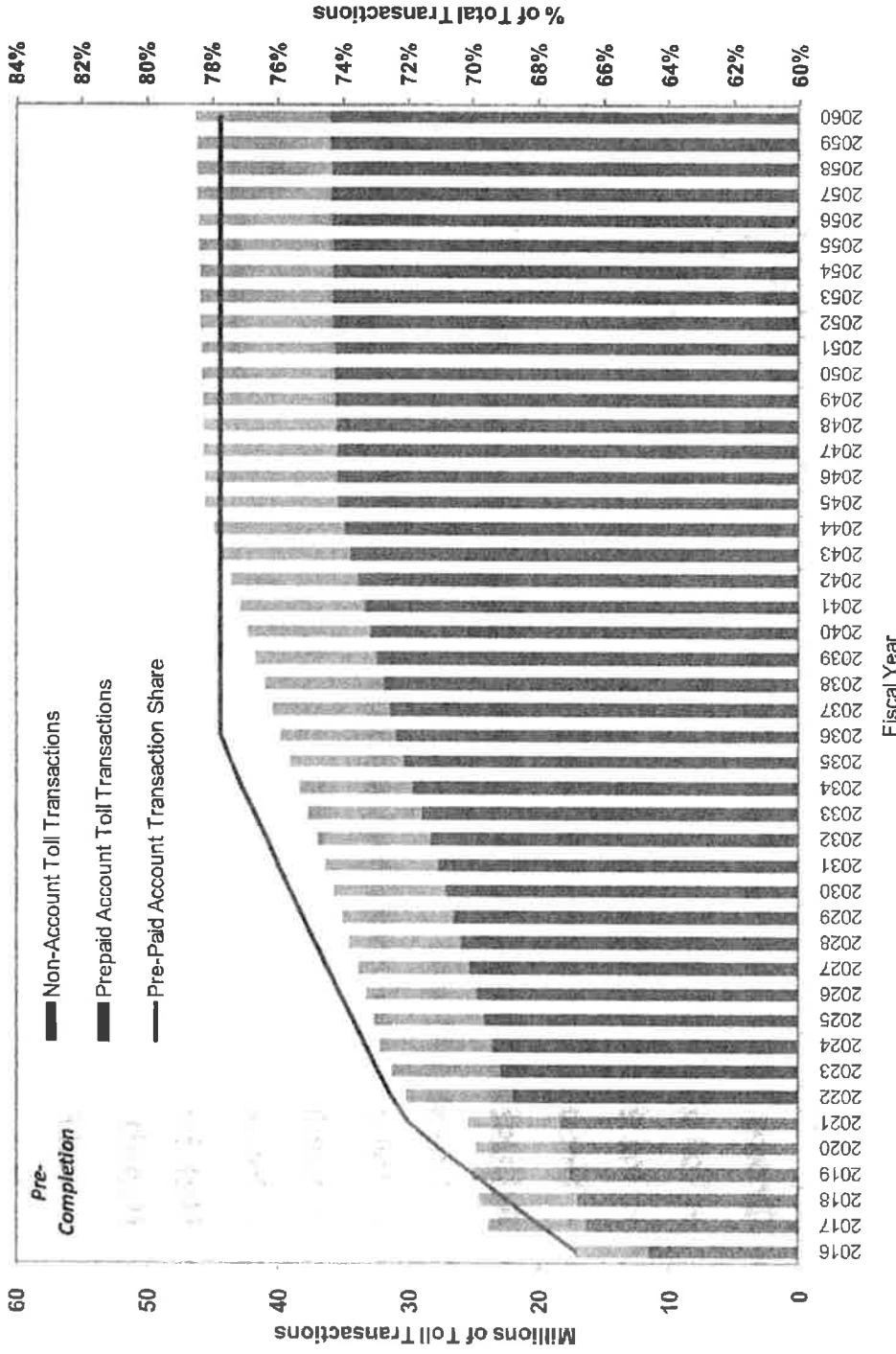
# Net Revenue Projections Approach

- Based on investment grade traffic and gross toll revenue projections by CDM Smith
- Employs conservative assumptions based on national data and experience elsewhere so as to not overstate net revenues
- Analyzes Oregon toll collection as a single facility operation

# Net Revenue Projection Components

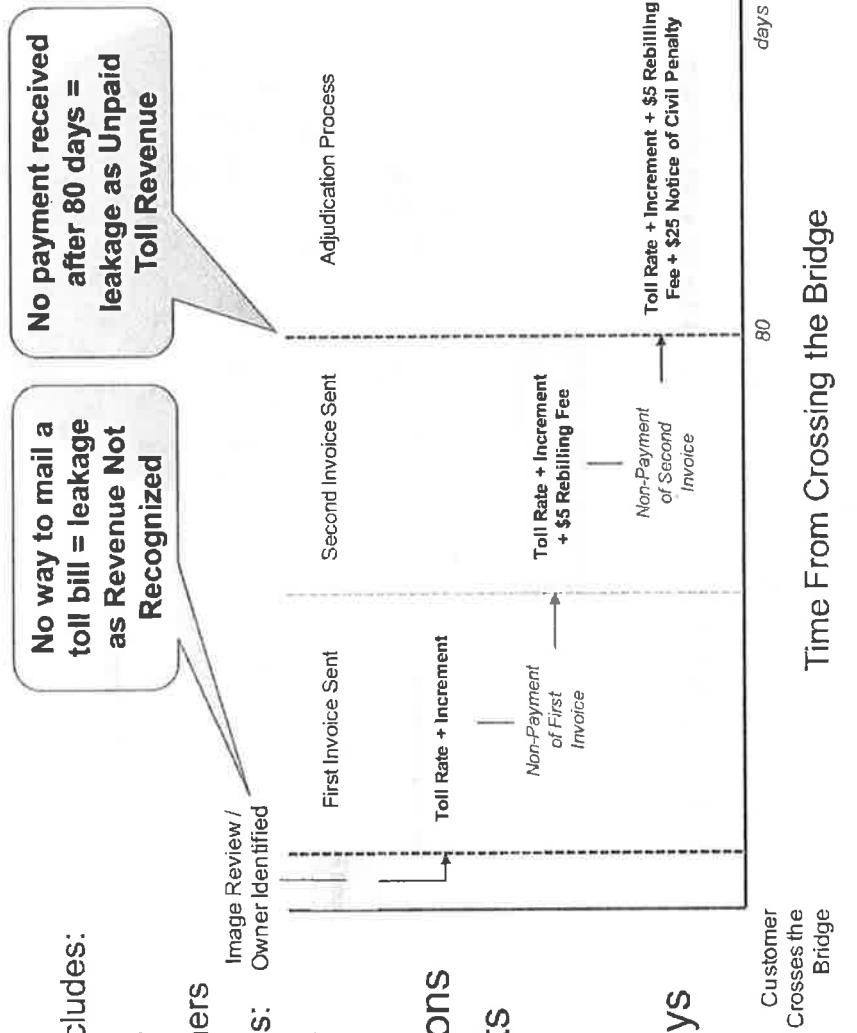


# Toll Payment Method Distribution



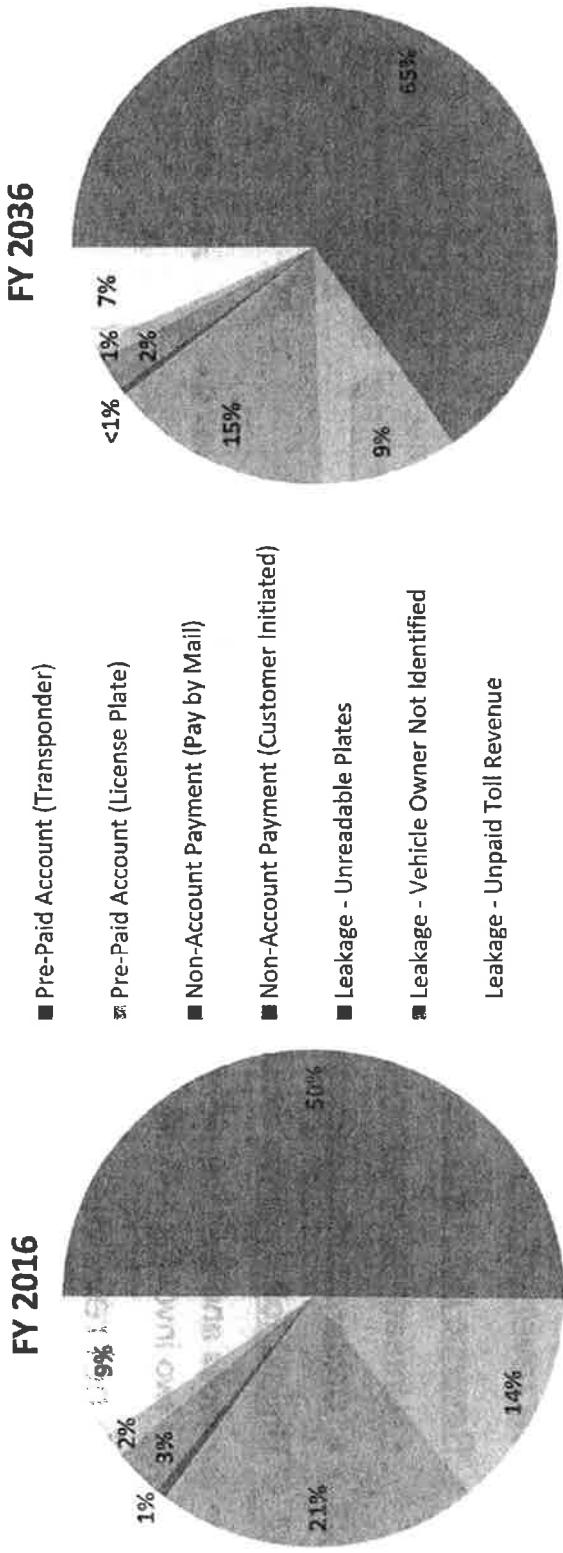
# Pay by Mail Process for Non-Account Customers

- Non-account customers drive revenue leakage
  - Revenue Not Recognized includes:
    - Unreadable license plates
    - Unidentifiable vehicle owners
  - Unpaid Toll Revenue includes:
    - tolls and fees unpaid after two invoices / 80 days
  - The net revenue projections exclude any toll payments potentially recovered via civil penalty adjudication or collections after 80 days



# Revenue Collection and Leakage Projections

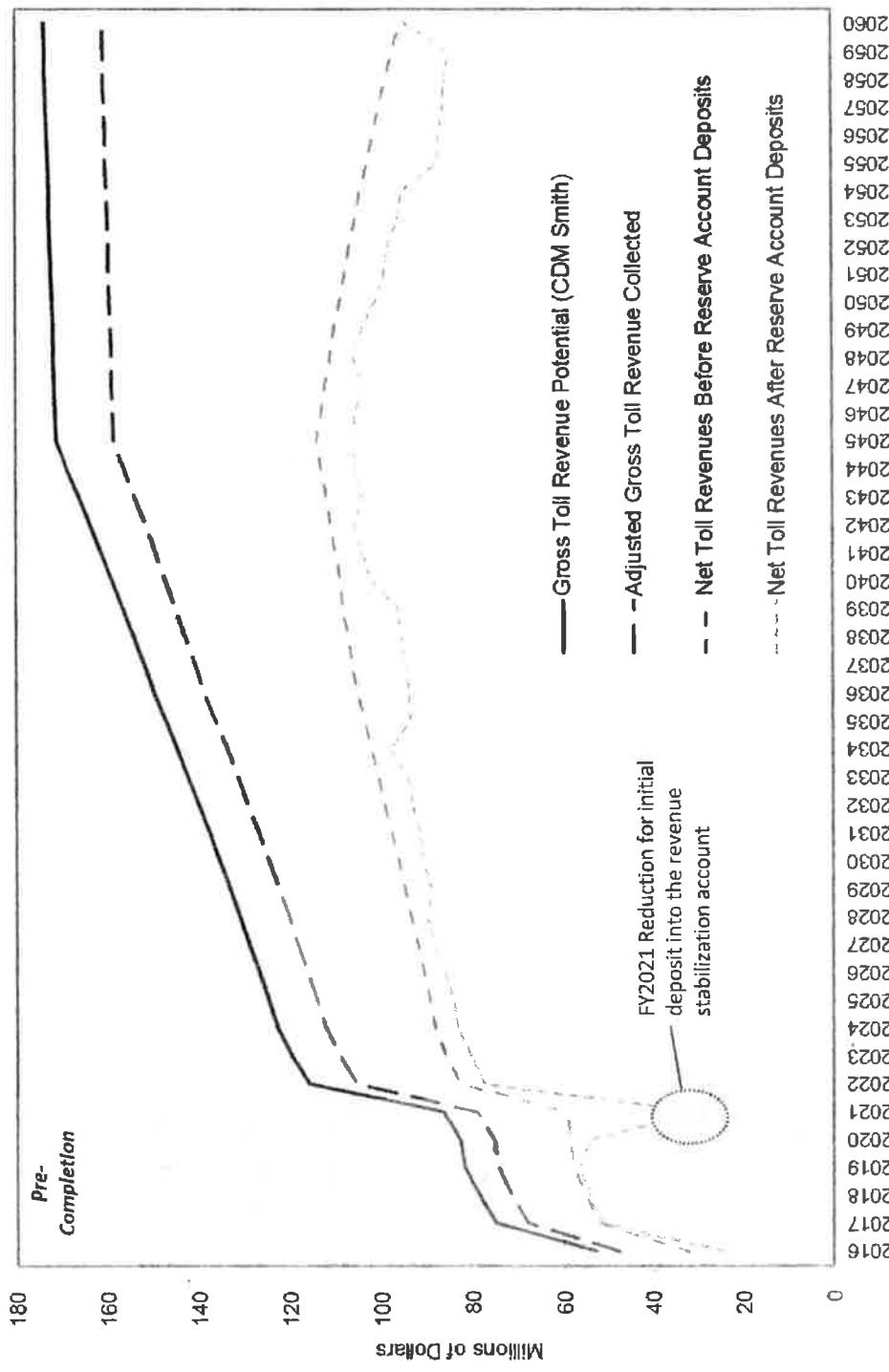
- As pre-paid account transactions increase from 67 to 78%, the rate of uncollectible revenue associated with pay by mail transactions declines from 14% to 10%



# O&M Cost Assumptions

- Toll Collection Costs
  - Customer Service Center and State Operations costs revised to account for Oregon toll collection as a single facility operation
  - Initial FY 2016 staffing: 12 state and 60 CSC full time employees
- Initial Marketing & Start-up Costs — no changes to September 2013 values
- Credit Card Fees — varies with revenue but no assumption changes
- Routine Facility O&M Costs — no changes to September 2013 values
- Bridge Insurance Premiums — no changes to September 2013 values

# Net Revenue Projections



**Additional information can be found in:**

*Columbia River Crossing  
Updated Net Toll Revenue Projections Memorandum  
December 27, 2013*



**State of Oregon  
Department of Transportation  
Oregon State Treasury**



**Summary of Funding Capacity Analysis as of 12/20/2013  
Columbia River Crossing First Phase Program**

**PRAG**

*December 22, 2013*

## Overview of Major Structuring Assumptions – December 13<sup>th</sup> Analysis

	Debt Vehicle	State-Backed Toll Revenue Bonds	TIFIA Loan	Standalone Toll Revenue Bonds (TRBs)
	Credit Structure	Secured by Net Toll Revenues, plus State backstop of revenues and/or GO pledge	Secured by Net Toll Revenues	Secured by Net Toll Revenues (net of O&M)
<input type="checkbox"/> Uses Parson Brinckerhoff net revenue analysis worksheet as of December 6 <sup>th</sup>	Amortization	40 years	35 years from project completion	Max 40 years
<input type="checkbox"/> Rates adjusted upward to reflect higher 30-year Treasury since September Analysis and longer amortization of TRBs with TIFIA scenarios	Minimum Debt Service Coverage	1.30x (note: FEIS assumed 1.25x)	1.15x (FEIS assumed 1.10x)	2.00x Senior; 1.50x Junior
	Current Market Rates (as of 12/11/13) – 30 Yr Yield to Nearest 0.25%	Current Interest Bonds: 4.75% / 5.00% for TIFIA scenarios Capital Appreciation Bonds: 6.00% / 6.25% for TIFIA scenarios	4.00% (30 YR UST plus 1 bp)	Current Interest Bonds: 5.50% / 5.75% for TIFIA scenarios (Senior, low "A") Capital Appreciation Bonds: 7.00% / 7.25% for TIFIA scenarios (Senior)
<input type="checkbox"/> Project sources and uses unchanged from September Analysis; under review and will change, with unknown impact on funding capacity	Debt Service Structure	Proportional to Net Toll Revenues	Proportional to Net Toll Revenues	Proportional to Net Toll Revenues
	Use of Pre-Completion Tolls	Fund O&M Reserve, R&R Reserve, and Revenue Stabilization Fund first; use excess to pay Project Costs.	Fund O&M Reserve, R&R Reserve, and Revenue Stabilization Fund first; use excess to pay Project Costs.	Fund O&M Reserve, R&R Reserve, and Revenue Stabilization Fund first; use excess to pay Project Costs.
	Debt Service Reserve Fund	n/a	n/a	Funded at lesser of Maximum Annual Debt Service, 10% of par, and 125% average annual debt service
	Bond-Related Expenses (COI)	Current Interest Bonds: 0.7% Capital Appreciation Bonds: 1.2%	n/a (paid from revenue, not included in loan sizing)	2.5%

## Results of December 13<sup>th</sup> Analysis

Amounts in \$ Millions	Principal						Non- Project Uses of Proceeds	PAYGO from Pre- Completion in Tolling	Net Proceeds (\$ Millions)	Change from Base (%)
	Standalone Senior CIBs	CAEs	State-Backed CIBs	CABs	TIFIA	TOTAL				
<b>State-Backed Bonds (40-Year)</b>										
Current Rates	-	-	1,319.4	13.1	-	1,332.5	249.3	267.4	1,350.6	n/a
+50bps	-	-	1,193.7	29.6	-	1,223.3	230.9	267.4	1,259.8	(90.8) -6.7%
+100bps	-	-	1,089.9	40.4	-	1,130.3	214.0	267.4	1,183.7	(166.9) -12.4%
+150bps	-	-	1,002.7	46.8	-	1,049.5	200.9	267.4	1,116.0	(234.6) -17.4%
<b>State-Backed Bonds (40-Year) + TIFIA</b>										
Current Rates	-	-	417.3	46.3	900.0	1,363.6	34.2	267.4	1,596.8	n/a n/a
+50bps	-	-	328.3	29.3	900.0	1,257.6	23.6	267.4	1,501.4	(95.4) -6.0%
+100bps	-	-	236.0	28.7	900.0	1,164.7	16.2	267.4	1,415.9	(180.9) -11.3%
+150bps	-	-	137.7	43.9	900.0	1,081.6	10.4	267.4	1,338.6	(258.3) -16.2%
<b>Toll Revenue Bonds + TIFIA</b>										
Current Rates	289.4	107.1	-	-	900.0	1,296.5	66.1	267.4	1,497.8	n/a n/a
+50bps	280.8	40.2	-	-	900.0	1,221.0	57.7	267.4	1,430.7	(67.1) -4.5%
+100bps	224.2	18.5	-	-	900.0	1,142.8	45.5	267.4	1,364.7	(133.1) -8.9%
+150bps	132.5	32.6	-	-	900.0	1,065.1	30.2	267.4	1,302.3	(195.5) -13.1%

## Overview of Major Structuring Assumptions – December 20<sup>th</sup> Analysis

- Uses substantially same assumptions as December 13<sup>th</sup> analysis (e.g., December 6<sup>th</sup> PB net revenue analysis, project sources and uses from September, interest rates as of December 11<sup>th</sup>)
- Rates further adjusted upward to reflect time lag for issuance of state-backed/standalone toll revenue bonds in scenarios which also use TIFIA loan; changes are highlighted in red

Debt Vehicle	State-Backed Toll Revenue Bonds	TIFIA Loan	Standalone Toll Revenue Bonds (TRBs)
Credit Structure	Secured by Net Toll Revenues, plus State backstop of revenues and/or GO pledge	Secured by Net Toll Revenues	Secured by Net Toll Revenues (net of O&M)
Amortization	40 years	35 years from project completion	Max 40 years
Minimum Debt Service Coverage	1.30x (note: FEIS assumed 1.25x)	1.15x (FEIS assumed 1.10x)	2.00x Senior; 1.50x Junior
Current Market Rates (as of 12/11/13) – 30 Yr Yield to Nearest 0.25%	Current Interest Bonds: 4.75% / 5.50% for TIFIA scenarios Capital Appreciation Bonds: 6.00% / 6.75% for TIFIA scenarios	4.00% (30 YR UST plus 1 bp)	Current Interest Bonds: 7.00% for TIFIA scenarios (Senior, low "A" issued in 2021) Capital Appreciation Bonds: 8.50% for TIFIA scenarios (Senior)
Debt Service Structure	Proportional to Net Toll Revenues	Proportional to Net Toll Revenues	Proportional to Net Toll Revenues
Use of Pre-completion Tolls	Fund O&M Reserve, R&R Reserve, and Revenue Stabilization Fund first; use excess to pay Project Costs.	Fund O&M Reserve, R&R Reserve, and Revenue Stabilization Fund first; use excess to pay Project Costs.	Fund O&M Reserve, R&R Reserve, and Revenue Stabilization Fund first; use excess to pay Project Costs.
Debt Service Reserve Fund	n/a	n/a	Funded at lesser of Maximum Annual Debt Service, 10% of par, and 125% average annual debt service
Bond-Related Expenses (COI)	Current Interest Bonds: 0.7% Capital Appreciation Bonds: 1.2%	n/a (paid from revenue, not included in loan sizing)	2.5%

## Results of December 20<sup>th</sup> Analysis

Amounts in \$ Millions	Principal				TIFIA	TOTAL	Non- Project Uses of Proceeds	PAYGO from Pre- Completion Tolling	Net Proceeds (\$ Millions)	Change from Base ("%)
	Standalone Senior CIBs	CIBs	State-Backed CIBs	CABs						
<b>State-Backed Bonds (40-Year)</b>										
Current Rates	-	1,319.4	13.1	-	1,332.5	249.3	267.4	1,350.6	n/a	n/a
+50bps	-	1,193.7	29.6	-	1,223.3	230.9	267.4	1,259.8	(90.8)	-6.7%
+100bps	-	1,089.9	40.4	-	1,130.3	214.0	267.4	1,183.7	(166.9)	-12.4%
+150bps	-	1,002.7	46.8	-	1,049.5	200.9	267.4	1,116.0	(234.6)	-17.4%
<b>State-Backed Bonds (40-Year) + TIFIA</b>										
Current Rates	-	432.0	11.8	900.0	1,343.8	39.2	267.4	1,572.0	n/a	n/a
+50bps	-	324.4	15.3	900.0	1,239.7	24.7	267.4	1,482.4	(89.7)	-5.7%
+100bps	-	225.7	23.3	900.0	1,149.0	16.5	267.4	1,399.9	(172.2)	-11.0%
+150bps	-	131.0	38.8	900.0	1,069.8	10.6	267.4	1,326.6	(245.4)	-15.6%
<b>Toll Revenue Bonds + TIFIA</b>										
Current Rates	361.0	6.7	-	-	900.0	1,267.7	74.0	267.4	1,461.1	n/a
+50bps	280.2	7.3	-	-	900.0	1,187.5	56.9	267.4	1,398.0	(63.2)
+100bps	196.9	13.6	-	-	900.0	1,110.5	42.1	267.4	1,335.8	(125.3)
+150bps	117.2	26.1	-	-	900.0	1,043.3	27.9	267.4	1,282.8	(178.3)