

# Hood River Bridge Traffic & Revenue Study

WSTC Commission Meeting

3/14/2023

**CDM  
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# Agenda

- Study Update – Where are we?
- Preliminary Tolling Scenario Description
- Preliminary Tolling Scenario Results
  - Transactions, Gross and Net Revenue Streams
  - Financial Capacity Analysis
- Final Two Scenario Recommendations
- Next Steps/Workplan



# Study Background

# Study Purpose

- The 2022 enacted State Supplemental Transportation Budget (ESSB 5689) directs the WSTC to carry out a planning level traffic and revenue study of the Hood River Bridge to be completed by June 30, 2023
- The primary goal is to develop planning level traffic and revenue analysis and resulting toll funding capacity across multiple scenarios to support future funding decisions for proposed bridge replacement plan(s)
- This study should also inform a potential investment grade traffic and revenue study



# Hood River Bridge Replacement Funding

- Total bridge replacement project costs: \$520 million (2022 dollars)
  - Estimate based on preliminary analysis by the Port of Hood River
- Funding committed to date: \$95 million
  - State Funding: \$80 million from Washington, \$10 million from Oregon
  - Federal Grants: \$5 million in federal grant fund
- Funding targets to address the \$425 million in unfunded need include:
  - State Funding: \$160 million in additional state funding
    - Intent is to have total of \$125 million committed by both WA and OR (\$250 million total)
  - Federal Grants: \$125 - \$195 million
    - Unsuccessful in 2022, preparing new federal grant applications for 2023
  - **Toll-Backed Financing: \$75-\$125 million**
    - **Subject to on-going traffic & revenue analysis and financial need**

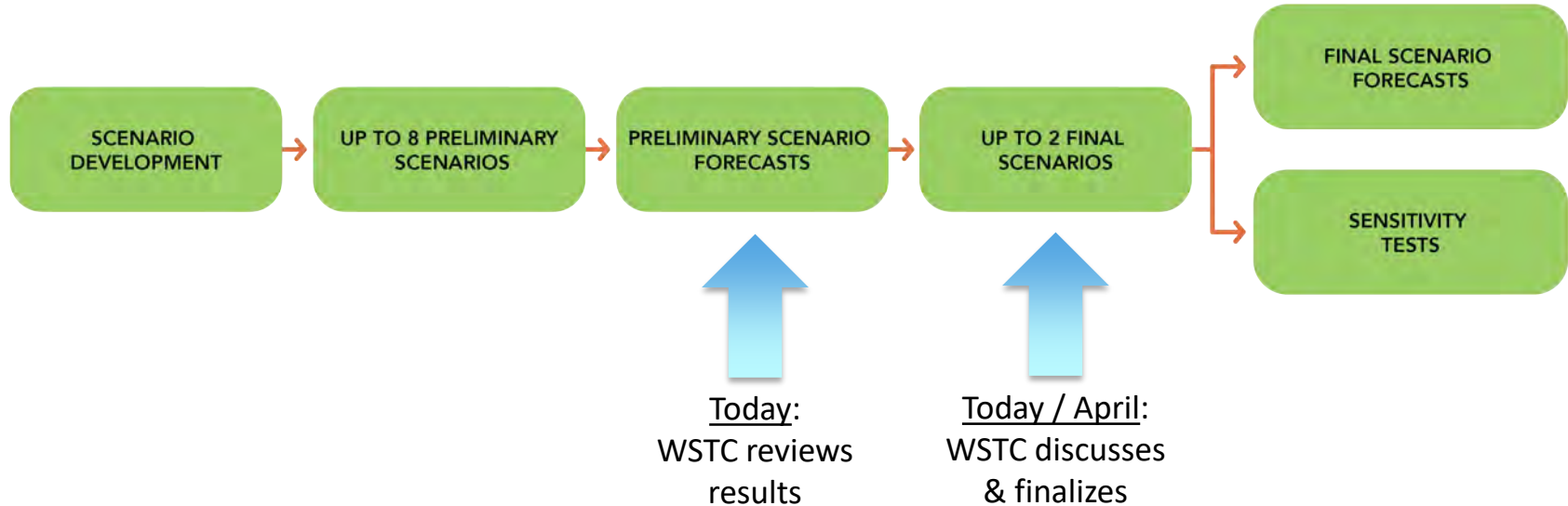
# Hood River Bridge Replacement Tolling

- Current Hood River Bridge tolling revenues support existing bridge operations & maintenance and a small portion of bridge replacement.
- Port of Hood River anticipates tolling in support of the replacement bridge to include:
  - Pre-Completion Tolling: Revenues from a toll increase on the current bridge dedicated to the replacement bridge project as soon as July 1, 2023 (FY 2024) – *may shift to January 1, 2024*
  - Post-Completion Tolling: Revenues from tolling on the replacement bridge beginning in FY 2031 dedicated to funding debt service as well as on-going operations & maintenance and repair & replacement costs



# Preliminary Tolling Scenarios

# Study Scenarios Process





# Recap: Tolling Scenario Structure

## Assumptions:

- Current axle toll multipliers assumed to remain unchanged
- Current toll-free exemptions and agreements assumed to remain unchanged\*

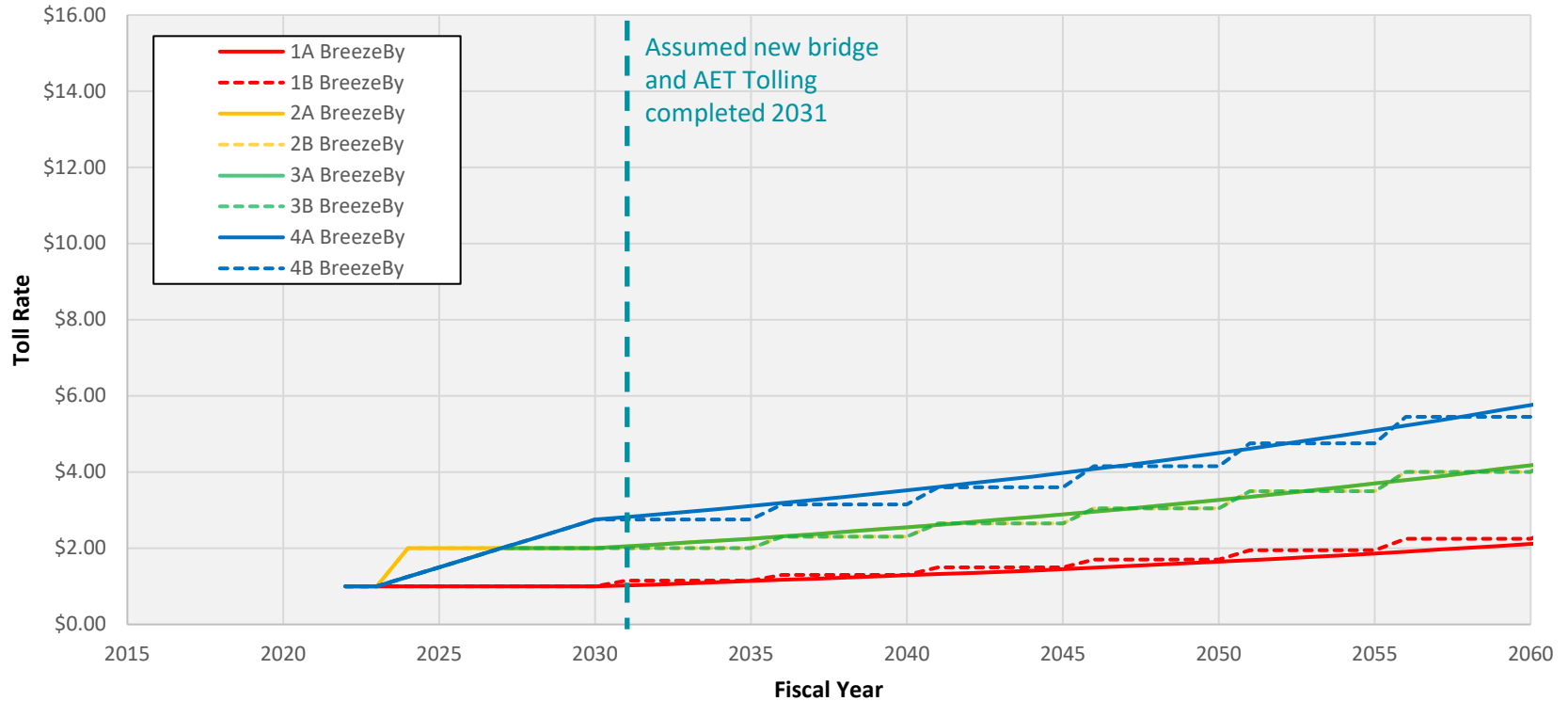
## Additional Considerations:

- Traffic data does not support need for time of day, day of week, nor seasonal pricing
- New low-income or high-frequency discount plans may be appropriate

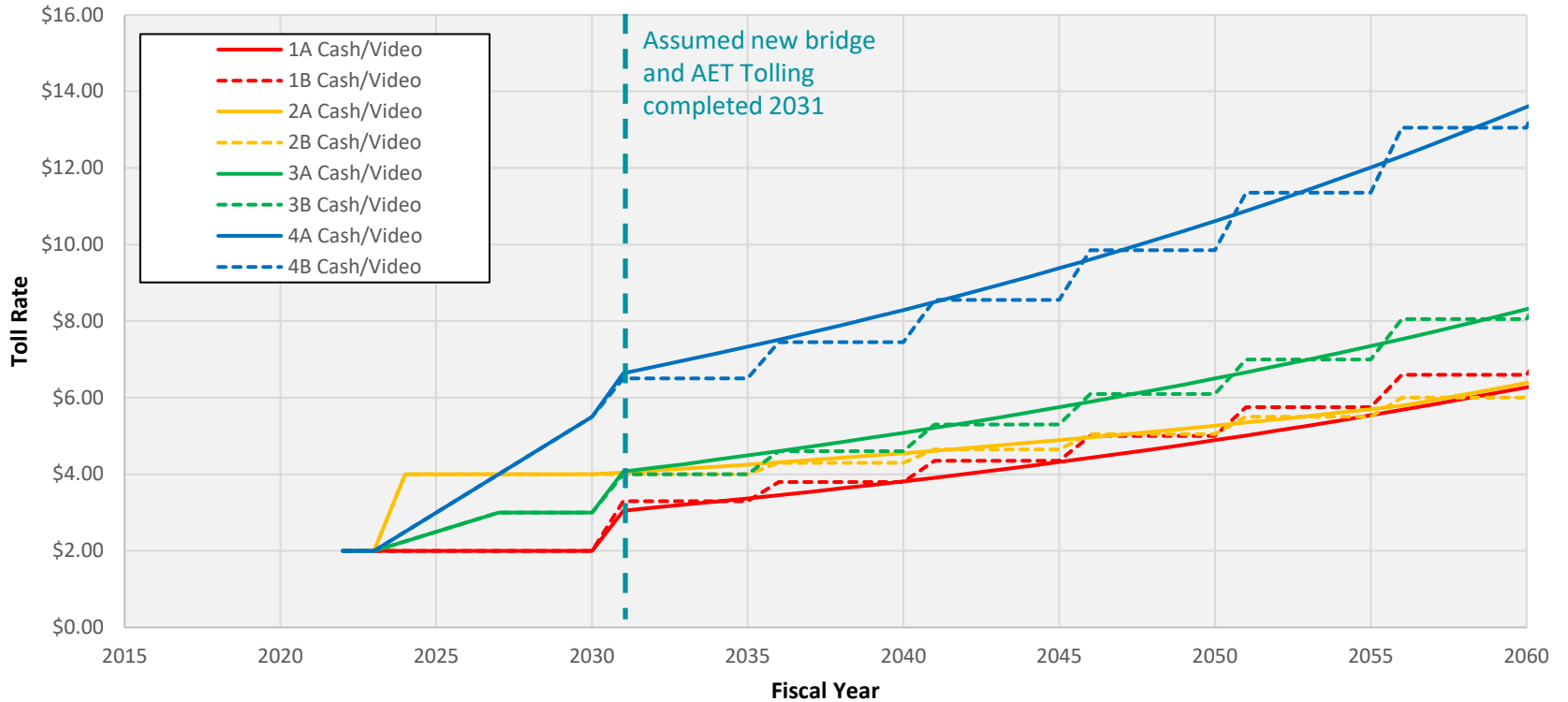
# Preliminary Tolling Scenarios (WSTC)

		Scenario 1A	Scenario 1B	Scenario 2A	Scenario 2B	Scenario 3A	Scenario 3B	Scenario 4A	Scenario 4B
<i>Pre-Completion (FY24-30)</i>		<i>No change</i>		<i>100% increase in FY24</i>		<i>\$0.25 annual increase for Cash/CC &amp; BreezeBy thru FY27</i>		<i>\$0.50 annual increase for Cash/CC &amp; \$0.25 for BreezeBy thru FY30</i>	
FY'24	<b>BreezeBy</b>	\$1.00	\$1.00	\$2.00	\$2.00	\$1.25	\$1.25	\$1.25	\$1.25
	Cash/CC	\$2.00	\$2.00	\$4.00	\$4.00	\$2.25	\$2.25	\$2.50	\$2.50
FY'30	<b>BreezeBy</b>	\$1.00	\$1.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.75	\$2.75
	Cash/CC	\$2.00	\$2.00	\$4.00	\$4.00	\$3.00	\$3.00	\$5.50	\$5.50
<i>Post Completion (FY31-51)</i>		<i>2.5% Annual Increase</i>	<i>15% Increase every 5 yr starting in FY31</i>	<i>2.5% Annual Increase (BreezeBy)</i>	<i>15% Increase every 5 yr starting in FY36 (BreezeBy)</i>	<i>2.5% Annual Increase</i>	<i>15% Increase every 5 yr starting in FY36</i>	<i>2.5% Annual Increase</i>	<i>15% Increase every 5 yr starting in FY36</i>
FY'31	<b>BreezeBy</b>	\$1.02	\$1.15	\$2.05	\$2.00	\$2.05	\$2.00	\$2.82	\$2.75
	Video	\$3.05	\$3.30	\$4.05	\$4.00	\$4.07	\$4.00	\$6.64	\$6.50
FY'51	<b>BreezeBy</b>	\$1.69	\$1.95	\$3.35	\$3.50	\$3.35	\$3.50	\$4.61	\$4.75
	Video	\$5.01	\$5.75	\$5.35	\$5.50	\$6.66	\$7.00	\$10.88	\$11.35

# Passenger Car BreezeBy\* Toll Rates



# Passenger Cash-CC/Video\* Toll Rates



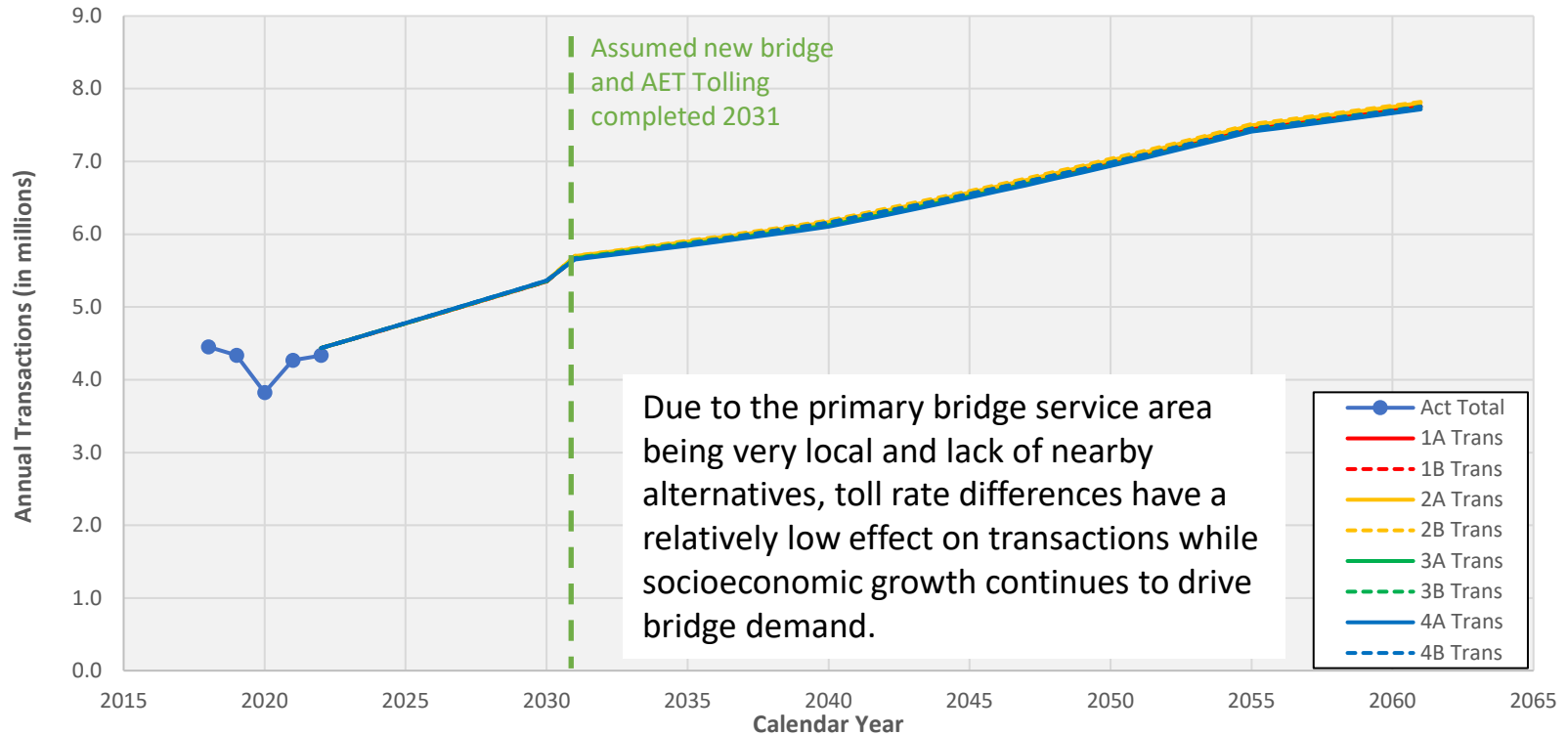


# Preliminary Scenario T&R Forecasting Results

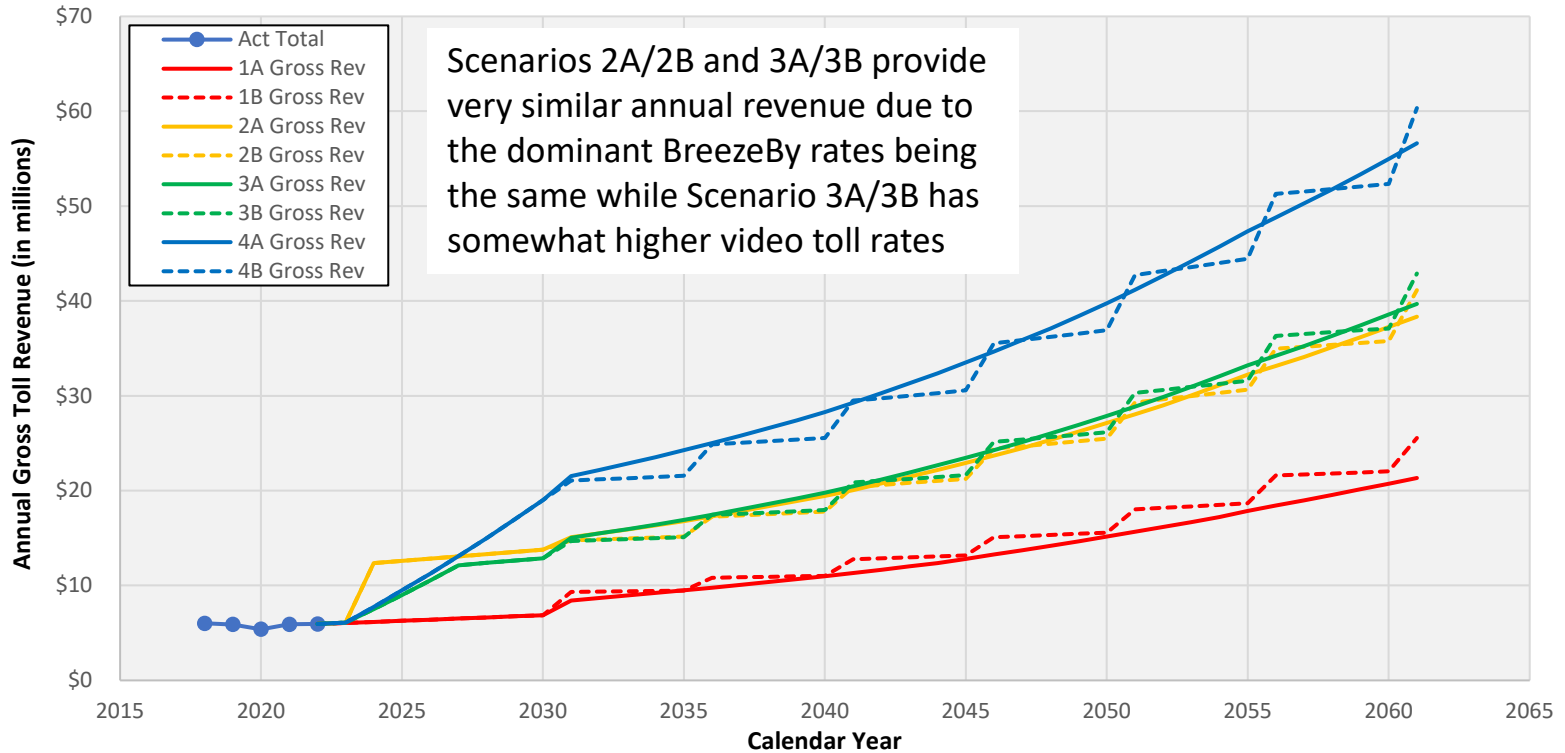
# Traffic & Revenue Forecasting Assumptions

- Bridge replacement configuration, timing, and phasing
- Model years: 2019, 2031, 2040, 2055
- Tolling concept of operations, methods of payment
- Toll systems coordination - current system, ODOT system, WSDOT system
- Inflation
- Payment share assumptions

# Annual Toll Transactions

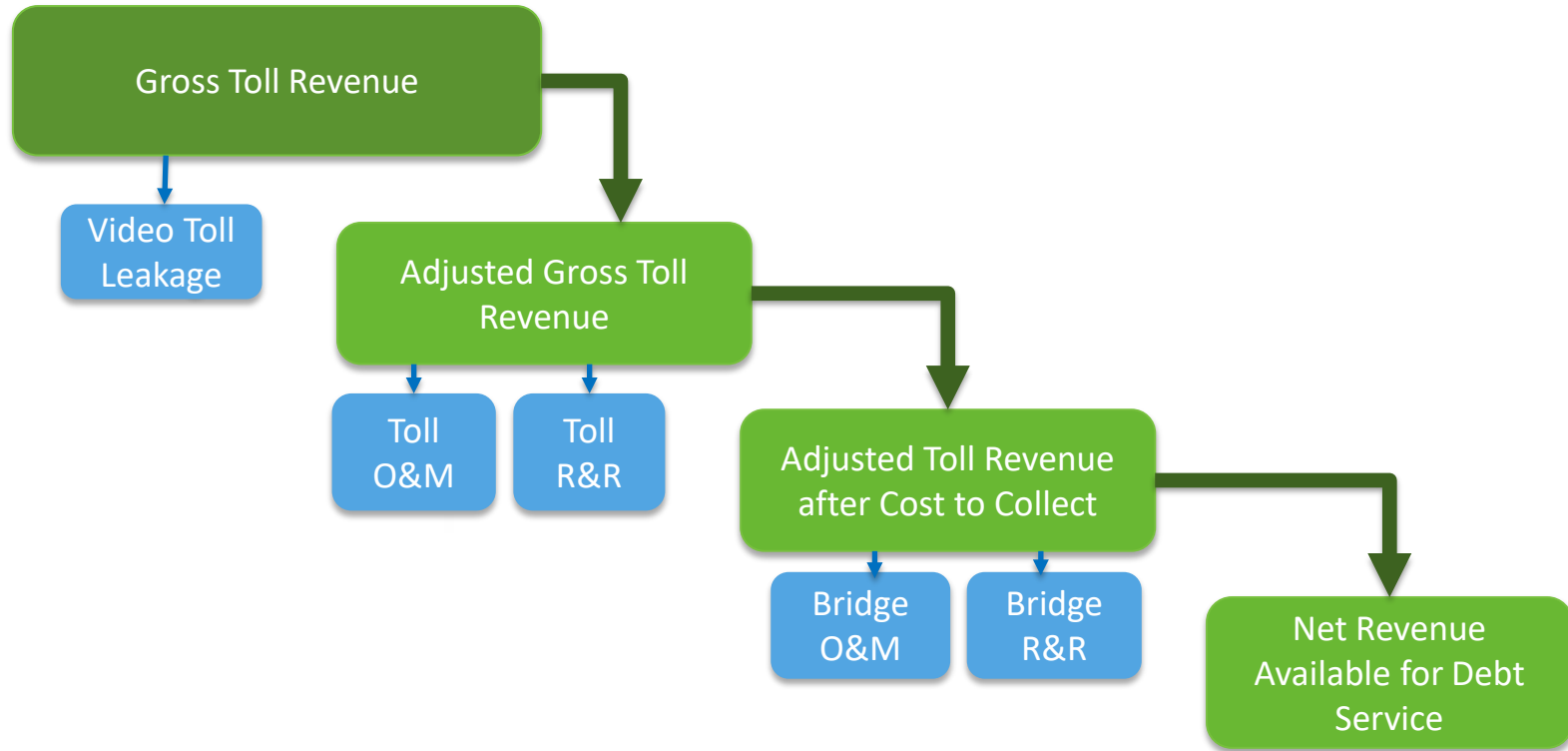


# Annual Gross Toll Revenue

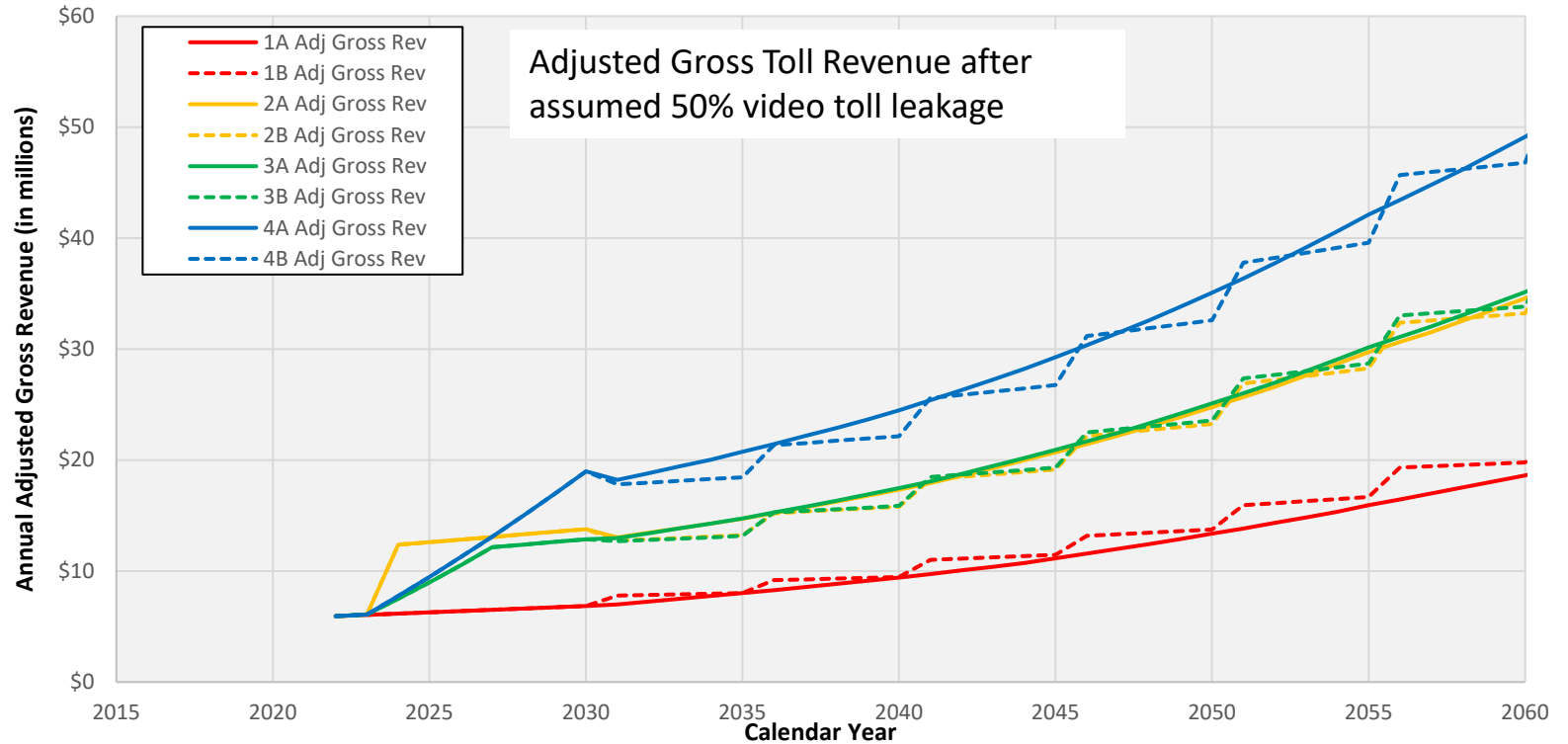




# Gross Revenue to Net Available For Debt Service



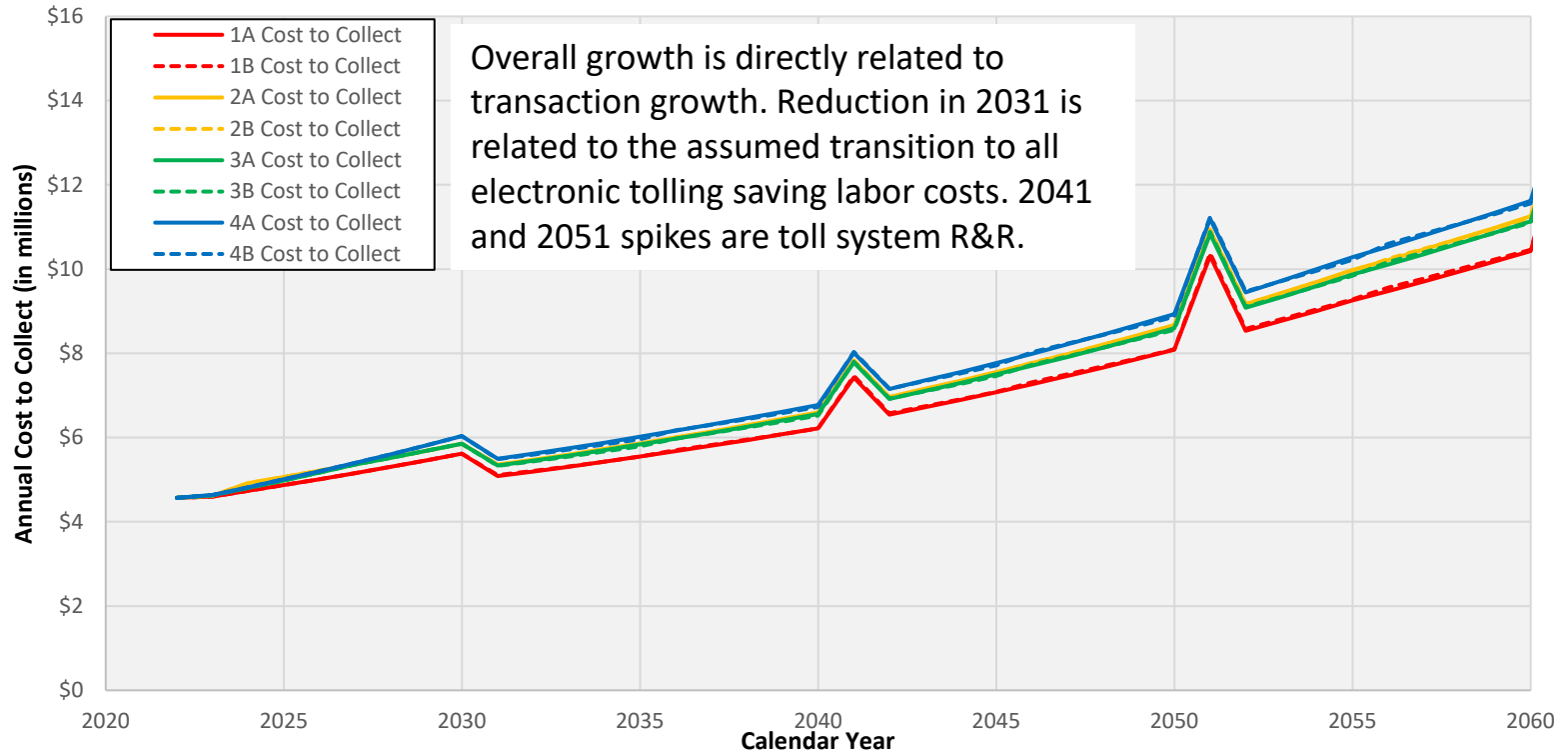
# Annual Adjusted Gross Toll Revenue



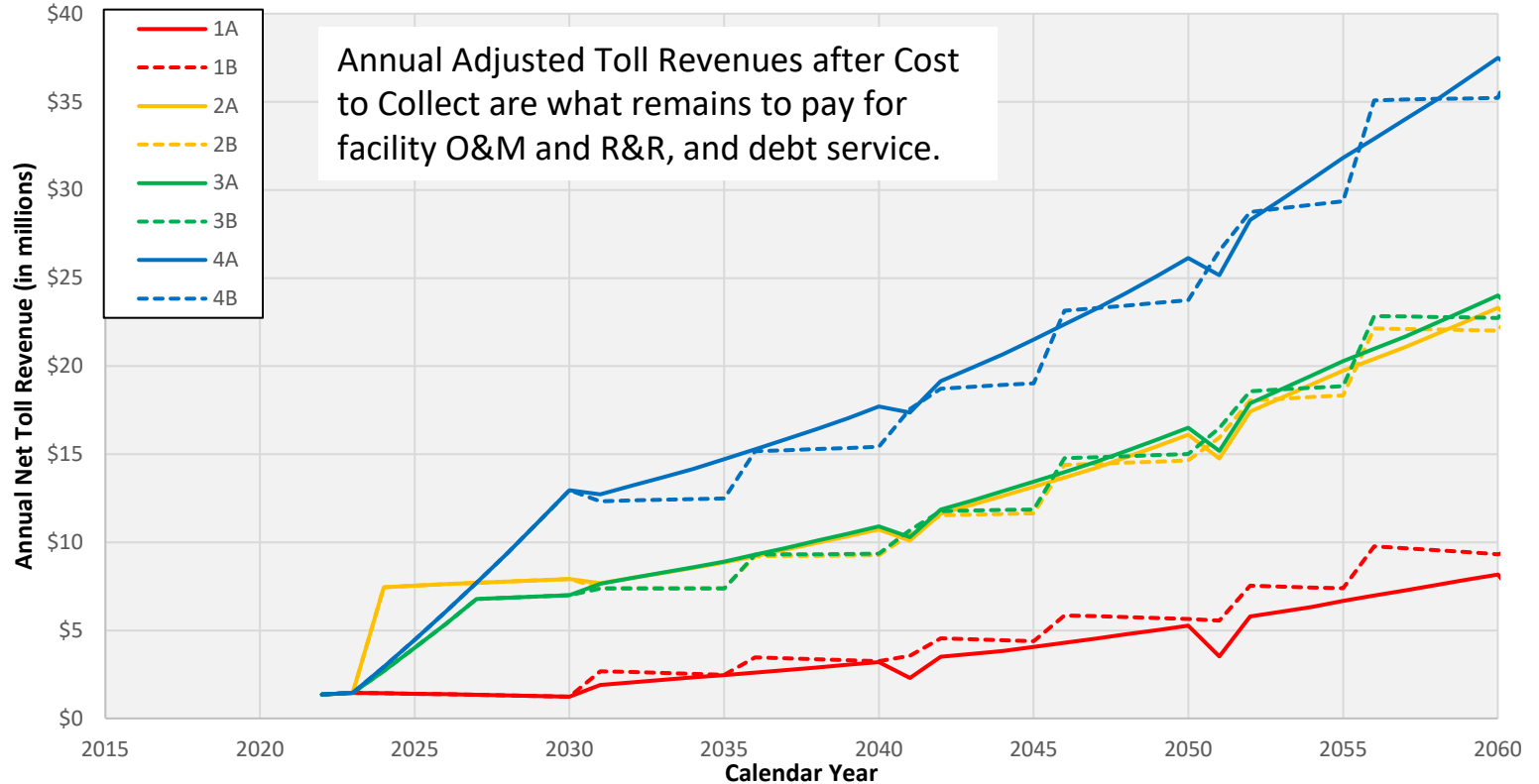
# Adjusted Toll Revenue after Cost to Collect

- Cost to Collect Tolls
  - Toll system operations & maintenance (O&M) and repair & replacement (R&R) costs
  - Transaction processing, toll collectors (pre-completion) and support personnel, transponder costs, statement generation, and mailing costs
  - Credit card fees

# Annual Cost To Collect



# Annual Adjusted Toll Revenue after Cost to Collect





# Preliminary Scenario Financial Capacity Analysis

# Financial Capacity Analysis Assumptions

## “BBB” Rated Bonded Debt

- Debt structure
  - Bonds issued at construction
  - Capitalized interest during construction for 3 years
  - Level debt service for 27 years
- Debt service interest rates
  - 5.08% interest rate
  - *Rates subject to change - current as of 2/28/2023*
- Required debt service coverage ratio
  - Assumed minimum 1.35x ratio of net revenues to bond debt service

## Federal TIFIA Loan

- Debt structure
  - Issued as line of credit
  - Capitalized interest during construction
  - Debt service ramps up five years
  - Level debt service for 25 years
- Debt service interest rates
  - 3.93% interest rate
  - *Rates subject to change - current as of 2/28/2023*
- Required debt service coverage ratio
  - Assumed minimum 1.20x ratio of net revenues to TIFIA Loan debt service

# Preliminary Financial Capacity (in millions of \$)

- Differences in estimated net revenues available for debt service from each tolling scenario results in a range of financial capacities for each financing option

- “BBB” Rated Bonded Debt

1A - \$0  
1B - \$0  
2A - \$45M  
2B - \$45M  
3A - \$40M  
3B - \$40M  
4A - \$75M  
4B - \$70M

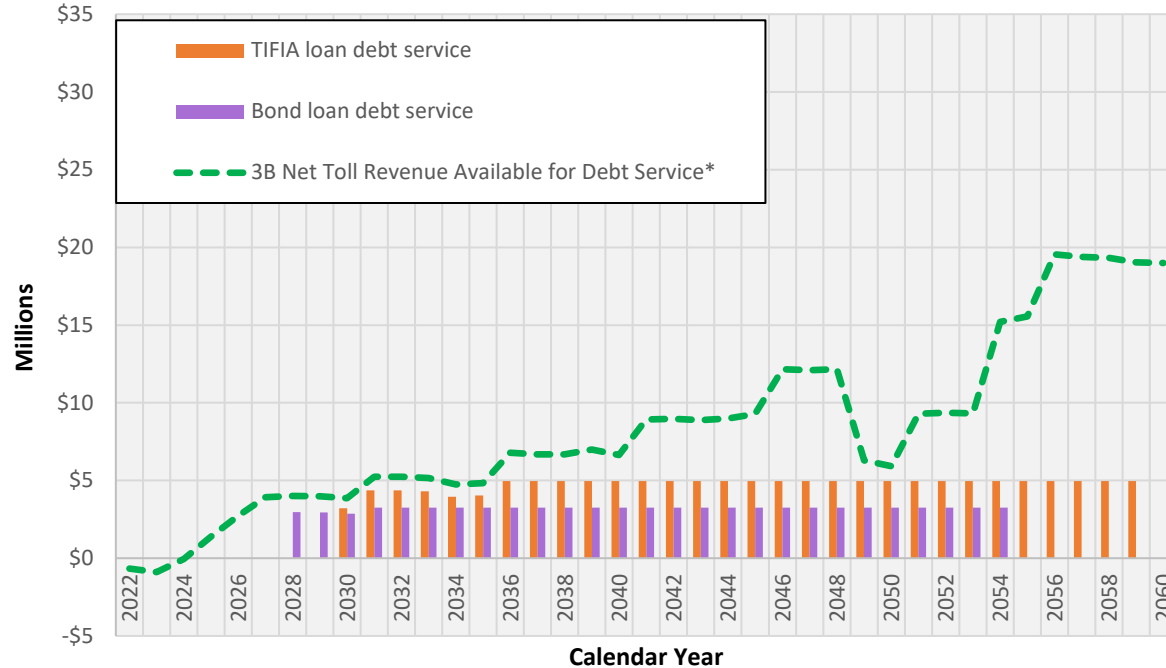
- Federal TIFIA Loan

1A - \$0  
1B - \$0  
2A - \$75M  
2B - \$75M  
3A - \$75M  
3B - \$70M  
4A - \$140M  
4B - \$140M

Market Interest Rates as of 2-28-2023. Changes in market rates will change the results.



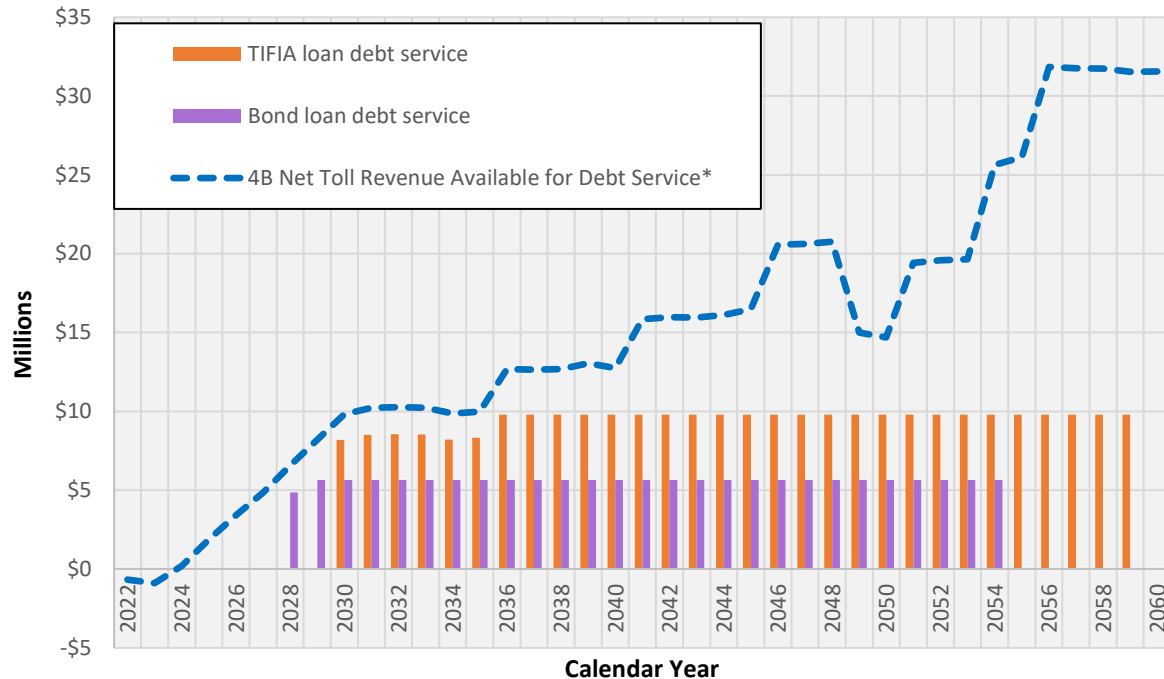
# Net Revenue Available for Debt Service vs. Funding Needs – Scenario 3B



- Bridge O&M and R&R assumed to be funded before debt service due to standalone nature of facility and owner agency
- Net toll revenue available for debt service designed to exceed annual debt payments

\* Net Toll Revenue Available for Debt Service = gross revenue adjusted for video leakage and net of cost to collect and bridge O&M and R&R

# Net Revenue Available for Debt Service vs. Funding Needs – Scenario 4B



- Bridge O&M and R&R assumed to be funded before debt service due to standalone nature of facility and owner agency
- Net toll revenue available for debt service designed to exceed annual debt payments

\* Net Toll Revenue Available for Debt Service = gross revenue adjusted for video leakage and net of cost to collect and bridge O&M and R&R



# Final Two Scenario Recommendations

# Input From Bi-State Working Group *(3-6-23 Meeting)*

- Support advancing bookend scenarios that approximate financing capacity (w/TIFIA Loan) of \$75 million and \$125 million
- Advance WSTC study scenarios based on two BSWG pre-completion toll scenarios:
  - BSWG Scenario 3 - \$1.75/\$3.50 in 2023 (no increase until bridge open)
  - BSWG Scenario 5 - \$2.00/\$3.00 in 2023 (no Increase until bridge open)
- Consider a toll rate bump with opening of the new facility
  - Possibly apply as means to achieve higher financing capacity
- Open to the \$2 toll rate differential between BreezeBy and video
- Preference for periodic escalation (ex: 15% every 5 years as opposed to annual escalation)
- Assume using TIFIA Loan funds starting in late 2028 / early 2029

# DRAFT Considerations for Final Two Scenarios

- Funding / Financing Needs
  - Should toll rate scenarios attempt to bookend the estimated toll funding range?
- BreezeBy / Video Rate Differential
  - Should escalation be applied to video tolling rates or assume the \$2 differential? To which scenarios?
- Pre-Completion Toll Rates
  - Should the pre-completion options be revised to reflect the current direction from the Bi-State Working Group?
- BreezeBy Toll Rates / Escalation Amount
  - Should a larger escalation amount and/or rate increase upon bridge opening be applied to one of the final options to broaden distinction in revenue capacity?

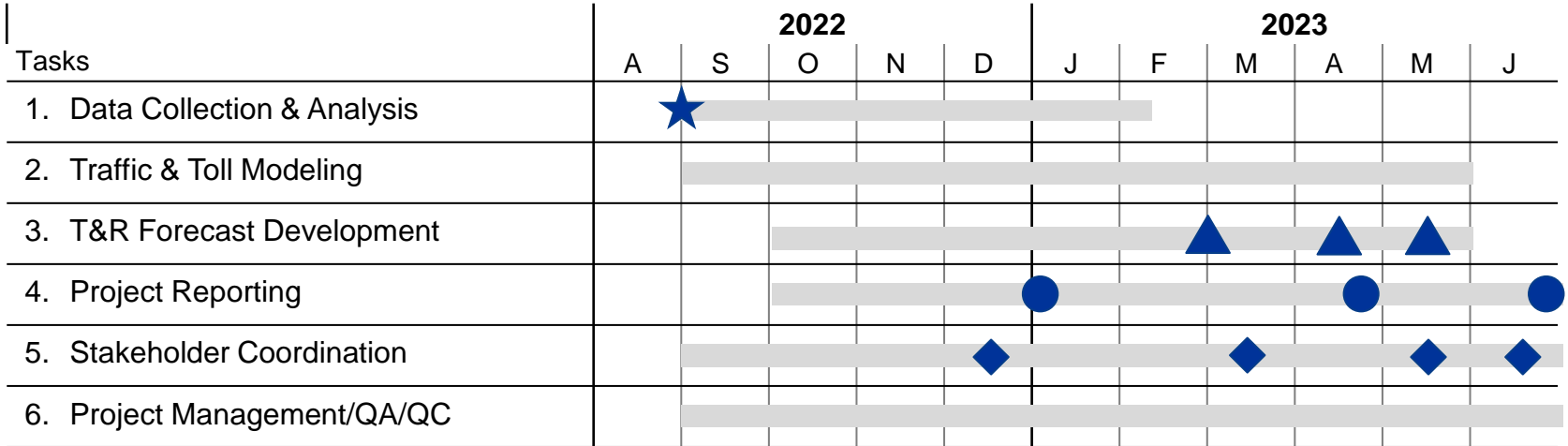
# DRAFT Proposal: Final Tolling Scenarios

<b>Existing Toll Rates</b>	BreezeBy	\$1.00	
	Cash / CC	\$2.00	
		<b>Scenario A</b>	<b>Scenario B</b>
<b>Pre-Completion (FY 24-30)</b>		<b>FY 24 Increase by \$0.75 for BreezeBy &amp; \$1.50 for Cash</b>	<b>FY 24 Increase by \$1.00 for BreezeBy &amp; Cash</b>
<b>FY 24</b>	BreezeBy	\$1.75	\$2.00
	Cash / CC	\$3.50	\$3.00
<b>FY 30</b>	BreezeBy	\$1.75	\$2.00
	Cash / CC	\$3.50	\$3.00
<b>Post Completion (FY 31-51)</b>		<b>15% Increase every 5 yr starting in FY 36 (BreezeBy)</b>	<b>15% Increase every 5 yr starting in FY 36</b>
<b>FY 31</b>	BreezeBy	\$2.00	\$2.50
	Video	\$4.00	\$5.00
<b>FY 51</b>	BreezeBy	\$3.50	\$4.45
	Video	\$5.50	\$8.75
<b>Estimated Financial Capacity Target</b>		<b>\$75 million</b>	<b>\$125 million</b>



## Next Steps / Workplan

# Project Update - Schedule



Month	Key Milestones
Aug 2022	Notice To Proceed
Nov 2022	Potential Scenarios
Dec 2022	WSTC briefing, Report Outline
Mar 2023	Preliminary T&R forecasts (8 scenarios)

Month	Key Milestones
May 2023	Refined T&R forecasts (2 scenarios)
May 2023	Draft T&R Report
May 2023	WSTC meeting, final T&R forecasts
Jun 2023	WSTC meeting, final T&R Report



## Questions / Contact:

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