

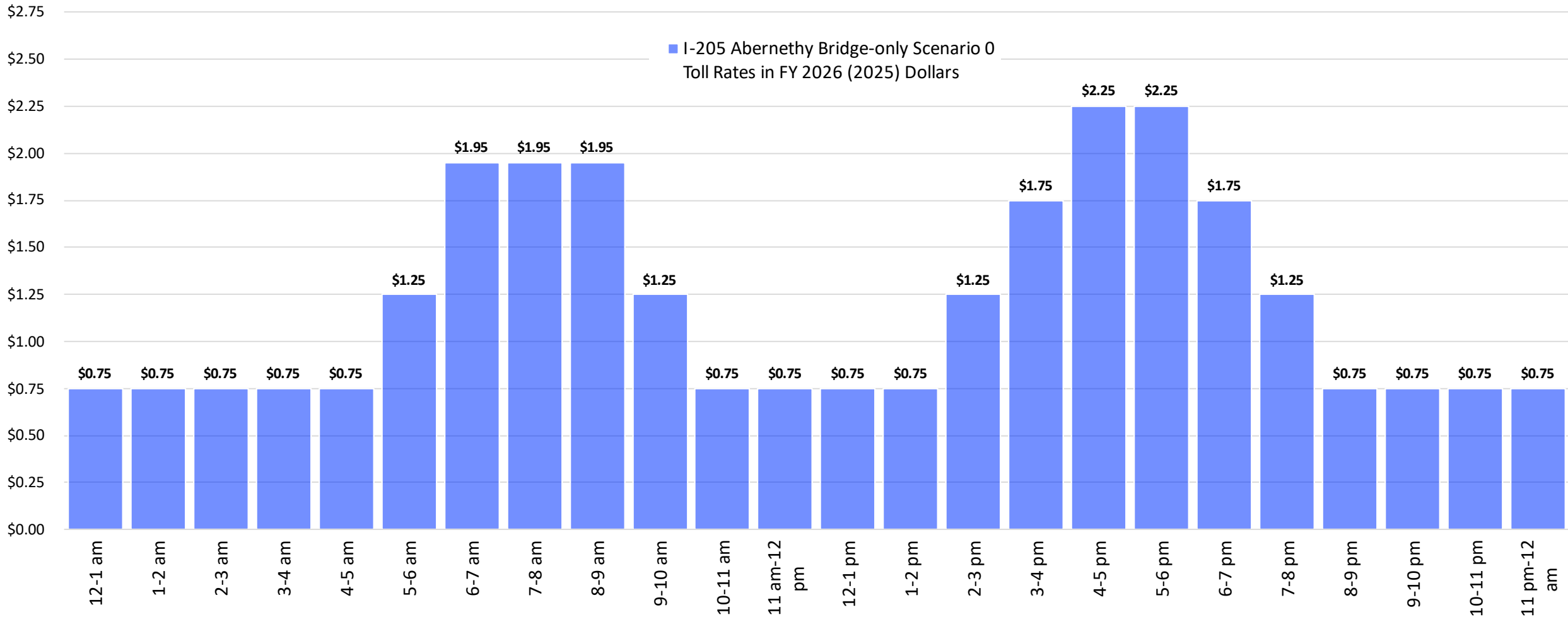
# I-205 Scenarios for “Trade-off” Analysis

#	Scenario Description	Trade-off Test	Comments
<b>NB</b>	No Build with IBR Toll	No action basis of comparison	
<b>0</b>	Abernethy Bridge-only Base Toll Rates	N/A	Targeting \$400 M in capital funding
<b>1</b>	Scenario 0 + less variable (flatter) toll rate schedule (peak/off-peak)	Traffic & diversion impacts of lower peak tolls and higher off-peak tolls	Same \$400 M funding goal
<b>2</b>	Scenario 0 + higher peak tolls for project area congestion relief	Can tolling Abernethy only manage congestion in the full project area?	No overnight tolls; may result in very high diversion near Abernethy
<b>3</b>	Scenario 0 + higher tolls for more capital funding	Traffic & diversion impacts of higher tolls + additional funding potential	Targeting \$500 M (+\$100 M) in toll funding

Notes:

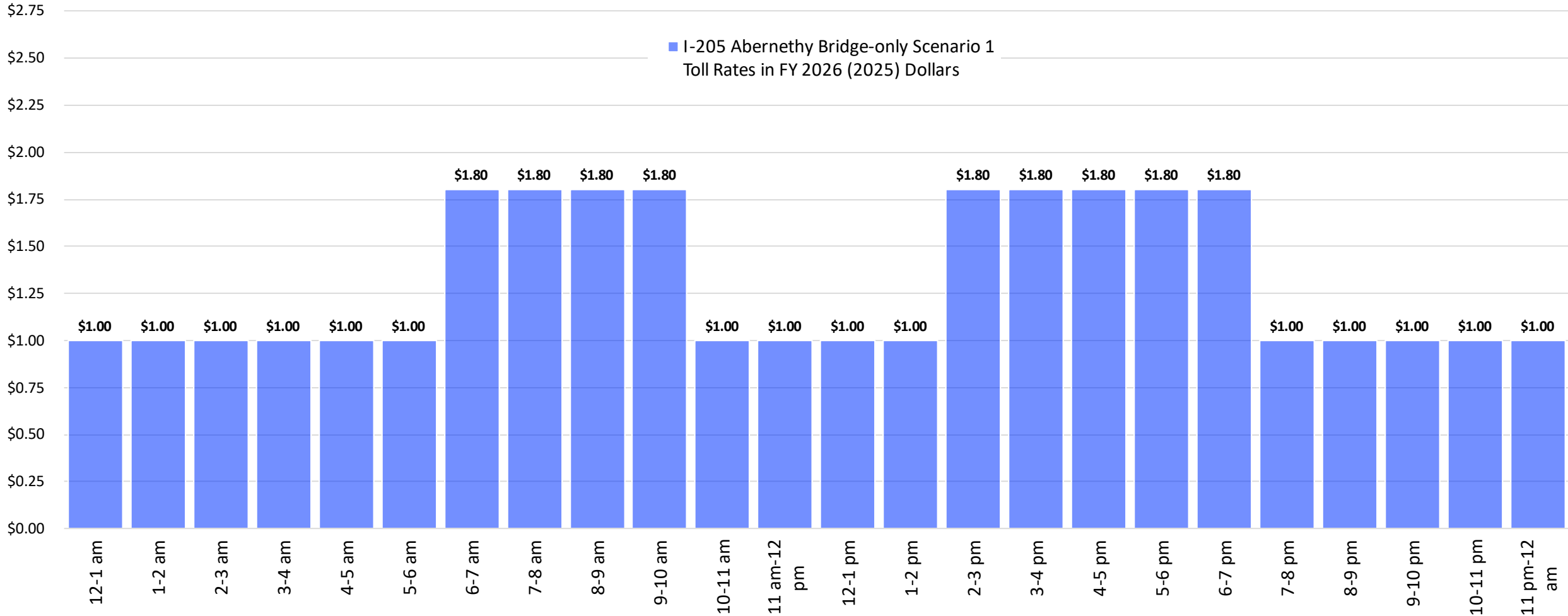
- A 5% gross toll collection reduction allowance for a low-income toll program will be included in the revenue results for all scenarios
- Truck toll multipliers are assumed to be 1.5x (formerly 2.0x) for medium trucks and 2.0x (formerly 4.0x) for heavy trucks

# Scenario 0 | Abernethy Bridge Base Toll Rates



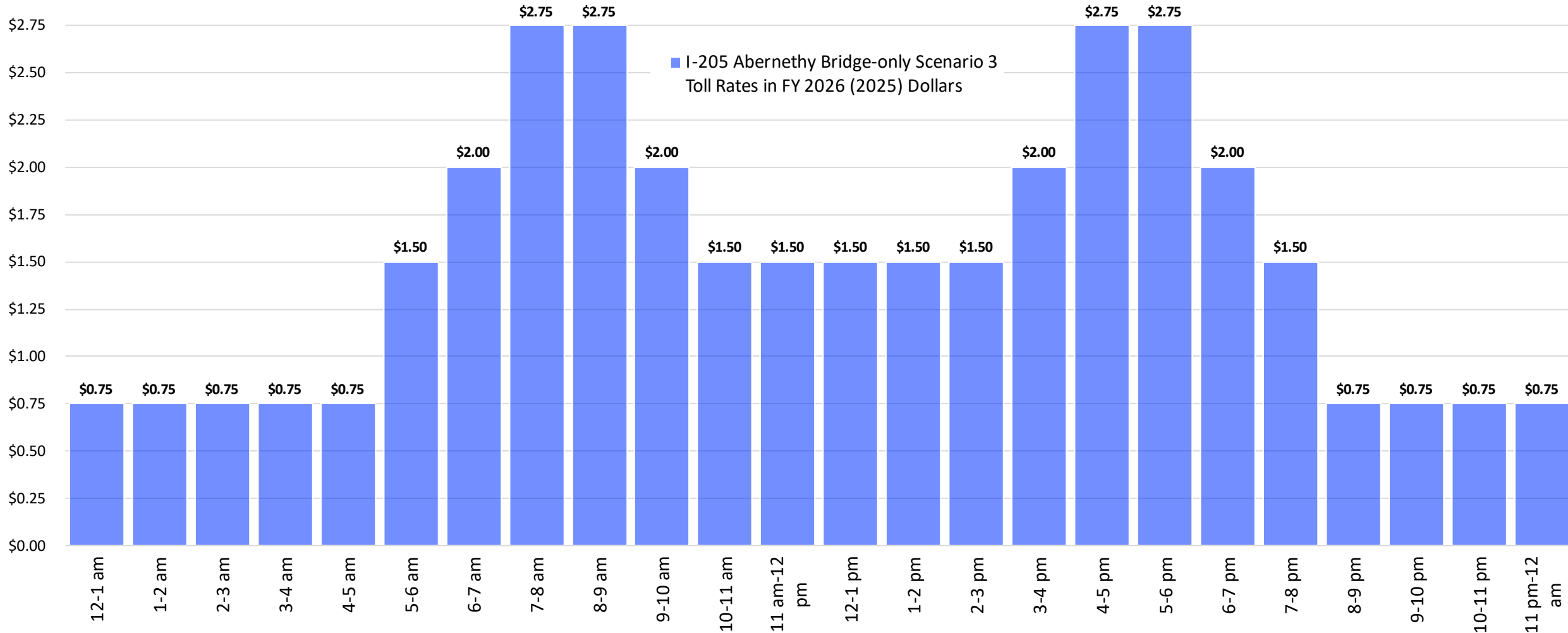
**Note:** Tolls are assumed to escalate by 2.15% per year to keep pace with general price inflation.

# Scenario 1 | Abernethy Bridge Flatter Toll Rates



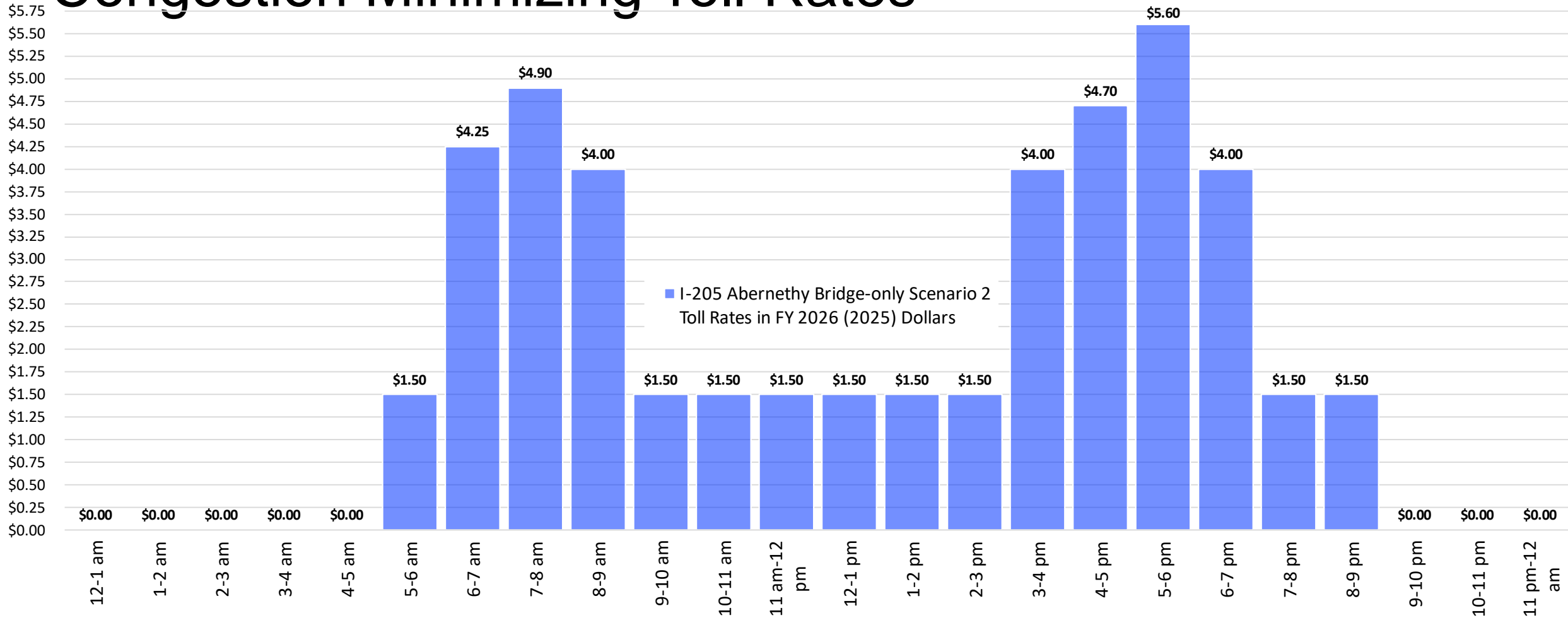
**Note:** Tolls are assumed to escalate by 2.15% per year to keep pace with general price inflation.

# Scenario 3 | Abernethy Bridge-only Higher Toll Rates



**Note:** Tolls are assumed to escalate by 2.15% per year to keep pace with general price inflation.

# Scenario 2 | Abernethy Bridge Study Area Congestion Minimizing Toll Rates



**Note:** Tolls are assumed to escalate by at least 2.15% per year to keep pace demand growth in addition to general price inflation.

# Modeling and Revenue Assumptions

## ***Consistent Across Scenarios***

- Assignment Only Runs
  - Affects routing only
  - No peak period DTA
- Truck Multiplier Assumptions
  - 1.5x for medium trucks
  - 2.0x for heavy trucks
- Project Assumptions
  - I-205 Phase 1A: 4 WB + 3 EB lanes on Abernethy Bridge
  - No RMPP
  - IBR: Scenario B toll rates, pre-Modified LPA network
- VOT Assumptions
  - Uses updated regional time-of-day schedule for applying values of time
- 5% gross toll revenue reduction allowance for a Low-Income Program

## ***Varies by Scenario***

- Scenarios 0, 1, and 3 assume constant real tolls / 2.15% annual inflation
- Scenario 2 allows for real growth (greater than 2.15% escalation) in toll rates to adjust for demand growth over time

# Summary of Key Findings

Scenario	Average I-205 Peak Hour Speeds		Hours with Severe Congestion on I-205		Arterial Impacts / Diversion	Net Toll Revenue (% change vs. Scenario 0)	
	2027	2045	2027	2045		FY 2030	Forecast Period
<b>No Build</b>	34	28	7	13	N/A	N/A	N/A
<b>Scenario 0</b>	38	34	6	10	Least Diversion	-	-
<b>Scenario 1</b>	37	33	5	9	Least Diversion	+0.5%*	+1.6%*
<b>Scenario 2</b>	47	46	0	0	Most Diversion	+60.5%	+66.1%
<b>Scenario 3</b>	40	36	4	7	Moderate Diversion	+27.1%	+35.0%

\*Net revenue differences between Scenarios 0 and 1 are negligible

# 2027 Average I-205 Corridor Speeds NB/EB

Stafford Rd to OR 213

Scenario	Avg. Peak Period Speed (mph   7-9am, 4-6pm)	Avg. Off-Peak Speed (mph   5-7am, 9am-4pm, 6pm-9pm)
No Build	34	46
Scenario 0	38	48
Scenario 1	36	49
Scenario 2	47	51
Scenario 3	40	50



# 2027 Average I-205 Corridor Speeds SB/WB

## OR 213 to Stafford Rd

Scenario	Avg. Peak Period Speed (mph   7-9am, 4-6pm)	Avg. Off-Peak Speed (mph   5-7am, 9am-4pm, 6pm-9pm)
No Build	35	46
Scenario 0	38	48
Scenario 1	37	49
Scenario 2	47	51
Scenario 3	41	50

# 2045 Average I-205 Corridor Speeds NB/EB

Stafford Rd to OR 213






Scenario	Avg. Peak Period Speed (mph   7-9am, 4-6pm)	Avg. Off-Peak Speed (mph   5-7am, 9am-4pm, 6pm-9pm)
No Build	26	38
Scenario 0	33	44
Scenario 1	32	45
Scenario 2	46	48
Scenario 3	36	46

# 2045 Average I-205 Corridor Speeds SB/WB

## OR 213 to Stafford Rd

Scenario	Avg. Peak Period Speed (mph   7-9am, 4-6pm)	Avg. Off-Peak Speed (mph   5-7am, 9am-4pm, 6pm-9pm)
No Build	29	39
Scenario 0	34	43
Scenario 1	34	44
Scenario 2	46	48
Scenario 3	36	45

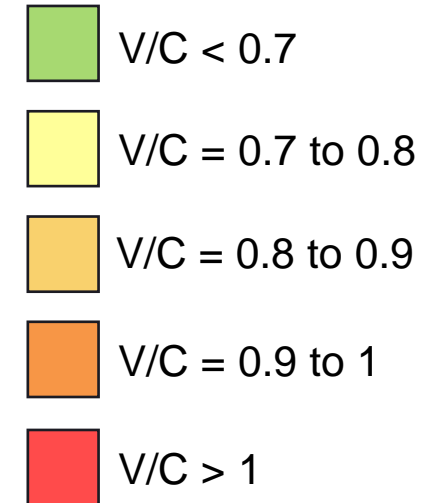
# Volume-to-Capacity (V/C) Ranges

No Congestion		$V/C < 0.7$
Light Congestion		$V/C = 0.7 \text{ to } 0.8$
Moderate Congestion		$V/C = 0.8 \text{ to } 0.9$
Severe Congestion		$V/C = 0.9 \text{ to } 1$
Over Capacity (Gridlock)		$V/C > 1$

# I-205 from OR 213 to OR 99E 2027

NB/EB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.80	0.68	0.80	0.37	0.13	0
Scenario 0	0.76	0.65	0.76	0.31	0.09	0
Scenario 1	0.75	0.62	0.76	0.31	0.08	0
Scenario 2	0.66	0.59	0.59	0.28	0.13	0
Scenario 3	0.72	0.59	0.73	0.29	0.09	0

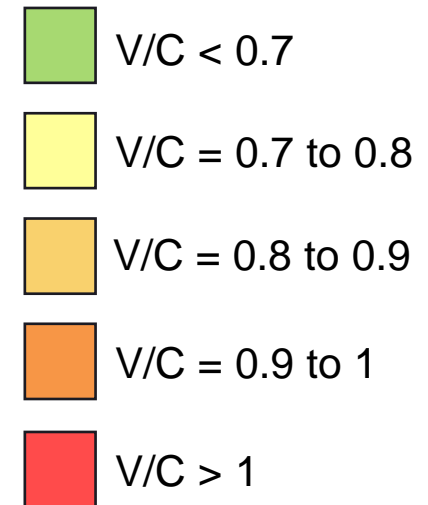
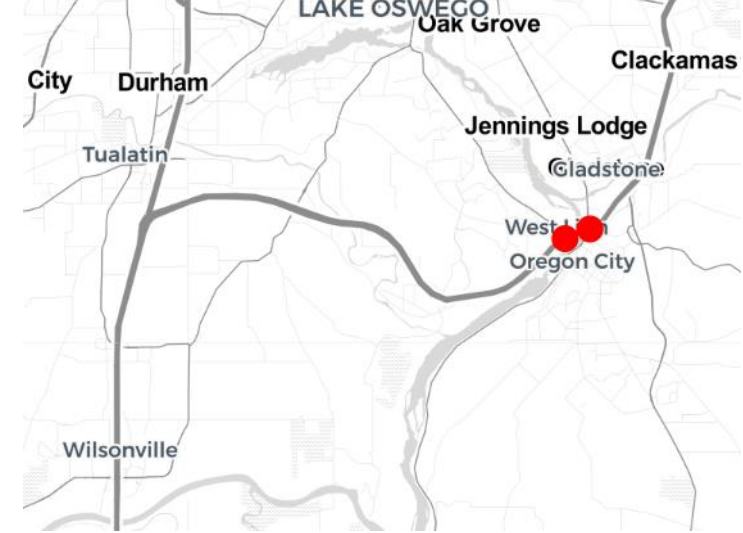
SB/WB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.68	0.65	0.82	0.39	0.14	0
Scenario 0	0.64	0.61	0.78	0.33	0.10	0
Scenario 1	0.63	0.58	0.78	0.33	0.10	0
Scenario 2	0.53	0.56	0.65	0.30	0.14	0
Scenario 3	0.60	0.56	0.76	0.31	0.10	0



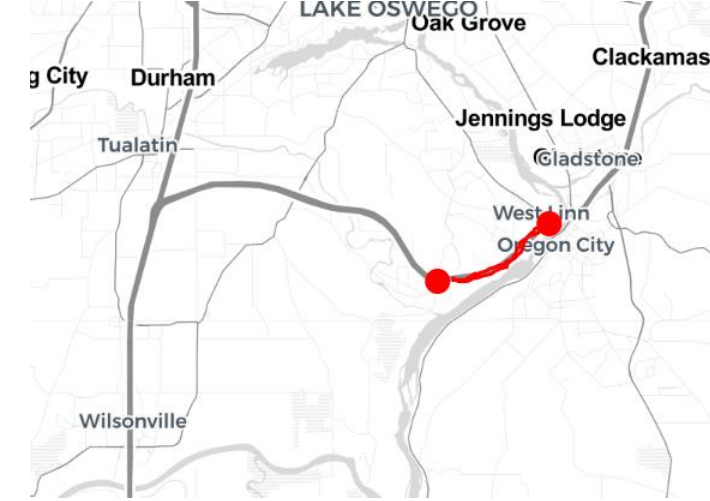
# Abernethy Bridge 2027

NB/EB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.72	0.60	0.76	0.31	0.11	0
Scenario 0	0.65	0.54	0.67	0.21	0.05	0
Scenario 1	0.64	0.50	0.69	0.22	0.03	0
Scenario 2	0.50	0.46	0.44	0.16	0.12	0
Scenario 3	0.59	0.46	0.64	0.19	0.05	0

SB/WB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.58	0.54	0.69	0.30	0.11	0
Scenario 0	0.52	0.48	0.62	0.23	0.06	0
Scenario 1	0.51	0.45	0.62	0.23	0.04	0
Scenario 2	0.38	0.41	0.46	0.18	0.12	0
Scenario 3	0.47	0.41	0.59	0.20	0.06	0

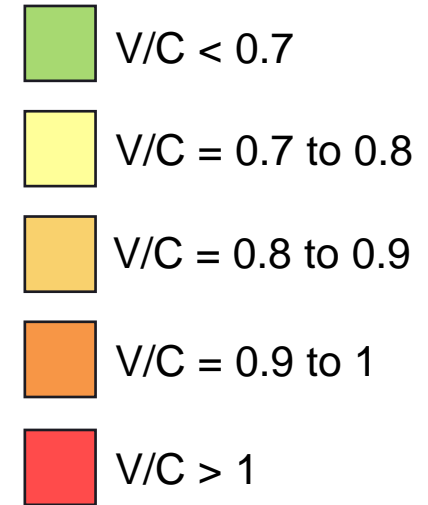


# I-205 from OR 43 to 10<sup>th</sup> St 2027

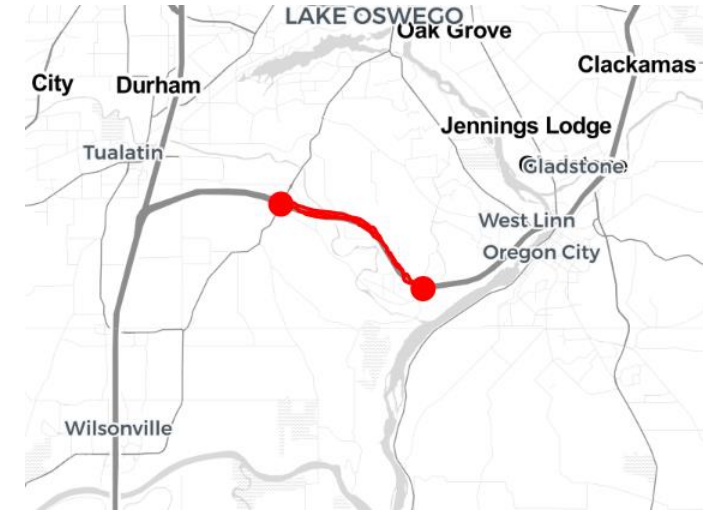


NB/EB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.93	0.85	0.97	0.50	0.18	7
Scenario 0	0.89	0.81	0.93	0.43	0.15	4
Scenario 1	0.88	0.78	0.94	0.44	0.14	3
Scenario 2	0.77	0.74	0.75	0.38	0.18	0
Scenario 3	0.84	0.74	0.91	0.40	0.15	3

SB/WB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.91	0.84	0.95	0.53	0.17	5
Scenario 0	0.87	0.79	0.91	0.47	0.14	4
Scenario 1	0.86	0.76	0.91	0.47	0.13	4
Scenario 2	0.75	0.73	0.74	0.43	0.17	0
Scenario 3	0.83	0.73	0.89	0.44	0.14	3

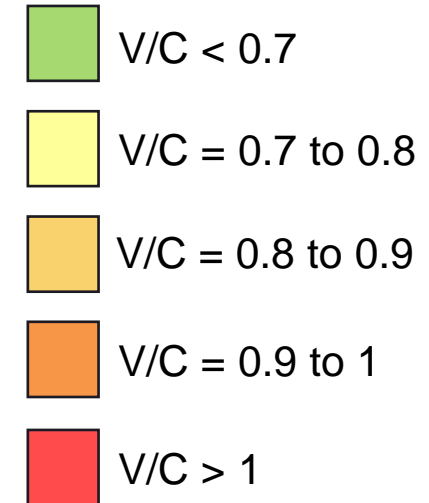


# I-205 from 10th St to Stafford Rd 2027



NB/EB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.86	0.83	0.96	0.49	0.18	4
Scenario 0	0.82	0.80	0.92	0.43	0.16	3
Scenario 1	0.81	0.77	0.93	0.43	0.15	2
Scenario 2	0.71	0.74	0.79	0.39	0.18	0
Scenario 3	0.78	0.74	0.91	0.41	0.16	2

SB/WB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.95	0.82	0.91	0.54	0.17	6
Scenario 0	0.92	0.79	0.87	0.49	0.14	4
Scenario 1	0.91	0.76	0.87	0.48	0.13	5
Scenario 2	0.83	0.74	0.73	0.45	0.17	0
Scenario 3	0.88	0.74	0.84	0.46	0.14	2

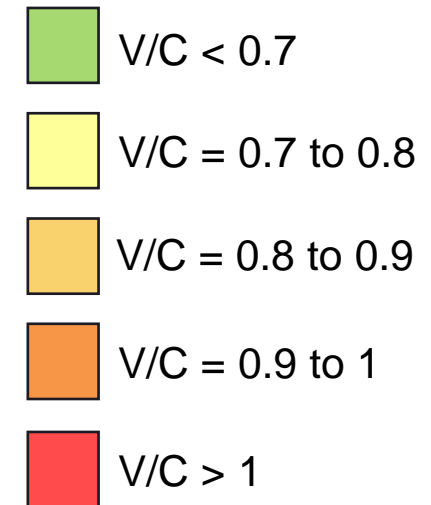
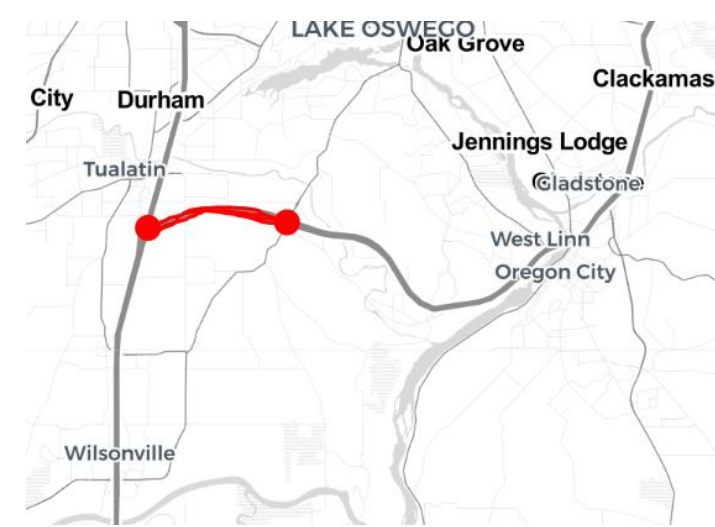




# I-205 from Stafford Rd to I-5 2027

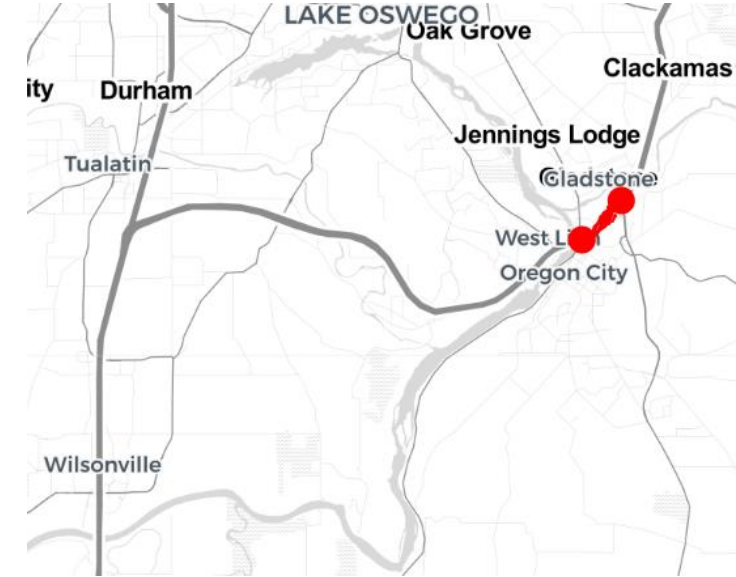
NB/EB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.52	0.53	0.61	0.32	0.12	0
Scenario 0	0.50	0.51	0.58	0.28	0.11	0
Scenario 1	0.49	0.49	0.58	0.28	0.10	0
Scenario 2	0.43	0.47	0.49	0.26	0.12	0
Scenario 3	0.47	0.47	0.57	0.27	0.10	0

SB/WB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.63	0.54	0.59	0.35	0.11	0
Scenario 0	0.61	0.51	0.55	0.32	0.09	0
Scenario 1	0.60	0.50	0.56	0.32	0.09	0
Scenario 2	0.54	0.48	0.46	0.30	0.11	0
Scenario 3	0.58	0.48	0.54	0.31	0.09	0



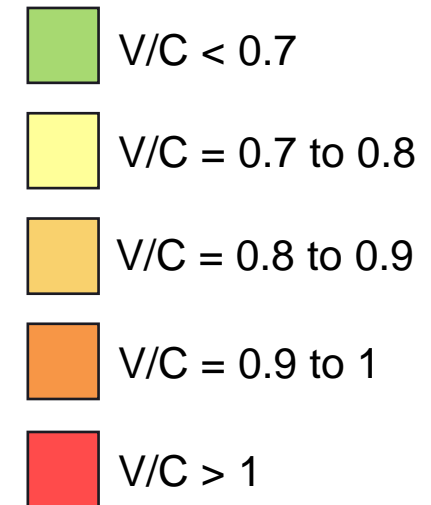
# I-205 from OR 213 to OR 99E

## 2045



NB/EB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.90	0.80	0.88	0.55	0.17	3
Scenario 0	0.84	0.76	0.81	0.45	0.11	1
Scenario 1	0.83	0.73	0.81	0.45	0.10	1
Scenario 2	0.72	0.68	0.63	0.40	0.16	0
Scenario 3	0.81	0.71	0.78	0.42	0.11	0

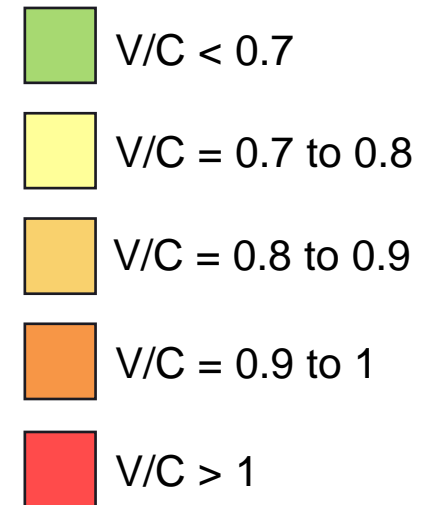
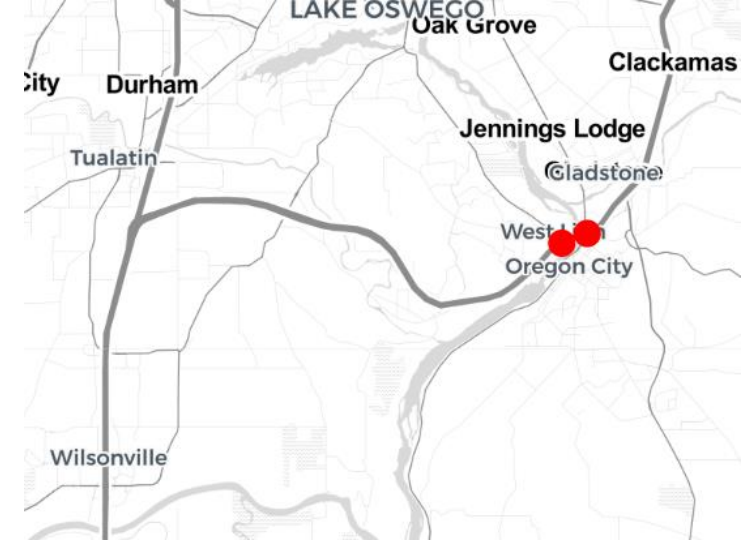
SB/WB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.77	0.79	0.92	0.57	0.18	3
Scenario 0	0.70	0.73	0.85	0.46	0.13	1
Scenario 1	0.69	0.71	0.85	0.46	0.12	1
Scenario 2	0.57	0.65	0.70	0.41	0.17	0
Scenario 3	0.67	0.68	0.83	0.44	0.13	0



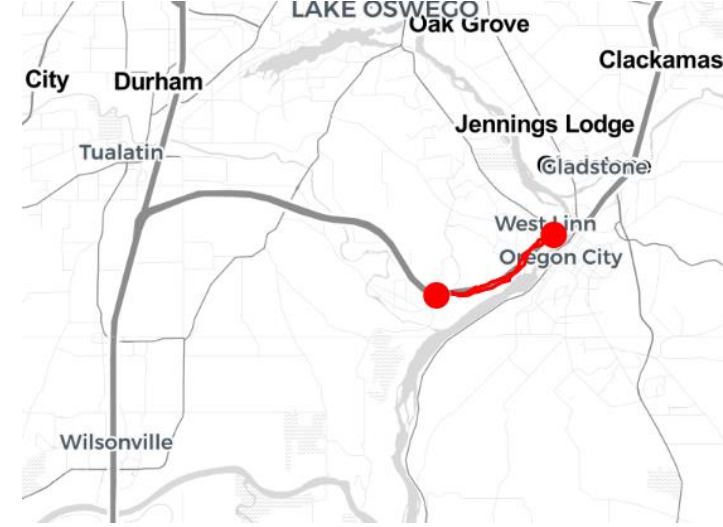
# Abernethy Bridge 2045

NB/EB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	1.08	0.94	1.07	0.64	0.19	13
Scenario 0	0.92	0.80	0.90	0.42	0.08	5
Scenario 1	0.91	0.76	0.91	0.43	0.05	5
Scenario 2	0.69	0.66	0.59	0.34	0.19	0
Scenario 3	0.86	0.71	0.87	0.38	0.08	3

SB/WB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.69	0.68	0.80	0.49	0.15	0
Scenario 0	0.57	0.58	0.68	0.34	0.08	0
Scenario 1	0.56	0.55	0.69	0.34	0.06	0
Scenario 2	0.39	0.48	0.48	0.28	0.14	0
Scenario 3	0.53	0.52	0.66	0.31	0.08	0

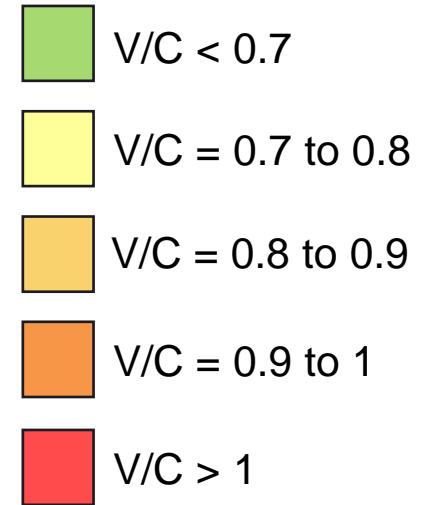


# I-205 from OR 43 to 10<sup>th</sup> St 2045



NB/EB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	1.01	0.94	1.02	0.71	0.22	13
Scenario 0	0.95	0.89	0.96	0.59	0.18	10
Scenario 1	0.95	0.87	0.96	0.58	0.17	7
Scenario 2	0.83	0.82	0.80	0.53	0.22	0
Scenario 3	0.93	0.84	0.94	0.56	0.18	7

SB/WB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.99	0.93	1.04	0.75	0.22	11
Scenario 0	0.92	0.89	0.97	0.63	0.18	8
Scenario 1	0.92	0.87	0.97	0.63	0.17	8
Scenario 2	0.78	0.81	0.80	0.58	0.22	0
Scenario 3	0.89	0.85	0.96	0.60	0.18	6

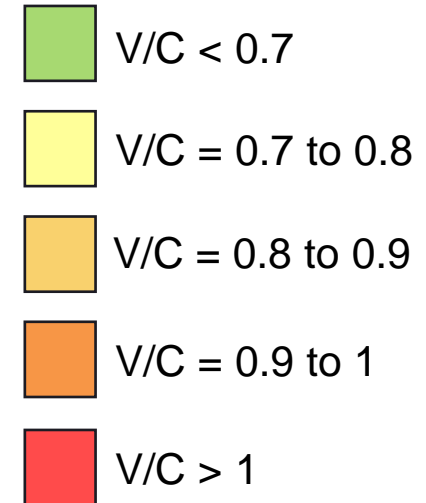


# I-205 from 10th St to Stafford Rd 2045



NB/EB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.93	0.91	1.00	0.69	0.22	11
Scenario 0	0.88	0.87	0.94	0.58	0.19	5
Scenario 1	0.87	0.85	0.94	0.58	0.18	4
Scenario 2	0.77	0.81	0.82	0.54	0.22	0
Scenario 3	0.86	0.84	0.93	0.56	0.18	4

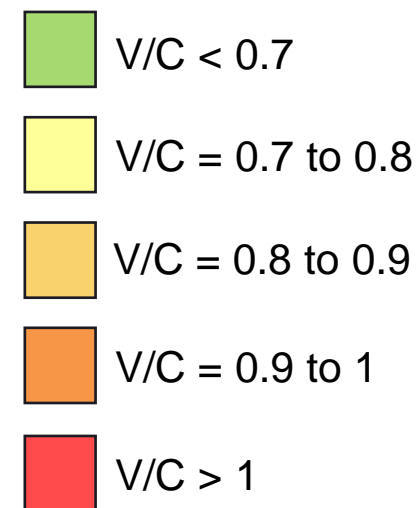
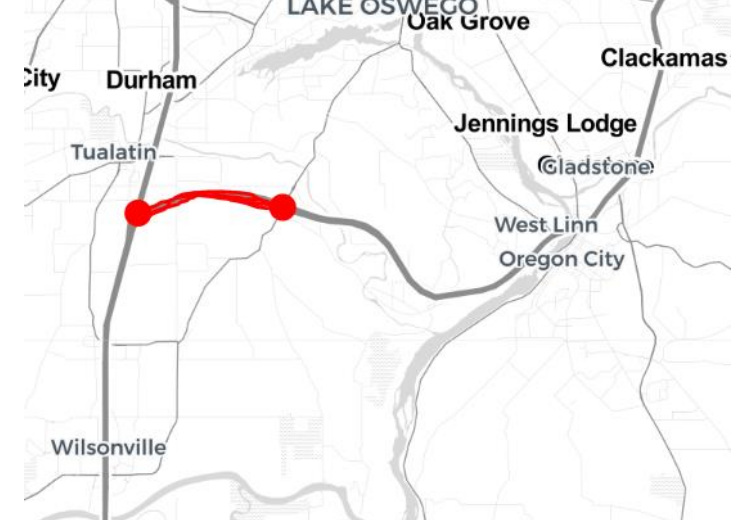
SB/WB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	1.01	0.93	0.99	0.74	0.21	13
Scenario 0	0.96	0.89	0.93	0.64	0.18	9
Scenario 1	0.96	0.87	0.93	0.63	0.17	8
Scenario 2	0.87	0.82	0.80	0.59	0.21	0
Scenario 3	0.94	0.85	0.91	0.61	0.18	7



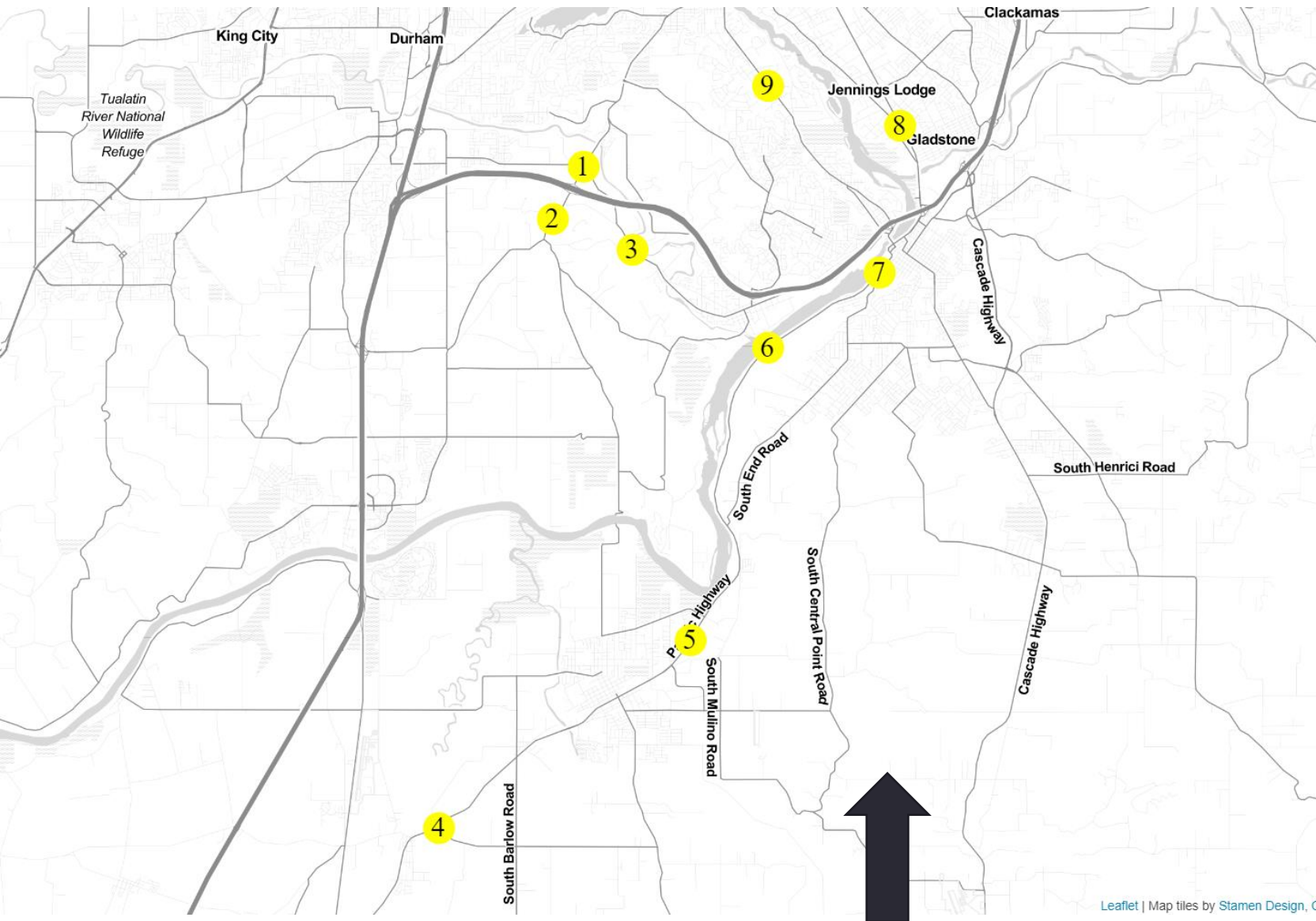
# I-205 from Stafford Rd to I-5 2045

NB/EB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.57	0.58	0.64	0.44	0.15	0
Scenario 0	0.53	0.55	0.60	0.38	0.12	0
Scenario 1	0.53	0.53	0.60	0.37	0.12	0
Scenario 2	0.46	0.50	0.50	0.35	0.14	0
Scenario 3	0.51	0.52	0.59	0.36	0.12	0

SB/WB	AM Peak	Mid-day	PM Peak	Off-Peak	Overnight	Hours w/ Severe Congestion (v/c > 0.9)
No Build	0.70	0.63	0.67	0.49	0.14	0
Scenario 0	0.66	0.59	0.62	0.42	0.12	0
Scenario 1	0.65	0.57	0.62	0.42	0.11	0
Scenario 2	0.59	0.54	0.52	0.39	0.14	0
Scenario 3	0.64	0.56	0.61	0.40	0.12	0







Number	Location
1	Stafford Rd north of I205
2	Stafford Rd south of I-205
3	SW Borland Rd south of I-205
4	OR 99E west of Lone Elder Rd
5	OR 99E south of NE Territorial Rd
6	OR 99E between Oregon City & South End Rd
7	OR 99E south of downtown Oregon City
8	OR 99E north of Arlington St
9	OR43 north of Hidden Springs Rd

# Peak Hour Congestion on Diversion Routes 2027

Diversion Route	No Build	Scenario 0	Scenario 1	Scenario 2	Scenario 3
Stafford Rd north of I-205	0.71	0.72	0.72	0.75	0.73
Stafford Rd south of I-205	0.64	0.63	0.63	0.59	0.62
SW Borland Rd south of I-205	0.32	0.28	0.29	0.16	0.26
OR 99E west of Lone Elder Rd	0.31	0.34	0.33	0.48	0.39
OR 99E south of NE Territorial Rd	0.47	0.49	0.48	0.57	0.52
OR 99E between Oregon City & South End Rd	0.42	0.44	0.43	0.49	0.46
OR 99E south of downtown Oregon City	0.79	0.81	0.81	0.88	0.85
OR 99E north of Arlington St	0.55	0.54	0.54	0.52	0.53
OR43 north of Hidden Springs Rd	0.83	0.82	0.82	0.77	0.80



# Peak Hour Congestion on Diversion Routes 2045

Diversion Route	No Build	Scenario 0	Scenario 1	Scenario 2	Scenario 3
Stafford Rd north of I-205	0.64	0.68	0.67	0.71	0.68
Stafford Rd south of I-205	0.78	0.76	0.77	0.74	0.77
SW Borland Rd south of I-205	0.42	0.35	0.36	0.18	0.32
OR 99E west of Lone Elder Rd	0.33	0.42	0.41	0.55	0.46
OR 99E south of NE Territorial Rd	0.50	0.54	0.54	0.62	0.56
OR 99E between Oregon City & South End Rd	0.46	0.50	0.49	0.55	0.51
OR 99E south of downtown Oregon City	0.84	0.89	0.88	0.94	0.90
OR 99E north of Arlington St	0.57	0.57	0.56	0.55	0.56
OR43 north of Hidden Springs Rd	0.87	0.85	0.85	0.80	0.84

# Net Revenue Results

Scenario	Description	Net Revenue \$ Millions (FY 2030)	% Change Relative to Scenario 0 (FY 2030)	Net Revenue \$ Millions (FYs 2026-60)	% Change Relative to Scenario 0 (FYs 2026-60)
Scenario 0	Abernethy Bridge-only Base Toll Rates	\$31.3 M	-	\$1,555 M	-
Scenario 1	Scenario 0 + less variable (peak/off-peak) toll rate schedule	\$31.4 M*	+0.5%*	\$1,580 M*	+1.7%*
Scenario 2	Scenario 0 + higher peak tolls for project area congestion relief	\$51.1 M	+60.5%	\$2,582 M	+66.1%
Scenario 3	Scenario 0 + higher tolls for more capital funding	\$41.6 M	+27.1%	\$2,098 M	+35.0%

\*Net revenue differences between Scenarios 0 and 1 are negligible

# Net Revenue Comparison to L2 T&R Study

Scenario	Description	Net Revenue \$ Millions (FY 2030)	% Share of L2 T&R Study Scenario A (FY 2030)	Net Revenue \$ Millions (FYs 2026-60)	% Share of L2 T&R Study Scenario A (FYs 2026-60)
Scenario A	Level 2 T&R Study	\$75.4 M	-	\$4,050 M	-
Scenario 0	Abernethy Bridge-only Base Toll Rates	\$31.3 M	<b>43.3%</b>	\$1,555 M	<b>38.4%</b>
Scenario 1	Scenario 0 + less variable (peak/off-peak) toll rate schedule	\$31.4 M	<b>43.6%</b>	\$1,580 M	<b>39.0%</b>
Scenario 2	Scenario 0 + higher peak tolls for project area congestion relief	\$51.1 M	<b>69.6%</b>	\$2,582 M	<b>63.8%</b>
Scenario 3	Scenario 0 + higher tolls for more capital funding	\$41.6 M	<b>55.1%</b>	\$2,098 M	<b>51.8%</b>

Note that the “trade-off” Scenarios 0-3 include a 5% gross revenue deduction as an allowance for a Low-Income Program not included in the Level 2 T&R Study results for Scenario A.