



BUCKLEY CITY COUNCIL STUDY SESSION AGENDA

Tuesday, December 2, 2025, 6:00 P.M.

Multi-Purpose Center, 811 Main Street

Or Via Zoom:

<https://us02web.zoom.us/j/82990819660?pwd=WVdKY0U3UlkwS1JybWxtWnh5M3NQdz09>

Call-in Number: 253-215-8782

Meeting ID: 829 9081 9660

Webinar Passcode: 637567

A. CALL TO ORDER

B. DISCUSSION ITEMS

- a. SS4A (Safe Streets 4 All)

C. CITY COUNCIL COMMENTS

D. ADJORNMENT

SR 410 CORRIDOR TRAFFIC ANALYSIS

CITY COUNCIL WORK SESSION
DECEMBER 2, 2025

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AGENDA

- Background (WSDOT Congestion Study, February 2019)
- Purpose of Updated Analysis
- Spring 2025 Conditions
- Future Growth Assumptions
- Future Corridor Scenario Results

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WSDOT CONGESTION STUDY

- Bonney Lake to Enumclaw
- Purpose: Improve travel time, predictability, and operations
- Study Years
 - 2018 Existing
 - 2030 Mid-term
 - 2040 Long-term



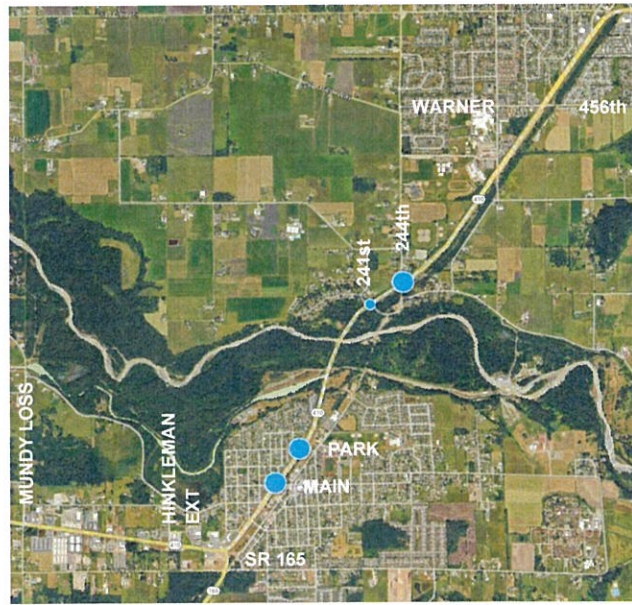
WSDOT Study Area (Congestion Study, 2019)

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WSDOT STUDY RECOMMENDATIONS (PRIORITY)

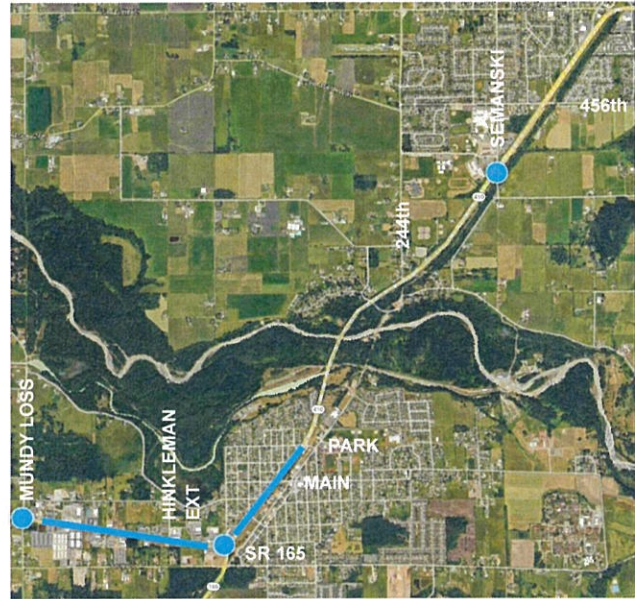
- Priority Mid-term Strategies (2030)
 - Convert Park Ave from signal to roundabout
 - Convert Main St from signal to roundabout
 - Install roundabout at 244th Ave SE (and restrict access at 241st Ave SE)



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WSDOT STUDY RECOMMENDATIONS (OTHER)

- Other Mid-term Strategies (2030)
 - At SR 165, extend LT land...or convert to roundabout
 - Roundabouts at Mundy Loss Rd, Semanski St
- Long-term "Options" (2040)
 - 4-lane corridor, Park Ave to Mundy Loss
- Widening White River Bridge not needed until sometime after 2040



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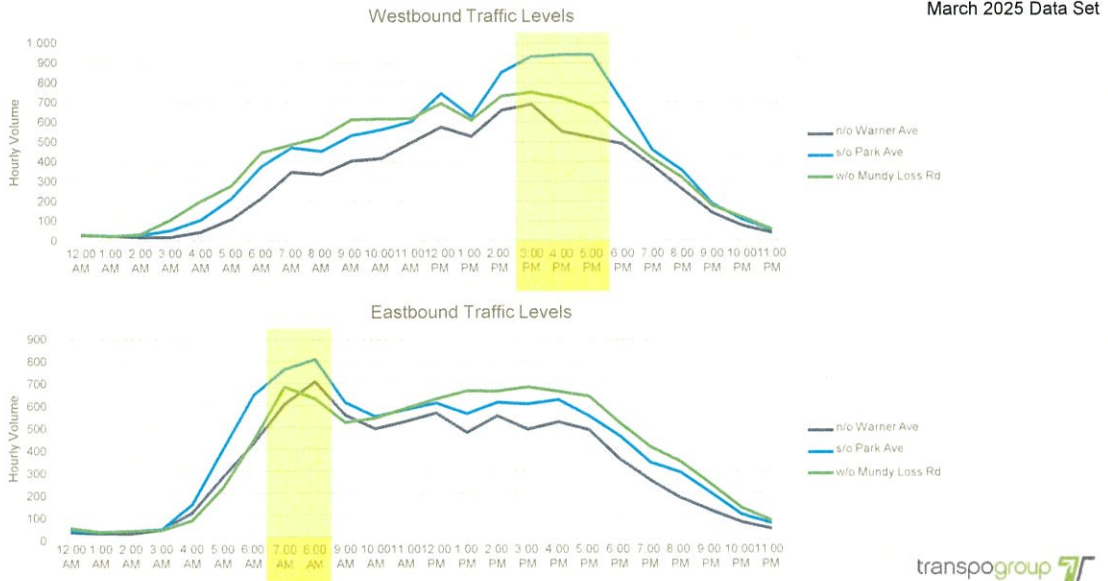
PURPOSE OF UPDATED ANALYSIS

- More detailed analysis of priority strategies from WSDOT report
 - Specific concept design and intersection layouts
 - Microsimulation of corridor to understand reduction in queuing
- Updated analysis with 2025 traffic information
- Reconsideration of alternate strategy (Traffic signal improvements at Park and Main)

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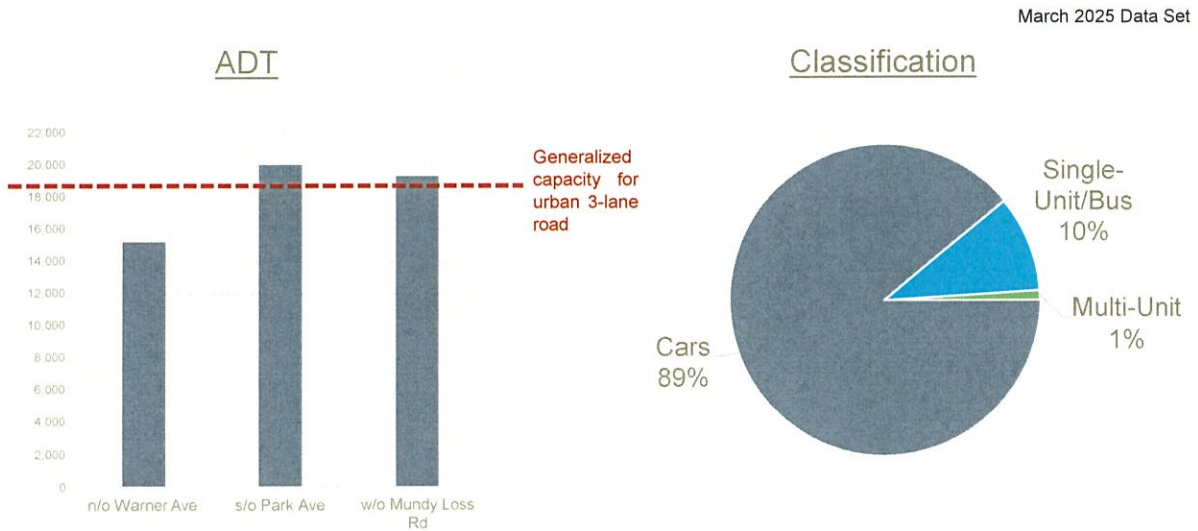
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EXISTING DAILY/HOURLY TRAFFIC VOLUMES



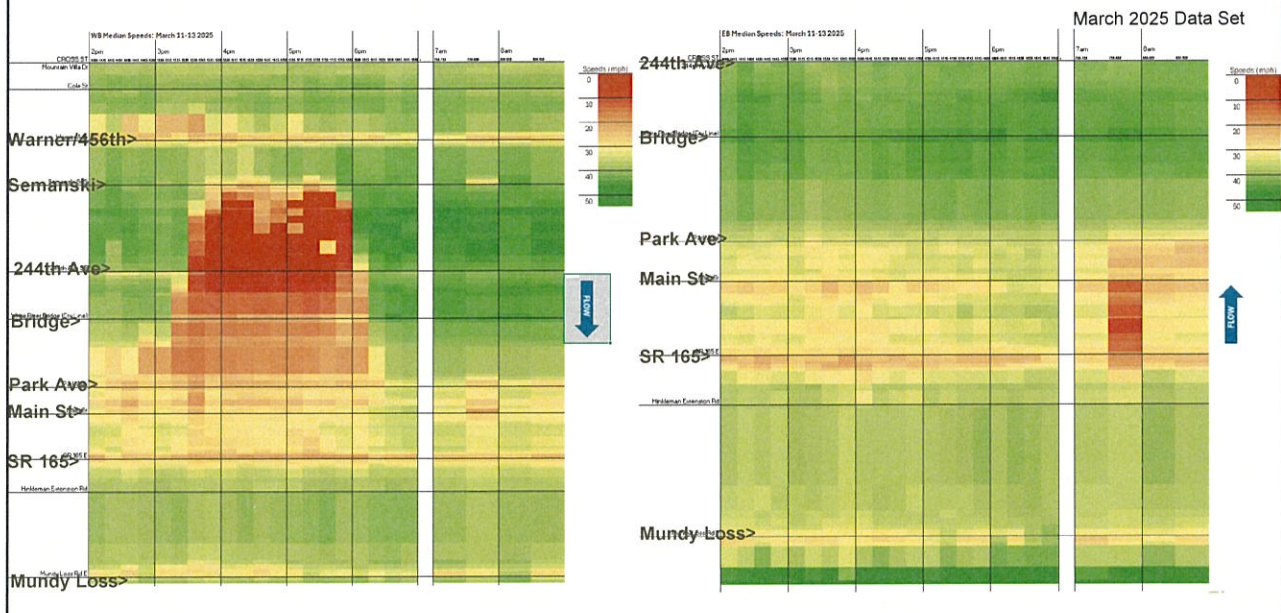
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EXISTING ADT AND CLASSIFICATION



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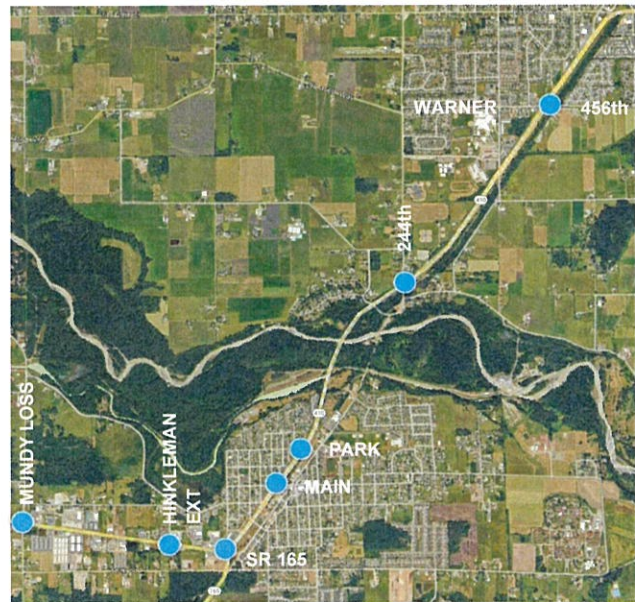
EXISTING TRAVEL SPEED HEAT MAPS



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STUDY INTERSECTIONS

- Study focus is on PM peak period operations



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GROWTH FORECAST

PREVIOUS STUDY	AM Peak Hour			PM Peak Hour		
	2018	2040	Annual%	2018	2040	Annual%
White River Bridge	1490	1970	1.3%	2005	2495	1.0%
West of Buckley	1240	1990	2.2%	1460	2070	1.6%
PSRC SOUNDCAST MODEL	AM Peak Period (7-9am)			PM Peak Period (2-6pm)		
	2018	2050	Annual%	2018	2050	Annual%
White River Bridge WB	1242	1229	0.0%	4084	4837	0.5%
White River Bridge EB	2344	2719	0.5%	2619	2902	0.3%
West of Buckley WB	912	1036	0.4%	2156	2169	0.0%
West of Buckley EB	1185	1146	-0.1%	1677	2037	0.6%

For comparison and consistency with WSDOT study, these higher growth rates were assumed for the updated analysis. This is also more consistent with the Comprehensive Plan.

*assumes annual compounding growth rate

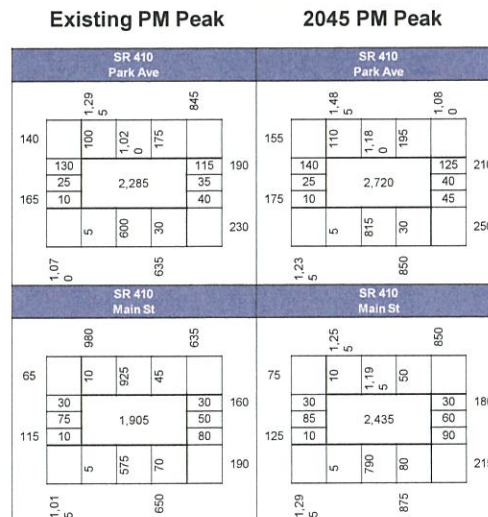
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INTERSECTION VOLUMES

Example of 1-hour turning movement volumes at Park Ave and Main St intersections.

Intersection volumes were forecast 2pm to 7pm



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MICROSIMULATION SCENARIOS

- 2025 Existing
 - Calibration
 - Did not do 2045 No Action given 2025 Existing extended queues
- 2045 Action (Roundabouts)
 - Convert Park Ave and Main St to single-lane roundabouts
 - SR 165 Signal minor modification (add NBR lane)
 - Add capacity to 244th intersection to allow more volume from King County
- 2045 Alternate Action (Signals, WB lane-addition)
 - Same as Action, except the following:
 - Modify current signals to accommodate lane additions
 - Add WB thru lane on SR 410, Park Ave to north of SR 165
 - 4 lane section: 2 WB thru, 1 center turn-lane, 1 EB thru
 - Transition 2 WB lanes back to 1 WB thru-lane at SR 165

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ROUNDAABOUT FOOTPRINTS

- Park Ave
- Main St



Note:
"single-lane roundabouts"
shown, with separate right-
turn lane capacity;

"multi-lane roundabouts"
would have generally
similar footprint

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ALTERNATE ACTION FOOTPRINTS

- Park Ave
- Main St



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ALTERNATE ACTION FOOTPRINTS

- Corridor



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CALIBRATION NOTES

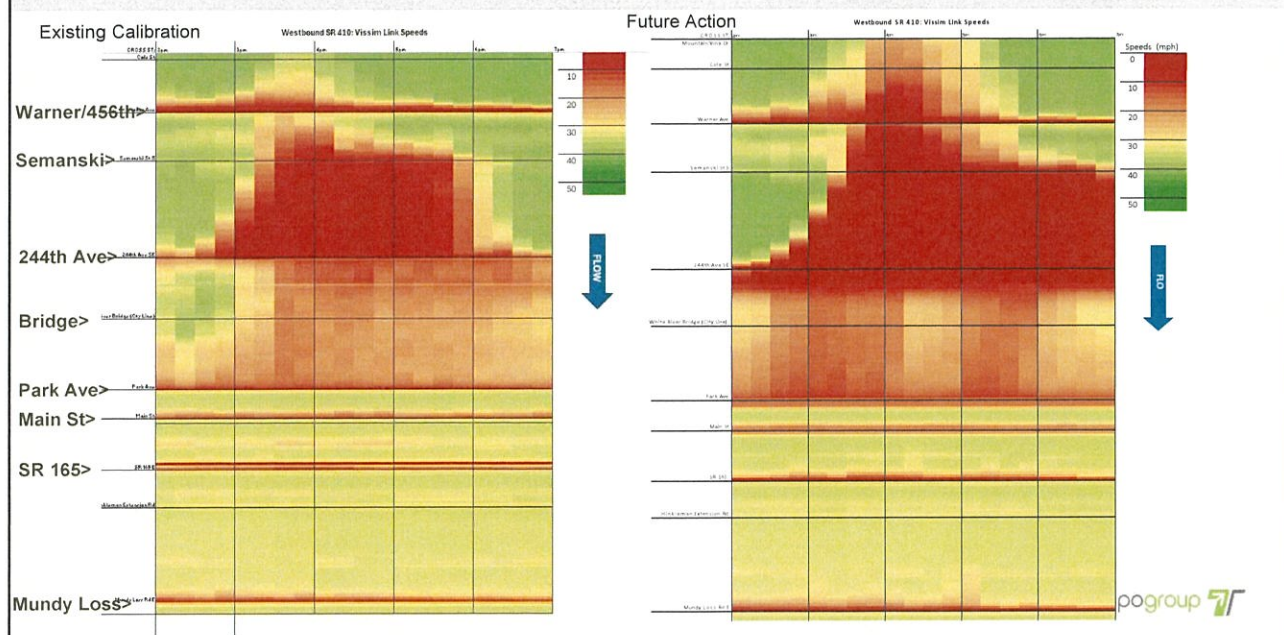
- Volumes and travel times within WSDOT tolerances for microsimulation studies
- 244th Ave/SR 410 was difficult to calibrate as conditions changed throughout the time period
 - This is major merge point before the one-lane bridge (westbound)
 - Once southbound queues reached this location, locals likely do creative things to mitigate further delays



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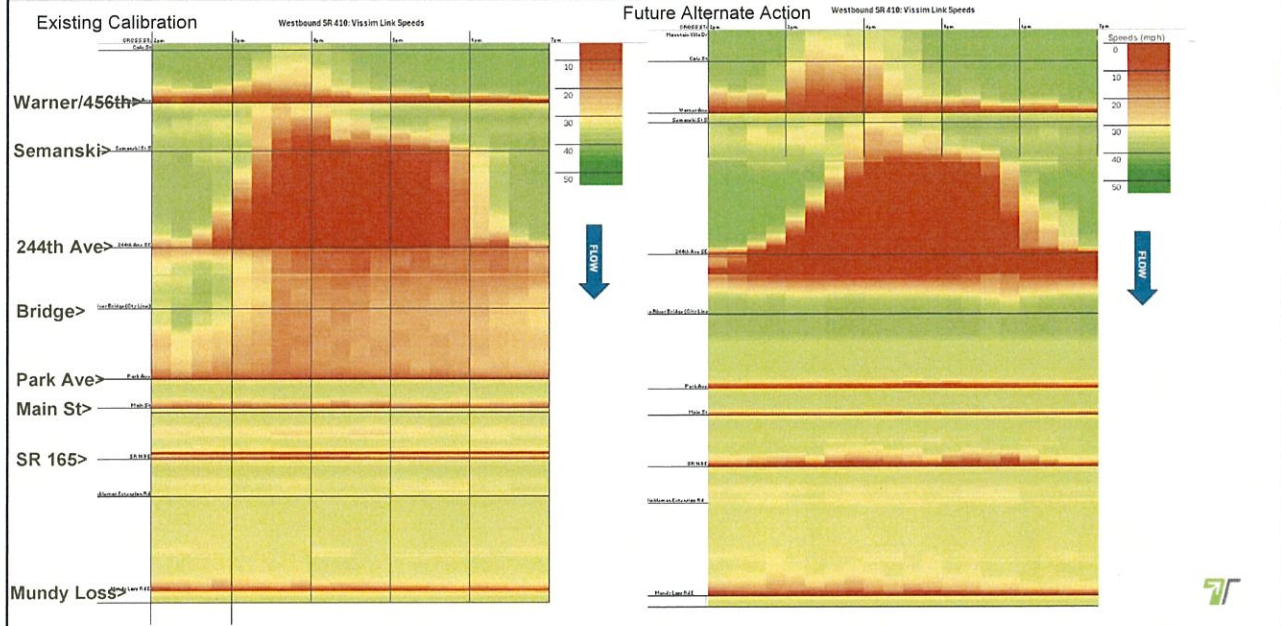
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ACTION HEAT MAPS: WESTBOUND



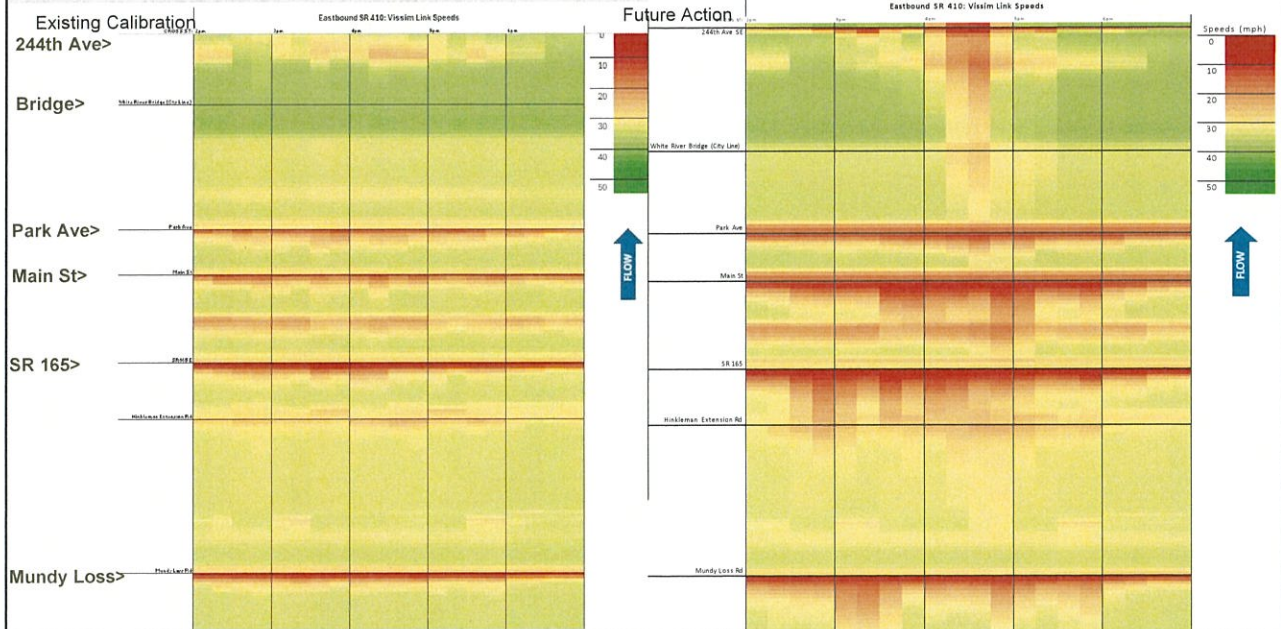
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ALTERNATE ACTION HEAT MAPS: WESTBOUND

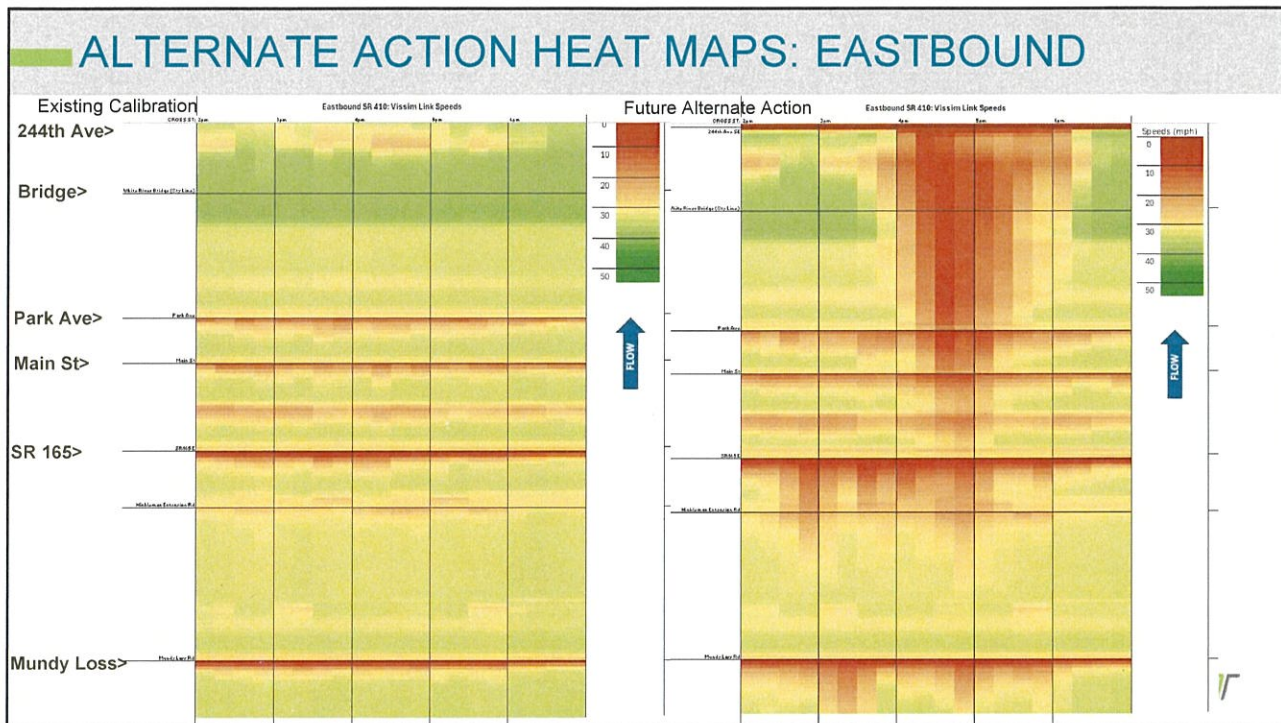


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ACTION HEAT MAPS: EASTBOUND



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SHOW SIMULATION VIDEOS

- Simulation Videos

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SUMMARY

- Both the Action and Alternate Action scenarios increase capacity through downtown (more demand throughput than existing conditions)
 - Likely best to assume 2 lanes for westbound SR 410 between Park Ave and SR 165 intersection, for either scenario (signal or roundabout)
- With either future scenario, the White River Bridge is firmly the capacity restraint. This capacity restraint shows up in analysis at a merge point south of the 244th intersection.

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Q&A

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