



Interstate 405 Project Update

Discussion Items

- Purpose and Need
- Mobility by alternative
- Project terminus – south end of project
- Project terminus – north end of project
- Stantec – traffic and revenue
- Bonding capacity
- Alternative 2 funding

Purpose of the Project

- Reduce congestion
- Maximize throughput
- Enhance operations
- Increase mobility, improve trip reliability
- Minimize environmental impacts and ROW acquisition

Mobility by Alternative - 2040

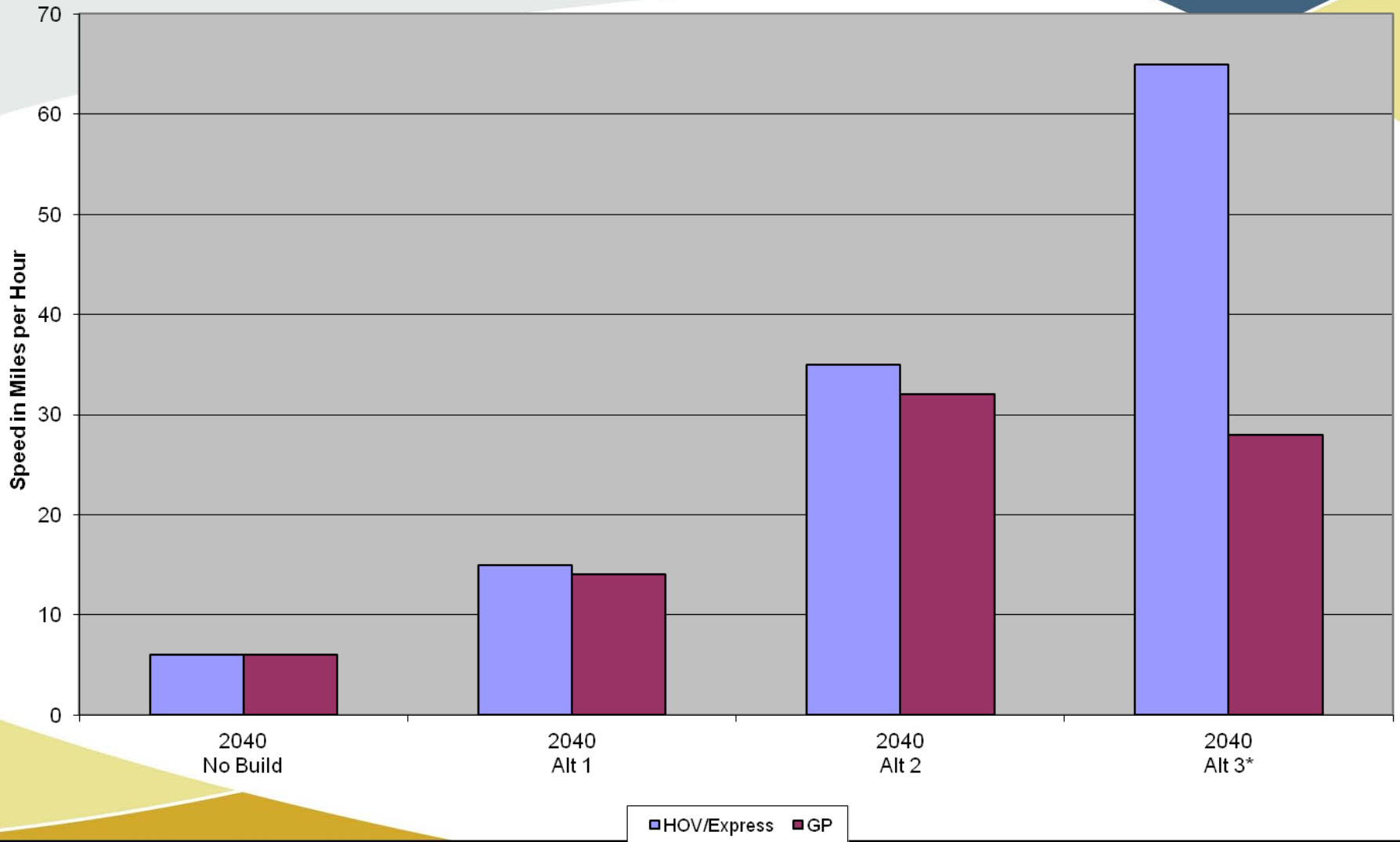
	No Build	Alt. 1	Alt. 2	Alt. 3	Alt. 3 Truncated
Peak Hour Throughput ¹	6000 vehicles per hour	7200 vehicles per hour	8400 vehicles per hour	9500 vehicles per hour	9500 vehicles per hour
Average Daily Traffic	288,000 - 427,000	321,000 - 475,000	344,000 - 509,000	352,000 - 512,000	352,000 - 512,000
Travel Time SR- 73 to I-605 ²	133 min GP 121 min HOV	57 min GP 54 min HOV	28 min GP 27 min HOV	29 min GP 13 min Express	31 min GP 17 min Express ³

¹ Potential throughput, peak hour, one direction, near Beach Boulevard

² PM peak period, northbound

³ HOV lane from SR-73 to Euclid and Express lane from Euclid to I-605

2040 PM Peak Hour Average Speeds NB Euclid to I-605

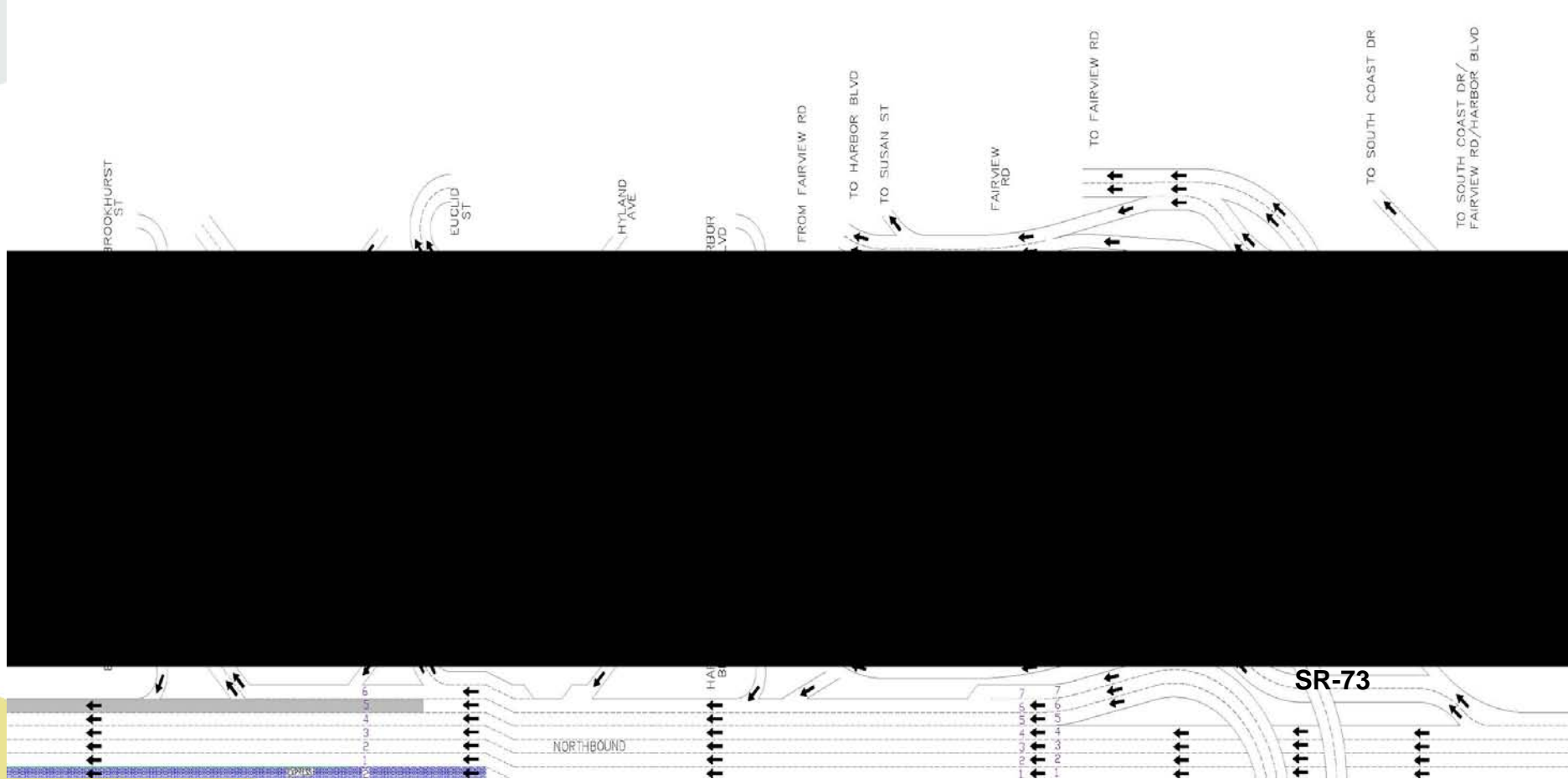


2040 PM Throughput

NB Peak Hour Near Beach Blvd



Alternative 3 Modified Transition near Euclid Street



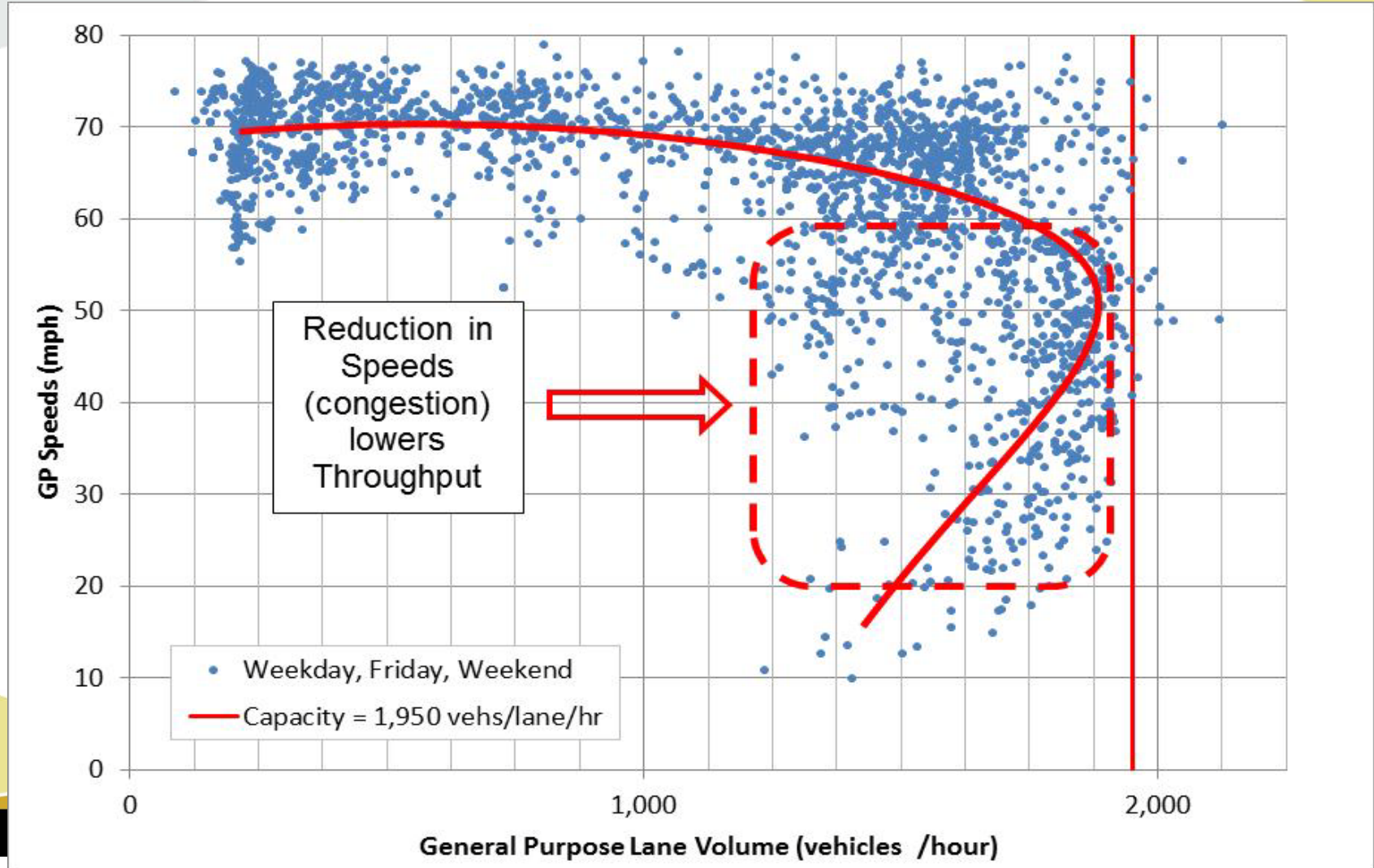
Stantec

Traffic and Revenue Update

Stantec Analysis

- Phase I Traffic and Revenue (T&R)
- Phase II T&R
- High Occupancy Vehicle (HOV) operating policy – various assumptions
- Alt 3 modified incorporated

How Congestion Impacts Throughput



I-405 Toll Policy Assumptions

Designed to:

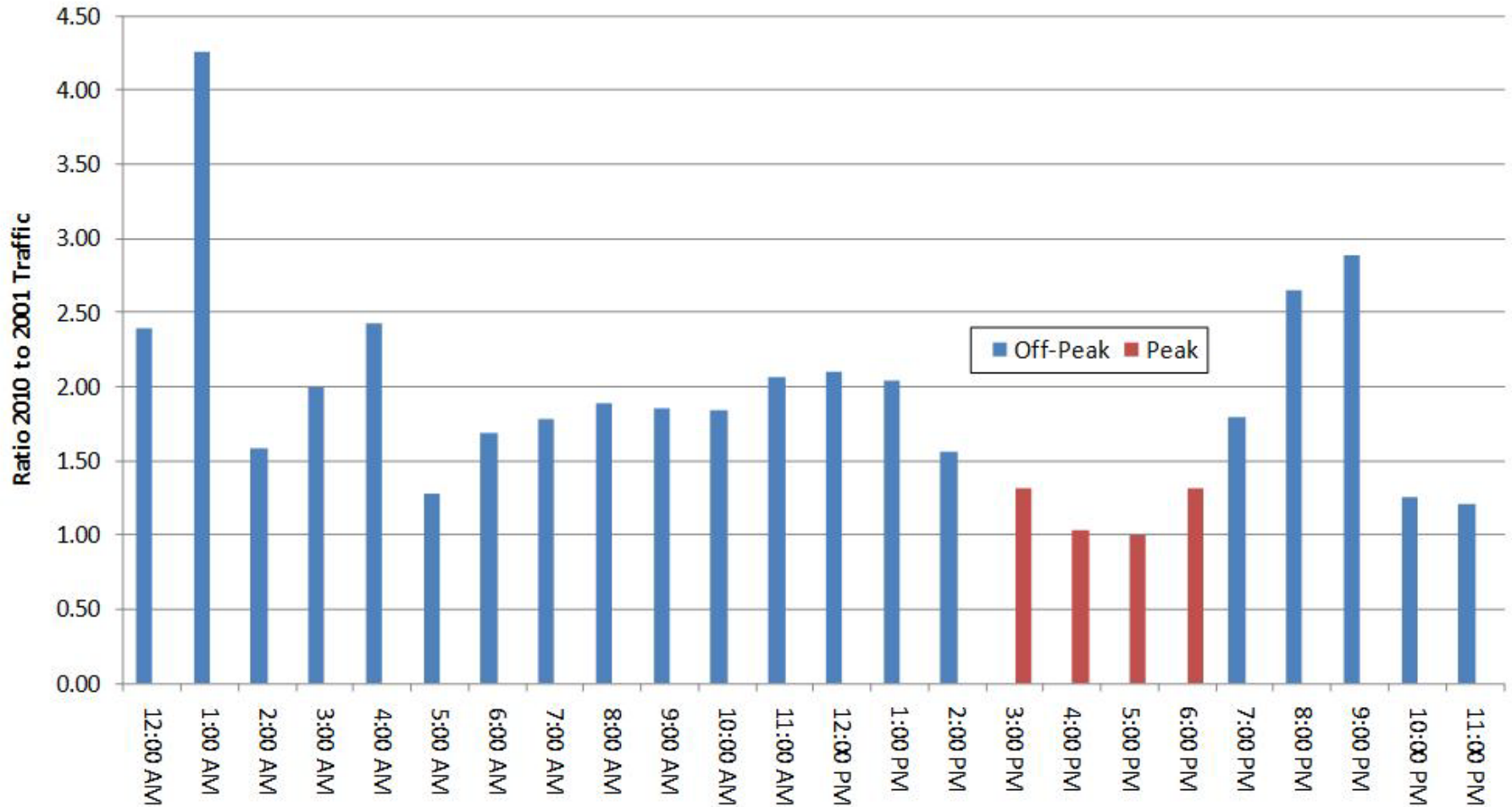
- Optimize throughput
- Provide safe, reliable trip
- Encourage HOV

Policy includes:

- HOV3+ free
- Annual COLA adjustments for non-peak hours*
- Tolls adjusted based on historical volumes
- Adjusted up and down
 - Up by either \$0.75 or \$1.00
 - Down by \$0.50

Express Lane Traffic Growth

91 Express EB Growth, 2001-2010



I-405 Toll Rates

2020 Average Weekday

Segment:	Dir	Segment Distance (mi)	Average Toll Rate (2012 \$s)	Peak Toll Rate (2012 \$s)
SR 73 to Magnolia*	NB	5.1 mi.	\$1.22	\$1.89
	SB	4.7 mi.	\$1.32	\$1.74
Brookhurst to Goldenwest	NB	2.6 mi.	\$0.80	\$1.20
	SB	2.4 mi.	\$0.84	\$1.10
Goldenwest to SR 22	NB	2.9 mi.	\$2.00	\$3.48
	SB	3.3 mi.	\$1.49	\$1.80
SR 22 to I-605	NB	2.8 mi.	\$1.91	\$3.34
	SB	2.8 mi.	\$1.23	\$1.48
Full Length Trip	NB	13.4 mi.	\$5.93	\$9.91
	SB	13.2 mi.	\$4.88	\$6.11

* Alternative 3 Analysis

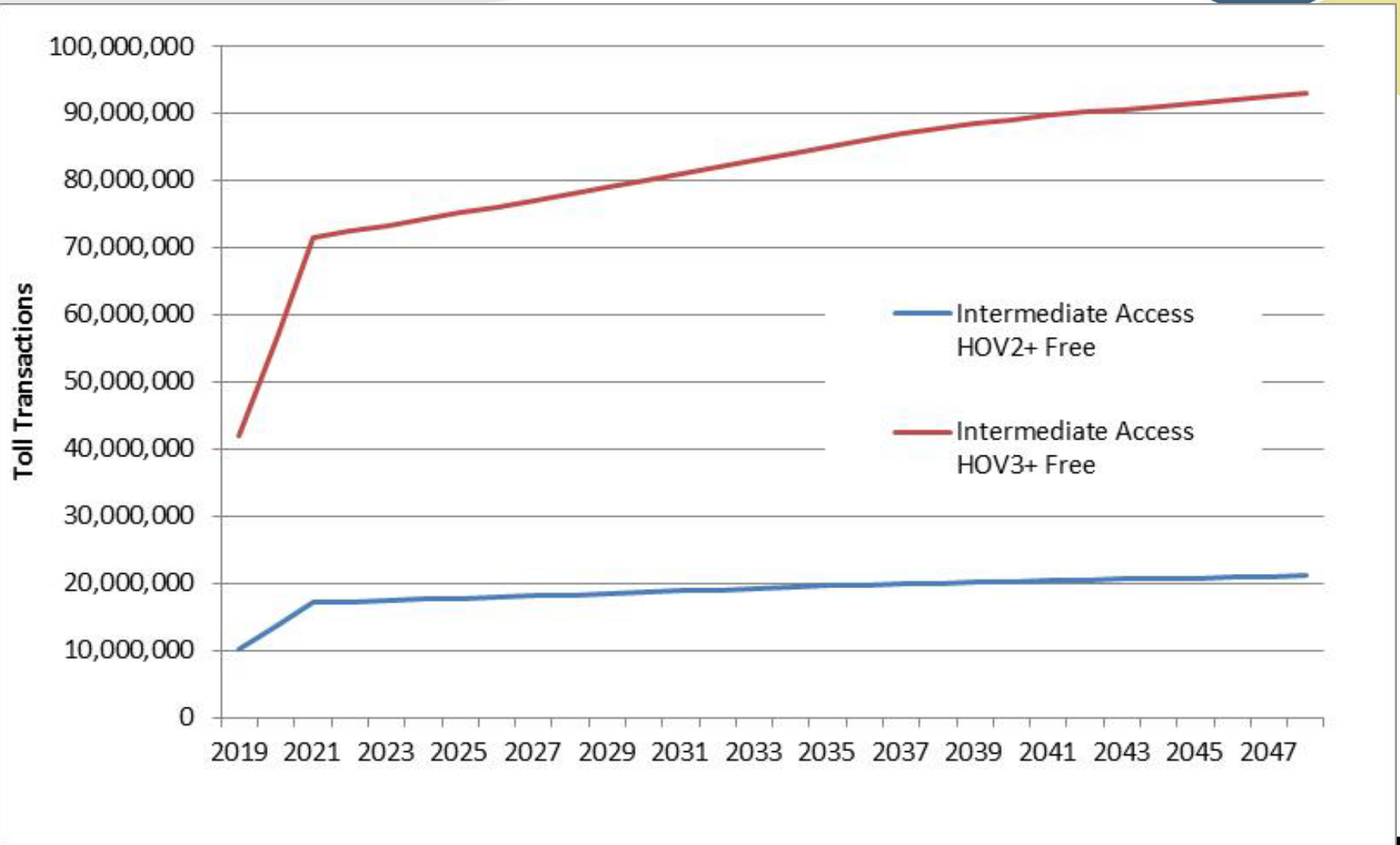
I-405 Toll Rates

2035 Average Weekday

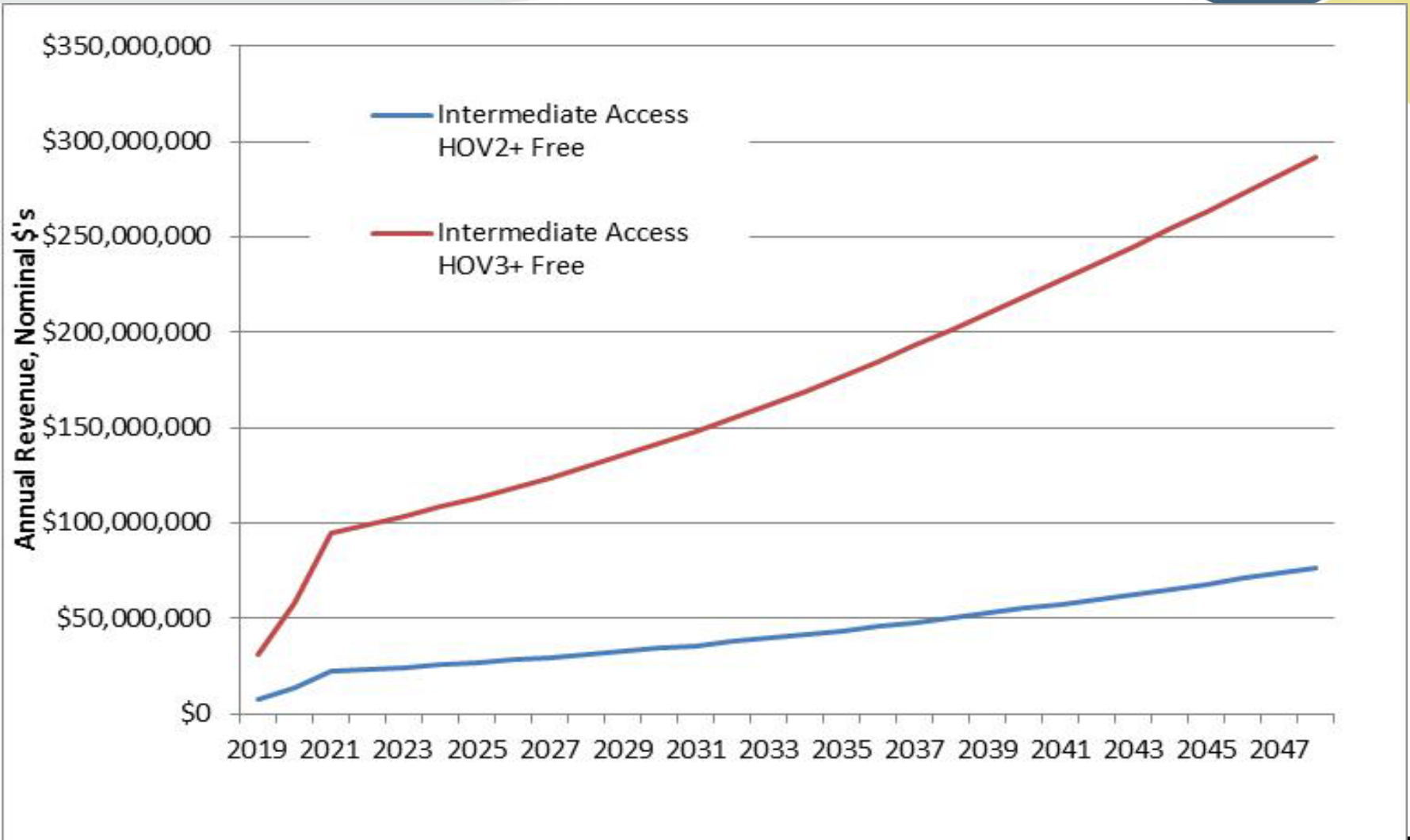
Segment:	Dir	Segment Distance (mi)	Average Toll Rate (2012 \$s)	Peak Toll Rate (2012 \$s)
SR 73 to Magnolia*	NB	5.1 mi.	\$1.20	\$1.89
	SB	4.7 mi.	\$1.29	\$1.74
Brookhurst to Goldenwest	NB	2.6 mi.	\$0.80	\$1.20
	SB	2.4 mi.	\$0.81	\$1.10
Goldenwest to SR 22	NB	2.9 mi.	\$2.24	\$4.95
	SB	3.3 mi.	\$1.49	\$1.80
SR 22 to I-605	NB	2.8 mi.	\$2.15	\$4.75
	SB	2.8 mi.	\$1.23	\$1.48
Full Length Trip	NB	13.4 mi.	\$6.38	\$12.78
	SB	13.2 mi.	\$4.83	\$6.11

* Alternative 3 Analysis

I-405 - Toll Transactions



I-405 - Toll Revenues



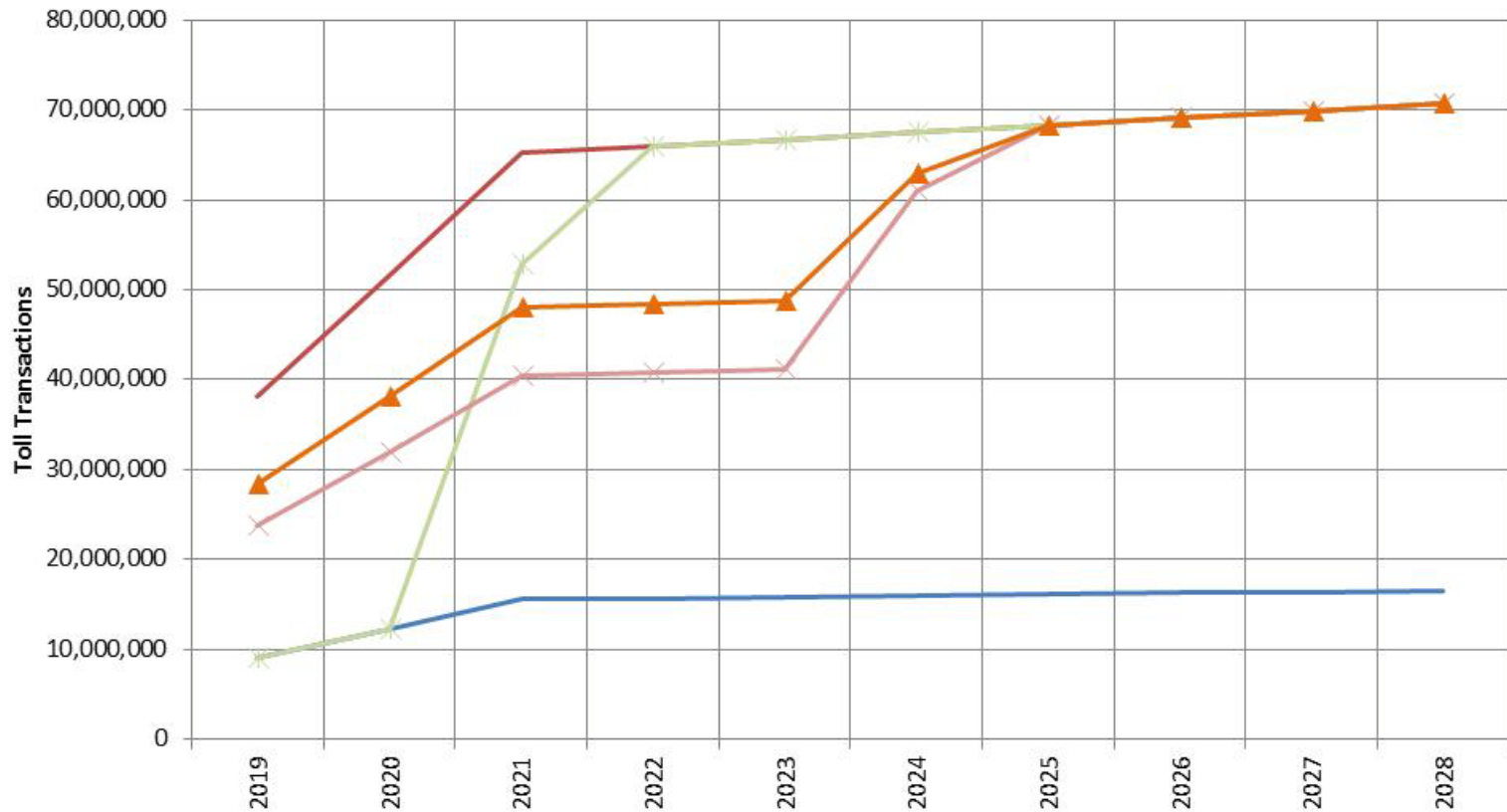
I-405 Tolling Sensitivities

Alternative 3 – Modified

- a) HOV2+ free at all times
- b) HOV3+ free at all times
- c) HOV2+ policy for 2 years, HOV3+ policy after 2 years
- d) HOV2+ free off-peak, 50% toll peak for 5 years;
HOV3+ free at all times
- e) HOV2+ free off-peak, 100% toll peak for first 5 years;
HOV3+ 50% toll during peak

I-405 Tolling Sensitivities

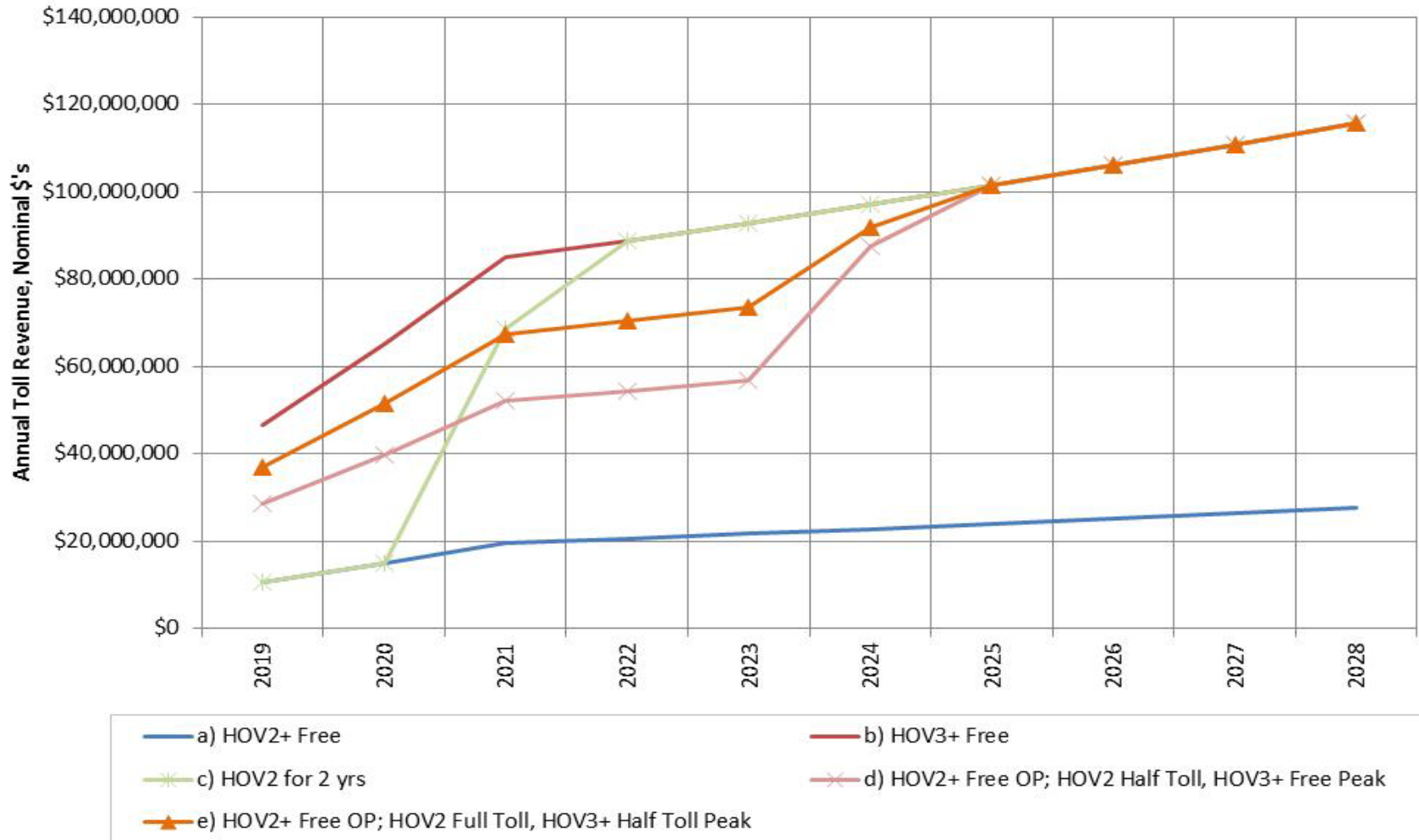
I-405 Express Lanes Projected Toll Transactions - 2019-2028



- a) HOV2+ Free
- b) HOV3+ Free
- * c) HOV2 for 2 yrs
- ▲ e) HOV2+ Free OP; HOV2 Full Toll, HOV3+ Half Toll Peak
- x d) HOV2+ Free OP; HOV2 Half Toll, HOV3+ Free Peak

I-405 Tolling Sensitivities

I-405 Express Lanes Projected Toll Revenue - 2019-2028



Financing Capacity

Various Tolling Alternatives

Bond Proceeds Available (Millions)

	<u>Level Debt Structure</u>	<u>Ascending Debt</u>
Alternative 3 - HOV3+ free at all times	\$296.63	\$406.69
Alternative 3 Modified (Truncated)		
a) HOV2+ free at all times	Not Feasible	Not Feasible
b) HOV3+ free at all times	\$283.87	\$391.70
c) HOV2+ free for 2 years	Not Feasible	Not Feasible
d) HOV2+ free off-peak for 5 years, pay 50% during peak*	\$131.74	\$180.79
e) HOV2+ free off peak for 5 years, 100% during peak**	\$202.22	\$278.48

* HOV2+ free off peak for 5 years, pay 50% during peak hours (6:00-9:00 AM and 4:00-7:00 PM), only HOV3+ free after five years

** HOV2+ free off peak for 5 years, pay 100% during peak hours (6:00-9:00 AM and 4:00-7:00 PM) and HOV3+ pays 50% during peak hours, only HOV3+ free after five years

I-405 Cost Assumptions

Alternatives*	Design-Build	Differential from Alternative 1	Alternative 3 Operating Costs (2019)	Alternative 3 Operating Costs (2049)
Alt. 1	\$1.23 billion	---	---	---
Alt. 2	\$1.33 billion	\$100 million	---	---
Alt 3	\$1.63 billion	\$400 million	\$17.6 million	\$57.0 million
Alt. 3 Modified	\$1.45 billion	\$220 million	---	---

* Reflects estimated cost savings from design modifications

Alternative 2 Funding

Funding Options	Related Actions
Use state and federal funds	<ul style="list-style-type: none">•Establish I-405 Alternative 2 as the first priority for all eligible future state and federal funds
Use M2 funds	<ul style="list-style-type: none">•Amend M2 I-405 project description•Establish I-405 as the first priority for use of any available M2 freeway funds•Defer other M2020 freeway, transit or streets and roads projects or accept greater financial risk

Next Steps

- Regional Planning and Highways September 17, 2012
- Board of Directors LPA* September 24, 2012
- Project Development Team PA** Fall 2012

* LPA = Locally Preferred Alternative

** PA = Preferred Alternative