

SR 99 Tunnel Toll Rate Setting

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December 12, 2017

Presentation Overview

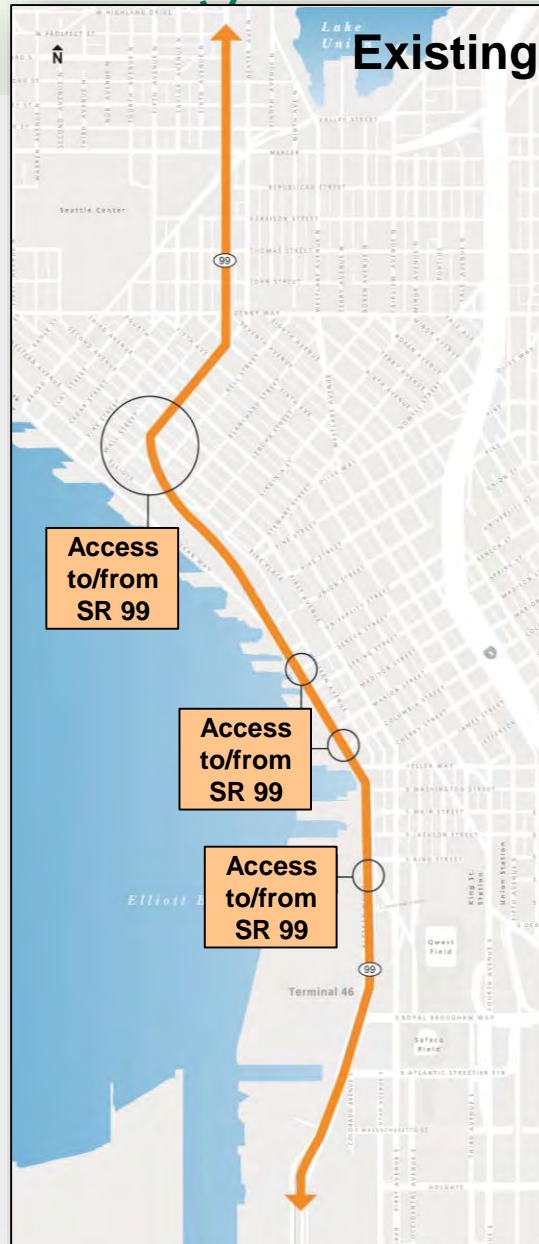
- SR 99 Rate-setting Context
 - Facility access changes
 - Downtown Seattle context
 - Toll financing assumptions
- Rate-setting Process and Timeline
- Baseline Traffic and Gross Revenue Projections
- Net Revenue Analysis and Findings

- Subcommittee Report and Discussion

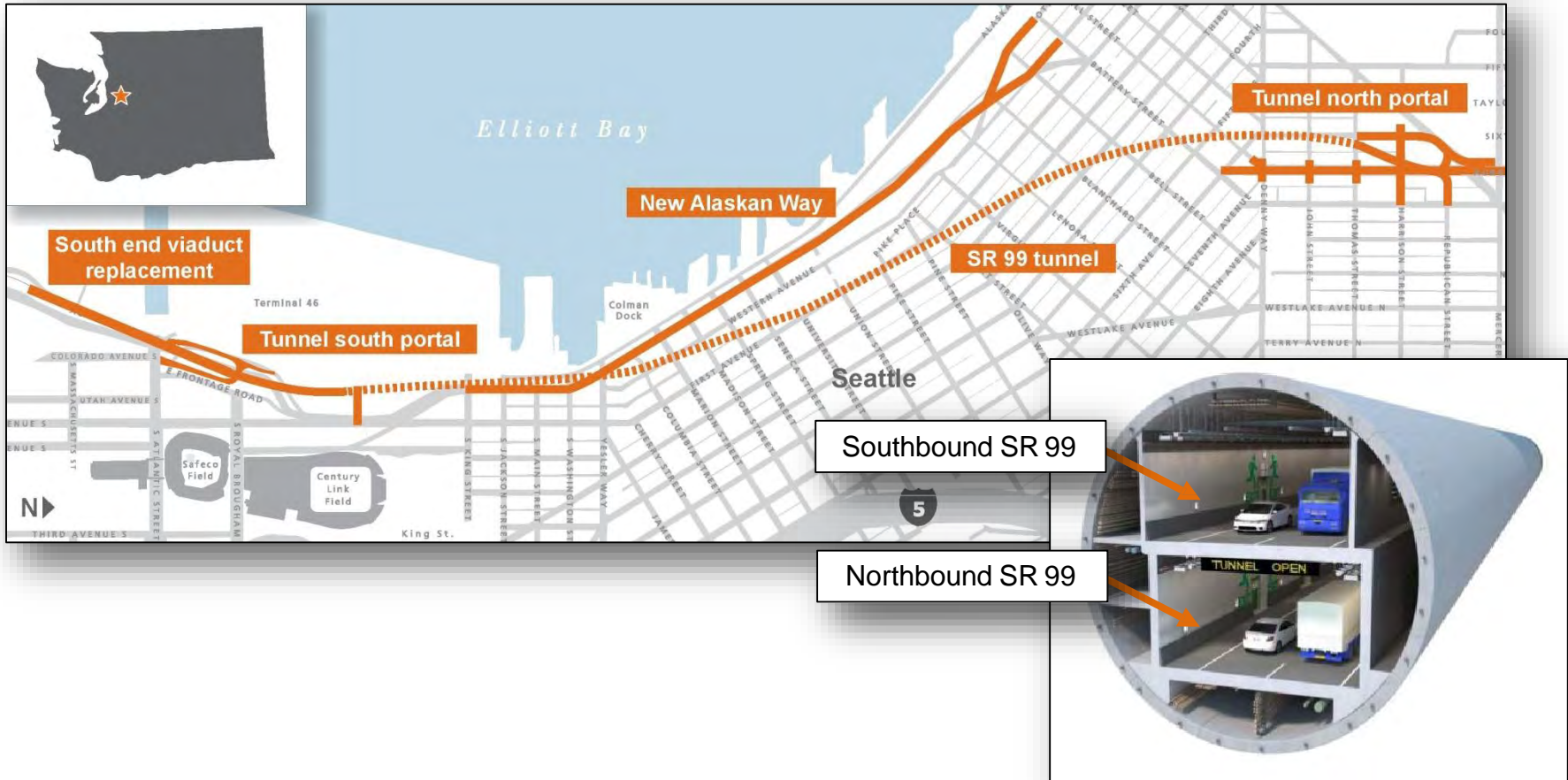
SR 99 RATE-SETTING CONTEXT

Traffic Patterns Change with the Tunnel

- Full access at tunnel portals to northbound and southbound SR 99 and ramps to downtown city streets.
- Removal of viaduct's Columbia and Seneca ramps.
- Removal of viaduct's Elliott and Western ramps.



Building a New SR 99 Corridor



Downtown Seattle Context

- **Downtown Seattle is growing quickly, and transportation capacity into and through downtown is constrained**
- **There are many factors and projects planned or underway that will affect downtown traffic**
 - At opening, the parallel Alaskan Way and connection to Western and Elliott Avenues will not be completed
 - Conversion of transit tunnel to rail-only will move 40 buses/hour/direction to surface streets until 2021, straining street and transit capacity
 - Significant growth in South Lake Union and downtown Seattle
 - Construction of a streetcar on First Avenue, Colman Ferry Dock replacement, Convention Center expansion and other projects
 - Seattle is considering changes to downtown street capacity for transit, streetcar, and bicycles

Requirements for Rate-setting

- **Policy guidelines for eligible toll facility proposals – Setting toll rates (RCW 47.56.830(4))**
 - Toll rates, which may include variable pricing, must be set to meet anticipated funding obligations
 - To the extent possible, the toll rates should be set to optimize system performance, recognizing necessary trade-offs to generate revenue
- **System performance includes managing congestion on the facility and minimizing impacts to alternative routes**
- **Financial plan requirements on following slides are based on draft legislation**
 - Bonds would be pledged against motor vehicle fuel taxes, to be reimbursed by tolls similar to Tacoma Narrows Bridge
 - Changes in financial plan ground rules may occur as the bill progresses through the legislature

Toll Rates Must be Sufficient to Cover Financial Obligations

Rate Setting Requirements (Financial Obligations) for Tolls:

- **Toll collection and tunnel operations and maintenance (O&M)**
- **Toll systems periodic repair and replacement (R&R)**
 - Annual contributions to a reserve account funds these expenditures as determined by WSDOT
- **Debt service on bonds**
 - Toll bonds are intended to provide up to \$200 million in capital funds
 - Repayment schedule provided by OST
- **Additional reserves or “coverage” to protect against revenue fluctuations**
 - To be determined by OST and WSDOT
 - Provides a margin for error which may vary with revenue risk, type of financing, and other identified uses for toll revenues

Adopting Toll Rates

Requirements for Adopting Toll Rates:

- **A certificate from a Traffic and Revenue Consultant**
 - The projected toll revenue is based on reasonable assumptions and applies the revised toll rate schedule
- **A certificate from an independent Consulting Engineer firm**
 - The projected operating and maintenance expenditures and repair and replacement costs are reasonable
- **A certificate from the Office of the State Treasurer**
 - Based on the information provided by the department the revised toll rate schedule will meet all the toll rate requirements

RATE SETTING TIMELINE AND MILESTONES

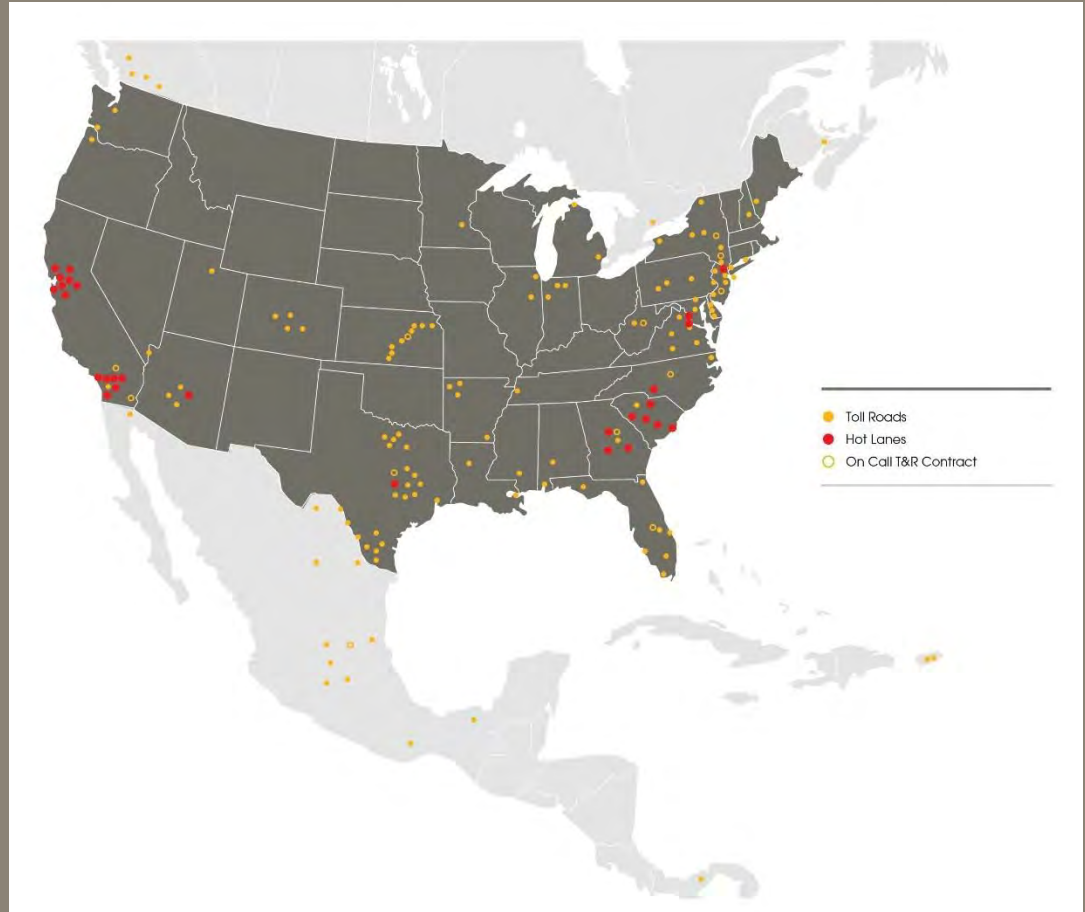
SR 99 Rate Setting Timeline

Rate Setting Activity	Date
Commission meeting Confirm preliminary rate scenarios to be analyzed	Dec. 12, 2017
Stantec to analyze rate scenarios	Dec. 2017 – Feb. 2018
Revise scenarios (if needed)	Late Mar. 2018
Commission meeting Stantec to present rate scenario results	Apr. 17, 2018
Public outreach on toll rate scenario results	Apr. – Jun. 2018
Propose toll rates	Jul. 17-18, 2018
Public hearing, Adopt toll rates	Sept. 11, 2018

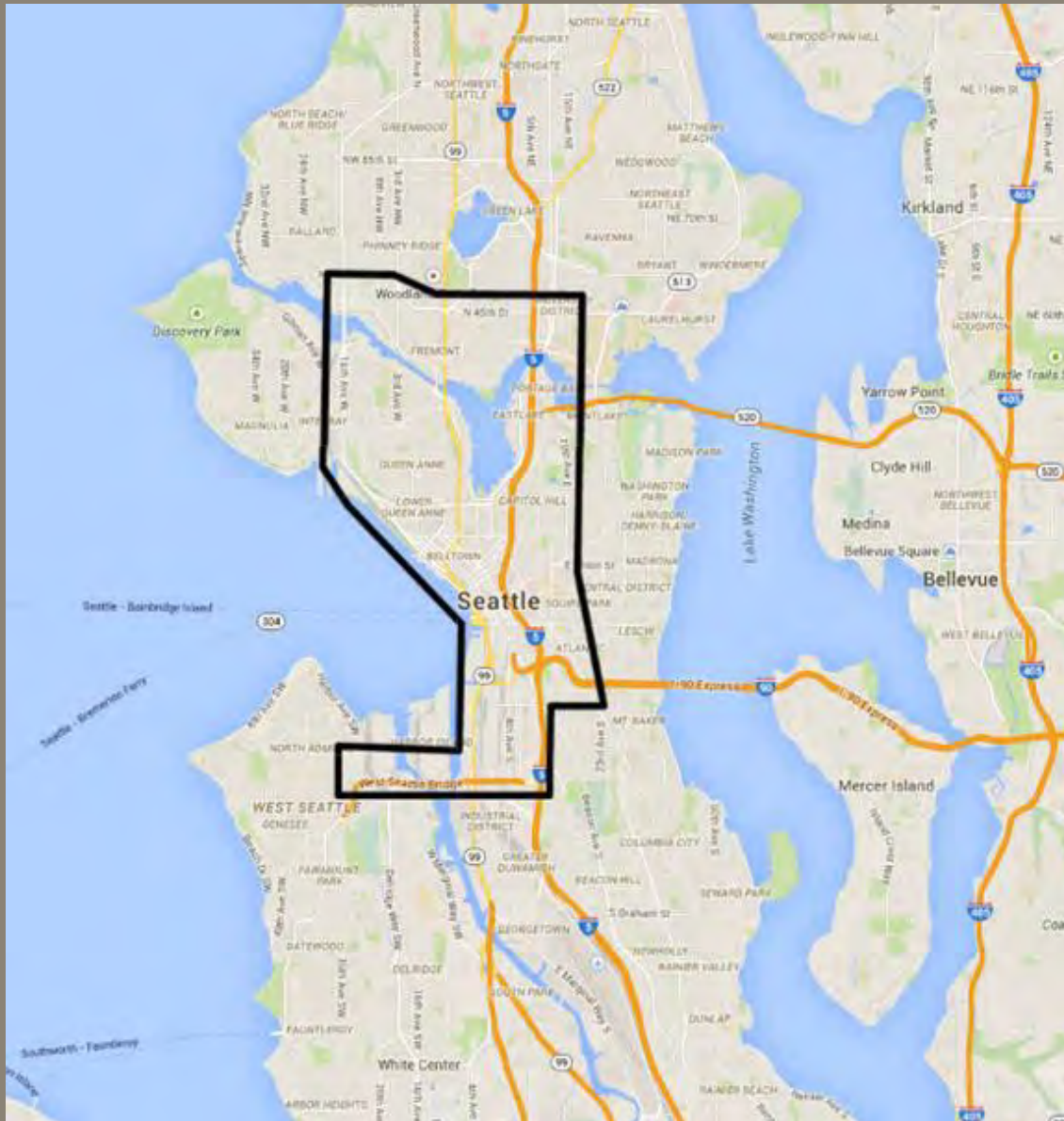
INVESTMENT GRADE TRAFFIC AND REVENUE ANALYSIS

Stantec's International Traffic and Revenue Practice

- Completed over 140 Investment Grade T&R Studies for 35 different clients
- Over \$43B in bond sales
- Over \$20B in bond sales since 2009 (post-recession)
- Experienced with TIFIA, rating agencies, and investor community
- Managing Leader for Stantec's T&R Group
- Project Manager for all west coast clients



Study Area



Investment Grade Traffic and Revenue | Key Inputs

Comprehensive data collection

- Traffic counts, including turning movements at intersections and volumes on arterials, plus analysis of historical count data
- Speed measurements using travel time runs and corridor speeds
- Trip origins and destinations from regional surveys and corridor level “big data” sources (Airsage, Streetlight)

Socio-economic forecasts (population, households, and employment)

- Independent forecasts prepared by Berk
- Focus on 14 core districts serving as SR 99 catchment area
- Socio-economic forecasts are higher than those used for the ACTT study

Future highway and transit network conditions

- Includes closure of 3rd Ave transit tunnel to buses

Investment Grade T&R Study | Model Framework

Two-tiered modeling structure

- PSRC Regional Model —> Dynamic Traffic Assignment (DTA) model
- Trip tables, modal splits, and trip characteristics extracted from the regional model and incorporated into the DTA model

DTA model simulates realistic congestion conditions and driver response to tolling

- The IG work employs a more complex, toll choice component in the DTA model than previous ACTT work
- Results in higher driver sensitivity to tolls

Model was calibrated for screen-line volumes, time of day patterns, speeds, and trip ends (origins / destinations)

Investment Grade T&R Study |

Key Assumptions

- Forecast period: FY 2019-59
- Truck shares and average toll multipliers (relative to 2-axle auto toll):
- No HOV exemptions
- Pay By Mail toll increment of \$2.00 (non-escalating)
- Pay By Plate fee of \$0.25 (non-escalating)
- No toll escalation (except in maximum revenue Scenario IG- 2)
- 96 routine maintenance closures per year on nights and weekends
- Values of time are based on values from existing area toll facilities

Fiscal Year	Ramp-Up Assumption	Forecast Reduction	
2019 (4 months)	75%	25%	
2020	80%	20%	
2021	97%	3%	

Vehicle Class	Toll-Free Share of Traffic	Average Axle Count	Toll Multiplier
Autos / Small Trucks	93%	2.00	1.00x
Medium Trucks	3%	2.11	1.06x
Large Trucks	4%	4.17	2.09x

Toll Scenario Assumptions

Toll Scenario	Toll Rate Schedules*
<p>Scenario IG-0 <i>(Financial Plan)</i></p>	<p>Minimum \$1.00 11 PM-5 AM Nights & All Day on Weekends</p> <p>Off-Peak \$1.50 5-6 AM, 9 AM-3 PM, & 6-11 PM Weekdays</p> <p>AM Peak \$1.75 6-9 AM Weekdays</p> <p>PM Peak \$2.50 3-6 PM Weekdays</p>
<p>Scenario IG-1 <i>(Low Diversion)</i></p>	<p>Minimum \$1.00 11 PM-5 AM Nights & All Day on Weekends</p> <p>Off-Peak \$1.00 5-6 AM, 9 AM-3 PM, & 6-11 PM Weekdays</p> <p>AM Peak \$1.25 6-9 AM Weekdays</p> <p>PM Peak \$1.25 3-6 PM Weekdays</p>

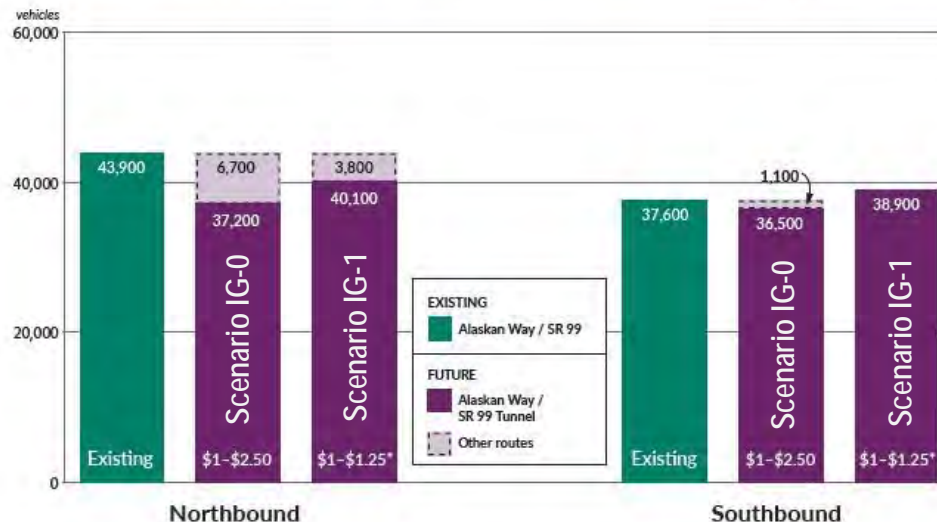
SR 99 and Alaskan Way Daily Volumes at Pike and Union



EXISTING



FUTURE



*Results show that toll rates between \$1 and \$1.25 do not raise the \$200 million in revenue required by the Legislature.

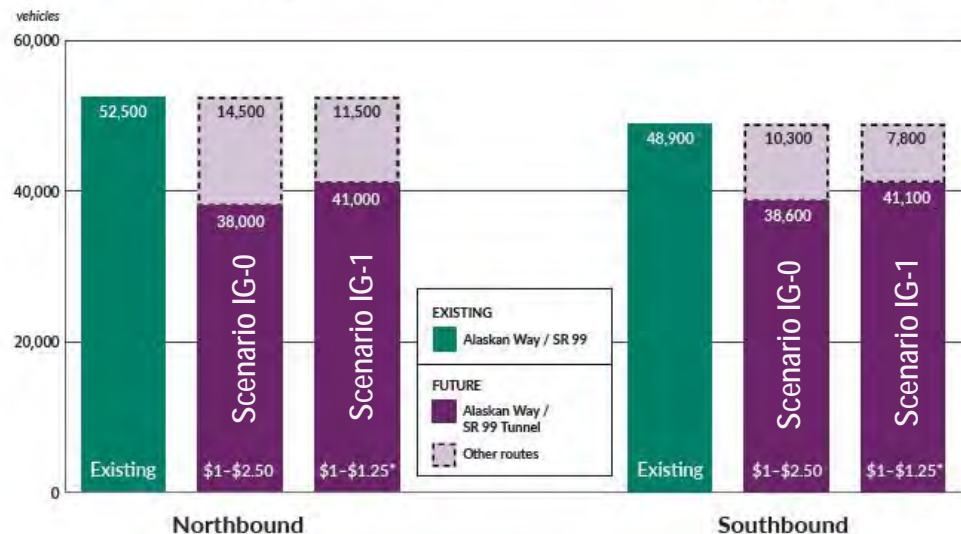
SR 99 and Alaskan Way Daily Volumes at University and Seneca



EXISTING

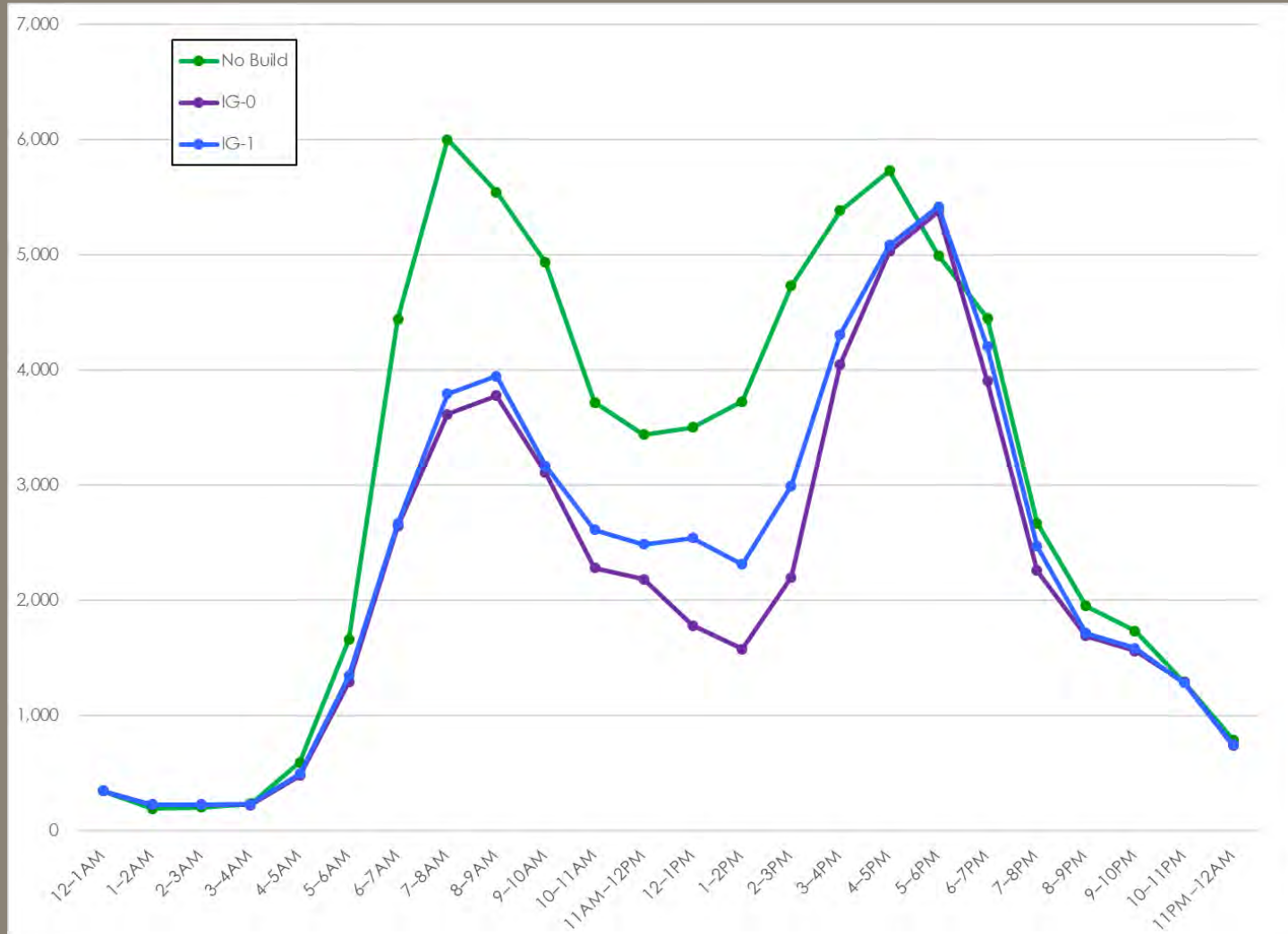


FUTURE

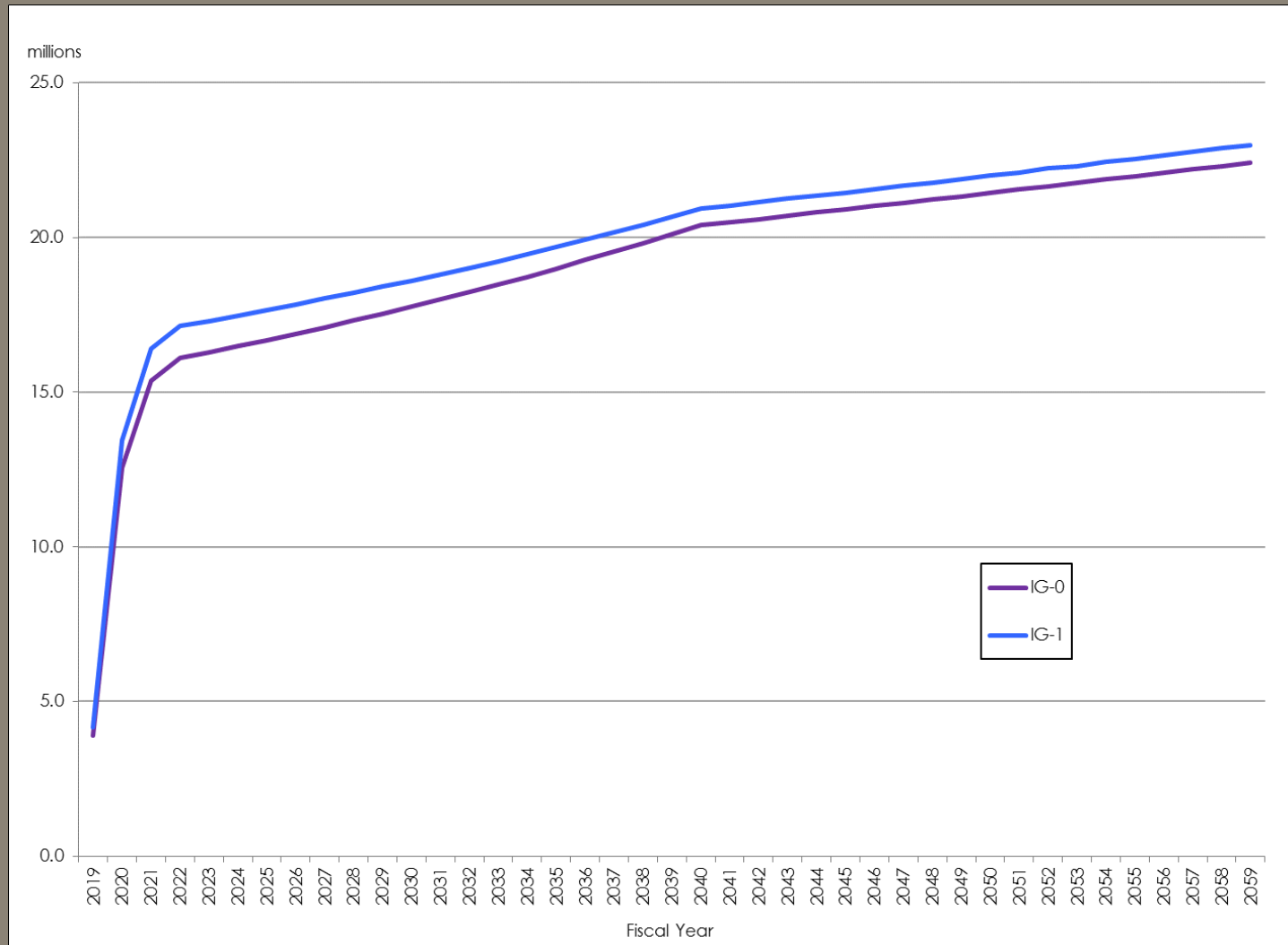


*Results show that toll rates between \$1 and \$1.25 do not raise the \$200 million in revenue required by the Legislature.

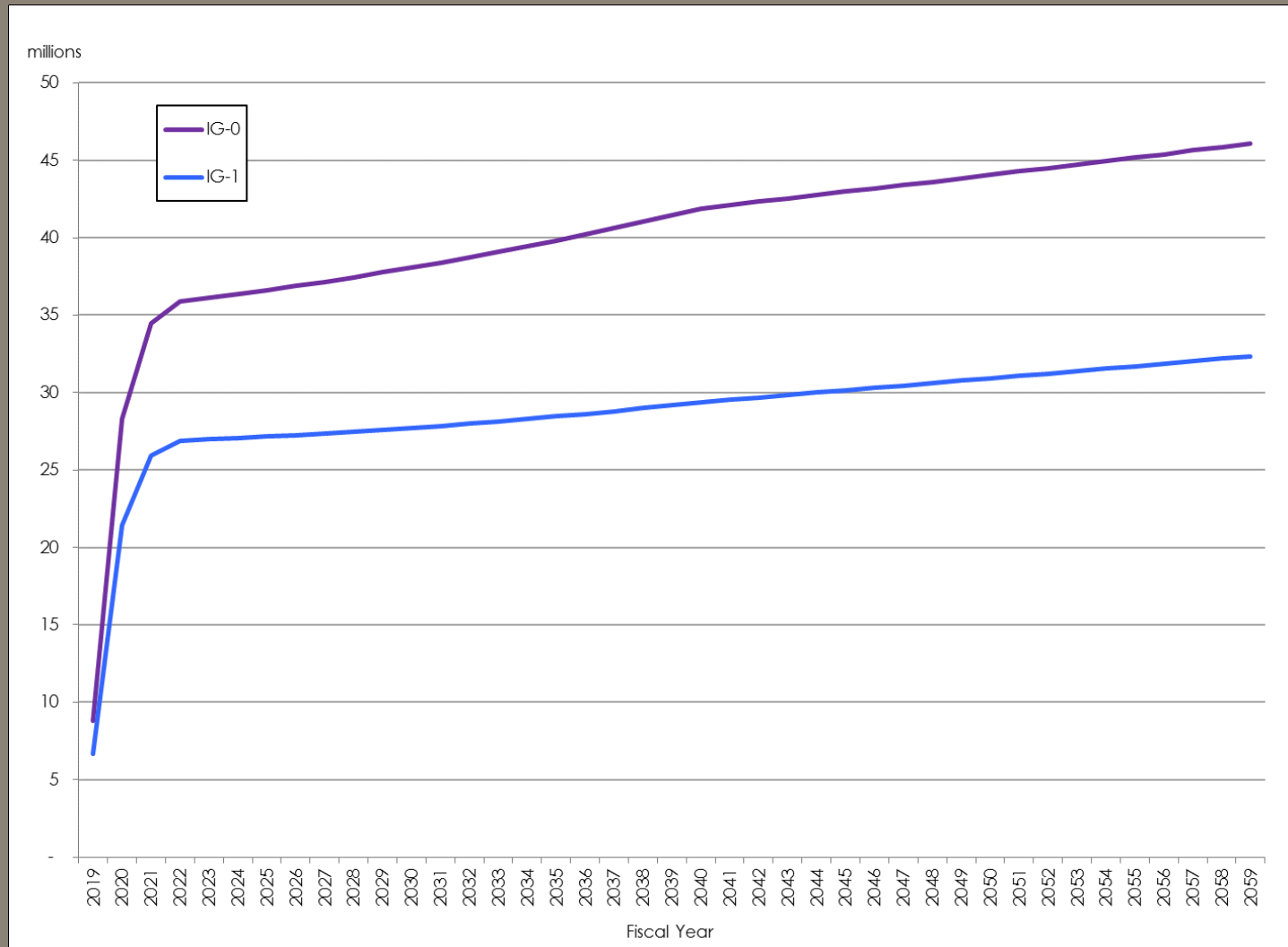
FY 2020 Weekday Traffic Profiles



Total Transactions



Total Gross Potential Revenue



NET REVENUE ANALYSIS AND FINDINGS

Uses of Toll Revenues – Waterfall

Gross Toll Revenue Potential

- ± Toll Payment Discounts and Fees
- Revenue Not Recognized
- Unpaid Toll Revenue
- + Recaptured Toll Revenue at *Good To Go!* Rates

Adjusted Gross Toll Revenue Collected

- + Transponder Sales Revenue
- + Pay By Mail Rebilling Fees
- + Toll Revenue Recovered at Pay By Mail Rates

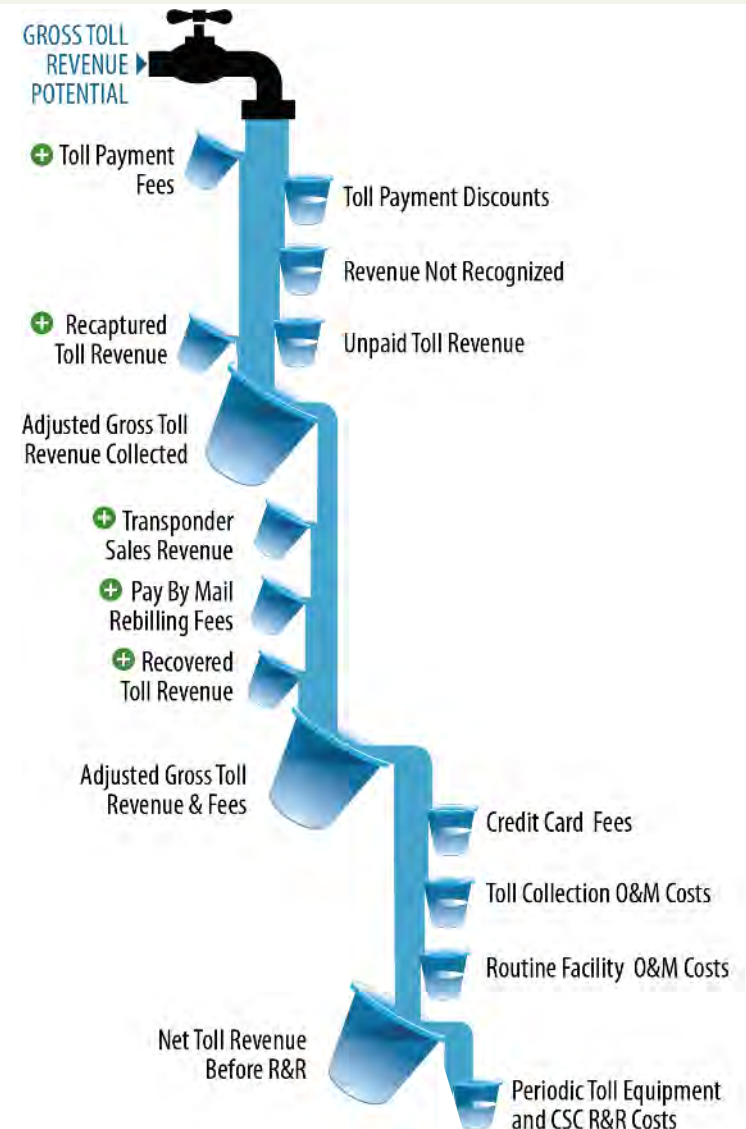
Adjusted Gross Toll Revenue & Fees

- Credit Card Fees
- Toll Collection O&M Costs*
- Routine Facility O&M Costs

Net Toll Revenue

- Periodic Toll Equipment / Systems R&R Reserves
- Debt service

* Includes Transponder Purchase & Inventory, State Operations, Customer Service Center Vendor and Roadway Toll System Vendor Costs

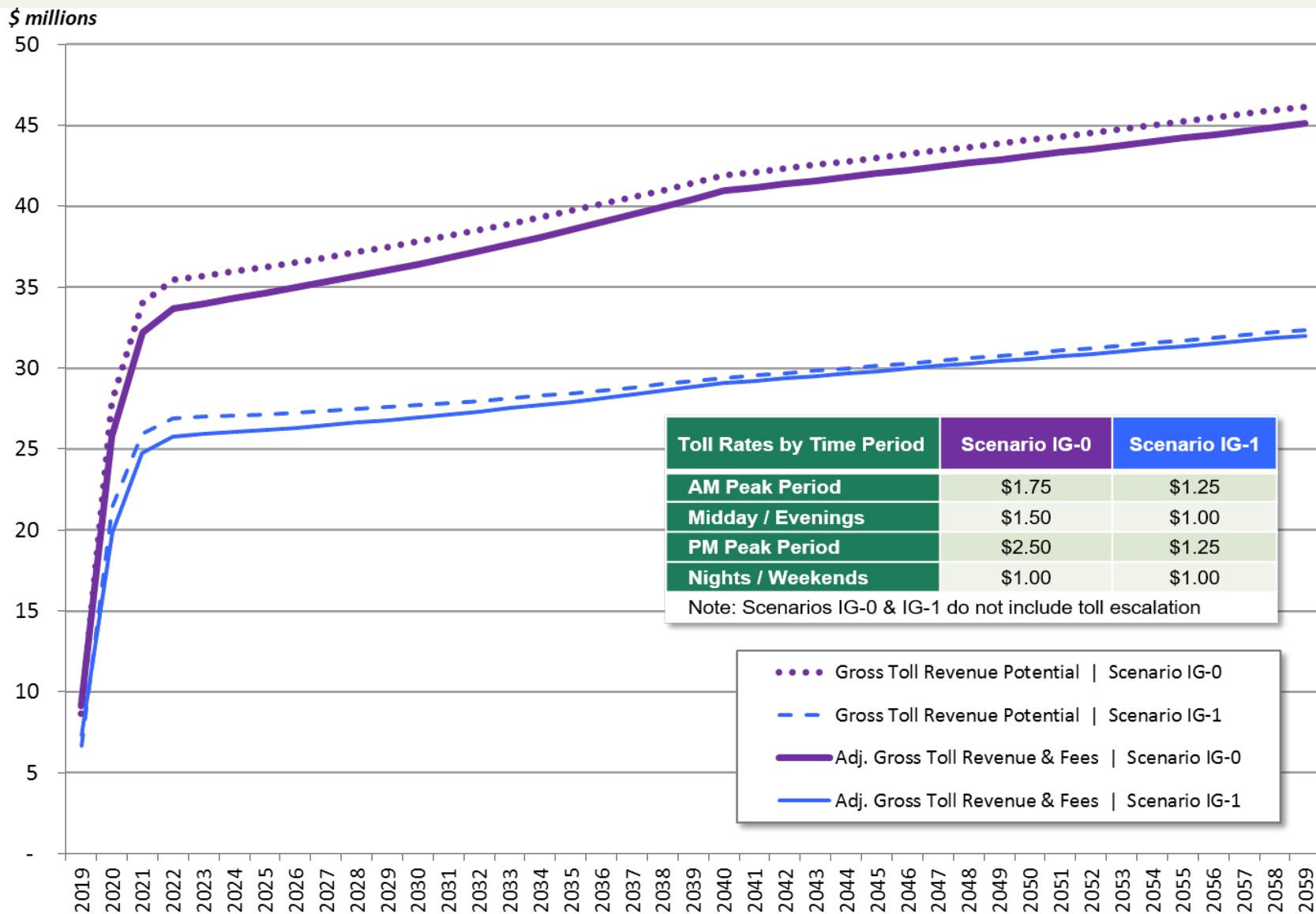


Uses of Net Toll Revenues

Net revenues in each year must be sufficient to:

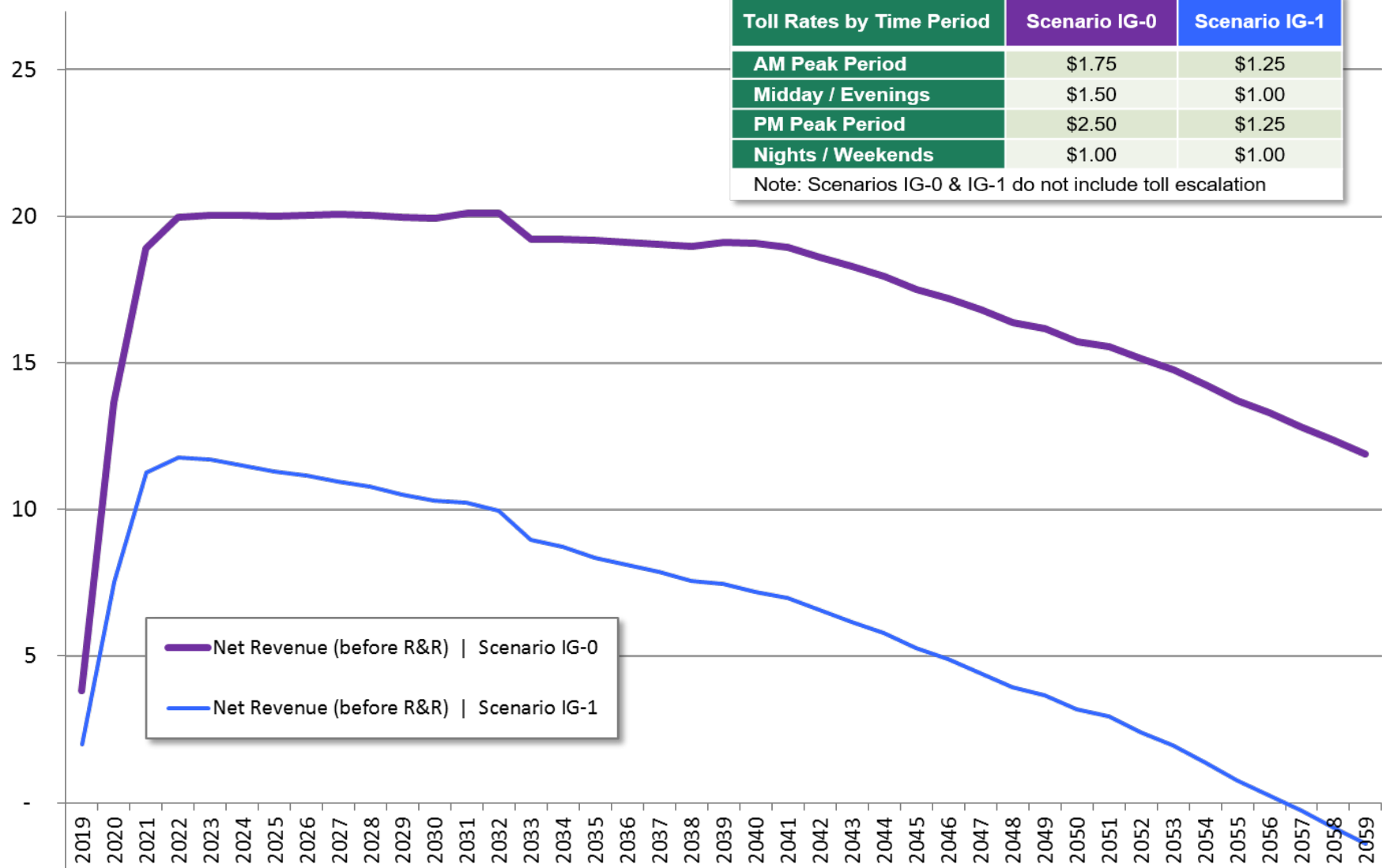
- **Cover necessary deposits to the toll collection repair and replacement (R&R) reserve account**
- **Make reimbursement for debt service paid from motor fuel tax revenue**
- **Provide debt service coverage as a factor (percentage) of debt service payments**
 - Coverage amount to be jointly provided by the Office of the State Treasurer (OST)
 - OST may identify other prudent reserves or uses of coverage revenues

Gross / Adjusted Gross Toll Revenue & Fees Forecast SR 99 Tunnel — Scenarios IG-0 & IG-1

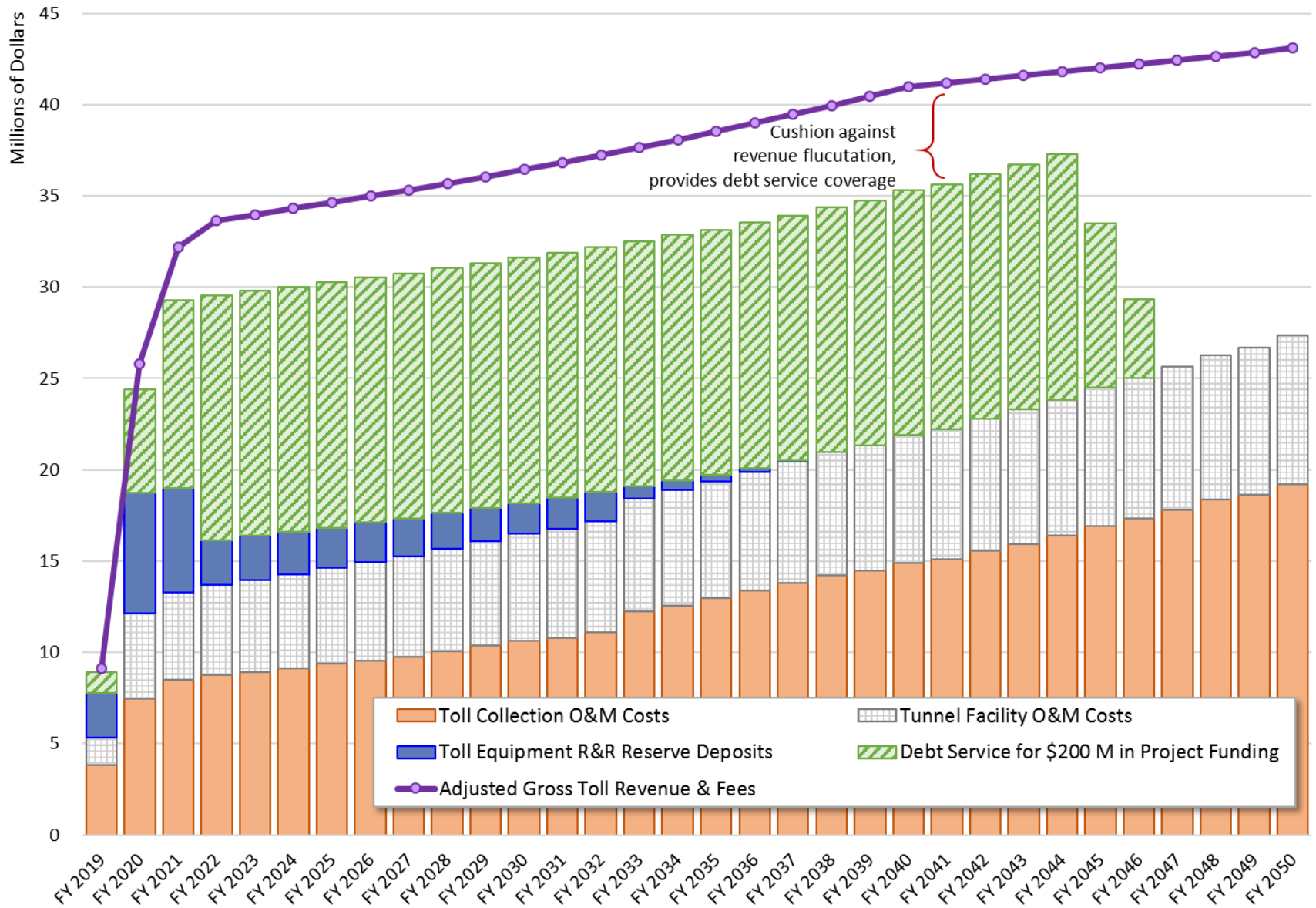


Net Toll Revenue (before R&R) Forecast Comparison SR 99 Tunnel — Scenarios IG-0 & IG-1

\$ millions



Uses of Adjusted Gross Toll Revenue & Fees



Uses of Net Revenue (after Toll R&R Deposits)

