



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Preliminary Traffic and Revenue Forecast for the 405
Express Lanes**

PowerPoint - OCTA Introduction



Preliminary Traffic and Revenue Forecast for the 405 Express Lanes

Interstate 405 Project Schedule

Description	Schedule
Initial Toll Policy and Preliminary Finance Plan	April/May 2016
Federal Highway Cost Estimate Review	End of April 2016
California Transportation Commission AB 194 Application Approval	May 2016
OCTA – Caltrans Operating Toll Agreement	June/July 2016
TIFIA: Indicative Credit Rating	June 2016
TIFIA: Application	August 2016
Design-Build Contractor Award	November 2016
Design-Build Contractor Notice to Proceed No. 1	January 2017
TIFIA: Loan Approval	March 2017
Design-Build Contractor Notice to Proceed No. 2	May 2017

Adopted Goals

- Provide express lanes customers with a safe, reliable, predictable commute.
- Optimize throughput at free flow speeds.
- Increase average vehicle occupancy.
- Balance capacity and demand to serve customers who pay tolls as well as people who rideshare or use transit.
- Generate sufficient revenue to sustain the financial viability of the 405 Express Lanes.
- Ensure all covenants in the financing documents are met.
- Ensure any potential net excess toll revenues are used for Interstate 405 corridor improvements.

Toll Policy Scenarios

Occupancy	Time of Day	A HOV2+ Free All Day	B HOV2+ Free Off-Peak HOV3+ 50% in Peak	B1 HOV2+ Free Off-Peak HOV3+ Free in Peak	C 91 Express Lanes Toll Policy	D Revenue Maximization*
HOV2+	Peak	Free	Full Toll	Full Toll	Full Toll	Full Toll
	Non-Peak	Free	Free	Free	Full Toll	Full Toll
HOV3+	Peak	Free	50% Discount	Free	50% Discount	50% Discount
	Non-Peak	Free	Free	Free	Free	Free

* Needed for rating agencies - tolls rates set higher.



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**Preliminary Traffic and Revenue Forecast for the 405
Express Lanes**

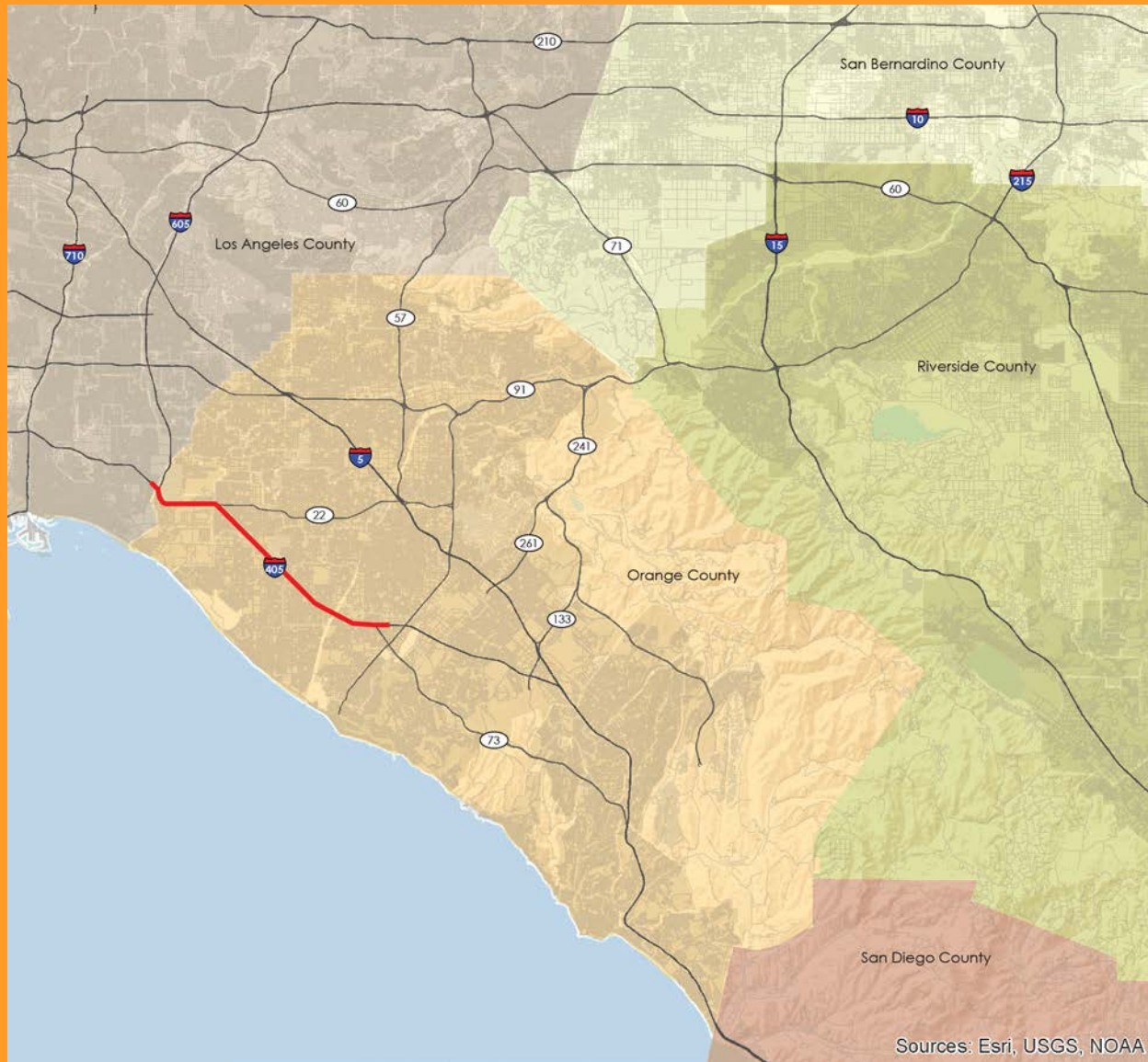
PowerPoint Excerpt - Stantec (Board Presentation)

405 Express Lanes

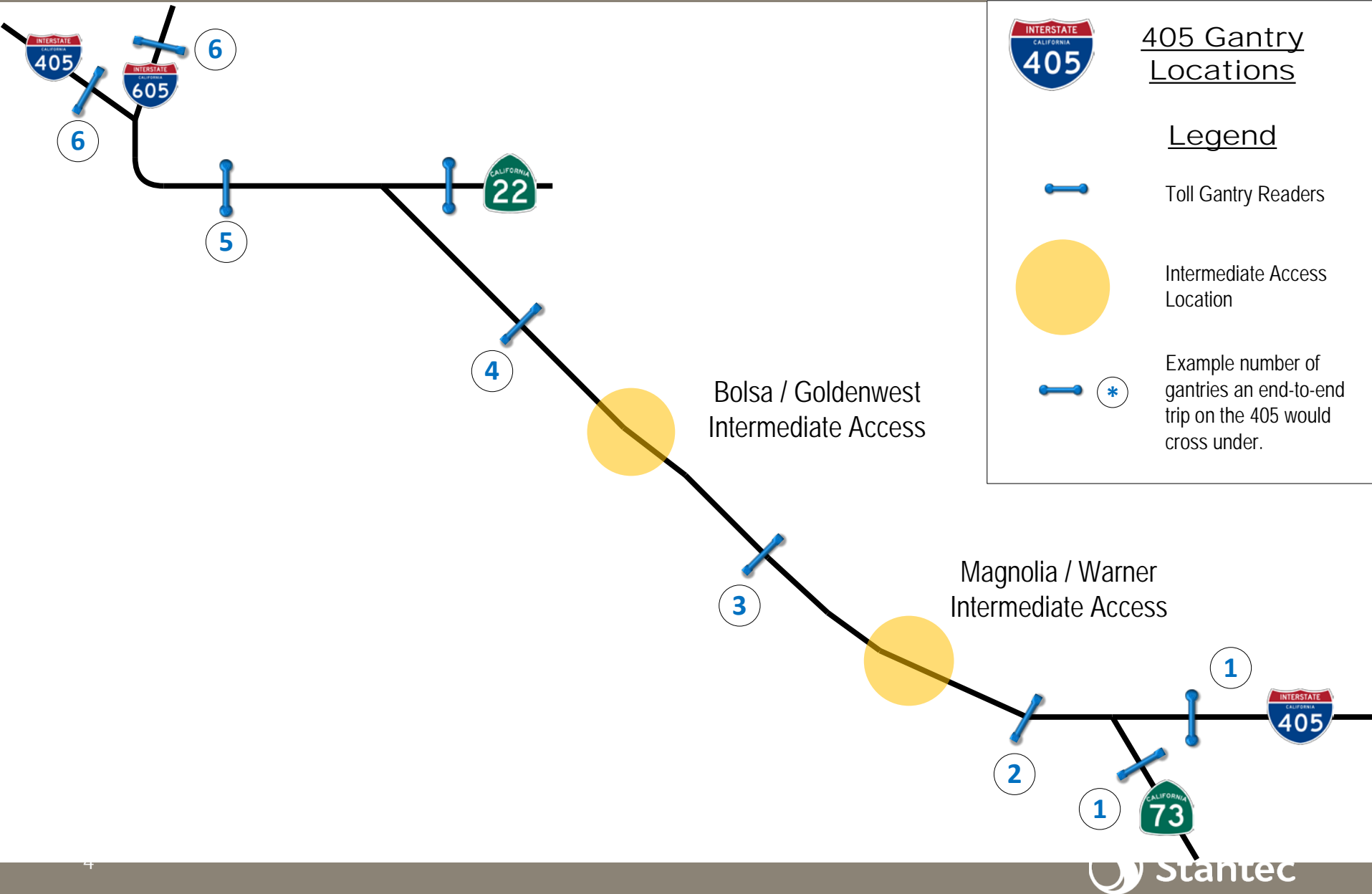
Traffic and Revenue Study



Regional Map

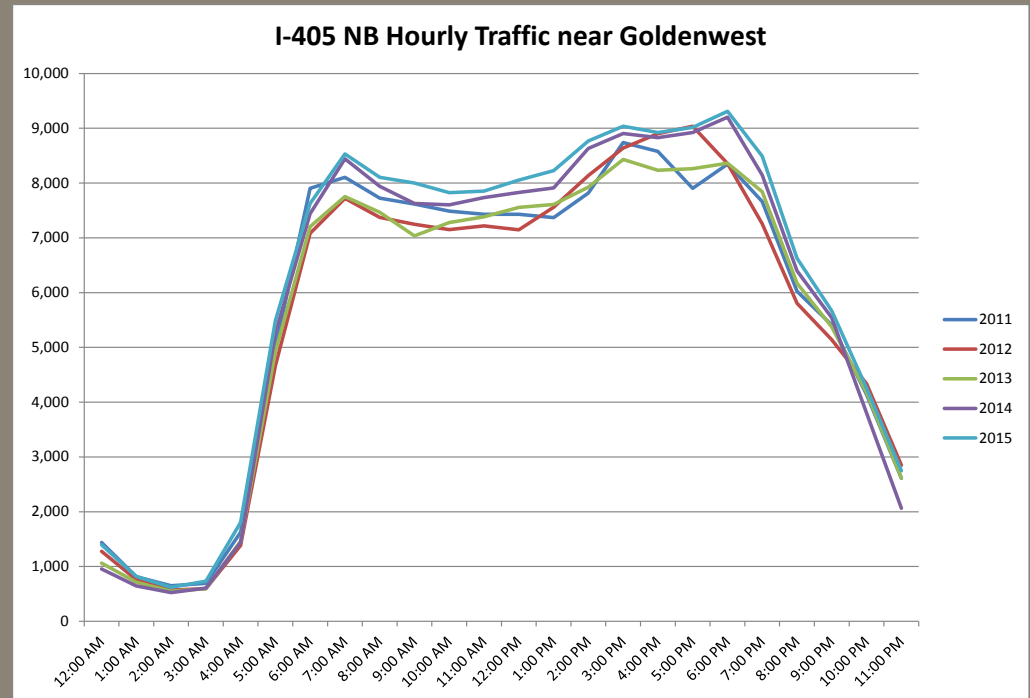


Project Configuration



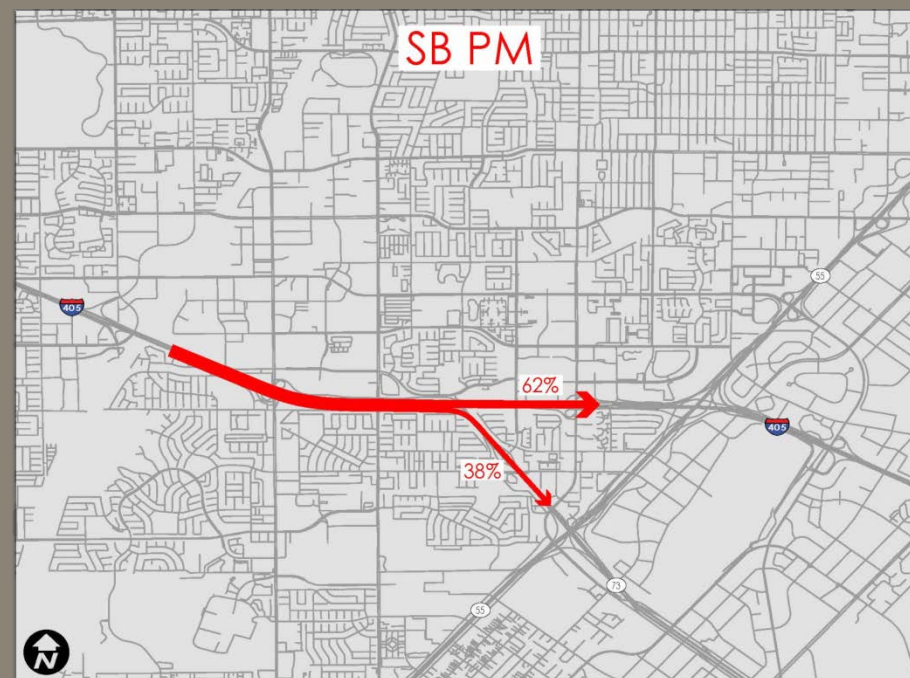
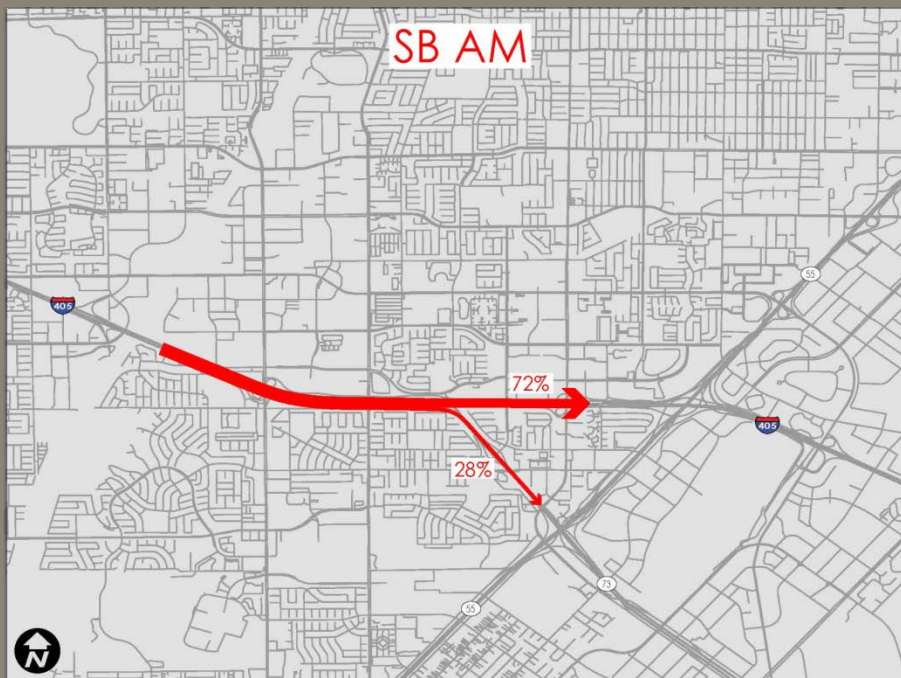
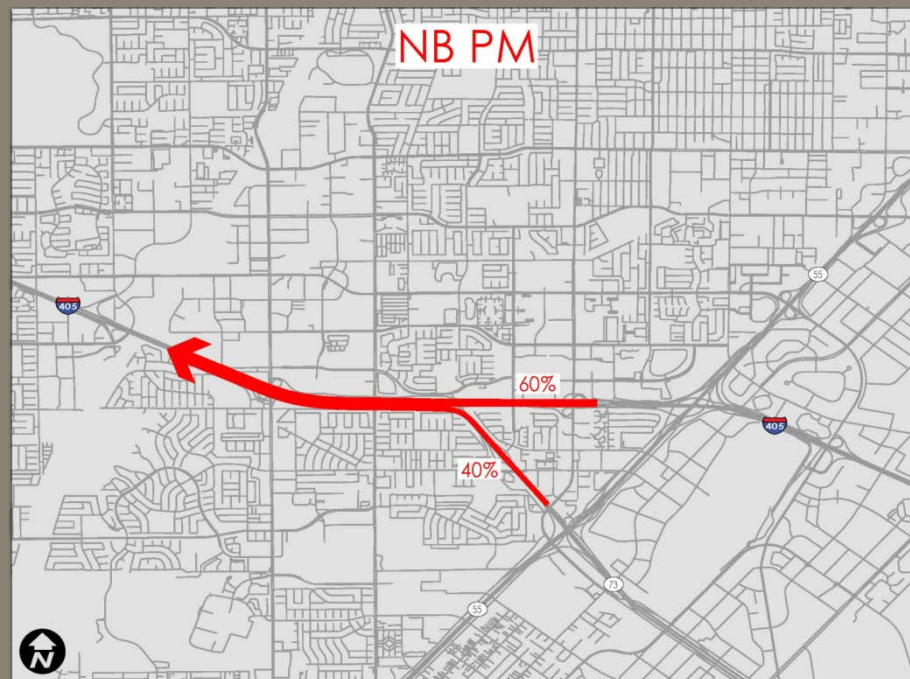
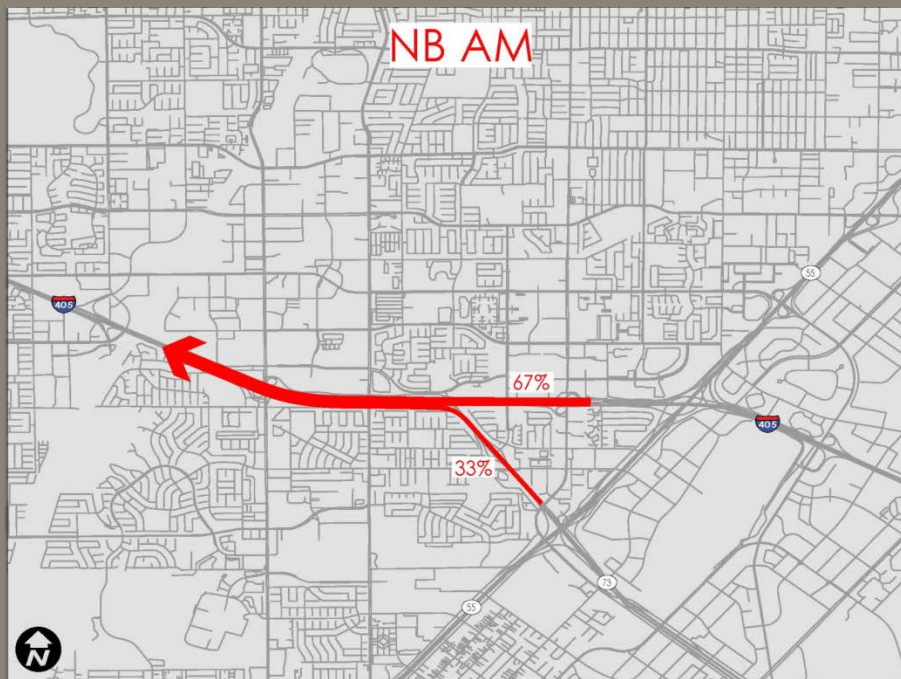
I-405 Historical Traffic

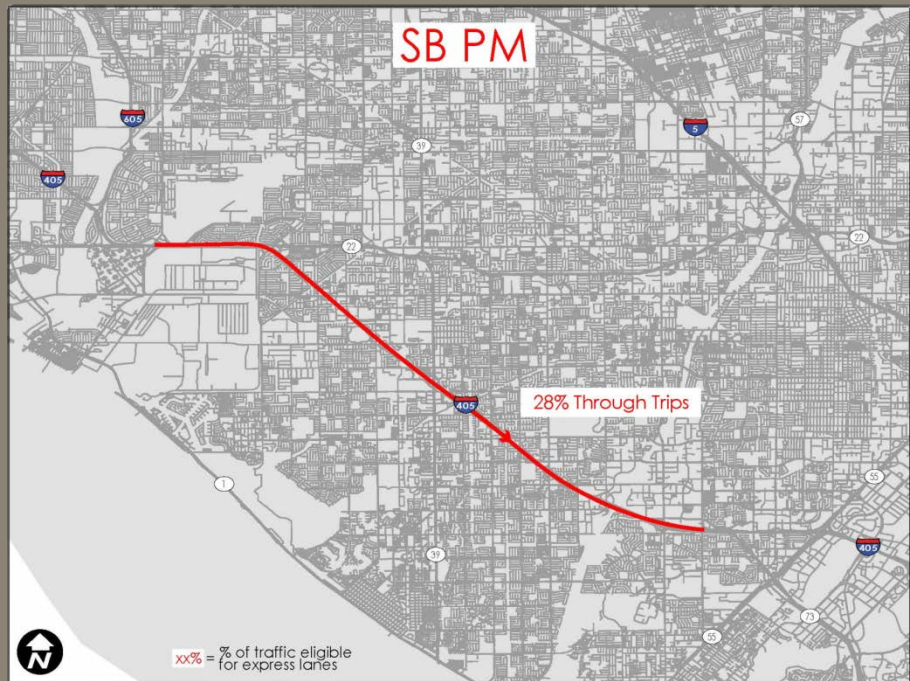
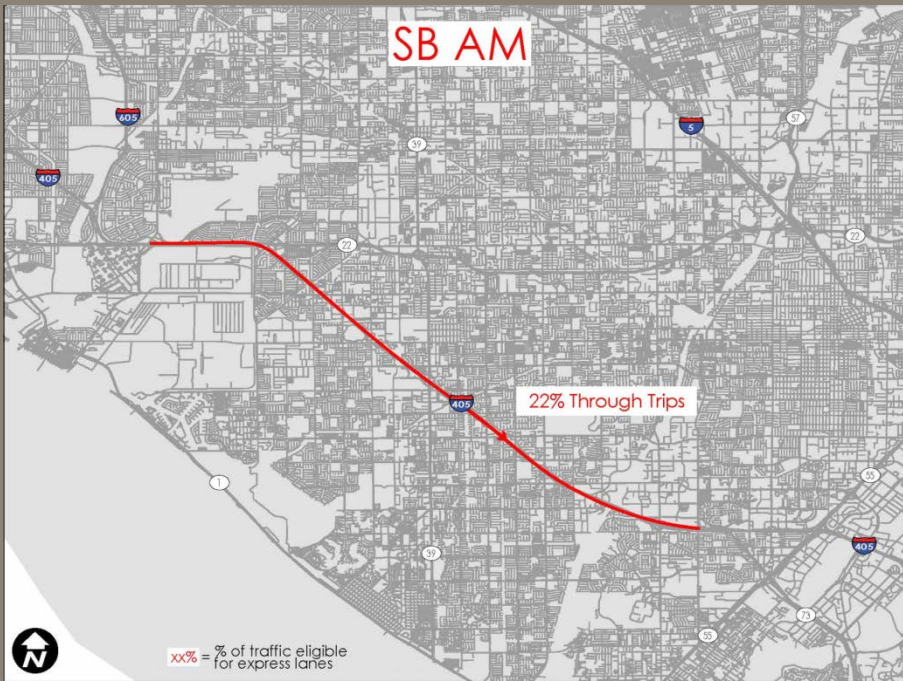
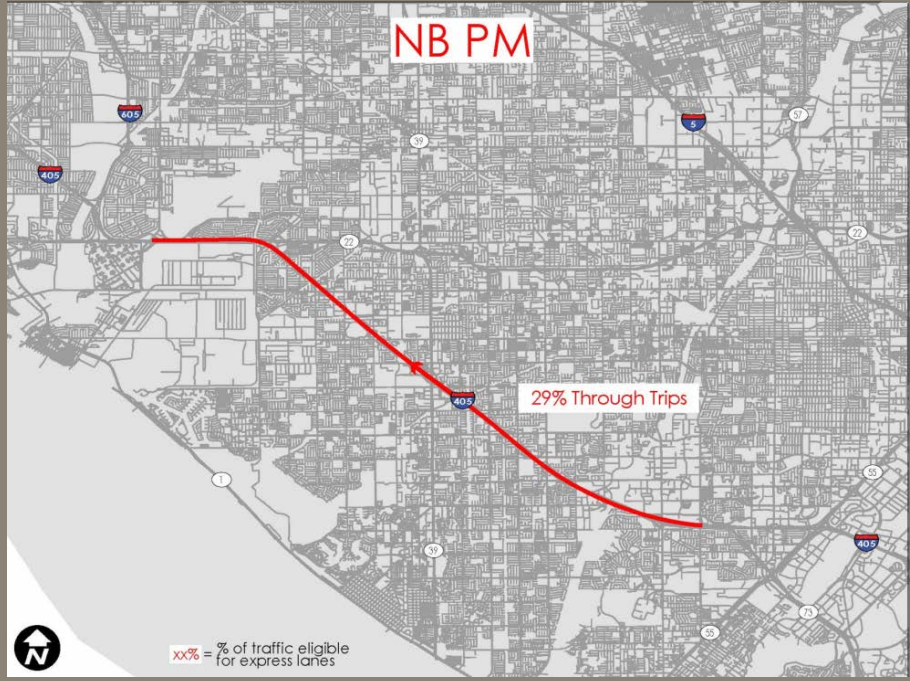
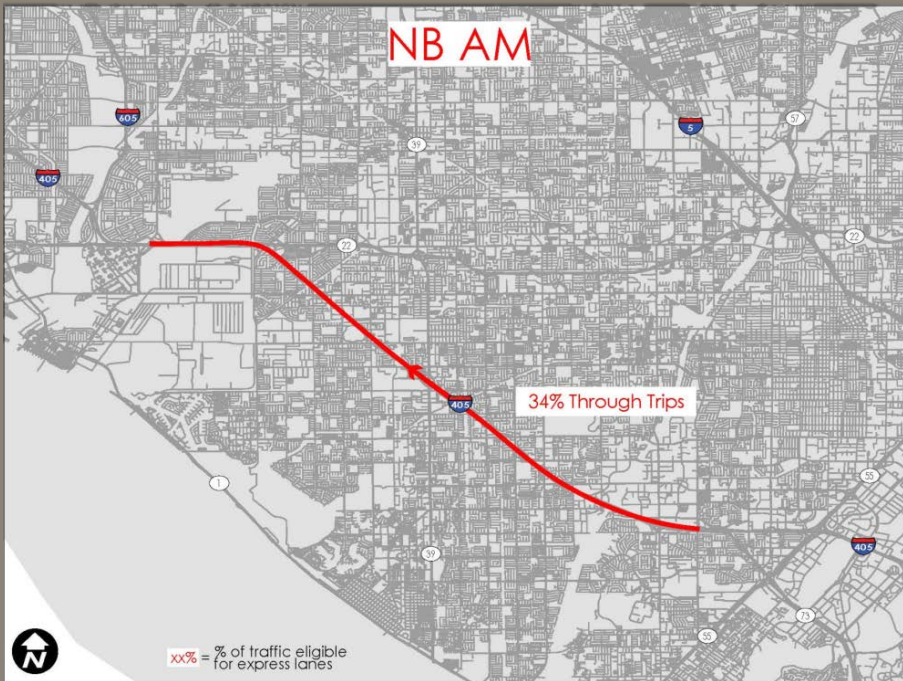
	2011	2012	2013	2014	2015
12:00 AM	1,438	1,278	1,061	956	1,395
1:00 AM	814	762	713	647	818
2:00 AM	648	570	549	522	620
3:00 AM	694	597	597	608	732
4:00 AM	1,625	1,385	1,461	1,442	1,803
5:00 AM	5,003	4,671	4,926	5,265	5,493
6:00 AM	7,905	7,082	7,203	7,440	7,628
7:00 AM	8,104	7,720	7,752	8,440	8,531
8:00 AM	7,723	7,373	7,464	7,938	8,103
9:00 AM	7,617	7,248	7,034	7,629	8,000
10:00 AM	7,487	7,152	7,280	7,603	7,824
11:00 AM	7,429	7,218	7,384	7,733	7,853
12:00 PM	7,431	7,145	7,555	7,828	8,053
1:00 PM	7,371	7,558	7,611	7,910	8,226
2:00 PM	7,816	8,135	7,925	8,631	8,768
3:00 PM	8,740	8,640	8,432	8,905	9,036
4:00 PM	8,578	8,900	8,234	8,830	8,921
5:00 PM	7,903	9,037	8,262	8,923	9,014
6:00 PM	8,344	8,356	8,362	9,203	9,311
7:00 PM	7,663	7,259	7,843	8,146	8,490
8:00 PM	6,023	5,803	6,172	6,396	6,626
9:00 PM	5,409	5,141	5,374	5,543	5,669
10:00 PM	4,140	4,336	4,176	3,802	4,260
11:00 PM	2,613	2,848	2,617	2,064	2,747
TOTAL	138,517	136,215	135,986	142,405	147,921
Growth		-2%	0%	5%	4%

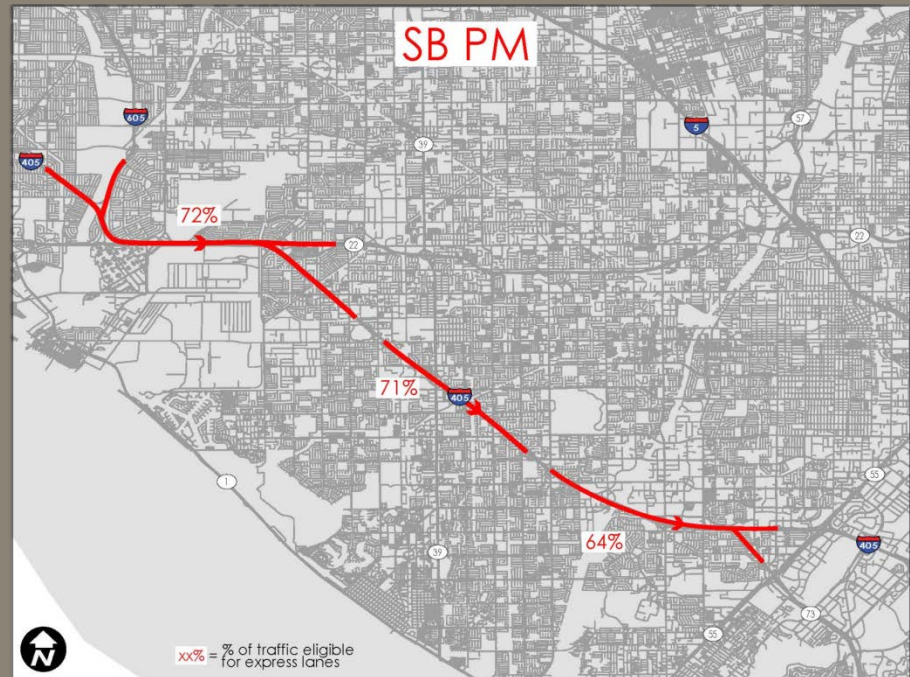
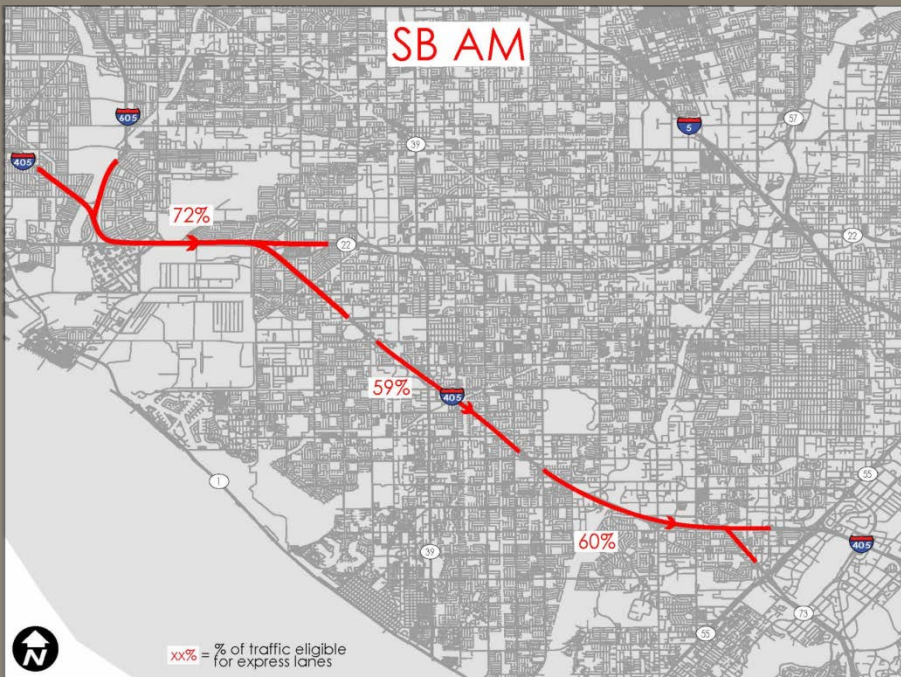
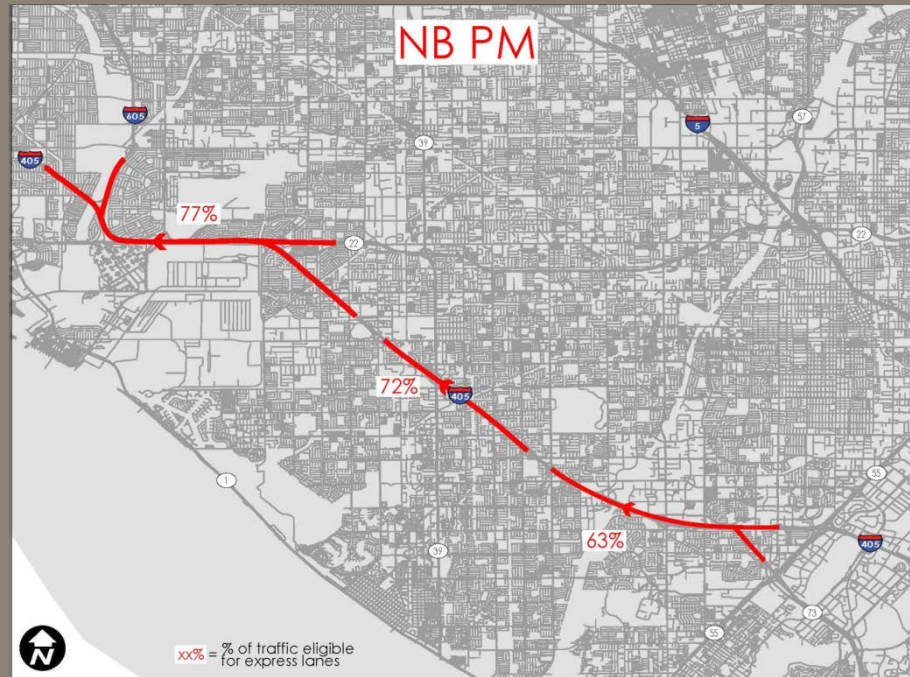
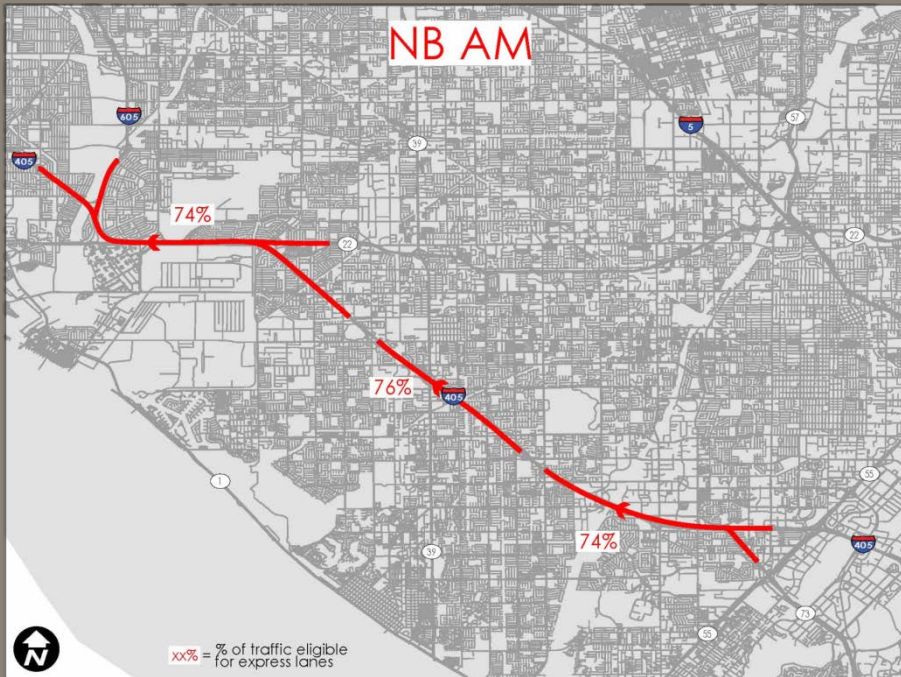


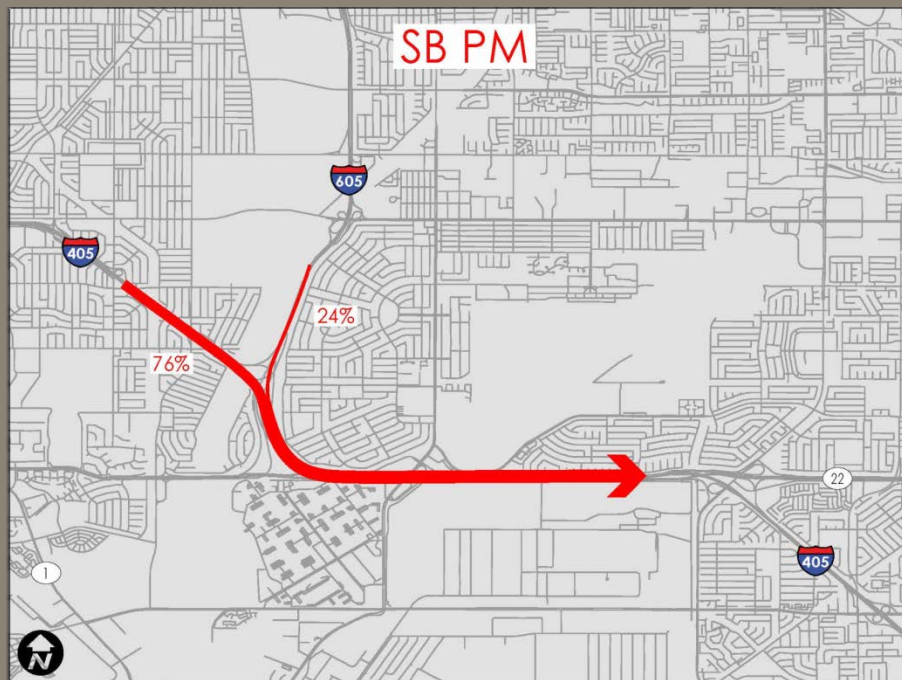
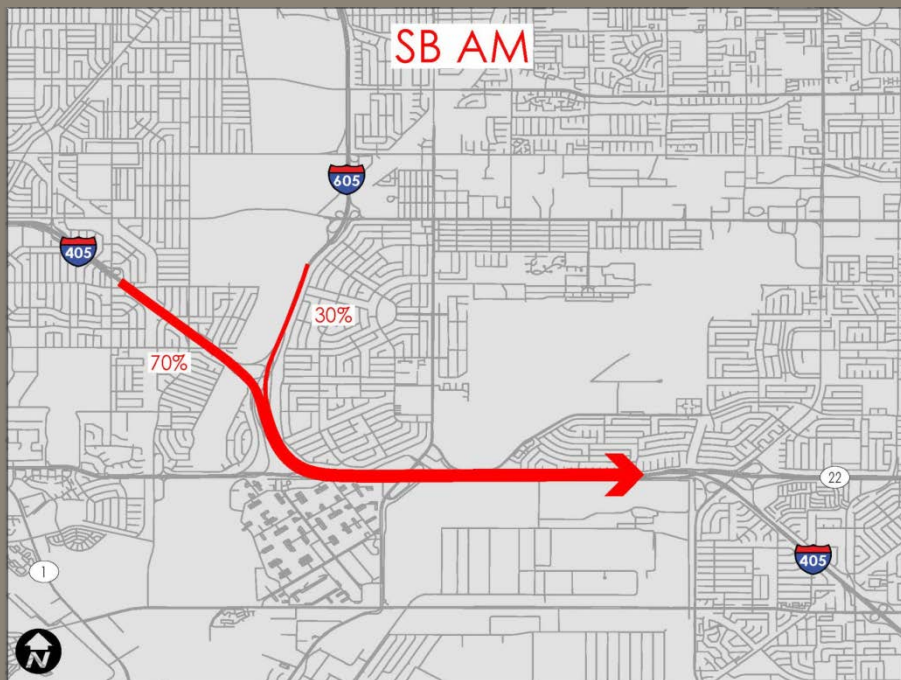
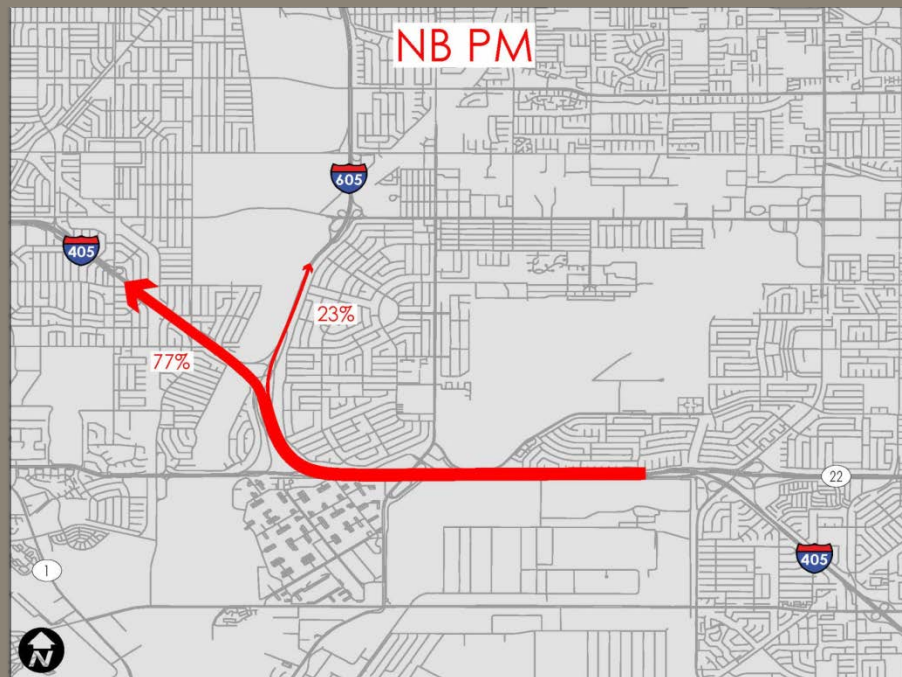
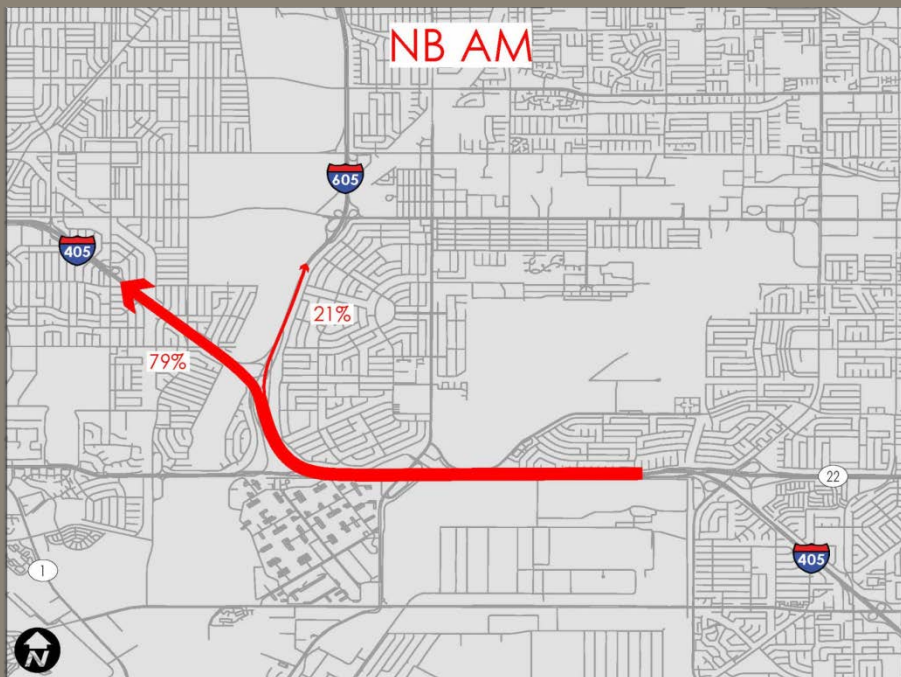












Traffic and Revenue Forecasts

Key Assumptions

- **Peak Period Definitions:**
 - 6 to 10 AM (weekday)
 - 3 to 8 PM (weekday)
 - 10 AM to 6 PM (weekend)
- **Static Variable Hourly Toll Schedule**
- **Toll Options:**

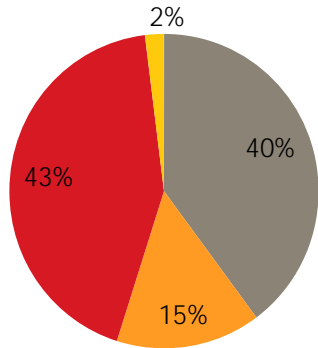
Occupancy	Time of Day	Toll Options			
		A	B	B1	C
HOV-2+	Peak	Free	Full Toll	Full Toll	Full Toll
	Off-Peak	Free	Free	Free	Full Toll
HOV-3+	Peak	Free	50% Toll	Free	50% Toll
	Off-Peak	Free	Free	Free	Free

Toll Option A:

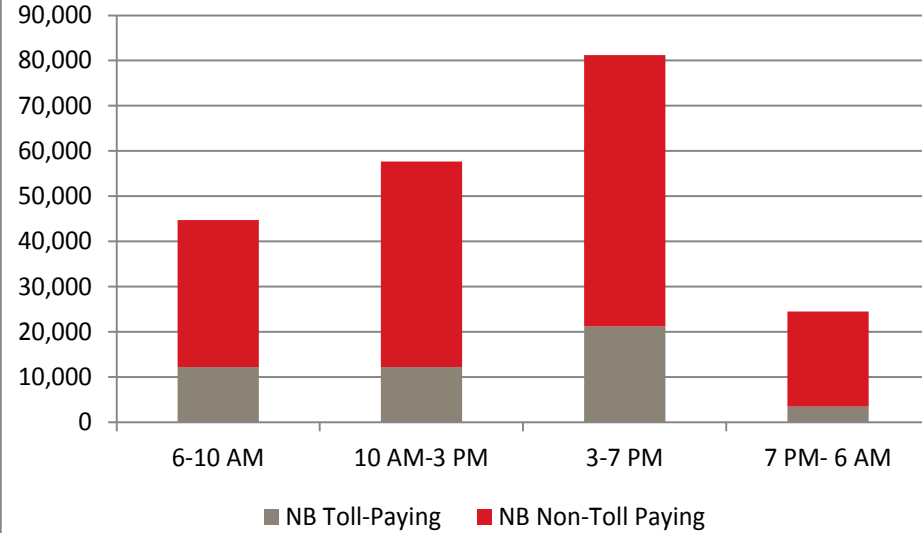
HOV-2+ Free All Day

Option A: 2025 T&R results

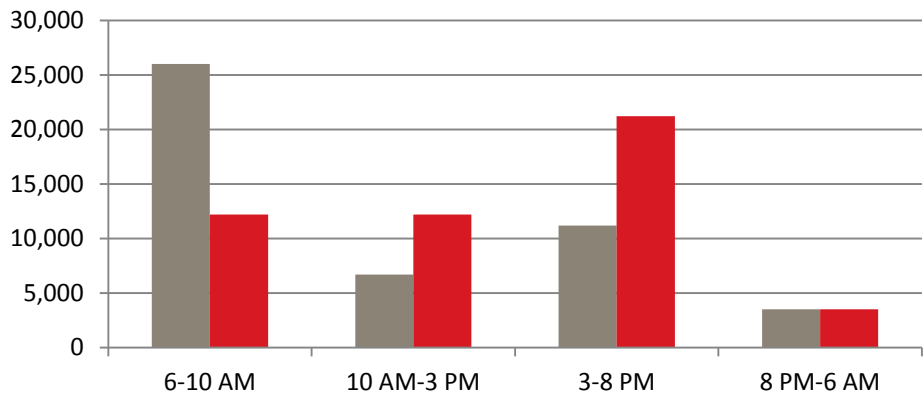
revenue by period



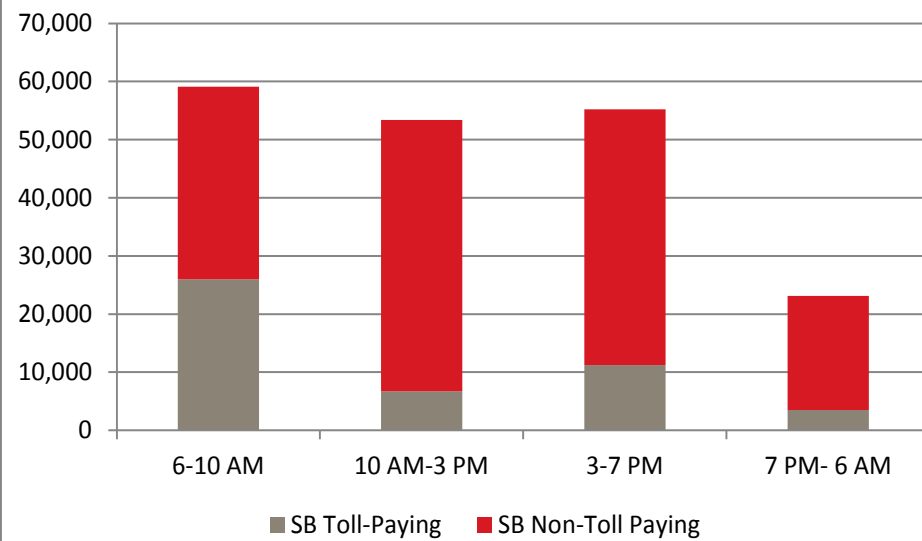
■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM



weekday toll transactions



46 ■ Southbound ■ Northbound



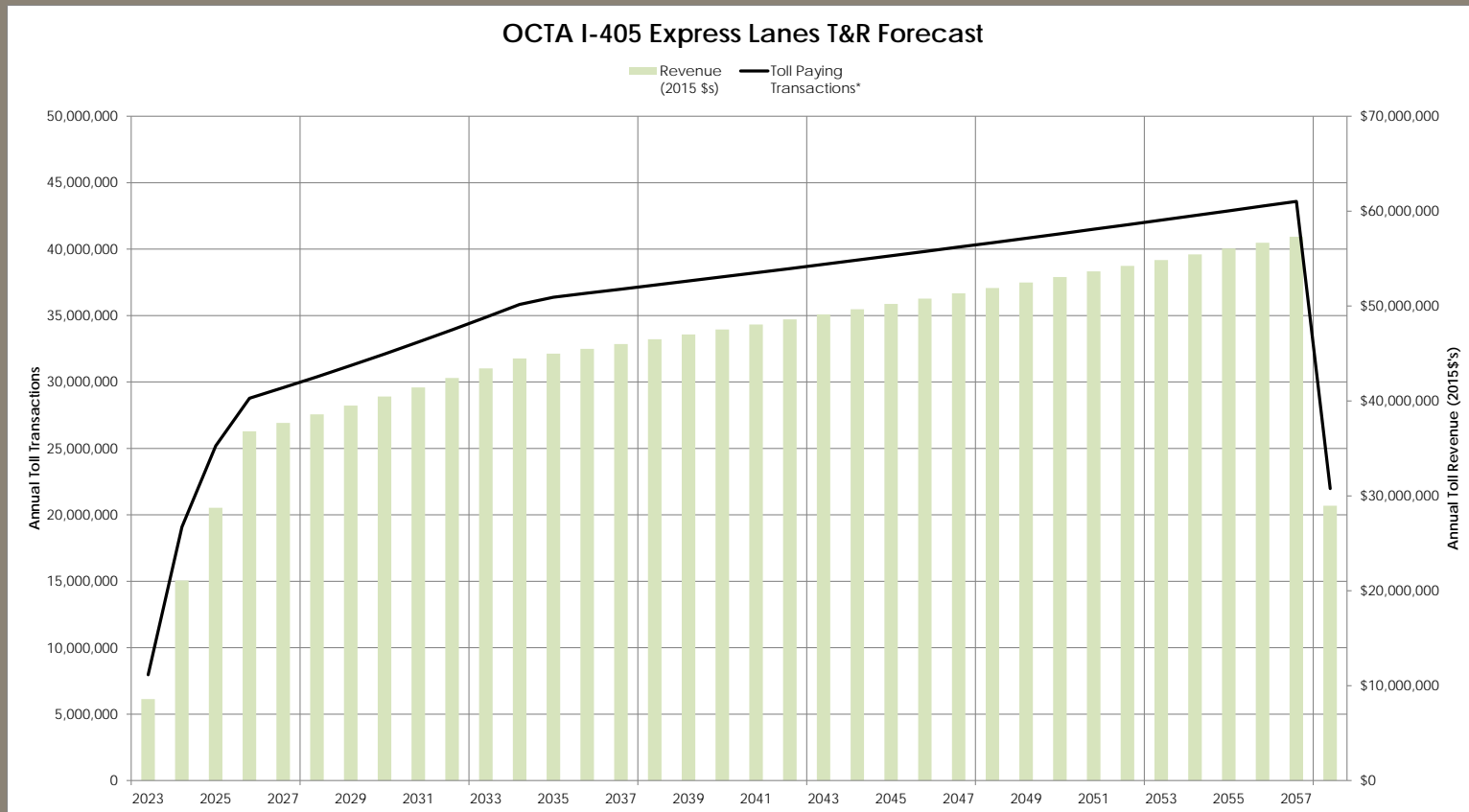
Toll Rates by Segment – 2025

Toll Option A

2025 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.14	\$ 0.36	\$ 1.25	\$ 0.98	\$ 0.63	\$ 0.21	\$ 4.30	\$ 2.15	\$ 3.22	\$ 3.94	\$ 0.26	\$ 0.06
605 NB HOT DC	1.43	\$ 0.21	\$ 0.36	\$ 0.50	\$ 0.47	\$ 0.54	\$ 0.48	\$ 0.78	\$ 0.78	\$ 0.97	\$ 0.94	\$ 0.57	\$ 0.23
22-605	2.02	\$ 0.50	\$ 0.91	\$ 1.11	\$ 1.05	\$ 1.07	\$ 0.85	\$ 1.31	\$ 1.27	\$ 1.41	\$ 1.37	\$ 0.97	\$ 0.34
22 NB HOT DC	0.65	\$ 0.13	\$ 0.19	\$ 0.16	\$ 0.19	\$ 0.18	\$ 0.14	\$ 0.17	\$ 0.15	\$ 0.26	\$ 0.26	\$ 0.16	\$ 0.10
Bolsa-22	3.14	\$ 0.64	\$ 1.10	\$ 1.48	\$ 1.35	\$ 1.35	\$ 1.10	\$ 1.66	\$ 1.60	\$ 1.79	\$ 1.48	\$ 1.26	\$ 0.50
Magnolia-Bolsa	3.11	\$ 0.59	\$ 0.93	\$ 1.40	\$ 1.28	\$ 1.34	\$ 1.03	\$ 1.84	\$ 1.74	\$ 1.77	\$ 1.80	\$ 1.43	\$ 0.50
73-Magnolia	4.24	\$ 0.81	\$ 1.27	\$ 1.82	\$ 1.91	\$ 1.99	\$ 2.12	\$ 3.18	\$ 2.88	\$ 3.14	\$ 3.82	\$ 4.03	\$ 0.68
73 NB HOT DC	0.74	\$ 0.11	\$ 0.19	\$ 0.26	\$ 0.27	\$ 0.32	\$ 0.31	\$ 1.56	\$ 0.67	\$ 0.97	\$ 1.30	\$ 0.89	\$ 0.11
405S NB HOT DC	0.28	\$ 0.06	\$ 0.11	\$ 0.15	\$ 0.17	\$ 0.15	\$ 0.18	\$ 2.50	\$ 0.28	\$ 1.58	\$ 3.05	\$ 1.80	\$ 0.04
Full Length Toll	13.14	\$ 2.74	\$ 4.68	\$ 7.21	\$ 6.74	\$ 6.53	\$ 5.49	\$ 14.79	\$ 9.92	\$ 12.91	\$ 15.46	\$ 9.75	\$ 2.13
Southbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N SB HOT DC	0.36	\$ 0.06	\$ 0.15	\$ 0.24	\$ 1.43	\$ 0.57	\$ 0.21	\$ 0.39	\$ 0.32	\$ 0.66	\$ 0.72	\$ 0.20	\$ 0.06
605 SB HOT DC	1.43	\$ 0.21	\$ 0.67	\$ 0.64	\$ 0.88	\$ 0.68	\$ 0.54	\$ 0.46	\$ 0.50	\$ 0.61	\$ 0.53	\$ 0.43	\$ 0.23
605-22	2.02	\$ 0.39	\$ 0.93	\$ 1.07	\$ 1.31	\$ 1.15	\$ 0.91	\$ 1.01	\$ 1.03	\$ 1.13	\$ 1.09	\$ 0.87	\$ 0.34
22 SB HOT DC	0.65	\$ 0.10	\$ 0.10	\$ 0.21	\$ 0.12	\$ 0.10	\$ 0.14	\$ 0.19	\$ 0.16	\$ 0.18	\$ 0.15	\$ 0.16	\$ 0.10
22-Bolsa	3.14	\$ 0.57	\$ 1.35	\$ 1.26	\$ 1.82	\$ 1.73	\$ 1.22	\$ 1.13	\$ 1.35	\$ 1.44	\$ 1.51	\$ 1.13	\$ 0.50
Bolsa-Magnolia	3.11	\$ 0.53	\$ 1.65	\$ 1.34	\$ 1.87	\$ 1.87	\$ 1.21	\$ 1.24	\$ 1.49	\$ 1.49	\$ 1.40	\$ 1.03	\$ 0.50
Magnolia-73	4.24	\$ 0.67	\$ 2.25	\$ 2.76	\$ 2.97	\$ 2.59	\$ 1.48	\$ 1.70	\$ 1.95	\$ 1.91	\$ 1.74	\$ 1.40	\$ 0.68
73 SB HOT DC	0.74	\$ 0.11	\$ 0.36	\$ 0.56	\$ 0.56	\$ 0.43	\$ 0.24	\$ 0.28	\$ 0.30	\$ 0.28	\$ 0.30	\$ 0.19	\$ 0.11
405S SB HOT DC	0.28	\$ 0.06	\$ 0.17	\$ 0.20	\$ 0.49	\$ 0.24	\$ 0.12	\$ 0.11	\$ 0.14	\$ 0.14	\$ 0.14	\$ 0.10	\$ 0.04
Full Length Toll	13.14	\$ 2.27	\$ 6.49	\$ 6.86	\$ 9.89	\$ 8.14	\$ 5.17	\$ 5.58	\$ 6.29	\$ 6.78	\$ 6.59	\$ 4.72	\$ 2.13

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

Traffic and Revenue Forecast

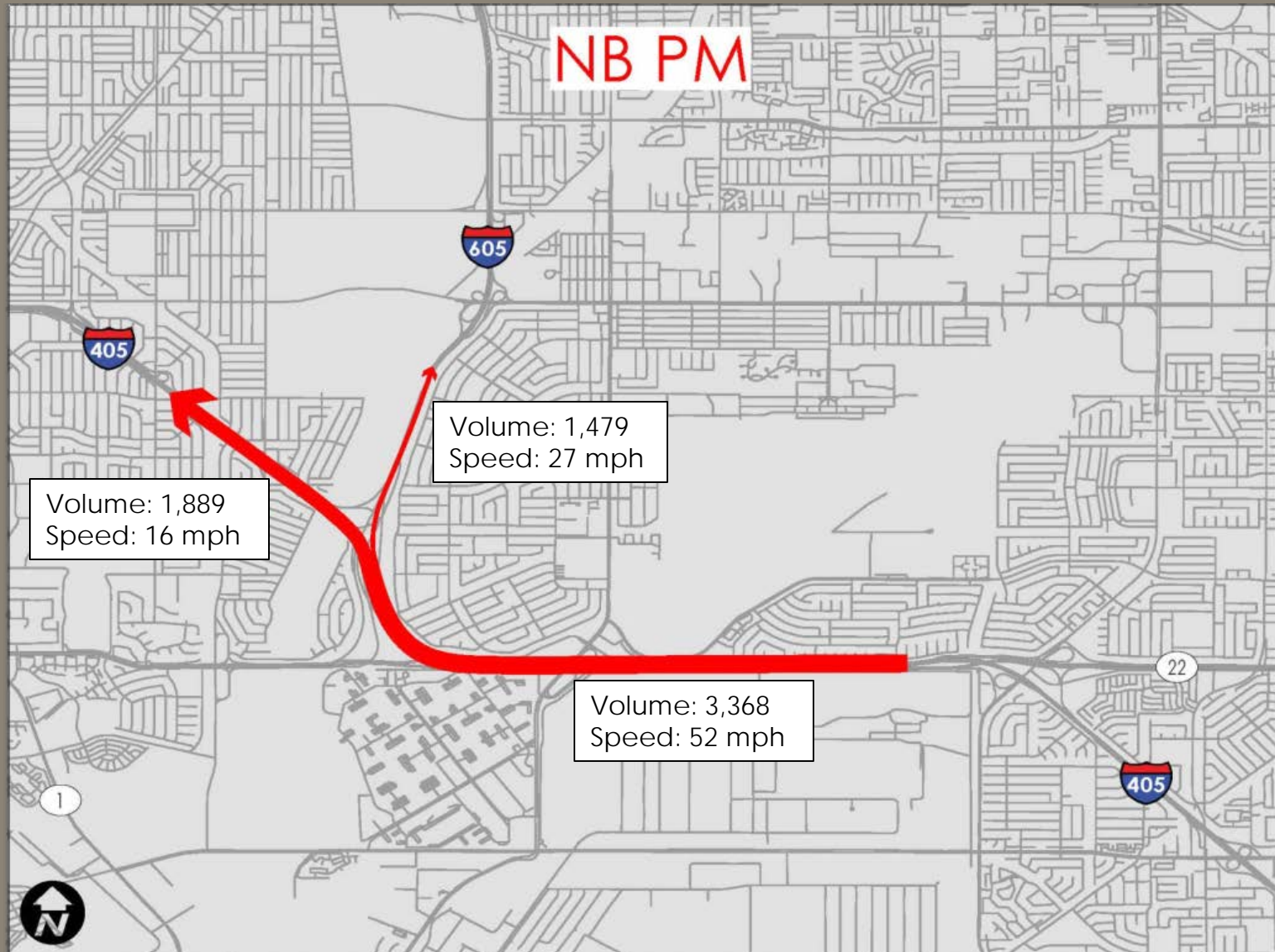


- Annualization of weekday T&R
 - Toll transactions = 290
 - HOV transactions = 350
 - Revenue = 295
- T&R Ramp-up
 - Fully ramped up by the beginning of FY 2026
 - Toll Transactions, FY 2023 = 60%, FY 2024 = 70%, FY 2025 = 90%
 - Revenue, FY 2023 = 50%, FY 2024 = 60%, FY 2025 = 80%

Traffic Operations

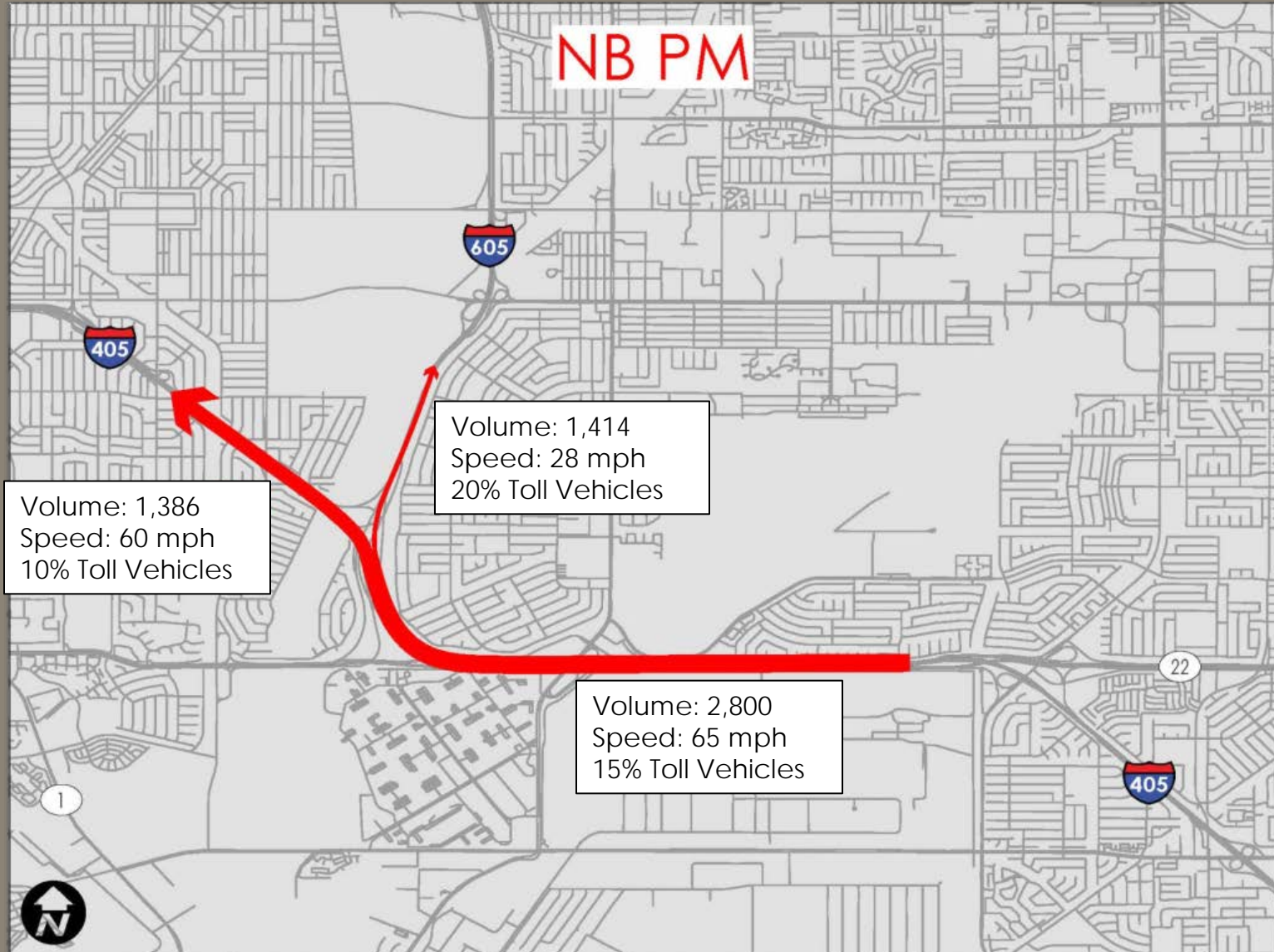
- Concerns about HOV-2+ free during peak periods, particularly at single lane termini
 - Analyzed facility as HOV lane (upper bound)
 - Transponder requirements (sensitivity)
 - Access
- Existing peak hour HOV-2+ counts in 22-605 section exceed 2,700

Facility as HOV Lane



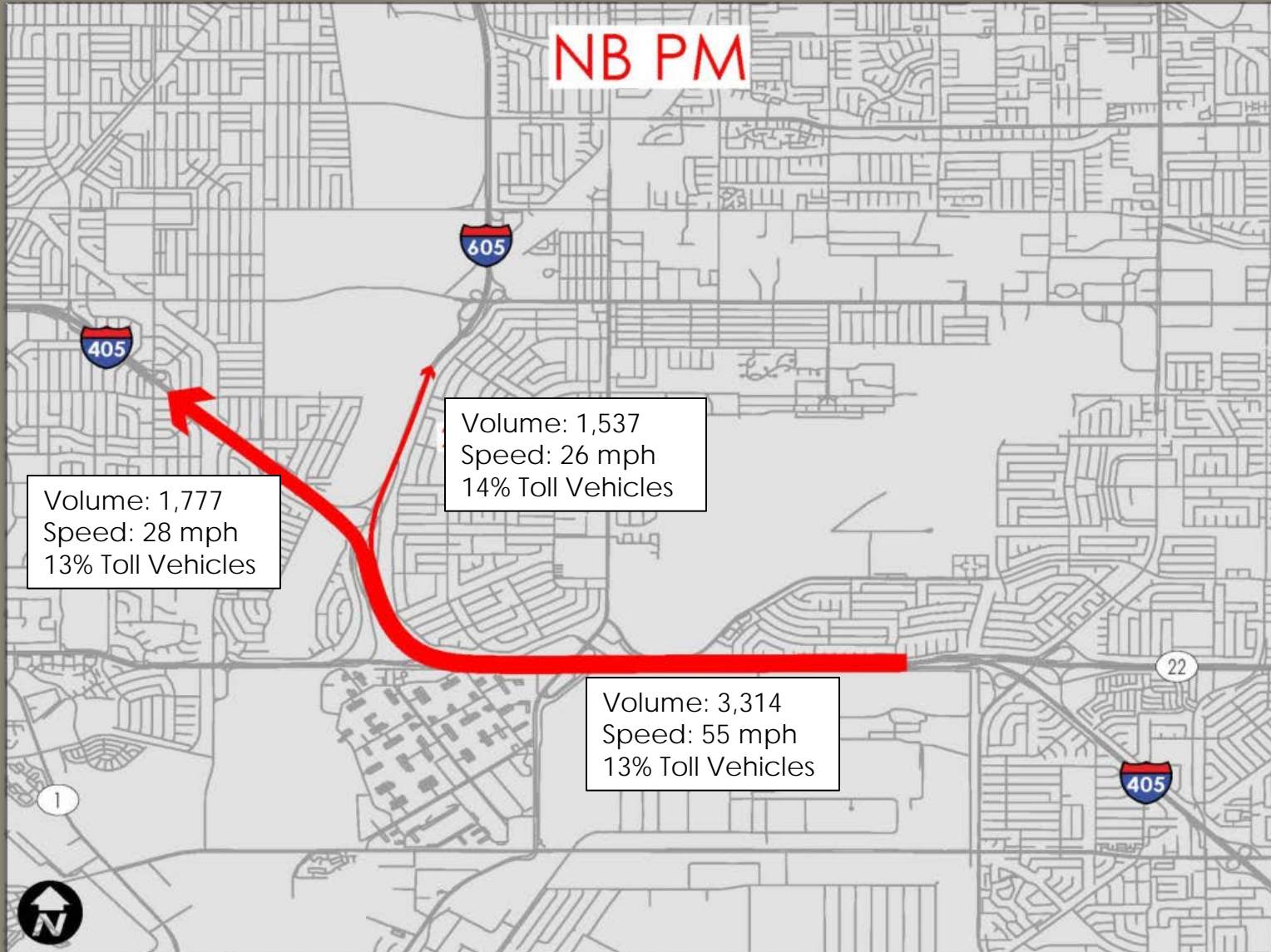
Facility as Express Lane

70% Transponder Share

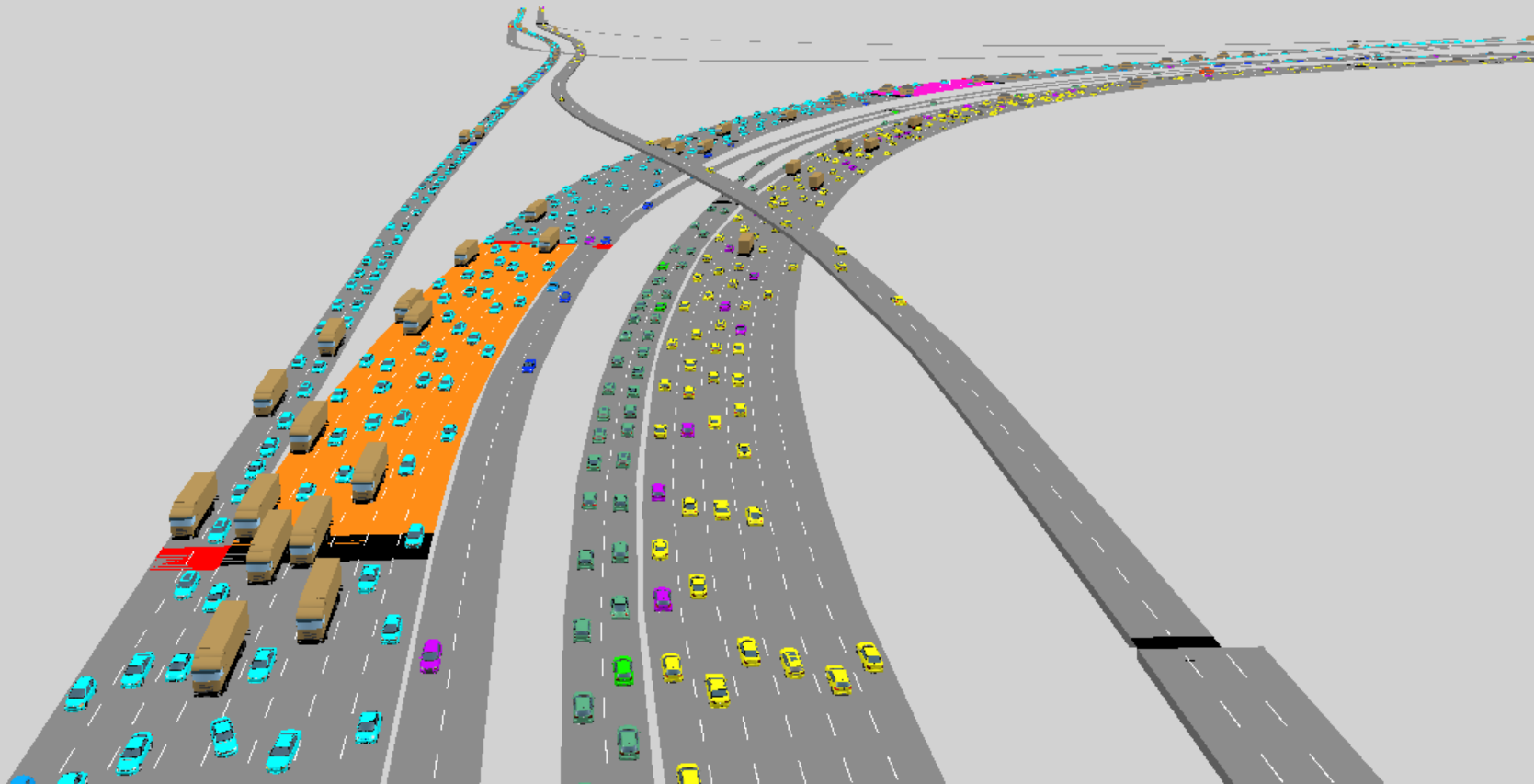


Facility as Express Lane

100% Transponder Share



Option A: Micro-simulation (video)



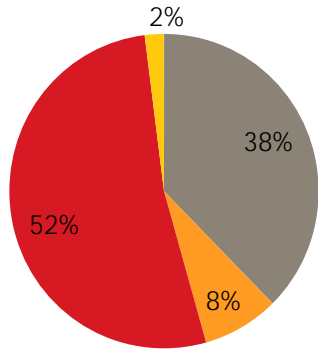
Toll Option B:

HOV-2+ Free Off-Peak

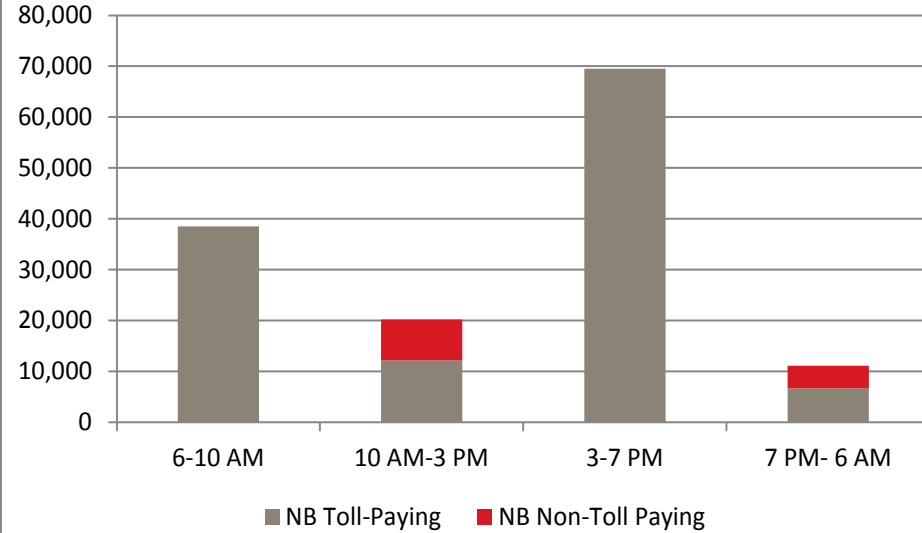
HOV-3+ 50% Toll Peak

Option B: 2025 T&R results

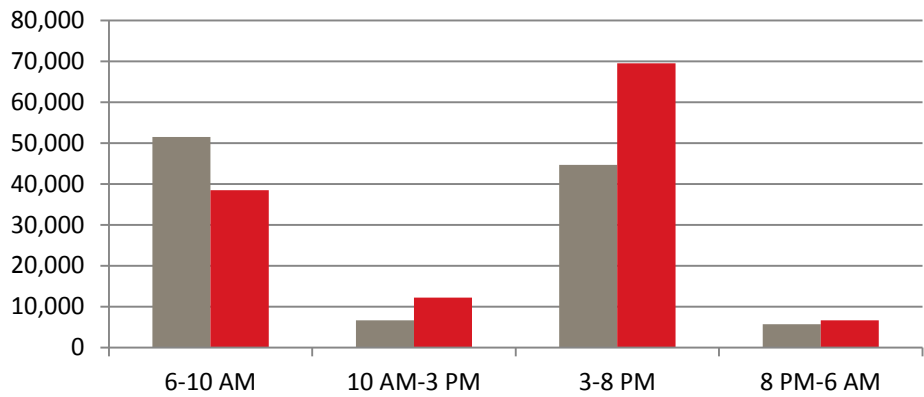
revenue by period



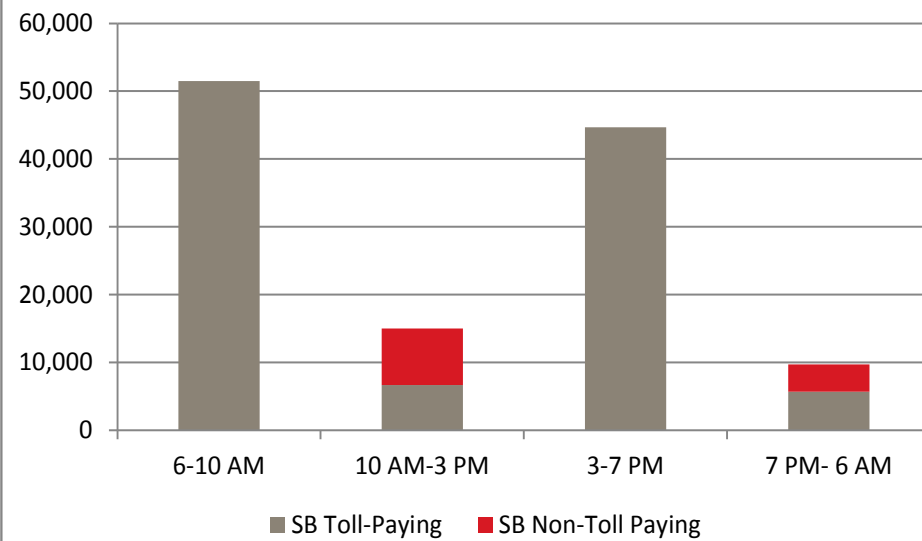
■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM



weekday toll transactions



59 ■ Southbound ■ Northbound



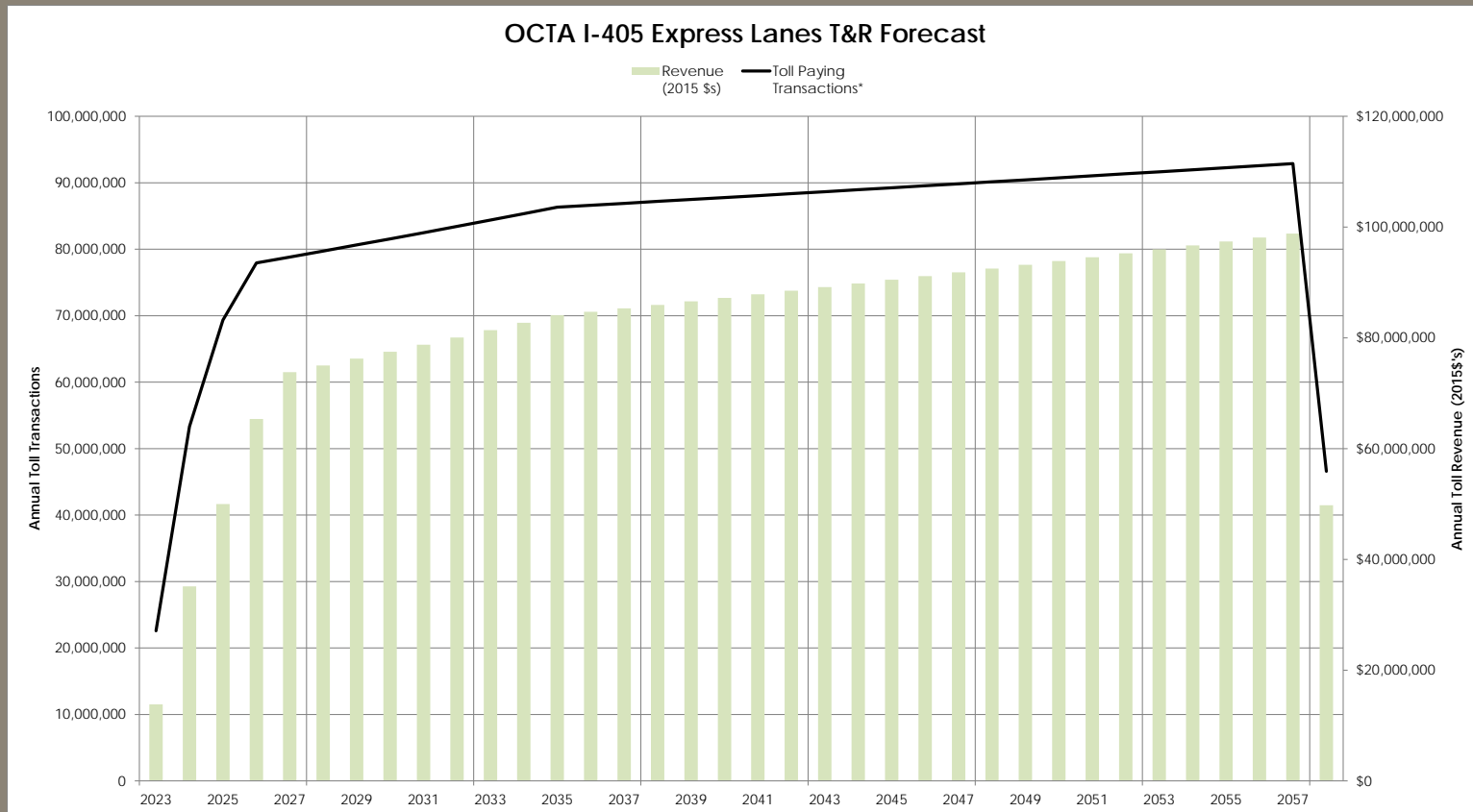
Toll Rates by Segment – 2025

Toll Option B

2025 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.14	\$ 0.23	\$ 0.50	\$ 0.36	\$ 0.27	\$ 0.21	\$ 1.39	\$ 0.61	\$ 1.45	\$ 1.54	\$ 0.33	\$ 0.06
605 NB HOT DC	1.43	\$ 0.21	\$ 0.36	\$ 0.46	\$ 0.43	\$ 0.50	\$ 0.48	\$ 0.57	\$ 0.61	\$ 0.60	\$ 0.71	\$ 0.43	\$ 0.23
22-605	2.02	\$ 0.50	\$ 0.75	\$ 1.01	\$ 0.95	\$ 0.97	\$ 0.85	\$ 1.05	\$ 1.00	\$ 1.05	\$ 1.10	\$ 0.70	\$ 0.34
22 NB HOT DC	0.65	\$ 0.13	\$ 0.19	\$ 0.16	\$ 0.19	\$ 0.18	\$ 0.14	\$ 0.16	\$ 0.13	\$ 0.26	\$ 0.23	\$ 0.16	\$ 0.10
Bolsa-22	3.14	\$ 0.64	\$ 0.94	\$ 1.26	\$ 1.26	\$ 1.19	\$ 1.10	\$ 1.57	\$ 1.48	\$ 1.32	\$ 1.41	\$ 0.94	\$ 0.50
Magnolia-Bolsa	3.11	\$ 0.59	\$ 0.78	\$ 1.15	\$ 1.09	\$ 1.09	\$ 1.03	\$ 1.62	\$ 1.49	\$ 1.50	\$ 1.56	\$ 1.24	\$ 0.50
73-Magnolia	4.24	\$ 0.81	\$ 1.06	\$ 1.48	\$ 1.70	\$ 1.67	\$ 2.12	\$ 2.97	\$ 2.33	\$ 2.30	\$ 2.88	\$ 2.88	\$ 0.68
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405S NB HOT DC	0.28	\$ 0.06	\$ 0.08	\$ 0.10	\$ 0.12	\$ 0.10	\$ 0.18	\$ 0.20	\$ 0.15	\$ 0.45	\$ 0.56	\$ 0.21	\$ 0.04
Full Length Toll	13.14	\$ 2.74	\$ 3.83	\$ 5.50	\$ 5.46	\$ 5.29	\$ 5.49	\$ 8.80	\$ 7.06	\$ 8.06	\$ 9.05	\$ 6.31	\$ 2.13
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605 SB HOT DC	1.43	\$ 0.21	\$ 0.53	\$ 0.47	\$ 0.64	\$ 0.57	\$ 0.54	\$ 0.36	\$ 0.43	\$ 0.43	\$ 0.46	\$ 0.36	\$ 0.23
605-22	2.02	\$ 0.39	\$ 0.81	\$ 0.91	\$ 1.11	\$ 1.01	\$ 0.91	\$ 0.91	\$ 0.85	\$ 1.01	\$ 0.91	\$ 0.71	\$ 0.34
22 SB HOT DC	0.65	\$ 0.10	\$ 0.10	\$ 0.19	\$ 0.12	\$ 0.10	\$ 0.14	\$ 0.19	\$ 0.16	\$ 0.18	\$ 0.13	\$ 0.16	\$ 0.10
22-Bolsa	3.14	\$ 0.57	\$ 1.16	\$ 1.10	\$ 1.57	\$ 1.57	\$ 1.22	\$ 1.10	\$ 1.10	\$ 1.26	\$ 1.26	\$ 0.94	\$ 0.50
Bolsa-Magnolia	3.11	\$ 0.53	\$ 1.40	\$ 1.09	\$ 1.62	\$ 1.71	\$ 1.21	\$ 0.93	\$ 1.18	\$ 1.18	\$ 1.24	\$ 0.78	\$ 0.50
Magnolia-73	4.24	\$ 0.67	\$ 1.91	\$ 2.33	\$ 2.54	\$ 2.33	\$ 1.48	\$ 1.27	\$ 1.48	\$ 1.48	\$ 1.40	\$ 1.05	\$ 0.68
73 SB HOT DC	0.74	\$ 0.11	\$ 0.36	\$ 0.50	\$ 0.56	\$ 0.43	\$ 0.24	\$ 0.26	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.19	\$ 0.11
405S SB HOT DC	0.28	\$ 0.06	\$ 0.13	\$ 0.15	\$ 0.20	\$ 0.16	\$ 0.12	\$ 0.08	\$ 0.10	\$ 0.10	\$ 0.08	\$ 0.07	\$ 0.04
Full Length Toll	13.14	\$ 2.27	\$ 5.55	\$ 5.78	\$ 7.35	\$ 7.02	\$ 5.17	\$ 4.53	\$ 4.94	\$ 5.32	\$ 5.16	\$ 3.71	\$ 2.13

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

Traffic and Revenue Forecast



- Annualization of weekday T&R
 - Toll transactions = 325
 - HOV transactions = 350
 - Revenue = 310
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 - Revenue, FY 2023 = 40%, FY 2024 = 50%, FY 2025 = 70%, FY 2026 = 90%

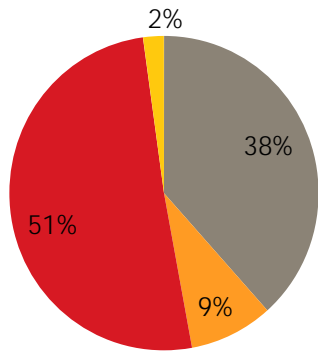
Toll Option B1:

HOV-2+ Free Off-Peak

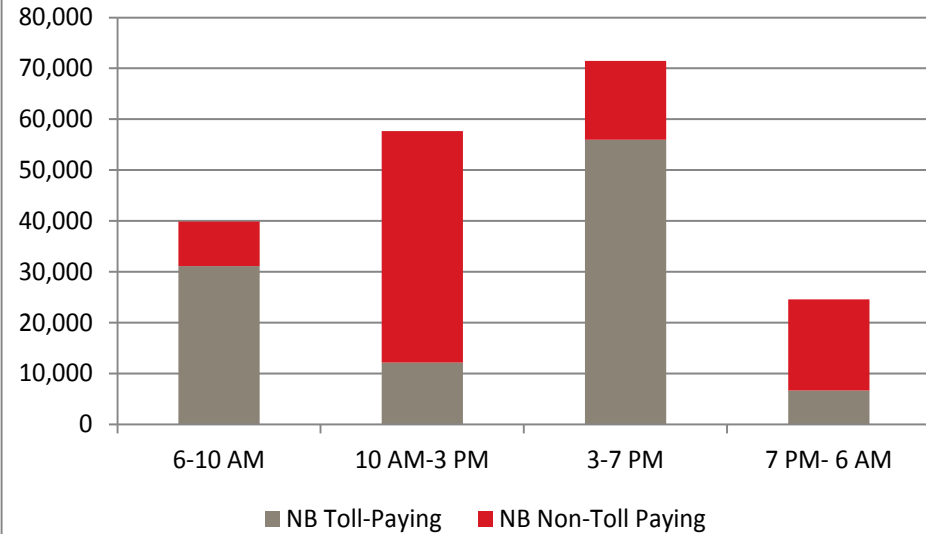
HOV-3+ Free Peak

Option B1: 2025 T&R results

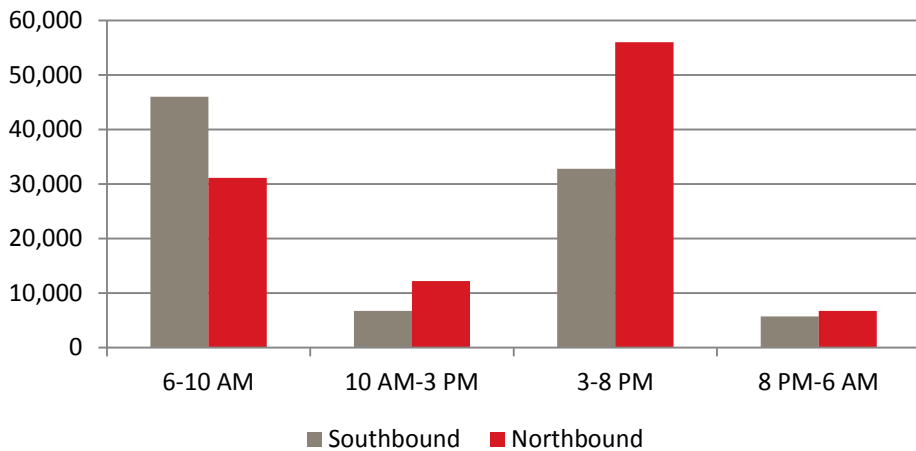
revenue by period



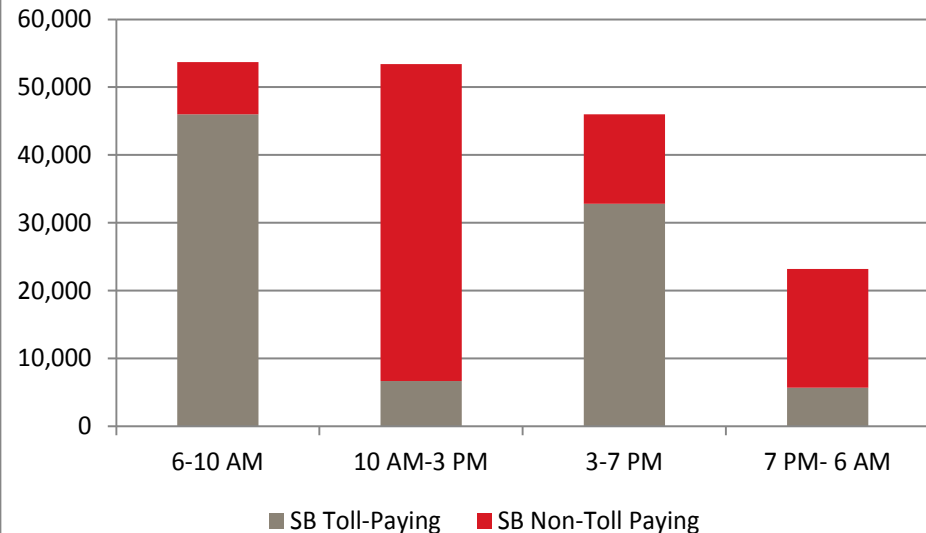
■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM



weekday toll transactions



■ Southbound ■ Northbound



■ SB Toll-Paying ■ SB Non-Toll Paying

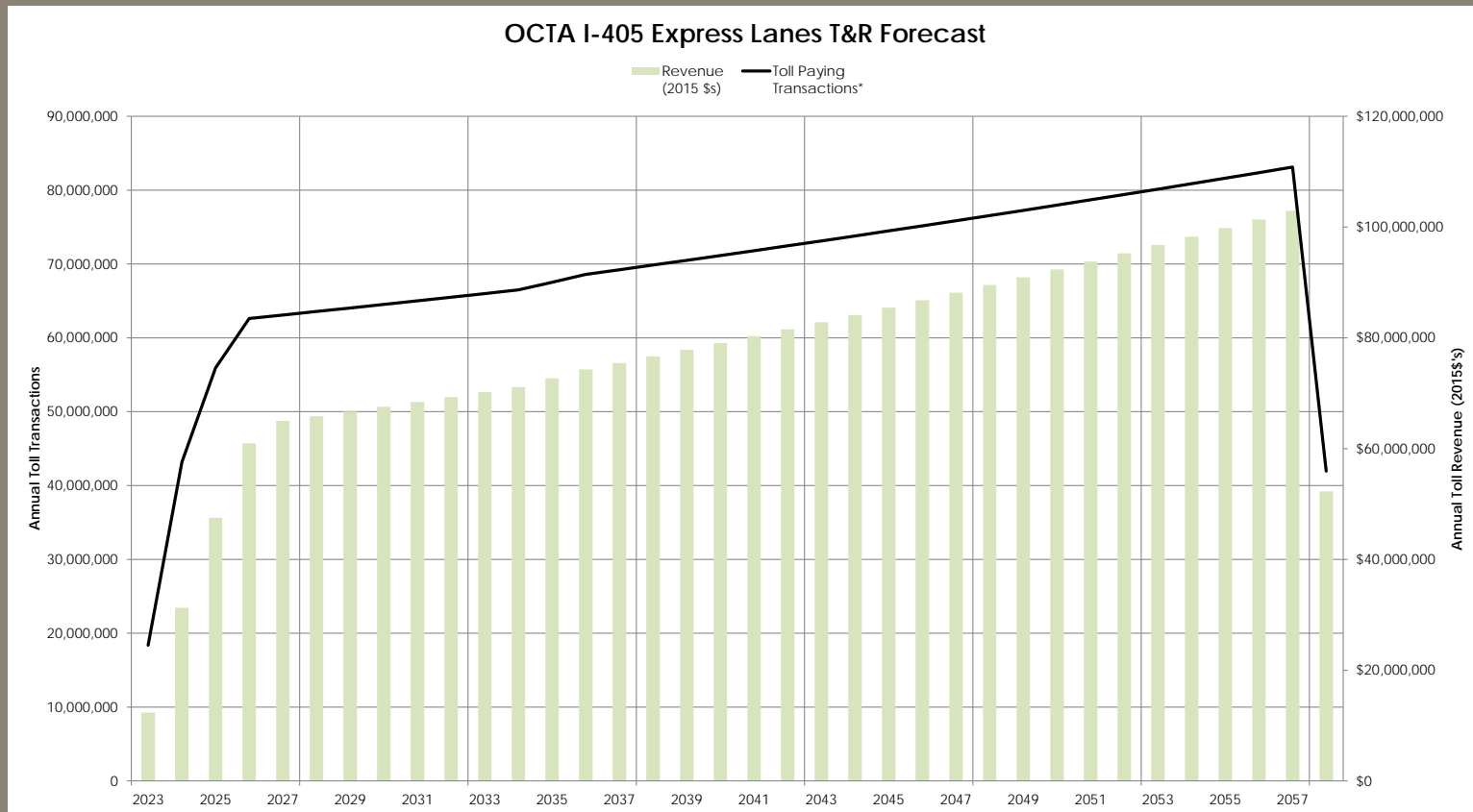
Toll Rates by Segment – 2025

Toll Option B1

2025 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.14	\$ 0.23	\$ 0.50	\$ 0.39	\$ 0.29	\$ 0.21	\$ 1.70	\$ 0.72	\$ 1.88	\$ 1.88	\$ 0.20	\$ 0.06
605 NB HOT DC	1.43	\$ 0.21	\$ 0.36	\$ 0.50	\$ 0.46	\$ 0.50	\$ 0.48	\$ 0.68	\$ 0.61	\$ 0.71	\$ 0.78	\$ 0.43	\$ 0.23
22-605	2.02	\$ 0.50	\$ 0.87	\$ 1.01	\$ 1.01	\$ 1.01	\$ 0.85	\$ 1.15	\$ 1.11	\$ 1.21	\$ 1.25	\$ 0.81	\$ 0.34
22 NB HOT DC	0.65	\$ 0.13	\$ 0.19	\$ 0.16	\$ 0.19	\$ 0.18	\$ 0.14	\$ 0.16	\$ 0.14	\$ 0.26	\$ 0.26	\$ 0.16	\$ 0.10
Bolsa-22	3.14	\$ 0.64	\$ 0.94	\$ 1.26	\$ 1.26	\$ 1.32	\$ 1.10	\$ 1.60	\$ 1.57	\$ 1.32	\$ 1.41	\$ 1.04	\$ 0.50
Magnolia-Bolsa	3.11	\$ 0.59	\$ 0.78	\$ 1.15	\$ 1.09	\$ 1.18	\$ 1.03	\$ 1.71	\$ 1.56	\$ 1.56	\$ 1.56	\$ 1.31	\$ 0.50
73-Magnolia	4.24	\$ 0.81	\$ 1.06	\$ 1.70	\$ 1.70	\$ 1.82	\$ 2.12	\$ 3.05	\$ 2.46	\$ 2.30	\$ 3.05	\$ 2.97	\$ 0.68
73 NB HOT DC	0.74	\$ 0.11	\$ 0.19	\$ 0.26	\$ 0.30	\$ 0.31	\$ 0.31	\$ 1.04	\$ 0.54	\$ 0.52	\$ 0.59	\$ 1.49	\$ 0.11
405S NB HOT DC	0.28	\$ 0.06	\$ 0.08	\$ 0.11	\$ 0.12	\$ 0.12	\$ 0.18	\$ 0.35	\$ 0.17	\$ 0.45	\$ 0.83	\$ 0.25	\$ 0.04
Full Length Toll	13.14	\$ 2.74	\$ 3.96	\$ 5.72	\$ 5.56	\$ 5.74	\$ 5.49	\$ 9.56	\$ 7.58	\$ 8.72	\$ 9.99	\$ 6.57	\$ 2.13
Southbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N SB HOT DC	0.36	\$ 0.06	\$ 0.14	\$ 0.21	\$ 0.36	\$ 0.25	\$ 0.21	\$ 0.26	\$ 0.25	\$ 0.36	\$ 0.27	\$ 0.16	\$ 0.06
605 SB HOT DC	1.43	\$ 0.21	\$ 0.61	\$ 0.57	\$ 0.64	\$ 0.57	\$ 0.54	\$ 0.36	\$ 0.43	\$ 0.50	\$ 0.54	\$ 0.36	\$ 0.23
605-22	2.02	\$ 0.39	\$ 0.81	\$ 0.91	\$ 1.19	\$ 1.05	\$ 0.91	\$ 0.91	\$ 0.93	\$ 1.01	\$ 0.97	\$ 0.71	\$ 0.34
22 SB HOT DC	0.65	\$ 0.10	\$ 0.10	\$ 0.19	\$ 0.12	\$ 0.10	\$ 0.14	\$ 0.19	\$ 0.16	\$ 0.18	\$ 0.13	\$ 0.16	\$ 0.10
22-Bolsa	3.14	\$ 0.57	\$ 1.16	\$ 1.10	\$ 1.66	\$ 1.63	\$ 1.22	\$ 1.10	\$ 1.26	\$ 1.26	\$ 1.41	\$ 0.94	\$ 0.50
Bolsa-Magnolia	3.11	\$ 0.53	\$ 1.49	\$ 1.15	\$ 1.71	\$ 1.77	\$ 1.21	\$ 1.00	\$ 1.34	\$ 1.18	\$ 1.34	\$ 0.78	\$ 0.50
Magnolia-73	4.24	\$ 0.67	\$ 1.91	\$ 2.46	\$ 2.67	\$ 2.42	\$ 1.48	\$ 1.36	\$ 1.70	\$ 1.48	\$ 1.48	\$ 1.05	\$ 0.68
73 SB HOT DC	0.74	\$ 0.11	\$ 0.37	\$ 0.48	\$ 0.52	\$ 0.46	\$ 0.24	\$ 0.26	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.19	\$ 0.11
405S SB HOT DC	0.28	\$ 0.06	\$ 0.14	\$ 0.16	\$ 0.21	\$ 0.18	\$ 0.12	\$ 0.08	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.07	\$ 0.04
Full Length Toll	13.14	\$ 2.27	\$ 5.65	\$ 5.98	\$ 7.80	\$ 7.31	\$ 5.17	\$ 4.70	\$ 5.57	\$ 5.39	\$ 5.58	\$ 3.71	\$ 2.13

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

Traffic and Revenue Forecast



- Annualization of weekday T&R
 - Toll transactions = 315
 - HOV transactions = 350
 - Revenue = 300
- T&R Ramp-up
 - Fully ramped up by end of FY 2026
 - Toll Transactions, FY 2023 = 60%, FY 2024 = 70%, FY 2025 = 90%
 - Revenue, FY 2023 = 40%, FY 2024 = 50%, FY 2025 = 75%, FY 2026 = 95%

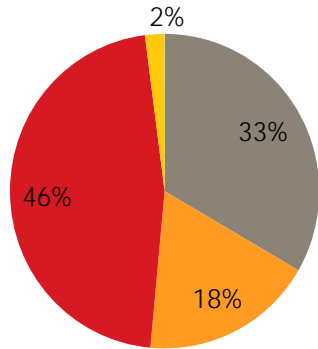
Toll Option C:

HOV-3+ Free Off-Peak

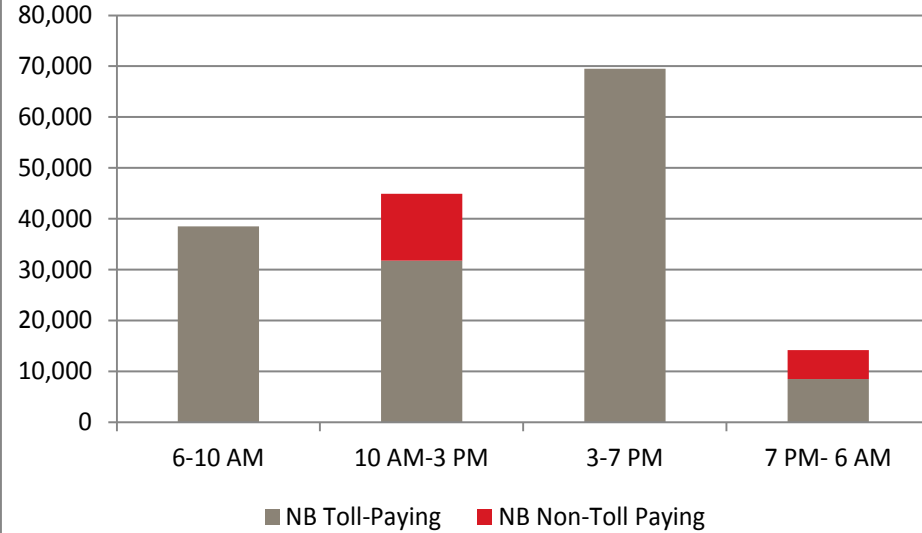
HOV-3+ 50% Toll Peak

Option C: 2025 T&R results

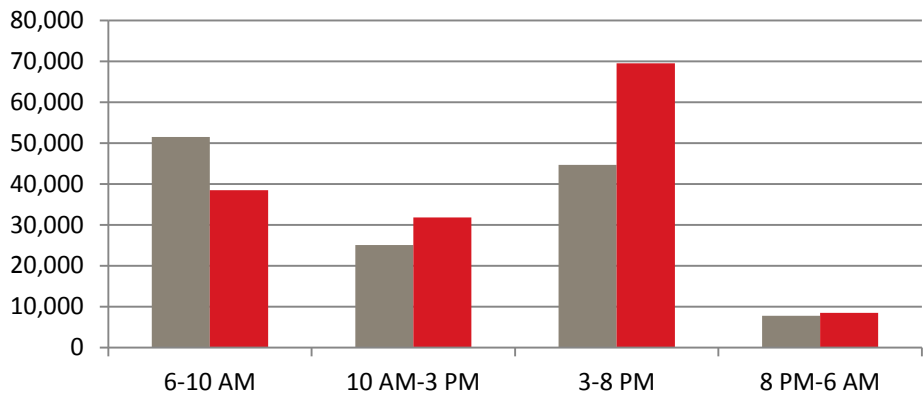
revenue by period



■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM

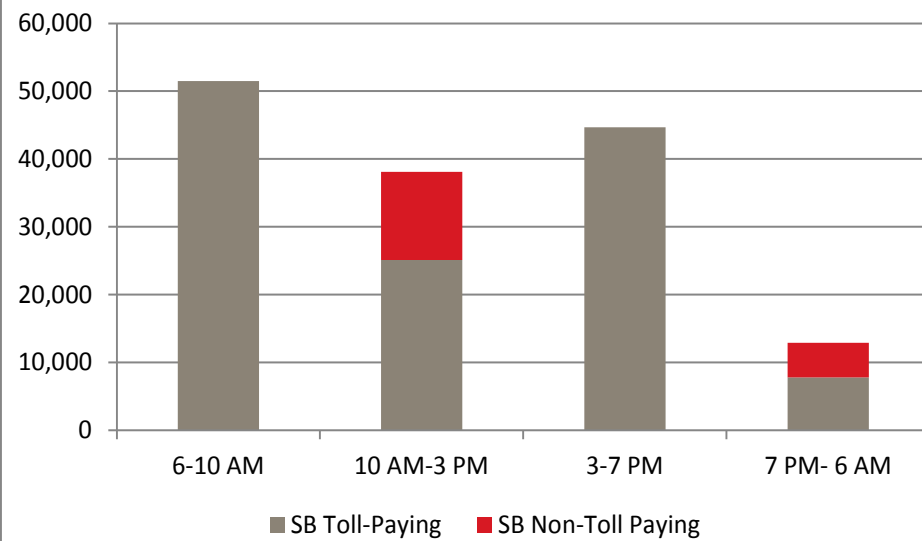


weekday toll transactions



73

■ Southbound ■ Northbound



■ SB Toll-Paying ■ SB Non-Toll Paying

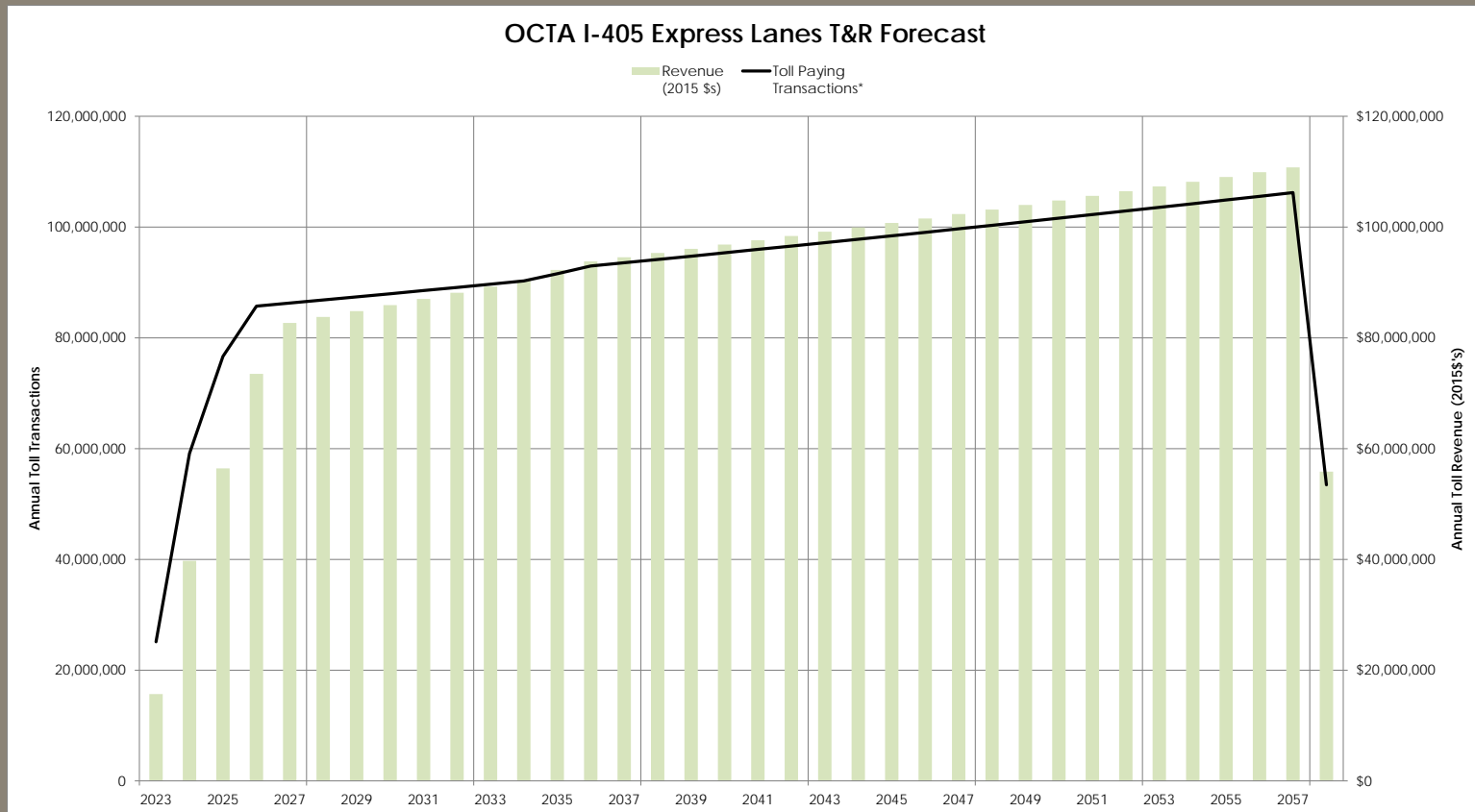
Toll Rates by Segment – 2025

Toll Option C

2025 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.11	\$ 0.23	\$ 0.50	\$ 0.36	\$ 0.27	\$ 0.18	\$ 1.39	\$ 0.61	\$ 1.45	\$ 1.54	\$ 0.33	\$ 0.05
605 NB HOT DC	1.43	\$ 0.15	\$ 0.36	\$ 0.46	\$ 0.43	\$ 0.50	\$ 0.36	\$ 0.57	\$ 0.61	\$ 0.60	\$ 0.71	\$ 0.43	\$ 0.21
22-605	2.02	\$ 0.40	\$ 0.75	\$ 1.01	\$ 0.95	\$ 0.97	\$ 0.77	\$ 1.05	\$ 1.00	\$ 1.05	\$ 1.10	\$ 0.70	\$ 0.30
22 NB HOT DC	0.65	\$ 0.13	\$ 0.19	\$ 0.16	\$ 0.19	\$ 0.18	\$ 0.13	\$ 0.16	\$ 0.13	\$ 0.26	\$ 0.23	\$ 0.16	\$ 0.10
Bolsa-22	3.14	\$ 0.64	\$ 0.94	\$ 1.26	\$ 1.26	\$ 1.19	\$ 0.97	\$ 1.57	\$ 1.48	\$ 1.32	\$ 1.41	\$ 0.94	\$ 0.47
Magnolia-Bolsa	3.11	\$ 0.47	\$ 0.78	\$ 1.15	\$ 1.09	\$ 1.09	\$ 1.09	\$ 1.62	\$ 1.49	\$ 1.50	\$ 1.56	\$ 1.24	\$ 0.47
73-Magnolia	4.24	\$ 0.64	\$ 1.06	\$ 1.48	\$ 1.70	\$ 1.67	\$ 1.91	\$ 2.97	\$ 2.33	\$ 2.30	\$ 2.88	\$ 2.88	\$ 0.64
73 NB HOT DC	0.74	\$ 0.10	\$ 0.19	\$ 0.26	\$ 0.30	\$ 0.31	\$ 0.28	\$ 0.93	\$ 0.48	\$ 0.52	\$ 0.56	\$ 0.93	\$ 0.11
405S NB HOT DC	0.28	\$ 0.06	\$ 0.08	\$ 0.10	\$ 0.12	\$ 0.10	\$ 0.14	\$ 0.20	\$ 0.15	\$ 0.45	\$ 0.56	\$ 0.21	\$ 0.04
Full Length Toll	13.14	\$ 2.31	\$ 3.83	\$ 5.50	\$ 5.46	\$ 5.29	\$ 5.05	\$ 8.80	\$ 7.06	\$ 8.06	\$ 9.05	\$ 6.31	\$ 1.97
Southbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
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605 SB HOT DC	1.43	\$ 0.17	\$ 0.53	\$ 0.47	\$ 0.64	\$ 0.57	\$ 0.43	\$ 0.36	\$ 0.43	\$ 0.43	\$ 0.46	\$ 0.36	\$ 0.21
605-22	2.02	\$ 0.34	\$ 0.81	\$ 0.91	\$ 1.11	\$ 1.01	\$ 0.81	\$ 0.91	\$ 0.85	\$ 1.01	\$ 0.91	\$ 0.71	\$ 0.30
22 SB HOT DC	0.65	\$ 0.08	\$ 0.10	\$ 0.19	\$ 0.12	\$ 0.10	\$ 0.13	\$ 0.19	\$ 0.16	\$ 0.18	\$ 0.13	\$ 0.16	\$ 0.10
22-Bolsa	3.14	\$ 0.47	\$ 1.16	\$ 1.10	\$ 1.57	\$ 1.57	\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.26	\$ 1.26	\$ 0.94	\$ 0.47
Bolsa-Magnolia	3.11	\$ 0.47	\$ 1.40	\$ 1.09	\$ 1.62	\$ 1.71	\$ 1.09	\$ 0.93	\$ 1.18	\$ 1.18	\$ 1.24	\$ 0.78	\$ 0.47
Magnolia-73	4.24	\$ 0.67	\$ 1.91	\$ 2.33	\$ 2.54	\$ 2.33	\$ 1.27	\$ 1.27	\$ 1.48	\$ 1.48	\$ 1.40	\$ 1.05	\$ 0.64
73 SB HOT DC	0.74	\$ 0.08	\$ 0.36	\$ 0.50	\$ 0.56	\$ 0.43	\$ 0.22	\$ 0.26	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.19	\$ 0.11
405S SB HOT DC	0.28	\$ 0.05	\$ 0.13	\$ 0.15	\$ 0.20	\$ 0.16	\$ 0.08	\$ 0.08	\$ 0.10	\$ 0.10	\$ 0.08	\$ 0.07	\$ 0.04
Full Length Toll	13.14	\$ 2.07	\$ 5.55	\$ 5.78	\$ 7.35	\$ 7.02	\$ 4.50	\$ 4.53	\$ 4.94	\$ 5.32	\$ 5.16	\$ 3.71	\$ 1.97

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

Traffic and Revenue Forecast



- Annualization of weekday T&R
 - Toll transactions = 325
 - HOV transactions = 350
 - Revenue = 310
- T&R Ramp-up
 - Fully ramped up by end of FY 2026
 - Toll Transactions, FY 2023 = 60%, FY 2024 = 70%, FY 2025 = 90%
 - Revenue, FY 2023 = 40%, FY 2024 = 50%, FY 2025 = 70%, FY 2026 = 90%

Questions?



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Preliminary Traffic and Revenue Forecast for the 405
Express Lanes**

Handout - 1st

Adopted 405 Express Lanes Toll Policy Goals

October 12, 2015

- Provide express lanes customers with a safe, reliable, predictable commute.
- Optimize throughput at free flow speeds.
- Increase average vehicle occupancy.
- Balance capacity and demand to serve customers who pay tolls as well as people who rideshare or use transit.
- Generate sufficient revenue to sustain the financial viability of the 405 Express Lanes.
- Ensure all covenants in the financing documents are met.
- Ensure any potential net excess toll revenues are used for Interstate 405 corridor improvements.

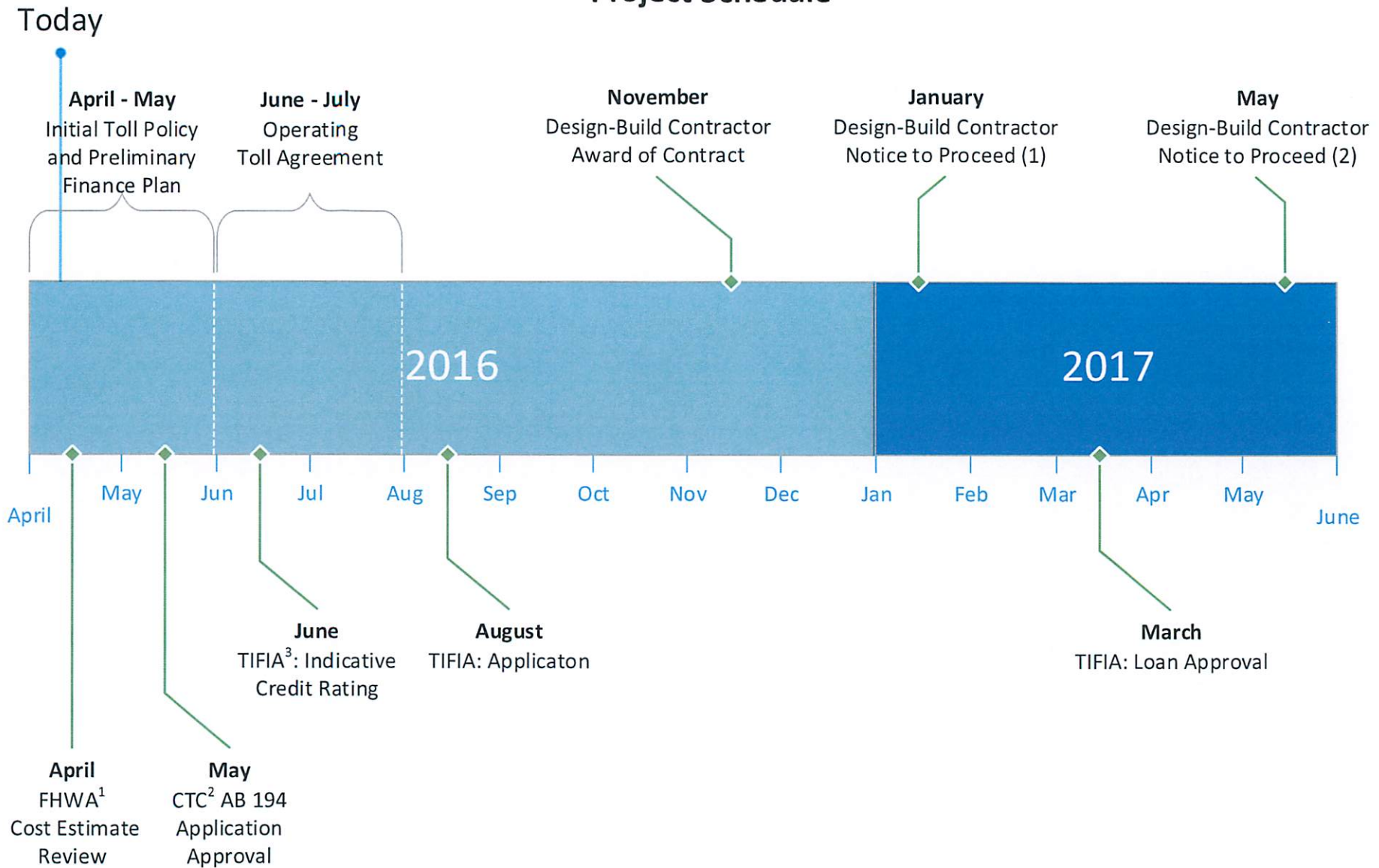


ORANGE COUNTY TRANSPORTATION AUTHORITY

**Preliminary Traffic and Revenue Forecast for the 405
Express Lanes**

Handout - 2nd

I-405 Near Term Project Schedule



¹ FHWA – Federal Highway Administration
² CTC – California Transportation Commission
³ TIFIA – Transportation Infrastructure Finance and Innovation Act



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Preliminary Traffic and Revenue Forecast for the 405
Express Lanes**

Handout - 3rd

**405 Express Lanes
Traffic & Revenue Options Comparison**

	A	B	B1	C
	HOV2+ Free All Day	HOV2+ Free Off-Peak HOV3+ 50% Peak	HOV2+ Free Off-Peak HOV3+ Free Peak	91 Express Lanes HOV3+ 50% Peak
<u>Fiscal Year 2025</u>				
Total Trips	29,874,390	27,008,980	27,008,939	22,823,472
Toll Paying Trips	6,630,000	17,781,538	14,343,590	19,161,250
HOV (Non-Toll Paying) Trips	23,244,390	9,227,442	12,665,349	3,662,222
Percent HOV (Non-Toll Paying)	78%	34%	47%	16%
Toll Revenues	\$ 28,754,000	\$ 50,000,000	\$ 47,513,000	\$ 56,439,000
<u>Fiscal Year 2030</u>				
Total Trips	34,384,321	30,849,052	31,236,186	26,213,975
Toll Paying Trips	8,233,590	20,389,750	16,132,000	21,719,753
HOV (Non-Toll Paying) Trips	26,150,732	10,459,302	15,104,186	4,494,222
Percent HOV (Non-Toll Paying)	76%	34%	48%	17%
Toll Revenues	\$ 40,461,000	\$ 77,495,000	\$ 67,546,000	\$ 85,914,000
<u>Fiscal Year 2035</u>				
Total Trips	34,642,579	31,985,788	31,941,792	27,242,369
Toll Paying Trips	9,095,750	21,315,556	16,674,815	22,334,146
HOV (Non-Toll Paying) Trips	25,546,829	10,670,233	15,266,977	4,908,222
Percent HOV (Non-Toll Paying)	74%	33%	48%	18%
Toll Revenues	\$ 44,989,000	\$ 84,077,000	\$ 72,679,000	\$ 92,262,000



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Preliminary Traffic and Revenue Forecast for the 405
Express Lanes**

Handout - 4th

**I-405 Project Implementation (Alternative 3)
Preliminary OCTA/Caltrans Agreement on Terms
As of
April 16, 2015**

1. Project Delivery

- a. OCTA is lead agency for procuring the design-build "db" contractor and/or toll systems integrator, as well as the provider of toll collection services for the project.
- b. Project delivery will be based on pending legislation & AB 401.
- c. Current implementation Co-Op for the db phase of the project can proceed followed by an agreement consistent with tolling authorization "Operating Toll Agreement".

2. Project Funding & Financing

- a. OCTA is responsible for developing the overall funding/financing plan for the project, including use of Measure M2 funds for the GP lanes. OCTA shall be the issuer of any indebtedness and shall be the borrower under any TIFIA loan. While OCTA is responsible for development of the overall funding/financing plan, OCTA will share information concerning the plan with Caltrans during the development process.
- b. Parties agree to seek additional State and Federal discretionary grant opportunities for the tolled portion of the project.
- c. Caltrans will provide \$82 million to be programmed in FY 2015/16 to be used towards constructing the project (Caltrans Preferred Alternative).
- d. OCTA will pursue TIFIA funding with due consideration for related requirements and project schedule considerations.
- e. Operating Toll Agreement (including tolling authority) with the state will extend a minimum of five years beyond the initial bonding period/term required for financing. If toll revenues are found to be insufficient to cover all costs for operations, maintenance, and financing requirements, and refinancing of the debt is required, the Operating Toll Agreement can be extended additional years (beyond the existing 5 years) to provide an extended financing term.

3. Operations

- a. OCTA operates or shall retain a private operator to operate the toll collection facilities.
- b. The facility to open with a HOV2+ free policy for no less than 3 years.¹
- c. Caltrans & OCTA recognize performance/operational and financial triggers will be established to switch to HOV3+ or if state implements a 3+ policy on state highways through changes to State law or through the administrative process.
- d. Parties agree there will be an exemption for ILEVs (such as customers with "green sticker".) However, customers will be required to pre-register their vehicles as is the policy on the SR 91 Express Lanes. There will be an agreed upon cap on number of such vehicles.
- e. The parties agree that 55 - 60 mph¹ is an appropriate target speed.

¹ Subject to results of the I-405 Traffic and Revenue study to be completed at a later date and further additional funding considerations.

- f. The parties agree that continuous access may be detrimental to financial and operational requirements of managed lanes based upon current technology, enforcement and safety considerations, however, consideration of continuous access should not be precluded in the future.
- g. Tolls shall be collected electronically and use congestion pricing to manage demand.
- h. OCTA decides on toll policies and agrees to toll lanes performance measures as will be outlined in the Operating Toll Agreement. The Parties agree that a goal of the Project should be to increase the Average Vehicle Occupancy of the Corridor.

4. Net Excess Revenues (after payment of O&M on the managed lanes including toll collection costs, debt service for obligations payable from tolls, funding of debt and project reserves, and required repayment of TIFIA loan)

The parties agree that development of an Expenditure Plan will be developed in partnership between each agency and consistent with the following terms below:

- a. The Parties shall develop a multiyear expenditure plan for use of Net Excess Revenues within the Corridor. This expenditure plan shall cover a period of either ten years or the full term of all financing used to construct or repair any portion of the toll facility project, whichever is longer. The Expenditure Plan shall be updated annually.
 - i. OCTA's Board of Directors shall review and adopt the expenditure plan and each update.
- b. Net Excess Revenues shall be used for projects that maintain or improve the safety, operation, or travel reliability of any transportation mode in the corridor, or provide or improve travel options in the corridor.
- c. General Purpose lanes capital and preventive maintenance and operational improvements are eligible expense and will be included in the annual Expenditure Plan in compliance with Federal law.
- d. The use of net excess revenue to pay for projects in the Expenditure Plan will not result in reducing SHOPP funds targets available to the County.
- e. Similar to the SR 91 Express Lanes, the Parties agree that OCTA will be responsible for implementing all projects required for the operation and maintenance of the Project tolled express lanes and associated toll collection facilities. Caltrans will be responsible for implementing non-toll related projects on the State Highway System that are funded from Net Excess Toll revenue.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Preliminary Traffic and Revenue Forecast for the 405
Express Lanes**

PowerPoint -Stantec (80 pages)



TRANSMITTAL

April 25, 2016

To: Members of the Board of Directors

From: 
Laurena Weinert, Clerk of the Board

Subject: April 25, 2016 Board Meeting - Item 15 Preliminary Traffic and Revenue Forecast for the 405 Express Lanes

The attached Stantec PowerPoint was presented on April 20, 2016, at the Special Finance and Administration Committee meeting workshop.

The excerpt Stantec PowerPoint will be presented to the full Board at the April 25, 2016 Board meeting for Item 15.

Attachment – Stantec PowerPoint

405 Express Lanes

Traffic and Revenue Study





TRANSMITTAL

April 25, 2016

To: Members of the Board of Directors

From: 
Laurena Weinert, Clerk of the Board

Subject: April 25th Board Agenda Item 15 - Preliminary Traffic and Revenue Forecast for the 405 Express Lanes

The attached Stantec PowerPoint was presented on April 20, 2016, at the Special Finance and Administration Committee meeting workshop.

The excerpt Stantec PowerPoint will be presented to the full Board at the April 25, 2016 Board meeting.

Agenda

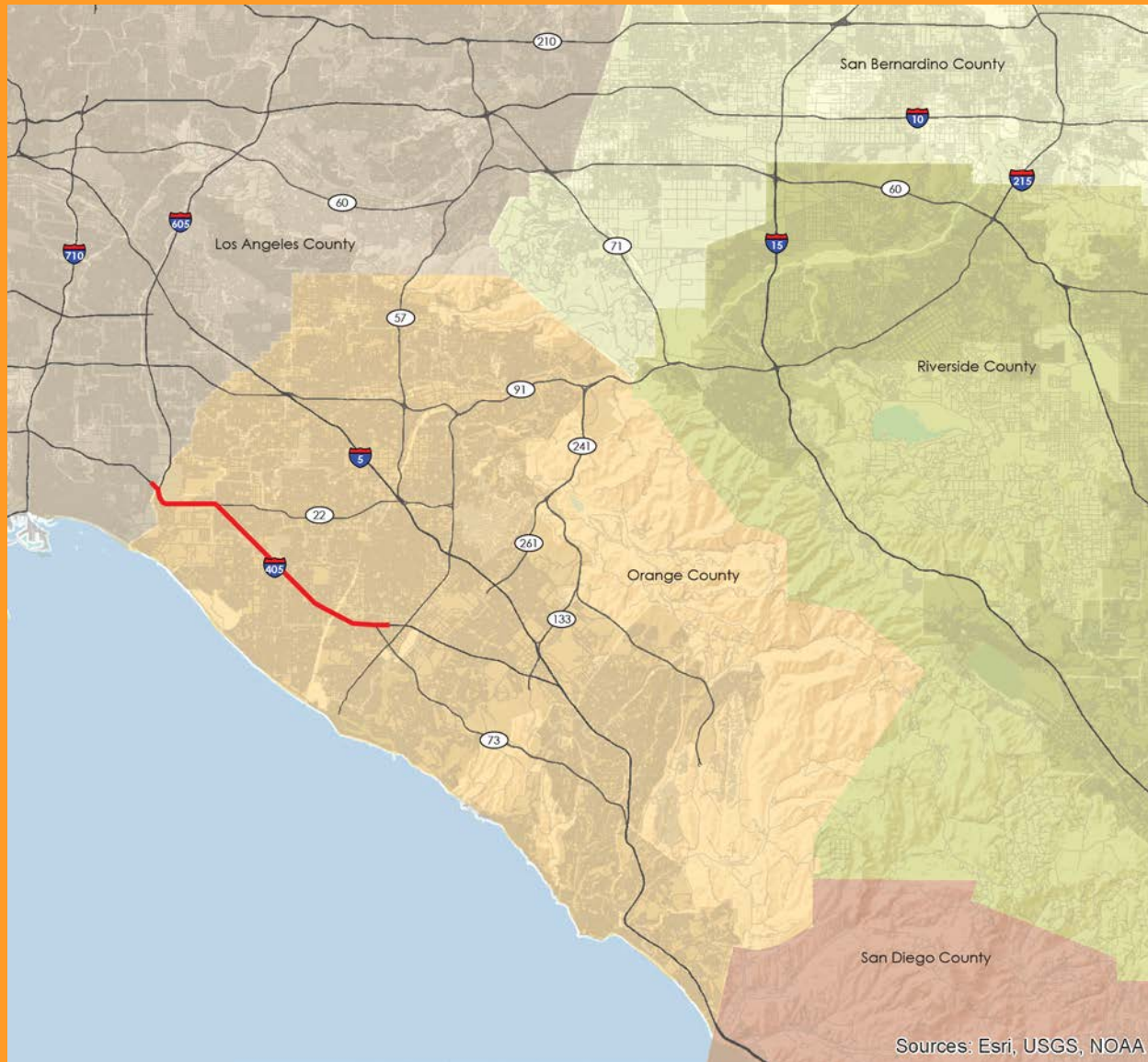
1 Existing Conditions

2 Socio-economic Forecast

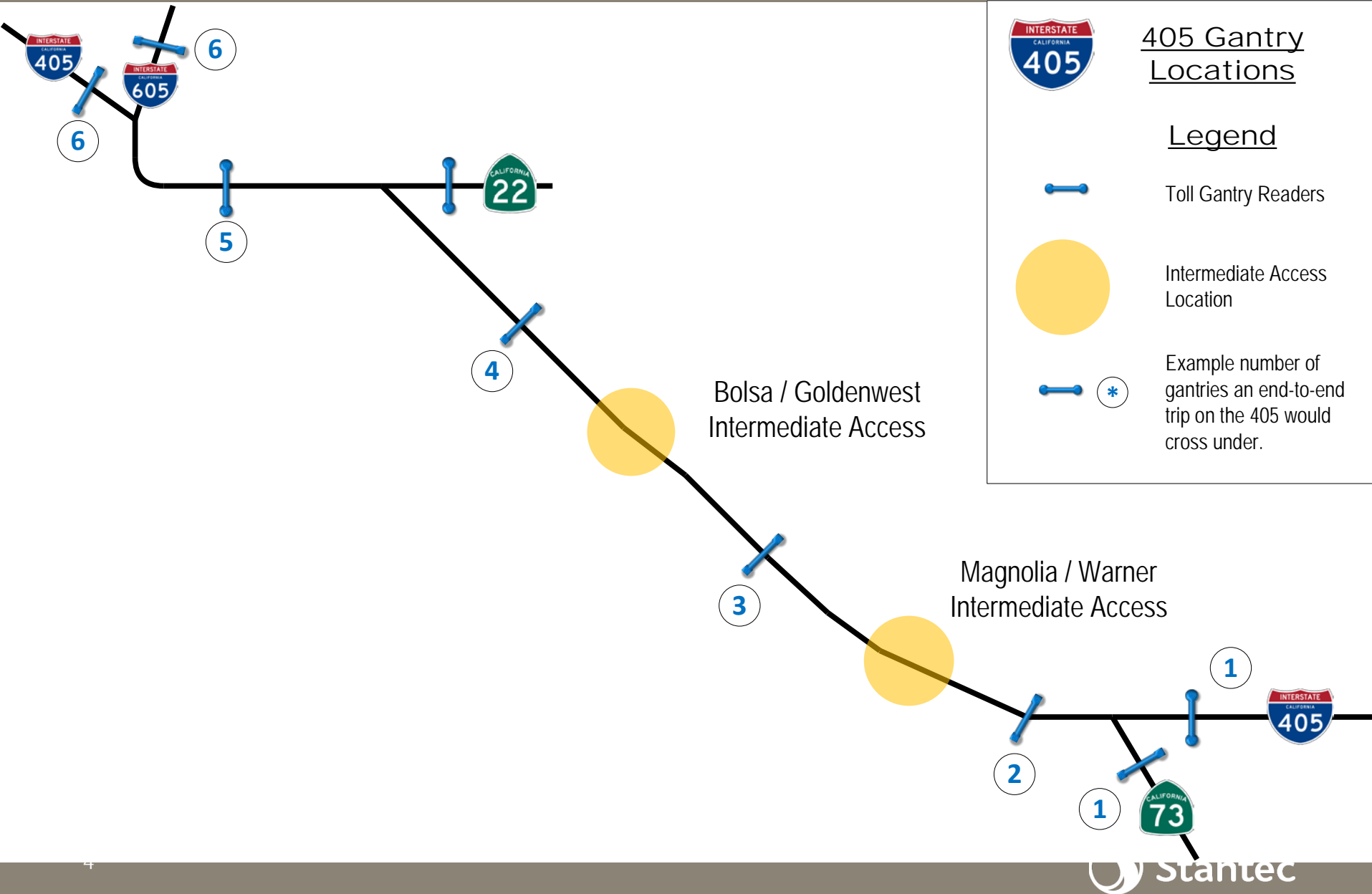
3 Model Calibration and Development

4 Traffic and Revenue Forecasts

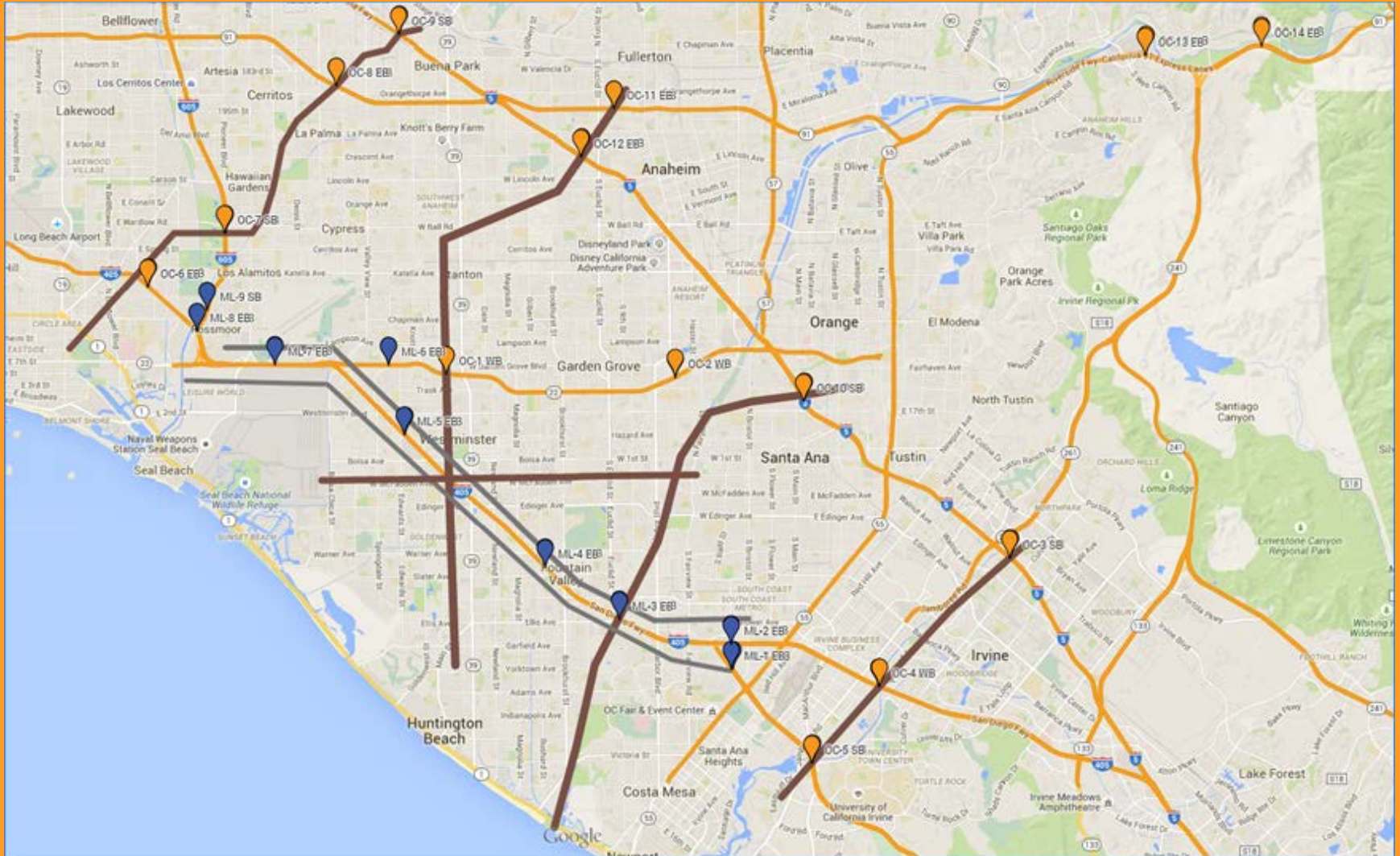
Regional Map



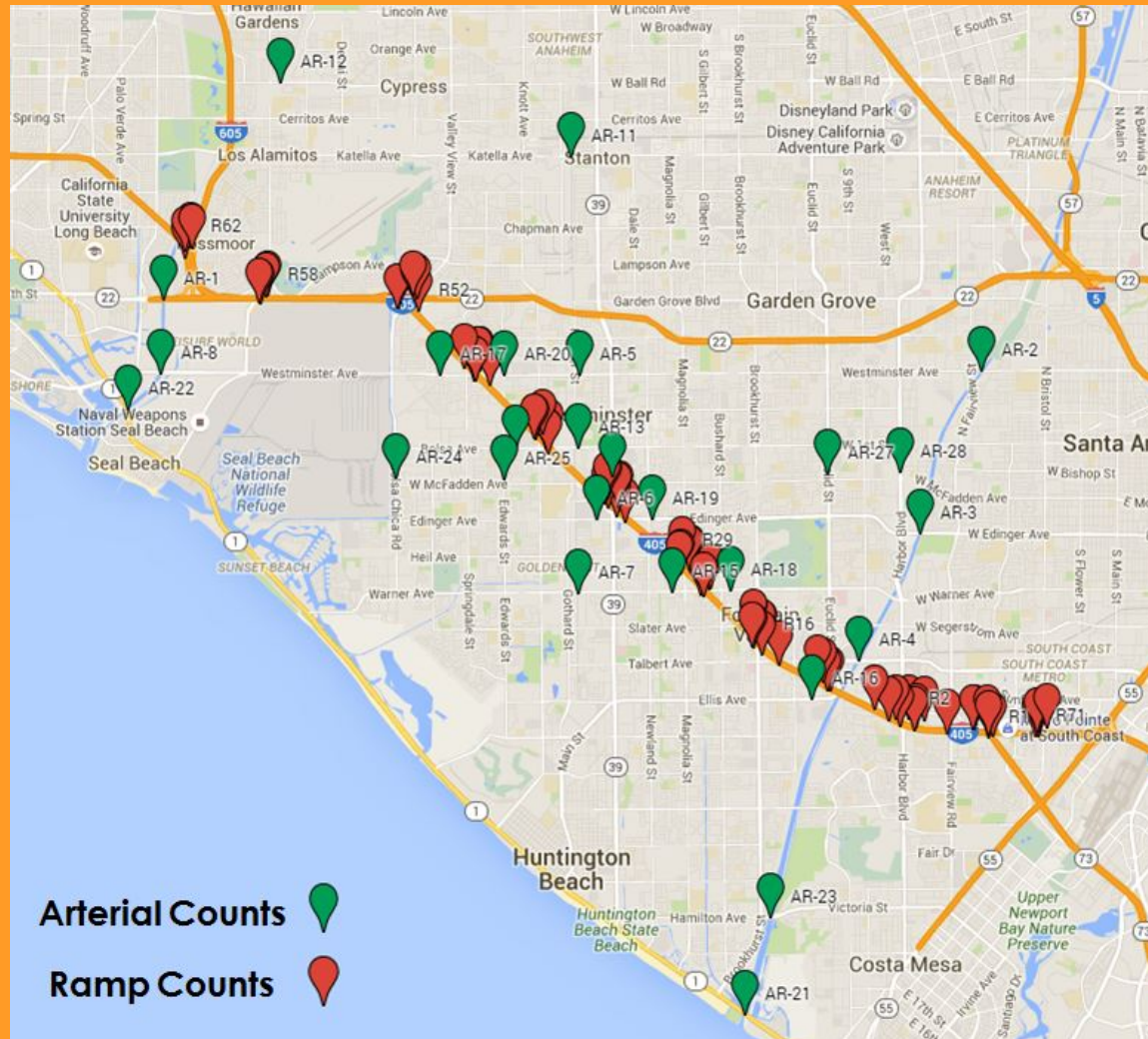
Project Configuration



I-405 Count Program

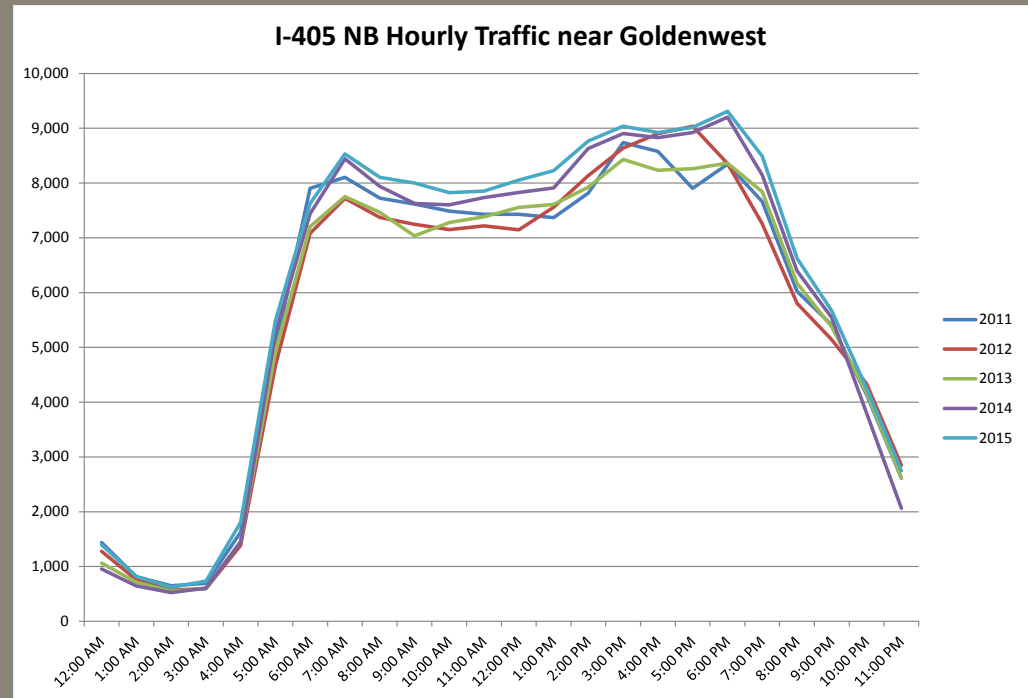


I-405 Count Program

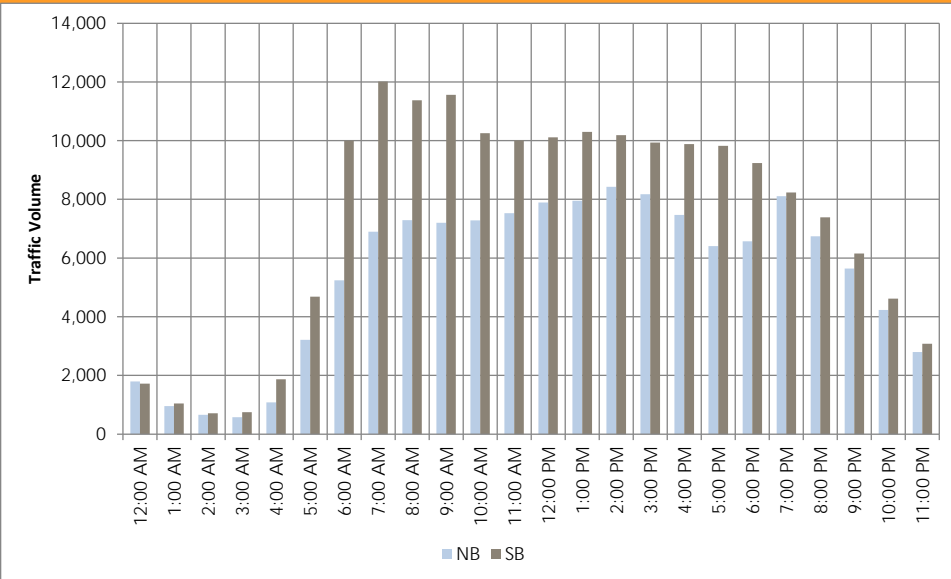


I-405 Historical Traffic

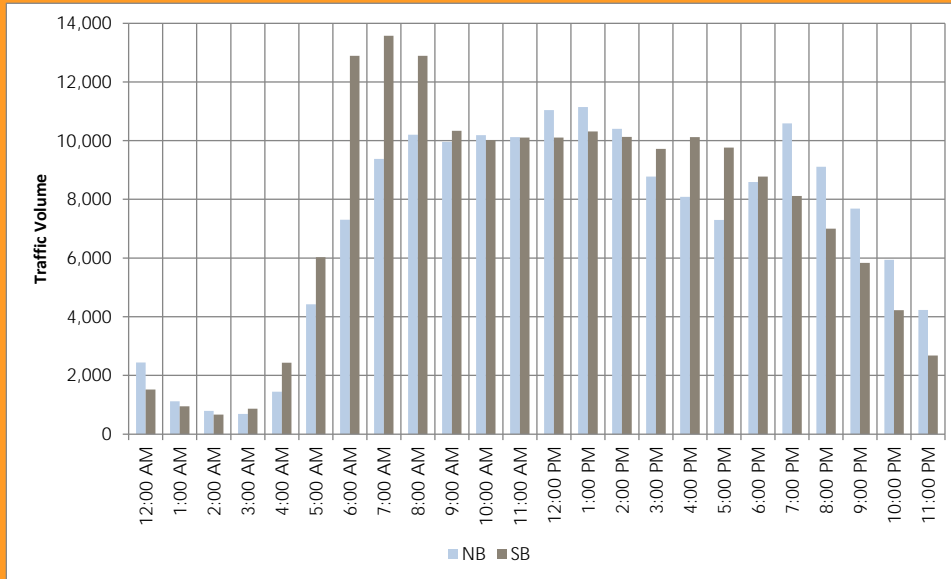
	2011	2012	2013	2014	2015
12:00 AM	1,438	1,278	1,061	956	1,395
1:00 AM	814	762	713	647	818
2:00 AM	648	570	549	522	620
3:00 AM	694	597	597	608	732
4:00 AM	1,625	1,385	1,461	1,442	1,803
5:00 AM	5,003	4,671	4,926	5,265	5,493
6:00 AM	7,905	7,082	7,203	7,440	7,628
7:00 AM	8,104	7,720	7,752	8,440	8,531
8:00 AM	7,723	7,373	7,464	7,938	8,103
9:00 AM	7,617	7,248	7,034	7,629	8,000
10:00 AM	7,487	7,152	7,280	7,603	7,824
11:00 AM	7,429	7,218	7,384	7,733	7,853
12:00 PM	7,431	7,145	7,555	7,828	8,053
1:00 PM	7,371	7,558	7,611	7,910	8,226
2:00 PM	7,816	8,135	7,925	8,631	8,768
3:00 PM	8,740	8,640	8,432	8,905	9,036
4:00 PM	8,578	8,900	8,234	8,830	8,921
5:00 PM	7,903	9,037	8,262	8,923	9,014
6:00 PM	8,344	8,356	8,362	9,203	9,311
7:00 PM	7,663	7,259	7,843	8,146	8,490
8:00 PM	6,023	5,803	6,172	6,396	6,626
9:00 PM	5,409	5,141	5,374	5,543	5,669
10:00 PM	4,140	4,336	4,176	3,802	4,260
11:00 PM	2,613	2,848	2,617	2,064	2,747
TOTAL	138,517	136,215	135,986	142,405	147,921
Growth		-2%	0%	5%	4%



I-405 Hourly Traffic Profile between Harbor and Euclid

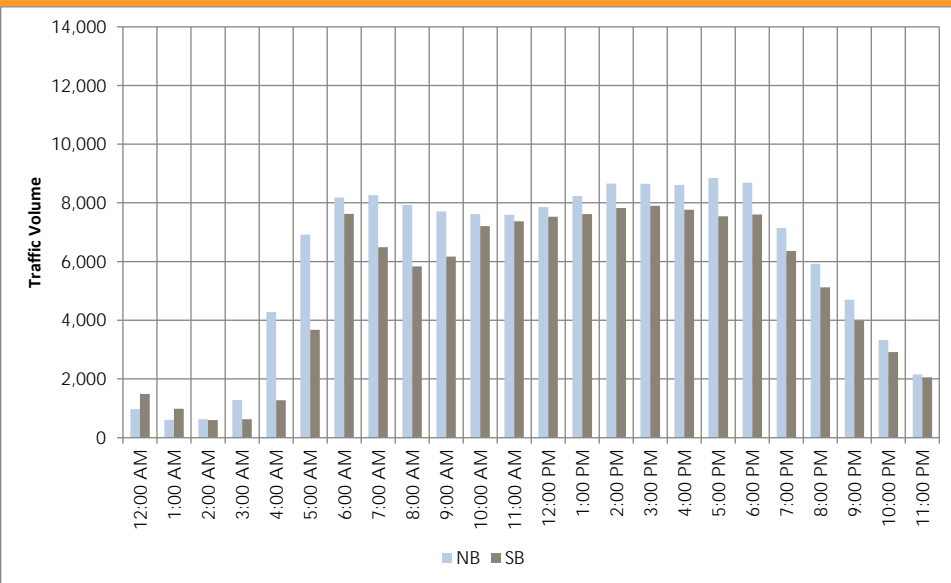


Counts

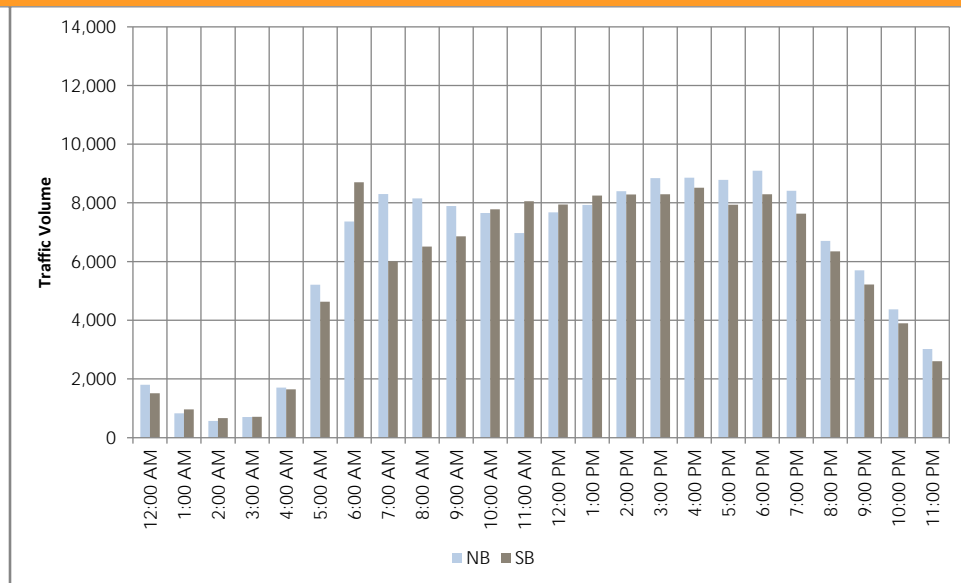


Demand

I-405 Hourly Traffic Profile between Goldenwest and Westminster

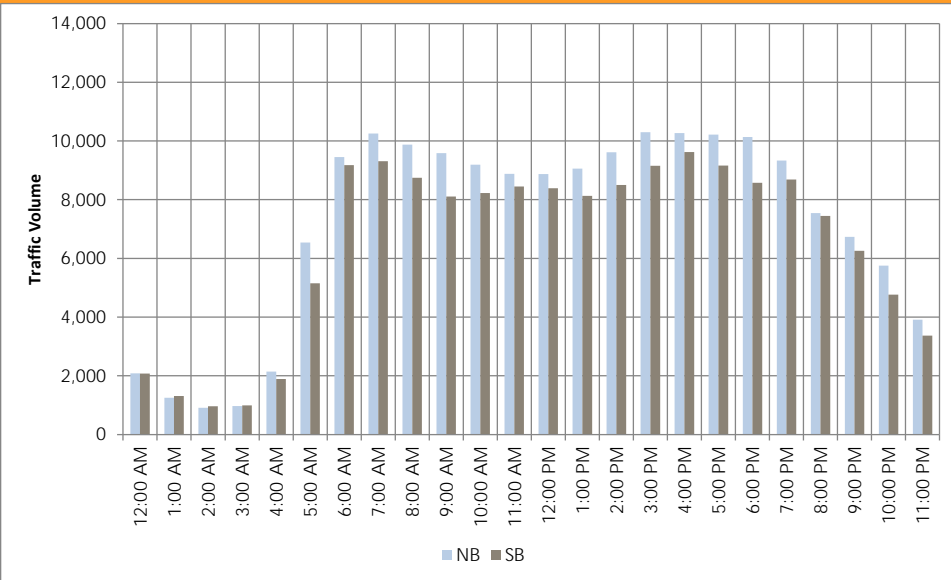


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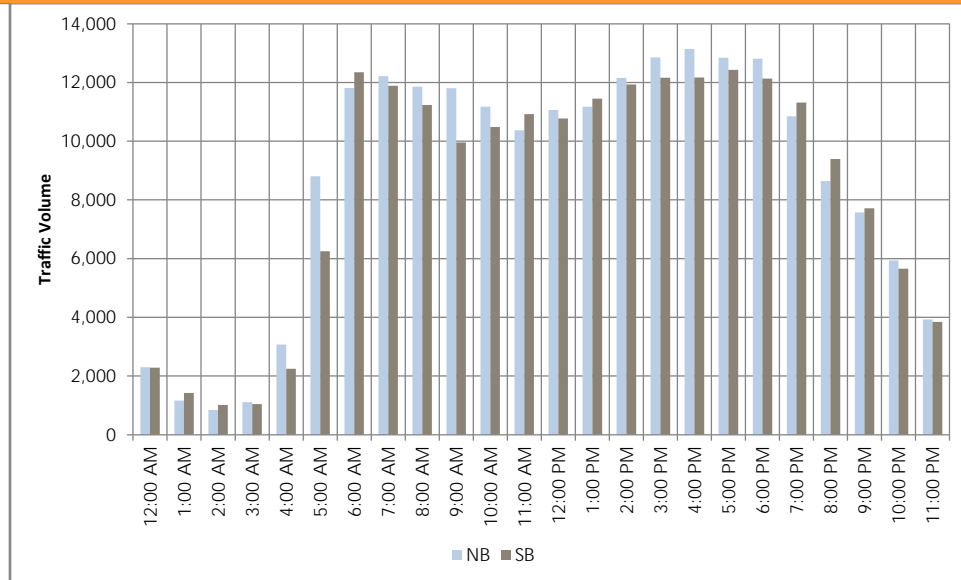


Demand

I-405 Hourly Traffic Profile between SR 22 and Seal Beach

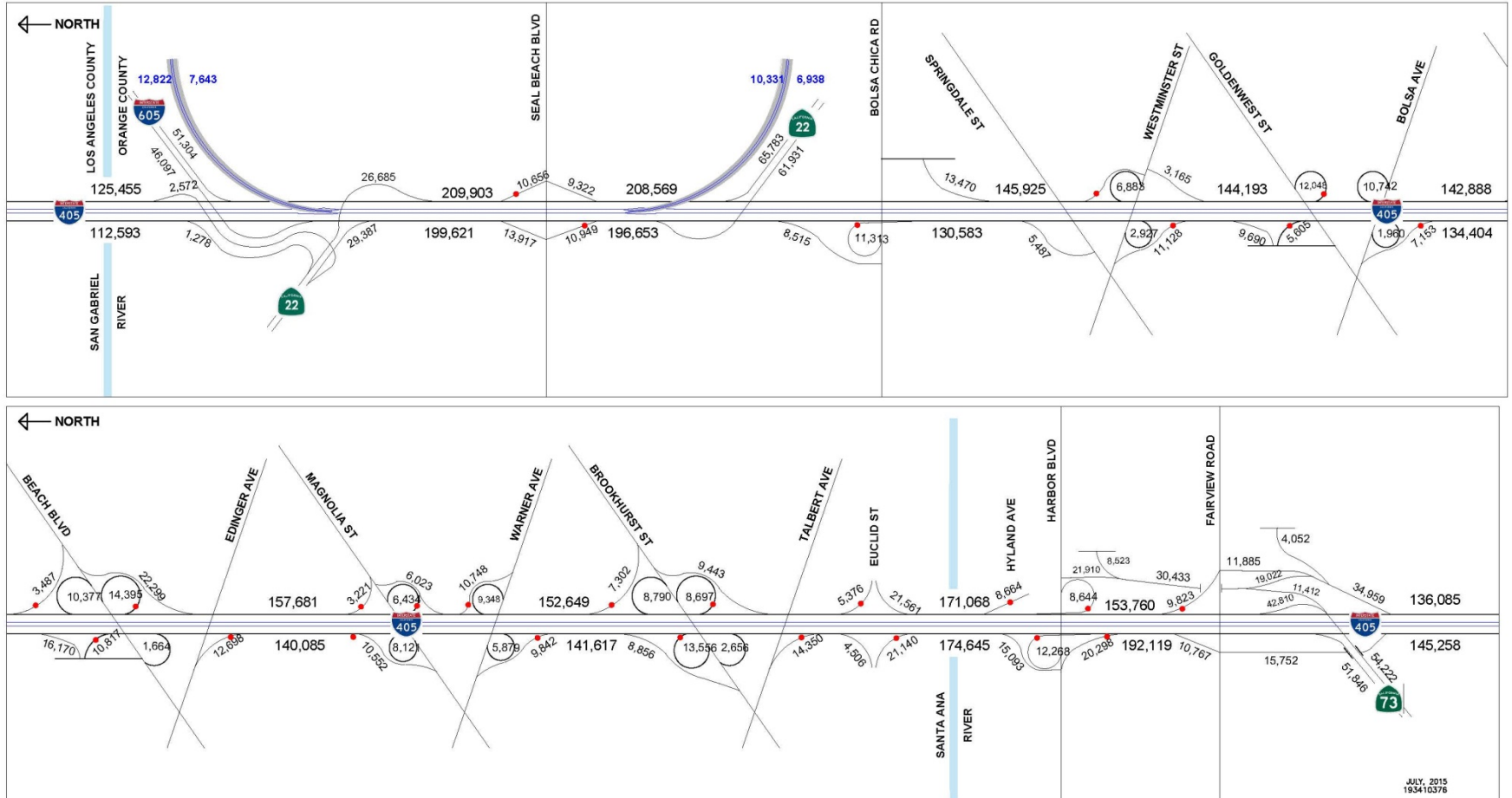


Counts



Demand

I-405 Balanced Network



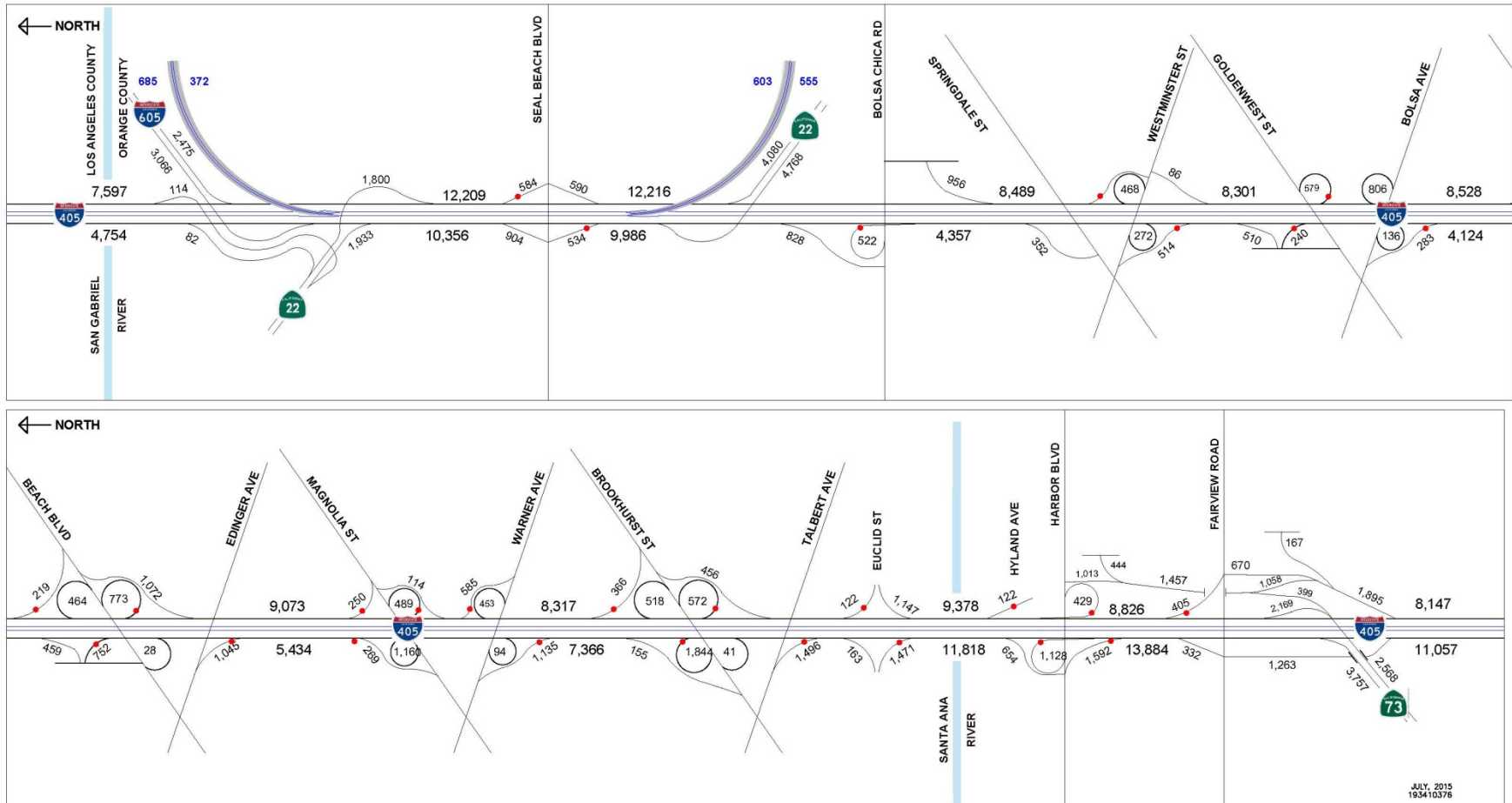
JULY, 2015
193410376

Client/Project
OCTA
I-405 INVESTMENT GRADE STUDY
MANAGED LANES/GP EXPANSION
Figure No.
1
Title
DAILY TRAFFIC VOLUMES
TUESDAY TO THURSDAY AVERAGE



**PRELIMINARY
DRAFT**
9/22/2015

I-405 Balanced Network



JULY, 2015
1934163376

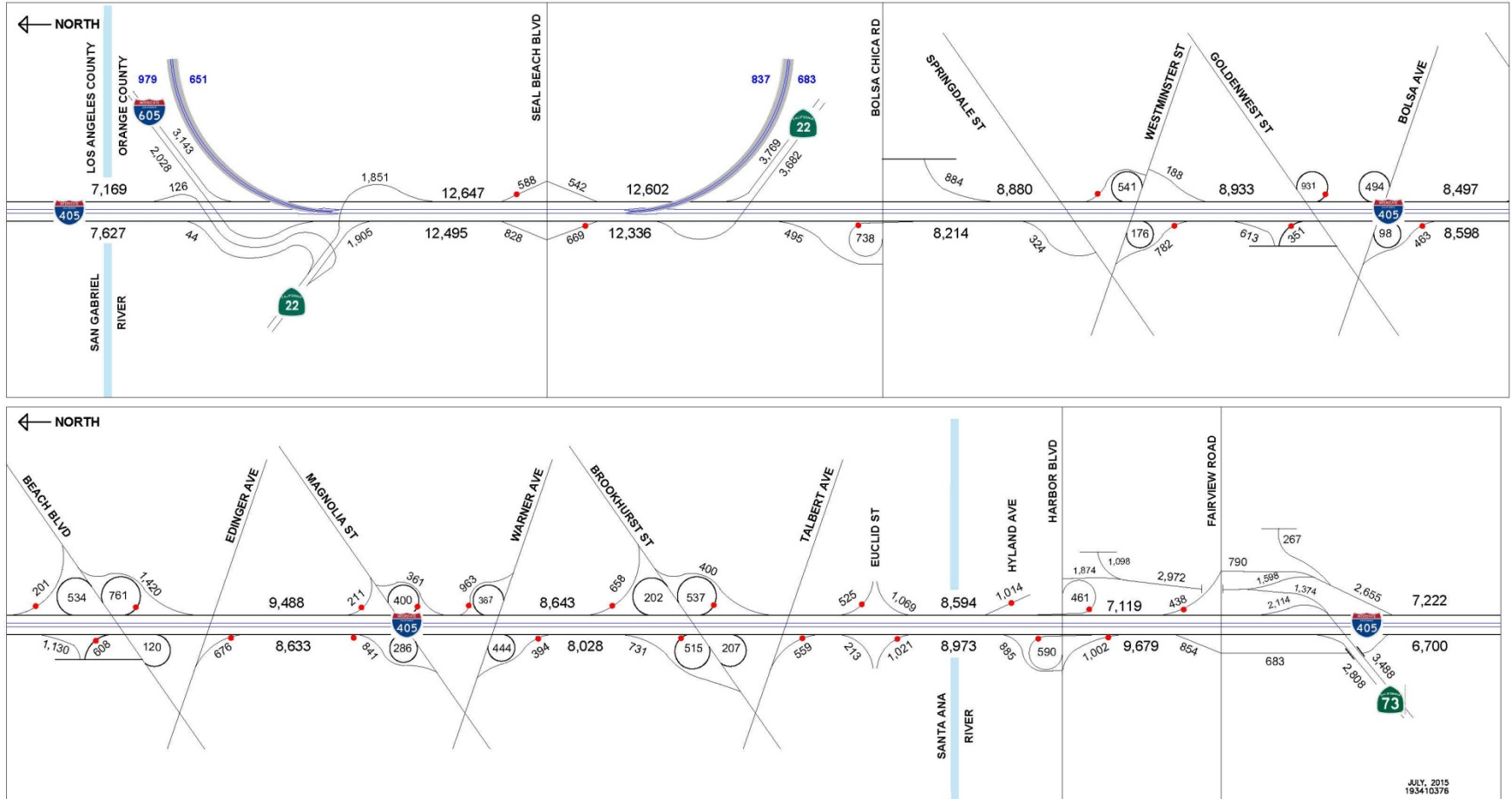
Client/Project
OCTA
I-405 INVESTMENT GRADE STUDY
MANAGED LANES/GP EXPANSION
Figure No.
1
Title
PEAK HOUR TRAFFIC VOLUMES
7 AM TO 8 AM



8,028 ● RAMP METERING IN EFFECT
I-405 VOLUME

PRELIMINARY DRAFT
9/22/2015

I-405 Balanced Network



JULY, 2015
193410376

Client/Project
OCTA
I-405 INVESTMENT GRADE STUDY
MANAGED LANES/GP EXPANSION
Figure No.
1
Title
PEAK HOUR TRAFFIC VOLUMES
6 PM TO 7 PM



● 8,028 RAMP METERING IN EFFECT
● I-405 VOLUME

PRELIMINARY DRAFT
9/22/2015













Travel Time Run: Beach Boulevard / SR 39 NB
Date of Run: Tues 07/28/2015
Start Time: 6:15 PM
End Time: 6:32 PM

SPEED

- 0 - 20 MPH
- 21 - 35 MPH
- 36 - 50 MPH
- 51 - 60 MPH
- 61 - 90 MPH

Los Angeles County
 Orange County



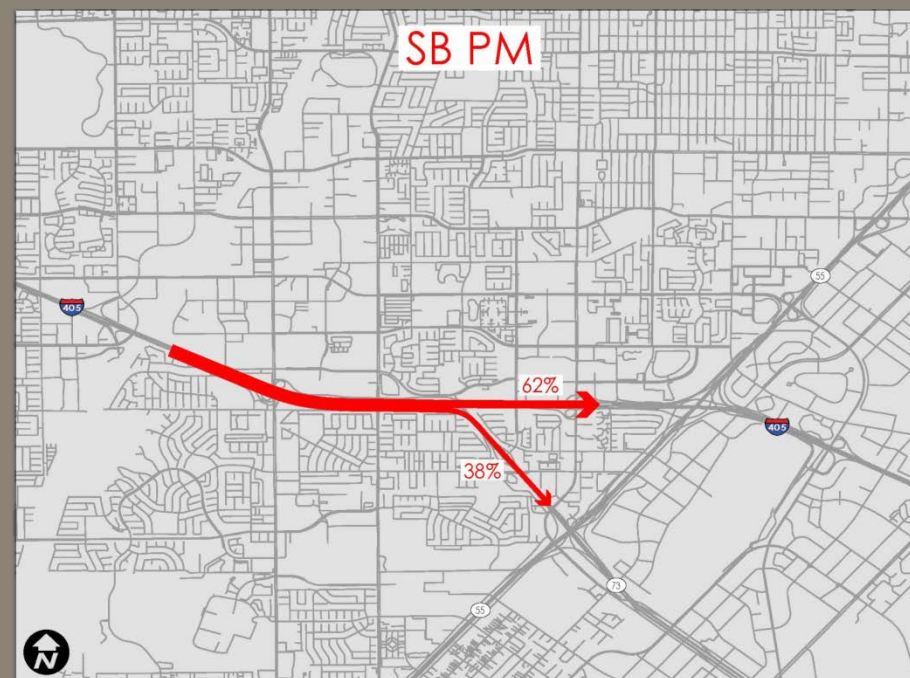
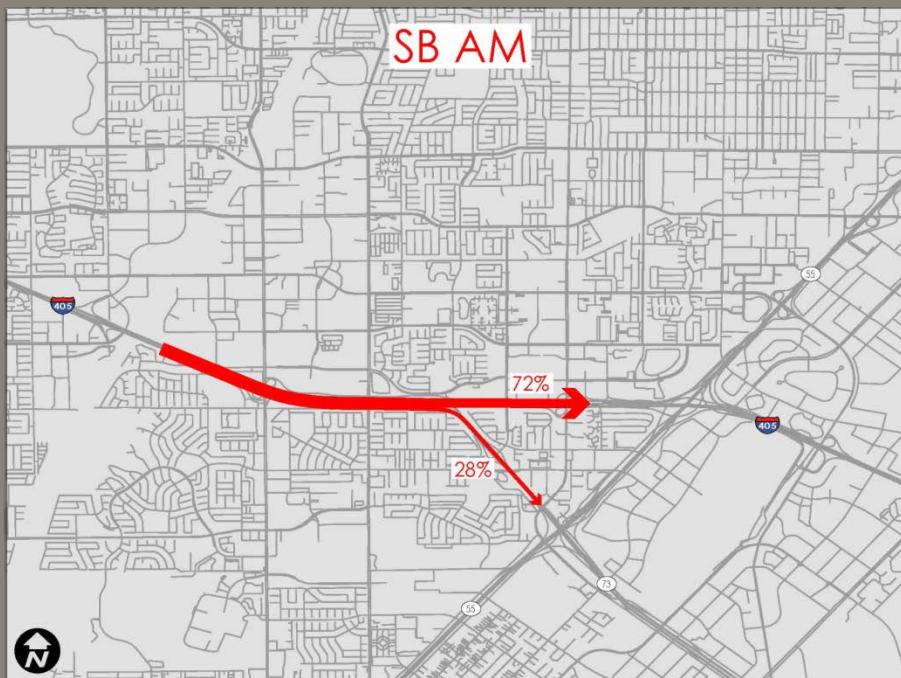
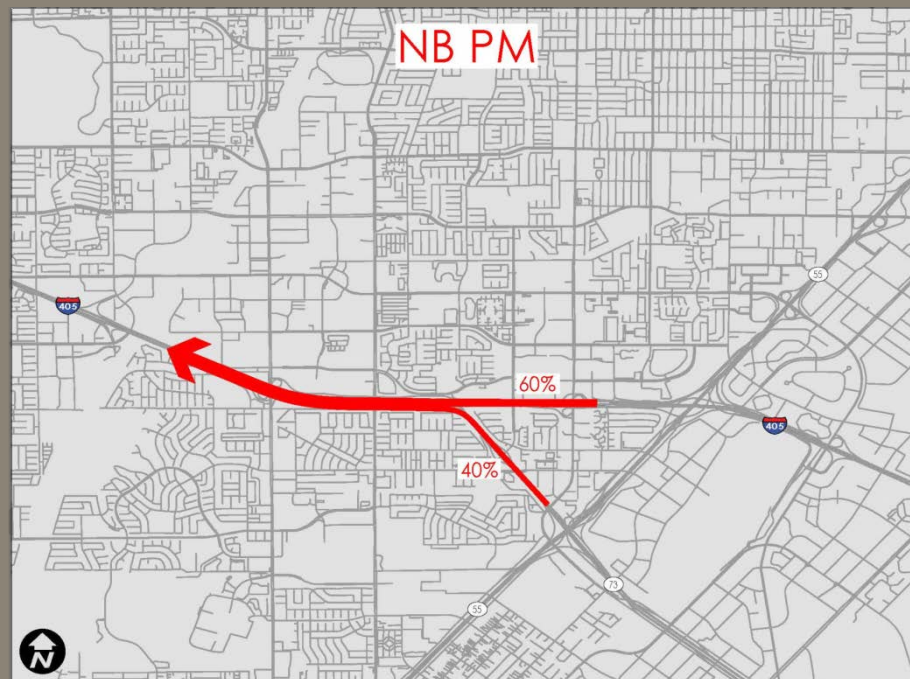
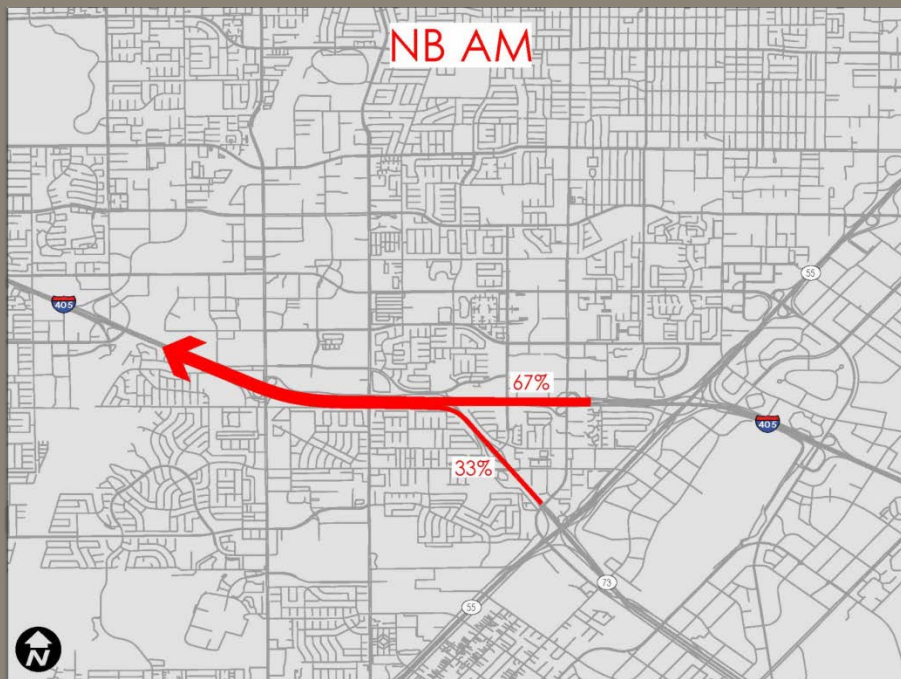
Travel Time Runs (video)

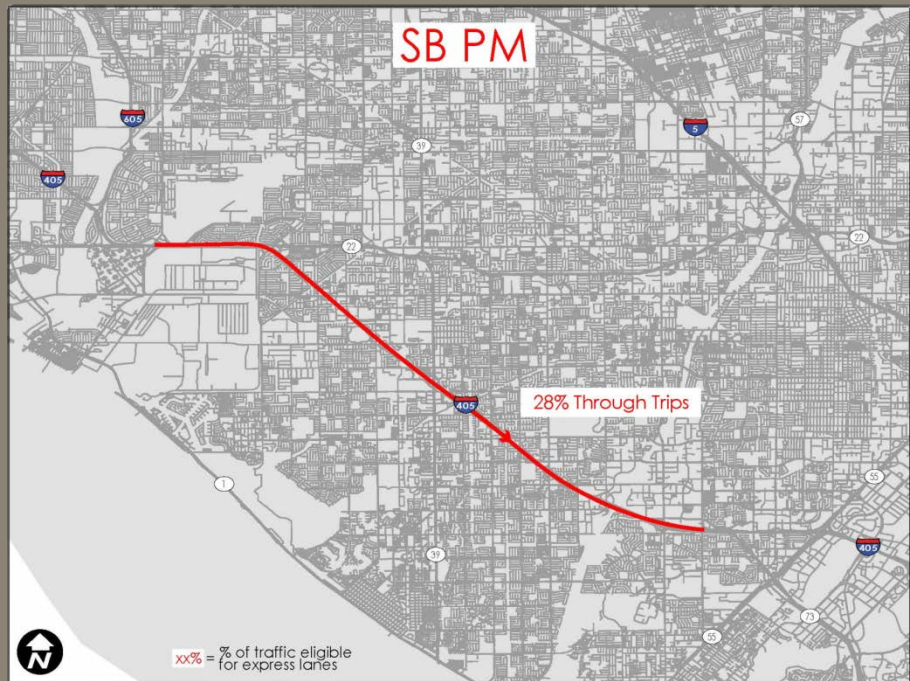
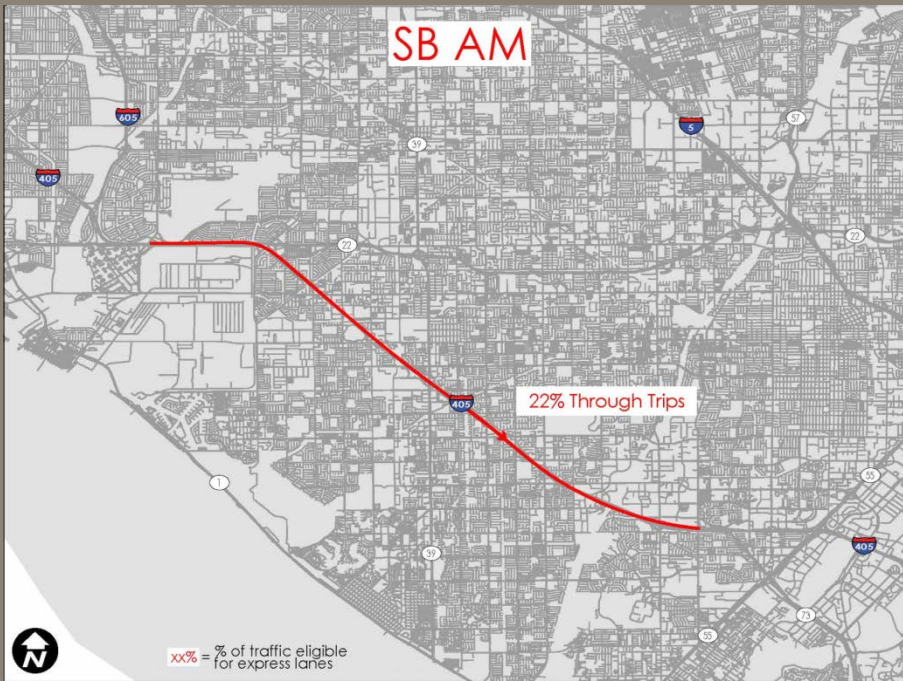
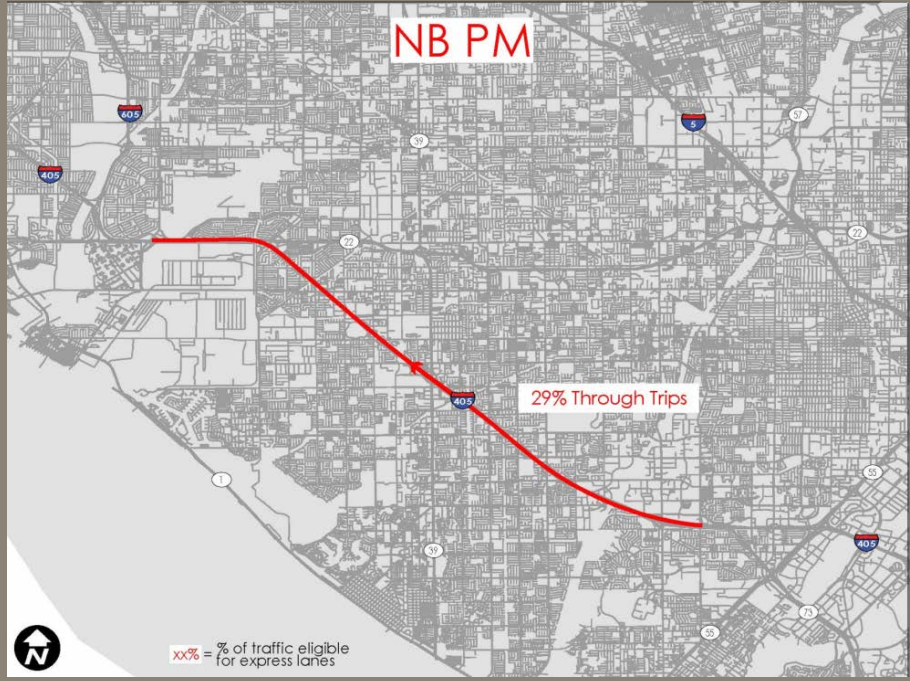
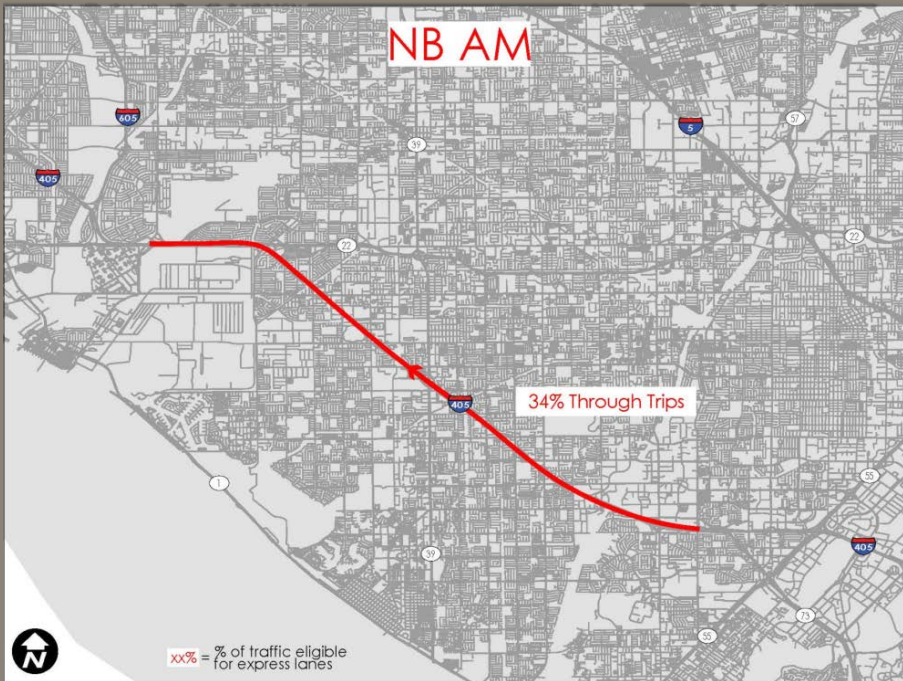


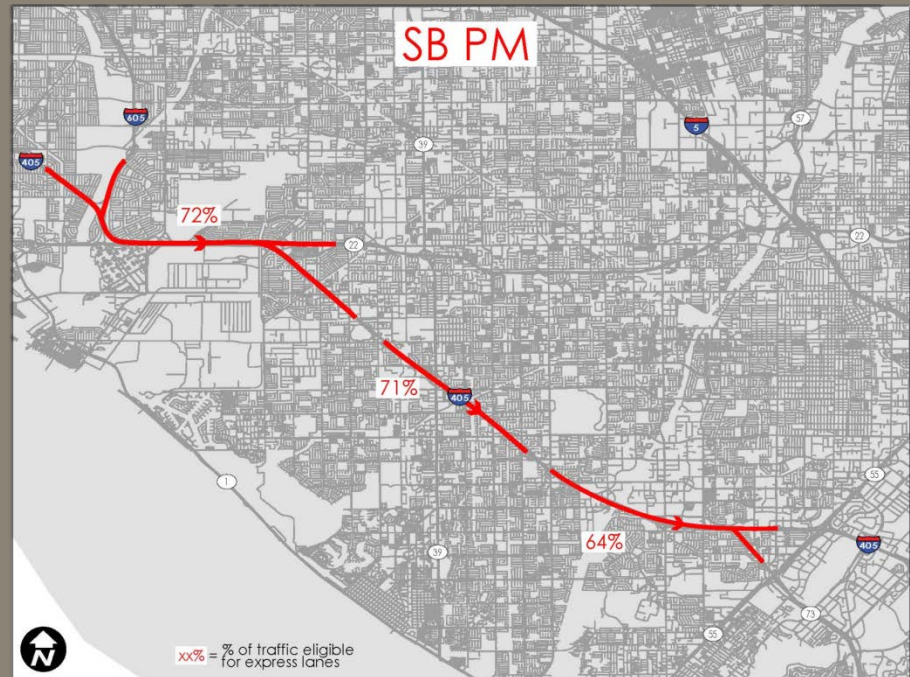
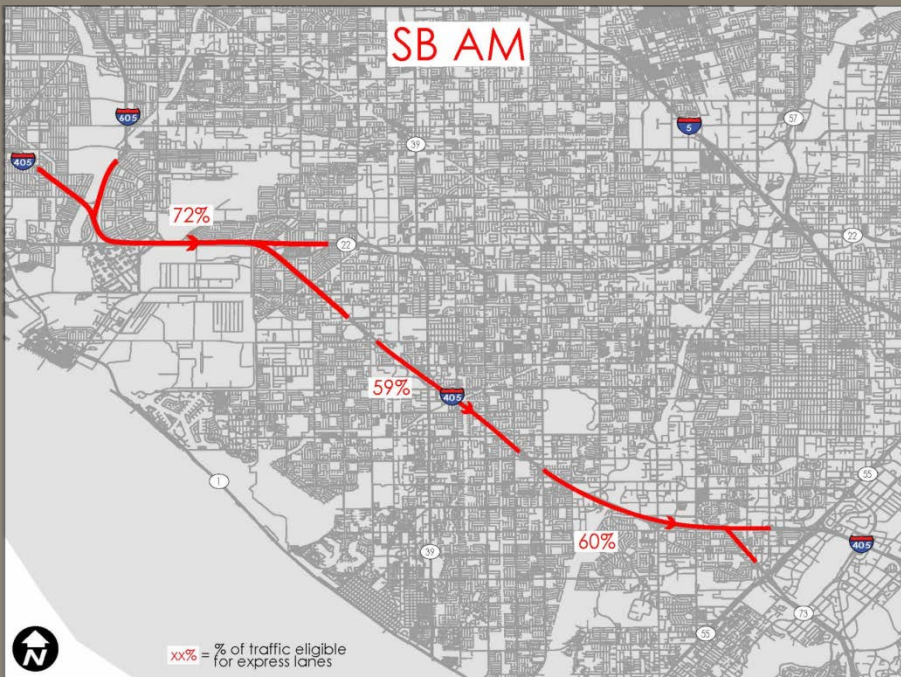
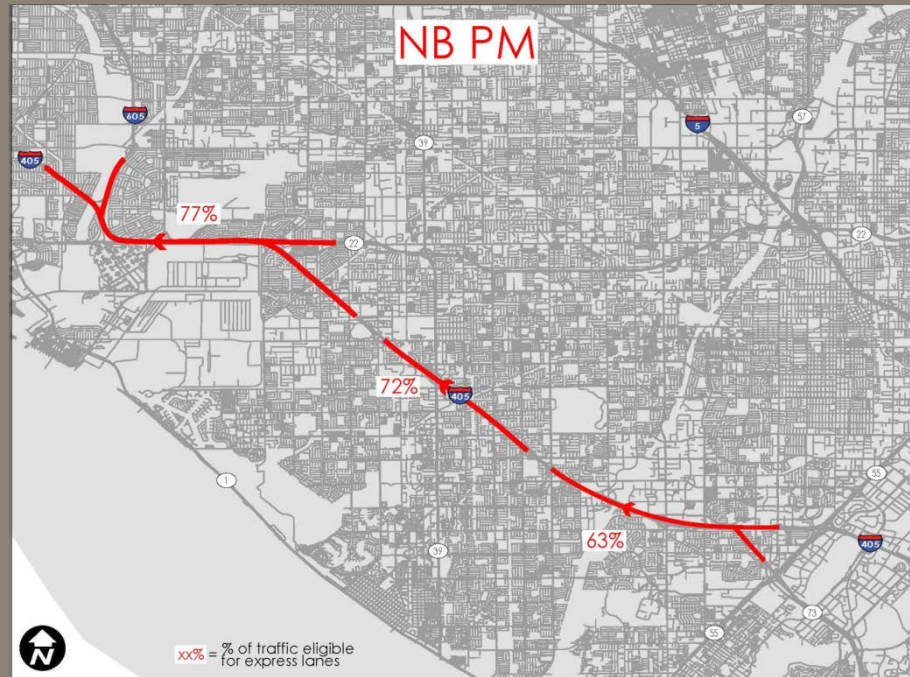
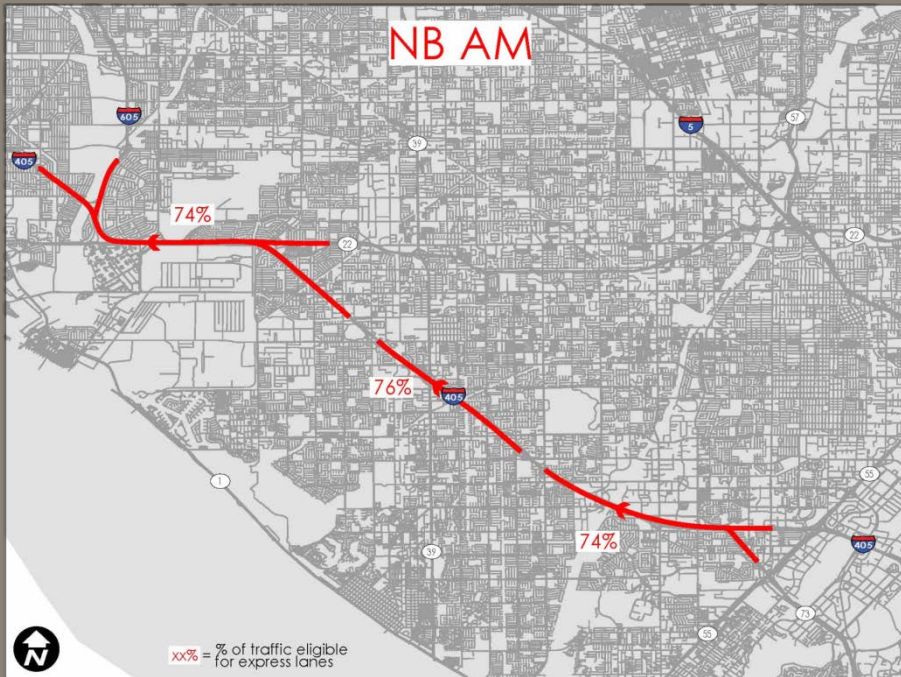
I-405 SB AM
8:30am

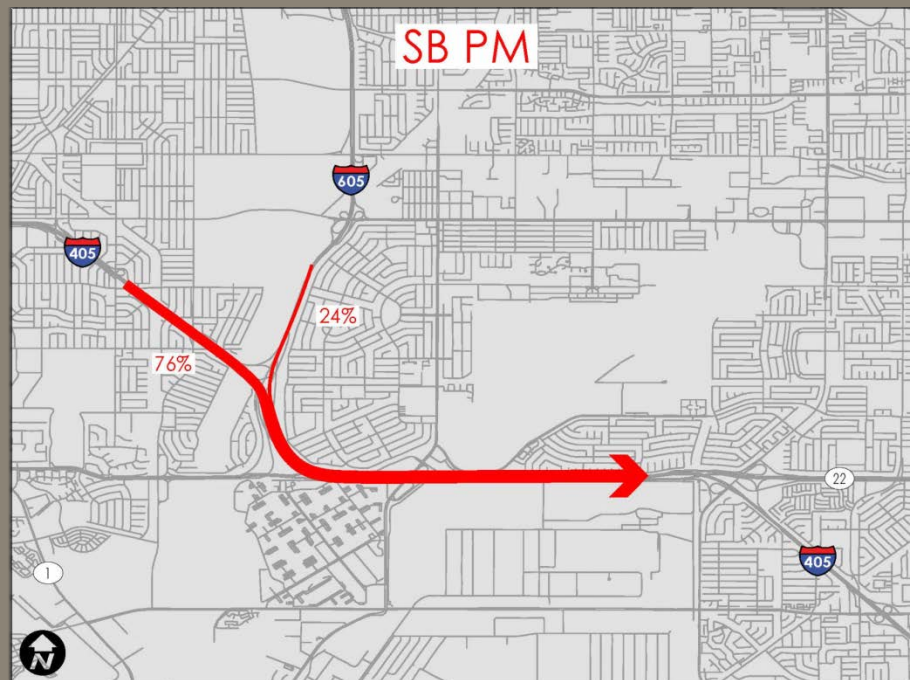
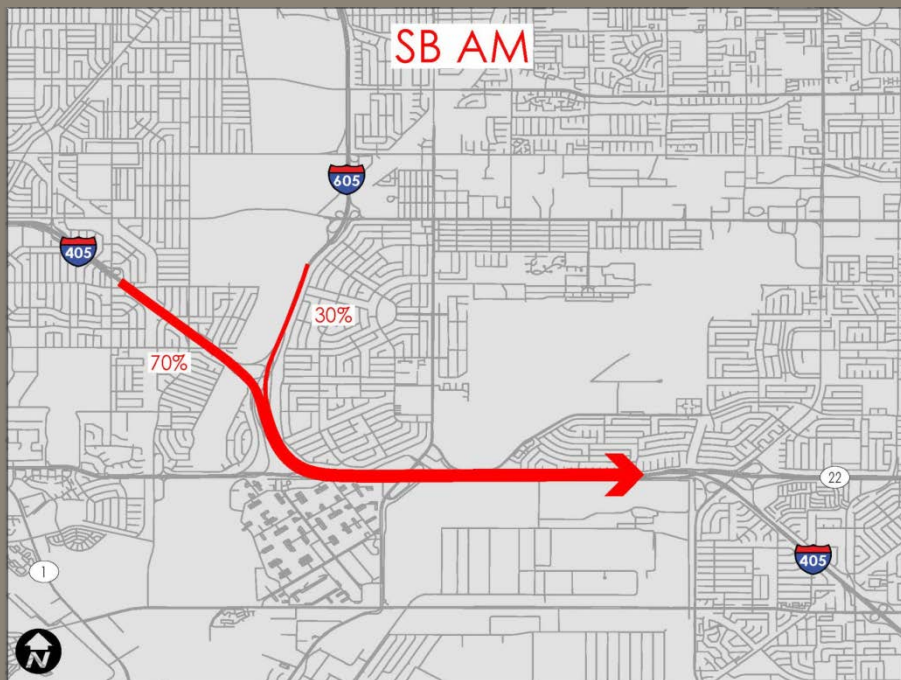
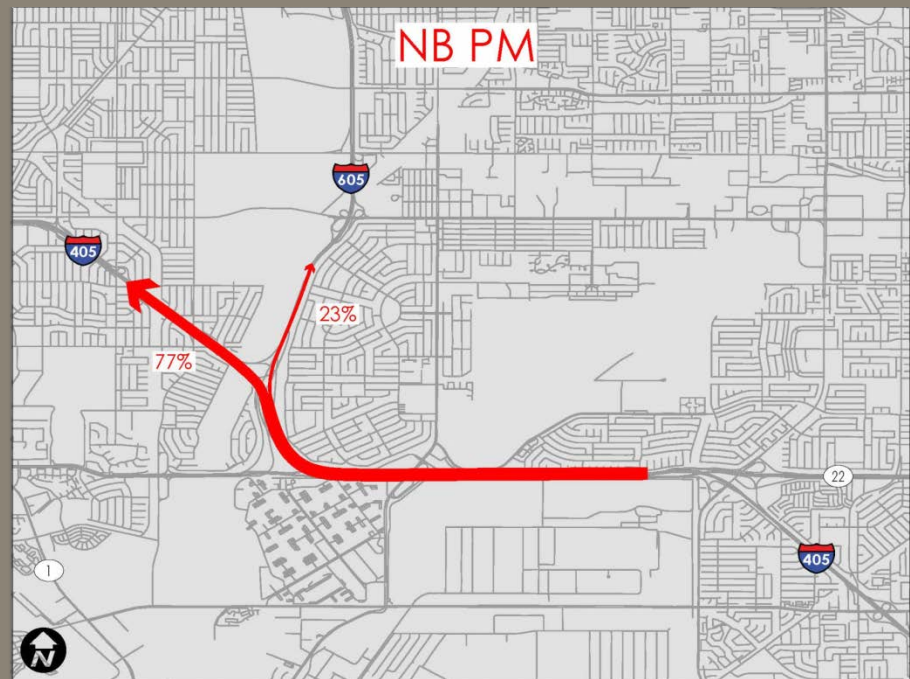
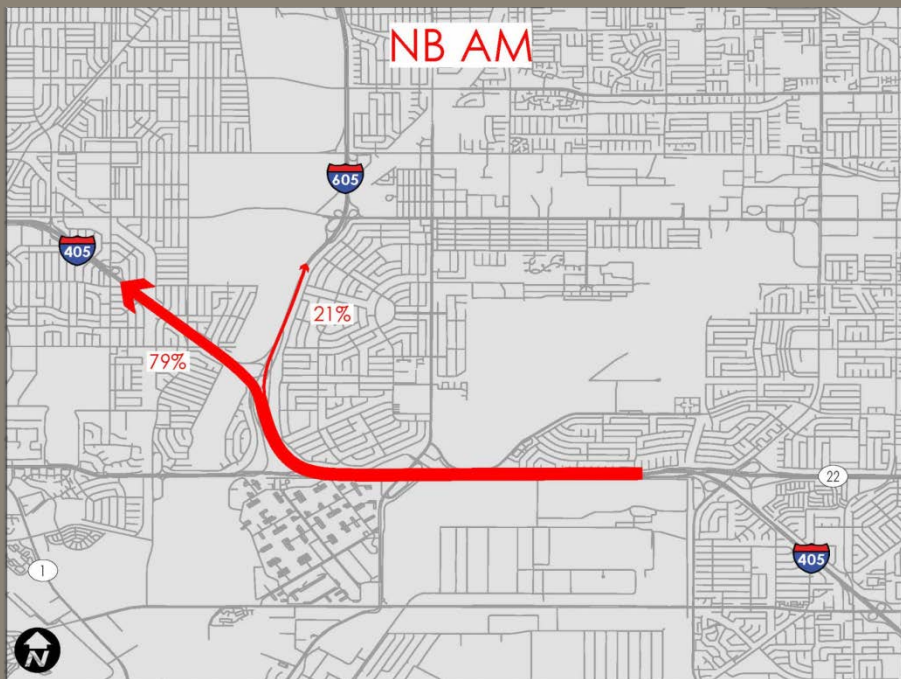


I-405 NB PM
4:30pm





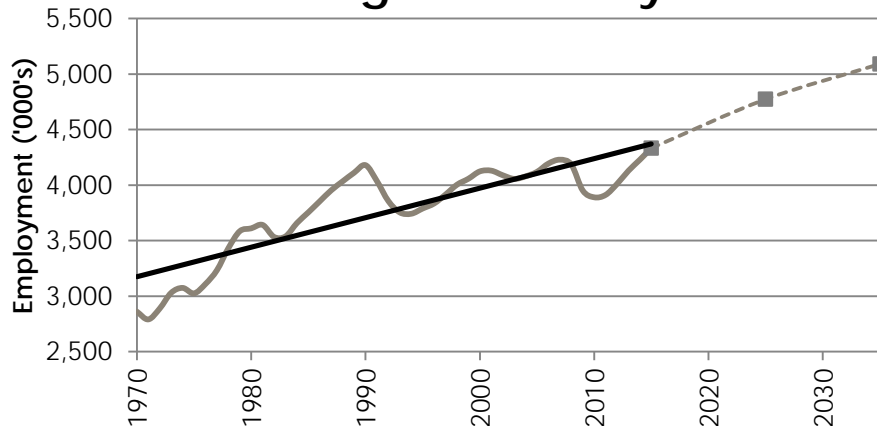




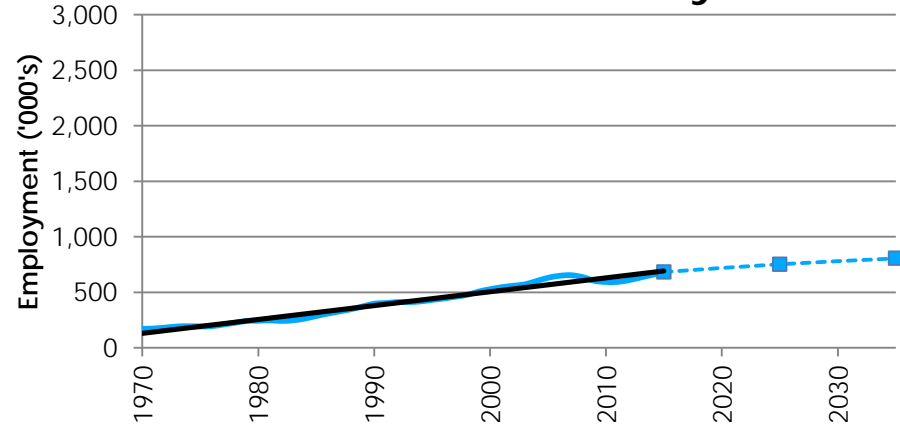
Socio-economic Forecast

Historical Employment

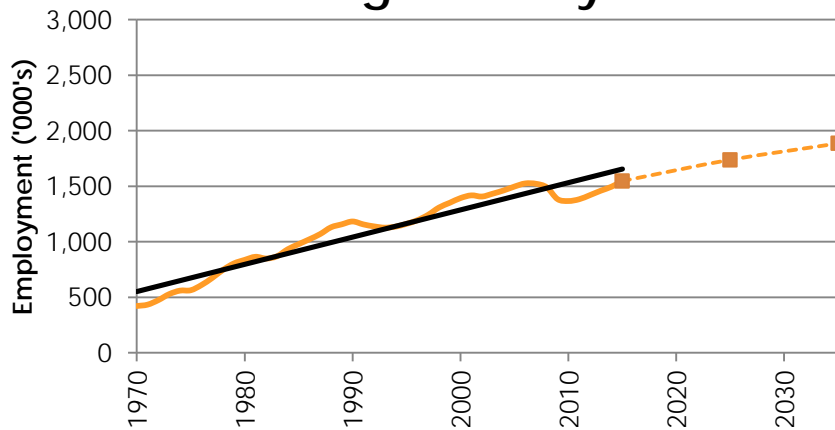
Los Angeles County



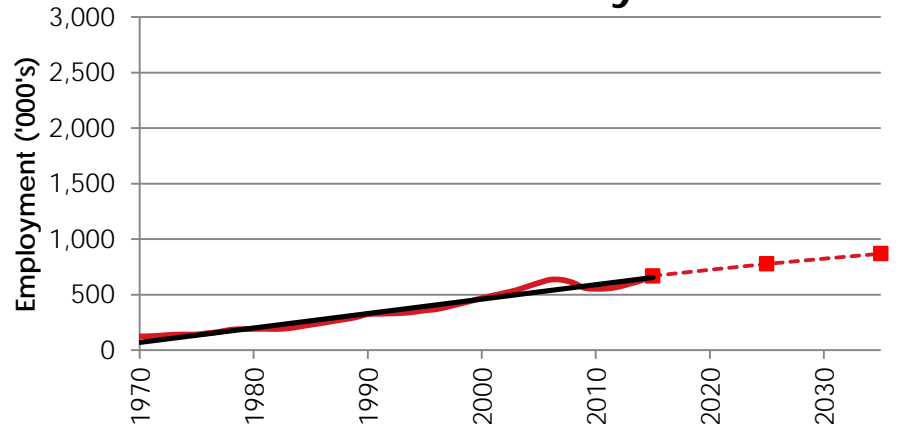
San Bernardino County



Orange County

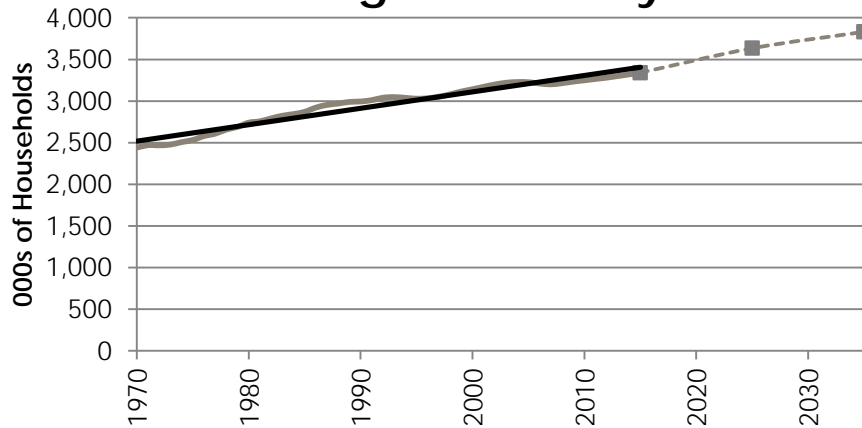


Riverside County

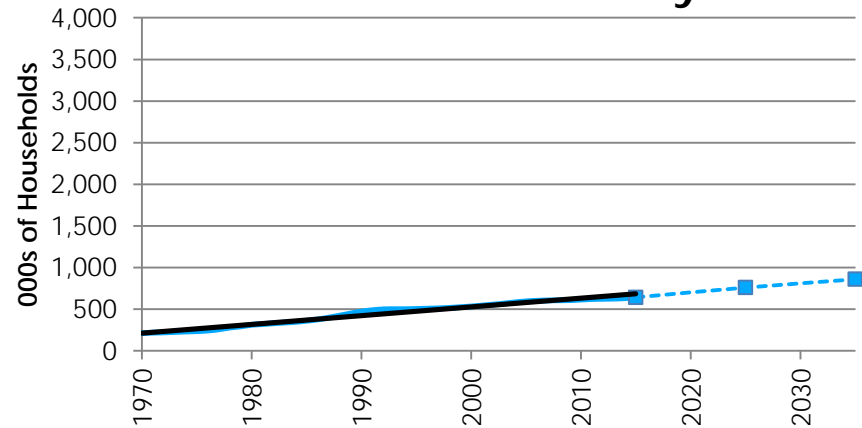


Historical Number of Households

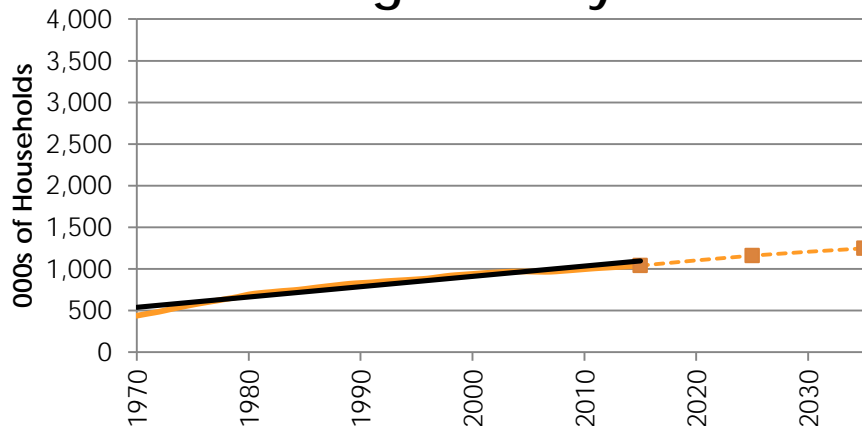
Los Angeles County



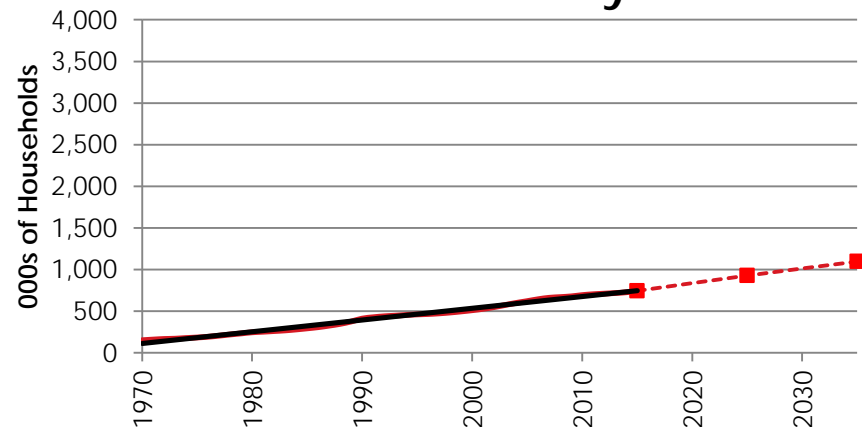
San Bernardino County



Orange County



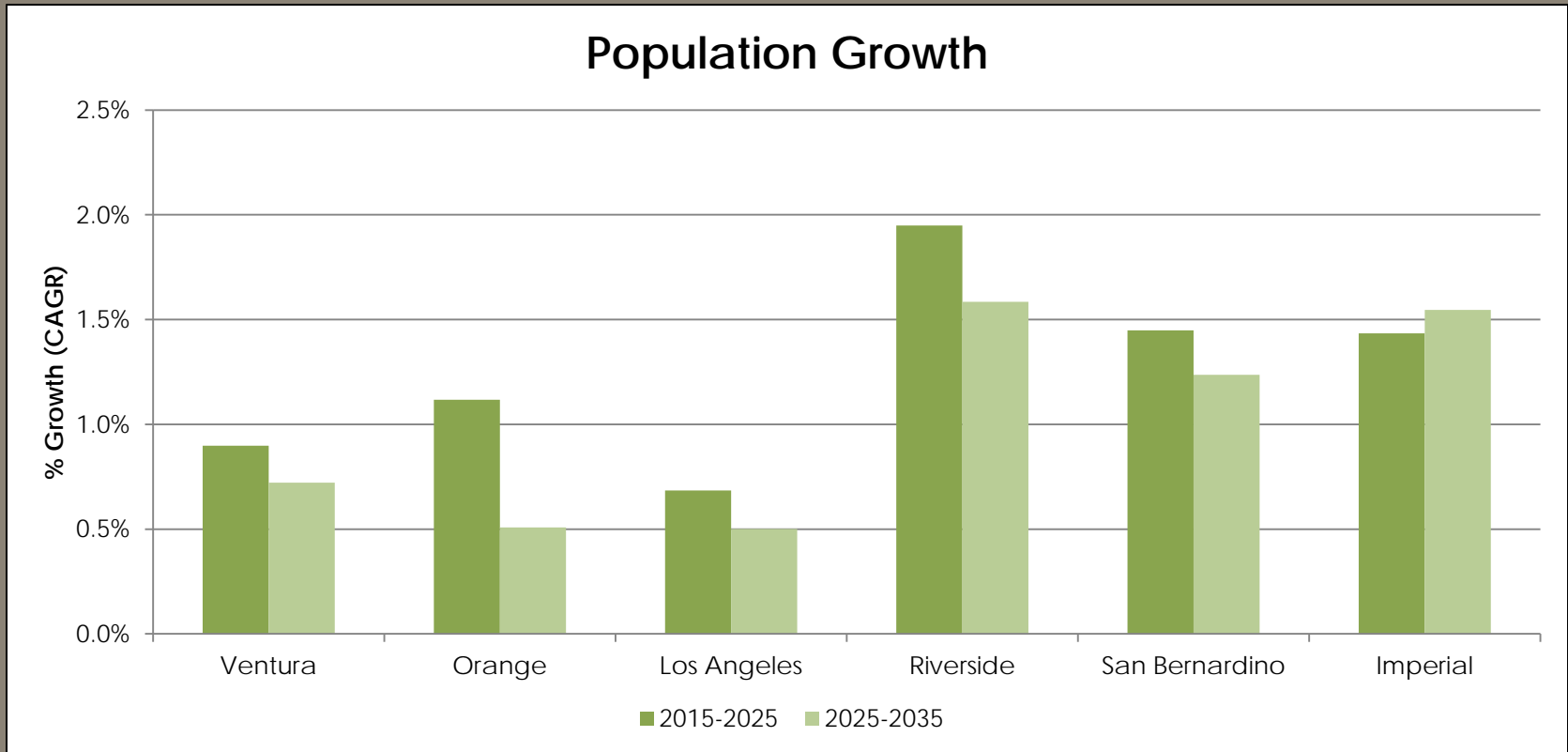
Riverside County



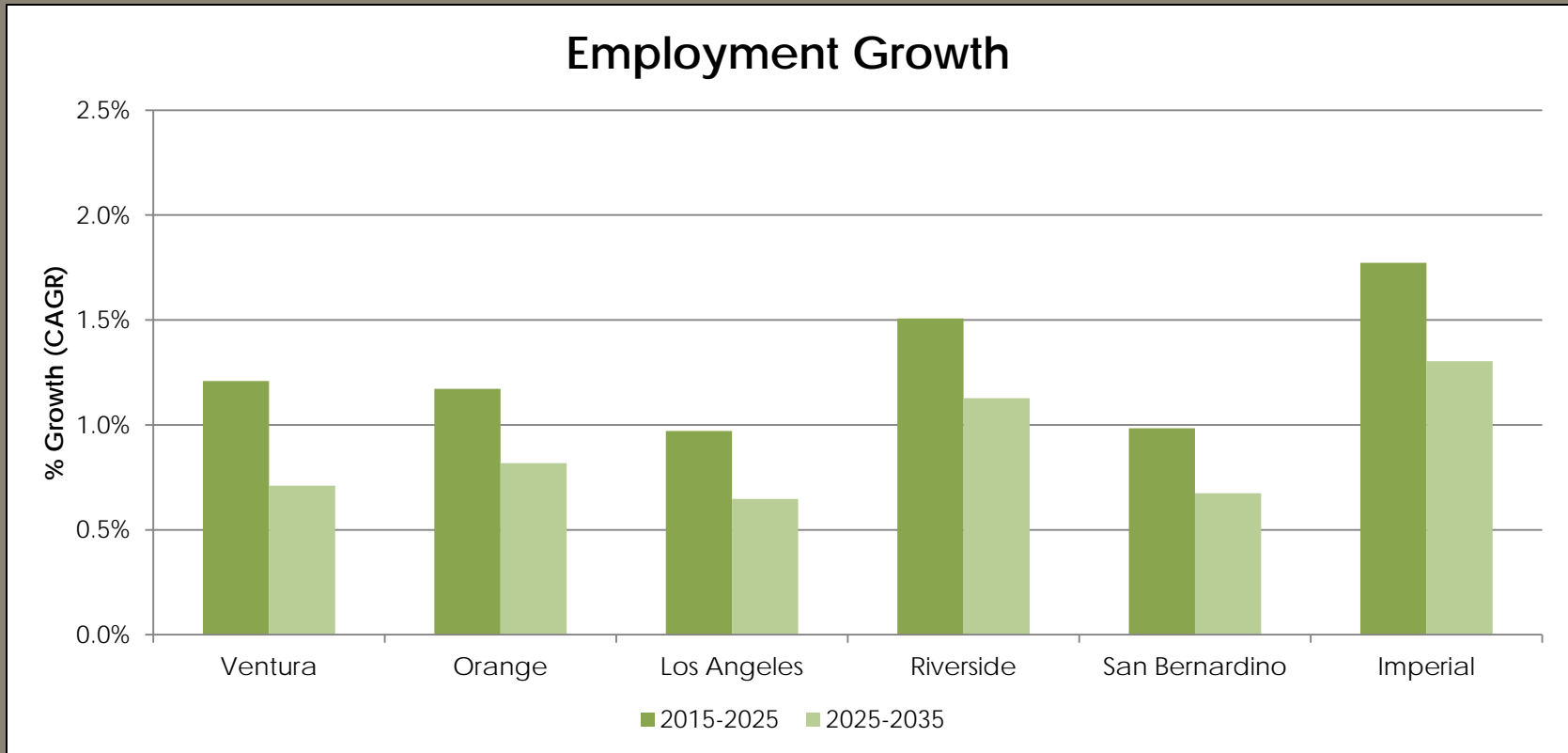
Socio-economic Forecast

	County	2015	2025	2035	2015-2035	2015-2025	2025-2035
	Population	Ventura	854,644	934,593	1,004,273	0.81%	0.90%
Orange		3,197,960	3,574,036	3,759,997	0.81%	1.12%	0.51%
Los Angeles		10,013,116	10,719,977	11,268,737	0.59%	0.68%	0.50%
Riverside		2,341,499	2,840,157	3,323,504	1.77%	1.95%	1.58%
San Bernardino		2,110,457	2,436,870	2,755,648	1.34%	1.45%	1.24%
Imperial		182,455	210,391	245,288	1.49%	1.43%	1.55%
Total		18,700,131	20,716,024	22,357,447	0.90%	1.03%	0.77%
	County	2015	2025	2035	2015-2035	2015-2025	2025-2035
	Number of Households	Ventura	270,707	294,010	314,700	0.76%	0.83%
Orange		1,038,976	1,158,982	1,246,475	0.91%	1.10%	0.73%
Los Angeles		3,340,155	3,633,796	3,831,362	0.69%	0.85%	0.53%
Riverside		743,292	926,726	1,095,572	1.96%	2.23%	1.69%
San Bernardino		641,272	758,251	858,350	1.47%	1.69%	1.25%
Imperial		50,399	58,499	68,001	1.51%	1.50%	1.52%
Total		6,084,801	6,830,264	7,414,460	0.99%	1.16%	0.82%
	County	2015	2025	2035	2015-2035	2015-2025	2025-2035
	Employment	Ventura	327,784	369,651	396,756	0.96%	1.21%
Orange		1,546,878	1,737,991	1,885,565	0.99%	1.17%	0.82%
Los Angeles		4,333,208	4,773,028	5,091,204	0.81%	0.97%	0.65%
Riverside		668,449	776,334	868,477	1.32%	1.51%	1.13%
San Bernardino		682,132	752,305	804,595	0.83%	0.98%	0.67%
Imperial		64,098	76,414	86,986	1.54%	1.77%	1.30%
Total		7,622,549	8,485,723	9,133,583	0.91%	1.08%	0.74%

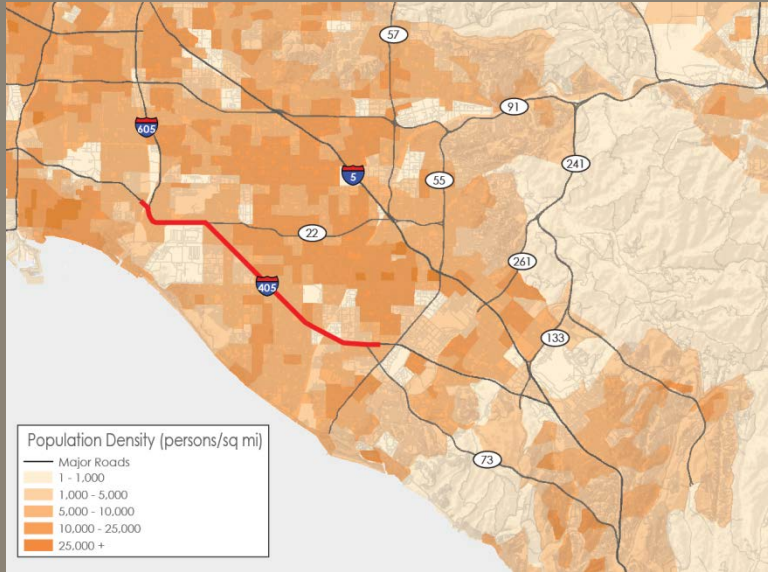
Population Growth



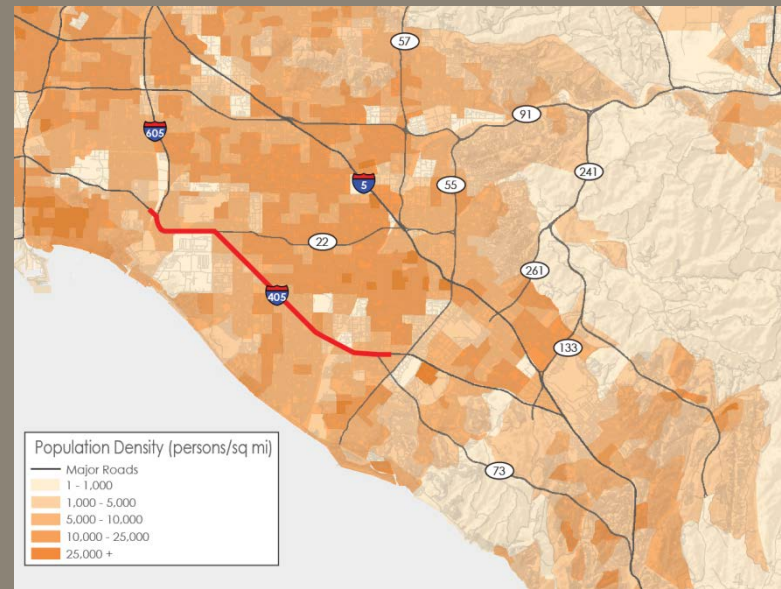
Employment Growth



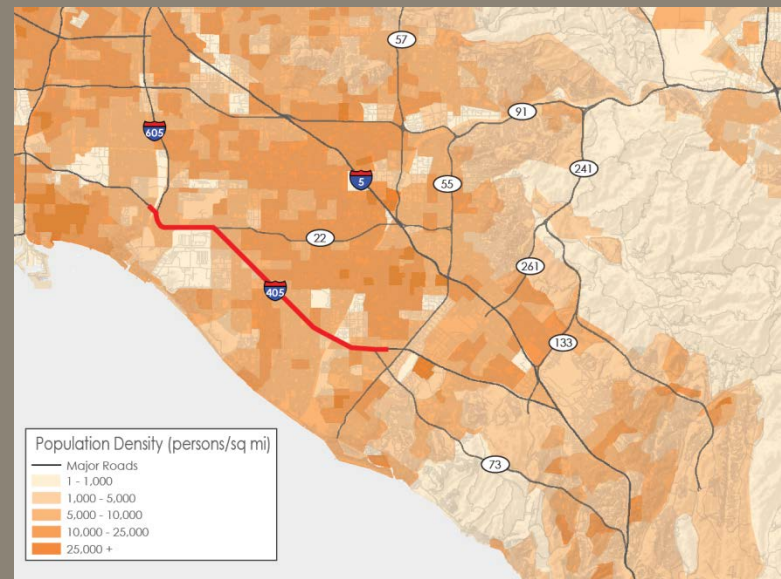
Population Density



2015

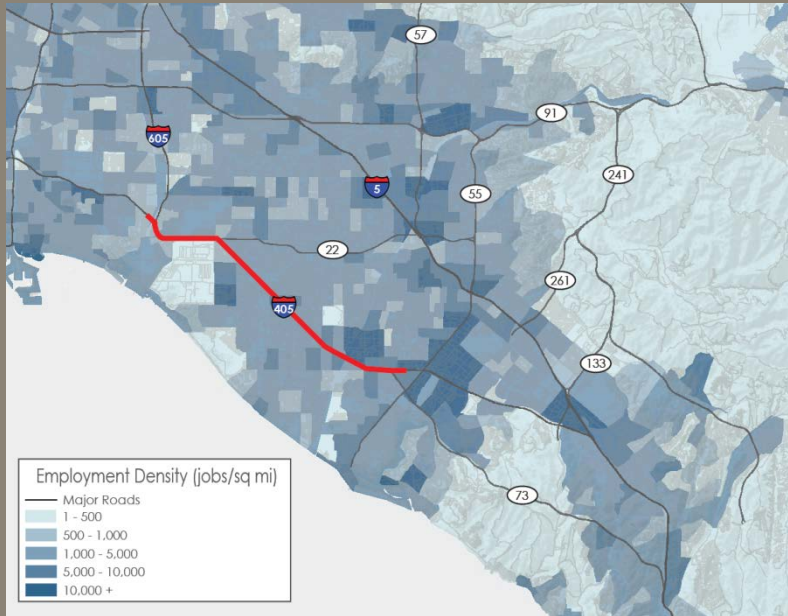


2025

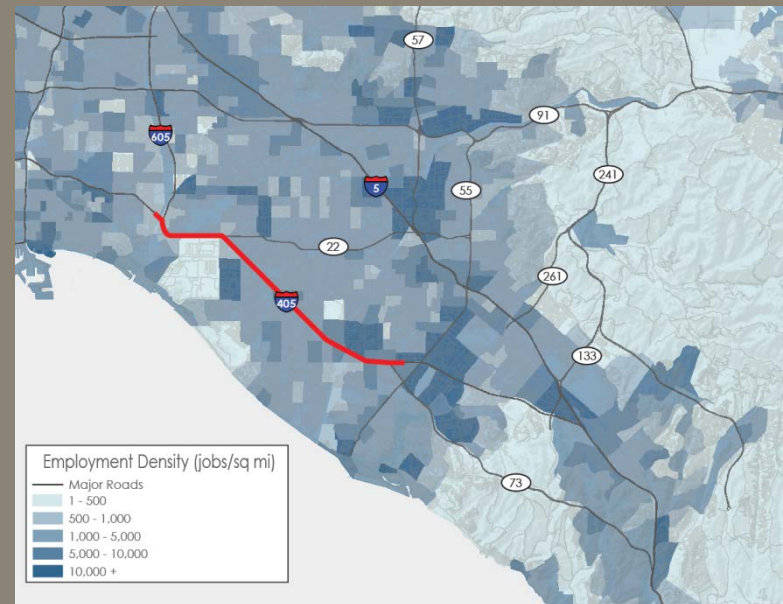
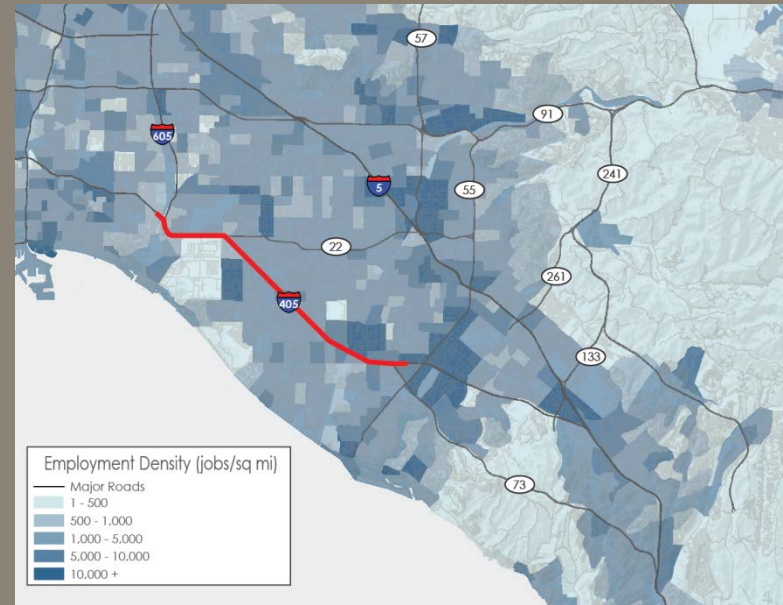


2035

Employment Density



2015



2035

2025

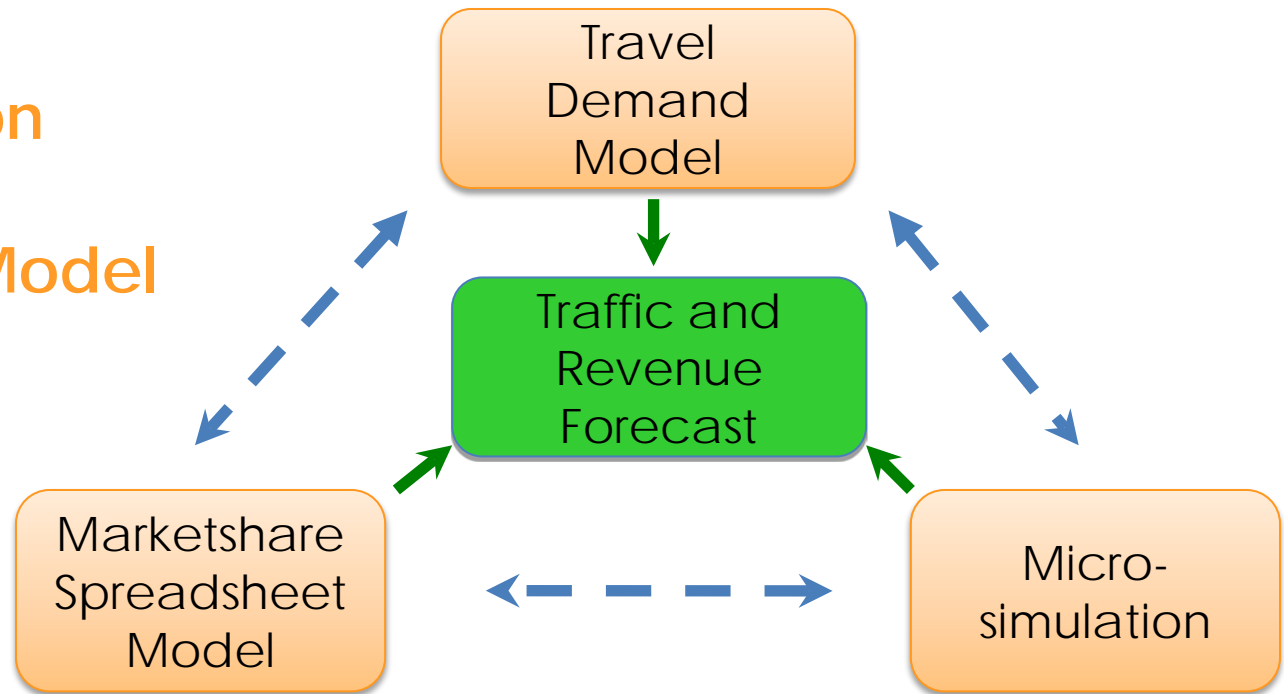
Model Calibration and Development

Modeling Process

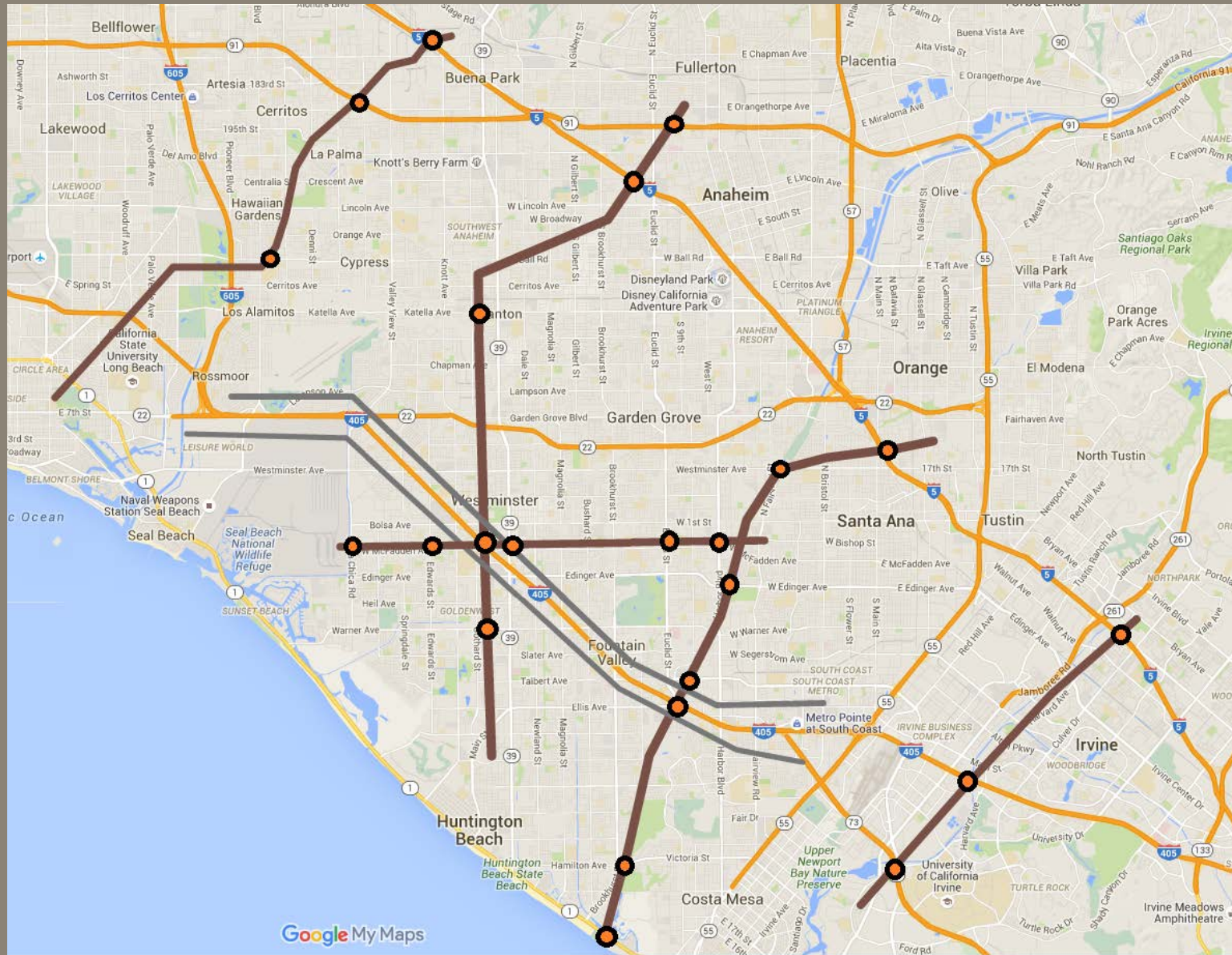
Travel Demand Model

Microsimulation

Marketshare Model



Model Calibration Screenlines



Regional Model Calibration - NB

LOCATION		AM Period					PM Period					Daily Volume				
		GP + HOV					GP + HOV					GP + HOV				
I-405 NB Mainline		Obs	Est	Est-Obs	% Diff	GEH	Obs	Est	Est-Obs	% Diff	GEH	Obs	Est	Est-Obs	% Diff	GEH
	I-405 GP - I-605 On and Studebaker On	39,359	38,373	(986)	-3%	5.0	40,901	39,424	(1,477)	-4%	7.4	139,090	133,854	(5,236)	-4%	2.9
	I-405 GP - at I-605	37,352	36,826	(527)	-1%	2.7	36,870	36,671	(199)	-1%	1.0	129,017	127,613	(1,405)	-1%	0.8
	I-405 GP - SR-22 and I-605	50,851	49,659	(1,193)	-2%	5.3	56,331	55,349	(983)	-2%	4.2	188,065	183,910	(4,155)	-2%	2.0
	I-405 GP -Seal Beach and SR-22	56,769	56,797	28	0%	0.1	63,352	63,532	180	0%	0.7	210,843	211,237	395	0%	0.2
	I-405 GP - at Seal Beach	54,144	54,316	172	0%	0.7	59,883	60,009	126	0%	0.5	200,187	200,391	204	0%	0.1
	I-405 GP - SR-22 and Seal Beach	56,500	56,985	485	1%	2.0	62,501	63,490	989	2%	3.9	209,508	211,756	2,248	1%	1.0
	I-405 GP - Garden Grove and SR-22	34,878	35,310	432	1%	2.3	39,841	39,523	(318)	-1%	1.6	133,195	133,880	685	1%	0.4
	I-405 GP - Willow and Garden Grove	38,227	38,717	490	1%	2.5	44,065	44,720	655	1%	3.1	146,665	150,309	3,644	2%	1.9
	I-405 GP - at Westminster	34,821	35,585	764	2%	4.1	40,498	40,910	412	1%	2.0	134,885	137,648	2,763	2%	1.5
	I-405 GP - Goldenwest and Westminster	36,920	37,822	902	2%	4.7	43,985	44,176	191	0%	0.9	144,933	147,581	2,648	2%	1.4
	I-405 GP - at Bolsa	34,020	35,108	1,088	3%	5.9	39,706	39,484	(222)	-1%	1.1	132,885	136,025	3,140	2%	1.7
	I-405 GP - Beach and Bolsa	37,114	37,401	287	1%	1.5	42,242	41,965	(277)	-1%	1.3	143,628	144,516	888	1%	0.5
	I-405 GP - at Beach	32,564	32,924	360	1%	2.0	37,219	36,451	(768)	-2%	4.0	125,616	126,122	506	0%	0.3
	I-405 GP - Warner and Beach	39,174	37,892	(1,282)	-3%	6.5	46,698	44,079	(2,619)	-6%	12.3	158,291	152,449	(5,842)	-4%	3.0
	I-405 GP - at Warner	33,662	32,895	(767)	-2%	4.2	39,127	37,186	(1,941)	-5%	9.9	137,553	133,032	(4,521)	-3%	2.5
	I-405 GP - Brookhurst and Warner	36,313	36,076	(237)	-1%	1.2	43,176	42,331	(845)	-2%	4.1	152,924	151,522	(1,402)	-1%	0.7
	I-405 GP - at Brookhurst	32,521	32,556	36	0%	0.2	37,236	35,737	(1,499)	-4%	7.8	136,675	134,205	(2,470)	-2%	1.4
	I-405 GP - Euclid and Brookhurst	36,834	36,544	(291)	-1%	1.5	40,521	40,117	(404)	-1%	2.0	154,908	152,658	(2,250)	-1%	1.2
	I-405 GP - at Euclid	36,208	35,997	(211)	-1%	1.1	37,778	36,484	(1,295)	-3%	6.7	149,407	146,012	(3,395)	-2%	1.8
I-405 GP - Hyland and Euclid	41,265	41,603	338	1%	1.7	43,350	43,035	(315)	-1%	1.5	170,968	170,155	(813)	0%	0.4	
I-405 GP - Harbor and Hyland	40,553	40,920	368	1%	1.8	38,558	37,596	(962)	-2%	4.9	162,304	160,898	(1,406)	-1%	0.7	
I-405 GP - Fairview and Harbor	38,726	38,628	(98)	0%	0.5	36,097	35,121	(976)	-3%	5.2	153,660	150,890	(2,769)	-2%	1.4	
I-405 GP - SR-73 and Fairview	37,002	37,144	142	0%	0.7	33,695	32,940	(755)	-2%	4.1	143,837	144,727	890	1%	0.5	
I-405 GP - S Coast and SR-73	26,981	27,776	795	3%	4.8	21,931	21,025	(906)	-4%	6.2	101,077	103,947	2,870	3%	1.8	
I-405 GP - Bristol and S Coast	34,711	33,326	(1,385)	-4%	7.5	34,394	37,865	3,471	10%	18.3	136,776	137,513	737	1%	0.4	
		% RMSE 2%					% RMSE 3%					% RMSE 2%				

Regional Model Calibration - SB

LOCATION	AM Period					PM Period					Daily Volume				
	GP + HOV					GP + HOV					GP + HOV				
	Obs	Est	Est-Obs	% Diff	GEH	Obs	Est	Est-Obs	% Diff	GEH	Obs	Est	Est-Obs	% Diff	GEH
I-405 GP - Studebaker Off and I-605 Off	30,268	30,424	156	1%	0.9	42,758	41,868	(890)	-2%	4.3	138,033	137,598	(436)	0%	0.2
I-405 GP - I-605 NB off and SR-22 WB off	24,177	24,587	410	2%	2.6	35,207	33,904	(1,303)	-4%	7.0	112,488	112,049	(439)	0%	0.3
I-405 GP - SR-22 WB off to SB 605 on	23,862	24,247	385	2%	2.5	34,930	33,595	(1,335)	-4%	7.2	111,210	110,731	(480)	0%	0.3
I-405 GP - SR-22 and I-605	40,334	41,389	1,056	3%	5.2	50,288	49,149	(1,138)	-2%	5.1	170,129	171,483	1,354	1%	0.7
I-405 GP - SR-22 west and Seal Beach	48,184	48,229	44	0%	0.2	60,700	58,430	(2,270)	-4%	9.3	200,366	196,876	(3,490)	-2%	1.6
I-405 GP - at Seal Beach	44,817	44,855	38	0%	0.2	56,453	53,419	(3,034)	-5%	12.9	186,449	182,477	(3,972)	-2%	1.9
I-405 GP - Seal Beach and SR-22 east	47,378	47,109	(269)	-1%	1.2	59,916	57,077	(2,839)	-5%	11.7	197,373	193,120	(4,253)	-2%	2.0
I-405 GP - SR-22 east and Bolsa Chica	28,011	27,094	(916)	-3%	5.5	38,689	38,780	90	0%	0.5	128,355	127,307	(1,048)	-1%	0.6
I-405 GP - at Bolsa Chica	25,252	24,217	(1,035)	-4%	6.6	36,231	36,622	391	1%	2.0	119,810	119,398	(412)	0%	0.2
I-405 GP - Bolsa Chica and Westminster	28,233	26,969	(1,264)	-4%	7.6	39,938	40,265	327	1%	1.6	131,183	129,905	(1,278)	-1%	0.7
I-405 GP at Westminster	26,020	24,460	(1,560)	-6%	9.8	37,425	36,852	(573)	-2%	3.0	122,769	119,706	(3,062)	-2%	1.8
I-405 GP - Westminster and Goldenwest	28,749	27,397	(1,352)	-5%	8.1	41,396	40,484	(913)	-2%	4.5	133,937	130,624	(3,312)	-2%	1.9
I-405 GP - at Bolsa	25,749	23,810	(1,938)	-8%	12.3	37,958	35,949	(2,009)	-5%	10.4	122,286	115,732	(6,554)	-5%	3.9
I-405 GP - Bolsa and Beach	28,451	27,526	(925)	-3%	5.5	42,536	41,151	(1,386)	-3%	6.8	135,144	131,785	(3,359)	-2%	1.9
I-405 GP - at Beach	25,406	24,304	(1,102)	-4%	7.0	36,698	35,583	(1,115)	-3%	5.9	117,310	114,292	(3,018)	-3%	1.8
I-405 GP - Beach and Edinger	28,275	28,492	217	1%	1.3	39,926	40,162	236	1%	1.2	128,117	130,906	2,789	2%	1.6
I-405 GP - Edinger and Magnolia	31,679	31,509	(170)	-1%	1.0	43,402	43,650	248	1%	1.2	140,865	143,497	2,632	2%	1.4
I-405 GP at Magnolia	30,240	30,701	461	2%	2.6	39,362	39,985	623	2%	3.1	130,343	133,452	3,109	2%	1.7
I-405 GP - Magnolia and Warner	34,142	34,139	(3)	0%	0.0	40,804	41,194	390	1%	1.9	138,494	140,133	1,638	1%	0.9
I-405 GP at Warner	33,239	33,171	(68)	0%	0.4	38,671	38,751	79	0%	0.4	132,645	132,679	34	0%	0.0
I-405 GP - Warner and Brookhurst	37,201	37,651	450	1%	2.3	40,856	40,251	(605)	-1%	3.0	142,517	141,970	(547)	0%	0.3
I-405 GP at Brookhurst	35,666	35,435	(230)	-1%	1.2	36,589	35,947	(642)	-2%	3.4	131,065	129,347	(1,717)	-1%	1.0
I-405 GP - Brookhurst and Talbert	41,482	41,636	154	0%	0.8	39,422	39,577	155	0%	0.8	144,651	144,376	(275)	0%	0.1
I-405 GP - Talbert and Euclid	46,683	47,623	939	2%	4.3	42,671	45,011	2,340	5%	11.2	159,031	163,461	4,430	3%	2.3
I-405 GP at Euclid	45,543	46,385	841	2%	3.9	41,549	42,970	1,421	3%	6.9	154,555	157,606	3,051	2%	1.6
I-405 GP - Euclid and Harbor	51,773	53,196	1,423	3%	6.2	47,210	48,684	1,474	3%	6.7	175,725	179,386	3,661	2%	1.8
I-405 GP at Harbor	48,515	48,941	426	1%	1.9	42,733	42,352	(382)	-1%	1.9	160,663	159,164	(1,499)	-1%	0.8
I-405 GP at Harbor	52,439	55,516	3,076	6%	13.2	46,337	49,214	2,877	6%	13.2	172,931	182,716	9,785	6%	4.7
I-405 GP - Harbor and Fairview off	58,343	62,626	4,283	7%	17.4	51,314	56,607	5,293	10%	22.8	193,229	210,826	17,597	9%	8.0
I-405 GP - Fairview off and SR-73	56,742	60,899	4,157	7%	17.1	47,522	53,380	5,858	12%	26.1	182,492	198,987	16,495	9%	7.7
I-405 GP - SR-73 and Fairview on	41,613	43,300	1,688	4%	8.2	31,974	33,317	1,342	4%	7.4	130,646	132,493	1,847	1%	1.0
I-405 GP - Fairview on and Bristol	46,424	47,875	1,450	3%	6.7	35,803	36,605	802	2%	4.2	146,398	146,534	136	0%	0.1
			% RMSE	4%				% RMSE	5%				% RMSE	4%	

I-405 SB Mainline

Micro-simulation Model Calibration

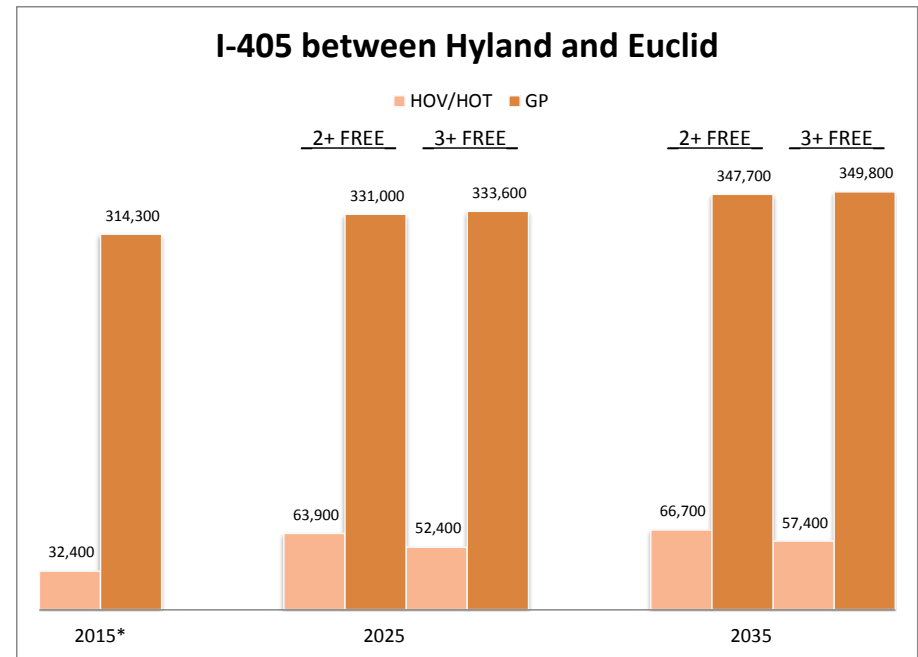
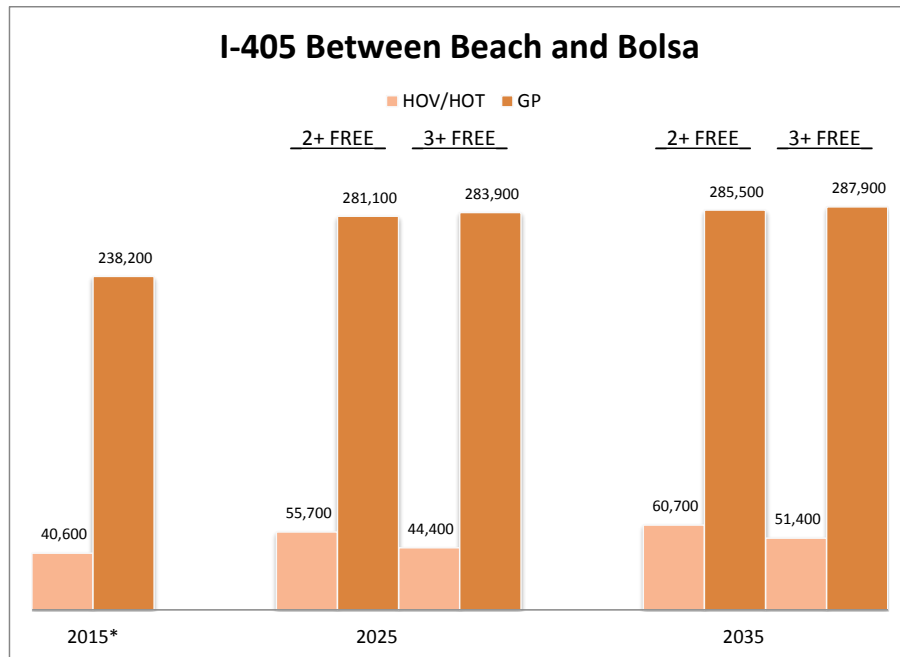
NB 6-10 AM					
From	To	Actual Volume	Microsim Volume	Difference	% Difference
Harbor	Euclid	36,842	36,705	137	(0.00)
Goldenwest/Bolsa	Westminster/Springdale	31,711	31,469	242	(0.01)
SR-22 East	Seal Beach Blvd	47,692	47,320	372	(0.01)
SB 6-10 AM					
From	To	Actual Volume	Microsim Volume	Difference	% Difference
Seal Beach Blvd	SR-22 East	41,126	40,797	329	(0.01)
Westminster/Springdale	Goldenwest/Bolsa	24,117	23,856	261	(0.01)
Euclid	Harbor	45,742	45,363	379	(0.01)
NB 3-7 PM					
From	To	Actual Volume	Microsim Volume	Difference	% Difference
Harbor	Euclid	32,758	33,515	(757)	0.02
Goldenwest/Bolsa	Westminster/Springdale	35,572	34,824	748	(0.02)
SR-22 East	Seal Beach Blvd	51,650	51,017	633	(0.01)
SB 3-7 PM					
From	To	Actual Volume	Microsim Volume	Difference	% Difference
Seal Beach Blvd	SR-22 East	48,597	48,651	(54)	0.00
Westminster/Springdale	Goldenwest/Bolsa	33,764	32,712	1,052	(0.03)
Euclid	Harbor	39,098	38,490	608	(0.02)

Freeway Improvements (2016-35)



Trip and Corridor Growth

Year	Total Trips	CAGR	Total HOV2 Trips	CAGR	Total HOV3 Trips	CAGR
2015	39,743,116		6,907,970		4,170,942	
2025	45,340,830	1.3%	7,765,441	1.2%	4,690,274	1.2%
2034	49,454,863	1.0%	8,474,031	1.0%	5,129,227	1.0%
2035	49,361,237	-0.2%	8,227,215	-2.9%	5,282,417	3.0%



- Corridor grows by 1.1 to 1.9% per year between 2015 and 2025
- Corridor grows by 0.3 to 0.5% per year between 2025 and 2035

Traffic and Revenue Forecasts

Key Assumptions

- **Peak Period Definitions:**
 - 6 to 10 AM (weekday)
 - 3 to 8 PM (weekday)
 - 10 AM to 6 PM (weekend)
- **Static Variable Hourly Toll Schedule**
- **Toll Options:**

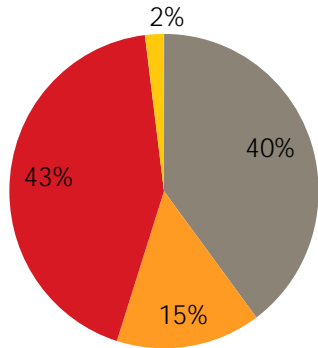
Occupancy	Time of Day	Toll Options			
		A	B	B1	C
HOV-2+	Peak	Free	Full Toll	Full Toll	Full Toll
	Off-Peak	Free	Free	Free	Full Toll
HOV-3+	Peak	Free	50% Toll	Free	50% Toll
	Off-Peak	Free	Free	Free	Free

Toll Option A:

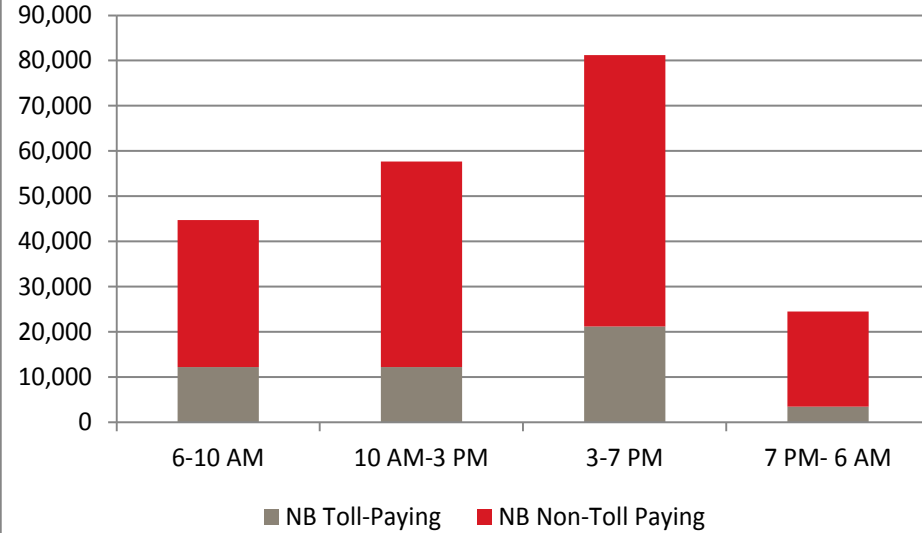
HOV-2+ Free All Day

Option A: 2025 T&R results

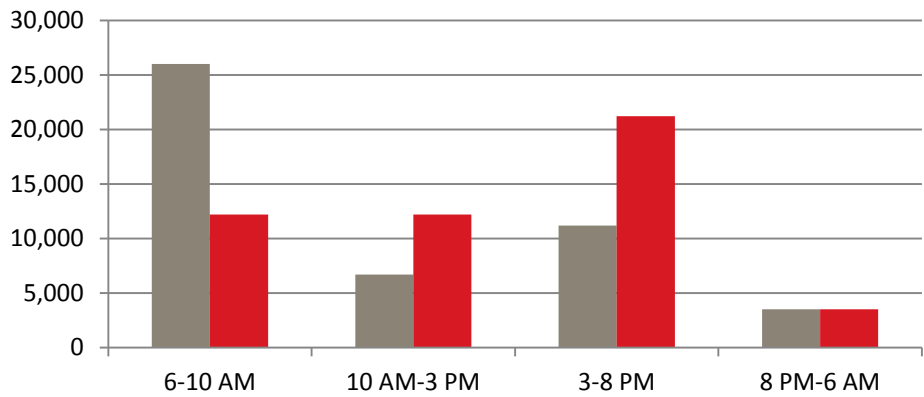
revenue by period



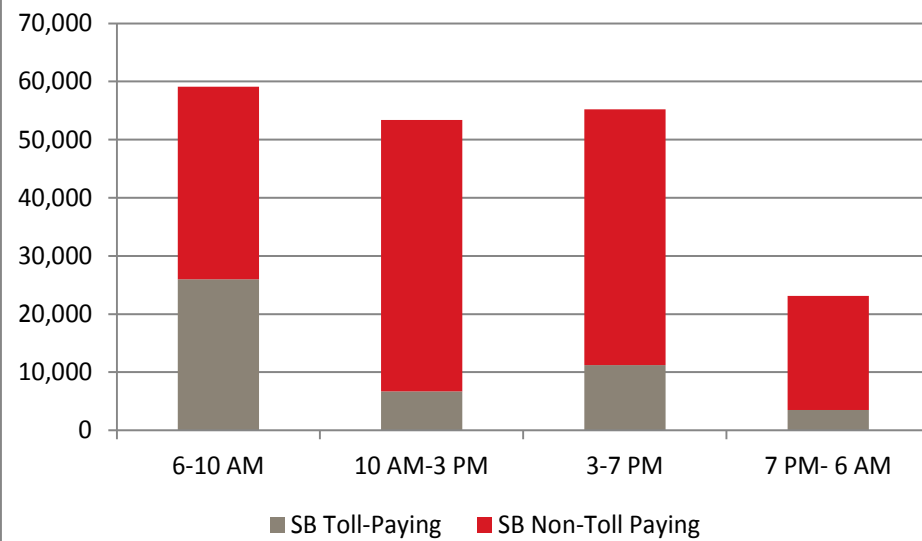
■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM



weekday toll transactions

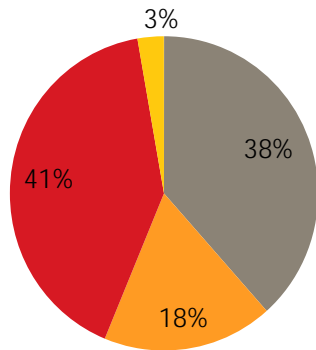


46 ■ Southbound ■ Northbound

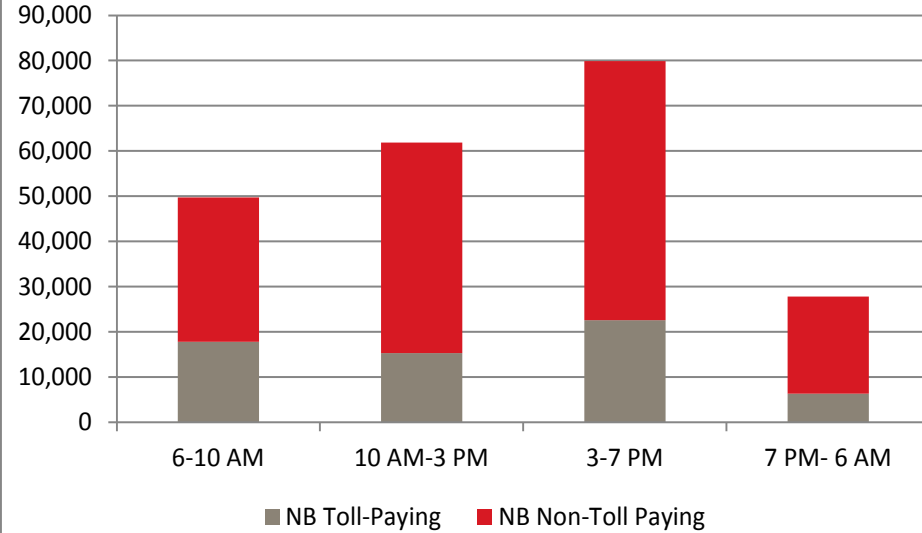


Option A: 2035 T&R results

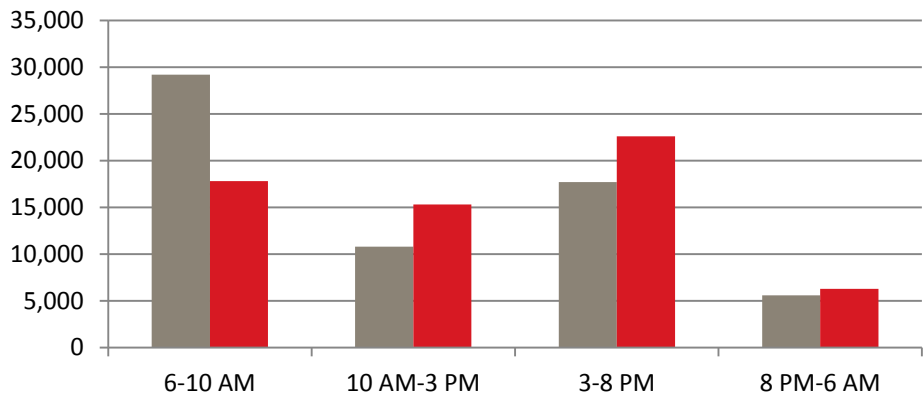
revenue by period



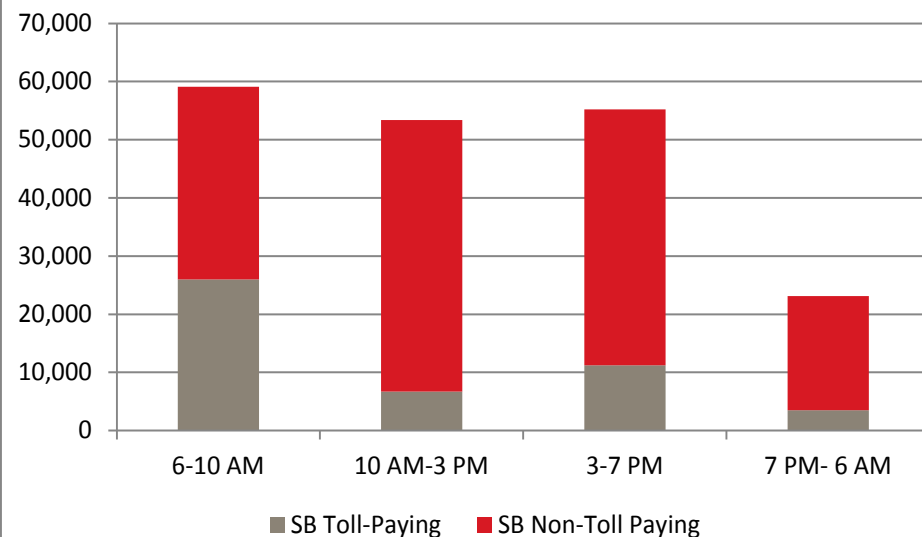
■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM



weekday toll transactions

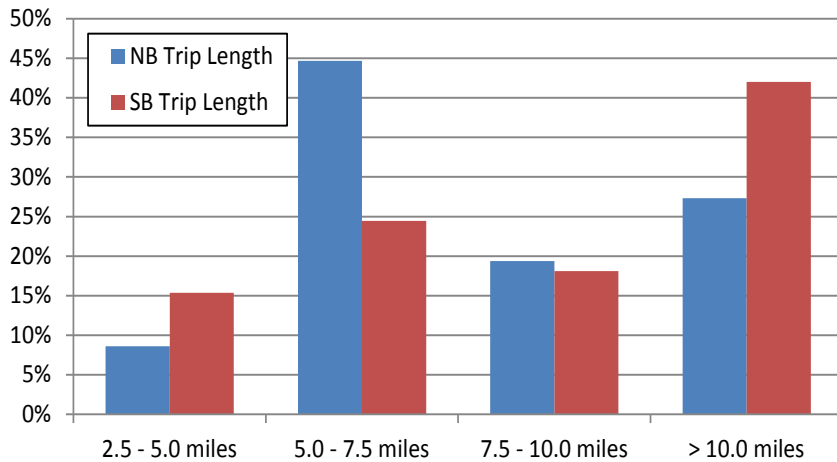


47 ■ Southbound ■ Northbound

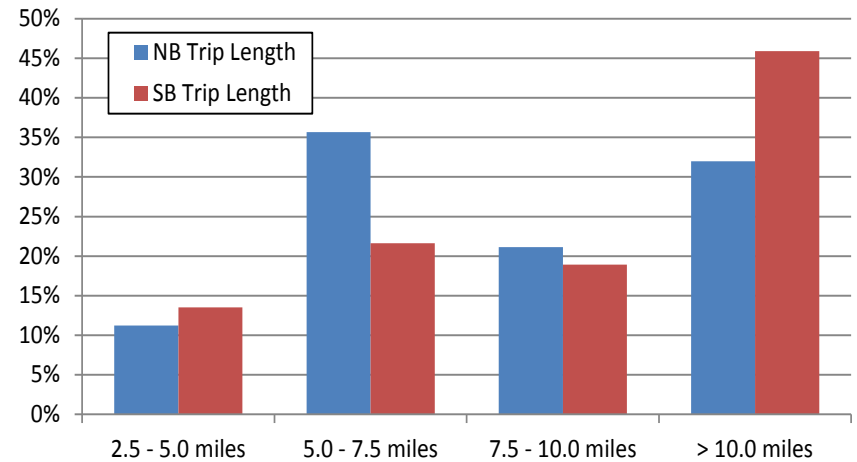


Option A: Trip Length

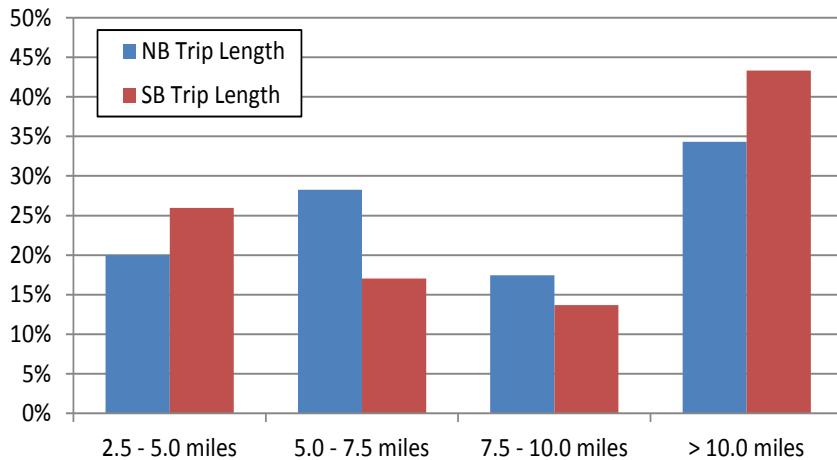
2025 Toll Paying Vehicle Trip Length



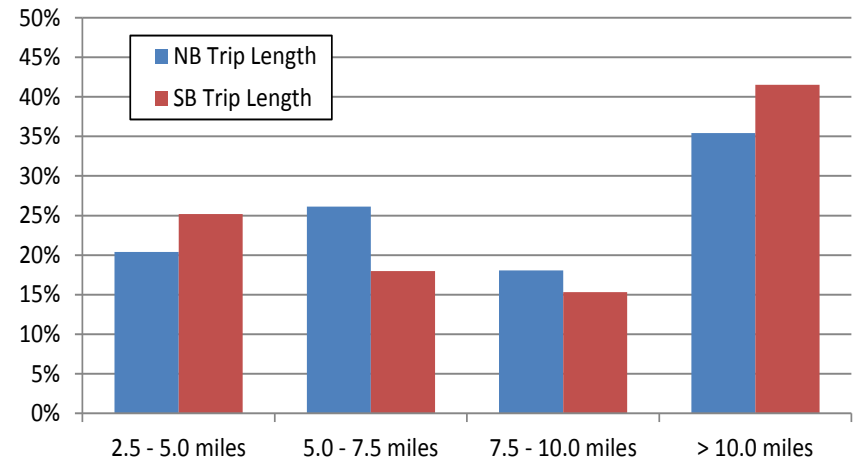
2035 Toll Paying Vehicle Trip Length



2025 Non-Toll Paying Vehicle Trip Length



2035 Non-Toll Paying Vehicle Trip Length



Toll Rates by Segment – 2025

Toll Option A

2025 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.14	\$ 0.36	\$ 1.25	\$ 0.98	\$ 0.63	\$ 0.21	\$ 4.30	\$ 2.15	\$ 3.22	\$ 3.94	\$ 0.26	\$ 0.06
605 NB HOT DC	1.43	\$ 0.21	\$ 0.36	\$ 0.50	\$ 0.47	\$ 0.54	\$ 0.48	\$ 0.78	\$ 0.78	\$ 0.97	\$ 0.94	\$ 0.57	\$ 0.23
22-605	2.02	\$ 0.50	\$ 0.91	\$ 1.11	\$ 1.05	\$ 1.07	\$ 0.85	\$ 1.31	\$ 1.27	\$ 1.41	\$ 1.37	\$ 0.97	\$ 0.34
22 NB HOT DC	0.65	\$ 0.13	\$ 0.19	\$ 0.16	\$ 0.19	\$ 0.18	\$ 0.14	\$ 0.17	\$ 0.15	\$ 0.26	\$ 0.26	\$ 0.16	\$ 0.10
Bolsa-22	3.14	\$ 0.64	\$ 1.10	\$ 1.48	\$ 1.35	\$ 1.35	\$ 1.10	\$ 1.66	\$ 1.60	\$ 1.79	\$ 1.48	\$ 1.26	\$ 0.50
Magnolia-Bolsa	3.11	\$ 0.59	\$ 0.93	\$ 1.40	\$ 1.28	\$ 1.34	\$ 1.03	\$ 1.84	\$ 1.74	\$ 1.77	\$ 1.80	\$ 1.43	\$ 0.50
73-Magnolia	4.24	\$ 0.81	\$ 1.27	\$ 1.82	\$ 1.91	\$ 1.99	\$ 2.12	\$ 3.18	\$ 2.88	\$ 3.14	\$ 3.82	\$ 4.03	\$ 0.68
73 NB HOT DC	0.74	\$ 0.11	\$ 0.19	\$ 0.26	\$ 0.27	\$ 0.32	\$ 0.31	\$ 1.56	\$ 0.67	\$ 0.97	\$ 1.30	\$ 0.89	\$ 0.11
405S NB HOT DC	0.28	\$ 0.06	\$ 0.11	\$ 0.15	\$ 0.17	\$ 0.15	\$ 0.18	\$ 2.50	\$ 0.28	\$ 1.58	\$ 3.05	\$ 1.80	\$ 0.04
Full Length Toll	13.14	\$ 2.74	\$ 4.68	\$ 7.21	\$ 6.74	\$ 6.53	\$ 5.49	\$ 14.79	\$ 9.92	\$ 12.91	\$ 15.46	\$ 9.75	\$ 2.13
Southbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N SB HOT DC	0.36	\$ 0.06	\$ 0.15	\$ 0.24	\$ 1.43	\$ 0.57	\$ 0.21	\$ 0.39	\$ 0.32	\$ 0.66	\$ 0.72	\$ 0.20	\$ 0.06
605 SB HOT DC	1.43	\$ 0.21	\$ 0.67	\$ 0.64	\$ 0.88	\$ 0.68	\$ 0.54	\$ 0.46	\$ 0.50	\$ 0.61	\$ 0.53	\$ 0.43	\$ 0.23
605-22	2.02	\$ 0.39	\$ 0.93	\$ 1.07	\$ 1.31	\$ 1.15	\$ 0.91	\$ 1.01	\$ 1.03	\$ 1.13	\$ 1.09	\$ 0.87	\$ 0.34
22 SB HOT DC	0.65	\$ 0.10	\$ 0.10	\$ 0.21	\$ 0.12	\$ 0.10	\$ 0.14	\$ 0.19	\$ 0.16	\$ 0.18	\$ 0.15	\$ 0.16	\$ 0.10
22-Bolsa	3.14	\$ 0.57	\$ 1.35	\$ 1.26	\$ 1.82	\$ 1.73	\$ 1.22	\$ 1.13	\$ 1.35	\$ 1.44	\$ 1.51	\$ 1.13	\$ 0.50
Bolsa-Magnolia	3.11	\$ 0.53	\$ 1.65	\$ 1.34	\$ 1.87	\$ 1.87	\$ 1.21	\$ 1.24	\$ 1.49	\$ 1.49	\$ 1.40	\$ 1.03	\$ 0.50
Magnolia-73	4.24	\$ 0.67	\$ 2.25	\$ 2.76	\$ 2.97	\$ 2.59	\$ 1.48	\$ 1.70	\$ 1.95	\$ 1.91	\$ 1.74	\$ 1.40	\$ 0.68
73 SB HOT DC	0.74	\$ 0.11	\$ 0.36	\$ 0.56	\$ 0.56	\$ 0.43	\$ 0.24	\$ 0.28	\$ 0.30	\$ 0.28	\$ 0.30	\$ 0.19	\$ 0.11
405S SB HOT DC	0.28	\$ 0.06	\$ 0.17	\$ 0.20	\$ 0.49	\$ 0.24	\$ 0.12	\$ 0.11	\$ 0.14	\$ 0.14	\$ 0.14	\$ 0.10	\$ 0.04
Full Length Toll	13.14	\$ 2.27	\$ 6.49	\$ 6.86	\$ 9.89	\$ 8.14	\$ 5.17	\$ 5.58	\$ 6.29	\$ 6.78	\$ 6.59	\$ 4.72	\$ 2.13

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

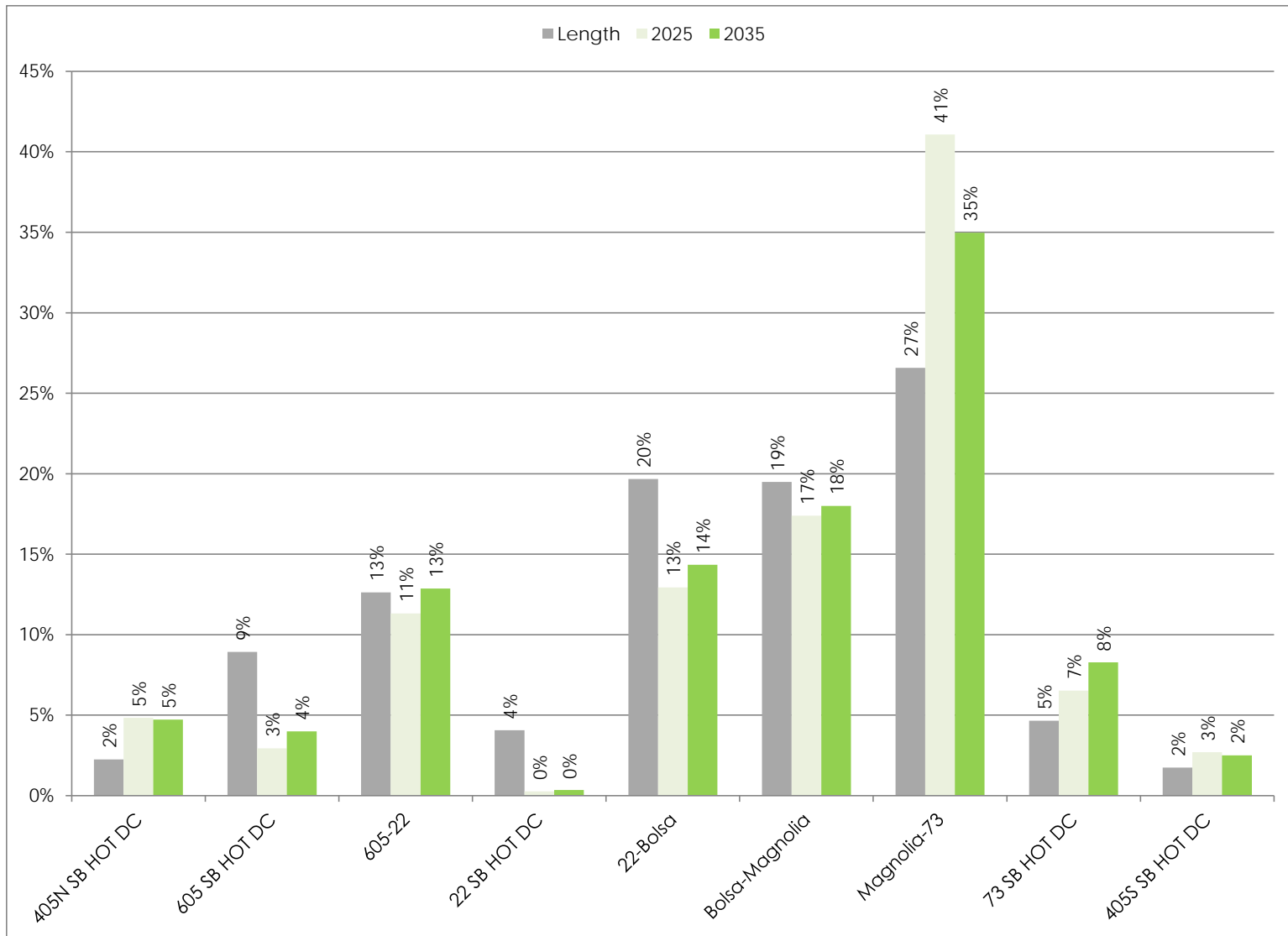
Toll Rates by Segment – 2035

Toll Option A

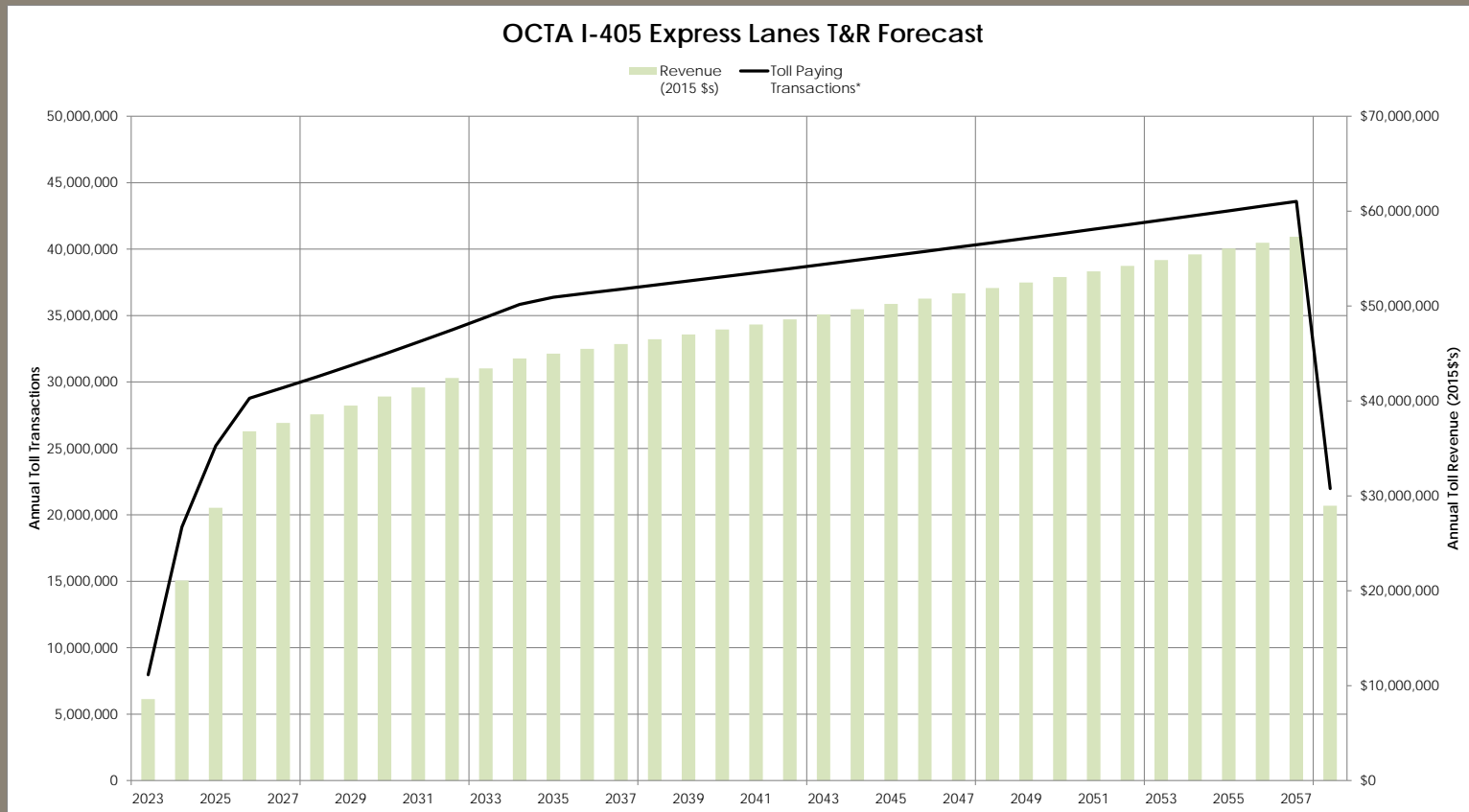
2035 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.14	\$ 0.54	\$ 2.51	\$ 1.79	\$ 0.72	\$ 0.25	\$ 3.94	\$ 2.87	\$ 4.48	\$ 4.66	\$ 0.29	\$ 0.06
605 NB HOT DC	1.43	\$ 0.26	\$ 0.50	\$ 0.71	\$ 0.71	\$ 0.64	\$ 0.53	\$ 0.86	\$ 0.76	\$ 0.86	\$ 0.88	\$ 0.47	\$ 0.21
22-605	2.02	\$ 0.56	\$ 1.03	\$ 1.21	\$ 1.17	\$ 1.13	\$ 0.97	\$ 1.31	\$ 1.21	\$ 1.31	\$ 1.31	\$ 1.01	\$ 0.36
22 NB HOT DC	0.65	\$ 0.16	\$ 0.24	\$ 0.21	\$ 0.21	\$ 0.23	\$ 0.16	\$ 0.16	\$ 0.17	\$ 0.27	\$ 0.24	\$ 0.21	\$ 0.10
Bolsa-22	3.14	\$ 0.63	\$ 1.19	\$ 1.51	\$ 1.41	\$ 1.35	\$ 1.19	\$ 1.73	\$ 1.66	\$ 1.69	\$ 1.51	\$ 1.16	\$ 0.47
Magnolia-Bolsa	3.11	\$ 0.62	\$ 1.03	\$ 1.40	\$ 1.34	\$ 1.34	\$ 1.24	\$ 2.02	\$ 1.56	\$ 1.55	\$ 1.74	\$ 1.31	\$ 0.47
73-Magnolia	4.24	\$ 0.81	\$ 1.31	\$ 1.82	\$ 2.04	\$ 1.99	\$ 2.12	\$ 3.10	\$ 2.84	\$ 3.09	\$ 3.31	\$ 2.97	\$ 0.64
73 NB HOT DC	0.74	\$ 0.11	\$ 0.21	\$ 0.33	\$ 0.36	\$ 0.36	\$ 0.42	\$ 3.16	\$ 1.86	\$ 1.02	\$ 3.34	\$ 4.46	\$ 0.11
405S NB HOT DC	0.28	\$ 0.06	\$ 0.09	\$ 0.12	\$ 0.13	\$ 0.12	\$ 0.14	\$ 1.11	\$ 0.21	\$ 1.57	\$ 2.22	\$ 0.22	\$ 0.05
Full Length Toll	13.14	\$ 2.83	\$ 5.19	\$ 8.57	\$ 7.88	\$ 6.65	\$ 5.92	\$ 13.21	\$ 10.34	\$ 13.69	\$ 14.75	\$ 6.95	\$ 2.05
Southbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N SB HOT DC	0.36	\$ 0.07	\$ 0.15	\$ 0.25	\$ 1.61	\$ 0.32	\$ 0.24	\$ 0.32	\$ 0.54	\$ 1.43	\$ 0.72	\$ 0.19	\$ 0.06
605 SB HOT DC	1.43	\$ 0.29	\$ 0.64	\$ 0.53	\$ 0.83	\$ 0.68	\$ 0.61	\$ 0.57	\$ 0.57	\$ 0.67	\$ 0.68	\$ 0.50	\$ 0.21
605-22	2.02	\$ 0.40	\$ 0.91	\$ 0.95	\$ 1.25	\$ 1.15	\$ 1.01	\$ 1.07	\$ 1.09	\$ 1.17	\$ 1.17	\$ 0.85	\$ 0.36
22 SB HOT DC	0.65	\$ 0.10	\$ 0.10	\$ 0.17	\$ 0.13	\$ 0.10	\$ 0.14	\$ 0.17	\$ 0.16	\$ 0.18	\$ 0.14	\$ 0.16	\$ 0.10
22-Bolsa	3.14	\$ 0.57	\$ 1.35	\$ 1.16	\$ 1.82	\$ 1.73	\$ 1.29	\$ 1.35	\$ 1.41	\$ 1.51	\$ 1.60	\$ 1.04	\$ 0.47
Bolsa-Magnolia	3.11	\$ 0.56	\$ 1.74	\$ 1.24	\$ 1.87	\$ 1.87	\$ 1.34	\$ 1.24	\$ 1.65	\$ 1.49	\$ 1.59	\$ 1.00	\$ 0.47
Magnolia-73	4.24	\$ 0.76	\$ 2.25	\$ 2.46	\$ 2.76	\$ 2.54	\$ 1.70	\$ 1.74	\$ 1.99	\$ 1.91	\$ 1.82	\$ 1.27	\$ 0.64
73 SB HOT DC	0.74	\$ 0.11	\$ 0.45	\$ 1.11	\$ 1.30	\$ 0.63	\$ 0.31	\$ 0.32	\$ 0.35	\$ 0.33	\$ 0.32	\$ 0.24	\$ 0.11
405S SB HOT DC	0.28	\$ 0.06	\$ 0.14	\$ 0.14	\$ 0.20	\$ 0.17	\$ 0.11	\$ 0.11	\$ 0.13	\$ 0.12	\$ 0.13	\$ 0.09	\$ 0.05
Full Length Toll	13.14	\$ 2.42	\$ 6.54	\$ 6.21	\$ 9.51	\$ 7.78	\$ 5.68	\$ 5.83	\$ 6.81	\$ 7.63	\$ 7.03	\$ 4.43	\$ 2.05

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

Revenue Contribution by Section



Traffic and Revenue Forecast

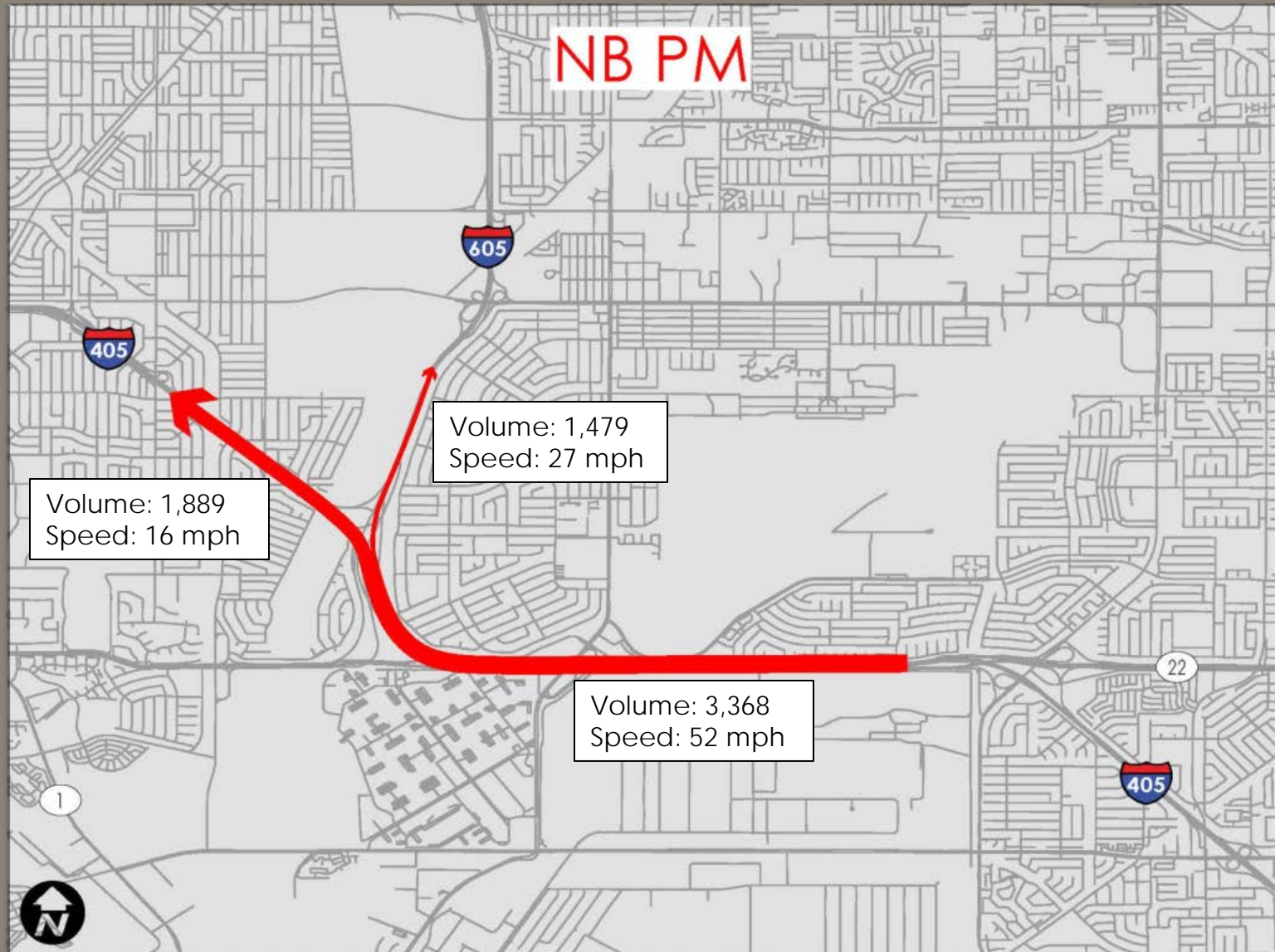


- Annualization of weekday T&R
 - Toll transactions = 290
 - HOV transactions = 350
 - Revenue = 295
- T&R Ramp-up
 - Fully ramped up by the beginning of FY 2026
 - Toll Transactions, FY 2023 = 60%, FY 2024 = 70%, FY 2025 = 90%
 - Revenue, FY 2023 = 50%, FY 2024 = 60%, FY 2025 = 80%

Traffic Operations

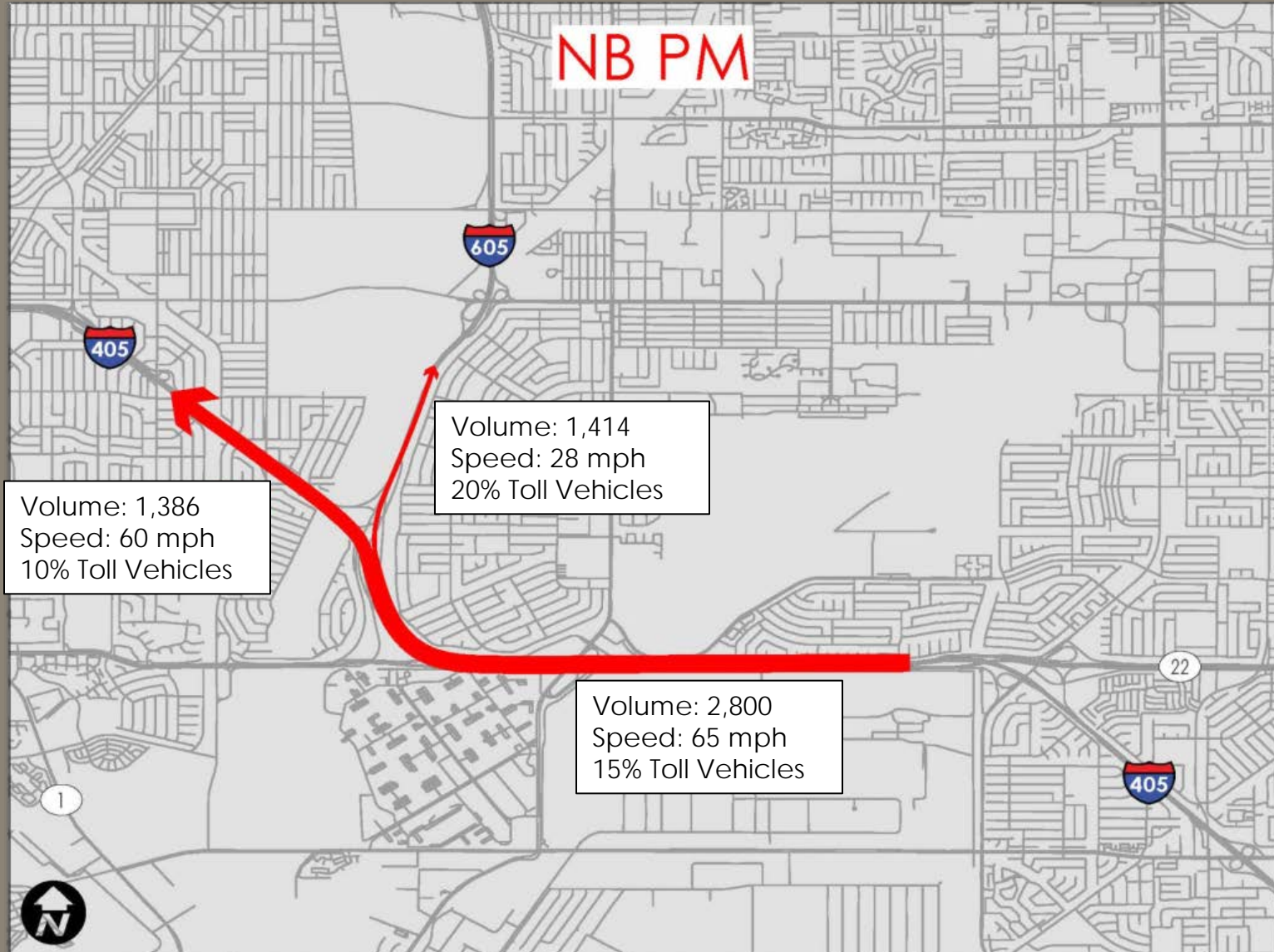
- Concerns about HOV-2+ free during peak periods, particularly at single lane termini
 - Analyzed facility as HOV lane (upper bound)
 - Transponder requirements (sensitivity)
 - Access
- Existing peak hour HOV-2+ counts in 22-605 section exceed 2,700

Facility as HOV Lane



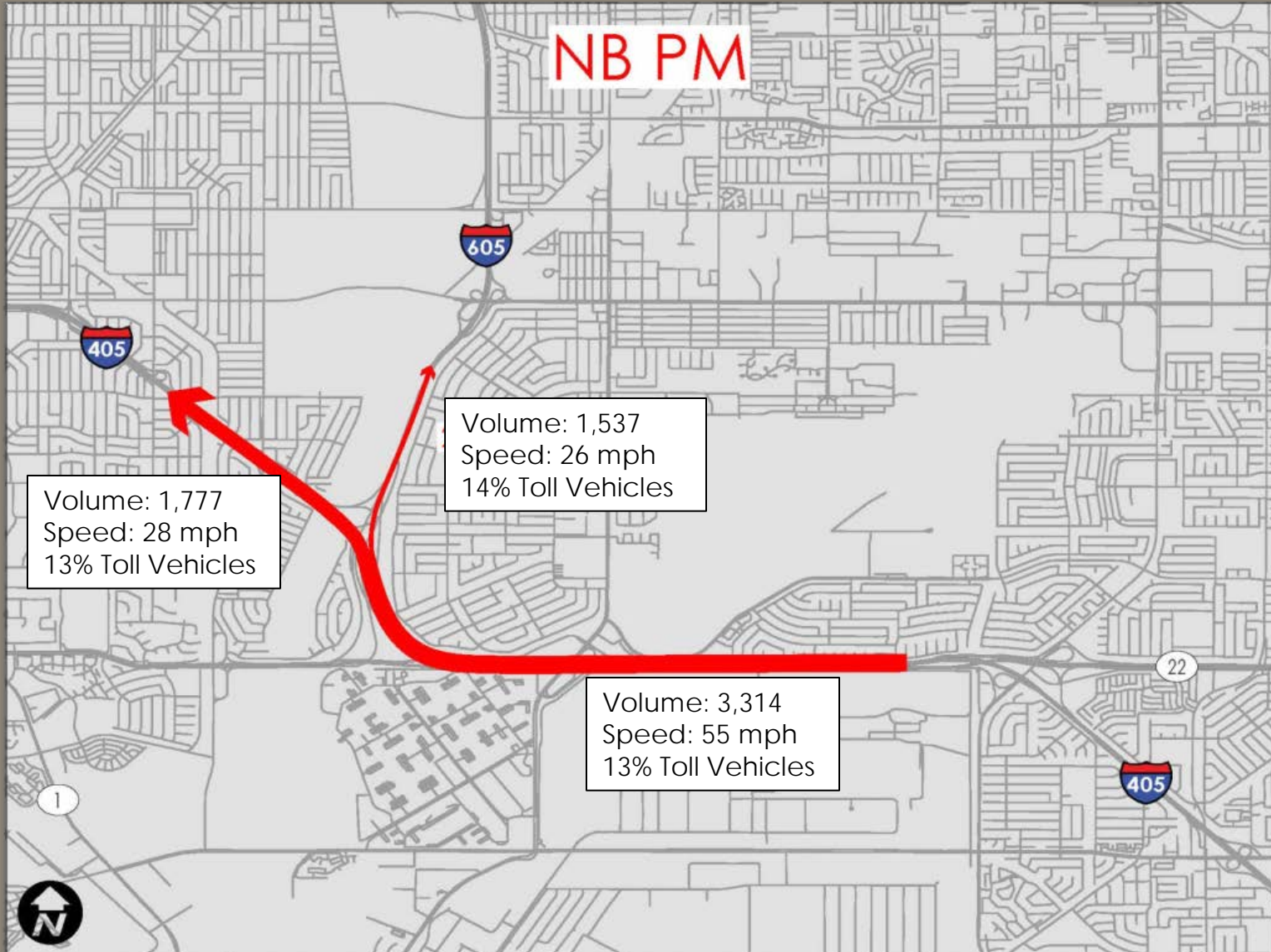
Facility as Express Lane

70% Transponder Share

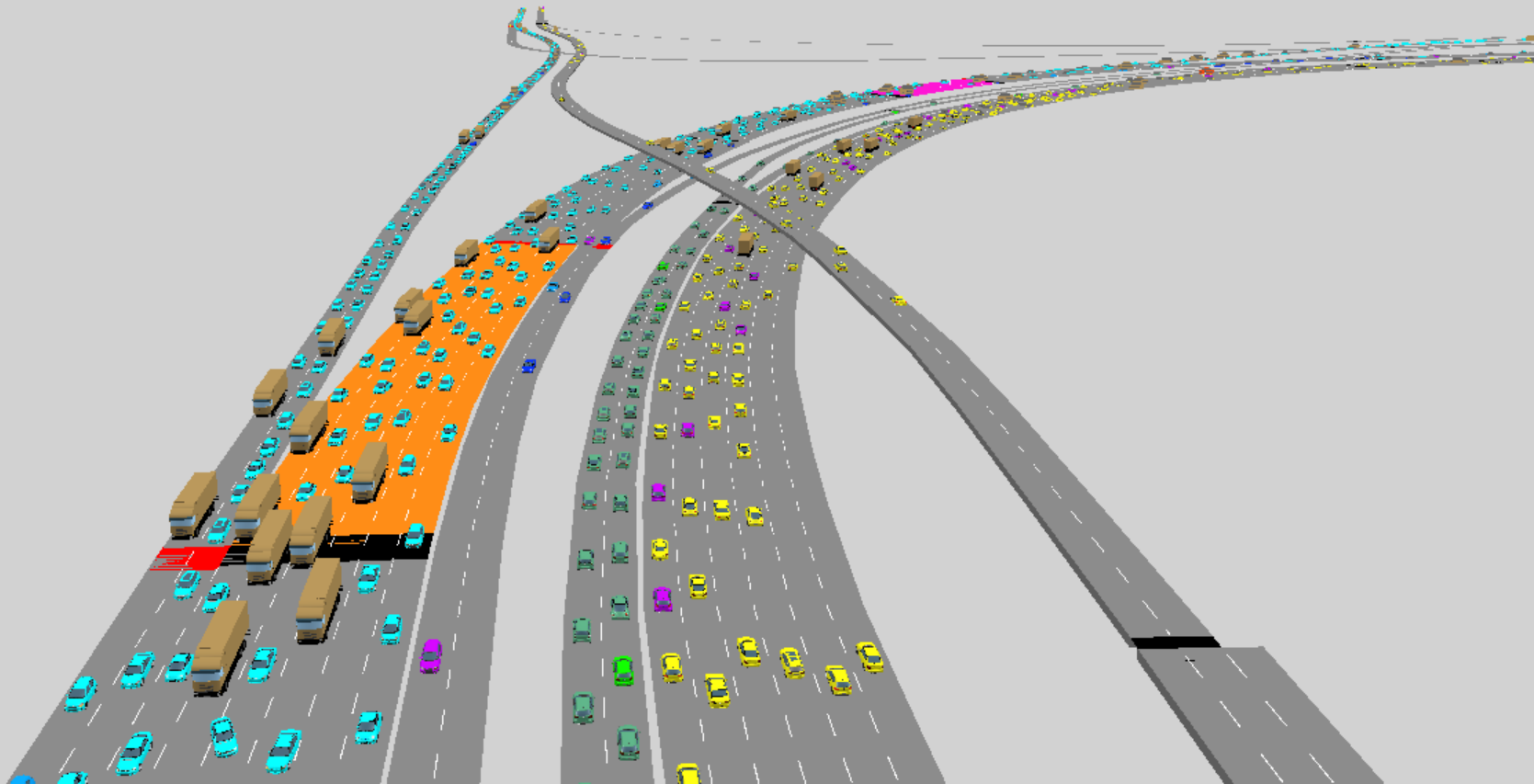


Facility as Express Lane

100% Transponder Share



Option A: Micro-simulation (video)



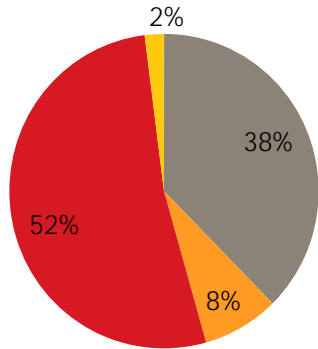
Toll Option B:

HOV-2+ Free Off-Peak

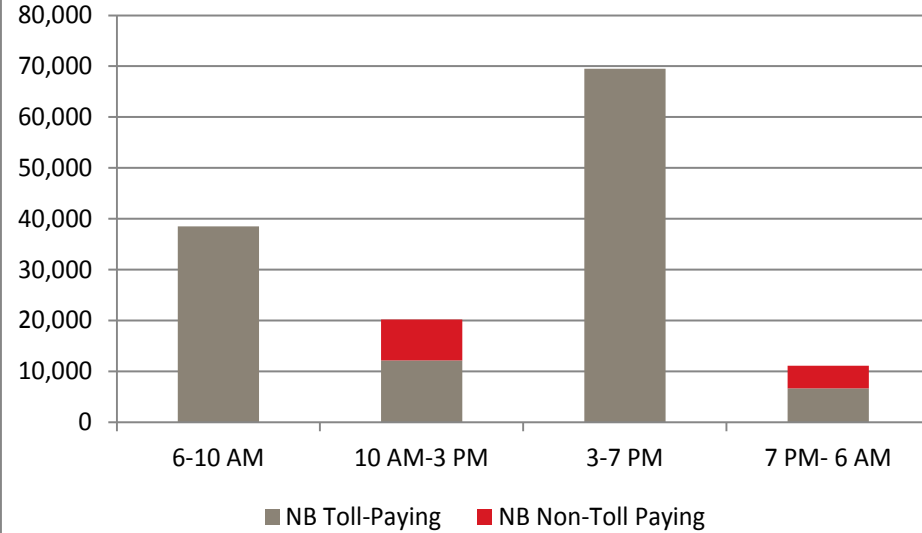
HOV-3+ 50% Toll Peak

Option B: 2025 T&R results

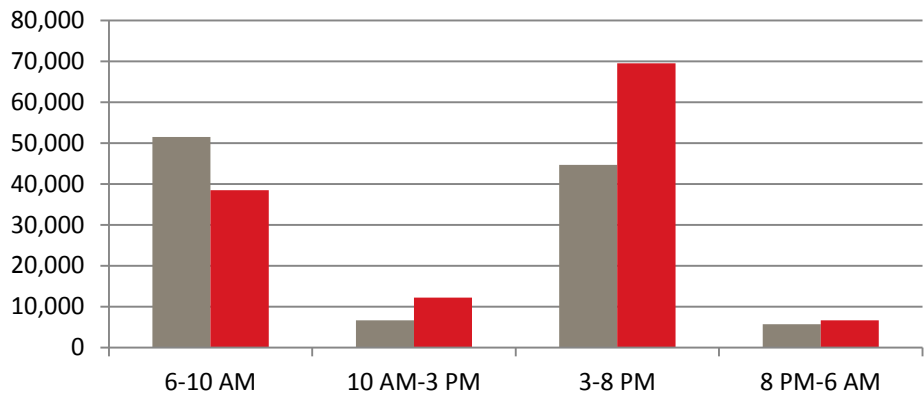
revenue by period



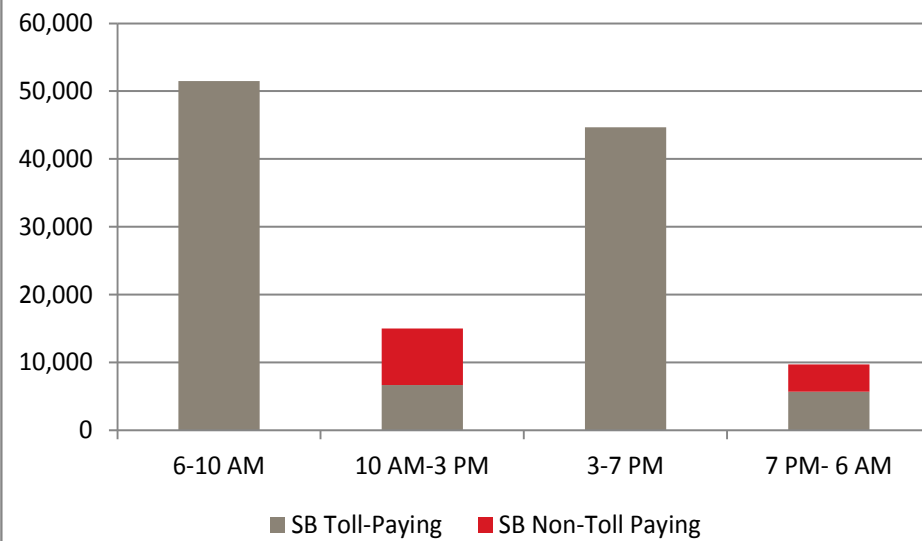
■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM



weekday toll transactions

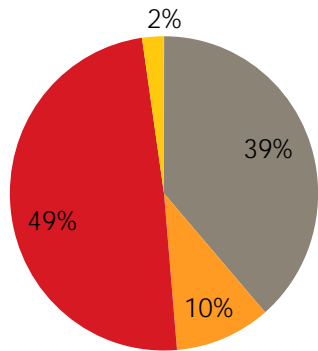


59 ■ Southbound ■ Northbound

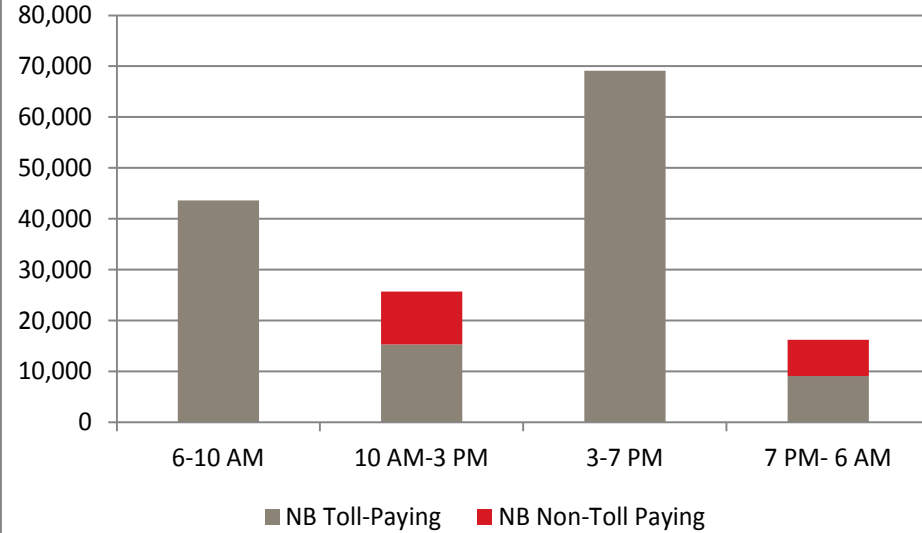


Option B: 2035 T&R results

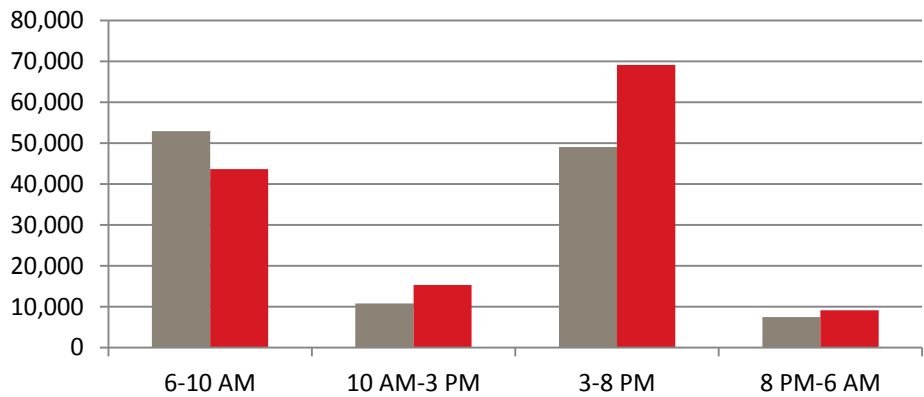
revenue by period



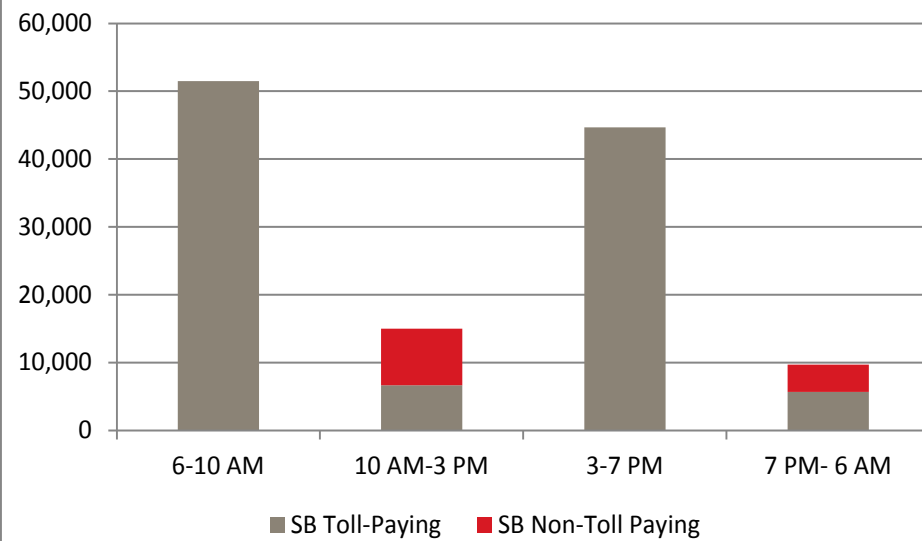
■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM



weekday toll transactions



60 ■ Southbound ■ Northbound



Toll Rates by Segment – 2025

Toll Option B

2025 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.14	\$ 0.23	\$ 0.50	\$ 0.36	\$ 0.27	\$ 0.21	\$ 1.39	\$ 0.61	\$ 1.45	\$ 1.54	\$ 0.33	\$ 0.06
605 NB HOT DC	1.43	\$ 0.21	\$ 0.36	\$ 0.46	\$ 0.43	\$ 0.50	\$ 0.48	\$ 0.57	\$ 0.61	\$ 0.60	\$ 0.71	\$ 0.43	\$ 0.23
22-605	2.02	\$ 0.50	\$ 0.75	\$ 1.01	\$ 0.95	\$ 0.97	\$ 0.85	\$ 1.05	\$ 1.00	\$ 1.05	\$ 1.10	\$ 0.70	\$ 0.34
22 NB HOT DC	0.65	\$ 0.13	\$ 0.19	\$ 0.16	\$ 0.19	\$ 0.18	\$ 0.14	\$ 0.16	\$ 0.13	\$ 0.26	\$ 0.23	\$ 0.16	\$ 0.10
Bolsa-22	3.14	\$ 0.64	\$ 0.94	\$ 1.26	\$ 1.26	\$ 1.19	\$ 1.10	\$ 1.57	\$ 1.48	\$ 1.32	\$ 1.41	\$ 0.94	\$ 0.50
Magnolia-Bolsa	3.11	\$ 0.59	\$ 0.78	\$ 1.15	\$ 1.09	\$ 1.09	\$ 1.03	\$ 1.62	\$ 1.49	\$ 1.50	\$ 1.56	\$ 1.24	\$ 0.50
73-Magnolia	4.24	\$ 0.81	\$ 1.06	\$ 1.48	\$ 1.70	\$ 1.67	\$ 2.12	\$ 2.97	\$ 2.33	\$ 2.30	\$ 2.88	\$ 2.88	\$ 0.68
73 NB HOT DC	0.74	\$ 0.11	\$ 0.19	\$ 0.26	\$ 0.30	\$ 0.31	\$ 0.31	\$ 0.93	\$ 0.48	\$ 0.52	\$ 0.56	\$ 0.93	\$ 0.11
405S NB HOT DC	0.28	\$ 0.06	\$ 0.08	\$ 0.10	\$ 0.12	\$ 0.10	\$ 0.18	\$ 0.20	\$ 0.15	\$ 0.45	\$ 0.56	\$ 0.21	\$ 0.04
Full Length Toll	13.14	\$ 2.74	\$ 3.83	\$ 5.50	\$ 5.46	\$ 5.29	\$ 5.49	\$ 8.80	\$ 7.06	\$ 8.06	\$ 9.05	\$ 6.31	\$ 2.13
Southbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N SB HOT DC	0.36	\$ 0.06	\$ 0.14	\$ 0.20	\$ 0.30	\$ 0.24	\$ 0.21	\$ 0.23	\$ 0.23	\$ 0.29	\$ 0.27	\$ 0.16	\$ 0.06
605 SB HOT DC	1.43	\$ 0.21	\$ 0.53	\$ 0.47	\$ 0.64	\$ 0.57	\$ 0.54	\$ 0.36	\$ 0.43	\$ 0.43	\$ 0.46	\$ 0.36	\$ 0.23
605-22	2.02	\$ 0.39	\$ 0.81	\$ 0.91	\$ 1.11	\$ 1.01	\$ 0.91	\$ 0.91	\$ 0.85	\$ 1.01	\$ 0.91	\$ 0.71	\$ 0.34
22 SB HOT DC	0.65	\$ 0.10	\$ 0.10	\$ 0.19	\$ 0.12	\$ 0.10	\$ 0.14	\$ 0.19	\$ 0.16	\$ 0.18	\$ 0.13	\$ 0.16	\$ 0.10
22-Bolsa	3.14	\$ 0.57	\$ 1.16	\$ 1.10	\$ 1.57	\$ 1.57	\$ 1.22	\$ 1.10	\$ 1.10	\$ 1.26	\$ 1.26	\$ 0.94	\$ 0.50
Bolsa-Magnolia	3.11	\$ 0.53	\$ 1.40	\$ 1.09	\$ 1.62	\$ 1.71	\$ 1.21	\$ 0.93	\$ 1.18	\$ 1.18	\$ 1.24	\$ 0.78	\$ 0.50
Magnolia-73	4.24	\$ 0.67	\$ 1.91	\$ 2.33	\$ 2.54	\$ 2.33	\$ 1.48	\$ 1.27	\$ 1.48	\$ 1.48	\$ 1.40	\$ 1.05	\$ 0.68
73 SB HOT DC	0.74	\$ 0.11	\$ 0.36	\$ 0.50	\$ 0.56	\$ 0.43	\$ 0.24	\$ 0.26	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.19	\$ 0.11
405S SB HOT DC	0.28	\$ 0.06	\$ 0.13	\$ 0.15	\$ 0.20	\$ 0.16	\$ 0.12	\$ 0.08	\$ 0.10	\$ 0.10	\$ 0.08	\$ 0.07	\$ 0.04
Full Length Toll	13.14	\$ 2.27	\$ 5.55	\$ 5.78	\$ 7.35	\$ 7.02	\$ 5.17	\$ 4.53	\$ 4.94	\$ 5.32	\$ 5.16	\$ 3.71	\$ 2.13

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

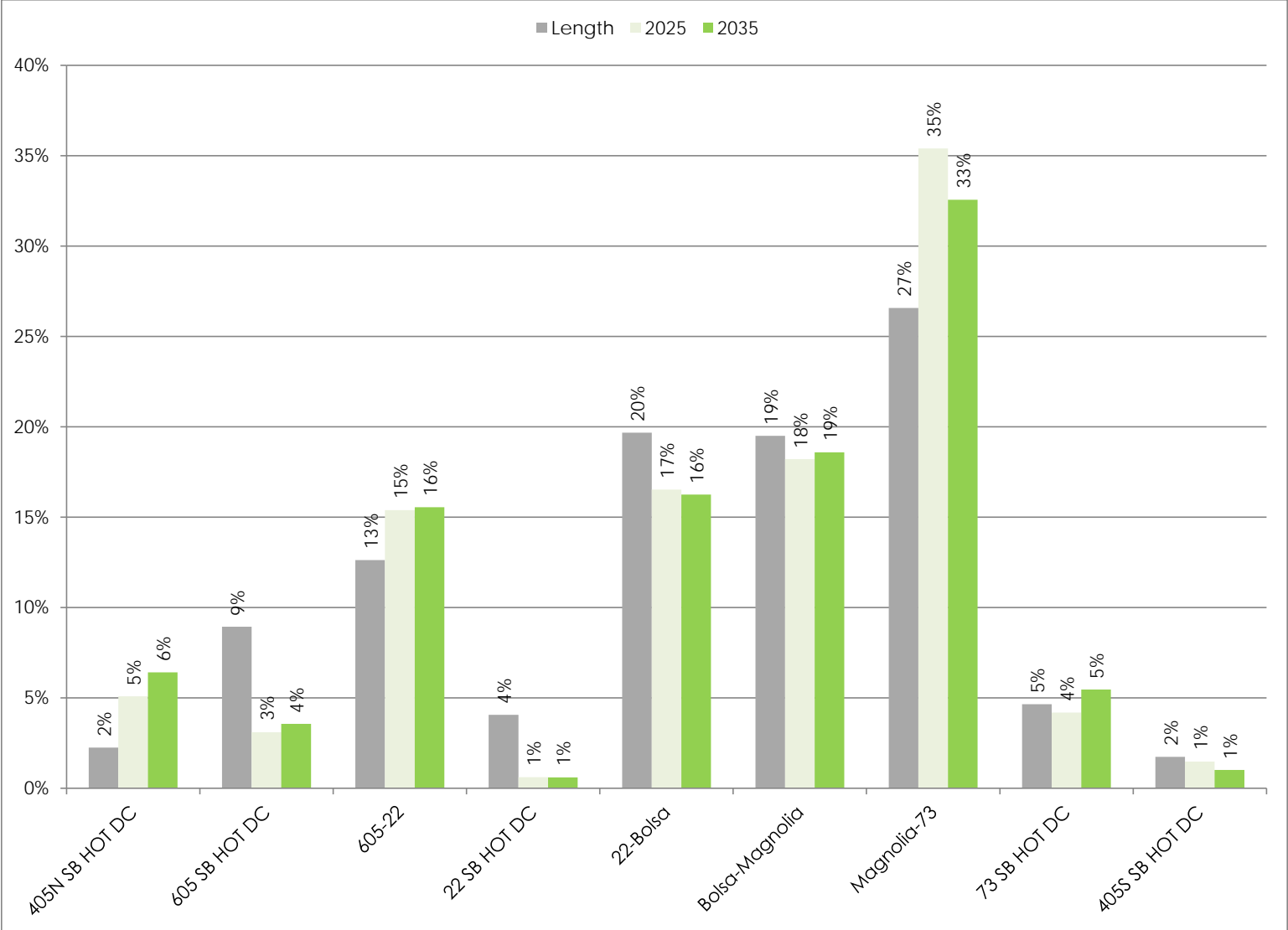
Toll Rates by Segment – 2035

Toll Option B

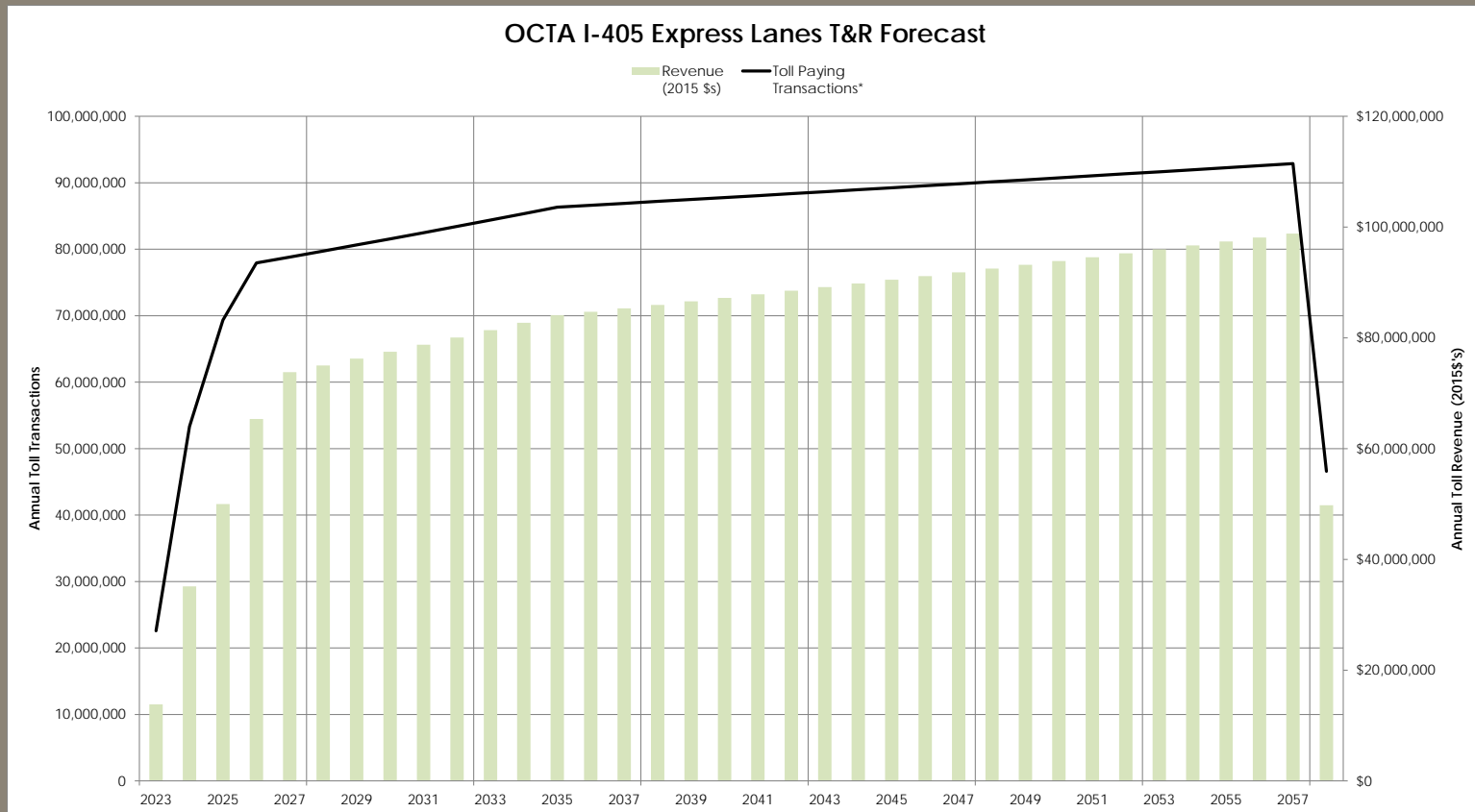
2035 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.14	\$ 0.36	\$ 1.25	\$ 0.79	\$ 0.43	\$ 0.25	\$ 1.79	\$ 1.07	\$ 2.44	\$ 2.26	\$ 0.31	\$ 0.06
605 NB HOT DC	1.43	\$ 0.26	\$ 0.50	\$ 0.64	\$ 0.57	\$ 0.60	\$ 0.53	\$ 0.60	\$ 0.57	\$ 0.54	\$ 0.67	\$ 0.43	\$ 0.21
22-605	2.02	\$ 0.56	\$ 1.01	\$ 1.11	\$ 1.07	\$ 1.05	\$ 0.97	\$ 1.11	\$ 1.05	\$ 1.00	\$ 1.10	\$ 0.85	\$ 0.36
22 NB HOT DC	0.65	\$ 0.16	\$ 0.23	\$ 0.19	\$ 0.23	\$ 0.23	\$ 0.16	\$ 0.16	\$ 0.17	\$ 0.27	\$ 0.24	\$ 0.19	\$ 0.10
Bolsa-22	3.14	\$ 0.63	\$ 1.10	\$ 1.41	\$ 1.26	\$ 1.26	\$ 1.19	\$ 1.41	\$ 1.41	\$ 1.19	\$ 1.32	\$ 1.10	\$ 0.47
Magnolia-Bolsa	3.11	\$ 0.62	\$ 0.93	\$ 1.24	\$ 1.24	\$ 1.09	\$ 1.24	\$ 1.71	\$ 1.34	\$ 1.44	\$ 1.56	\$ 1.24	\$ 0.47
73-Magnolia	4.24	\$ 0.81	\$ 1.19	\$ 1.70	\$ 1.70	\$ 1.70	\$ 2.12	\$ 2.76	\$ 2.33	\$ 2.30	\$ 2.88	\$ 2.54	\$ 0.64
73 NB HOT DC	0.74	\$ 0.11	\$ 0.22	\$ 0.31	\$ 0.33	\$ 0.37	\$ 0.42	\$ 1.34	\$ 0.63	\$ 0.54	\$ 0.93	\$ 1.86	\$ 0.11
405S NB HOT DC	0.28	\$ 0.06	\$ 0.07	\$ 0.11	\$ 0.10	\$ 0.10	\$ 0.14	\$ 0.19	\$ 0.14	\$ 0.46	\$ 0.24	\$ 0.13	\$ 0.05
Full Length Toll	13.14	\$ 2.83	\$ 4.66	\$ 6.82	\$ 6.16	\$ 5.62	\$ 5.92	\$ 8.97	\$ 7.34	\$ 8.82	\$ 9.35	\$ 6.18	\$ 2.05
Southbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N SB HOT DC	0.36	\$ 0.07	\$ 0.14	\$ 0.20	\$ 0.30	\$ 0.23	\$ 0.24	\$ 0.24	\$ 0.25	\$ 0.64	\$ 0.25	\$ 0.16	\$ 0.06
605 SB HOT DC	1.43	\$ 0.29	\$ 0.57	\$ 0.43	\$ 0.64	\$ 0.61	\$ 0.61	\$ 0.53	\$ 0.50	\$ 0.50	\$ 0.61	\$ 0.46	\$ 0.21
605-22	2.02	\$ 0.40	\$ 0.85	\$ 0.91	\$ 1.11	\$ 1.01	\$ 1.01	\$ 0.91	\$ 0.97	\$ 1.07	\$ 1.01	\$ 0.81	\$ 0.36
22 SB HOT DC	0.65	\$ 0.10	\$ 0.10	\$ 0.17	\$ 0.13	\$ 0.10	\$ 0.14	\$ 0.16	\$ 0.13	\$ 0.19	\$ 0.13	\$ 0.14	\$ 0.10
22-Bolsa	3.14	\$ 0.57	\$ 1.26	\$ 1.10	\$ 1.57	\$ 1.51	\$ 1.29	\$ 1.26	\$ 1.32	\$ 1.41	\$ 1.41	\$ 1.04	\$ 0.47
Bolsa-Magnolia	3.11	\$ 0.56	\$ 1.62	\$ 1.09	\$ 1.68	\$ 1.71	\$ 1.34	\$ 1.15	\$ 1.40	\$ 1.40	\$ 1.40	\$ 0.93	\$ 0.47
Magnolia-73	4.24	\$ 0.76	\$ 2.12	\$ 2.25	\$ 2.54	\$ 2.42	\$ 1.70	\$ 1.48	\$ 1.70	\$ 1.61	\$ 1.48	\$ 1.19	\$ 0.64
73 SB HOT DC	0.74	\$ 0.11	\$ 0.41	\$ 0.59	\$ 0.63	\$ 0.59	\$ 0.31	\$ 0.30	\$ 0.31	\$ 0.30	\$ 0.33	\$ 0.22	\$ 0.11
405S SB HOT DC	0.28	\$ 0.06	\$ 0.12	\$ 0.12	\$ 0.15	\$ 0.14	\$ 0.11	\$ 0.10	\$ 0.11	\$ 0.10	\$ 0.10	\$ 0.07	\$ 0.05
Full Length Toll	13.14	\$ 2.42	\$ 6.11	\$ 5.66	\$ 7.36	\$ 7.02	\$ 5.68	\$ 5.14	\$ 5.74	\$ 6.23	\$ 5.65	\$ 4.19	\$ 2.05

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

Revenue Contribution by Section



Traffic and Revenue Forecast



- Annualization of weekday T&R
 - Toll transactions = 325
 - HOV transactions = 350
 - Revenue = 310
- T&R Ramp-up
 - Fully ramped up by end of FY 2026
 - Toll Transactions, FY 2023 = 60%, FY 2024 = 70%, FY 2025 = 90%
 - Revenue, FY 2023 = 40%, FY 2024 = 50%, FY 2025 = 70%, FY 2026 = 90%

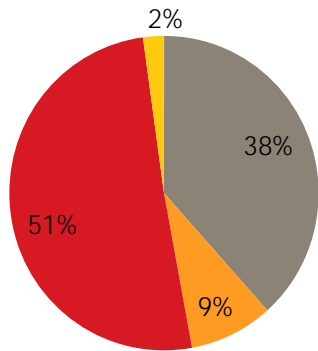
Toll Option B1:

HOV-2+ Free Off-Peak

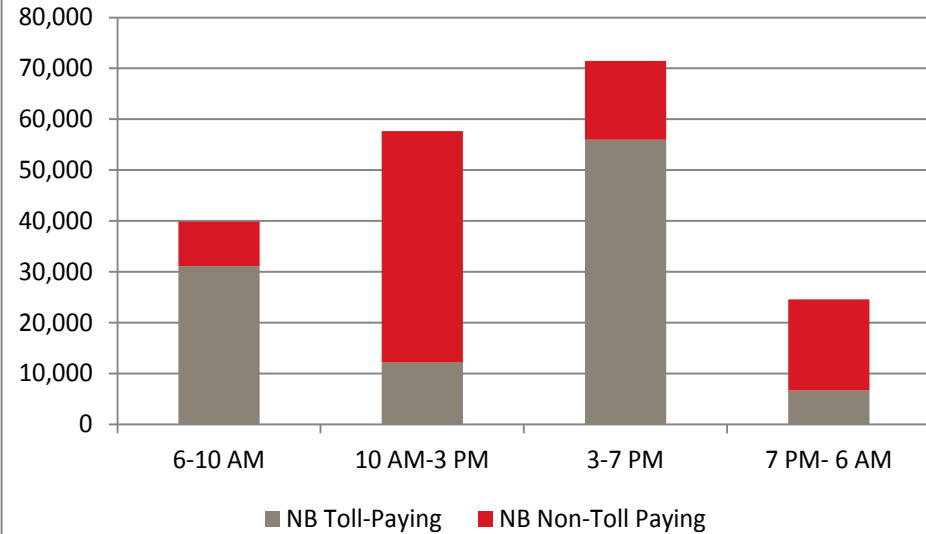
HOV-3+ Free Peak

Option B1: 2025 T&R results

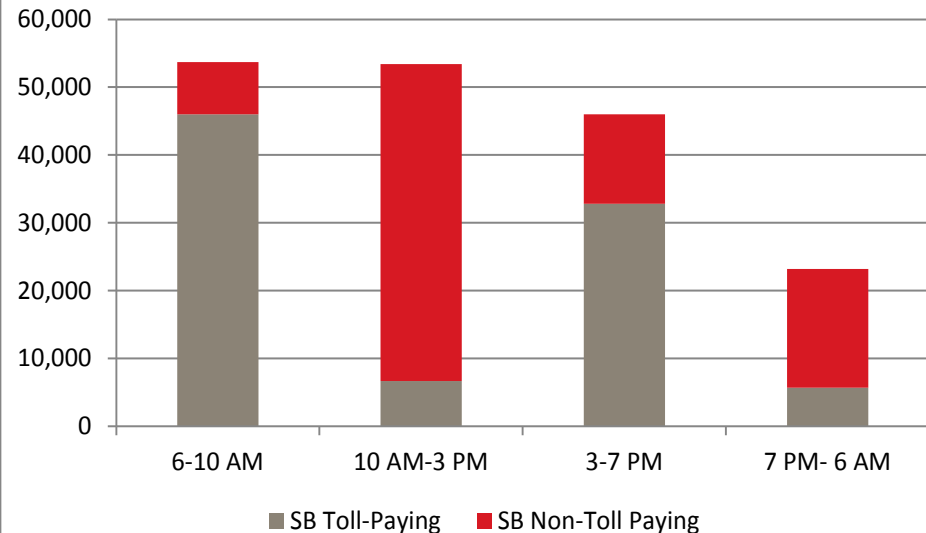
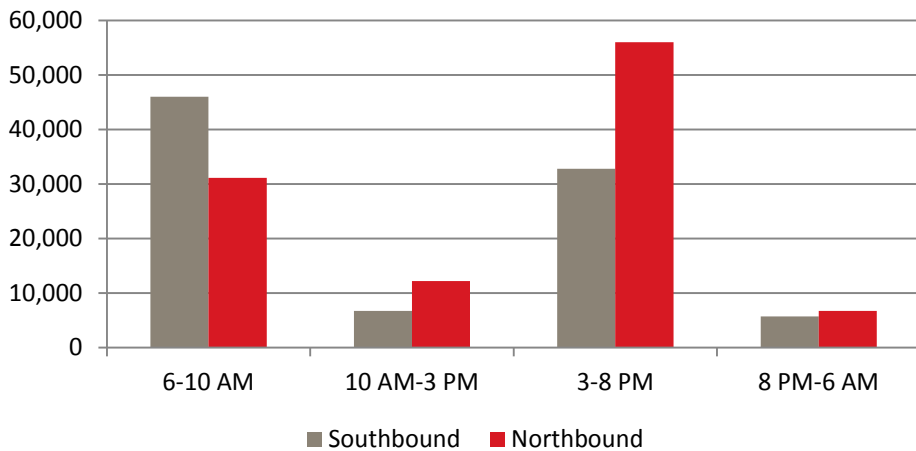
revenue by period



■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM

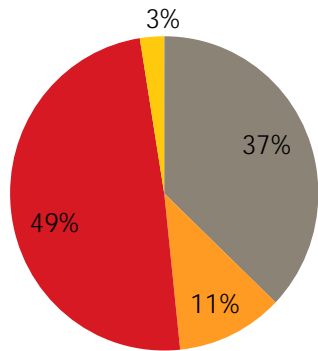


weekday toll transactions

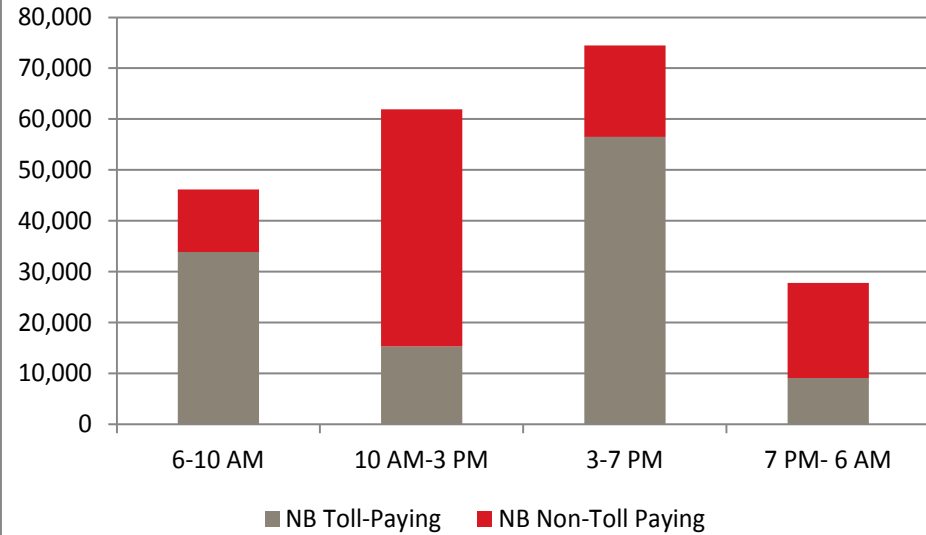


Option B1: 2035 T&R results

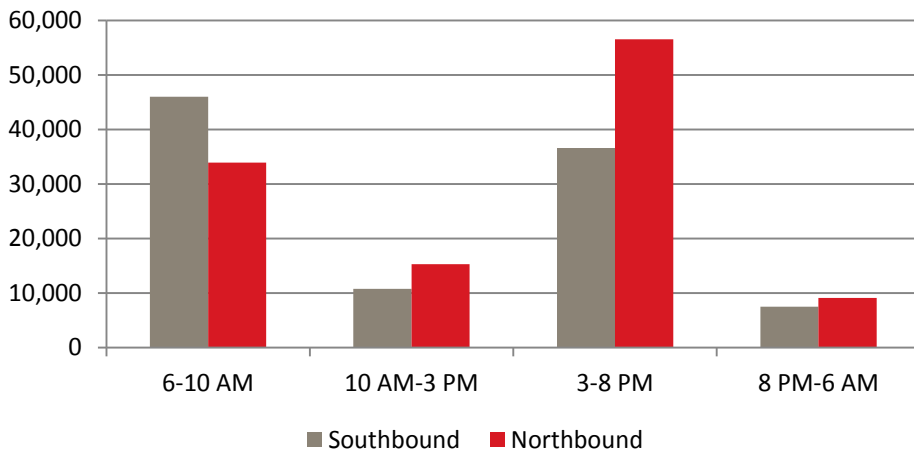
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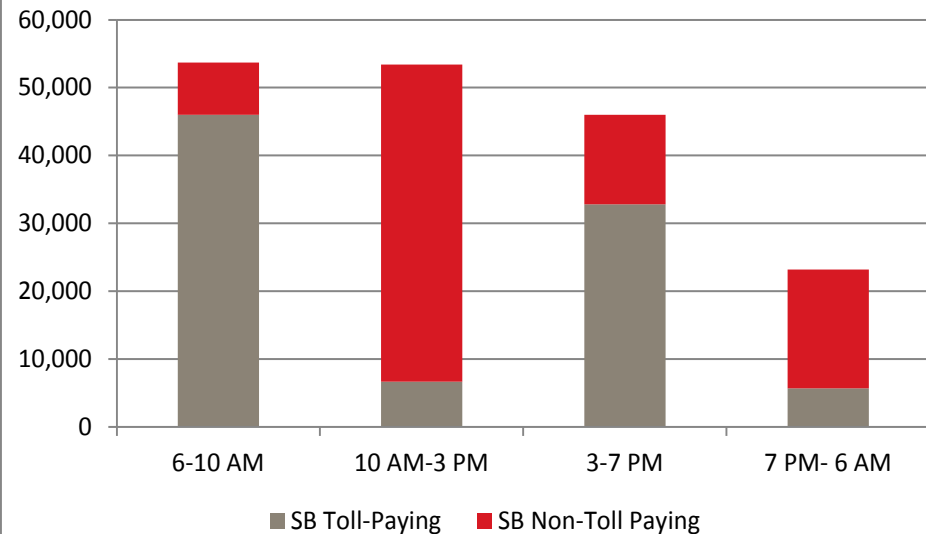
■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM



weekday toll transactions



■ Southbound ■ Northbound



■ SB Toll-Paying ■ SB Non-Toll Paying

Toll Rates by Segment – 2025

Toll Option B1

2025 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.14	\$ 0.23	\$ 0.50	\$ 0.39	\$ 0.29	\$ 0.21	\$ 1.70	\$ 0.72	\$ 1.88	\$ 1.88	\$ 0.20	\$ 0.06
605 NB HOT DC	1.43	\$ 0.21	\$ 0.36	\$ 0.50	\$ 0.46	\$ 0.50	\$ 0.48	\$ 0.68	\$ 0.61	\$ 0.71	\$ 0.78	\$ 0.43	\$ 0.23
22-605	2.02	\$ 0.50	\$ 0.87	\$ 1.01	\$ 1.01	\$ 1.01	\$ 0.85	\$ 1.15	\$ 1.11	\$ 1.21	\$ 1.25	\$ 0.81	\$ 0.34
22 NB HOT DC	0.65	\$ 0.13	\$ 0.19	\$ 0.16	\$ 0.19	\$ 0.18	\$ 0.14	\$ 0.16	\$ 0.14	\$ 0.26	\$ 0.26	\$ 0.16	\$ 0.10
Bolsa-22	3.14	\$ 0.64	\$ 0.94	\$ 1.26	\$ 1.26	\$ 1.32	\$ 1.10	\$ 1.60	\$ 1.57	\$ 1.32	\$ 1.41	\$ 1.04	\$ 0.50
Magnolia-Bolsa	3.11	\$ 0.59	\$ 0.78	\$ 1.15	\$ 1.09	\$ 1.18	\$ 1.03	\$ 1.71	\$ 1.56	\$ 1.56	\$ 1.56	\$ 1.31	\$ 0.50
73-Magnolia	4.24	\$ 0.81	\$ 1.06	\$ 1.70	\$ 1.70	\$ 1.82	\$ 2.12	\$ 3.05	\$ 2.46	\$ 2.30	\$ 3.05	\$ 2.97	\$ 0.68
73 NB HOT DC	0.74	\$ 0.11	\$ 0.19	\$ 0.26	\$ 0.30	\$ 0.31	\$ 0.31	\$ 1.04	\$ 0.54	\$ 0.52	\$ 0.59	\$ 1.49	\$ 0.11
405S NB HOT DC	0.28	\$ 0.06	\$ 0.08	\$ 0.11	\$ 0.12	\$ 0.12	\$ 0.18	\$ 0.35	\$ 0.17	\$ 0.45	\$ 0.83	\$ 0.25	\$ 0.04
Full Length Toll	13.14	\$ 2.74	\$ 3.96	\$ 5.72	\$ 5.56	\$ 5.74	\$ 5.49	\$ 9.56	\$ 7.58	\$ 8.72	\$ 9.99	\$ 6.57	\$ 2.13
Southbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N SB HOT DC	0.36	\$ 0.06	\$ 0.14	\$ 0.21	\$ 0.36	\$ 0.25	\$ 0.21	\$ 0.26	\$ 0.25	\$ 0.36	\$ 0.27	\$ 0.16	\$ 0.06
605 SB HOT DC	1.43	\$ 0.21	\$ 0.61	\$ 0.57	\$ 0.64	\$ 0.57	\$ 0.54	\$ 0.36	\$ 0.43	\$ 0.50	\$ 0.54	\$ 0.36	\$ 0.23
605-22	2.02	\$ 0.39	\$ 0.81	\$ 0.91	\$ 1.19	\$ 1.05	\$ 0.91	\$ 0.91	\$ 0.93	\$ 1.01	\$ 0.97	\$ 0.71	\$ 0.34
22 SB HOT DC	0.65	\$ 0.10	\$ 0.10	\$ 0.19	\$ 0.12	\$ 0.10	\$ 0.14	\$ 0.19	\$ 0.16	\$ 0.18	\$ 0.13	\$ 0.16	\$ 0.10
22-Bolsa	3.14	\$ 0.57	\$ 1.16	\$ 1.10	\$ 1.66	\$ 1.63	\$ 1.22	\$ 1.10	\$ 1.26	\$ 1.26	\$ 1.41	\$ 0.94	\$ 0.50
Bolsa-Magnolia	3.11	\$ 0.53	\$ 1.49	\$ 1.15	\$ 1.71	\$ 1.77	\$ 1.21	\$ 1.00	\$ 1.34	\$ 1.18	\$ 1.34	\$ 0.78	\$ 0.50
Magnolia-73	4.24	\$ 0.67	\$ 1.91	\$ 2.46	\$ 2.67	\$ 2.42	\$ 1.48	\$ 1.36	\$ 1.70	\$ 1.48	\$ 1.48	\$ 1.05	\$ 0.68
73 SB HOT DC	0.74	\$ 0.11	\$ 0.37	\$ 0.48	\$ 0.52	\$ 0.46	\$ 0.24	\$ 0.26	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.19	\$ 0.11
405S SB HOT DC	0.28	\$ 0.06	\$ 0.14	\$ 0.16	\$ 0.21	\$ 0.18	\$ 0.12	\$ 0.08	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.07	\$ 0.04
Full Length Toll	13.14	\$ 2.27	\$ 5.65	\$ 5.98	\$ 7.80	\$ 7.31	\$ 5.17	\$ 4.70	\$ 5.57	\$ 5.39	\$ 5.58	\$ 3.71	\$ 2.13

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

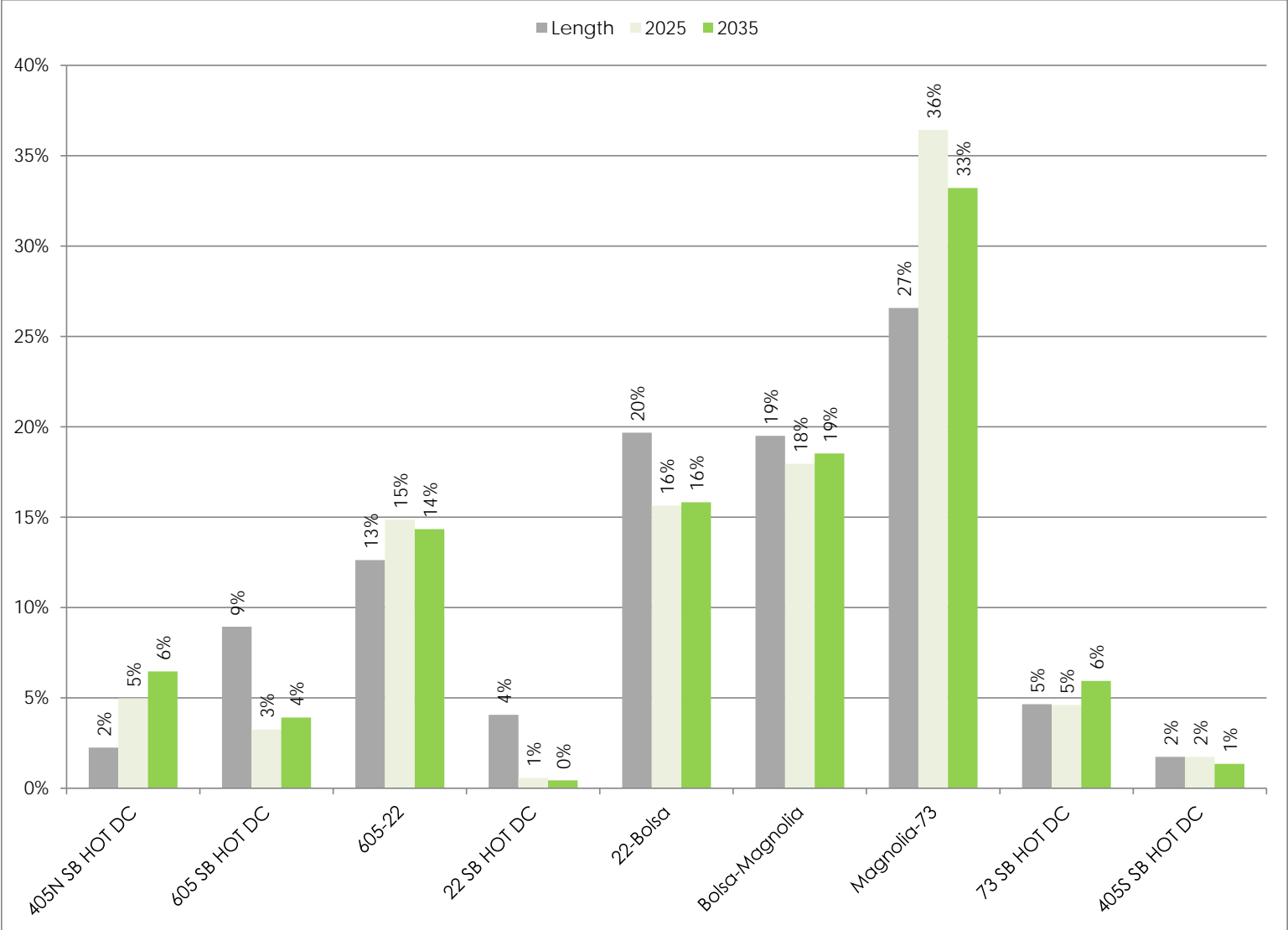
Toll Rates by Segment – 2035

Toll Option B1

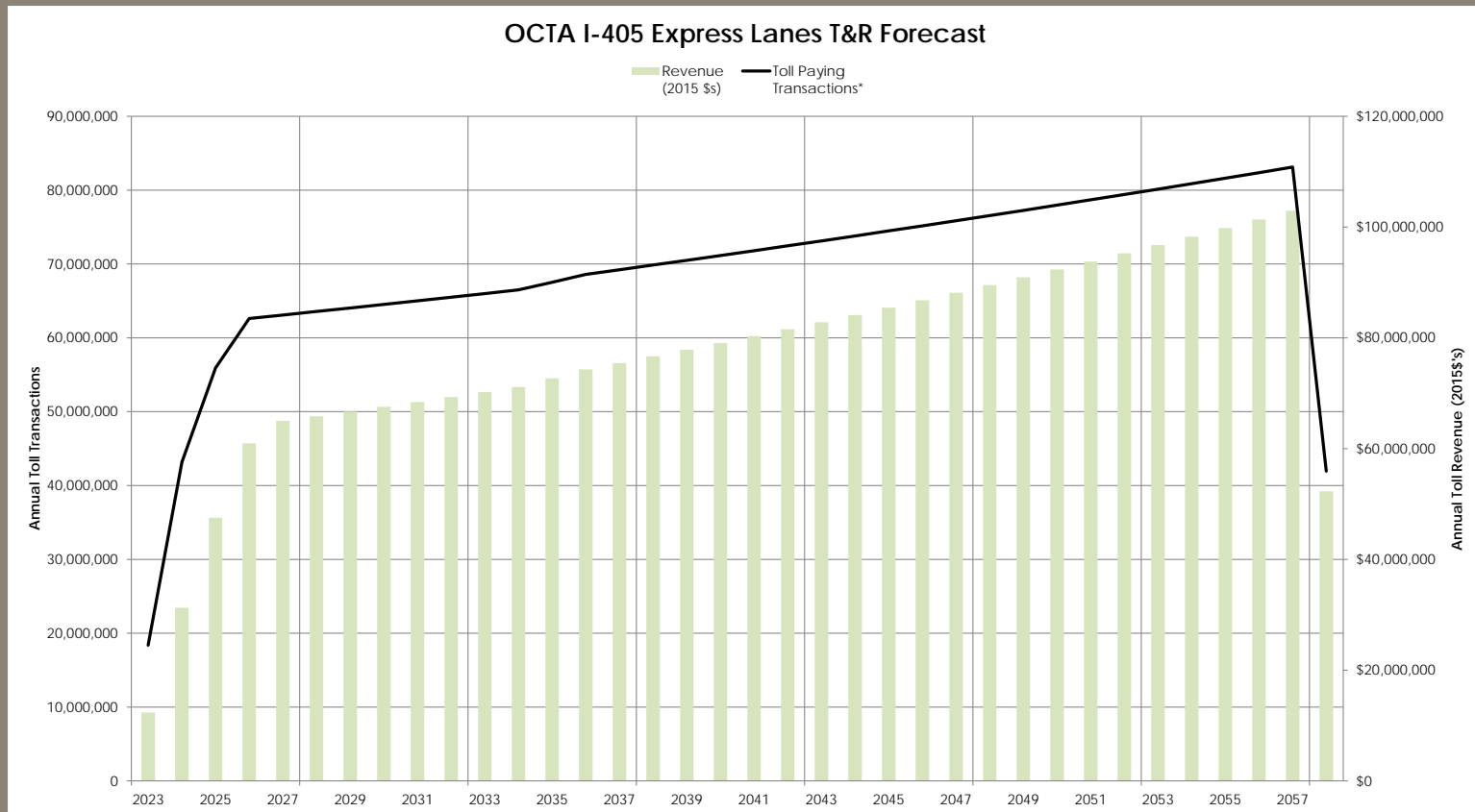
2035 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.14	\$ 0.54	\$ 1.43	\$ 0.90	\$ 0.90	\$ 0.25	\$ 2.69	\$ 1.79	\$ 2.87	\$ 2.60	\$ 0.32	\$ 0.06
605 NB HOT DC	1.43	\$ 0.26	\$ 0.47	\$ 0.66	\$ 0.64	\$ 0.64	\$ 0.53	\$ 0.74	\$ 0.64	\$ 0.71	\$ 0.78	\$ 0.44	\$ 0.21
22-605	2.02	\$ 0.56	\$ 0.97	\$ 1.13	\$ 1.07	\$ 1.05	\$ 0.97	\$ 1.13	\$ 1.17	\$ 1.13	\$ 1.21	\$ 0.85	\$ 0.36
22 NB HOT DC	0.65	\$ 0.16	\$ 0.24	\$ 0.19	\$ 0.20	\$ 0.21	\$ 0.16	\$ 0.16	\$ 0.17	\$ 0.27	\$ 0.24	\$ 0.19	\$ 0.10
Bolsa-22	3.14	\$ 0.63	\$ 1.10	\$ 1.44	\$ 1.35	\$ 1.35	\$ 1.19	\$ 1.51	\$ 1.51	\$ 1.29	\$ 1.41	\$ 1.10	\$ 0.47
Magnolia-Bolsa	3.11	\$ 0.62	\$ 0.93	\$ 1.34	\$ 1.31	\$ 1.18	\$ 1.24	\$ 1.62	\$ 1.49	\$ 1.59	\$ 1.62	\$ 1.24	\$ 0.47
73-Magnolia	4.24	\$ 0.81	\$ 1.19	\$ 1.82	\$ 1.82	\$ 1.82	\$ 2.12	\$ 2.76	\$ 2.42	\$ 2.42	\$ 2.97	\$ 2.67	\$ 0.64
73 NB HOT DC	0.74	\$ 0.11	\$ 0.20	\$ 0.32	\$ 0.33	\$ 0.36	\$ 0.42	\$ 1.56	\$ 0.74	\$ 0.55	\$ 1.11	\$ 2.04	\$ 0.11
405S NB HOT DC	0.28	\$ 0.06	\$ 0.08	\$ 0.11	\$ 0.12	\$ 0.11	\$ 0.14	\$ 0.49	\$ 0.17	\$ 0.46	\$ 0.69	\$ 0.19	\$ 0.05
Full Length Toll	13.14	\$ 2.83	\$ 4.81	\$ 7.28	\$ 6.56	\$ 6.41	\$ 5.92	\$ 10.18	\$ 8.54	\$ 9.76	\$ 10.50	\$ 6.38	\$ 2.05
Southbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N SB HOT DC	0.36	\$ 0.07	\$ 0.14	\$ 0.20	\$ 0.72	\$ 0.28	\$ 0.24	\$ 0.27	\$ 0.29	\$ 0.90	\$ 0.36	\$ 0.16	\$ 0.06
605 SB HOT DC	1.43	\$ 0.29	\$ 0.60	\$ 0.47	\$ 0.64	\$ 0.63	\$ 0.61	\$ 0.54	\$ 0.54	\$ 0.54	\$ 0.63	\$ 0.47	\$ 0.21
605-22	2.02	\$ 0.40	\$ 0.85	\$ 0.93	\$ 1.07	\$ 1.07	\$ 1.01	\$ 0.97	\$ 1.03	\$ 1.07	\$ 1.07	\$ 0.81	\$ 0.36
22 SB HOT DC	0.65	\$ 0.10	\$ 0.10	\$ 0.17	\$ 0.12	\$ 0.10	\$ 0.14	\$ 0.17	\$ 0.14	\$ 0.17	\$ 0.13	\$ 0.15	\$ 0.10
22-Bolsa	3.14	\$ 0.57	\$ 1.26	\$ 1.19	\$ 1.60	\$ 1.60	\$ 1.29	\$ 1.29	\$ 1.41	\$ 1.44	\$ 1.35	\$ 1.04	\$ 0.47
Bolsa-Magnolia	3.11	\$ 0.56	\$ 1.68	\$ 1.18	\$ 1.65	\$ 1.87	\$ 1.34	\$ 1.24	\$ 1.49	\$ 1.37	\$ 1.43	\$ 0.93	\$ 0.47
Magnolia-73	4.24	\$ 0.76	\$ 2.21	\$ 2.38	\$ 2.63	\$ 2.50	\$ 1.70	\$ 1.61	\$ 1.82	\$ 1.70	\$ 1.70	\$ 1.19	\$ 0.64
73 SB HOT DC	0.74	\$ 0.11	\$ 0.41	\$ 0.59	\$ 0.67	\$ 0.56	\$ 0.31	\$ 0.30	\$ 0.32	\$ 0.30	\$ 0.30	\$ 0.21	\$ 0.11
405S SB HOT DC	0.28	\$ 0.06	\$ 0.14	\$ 0.14	\$ 0.17	\$ 0.16	\$ 0.11	\$ 0.10	\$ 0.12	\$ 0.11	\$ 0.11	\$ 0.08	\$ 0.05
Full Length Toll	13.14	\$ 2.42	\$ 6.28	\$ 6.02	\$ 7.84	\$ 7.48	\$ 5.68	\$ 5.48	\$ 6.16	\$ 6.58	\$ 6.02	\$ 4.21	\$ 2.05

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

Revenue Contribution by Section



Traffic and Revenue Forecast



- Annualization of weekday T&R
 - Toll transactions = 315
 - HOV transactions = 350
 - Revenue = 300
- T&R Ramp-up
 - Fully ramped up by end of FY 2026
 - Toll Transactions, FY 2023 = 60%, FY 2024 = 70%, FY 2025 = 90%
 - Revenue, FY 2023 = 40%, FY 2024 = 50%, FY 2025 = 75%, FY 2026 = 95%

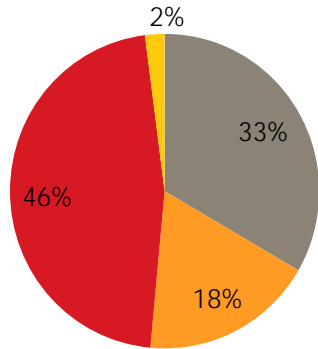
Toll Option C:

HOV-3+ Free Off-Peak

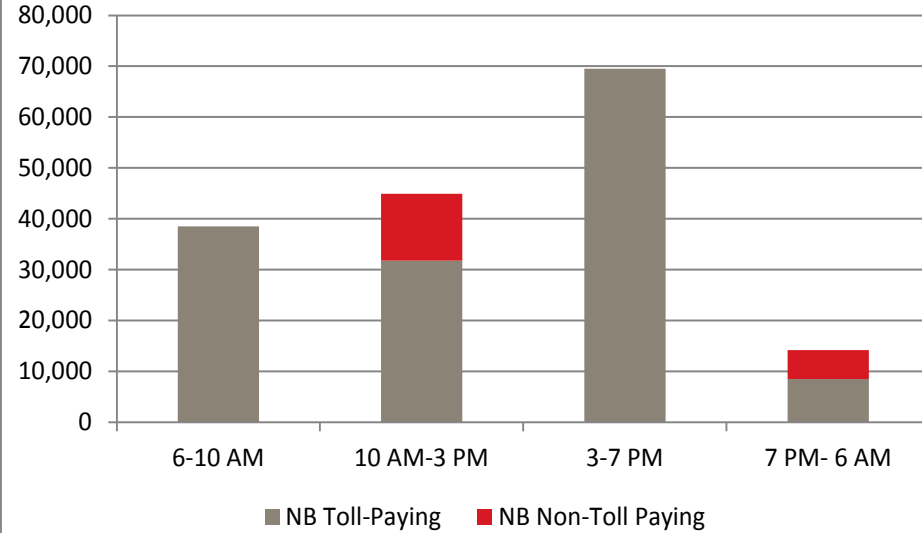
HOV-3+ 50% Toll Peak

Option C: 2025 T&R results

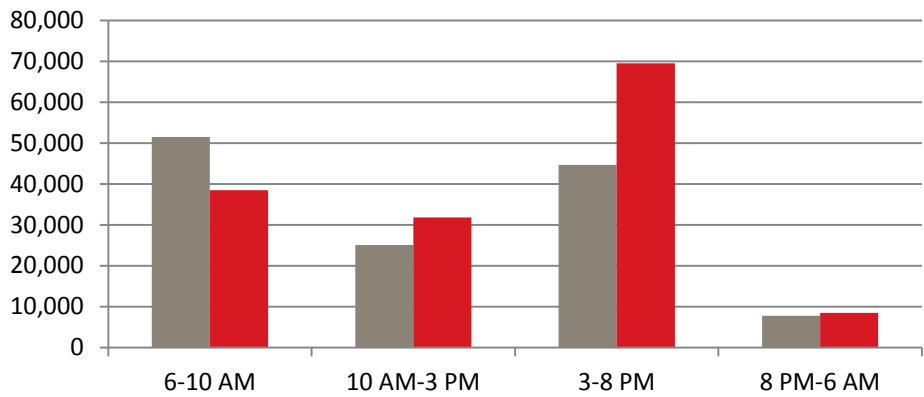
revenue by period



■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM

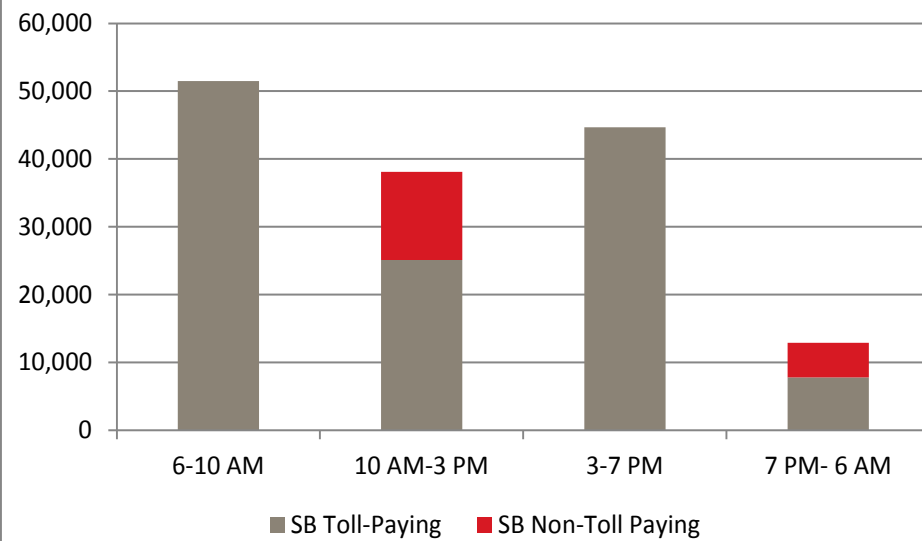


weekday toll transactions



73

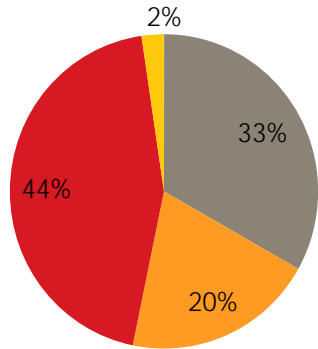
■ Southbound ■ Northbound



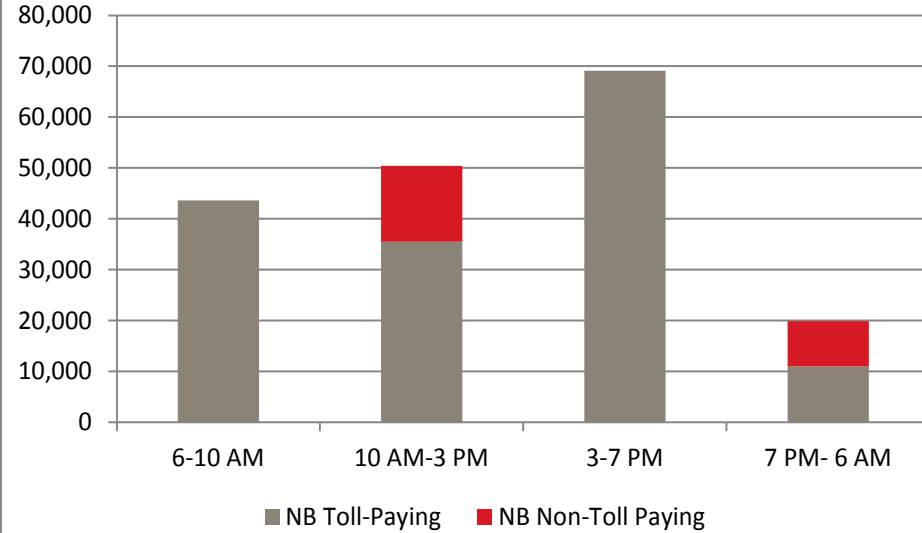
■ SB Toll-Paying ■ SB Non-Toll Paying

Option C: 2035 T&R results

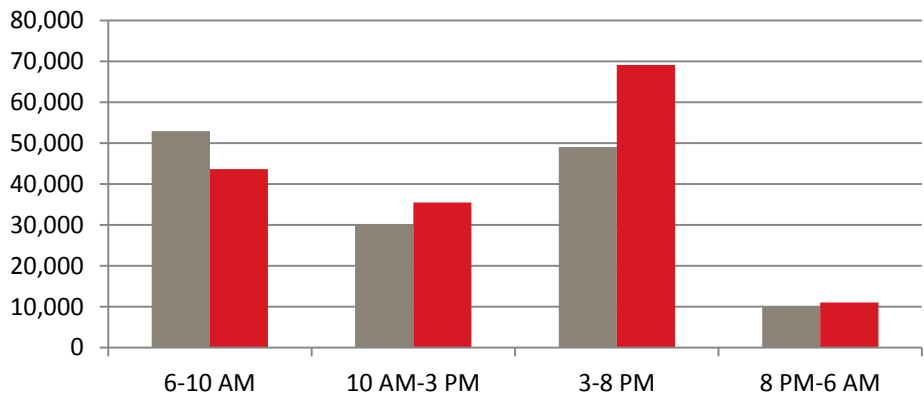
revenue by period



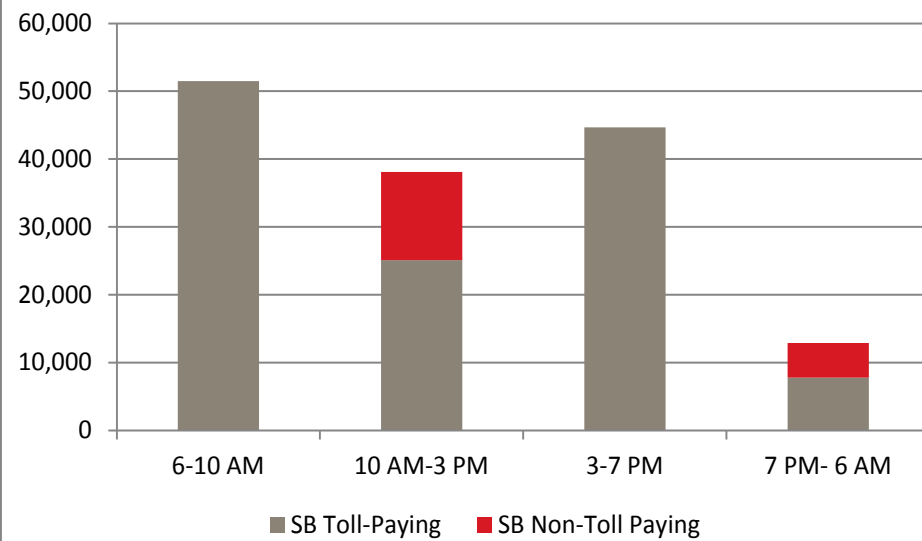
■ 6-10 AM ■ 10 AM-3 PM ■ 3-8 PM ■ 8 PM-6 AM



weekday toll transactions



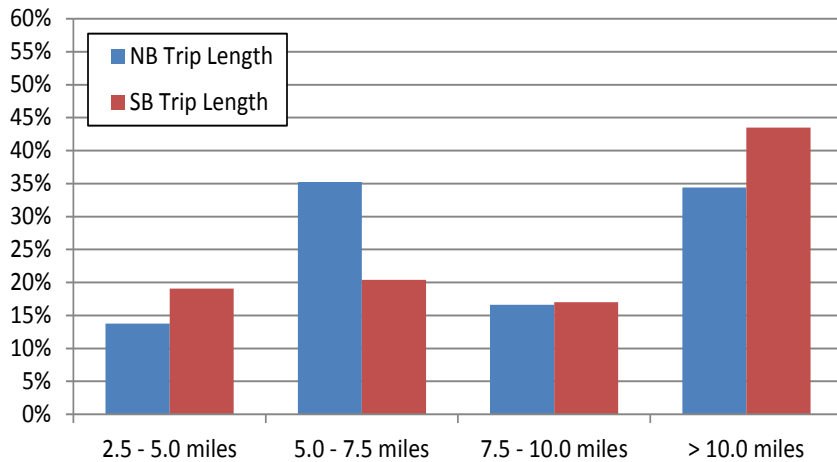
■ Southbound ■ Northbound



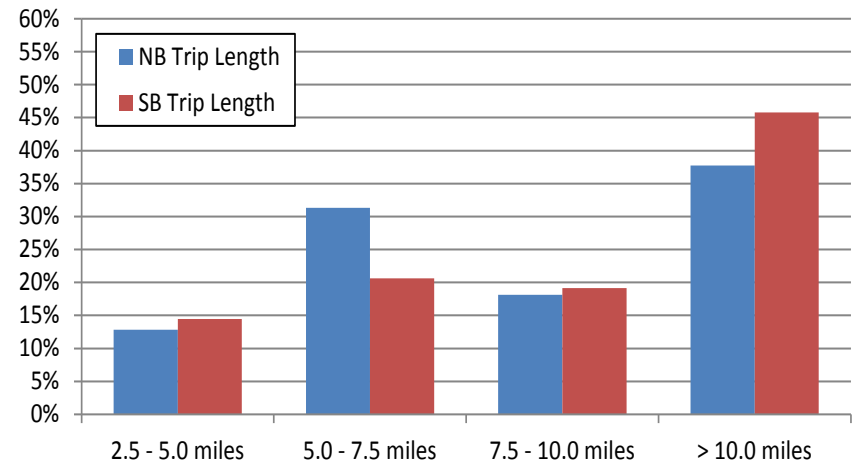
■ SB Toll-Paying ■ SB Non-Toll Paying

Option C: Trip Length

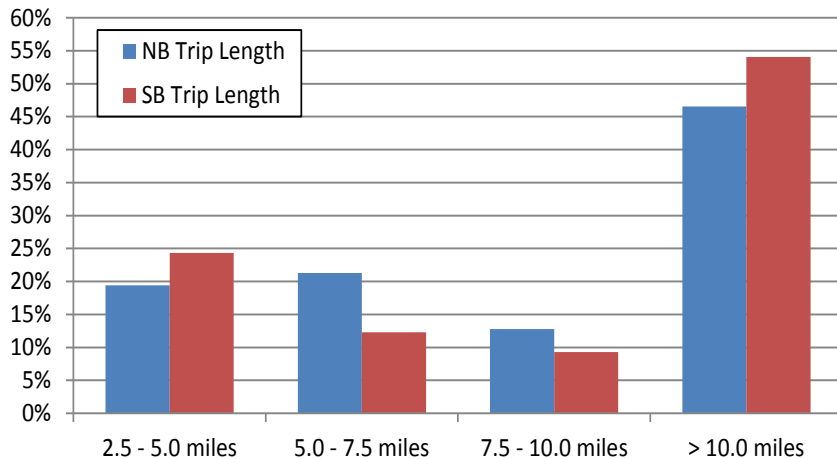
2025 Toll Paying Vehicle Trip Length



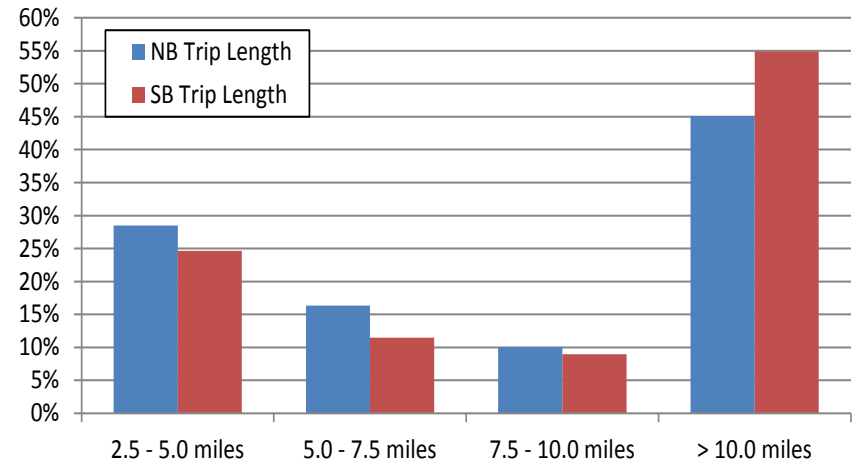
2035 Toll Paying Vehicle Trip Length



2025 Non-Toll Paying Vehicle Trip Length



2035 Non-Toll Paying Vehicle Trip Length



Toll Rates by Segment – 2025

Toll Option C

2025 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.11	\$ 0.23	\$ 0.50	\$ 0.36	\$ 0.27	\$ 0.18	\$ 1.39	\$ 0.61	\$ 1.45	\$ 1.54	\$ 0.33	\$ 0.05
605 NB HOT DC	1.43	\$ 0.15	\$ 0.36	\$ 0.46	\$ 0.43	\$ 0.50	\$ 0.36	\$ 0.57	\$ 0.61	\$ 0.60	\$ 0.71	\$ 0.43	\$ 0.21
22-605	2.02	\$ 0.40	\$ 0.75	\$ 1.01	\$ 0.95	\$ 0.97	\$ 0.77	\$ 1.05	\$ 1.00	\$ 1.05	\$ 1.10	\$ 0.70	\$ 0.30
22 NB HOT DC	0.65	\$ 0.13	\$ 0.19	\$ 0.16	\$ 0.19	\$ 0.18	\$ 0.13	\$ 0.16	\$ 0.13	\$ 0.26	\$ 0.23	\$ 0.16	\$ 0.10
Bolsa-22	3.14	\$ 0.64	\$ 0.94	\$ 1.26	\$ 1.26	\$ 1.19	\$ 0.97	\$ 1.57	\$ 1.48	\$ 1.32	\$ 1.41	\$ 0.94	\$ 0.47
Magnolia-Bolsa	3.11	\$ 0.47	\$ 0.78	\$ 1.15	\$ 1.09	\$ 1.09	\$ 1.09	\$ 1.62	\$ 1.49	\$ 1.50	\$ 1.56	\$ 1.24	\$ 0.47
73-Magnolia	4.24	\$ 0.64	\$ 1.06	\$ 1.48	\$ 1.70	\$ 1.67	\$ 1.91	\$ 2.97	\$ 2.33	\$ 2.30	\$ 2.88	\$ 2.88	\$ 0.64
73 NB HOT DC	0.74	\$ 0.10	\$ 0.19	\$ 0.26	\$ 0.30	\$ 0.31	\$ 0.28	\$ 0.93	\$ 0.48	\$ 0.52	\$ 0.56	\$ 0.93	\$ 0.11
405S NB HOT DC	0.28	\$ 0.06	\$ 0.08	\$ 0.10	\$ 0.12	\$ 0.10	\$ 0.14	\$ 0.20	\$ 0.15	\$ 0.45	\$ 0.56	\$ 0.21	\$ 0.04
Full Length Toll	13.14	\$ 2.31	\$ 3.83	\$ 5.50	\$ 5.46	\$ 5.29	\$ 5.05	\$ 8.80	\$ 7.06	\$ 8.06	\$ 9.05	\$ 6.31	\$ 1.97
Southbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N SB HOT DC	0.36	\$ 0.06	\$ 0.14	\$ 0.20	\$ 0.30	\$ 0.24	\$ 0.15	\$ 0.23	\$ 0.23	\$ 0.29	\$ 0.27	\$ 0.16	\$ 0.05
605 SB HOT DC	1.43	\$ 0.17	\$ 0.53	\$ 0.47	\$ 0.64	\$ 0.57	\$ 0.43	\$ 0.36	\$ 0.43	\$ 0.43	\$ 0.46	\$ 0.36	\$ 0.21
605-22	2.02	\$ 0.34	\$ 0.81	\$ 0.91	\$ 1.11	\$ 1.01	\$ 0.81	\$ 0.91	\$ 0.85	\$ 1.01	\$ 0.91	\$ 0.71	\$ 0.30
22 SB HOT DC	0.65	\$ 0.08	\$ 0.10	\$ 0.19	\$ 0.12	\$ 0.10	\$ 0.13	\$ 0.19	\$ 0.16	\$ 0.18	\$ 0.13	\$ 0.16	\$ 0.10
22-Bolsa	3.14	\$ 0.47	\$ 1.16	\$ 1.10	\$ 1.57	\$ 1.57	\$ 1.10	\$ 1.10	\$ 1.10	\$ 1.26	\$ 1.26	\$ 0.94	\$ 0.47
Bolsa-Magnolia	3.11	\$ 0.47	\$ 1.40	\$ 1.09	\$ 1.62	\$ 1.71	\$ 1.09	\$ 0.93	\$ 1.18	\$ 1.18	\$ 1.24	\$ 0.78	\$ 0.47
Magnolia-73	4.24	\$ 0.67	\$ 1.91	\$ 2.33	\$ 2.54	\$ 2.33	\$ 1.27	\$ 1.27	\$ 1.48	\$ 1.48	\$ 1.40	\$ 1.05	\$ 0.64
73 SB HOT DC	0.74	\$ 0.08	\$ 0.36	\$ 0.50	\$ 0.56	\$ 0.43	\$ 0.22	\$ 0.26	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.19	\$ 0.11
405S SB HOT DC	0.28	\$ 0.05	\$ 0.13	\$ 0.15	\$ 0.20	\$ 0.16	\$ 0.08	\$ 0.08	\$ 0.10	\$ 0.10	\$ 0.08	\$ 0.07	\$ 0.04
Full Length Toll	13.14	\$ 2.07	\$ 5.55	\$ 5.78	\$ 7.35	\$ 7.02	\$ 4.50	\$ 4.53	\$ 4.94	\$ 5.32	\$ 5.16	\$ 3.71	\$ 1.97

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

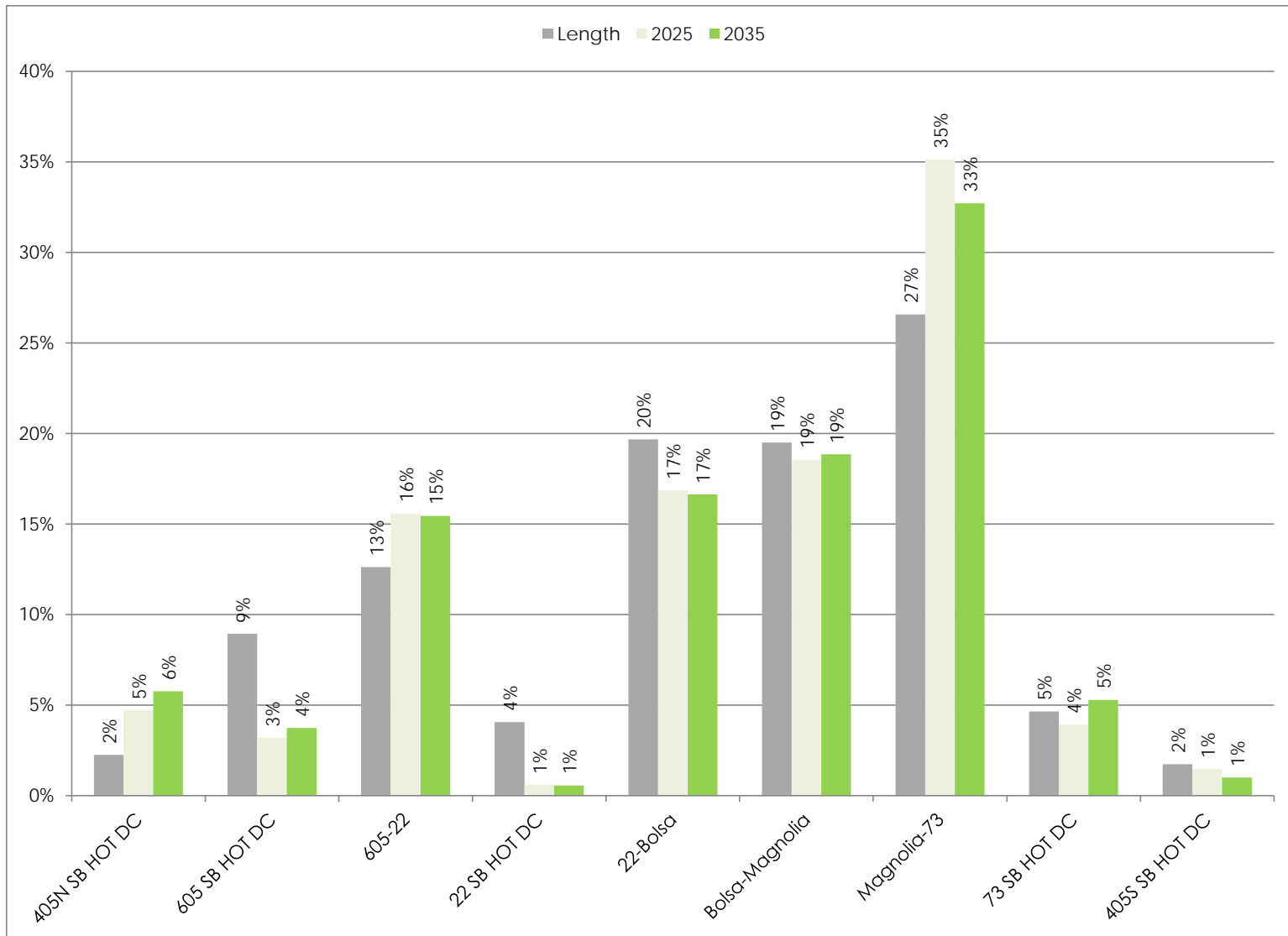
Toll Rates by Segment – 2035

Toll Option C

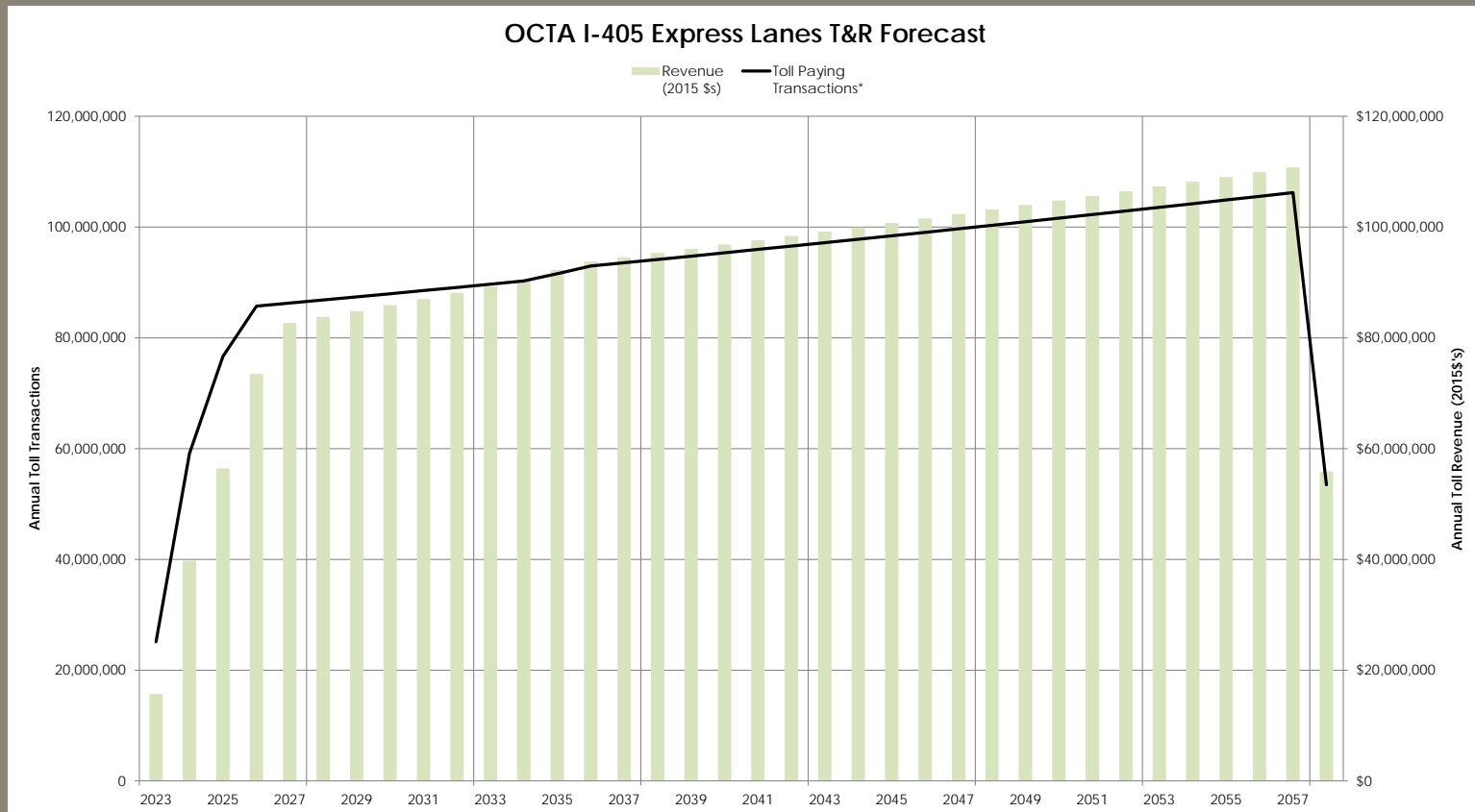
2035 TOLL													
Northbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N NB HOT DC	0.36	\$ 0.14	\$ 0.36	\$ 1.25	\$ 0.79	\$ 0.43	\$ 0.19	\$ 1.79	\$ 1.07	\$ 2.44	\$ 2.26	\$ 0.31	\$ 0.06
605 NB HOT DC	1.43	\$ 0.23	\$ 0.50	\$ 0.64	\$ 0.57	\$ 0.60	\$ 0.47	\$ 0.60	\$ 0.57	\$ 0.54	\$ 0.67	\$ 0.43	\$ 0.21
22-605	2.02	\$ 0.52	\$ 1.01	\$ 1.11	\$ 1.07	\$ 1.05	\$ 0.87	\$ 1.11	\$ 1.05	\$ 1.00	\$ 1.10	\$ 0.85	\$ 0.30
22 NB HOT DC	0.65	\$ 0.16	\$ 0.23	\$ 0.19	\$ 0.23	\$ 0.23	\$ 0.14	\$ 0.16	\$ 0.17	\$ 0.27	\$ 0.24	\$ 0.19	\$ 0.10
Bolsa-22	3.14	\$ 0.63	\$ 1.10	\$ 1.41	\$ 1.26	\$ 1.26	\$ 1.10	\$ 1.41	\$ 1.41	\$ 1.19	\$ 1.32	\$ 1.10	\$ 0.47
Magnolia-Bolsa	3.11	\$ 0.62	\$ 0.93	\$ 1.24	\$ 1.24	\$ 1.09	\$ 1.12	\$ 1.71	\$ 1.34	\$ 1.44	\$ 1.56	\$ 1.24	\$ 0.47
73-Magnolia	4.24	\$ 0.81	\$ 1.19	\$ 1.70	\$ 1.70	\$ 1.70	\$ 1.91	\$ 2.76	\$ 2.33	\$ 2.30	\$ 2.88	\$ 2.54	\$ 0.64
73 NB HOT DC	0.74	\$ 0.11	\$ 0.22	\$ 0.31	\$ 0.33	\$ 0.37	\$ 0.36	\$ 1.34	\$ 0.63	\$ 0.54	\$ 0.93	\$ 1.86	\$ 0.11
405S NB HOT DC	0.28	\$ 0.06	\$ 0.07	\$ 0.11	\$ 0.10	\$ 0.10	\$ 0.12	\$ 0.19	\$ 0.14	\$ 0.46	\$ 0.24	\$ 0.13	\$ 0.05
Full Length Toll	13.14	\$ 2.77	\$ 4.66	\$ 6.82	\$ 6.16	\$ 5.62	\$ 5.31	\$ 8.97	\$ 7.34	\$ 8.82	\$ 9.35	\$ 6.18	\$ 1.99
Southbound	Dist	AM0	AM1	AM2	AM3	AM4	MD	PM1	PM2	PM3	PM4	PM5	NT
405N SB HOT DC	0.36	\$ 0.07	\$ 0.14	\$ 0.20	\$ 0.30	\$ 0.23	\$ 0.18	\$ 0.24	\$ 0.25	\$ 0.64	\$ 0.25	\$ 0.16	\$ 0.06
605 SB HOT DC	1.43	\$ 0.24	\$ 0.57	\$ 0.43	\$ 0.64	\$ 0.61	\$ 0.54	\$ 0.53	\$ 0.50	\$ 0.50	\$ 0.61	\$ 0.46	\$ 0.21
605-22	2.02	\$ 0.38	\$ 0.85	\$ 0.91	\$ 1.11	\$ 1.01	\$ 0.87	\$ 0.91	\$ 0.97	\$ 1.07	\$ 1.01	\$ 0.81	\$ 0.30
22 SB HOT DC	0.65	\$ 0.08	\$ 0.10	\$ 0.17	\$ 0.13	\$ 0.10	\$ 0.13	\$ 0.16	\$ 0.13	\$ 0.19	\$ 0.13	\$ 0.14	\$ 0.10
22-Bolsa	3.14	\$ 0.53	\$ 1.26	\$ 1.10	\$ 1.57	\$ 1.51	\$ 1.22	\$ 1.26	\$ 1.32	\$ 1.41	\$ 1.41	\$ 1.04	\$ 0.47
Bolsa-Magnolia	3.11	\$ 0.53	\$ 1.62	\$ 1.09	\$ 1.68	\$ 1.71	\$ 1.28	\$ 1.15	\$ 1.40	\$ 1.40	\$ 1.40	\$ 0.93	\$ 0.47
Magnolia-73	4.24	\$ 0.76	\$ 2.12	\$ 2.25	\$ 2.54	\$ 2.42	\$ 1.57	\$ 1.48	\$ 1.70	\$ 1.61	\$ 1.48	\$ 1.19	\$ 0.64
73 SB HOT DC	0.74	\$ 0.11	\$ 0.41	\$ 0.59	\$ 0.63	\$ 0.59	\$ 0.28	\$ 0.30	\$ 0.31	\$ 0.30	\$ 0.33	\$ 0.22	\$ 0.11
405S SB HOT DC	0.28	\$ 0.05	\$ 0.12	\$ 0.12	\$ 0.15	\$ 0.14	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.10	\$ 0.10	\$ 0.07	\$ 0.05
Full Length Toll	13.14	\$ 2.33	\$ 6.11	\$ 5.66	\$ 7.36	\$ 7.02	\$ 5.22	\$ 5.14	\$ 5.74	\$ 6.23	\$ 5.65	\$ 4.19	\$ 1.99

AM0	5-6am	PM1	3-4pm
AM1	6-7am	PM2	4-5pm
AM2	7-8am	PM3	5-6pm
AM3	8-9am	PM4	6-7pm
AM4	9-10am	PM5	7-8pm
MD	10am-3pm	NT	8pm-5am

Revenue Contribution by Section



Traffic and Revenue Forecast



- Annualization of weekday T&R
 - Toll transactions = 325
 - HOV transactions = 350
 - Revenue = 310
- T&R Ramp-up
 - Fully ramped up by end of FY 2026
 - Toll Transactions, FY 2023 = 60%, FY 2024 = 70%, FY 2025 = 90%
 - Revenue, FY 2023 = 40%, FY 2024 = 50%, FY 2025 = 70%, FY 2026 = 90%

Questions?