

# Tacoma Narrows Bridge Rate Setting Process

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**Washington State Transportation Commission**  
**March 20, 2012**

# Presentation Outline

- Tacoma Narrows Bridge (TNB) Funding Requirements
- Information Provided to the Citizen's Advisory Committee (CAC)
- Rate Scenarios Requested by Transportation Commissioners
- Payment Method Cost Differentials
- Forecasting Risk



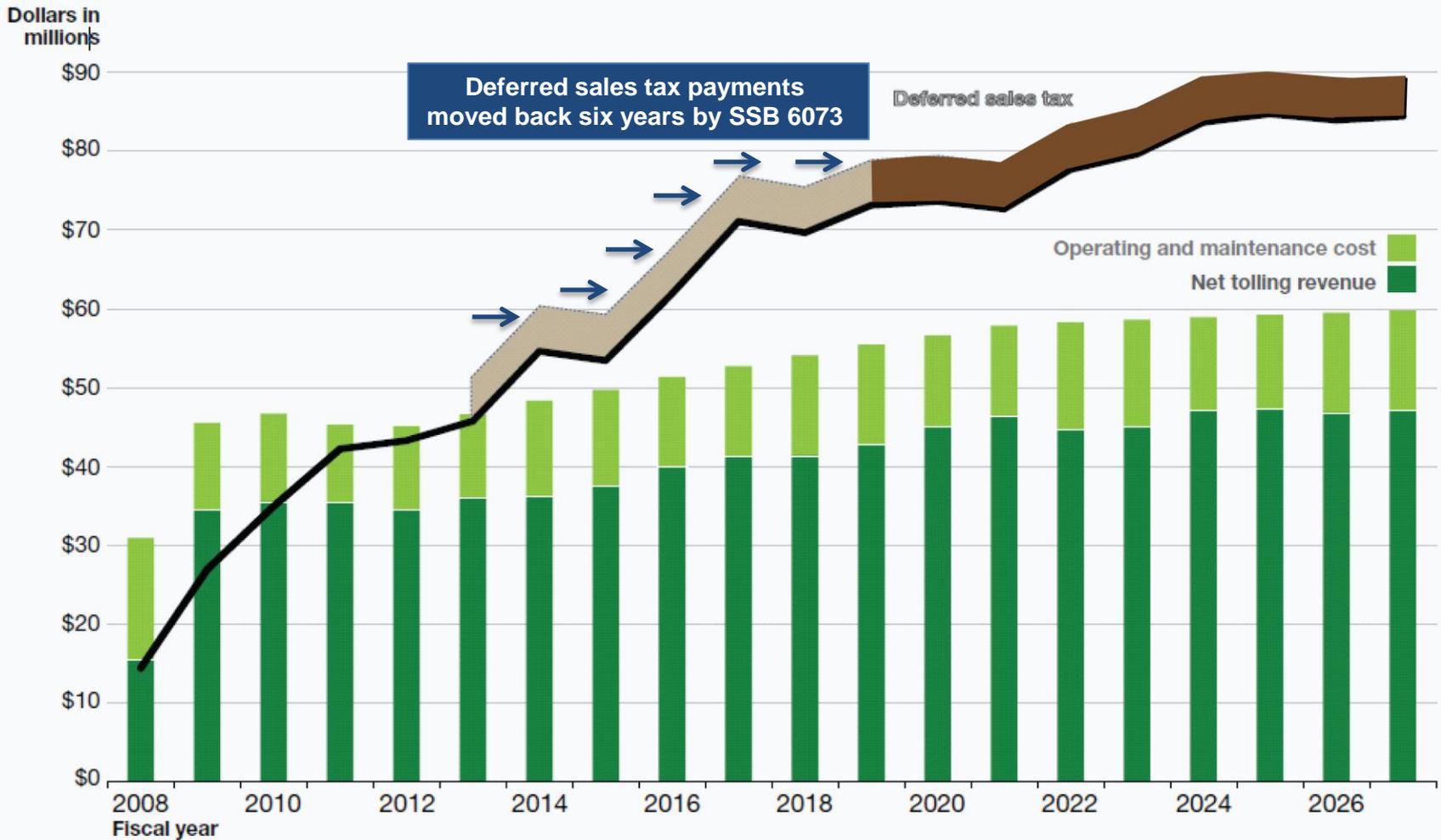
# TNB Rate-setting Requirements

- RCW 47.46.100 states the toll charges must be imposed in amount sufficient to:
  - Provide for annual operating and maintenance expenses, except as provided in RCW [47.56.245](#);
  - Make payments required under RCW [47.56.165](#) and [47.46.140](#), including insurance costs and the payment of principal and interest on bonds issued for any particular toll bridge or toll bridges; and
  - Repay the motor vehicle fund under RCW [47.46.110](#), [47.56.165](#), and [47.46.140](#).
- Transportation Commission policy requires that the sufficient fund balance in the Tacoma Narrows Bridge account each year be 12.5% of annual debt service and expenditures.
- Prior forecasts suggested that a toll rate increase might not be needed before July 1, 2012.
- Rate increase was deferred in 2010, reflecting a conscious decision to lower fund balance to the 12.5% sufficient balance policy level.

# Tacoma Narrows Bridge toll revenue vs. debt service

(including transponder sales, penalties and fees)

November 2011 revenue forecast; no future toll increases assumed



Actual toll rate	\$1.75 T \$3.00 C	\$2.75 Transponder \$4.00 Cash
2002 plan toll rate	\$3.00	\$4.00
	\$5.00	\$6.00

Note: Operating and maintenance cost reflect actual expenditures through fiscal year 2011, allotted amounts for 2012 and 2013, and estimates for the out-biennia are based on WSDOT's 2012 supplemental budget request.

# TNB Funding Needs for FY 2013

## From TNB Baseline Financial Plan

- **Starting Fund Balance:** **\$4.47M**  
Below the 12.5% sufficient minimum balance policy
- **2012 Baseline - costs exceeded revenues by:** **- \$6.52M**  
The imbalance between costs and revenues reduces the fund balance and carries forward to 2013\*
- **Changes from FY 2012**
  - Baseline revenues are forecast to increase by: **+\$2.48M**
  - Increase in debt service cost in 2013 **- \$2.48M**
  - Increase in other costs in 2013 **- \$1.82M**
- **Ending FY2013 fund balance with no toll increase** **- \$3.87M**
  - 12.5% Sufficient Minimum Balance (SMB)** **\$7.13M**
  - Additional Revenues Needed to Achieve SMB** **\$11.00M**

**NOTE: \$5.7M more would have been needed for deferred sales tax payments if SSB 6073 had not passed**

# TNB Rate-setting Milestones

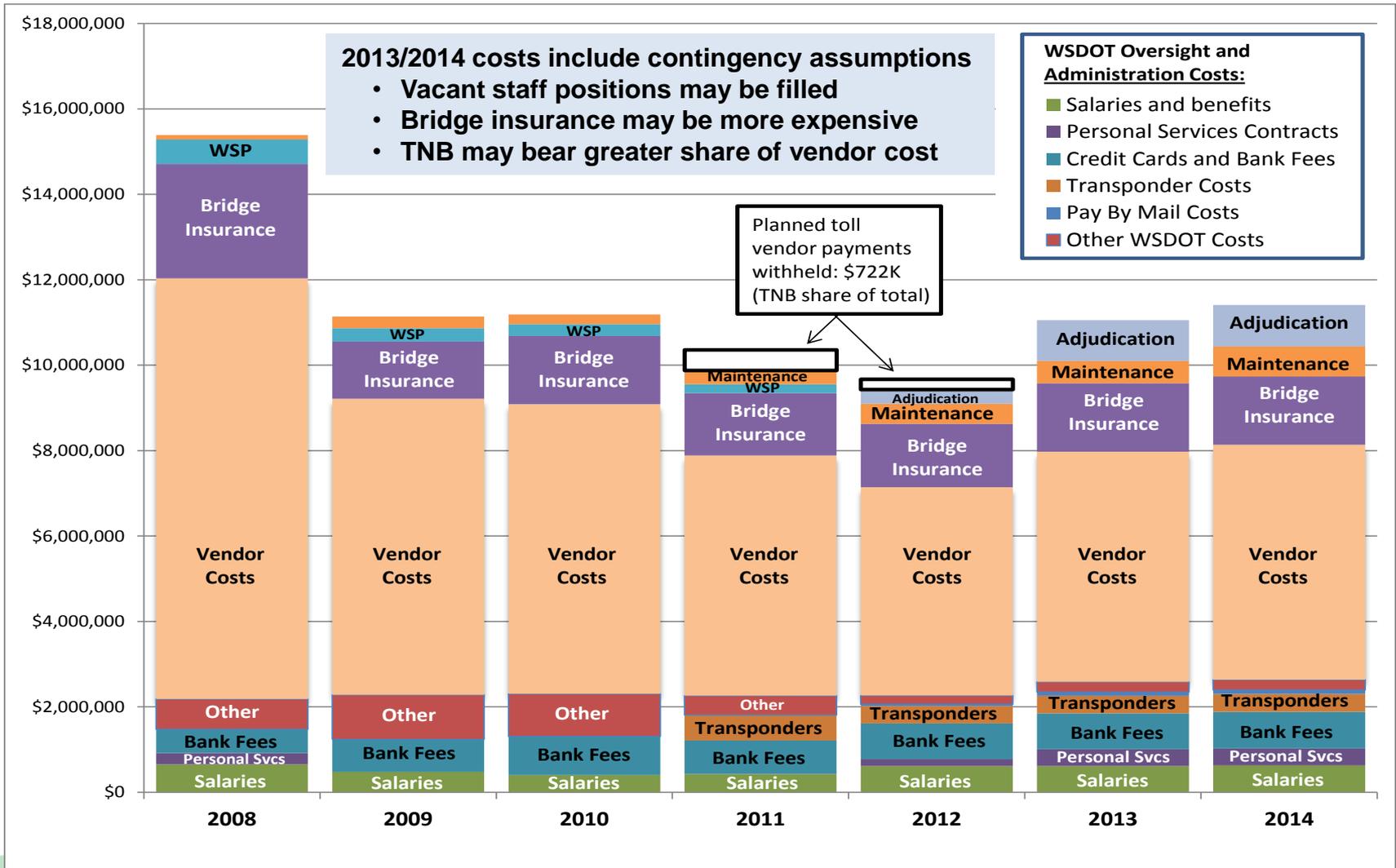
- **November 16:** Transportation Commission/TNB Citizen Advisory Committee Toll Rate Setting Workshop
- **January 17:** Transportation Commission Initiated Washington Administrative Code Process (Filed CR 101)
- **TNB Citizens' Advisory Committee (CAC) Meetings:**
  - January 11: Overview presentation, results of four preliminary scenarios
  - February 8: Responded to initial CAC questions
  - February 22: Responded to additional questions, additional scenarios
  - March 8: Results of more scenarios and CAC recommendation
- **Upcoming Commission Public Input Meetings and Action:**
  - April 18: Public Input Meeting (Port Orchard)
  - April 19: Public Input Meeting (Gig Harbor)
  - May 21: Public Hearing (Gig Harbor)
  - May 29: Final Commission Action (File CR 103)

# CAC Discussion Focused on Cost Control

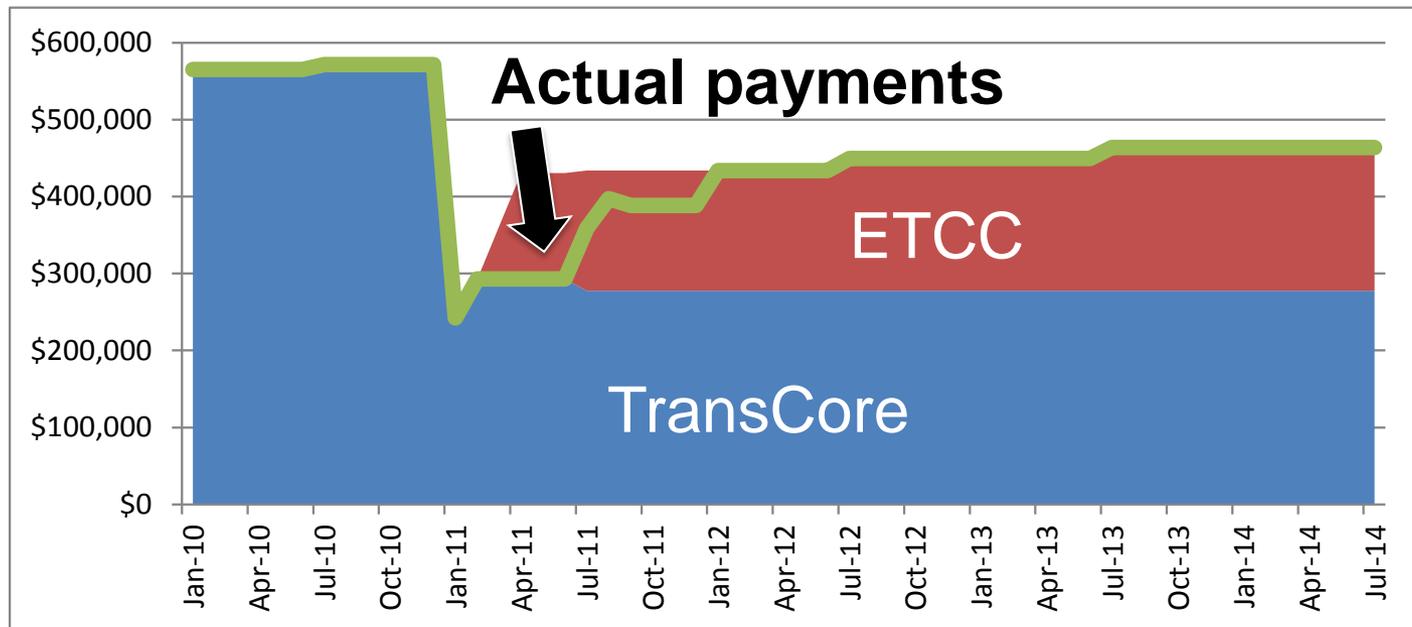
## Concerns included (among others):

- Whether 12.5% sufficient minimum balance policy is justified
- Whether debt service withholding should be included in sufficient minimum balance calculation
- Whether civil penalty costs will exceed revenues
- Whether costs should include “contingencies”
- How ratepayers will be held harmless from new vendor transition costs
- Whether the \$1.50 differential for Pay By Mail is sufficient to cover costs

# TNB Toll Collection Costs Since 2008

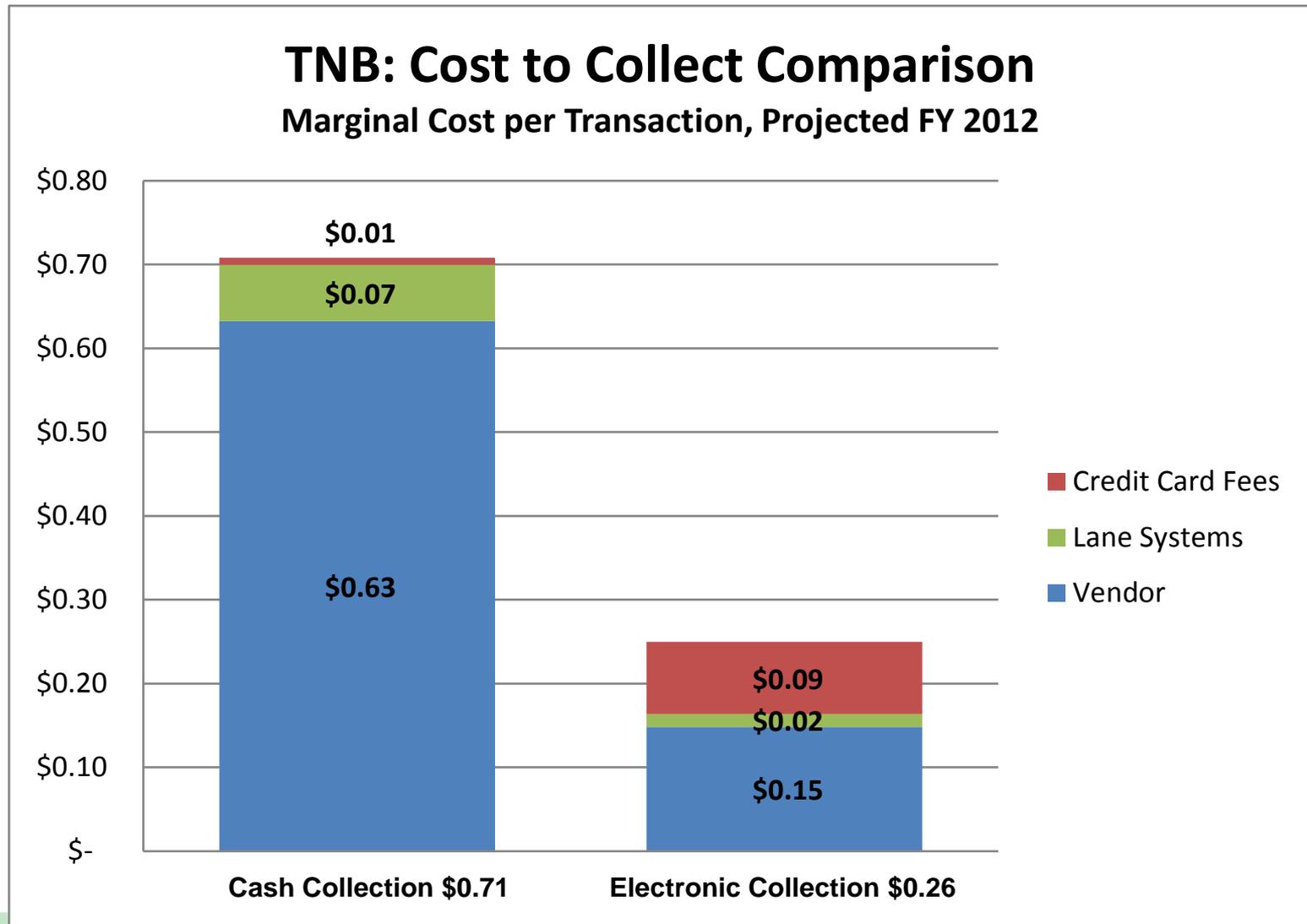


# Vendor Costs with New Contract



- TransCore now provides lane systems and cash collection only
- ETCC customer service center contract has a lower price
- No payments made to ETCC between February and June; only partial payments since July until SR 520 tolling is operational

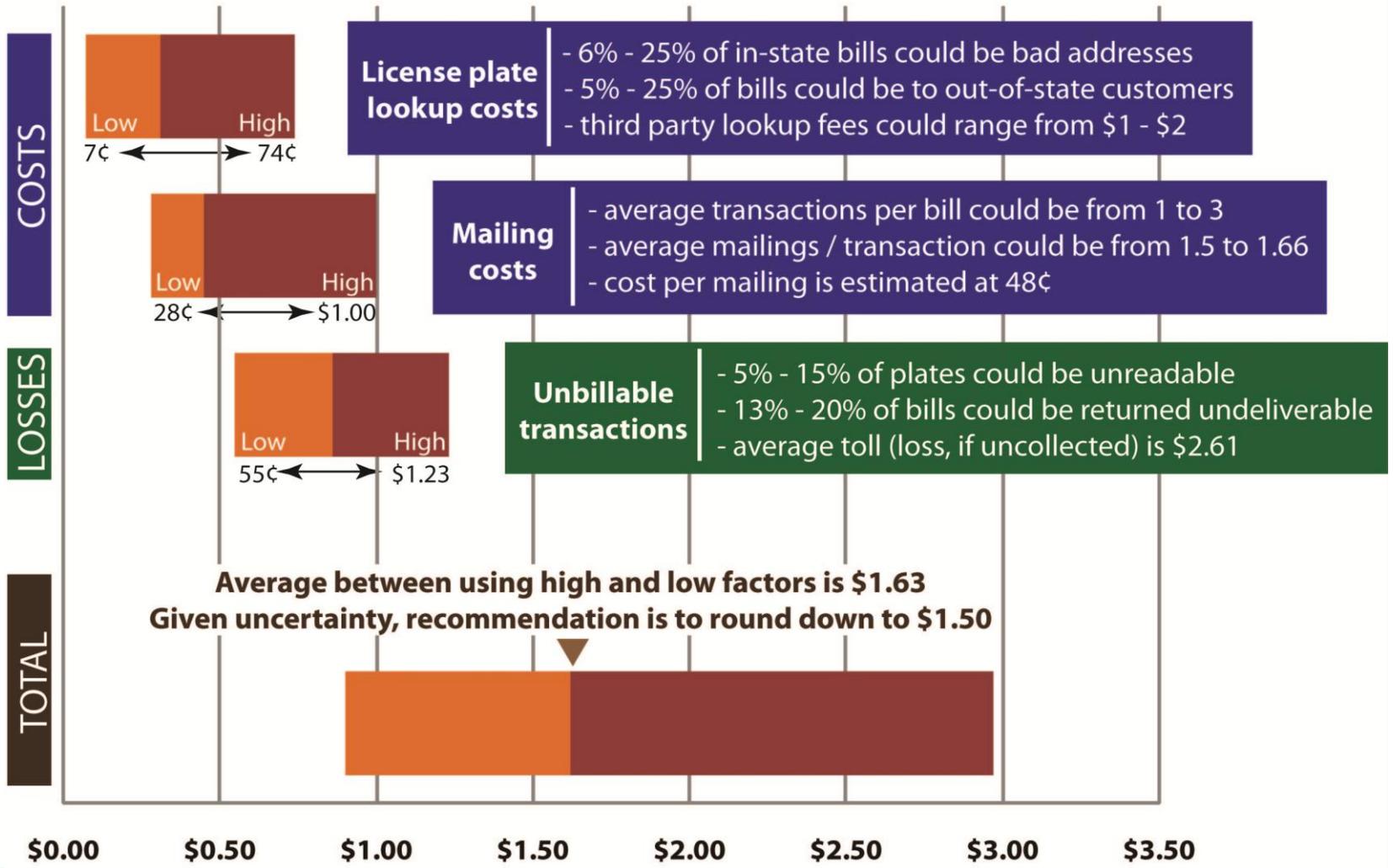
# Cost to Collect Cash and *Good To Go!*



# Incremental Cost of Pay By Mail

- **\$1.50 increment was calculated for SR 520 and TNB and then rounded**
  - Based on assumptions – since no actual data so far
  - Commission direction to use a consistent rate on both facilities
- **Includes incremental toll collection costs**
  - Reviewing and looking up license plates
  - Sending and processing bills
- **Also includes losses from unbillable transactions**
  - Unreadable plates
  - Bad addresses
  - *Does not include losses from billed but unpaid tolls and penalties*
- **Increment set at a midpoint between high and low assumptions**
  - Will revisit Pay By Mail toll rates when actual data is available

# Pay By Mail Increment Assumptions



# Summary of Rate Scenarios

- CDM Smith prepares traffic and revenue forecasts for rate scenarios. A few were generated by WSDOT by interpolating between previous CDM Smith forecasts.
- The CAC requested nine scenarios: 4 prior to their first meeting, 2 more prior to their third meeting, and 3 more prior to their fourth meeting.
- Senator Kilmer's bill (SSB 6073) to further defer sales taxes from bridge construction picked up steam late in the CAC deliberation process. **This bill changed the funding need.**
- Legislative staff requested four interpolated scenarios to show the effect of SSB 6073. These were shared with the CAC.
- Forecasts have been prepared for the CAC recommended rates, and 2 other scenarios requested by the Commission Toll Subcommittee.
- The following scenario evaluations all reflect passage of SSB 6073.

# Scenarios Requested by the CAC

## 2012 Citizen Advisory Committee Toll Scenario Results

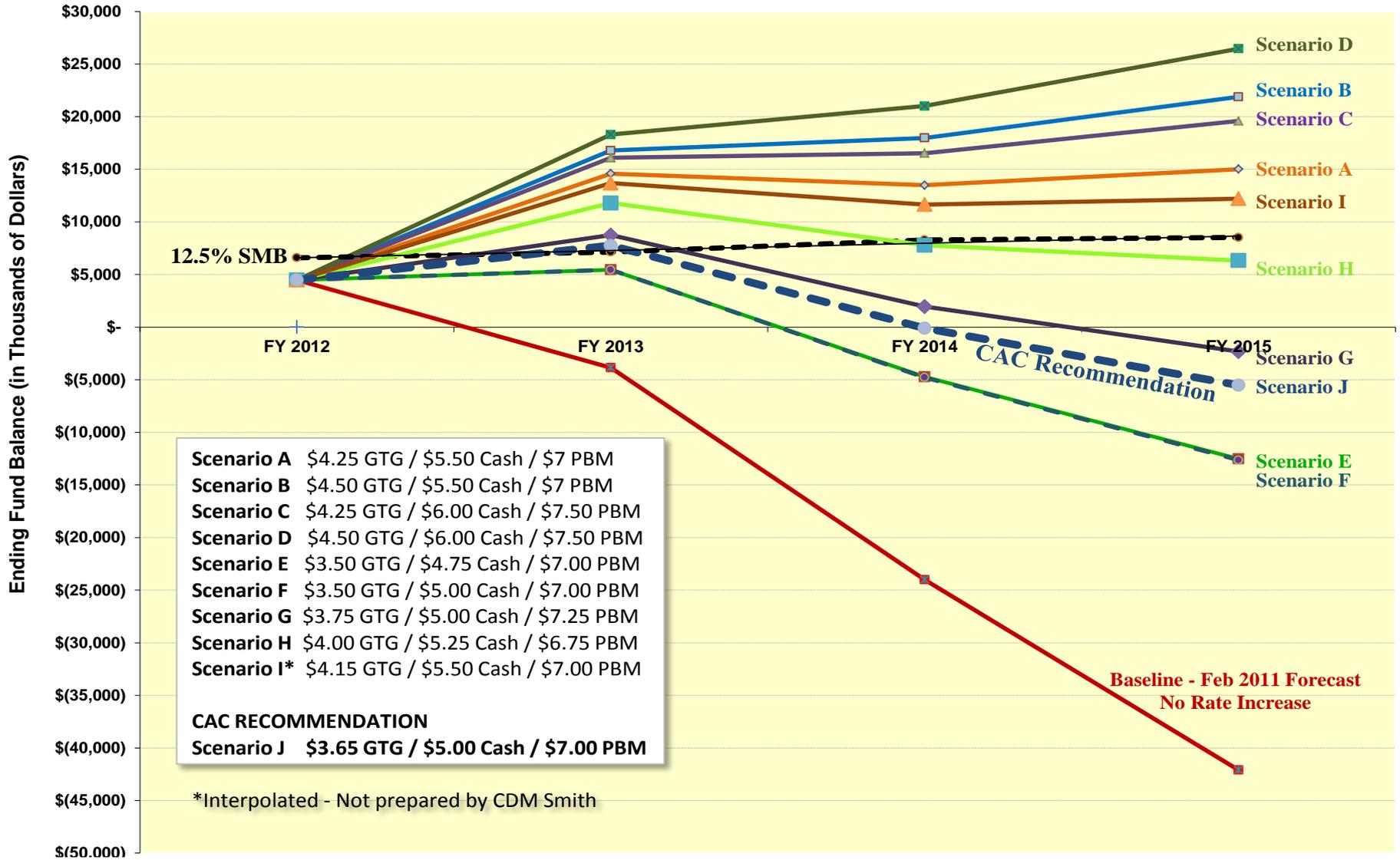
Reflects Passage of SSB 6073 (Deferring Sales Taxes)

		FY 2012	FY 2013	FY 2014	FY 2015
12.5% Sufficient Minimum Balance (SMB)		6,594	7,130	8,285	8,512
<b>Baseline Scenario - February 2012 Forecast</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ (3,859)	\$ (24,014)	\$ (42,101)
\$2.75 GTG / \$4 Cash / \$5.50 PBM	Sufficient Fund Balance Coverage	8.5%	-6.8%	-36.2%	-61.8%
<b>Scenario A</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 14,582	\$ 13,483	\$ 15,005
\$4.25 GTG / \$5.50 Cash / \$7 PBM	Sufficient Fund Balance Coverage	8.5%	25.6%	20.3%	22.0%
<b>Scenario B</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 16,783	\$ 17,977	\$ 21,880
\$4.50 GTG / \$5.50 Cash / \$7 PBM	Sufficient Fund Balance Coverage	8.5%	29.4%	27.1%	32.1%
<b>Scenario C</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 16,090	\$ 16,524	\$ 19,583
\$4.25 GTG / \$6.00 Cash / \$7.50 PBM	Sufficient Fund Balance Coverage	8.5%	28.2%	24.9%	28.8%
<b>Scenario D</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 18,291	\$ 21,017	\$ 26,458
\$4.50 GTG / \$6.00 Cash / \$7.50 PBM	Sufficient Fund Balance Coverage	8.5%	32.1%	31.7%	38.9%
<b>Scenario E</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 5,458	\$ (4,724)	\$ (12,514)
\$3.50 GTG / \$4.75 Cash / \$7.00 PBM	Sufficient Fund Balance Coverage	8.5%	9.6%	-7.1%	-18.4%
<b>Scenario F</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 5,446	\$ (4,792)	\$ (12,647)
\$3.50 GTG / \$5.00 Cash / \$7.00 PBM	Sufficient Fund Balance Coverage	8.5%	9.5%	-7.2%	-18.6%
<b>Scenario G</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 8,738	\$ 1,951	\$ (2,327)
\$3.75 GTG / \$5.00 Cash / \$7.25 PBM	Sufficient Fund Balance Coverage	8.5%	15.3%	2.9%	-3.4%
<b>Scenario H</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 11,789	\$ 7,784	\$ 6,320
\$4.00 GTG / \$5.25 Cash / \$6.75 PBM	Sufficient Fund Balance Coverage	8.5%	20.7%	11.7%	9.3%
<b>Scenario I (Interpolated)</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 13,685	\$ 11,651	\$ 12,204
\$4.15 GTG / \$5.50 Cash / \$7 PBM	Sufficient Fund Balance Coverage	8.5%	24.0%	17.6%	17.9%
<b>CAC RECOMMENDATION</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 7,764	\$ (97)	\$ (5,513)
\$3.65 GTG / \$5.00 Cash / \$7 PBM	Sufficient Fund Balance Coverage	8.5%	13.6%	-0.1%	-8.1%

\*No formal forecast was done by CDM Smith for this scenario; results were interpolated from prior scenario results.

# Scenarios Requested by the CAC

**TNB Toll Rate Scenarios - Projected TNB Account Ending Fund Balance - March 16, 2012**  
 Reflects Passage of SSB 6073



# Scenarios Requested by Legislative Staff

## Toll Scenario Results **Assuming Passage of SSB 6073**

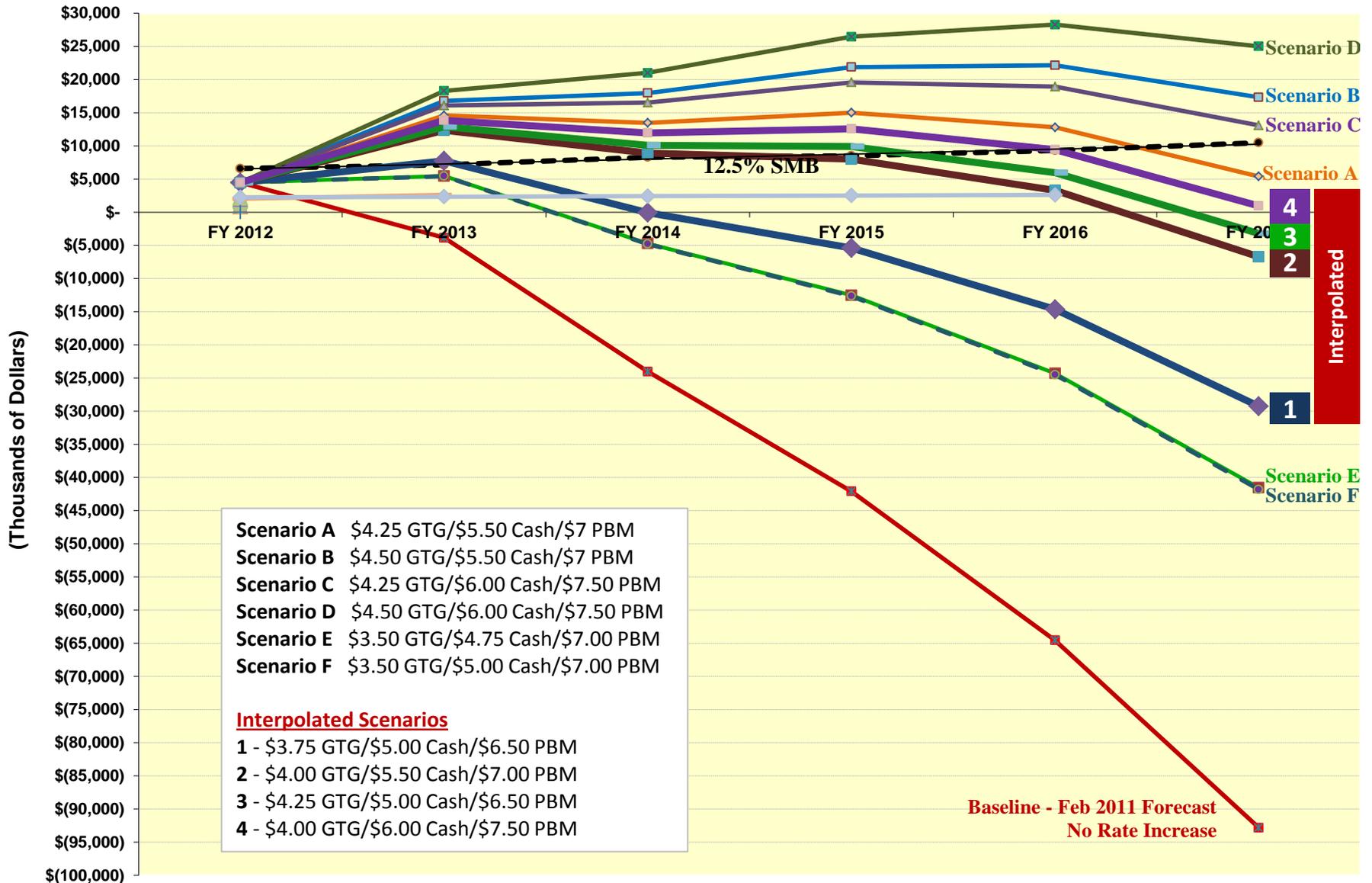
		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
12.5% Sufficient Minimum Balance (SMB)		6,594	7,130	8,285	8,512	9,318	10,481
<b>Baseline Scenario - February 2012 Forecast</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ (3,859)	\$ (24,021)	\$ (42,101)	\$ (64,569)	\$ (92,816)
\$2.75 GTG/\$4 Cash/\$5.50 PBM	Sufficient Fund Balance Coverage	8.5%	-6.8%	-36.2%	-61.8%	-86.6%	-110.7%
<b>Scenario A</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 14,582	\$ 13,483	\$ 15,005	\$ 12,803	\$ 5,402
\$4.25 GTG/\$5.50 Cash/\$7 PBM	Sufficient Fund Balance Coverage	8.5%	25.6%	20.3%	22.0%	17.2%	6.4%
<b>Scenario B</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 16,783	\$ 17,977	\$ 21,880	\$ 22,160	\$ 17,320
\$4.50 GTG/\$5.50 Cash/\$7 PBM	Sufficient Fund Balance Coverage	8.5%	29.4%	27.1%	32.1%	29.7%	20.7%
<b>Scenario C</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 16,090	\$ 16,524	\$ 19,583	\$ 18,940	\$ 13,095
\$4.25 GTG/\$6.00 Cash/\$7.50 PBM	Sufficient Fund Balance Coverage	8.5%	28.2%	24.9%	28.8%	25.4%	15.6%
<b>Scenario D</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 18,291	\$ 21,017	\$ 26,458	\$ 28,297	\$ 25,014
\$4.50 GTG/\$6.00 Cash/\$7.50 PBM	Sufficient Fund Balance Coverage	8.5%	32.1%	31.7%	38.9%	38.0%	29.8%
<b>Scenario E</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 5,458	\$ (4,724)	\$ (12,514)	\$ (24,298)	\$ (41,535)
\$3.50 GTG/\$4.75 Cash/\$7.00 PBM	Sufficient Fund Balance Coverage	8.5%	9.6%	-7.1%	-18.4%	-32.6%	-49.5%
<b>Scenario F</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 5,446	\$ (4,792)	\$ (12,647)	\$ (24,506)	\$ (41,817)
\$3.50 GTG/\$5.00 Cash/\$7.00 PBM	Sufficient Fund Balance Coverage	8.5%	9.5%	-7.2%	-18.6%	-32.9%	-49.9%
<b>Interpolated Scenario 1*</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 7,765	\$ (55)	\$ (5,405)	\$ (14,655)	\$ (29,268)
\$3.75 GTG/\$5.00 Cash/\$6.50 PBM	Sufficient Fund Balance Coverage	8.5%	13.6%	-0.1%	-7.9%	-19.7%	-34.9%
<b>Interpolated Scenario 2*</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 12,340	\$ 8,903	\$ 8,003	\$ 3,279	\$ (6,731)
\$4.00 GTG/\$5.50 Cash/\$7.00 PBM	Sufficient Fund Balance Coverage	8.5%	21.6%	13.4%	11.8%	4.4%	-8.0%
<b>Interpolated Scenario 3*</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 12,900	\$ 10,094	\$ 9,894	\$ 5,951	\$ (3,218)
\$4.25 GTG/\$5.00 Cash/\$6.50 PBM	Sufficient Fund Balance Coverage	8.5%	22.6%	15.2%	14.5%	8.0%	-3.8%
<b>Interpolated Scenario 4*</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 13,848	\$ 11,943	\$ 12,581	\$ 9,416	\$ 963
\$4.00 GTG/\$6.00 Cash/\$7.50 PBM	Sufficient Fund Balance Coverage	8.5%	24.3%	18.0%	18.5%	12.6%	1.1%

\*No formal forecast was done for these scenarios; they were interpolated from prior scenario results.

# Scenarios Requested by Legislative Staff

## TNB Toll Rate Scenarios Assuming Passage of SSB 6073

Projected TNB Account Ending Fund Balance - Updated March 2, 2012



# Scenarios Requested by Toll Subcommittee

## 2012 TNB Citizen Advisory Committee Recommendation and Commission Alternative Toll Scenario Results

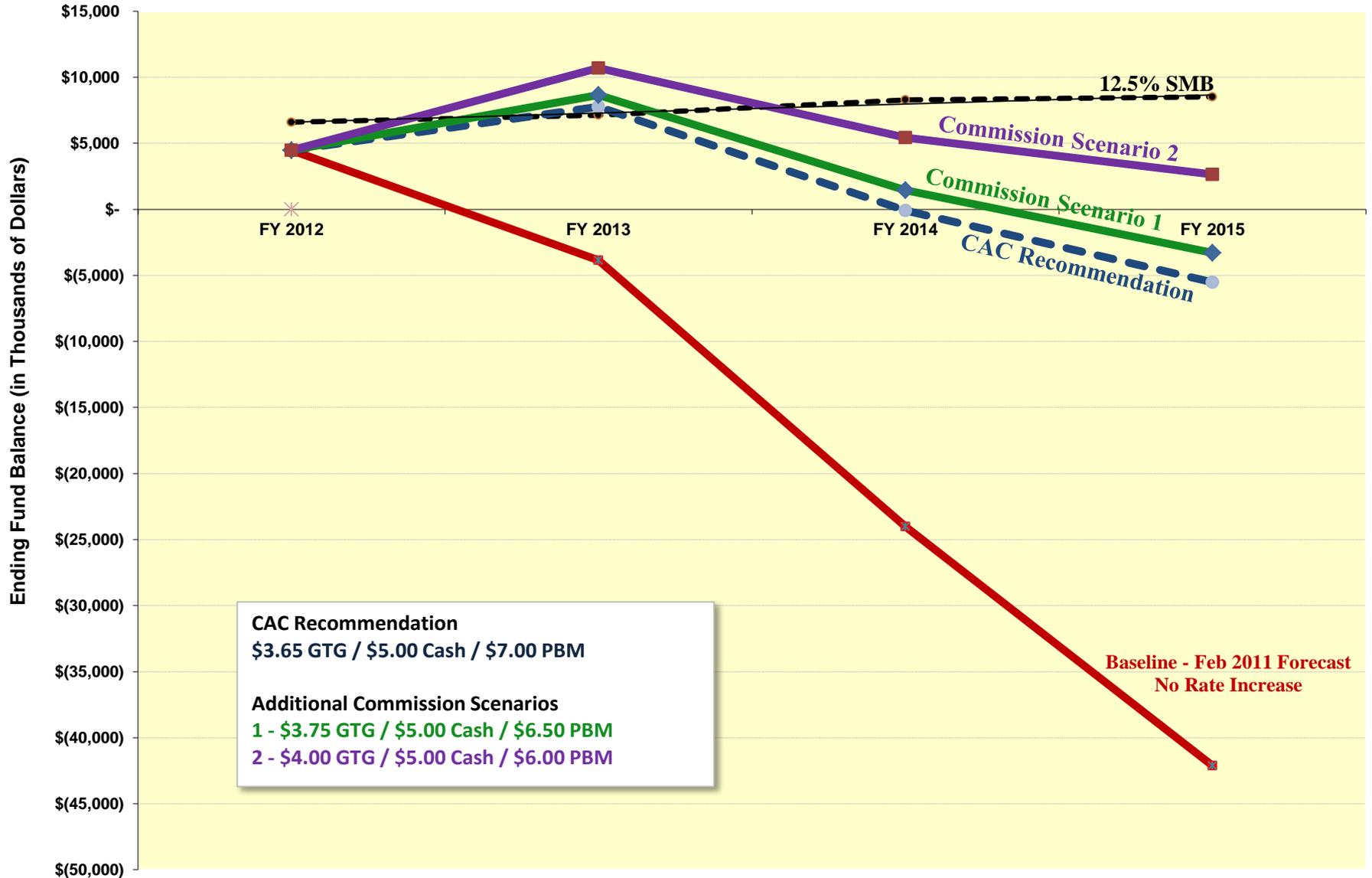
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<b>Baseline Scenario - February 2012 Forecast</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ (3,859)	\$ (24,014)	\$ (42,101)
\$2.75 GTG / \$4 Cash / \$5.50 PBM	Sufficient Fund Balance Coverage	8.5%	-6.8%	-36.2%	-61.8%
<b>CAC RECOMMENDATION</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 7,764	\$ (97)	\$ (5,513)
\$3.65 GTG / \$5.00 Cash / \$7 PBM	Sufficient Fund Balance Coverage	8.5%	13.6%	-0.1%	-8.1%
<b>Commission Alternative Scenario 1</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 8,648	\$ 1,453	\$ (3,292)
\$3.75 GTG / \$5.00 Cash / \$6.50 PBM	Sufficient Fund Balance Coverage	8.5%	15.2%	2.2%	-4.8%
<b>Commission Alternative Scenario 2</b>	TNB Account Ending Fund Balance	\$ 4,474	\$ 10,700	\$ 5,432	\$ 2,647
\$4.00 GTG / \$5.00 Cash / \$6.00 PBM	Sufficient Fund Balance Coverage	8.5%	18.8%	8.2%	3.9%

# Scenarios Requested by Toll Subcommittee

TNB Toll Rate Scenarios - Projected TNB Account Ending Fund Balance - March 16, 2012

Reflects Passage of SSB 6073

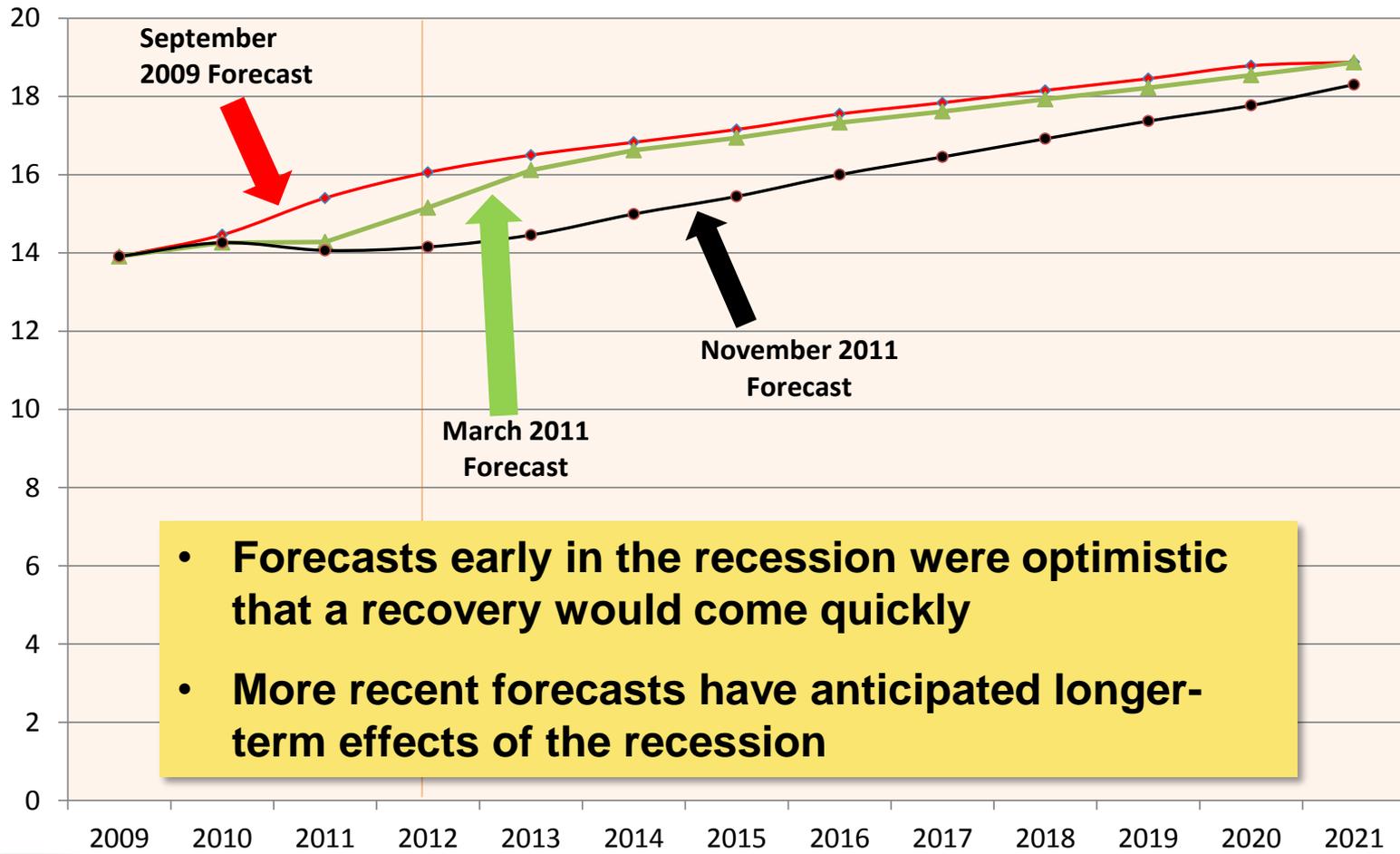


# Forecast Risk Considerations

- Accurate forecasting has been difficult during the current extended economic downturn.
- Tolling Subcommittee has expressed concern that traffic and revenue forecasts may be optimistic.
- Focus on the ending balance for the fiscal year doesn't reflect fluctuation throughout the year resulting from uneven monthly revenues, debt service, and bridge insurance payments.
- At issue is whether the 12.5% sufficient minimum balance provides adequate protection against these risks.

# Effect of Economy on Traffic Forecasts

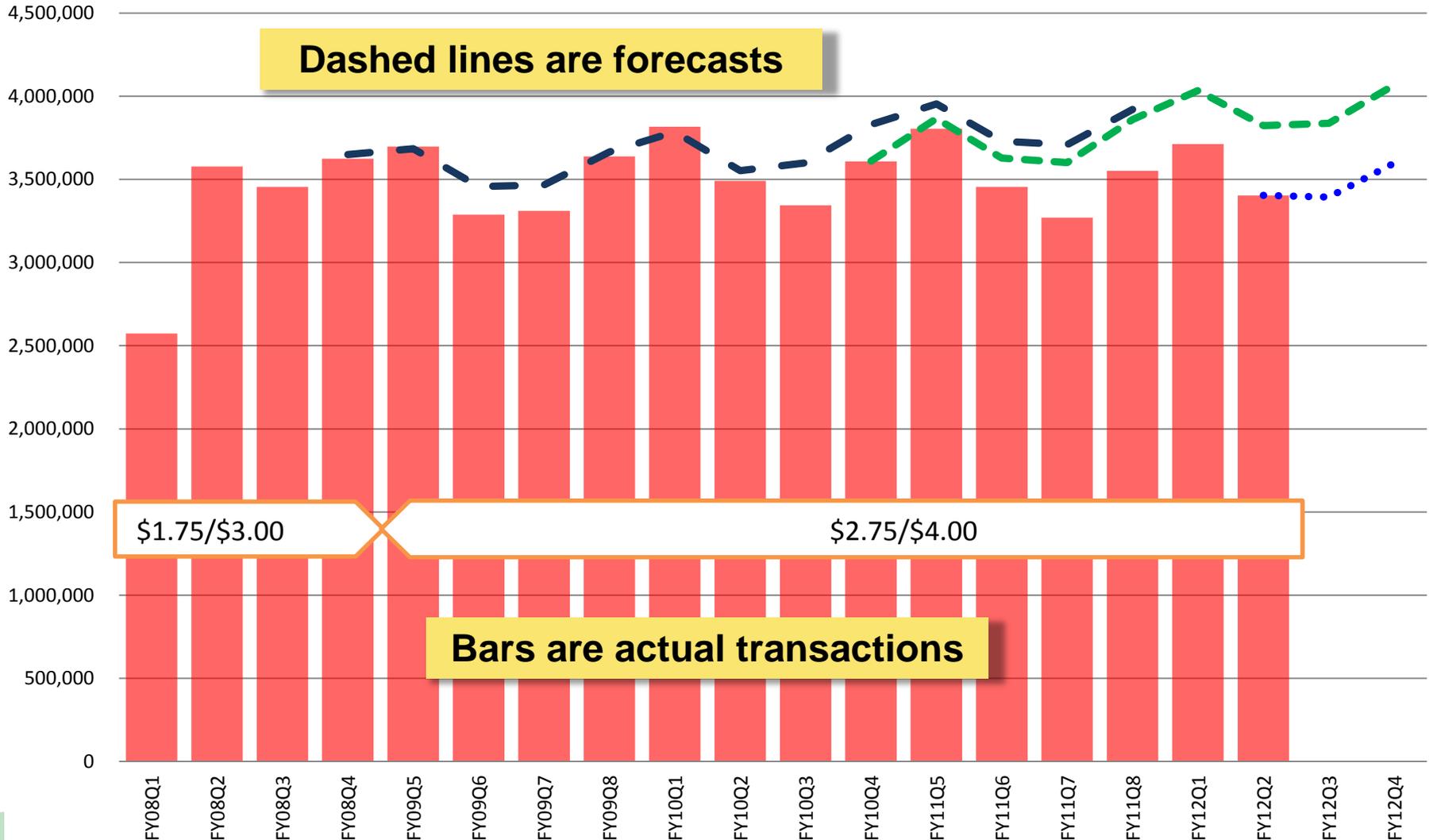
Annual Round Trip Traffic on TNB (in millions)



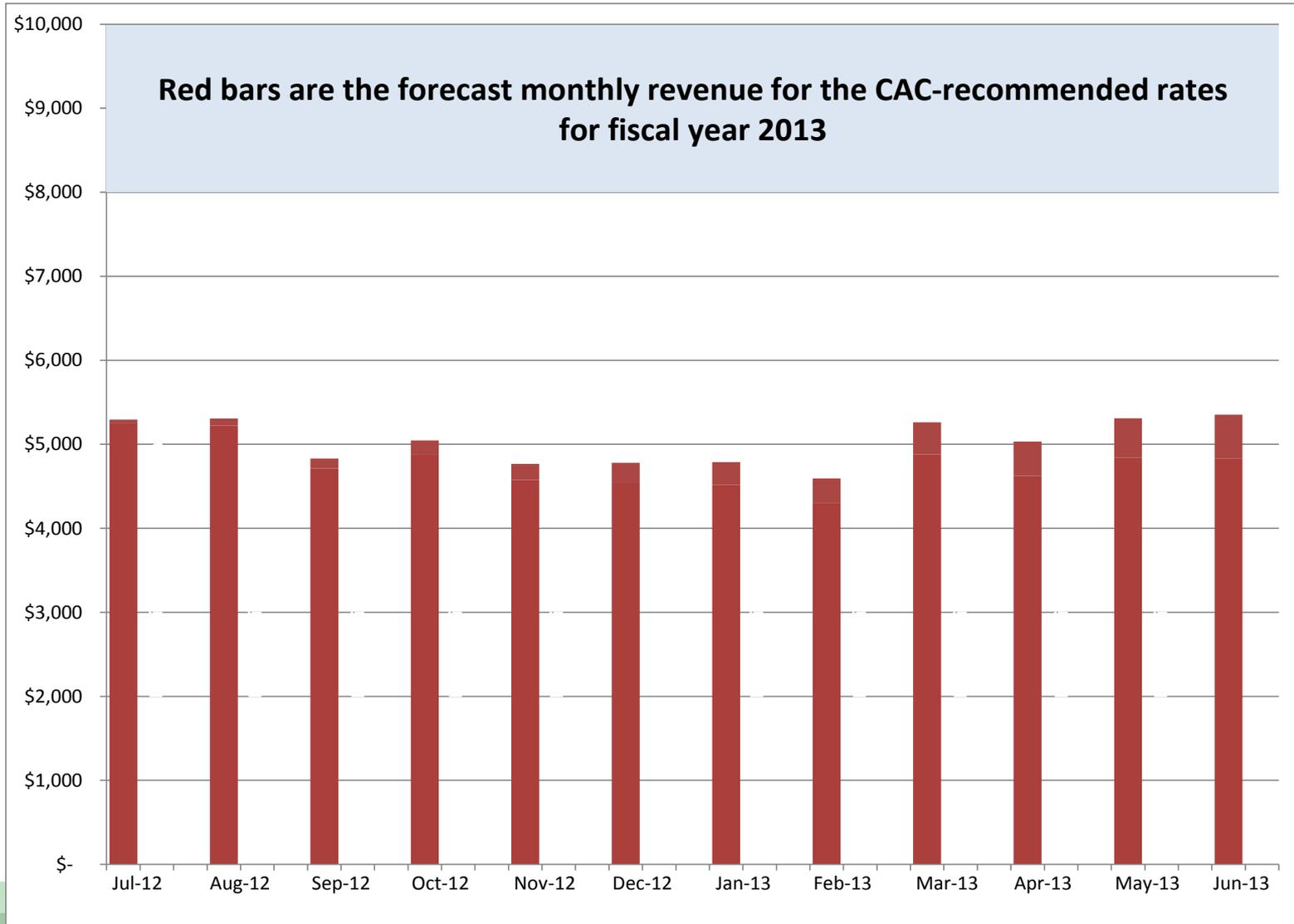
- Forecasts early in the recession were optimistic that a recovery would come quickly
- More recent forecasts have anticipated longer-term effects of the recession

Note: The March 2011 and June 2011 forecasts were the same.

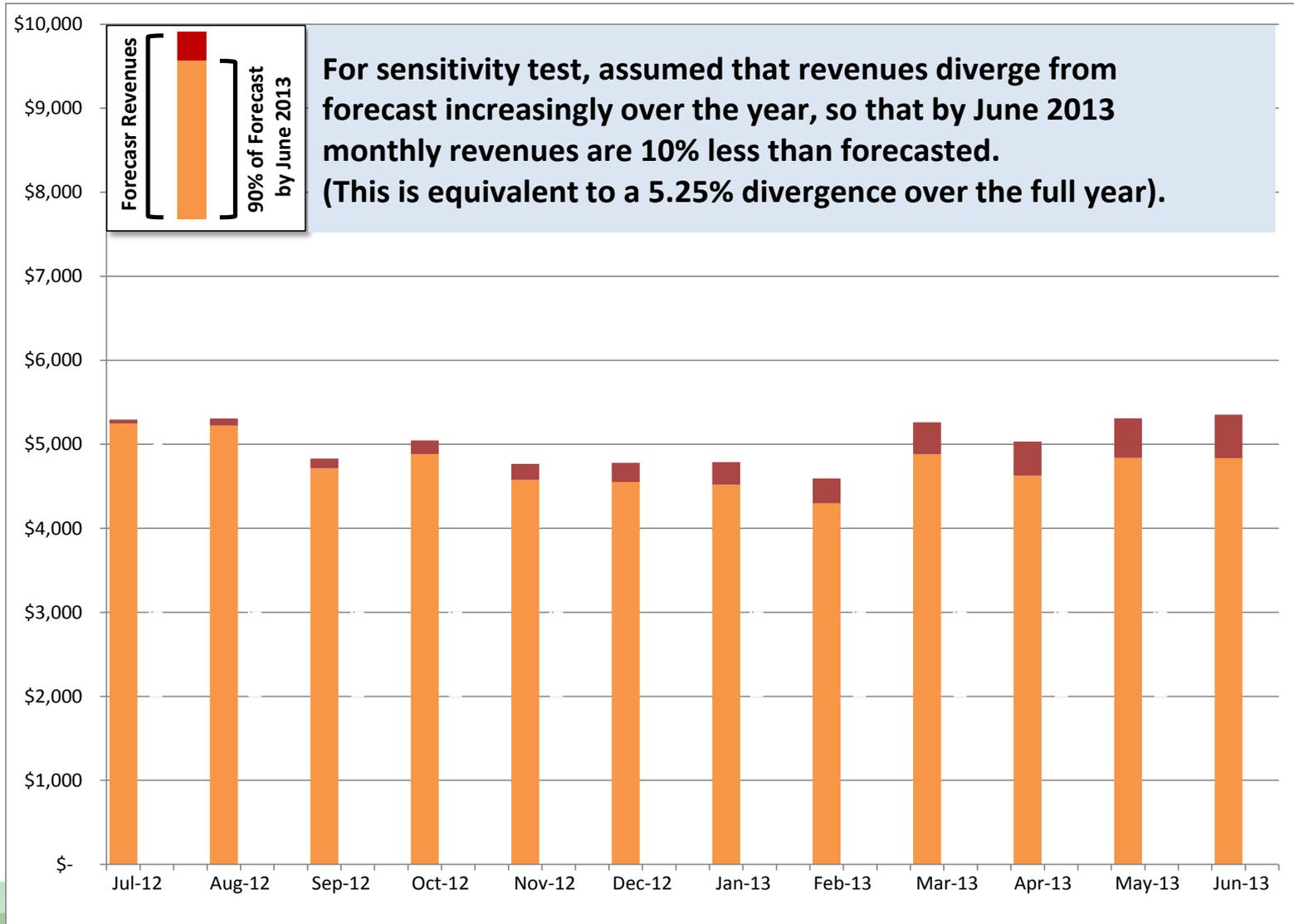
# Shorter-Term Forecast Accuracy



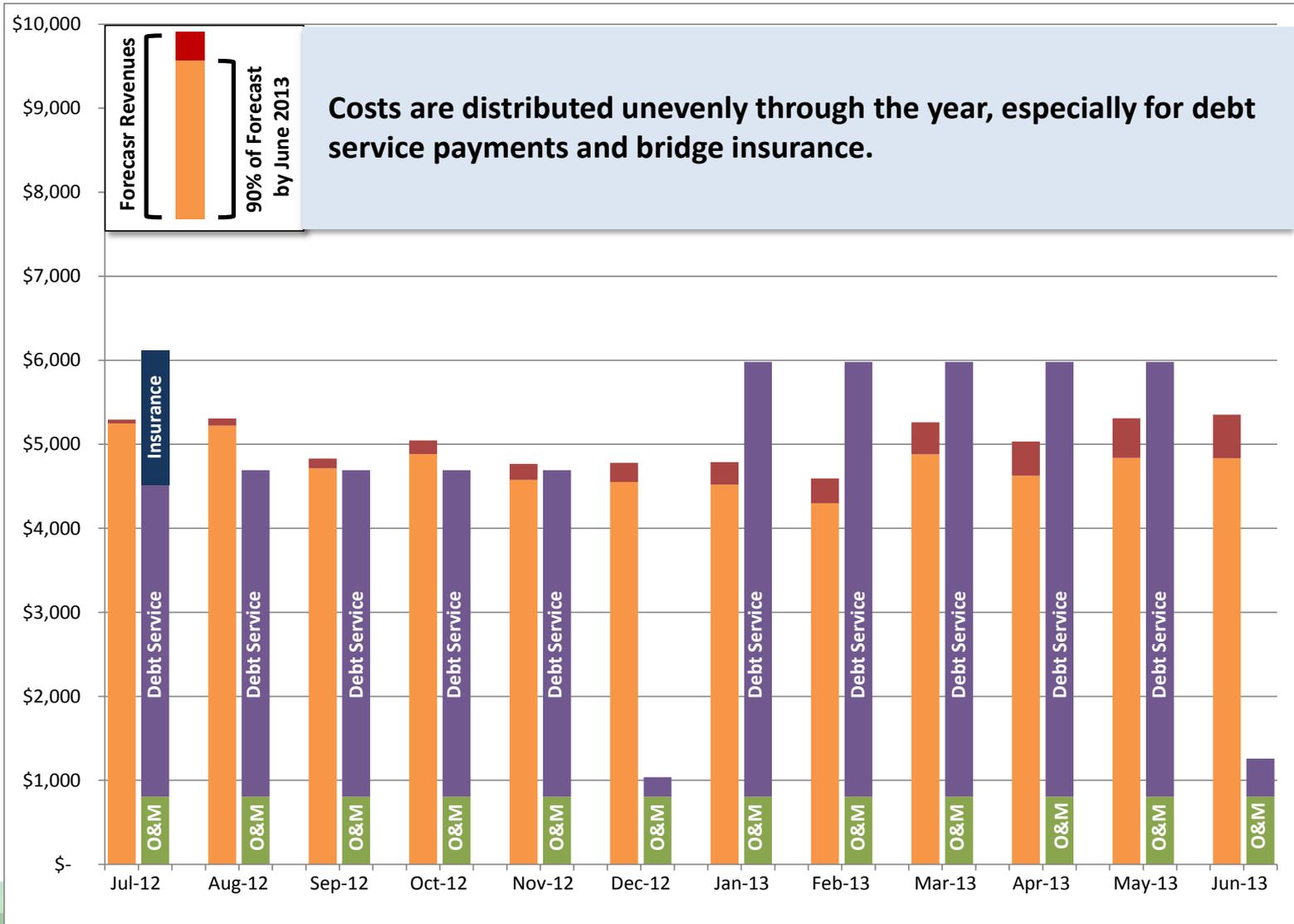
# Stress Test - CAC Recommendation



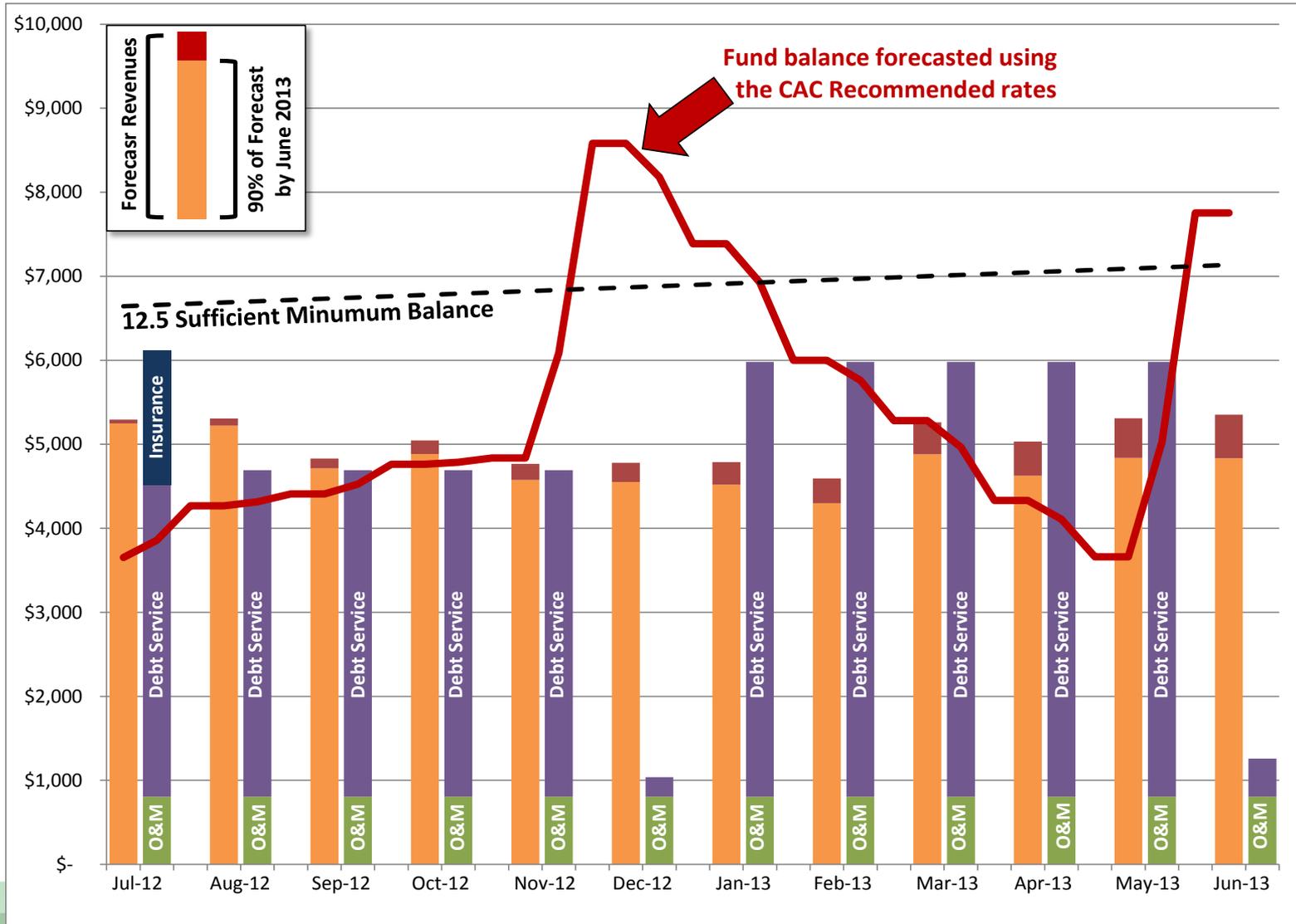
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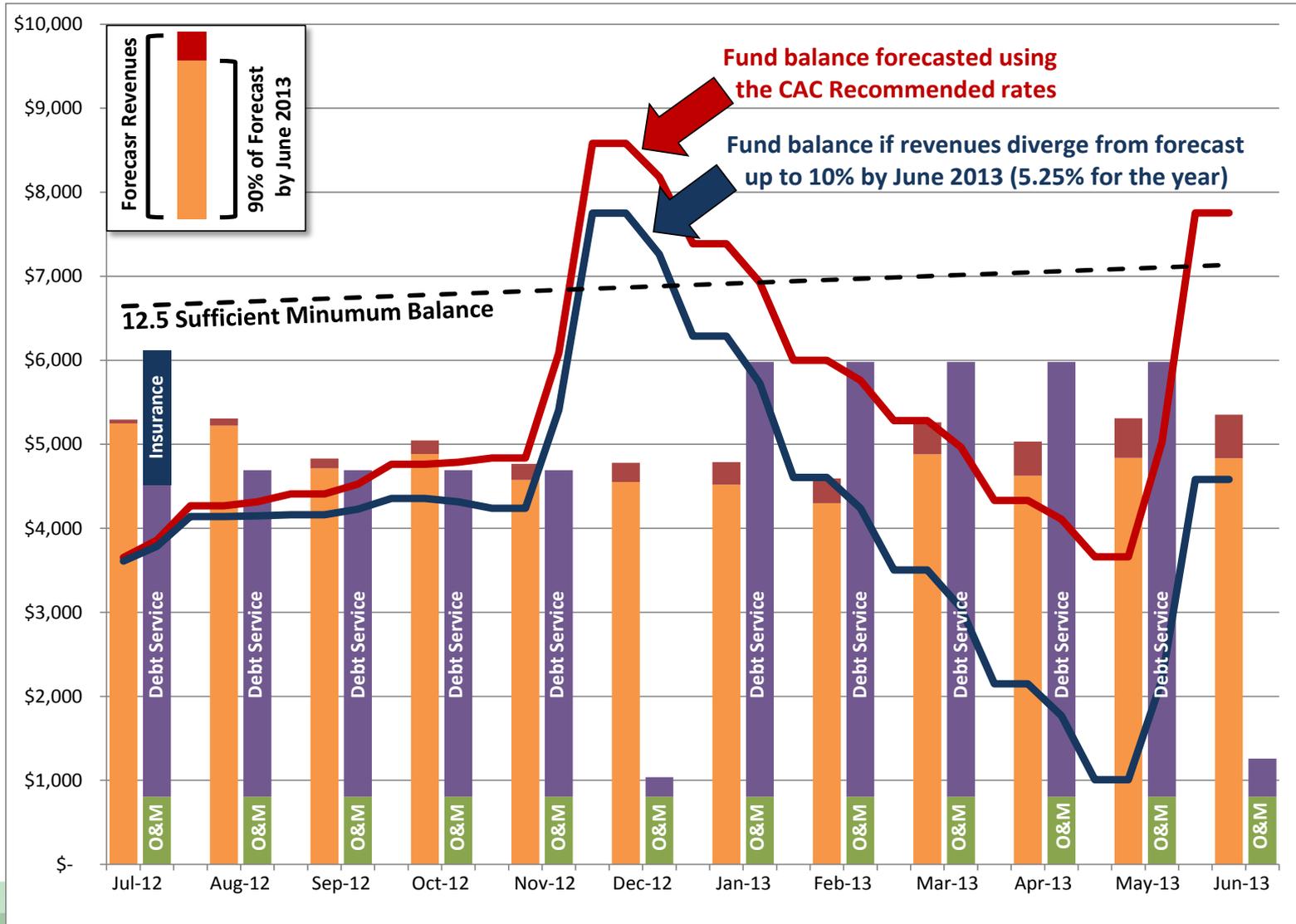
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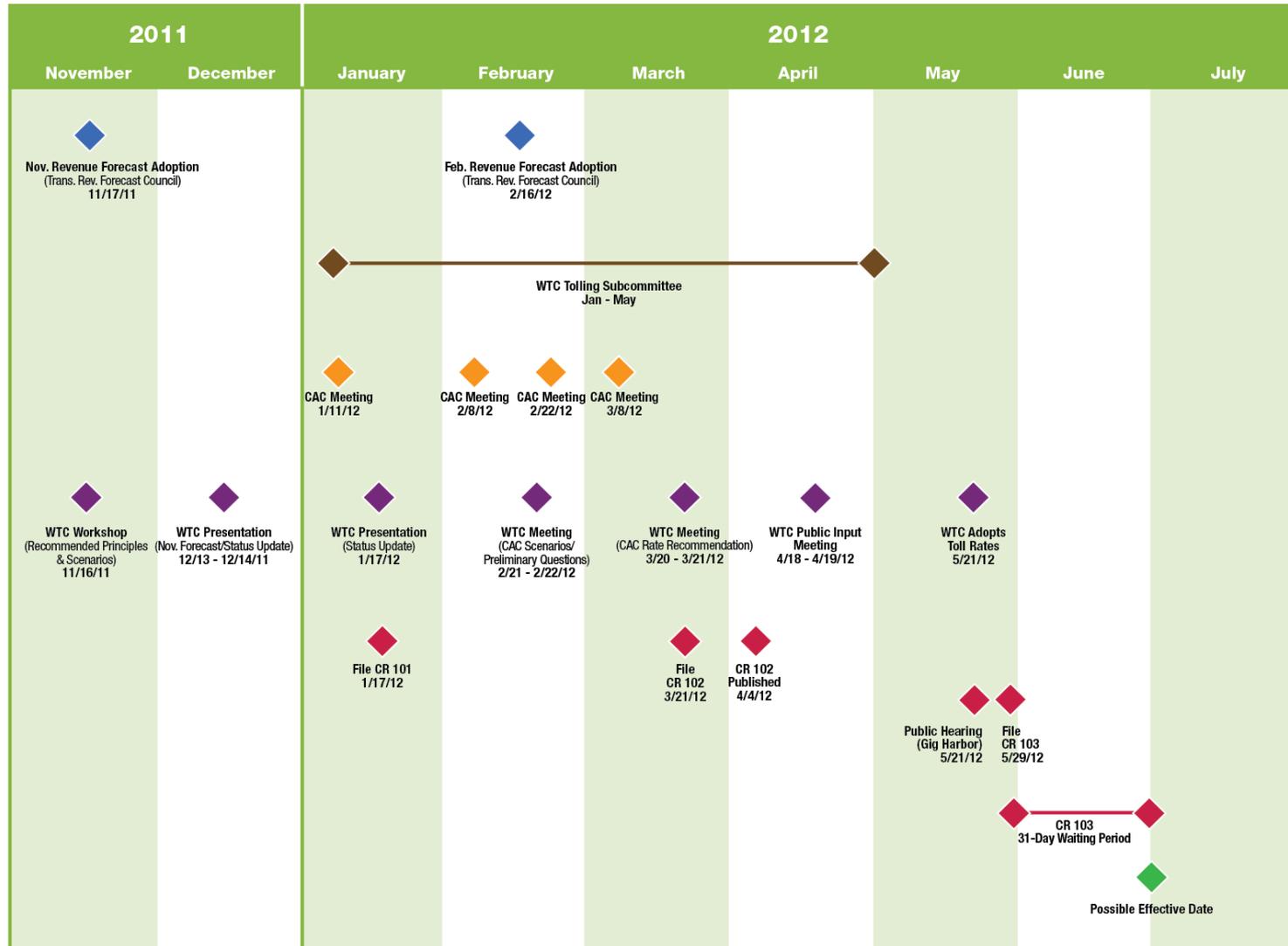
# Stress Test - CAC Recommendation



# Stress Test - CAC Recommendation



# Next Steps: Rate Setting Schedule



# Questions?

For more information please contact:

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206-464-1222 or [stonec@wsdot.wa.gov](mailto:stonec@wsdot.wa.gov)