

I-405/SR 167 ETLs Corridor Program Toll Rate Setting Process

WASHINGTON STATE TRANSPORTATION COMMISSION

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WSDOT TOLL DIVISION DIRECTOR

May 16, 2023

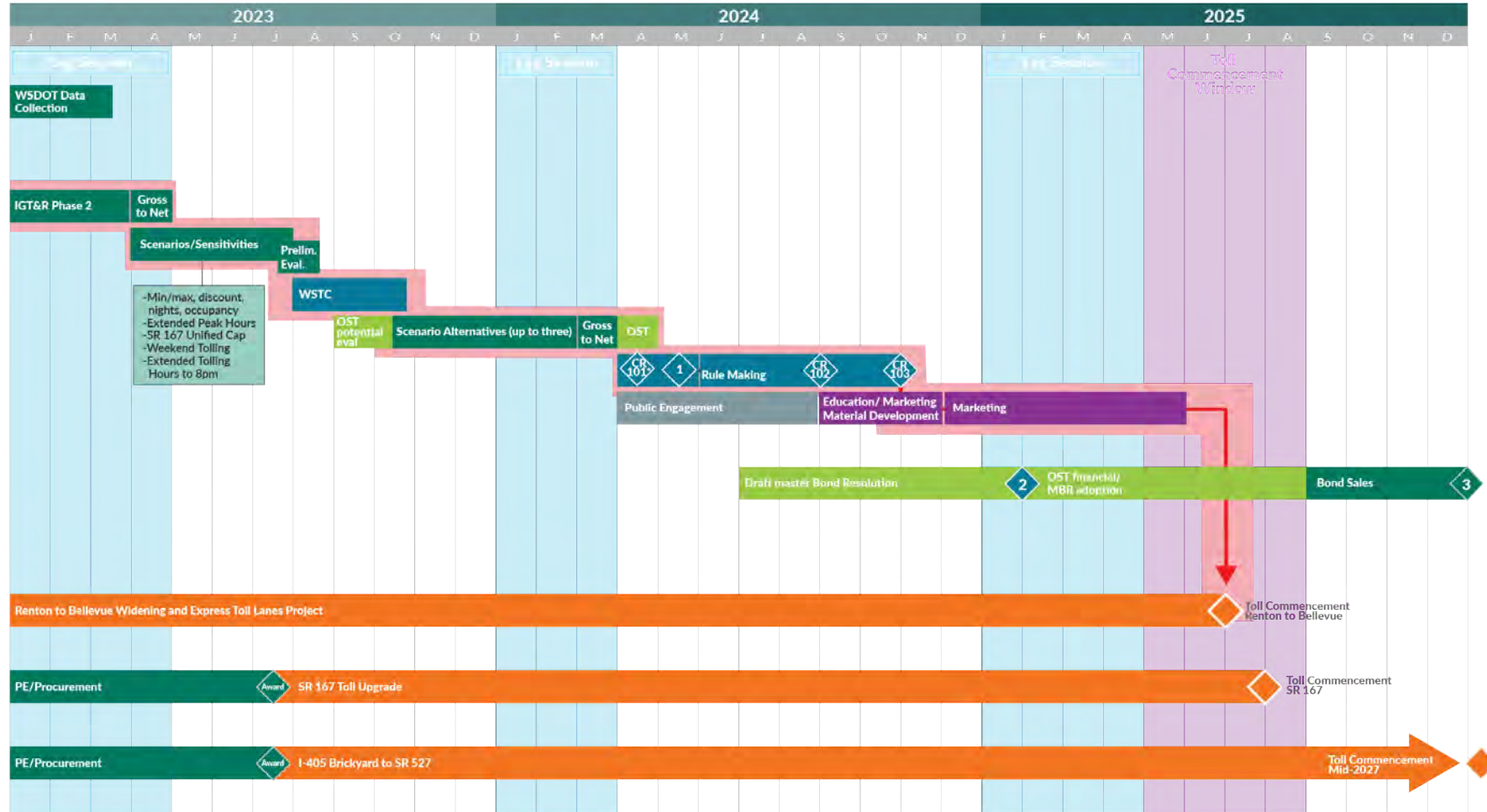
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I-405/SR 167 PROGRAM TRAFFIC OPERATIONS LEAD

Purpose

- Guidance for advancing the maximum toll rate analysis
- Discussion on peak periods

Toll Rate Setting and Outreach

● WSDOT
 ● WSTC
 ● OST
 ● Design-Build
 ● Toll Division
 ➔ Critical Path



- # 1. Propose options for public comment
- 2. Bond appropriation by legislature
- 3. Bond sales complete

SCHEDULE IS PRELIMINARY / DRAFT BASED ON MOST RECENT INFORMATION AVAILABLE.

*EARLIEST FILING FALL 2023, LATEST FILING SPRING 2024.

I-405/SR 167 Rate Setting and Outreach Schedule

Agency	Timeline	Description
WSTC	February 2023	I-405 rate setting kick-off with the Commission
WSTC	March – August 2023	Work with the Commission to establish policies, to inform the final scenarios (minimum & maximum rates, occupancy, etc.)
WSDOT	April – August 2023	On-going Traffic & Revenue scenarios and sensitivities
OST	Fall 2023	Draft preliminary finance results of select
WSDOT	Fall 2023 – Winter 2024	Scenario Alternative Analysis
WSTC	Spring 2024	Public Engagement
OST	Spring 2024	Draft preliminary finance results
WSTC	Spring-Fall 2024	Commission Rule Making Process
WSDOT	Winter-Summer 2025	Educational Marketing Campaign
WSDOT	Spring-Summer 2025	Toll Commencement for both Renton to Bellevue & SR 167 Toll Upgrade

Scenarios and Sensitivities

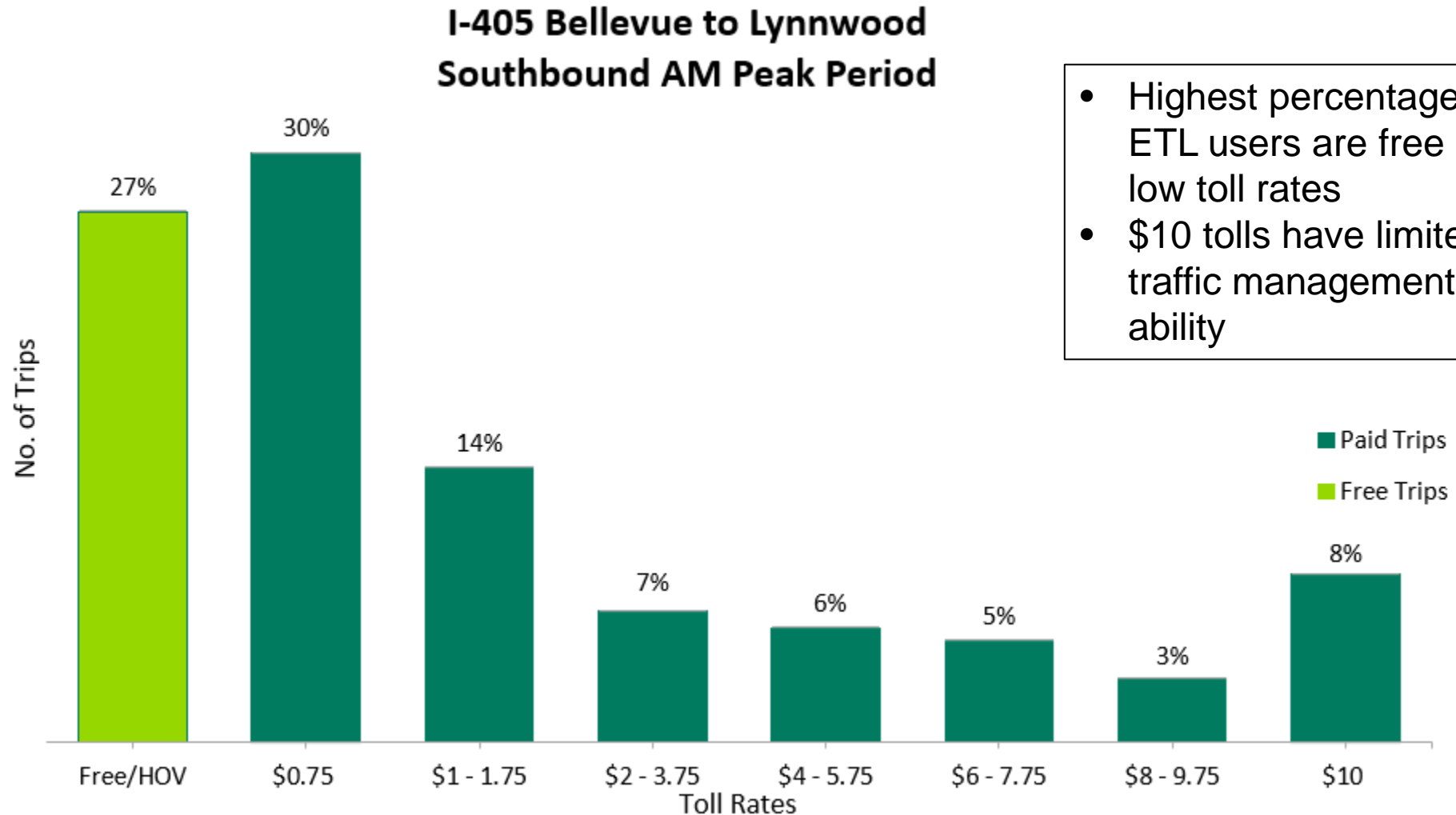
Full T&R Stream Analysis (2022 through 2056)							Sensitivity Scenarios Under Consideration (year 2030 ONLY)					
Scenario	I	II	III	IV	V	VI	VII	II w/A	II w/B	V w/C	V w/D	II w/E
Future Peak Period HOV Policy Assumptions	3-3-3	3-3-3	3-2-2	3-3-3	2-2-2	2-2-2	3-3-3	3-3-3	3-3-3	2-2-2	2-2-2	N/A
Future Toll Policy	Base*	Base*	Base*	Higher Cap	Base*	No Cap	\$1 Min	Extended Peak Hours	SR 167 Unified Cap	Weekend Tolling	Extended Tolling Hours to 8pm	HOV Discount

***Base Assumptions: Minimum toll rate \$0.75; Maximum toll rate \$9.00/\$10.00; All projects open by 2030**

I-405 / SR 167 Maximum Toll Rate: Summary of Toll Rates Weekdays October 2022

I-405 Bellevue to Lynnwood

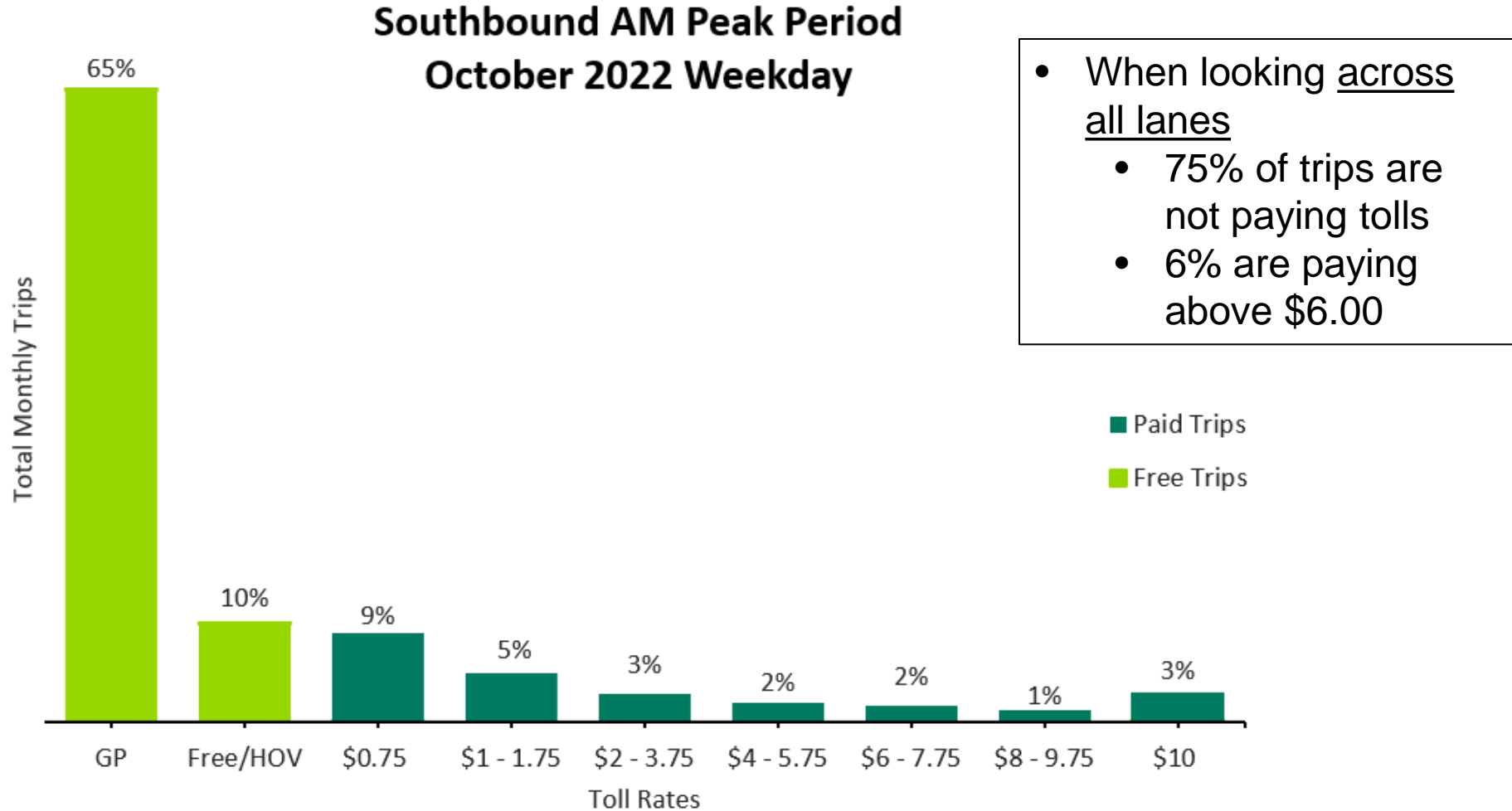
Southbound AM Peak Period (ETL Only) October 2022 Weekdays



- Highest percentages of ETL users are free or low toll rates
- \$10 tolls have limited traffic management ability

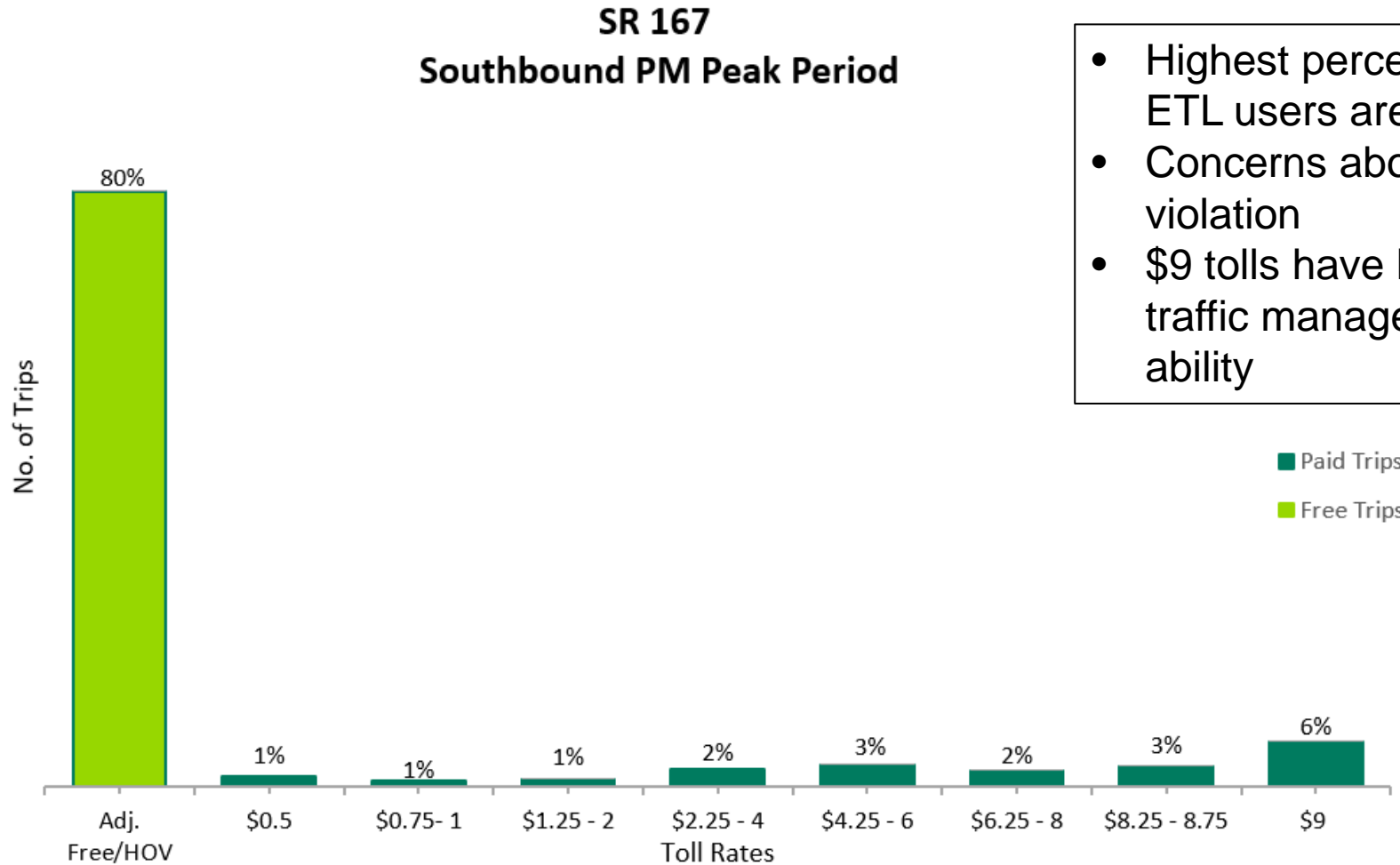
I-405

Southbound AM Peak Period – All Lanes Kirkland Screen Line



SR 167

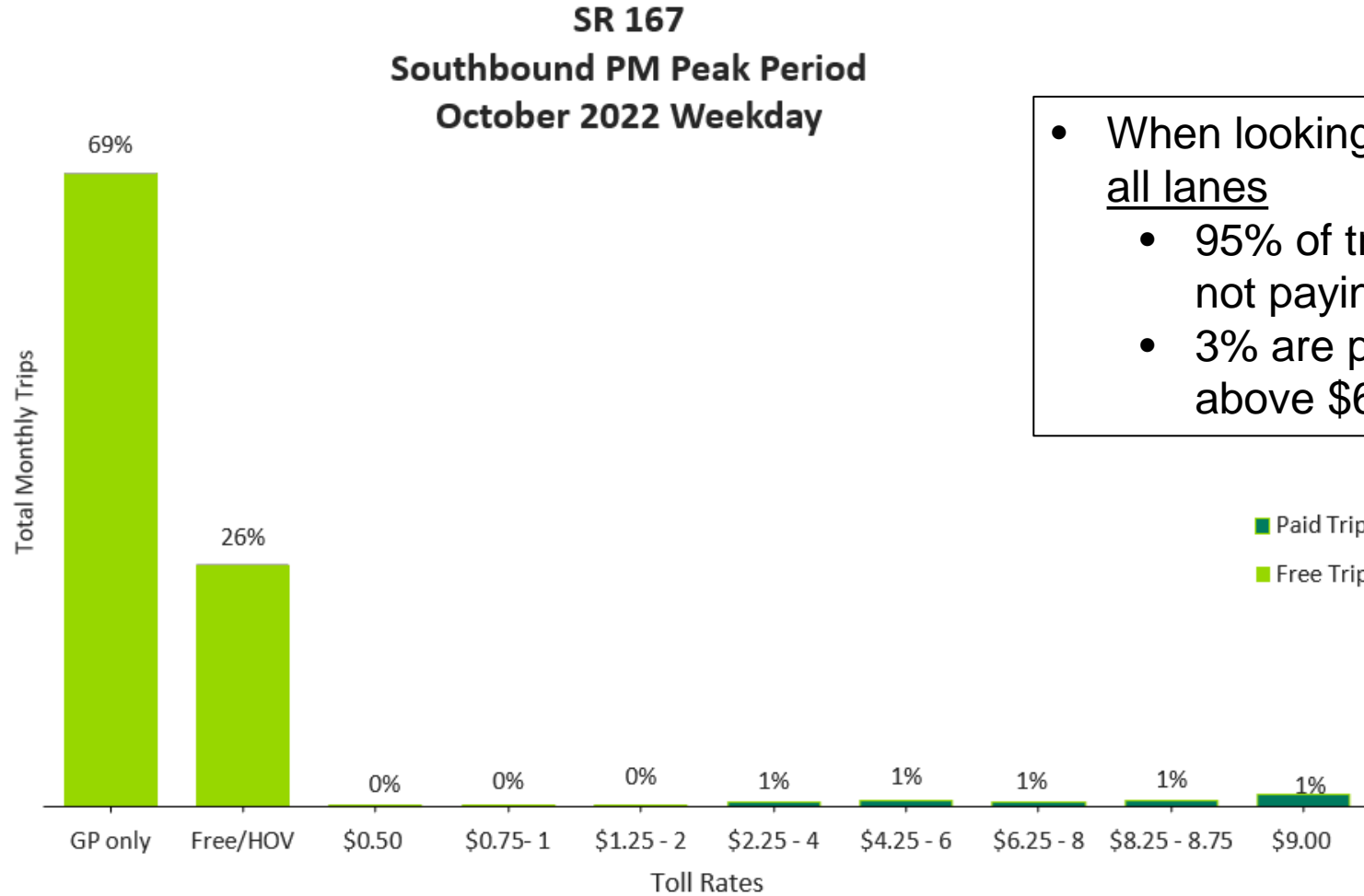
Southbound PM Peak Period – HOT Lanes October 2022 Weekdays



- Highest percentages of ETL users are free
- Concerns about HOV violation
- \$9 tolls have limited traffic management ability

SR 167

Southbound PM Peak Period – All Lanes Auburn Screen Line



- When looking across all lanes
 - 95% of trips are not paying tolls
 - 3% are paying above \$6.00

Maximum Toll Rate Observations

Traffic operations and management ability are limited when toll cap is reached

Maximum rate impacting a small percentage of daily users

- I-405 ETL = 3% of daily trips paying maximum toll rate
- SR 167 HOT = 2% paying maximum toll rate

Toll free trips are a significant number of total daily trips

- I-405 = 20% toll free
- SR 167 HOT = 77% toll free

Assumption for Maximum Toll Rate Scenario

System needs better management abilities

- A maximum toll rate of \$15 per facility (scenario IV) is projected to provide necessary management during opening year

System needs to be consistent

- Consistent maximum toll rate throughout entire length of corridor, for I-405 and SR 167

I-405 / SR 167 Peak Periods: Summary of Operating Hours Mid-day

I-405 and SR 167

Existing Toll Rate Occupancy Hours Weekdays

I-405 Current Policy:

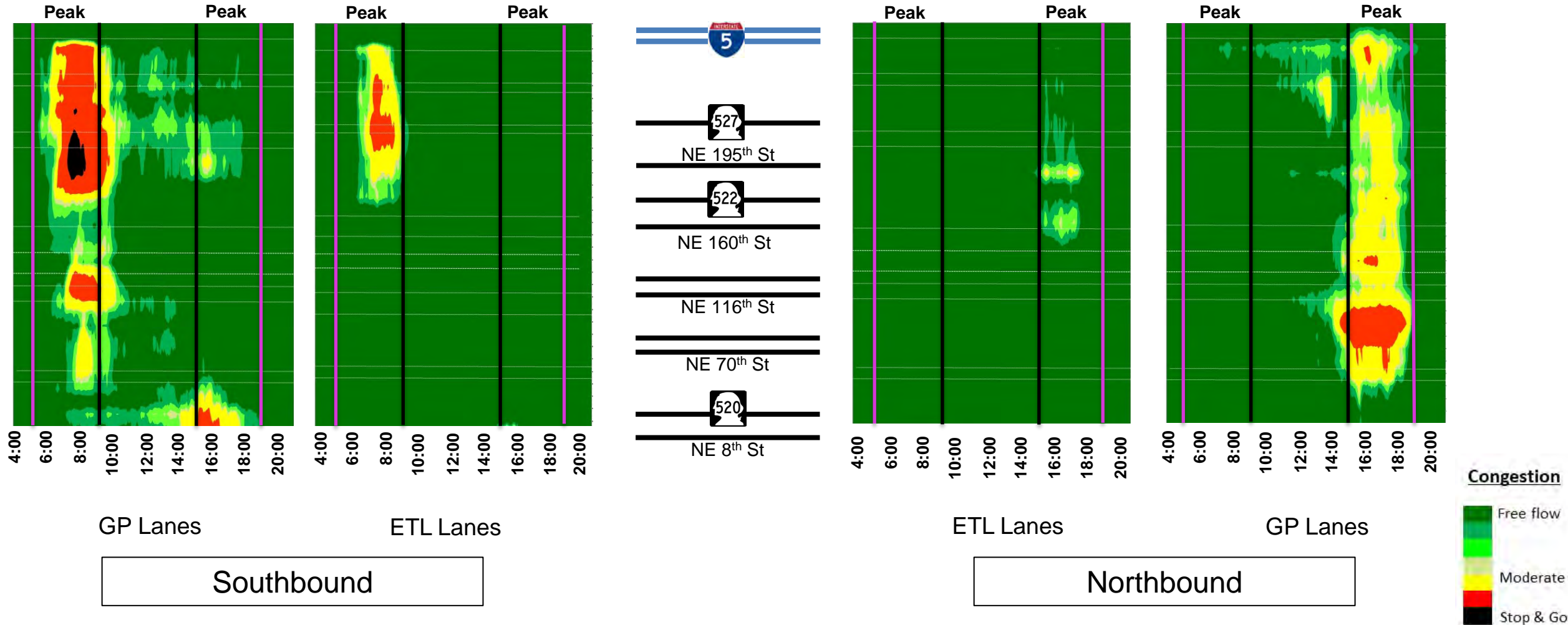
- 5am to 9am: 3+ free
- 9am to 3pm: 2+ free
- 3pm to 7pm: 3+ free

SR 167 Current Policy:

- 5am to 7pm: 2+ free

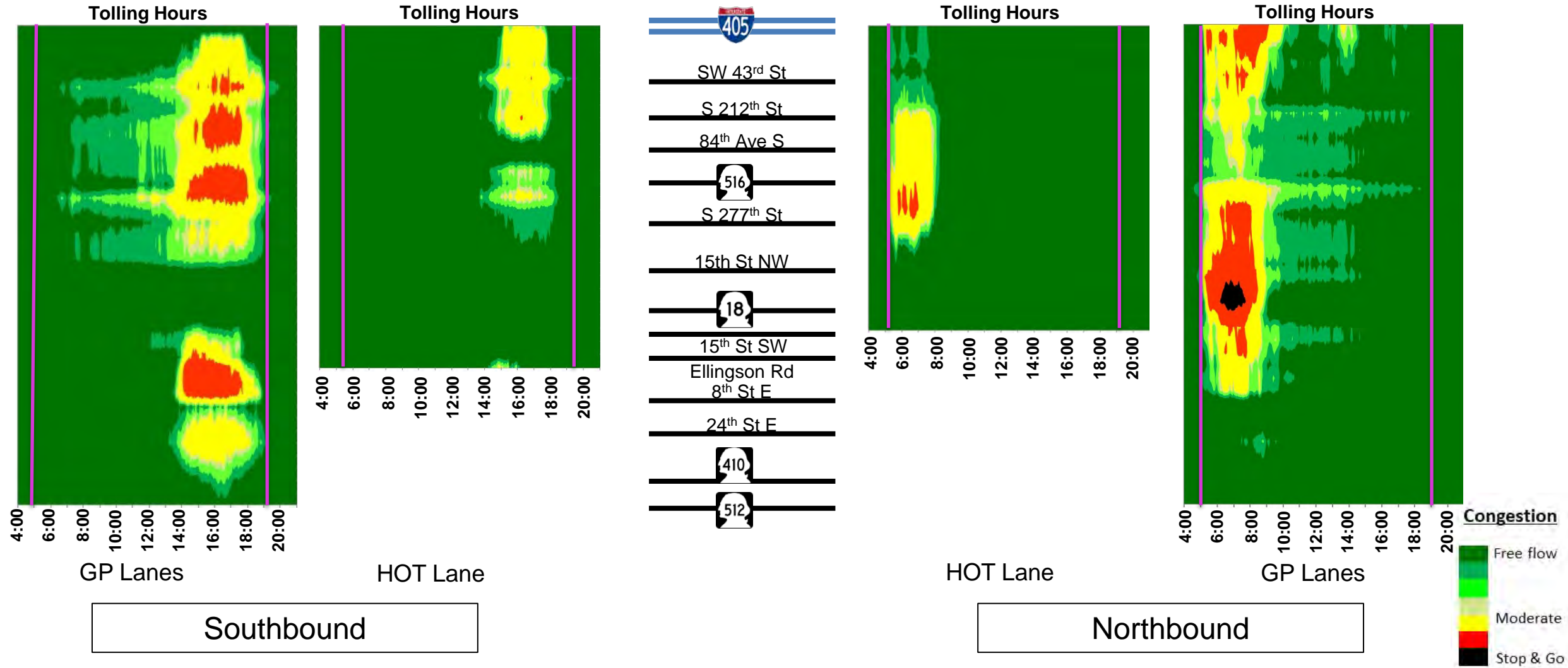
I-405 Bellevue to Lynnwood Heatmaps

October 2022 Average Weekdays



SR 167 Heatmaps

October 2022 Average Weekdays



I-405 and SR 167 Occupancy Hours

October 2022 Conditions

I-405

- Occupancy switch is very close to corridor congestion periods
 - 9:00am corridor volumes dropping
 - 3:00pm corridor volumes increasing

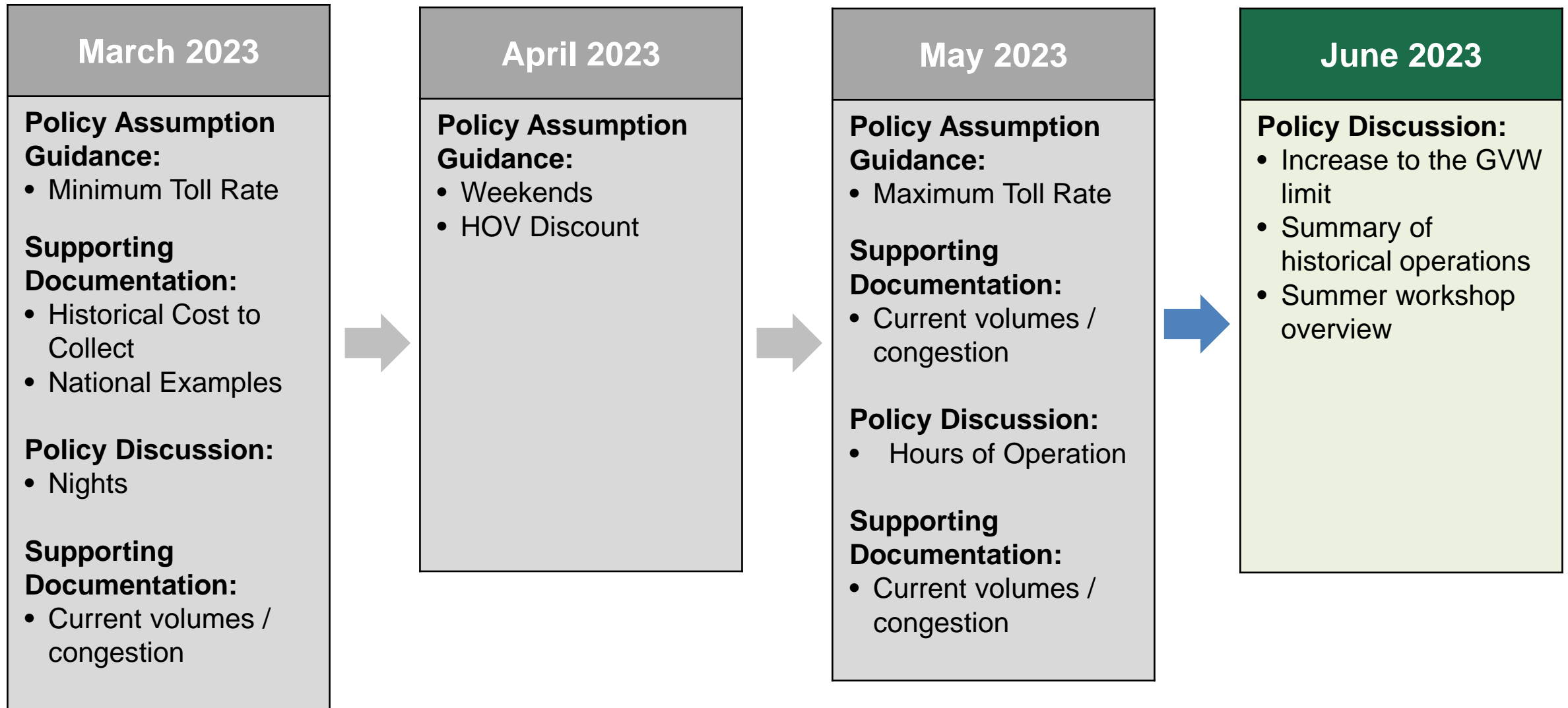
SR 167

- HOV 2+ free all tolling hours
- 9:00am and 3:00pm time periods are very close to corridor congestion periods

Operational improvements could be gained by HOV3+ 2:00 start (sensitivity test II w/A)

Calendar Action is required by the WSDOT State Traffic Engineer to adjust the peak periods

Upcoming Schedule/Next Steps



Questions?

For additional information, please contact:

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