Appendix L2 Traffic Impact Analysis Report

EMAIL TRANSMITTED

February 7, 2011

Robert Eisenbeisz
Senior Civil Engineer
Development Services Department
City of San Bernardino, 300 North D Street
San Bernardino, CA 92418-0001

RE: Palm Avenue Warehouse Traffic Study – Traffic Conditions Update

Dear Robert,

Crain & Associates was requested to update the approved Traffic Impact Analysis Report for the Palm Avenue Warehouse/Distribution Center Project (Crain & Associates, December 2007) in order to reflect current traffic conditions and updated traffic model projections for the study area. The horizon year of San Bernardino Associated Governments (SANBAG) transportation model has been updated from 2030 to 2035. Traffic volume counts were performed during the present year (2010) in order to provide a comparison with the existing volumes shown in the December 2007 traffic study. The future (2030) pre-project traffic volumes contained in the December 2007 traffic study were compared with the future (2035) traffic volume projections for common study intersections included in the Palm Avenue Grade Separation Project Traffic Analysis prepared for SANBAG (CH2M Hill, October 21, 2010). Recent roadway realignments and other factors are believed to have potentially influenced traffic conditions.

Existing Traffic Conditions Comparison (2007 and 2010)

Existing traffic volume counts were conducted in September 2010 during the AM and PM peak hours at the same study intersections analyzed in the December 2007 traffic study (see Attachment A). The traffic counts were classified based on vehicle type, accounting for turning movement volumes at each intersection made by passenger vehicles, two-axle trucks, three-axle trucks, four-axle trucks, and five-or-more-axle trucks. The traffic volumes for each vehicle type were converted into passenger car equivalent (PCE) trips. The September 2010 count volumes

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were then compared to the existing (2007) traffic volumes analyzed in the December 2007 traffic study. Table 1 presents a comparison of these volumes in terms of total vehicle trips and PCEs. As shown in Table 1, the traffic counts performed in September 2010 exhibit significantly lower volumes than the existing conditions analyzed as part of the December 2007 traffic study. Thus, the December 2007 traffic study represents a more conservative analysis scenario that an updated traffic study utilizing current (2010) count volumes would.

Table 1
December 2007 Traffic Study and September 2010 Traffic Count
Existing Volume Comparison – Total Vehicle Trips

No.	Intersection	Peak Hour	December 2007 Traffic Study Existing Volumes	September 2010 Traffic Count Volumes	Volume Change[1]
1	Palm Ave. &	AM	2,582	1,630	-952
	Kendall Dr./Little League Dr.	PM	2,385	2,126	-259
2	Palm Ave. &	AM	2,192	1,444	-748
	I-215 NB On/Off-Ramps	PM	2,034	1,980	-54
3	Palm Ave. & I-215 SB	AM	1,776	1,196	-580
	On/Off-Ramps/Kendall Dr.	PM	1,415	1,142	-273
4	Palm Ave. &	AM	656	454	-202
	Industrial Pkwy.	PM	656	466	-190
5	Palm Ave./Institution Rd. &	AM	608	397	-211
	Cajon Blvd.	PM	469	394	-75

Notes
[1] Volume change represents September 2010 traffic count volume minus December 2007 Traffic Study volume.

December 2007 Traffic Study and September 2010 Traffic Count
Existing Volume Comparison – Passenger Car Equivalent (PCE) Trips

No.	Intersection	Peak Hour	December 2007 Traffic Study Existing Volumes	September 2010 Traffic Count Volumes	Volume Change[1]
1	Palm Ave. &	AM	2,719	1,646	-1,073
	Kendall Dr./Little League Dr.	PM	2,452	2,127	-325
2	Palm Ave. &	AM	2,375	1,454	-921
	I-215 NB On/Off-Ramps	PM	2,104	1,996	-108
3	Palm Ave. & I-215 SB	AM	1,977	1,247	-730
	On/Off-Ramps/Kendall Dr.	PM	1,490	1,168	-322
4	Palm Ave. &	AM	793	474	-319
	Industrial Pkwy.	PM	706	483	-223
5	Palm Ave./Institution Rd. &	AM	722	402	-320
	Cajon Blvd.	PM	533	406	-127

Notes
[1] Volume change represents September 2010 traffic count volume minus December 2007 Traffic Study volume.

Future Traffic Conditions Comparison (2030 and 2035)

In addition, the future (2030) pre-project traffic volume projections from the December 2007 traffic study were compared to the future (2035) traffic model volumes from the Palm Avenue Grade Separation Project Traffic Analysis. It should be noted that the Palm Avenue Grade Separation Project Traffic Analysis considered all future land-use growth, including the proposed Palm Avenue warehouse project, in developing its future (2035) traffic volumes. In order to provide a more conservative comparison, however, these volumes were compared with the future pre-project ("Without Project") traffic volumes from the December 2007 traffic study. The future (2035) model traffic volumes from the Palm Avenue Grade Separation Traffic Analysis have been included in Attachment B.

The future traffic volume projections from the December 2007 traffic study are in PCE trips, while the future (2035) model traffic volumes are in total vehicle trips. Therefore, the future (2035) model volumes were adjusted to PCE volumes by using the average total vehicle-to-PCE volume multiplier calculated from the September 2010 counts (determined to be 1.0743). Table 2 presents a comparison of these future volumes in terms of PCEs. As shown in Table 2, the future (2035) model traffic volumes are significantly lower than the December 2007 traffic study future (2030) pre-project traffic volumes. Therefore, the future conditions analysis contained in the December 2007 traffic study is based on more conservative traffic volumes than the future (2035) traffic model volumes from the Palm Avenue Grade Separation Project Traffic Analysis.

Table 2
December 2007 Traffic Study and SANBAG Traffic Model Projection
Future Volume Comparison – Passenger Car Equivalent (PCE) Trips

No.	Intersection	Peak Hour	December 2007 Traffic Study Future (2030) Volumes	Palm Avenue Grade Sep. Traffic Analysis Future (2035) Volumes	Volume Change[1]
4	Palm Ave. &	AM	1,250	1,170	-80
	Industrial Pkwy.	PM	1,459	1,281	-178
5	Palm Ave./Institution Rd. &	AM	1,140	1,045[2]	-95
	Cajon Blvd.	PM	1,650	926[2]	-724

Notes

[1] Volume change represents Palm Ave. Grade Sep. Traffic Analysis future (2035) model volume minus December 2007 Traffic Study future (2030) volume.

[2] The intersection of Palm Avenue/Institution Road and Cajon Boulevard will be split into two intersections at different grades with one exclusive connector (Palm Avenue South). The volumes include all movements along Palm Avenue and Cajon Boulevard except Palm Avenue South to avoid duplicate counts.

Construction Period Traffic Impacts

As the above analysis shows, the existing traffic volumes have decreased and the future traffic volumes are lower than were anticipated in the circulated EIR. The project has not been substantially modified in size or design. The anticipated level and duration of construction activity remains the same as the project analyzed in the 2008 EIR. Relevant changes which have occurred include the reduction in area traffic volumes discussed above, and the potential for any exported soil to be used in the Palm Avenue railroad tracks Grade Separation Project, which is closer to the site. Both of these changes would reduce, rather than increase, the project construction period traffic impacts. Therefore the analysis and results contained in the 2008 EIR can be considered as a conservative estimate of the current projects construction period traffic impacts.

If the SanBAG grade separation project occurs concurrently with the proposed project, a substantial periodic increase in truck traffic during construction activities could result that could impact intersections in the immediate area as well as freeway on- and off-ramps. This is a potentially significant cumulative impact. However, the mitigation measure below would reduce this impact to less than significant, and, with implementation of this mitigation, the project would not make a cumulatively considerable contribution to the cumulative impact.

If grading or other construction activities for the proposed project involving 50 or more daily truck trips to or from the site (other than to or from the SanBAG grade separation project site) occur simultaneously with the proposed SanBAG grade separation project on Palm Avenue, the project developer shall coordinate preparation of a construction traffic mitigation plan with SanBAG, subject to the approval of the City traffic engineer and City police and fire departments, to avoid substantial traffic impacts to area intersections and freeway on- and off-ramps. This construction traffic management plan may include, but is not limited to, the following measures:

- Hauling of materials for the two sites shall be coordinated including, when feasible, using soil exports from the project site as imports to the grade separation project site;
- Materials delivery hours shall be restricted to occur outside of peak traffic hours;
- Truck traffic shall be directed to an alternate route as approved by the City;
- Flag persons or other traffic control measures shall be implemented at access points to the sites;
- Off-site construction worker parking provided nearer to major transportation corridors than the sites, with shuttles provided to eliminate construction worker trips near the construction site during peak hours.

Conclusion

The traffic volumes in the study area have exhibited a significant decrease since the December 2007 traffic study. As outlined above, the December 2007 traffic study conservatively estimates existing traffic volumes and future traffic volumes compared to current (2010) traffic counts and future (2035) model volumes from the Palm Avenue Grade Separation Project Traffic Analysis, respectively. Therefore, the assumptions and calculations contained in the December 2007 traffic study are deemed conservative, and no additional analysis is recommended.

If you have questions, please feel free to contact me.

Sincerely,

George Rhyner
Senior Transportation Engineer

GR:hs
C20111
JA09123
enclosures

ATTACHMENT A

September 2010 Traffic Volume Counts

Crain & Associates
2007 Sawtelle Blvd., Suite 4
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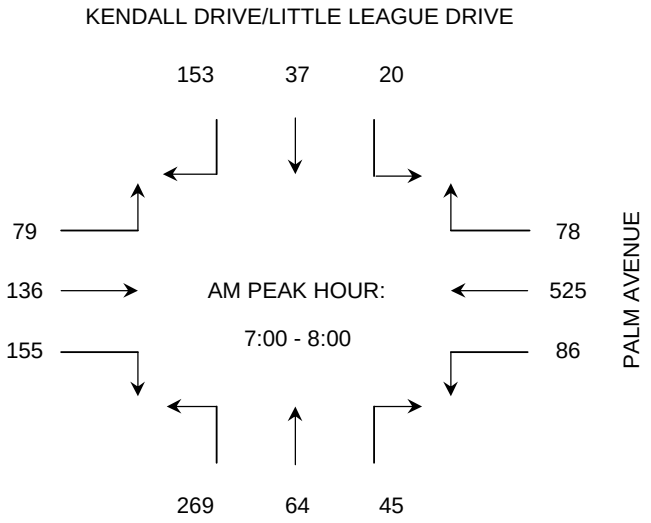
VEHICLE TURNING MOVEMENT COUNT SUMMARY (PCEs)

N/S STREET: KENDALL DRIVE/LITTLE LEAGUE DRIVE **E/W STREET:** PALM AVENUE

PERIOD: AM PEAK HOUR **DATE:** WEDNESDAY SEPTEMBER 8, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15	19	139	22	14	27	37	66	22	13	3	10	33	405
7:15 - 7:30	16	136	18	12	29	40	71	14	9	5	9	42	401
7:30 - 7:45	25	148	21	26	42	39	76	12	10	8	11	41	458
7:45 - 8:00	26	102	17	28	38	39	56	17	13	4	7	37	383
8:00 - 8:15	21	90	13	20	40	35	50	10	14	6	9	32	340
8:15 - 8:30	25	92	16	24	38	32	42	8	13	6	9	34	339
8:30 - 8:45	26	91	19	27	45	33	41	8	20	9	11	35	365
8:45 - 9:00	39	88	21	15	46	24	35	12	23	11	10	22	346

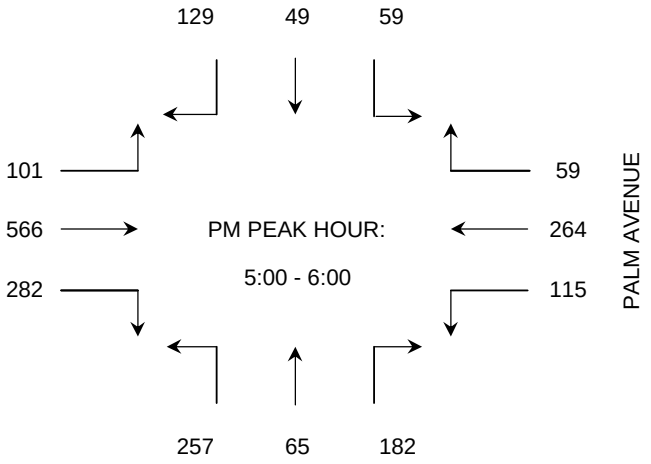
1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	86	525	78	79	136	155	269	64	45	20	37	153	1,646 *
7:15 - 8:15	88	476	69	85	149	153	253	53	46	23	36	151	1,581
7:30 - 8:30	97	432	67	98	158	145	224	47	50	24	36	143	1,520
7:45 - 8:45	98	375	65	99	161	139	189	43	60	25	36	138	1,427
8:00 - 9:00	111	361	69	86	169	124	168	38	70	32	39	123	1,390



PERIOD: PM PEAK HOUR **DATE:** WEDNESDAY SEPTEMBER 8, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 4:15	26	51	13	24	98	75	52	17	42	14	12	16	440
4:15 - 4:30	18	66	15	30	119	72	59	16	33	10	16	31	484
4:30 - 4:45	26	75	14	28	142	81	72	13	46	14	15	28	553
4:45 - 5:00	31	59	18	24	133	72	56	16	34	20	9	31	503
5:00 - 5:15	32	71	15	25	127	69	60	20	41	22	14	37	533
5:15 - 5:30	30	66	17	27	145	70	67	14	40	14	12	36	538
5:30 - 5:45	26	59	10	26	145	69	61	14	46	11	12	31	510
5:45 - 6:00	27	68	17	23	149	74	69	17	55	12	11	25	547

1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 5:00	101	251	60	106	492	300	239	62	155	58	52	105	1,979
4:15 - 5:15	107	270	62	107	521	294	247	65	154	66	54	126	2,072
4:30 - 5:30	119	270	64	104	546	292	255	63	161	70	50	132	2,125
4:45 - 5:45	119	255	60	102	550	280	244	64	161	67	47	135	2,083
5:00 - 6:00	115	264	59	101	566	282	257	65	182	59	49	129	2,127 *



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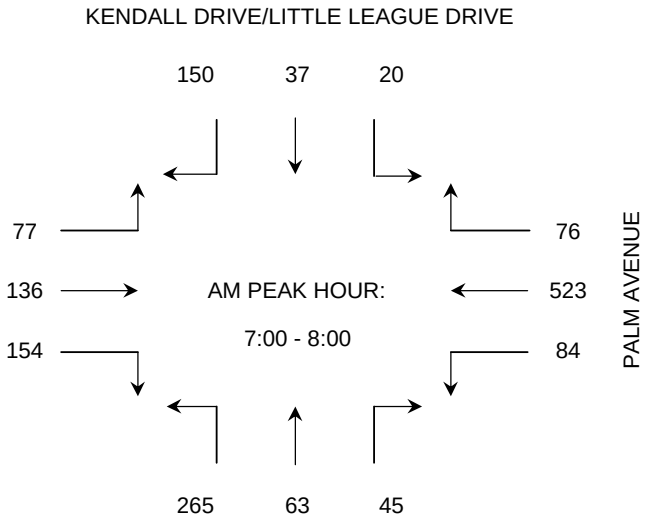
VEHICLE TURNING MOVEMENT COUNT SUMMARY (TOTAL VEHICLES)

N/S STREET: KENDALL DRIVE/LITTLE LEAGUE DRIVE **E/W STREET:** PALM AVENUE

PERIOD: AM PEAK HOUR **DATE:** WEDNESDAY SEPTEMBER 8, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15	19	139	22	14	27	37	66	21	13	3	10	33	404
7:15 - 7:30	16	136	17	11	29	39	69	14	9	5	9	40	394
7:30 - 7:45	25	146	20	25	42	39	74	12	10	8	11	40	452
7:45 - 8:00	24	102	17	27	38	39	56	16	13	4	7	37	380
8:00 - 8:15	21	90	13	20	40	35	50	10	14	6	9	31	339
8:15 - 8:30	25	92	16	24	38	32	42	8	13	6	9	34	339
8:30 - 8:45	26	91	19	27	45	33	41	8	20	9	11	35	365
8:45 - 9:00	39	88	21	13	46	24	35	12	23	11	10	22	344

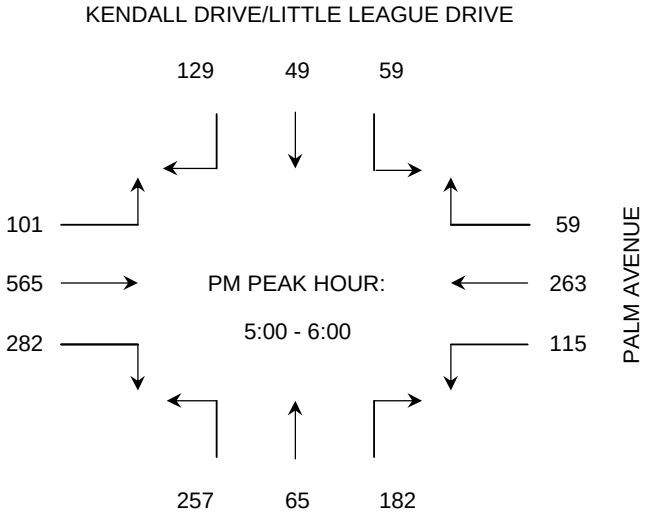
1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	84	523	76	77	136	154	265	63	45	20	37	150	1,630 *
7:15 - 8:15	86	474	67	83	149	152	249	52	46	23	36	148	1,565
7:30 - 8:30	95	430	66	96	158	145	222	46	50	24	36	142	1,510
7:45 - 8:45	96	375	65	98	161	139	189	42	60	25	36	137	1,423
8:00 - 9:00	111	361	69	84	169	124	168	38	70	32	39	122	1,387



PERIOD: PM PEAK HOUR **DATE:** WEDNESDAY SEPTEMBER 8, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 4:15	26	51	13	24	98	75	52	17	42	14	12	16	440
4:15 - 4:30	18	66	15	29	119	72	59	16	33	10	16	30	483
4:30 - 4:45	26	74	14	28	141	81	71	13	46	14	15	28	551
4:45 - 5:00	31	59	18	24	133	72	56	16	34	20	9	30	502
5:00 - 5:15	32	70	15	25	127	69	60	20	41	22	14	37	532
5:15 - 5:30	30	66	17	27	144	70	67	14	40	14	12	36	537
5:30 - 5:45	26	59	10	26	145	69	61	14	46	11	12	31	510
5:45 - 6:00	27	68	17	23	149	74	69	17	55	12	11	25	547

1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 5:00	101	250	60	105	491	300	238	62	155	58	52	104	1,976
4:15 - 5:15	107	269	62	106	520	294	246	65	154	66	54	125	2,068
4:30 - 5:30	119	269	64	104	545	292	254	63	161	70	50	131	2,122
4:45 - 5:45	119	254	60	102	549	280	244	64	161	67	47	134	2,081
5:00 - 6:00	115	263	59	101	565	282	257	65	182	59	49	129	2,126 *



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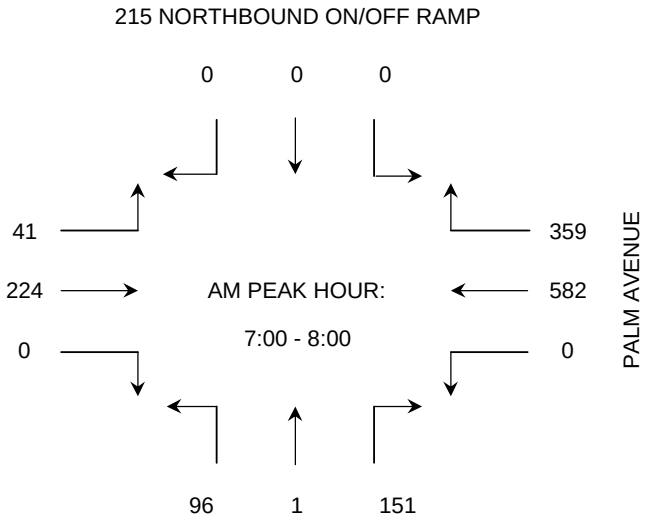
VEHICLE TURNING MOVEMENT COUNT SUMMARY (PCEs)

N/S STREET: 215 NORTHBOUND ON/OFF RAMP **E/W STREET:** PALM AVENUE

PERIOD: AM PEAK HOUR **DATE:** THURSDAY SEPTEMBER 2, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15	0	153	89	20	49	0	29	0	26	0	0	0	366
7:15 - 7:30	0	142	88	6	58	0	24	0	25	0	0	0	343
7:30 - 7:45	0	171	97	7	62	0	24	1	49	0	0	0	411
7:45 - 8:00	0	117	85	8	55	0	19	0	51	0	0	0	335
8:00 - 8:15	0	100	74	15	44	0	15	1	58	0	0	0	307
8:15 - 8:30	0	96	62	10	49	0	18	0	51	0	0	0	286
8:30 - 8:45	0	130	56	15	63	0	17	0	66	0	0	0	347
8:45 - 9:00	0	140	31	5	58	0	19	0	51	0	0	0	304

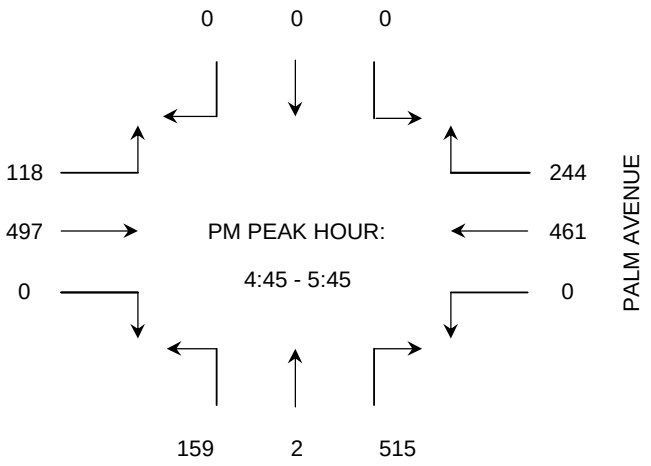
1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	0	582	359	41	224	0	96	1	151	0	0	0	1,454 *
7:15 - 8:15	0	529	344	36	219	0	82	2	183	0	0	0	1,395
7:30 - 8:30	0	483	318	40	210	0	76	2	209	0	0	0	1,338
7:45 - 8:45	0	443	277	48	211	0	69	1	226	0	0	0	1,275
8:00 - 9:00	0	466	223	45	214	0	69	1	226	0	0	0	1,244



PERIOD: PM PEAK HOUR **DATE:** THURSDAY SEPTEMBER 2, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 4:15	0	95	49	23	86	0	18	0	89	0	0	0	360
4:15 - 4:30	0	100	51	26	100	0	21	0	101	0	0	0	398
4:30 - 4:45	0	118	50	25	95	0	25	0	116	0	0	0	429
4:45 - 5:00	0	111	53	24	112	0	32	0	114	0	0	0	446
5:00 - 5:15	0	120	69	35	125	0	35	2	123	0	0	0	509
5:15 - 5:30	0	118	67	31	133	0	42	0	146	0	0	0	537
5:30 - 5:45	0	112	55	28	127	0	50	0	133	0	0	0	505
5:45 - 6:00	0	82	56	12	127	0	39	0	130	0	0	0	446

1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 5:00	0	424	203	98	393	0	96	0	420	0	0	0	1,633
4:15 - 5:15	0	449	223	110	432	0	113	2	454	0	0	0	1,782
4:30 - 5:30	0	467	239	115	465	0	134	2	498	0	0	0	1,920
4:45 - 5:45	0	461	244	118	497	0	159	2	515	0	0	0	1,996 *
5:00 - 6:00	0	432	247	106	512	0	166	2	531	0	0	0	1,996 *



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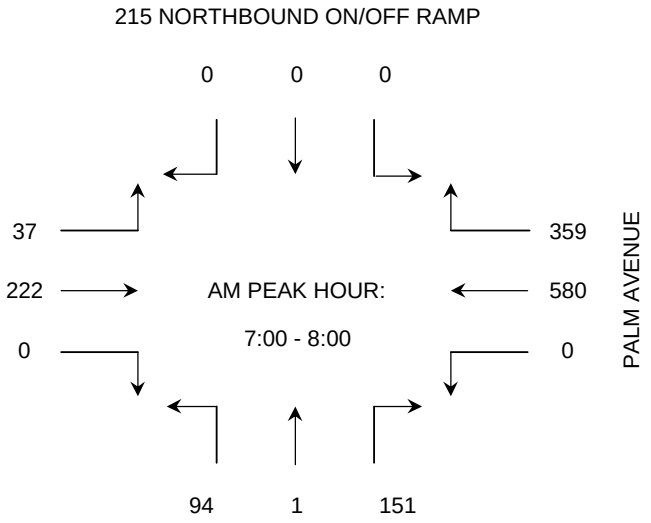
VEHICLE TURNING MOVEMENT COUNT SUMMARY (TOTAL VEHICLES)

N/S STREET: 215 NORTHBOUND ON/OFF RAMP **E/W STREET:** PALM AVENUE

PERIOD: AM PEAK HOUR **DATE:** THURSDAY SEPTEMBER 2, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15	0	152	89	16	49	0	29	0	26	0	0	0	361
7:15 - 7:30	0	141	88	6	57	0	22	0	25	0	0	0	339
7:30 - 7:45	0	170	97	7	61	0	24	1	49	0	0	0	409
7:45 - 8:00	0	117	85	8	55	0	19	0	51	0	0	0	335
8:00 - 8:15	0	99	74	9	44	0	13	1	58	0	0	0	298
8:15 - 8:30	0	95	62	9	47	0	18	0	51	0	0	0	282
8:30 - 8:45	0	125	56	11	61	0	17	0	65	0	0	0	335
8:45 - 9:00	0	140	31	4	56	0	19	0	49	0	0	0	299

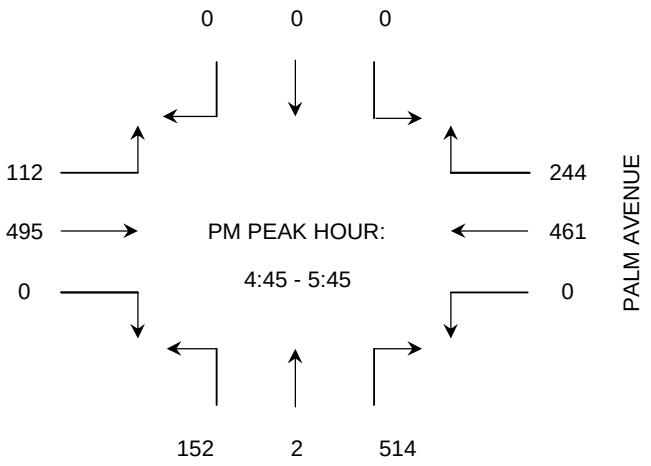
1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	0	580	359	37	222	0	94	1	151	0	0	0	1,444 *
7:15 - 8:15	0	527	344	30	217	0	78	2	183	0	0	0	1,381
7:30 - 8:30	0	481	318	33	207	0	74	2	209	0	0	0	1,324
7:45 - 8:45	0	436	277	37	207	0	67	1	225	0	0	0	1,250
8:00 - 9:00	0	459	223	33	208	0	67	1	223	0	0	0	1,214



PERIOD: PM PEAK HOUR **DATE:** THURSDAY SEPTEMBER 2, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 4:15	0	94	49	21	84	0	13	0	89	0	0	0	350
4:15 - 4:30	0	99	51	26	99	0	21	0	101	0	0	0	397
4:30 - 4:45	0	118	50	25	95	0	25	0	116	0	0	0	429
4:45 - 5:00	0	111	53	24	111	0	30	0	114	0	0	0	443
5:00 - 5:15	0	120	69	33	125	0	35	2	122	0	0	0	506
5:15 - 5:30	0	118	67	31	132	0	42	0	145	0	0	0	535
5:30 - 5:45	0	112	55	24	127	0	45	0	133	0	0	0	496
5:45 - 6:00	0	82	56	12	127	0	37	0	128	0	0	0	442

1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 5:00	0	422	203	96	389	0	89	0	420	0	0	0	1,619
4:15 - 5:15	0	448	223	108	430	0	111	2	453	0	0	0	1,775
4:30 - 5:30	0	467	239	113	463	0	132	2	497	0	0	0	1,913
4:45 - 5:45	0	461	244	112	495	0	152	2	514	0	0	0	1,980 *
5:00 - 6:00	0	432	247	100	511	0	159	2	528	0	0	0	1,979



Crain & Associates
2007 Sawtelle Blvd., Suite 4
Los Angeles, CA 90025
Tel: (310) 473-6508

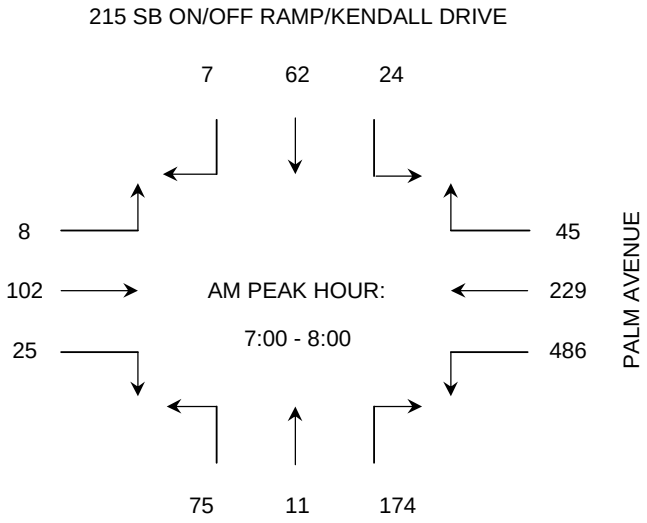
VEHICLE TURNING MOVEMENT COUNT SUMMARY (PCEs)

N/S STREET: 215 SB ON/OFF RAMP/KENDALL DRIVE **E/W STREET:** PALM AVENUE

PERIOD: AM PEAK HOUR **DATE:** WEDNESDAY SEPTEMBER 1, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15	126	44	12	1	14	4	17	1	59	6	23	0	307
7:15 - 7:30	127	44	10	1	25	10	19	6	44	7	18	2	312
7:30 - 7:45	120	72	10	4	31	6	17	1	37	7	13	2	320
7:45 - 8:00	113	69	13	2	32	5	22	3	34	4	8	3	308
8:00 - 8:15	69	34	10	2	40	17	13	3	31	10	13	1	243
8:15 - 8:30	70	40	7	3	29	12	14	3	40	9	11	3	240
8:30 - 8:45	73	30	8	1	23	10	10	4	36	12	11	3	221
8:45 - 9:00	85	38	13	2	25	9	13	2	37	14	8	6	252

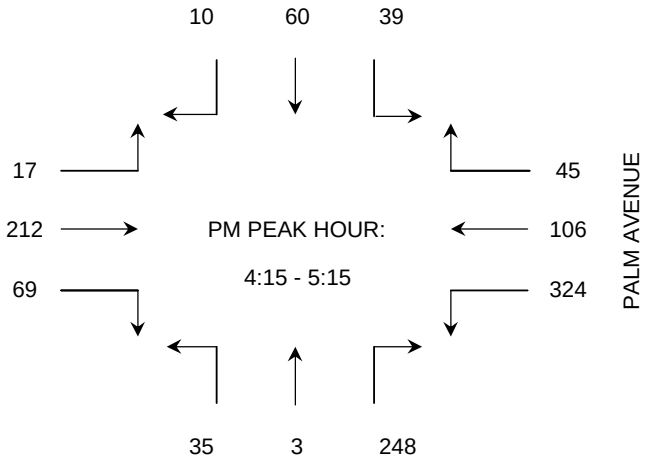
1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	486	229	45	8	102	25	75	11	174	24	62	7	1,247 *
7:15 - 8:15	429	219	43	9	128	38	71	13	146	28	52	8	1,182
7:30 - 8:30	372	215	40	11	131	40	66	10	142	30	45	9	1,111
7:45 - 8:45	325	173	38	8	123	44	59	13	141	35	43	10	1,012
8:00 - 9:00	297	142	38	8	116	48	50	12	144	45	43	13	956



PERIOD: PM PEAK HOUR **DATE:** WEDNESDAY SEPTEMBER 1, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 4:15	81	34	8	4	59	18	12	1	51	11	15	3	297
4:15 - 4:30	76	31	10	3	42	20	6	1	62	9	19	2	280
4:30 - 4:45	74	31	12	7	63	26	9	0	42	13	21	4	300
4:45 - 5:00	84	26	14	3	51	12	11	1	68	7	10	3	290
5:00 - 5:15	90	19	10	4	57	11	9	1	76	10	10	1	298
5:15 - 5:30	87	21	9	2	41	4	3	0	74	9	7	3	260
5:30 - 5:45	77	25	20	6	56	22	7	0	62	5	8	3	291
5:45 - 6:00	71	24	16	2	63	3	6	0	66	13	10	0	274

1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 5:00	315	121	43	17	214	76	38	3	223	40	65	12	1,166
4:15 - 5:15	324	106	45	17	212	69	35	3	248	39	60	10	1,168 *
4:30 - 5:30	335	96	45	16	212	53	32	2	260	39	48	11	1,148
4:45 - 5:45	338	91	53	15	205	49	30	2	280	31	35	10	1,139
5:00 - 6:00	325	89	55	14	217	40	25	1	278	37	35	7	1,123



Crain & Associates
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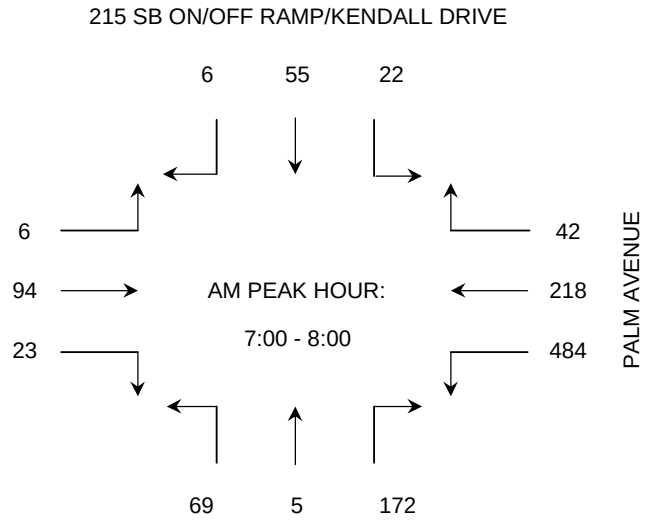
VEHICLE TURNING MOVEMENT COUNT SUMMARY (TOTAL VEHICLES)

N/S STREET: 215 SB ON/OFF RAMP/KENDALL DRIVE **E/W STREET:** PALM AVENUE

PERIOD: AM PEAK HOUR **DATE:** WEDNESDAY SEPTEMBER 1, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15	126	40	12	1	12	4	17	1	59	6	18	0	296
7:15 - 7:30	125	44	8	1	23	8	15	2	42	6	18	1	293
7:30 - 7:45	120	69	9	2	31	6	17	1	37	7	13	2	314
7:45 - 8:00	113	65	13	2	28	5	20	1	34	3	6	3	293
8:00 - 8:15	69	31	10	2	33	13	13	3	31	10	12	1	228
8:15 - 8:30	70	37	7	3	28	12	14	3	40	9	9	3	235
8:30 - 8:45	71	30	8	1	21	8	10	2	36	12	10	3	212
8:45 - 9:00	85	33	10	2	20	7	11	2	37	14	6	6	233

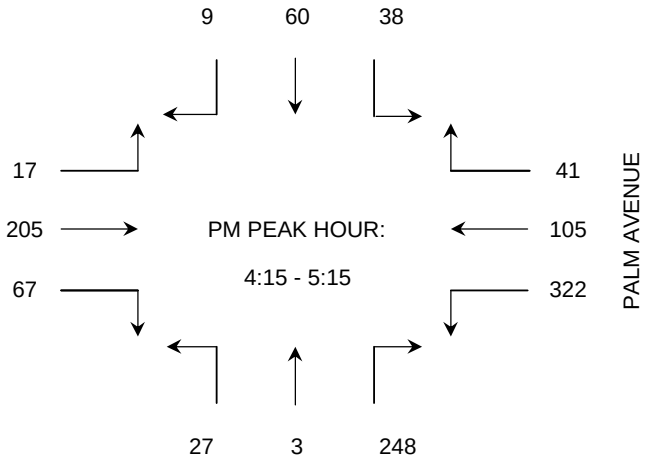
1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	484	218	42	6	94	23	69	5	172	22	55	6	1,196 *
7:15 - 8:15	427	209	40	7	115	32	65	7	144	26	49	7	1,128
7:30 - 8:30	372	202	39	9	120	36	64	8	142	29	40	9	1,070
7:45 - 8:45	323	163	38	8	110	38	57	9	141	34	37	10	968
8:00 - 9:00	295	131	35	8	102	40	48	10	144	45	37	13	908



PERIOD: PM PEAK HOUR **DATE:** WEDNESDAY SEPTEMBER 1, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 4:15	81	34	8	4	49	18	10	1	51	10	15	3	284
4:15 - 4:30	76	31	9	3	41	20	6	1	62	9	19	2	279
4:30 - 4:45	74	30	11	7	60	26	7	0	42	12	21	3	293
4:45 - 5:00	82	25	11	3	49	10	5	1	68	7	10	3	274
5:00 - 5:15	90	19	10	4	55	11	9	1	76	10	10	1	296
5:15 - 5:30	87	18	7	2	37	4	3	0	74	9	7	3	251
5:30 - 5:45	77	25	16	6	54	20	3	0	62	5	8	3	279
5:45 - 6:00	71	20	15	2	61	3	6	0	66	13	10	0	267

1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 5:00	313	120	39	17	199	74	28	3	223	38	65	11	1,130
4:15 - 5:15	322	105	41	17	205	67	27	3	248	38	60	9	1,142 *
4:30 - 5:30	333	92	39	16	201	51	24	2	260	38	48	10	1,114
4:45 - 5:45	336	87	44	15	195	45	20	2	280	31	35	10	1,100
5:00 - 6:00	325	82	48	14	207	38	21	1	278	37	35	7	1,093



Crain & Associates
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Tel: (310) 473-6508

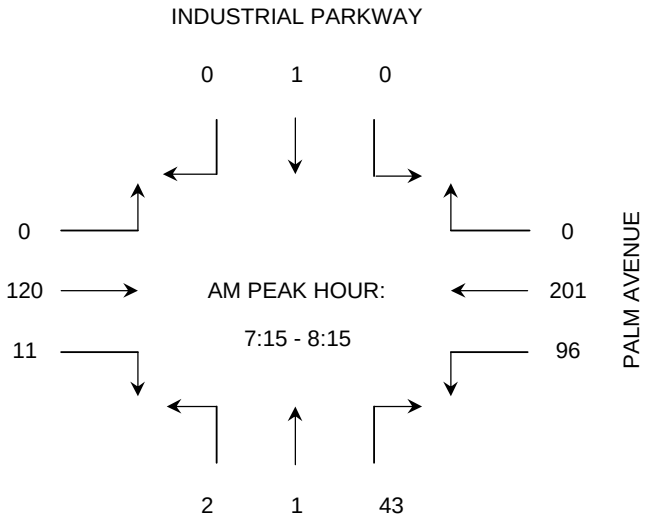
VEHICLE TURNING MOVEMENT COUNT SUMMARY (PCEs)

N/S STREET: INDUSTRIAL PARKWAY **E/W STREET:** PALM AVENUE

PERIOD: AM PEAK HOUR **DATE:** TUESDAY AUGUST 31, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15	20	44	0	0	20	0	2	0	6	0	0	0	91
7:15 - 7:30	26	37	0	0	33	3	1	0	8	0	0	0	107
7:30 - 7:45	29	66	0	0	28	1	0	0	13	0	0	0	137
7:45 - 8:00	22	61	0	0	29	3	1	0	9	0	0	0	124
8:00 - 8:15	19	37	0	0	31	4	0	1	13	0	1	0	106
8:15 - 8:30	28	20	0	0	27	0	0	0	17	0	0	0	92
8:30 - 8:45	16	33	0	0	32	1	0	0	12	0	0	0	94
8:45 - 9:00	27	42	0	0	22	1	1	0	8	0	0	0	101

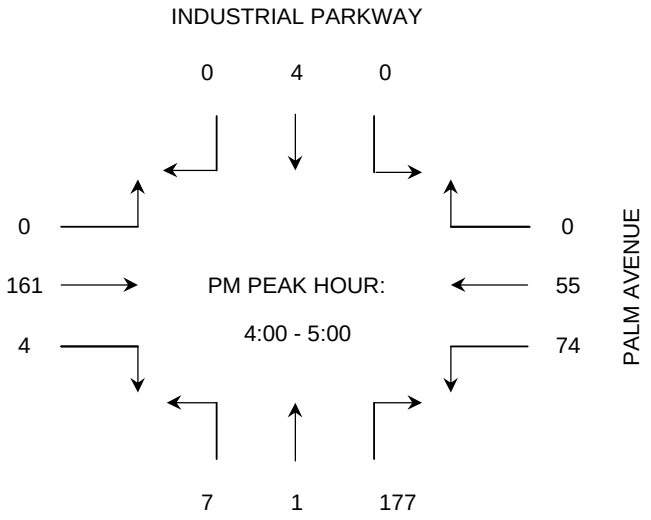
1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	96	207	0	0	109	7	4	0	35	0	0	0	458
7:15 - 8:15	96	201	0	0	120	11	2	1	43	0	1	0	474 *
7:30 - 8:30	98	184	0	0	115	8	1	1	52	0	1	0	459
7:45 - 8:45	85	151	0	0	119	8	1	1	51	0	1	0	416
8:00 - 9:00	89	132	0	0	112	6	1	1	50	0	1	0	392



PERIOD: PM PEAK HOUR **DATE:** TUESDAY AUGUST 31, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 4:15	26	11	0	0	54	1	3	1	61	0	0	0	156
4:15 - 4:30	20	12	0	0	21	0	2	0	38	0	0	0	93
4:30 - 4:45	22	13	0	0	45	1	1	0	46	0	0	0	127
4:45 - 5:00	7	19	0	0	41	2	1	0	33	0	4	0	107
5:00 - 5:15	12	17	0	0	26	0	2	0	37	0	0	0	94
5:15 - 5:30	13	16	0	0	25	1	0	0	30	0	0	0	85
5:30 - 5:45	10	11	0	0	32	1	1	0	29	0	0	0	84
5:45 - 6:00	11	14	0	0	38	0	0	0	21	0	0	0	84

1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 5:00	74	55	0	0	161	4	7	1	177	0	4	0	483 *
4:15 - 5:15	61	61	0	0	133	3	6	0	153	0	4	0	420
4:30 - 5:30	54	65	0	0	137	4	4	0	145	0	4	0	413
4:45 - 5:45	42	63	0	0	124	4	4	0	129	0	4	0	370
5:00 - 6:00	46	58	0	0	121	2	3	0	117	0	0	0	347



Crain & Associates
2007 Sawtelle Blvd., Suite 4
Los Angeles, CA 90025
Tel: (310) 473-6508

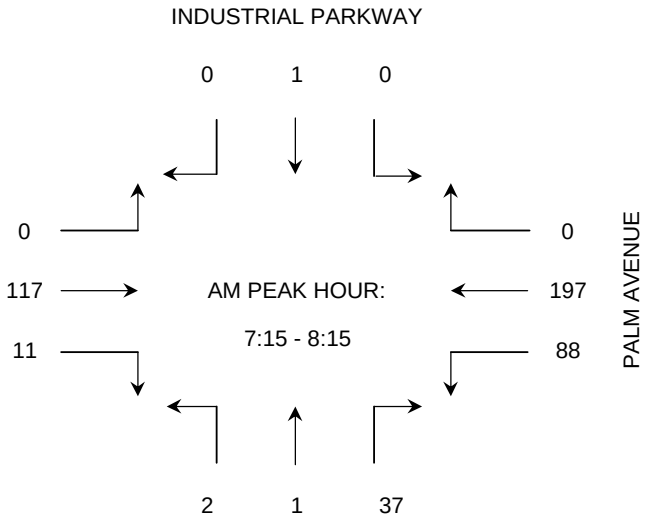
VEHICLE TURNING MOVEMENT COUNT SUMMARY (TOTAL VEHICLES)

N/S STREET: INDUSTRIAL PARKWAY **E/W STREET:** PALM AVENUE

PERIOD: AM PEAK HOUR **DATE:** TUESDAY AUGUST 31, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15	17	43	0	0	20	0	0	0	5	0	0	0	85
7:15 - 7:30	21	35	0	0	32	3	1	0	7	0	0	0	99
7:30 - 7:45	26	65	0	0	26	1	0	0	9	0	0	0	127
7:45 - 8:00	22	60	0	0	28	3	1	0	9	0	0	0	123
8:00 - 8:15	19	37	0	0	31	4	0	1	12	0	1	0	105
8:15 - 8:30	24	19	0	0	25	0	0	0	10	0	0	0	78
8:30 - 8:45	13	33	0	0	30	1	0	0	8	0	0	0	85
8:45 - 9:00	25	42	0	0	20	1	1	0	6	0	0	0	95

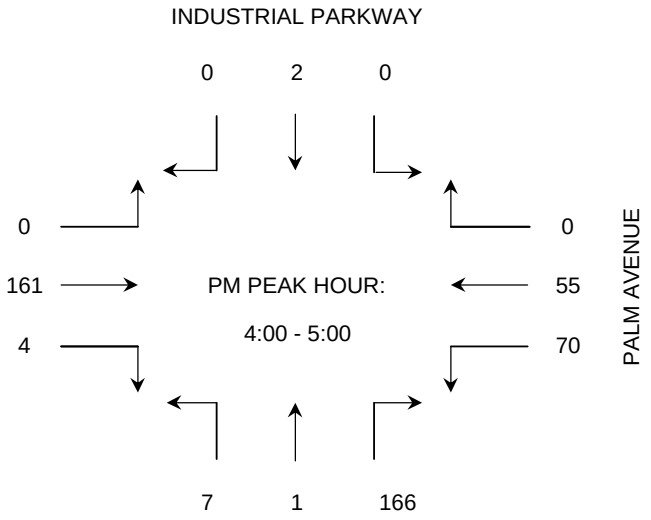
1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	86	203	0	0	106	7	2	0	30	0	0	0	434
7:15 - 8:15	88	197	0	0	117	11	2	1	37	0	1	0	454 *
7:30 - 8:30	91	181	0	0	110	8	1	1	40	0	1	0	433
7:45 - 8:45	78	149	0	0	114	8	1	1	39	0	1	0	391
8:00 - 9:00	81	131	0	0	106	6	1	1	36	0	1	0	363



PERIOD: PM PEAK HOUR **DATE:** TUESDAY AUGUST 31, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 4:15	23	11	0	0	54	1	3	1	53	0	0	0	146
4:15 - 4:30	19	12	0	0	21	0	2	0	37	0	0	0	91
4:30 - 4:45	21	13	0	0	45	1	1	0	45	0	0	0	126
4:45 - 5:00	7	19	0	0	41	2	1	0	31	0	2	0	103
5:00 - 5:15	12	15	0	0	26	0	2	0	32	0	0	0	87
5:15 - 5:30	13	16	0	0	25	1	0	0	30	0	0	0	85
5:30 - 5:45	10	11	0	0	32	1	1	0	29	0	0	0	84
5:45 - 6:00	11	14	0	0	36	0	0	0	21	0	0	0	82

1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 5:00	70	55	0	0	161	4	7	1	166	0	2	0	466 *
4:15 - 5:15	59	59	0	0	133	3	6	0	145	0	2	0	407
4:30 - 5:30	53	63	0	0	137	4	4	0	138	0	2	0	401
4:45 - 5:45	42	61	0	0	124	4	4	0	122	0	2	0	359
5:00 - 6:00	46	56	0	0	119	2	3	0	112	0	0	0	338



Crain & Associates
2007 Sawtelle Blvd., Suite 4
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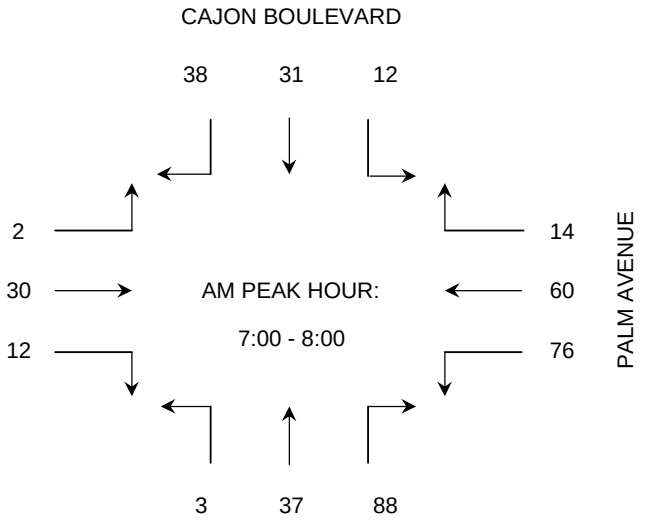
VEHICLE TURNING MOVEMENT COUNT SUMMARY (PCEs)

N/S STREET: CAJON BOULEVARD **E/W STREET:** PALM AVENUE

PERIOD: AM PEAK HOUR **DATE:** TUESDAY SEPTEMBER 14, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15	5	18	3	0	6	3	2	11	18	3	7	9	85
7:15 - 7:30	21	13	5	1	6	3	1	13	29	4	6	12	114
7:30 - 7:45	25	16	1	0	11	2	0	5	31	2	5	9	107
7:45 - 8:00	25	13	5	1	7	4	0	8	10	3	13	8	97
8:00 - 8:15	15	10	2	0	6	2	1	6	9	4	11	4	70
8:15 - 8:30	13	6	1	0	7	1	1	5	10	3	10	1	58
8:30 - 8:45	11	11	5	0	5	1	2	15	11	0	2	3	66
8:45 - 9:00	21	4	3	2	4	0	2	5	10	0	9	3	63

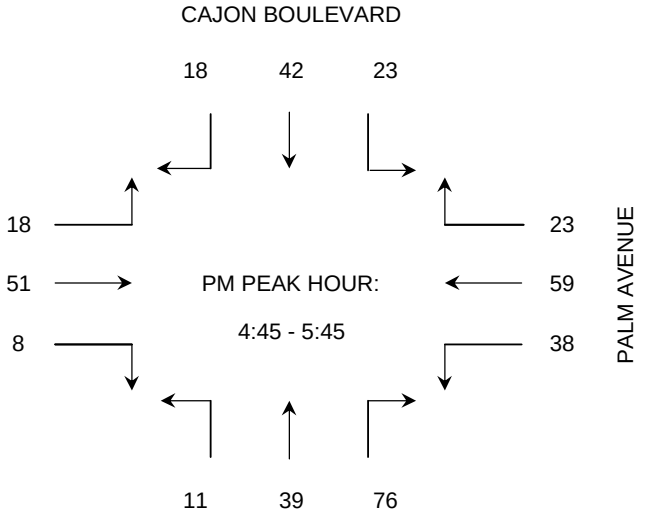
1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	76	60	14	2	30	12	3	37	88	12	31	38	402 *
7:15 - 8:15	86	52	13	2	30	11	2	32	79	13	35	33	387
7:30 - 8:30	78	45	9	1	31	9	2	24	60	12	39	22	332
7:45 - 8:45	64	40	13	1	25	8	4	34	40	10	36	16	291
8:00 - 9:00	60	31	11	2	22	4	6	31	40	7	32	11	257



PERIOD: PM PEAK HOUR **DATE:** TUESDAY SEPTEMBER 14, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 4:15	7	6	3	3	26	5	3	9	10	10	11	5	98
4:15 - 4:30	12	10	3	5	22	0	0	11	15	4	11	1	94
4:30 - 4:45	11	7	8	4	17	2	1	11	13	12	4	4	94
4:45 - 5:00	9	7	3	5	25	2	4	9	20	5	12	3	104
5:00 - 5:15	8	13	7	9	11	5	0	15	19	2	8	5	102
5:15 - 5:30	7	19	10	0	5	0	3	4	17	11	5	3	84
5:30 - 5:45	14	20	3	4	10	1	4	11	20	5	17	7	116
5:45 - 6:00	10	17	4	2	11	0	2	9	21	6	10	3	95

1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 5:00	39	30	17	17	90	9	8	40	58	31	38	13	390
4:15 - 5:15	40	37	21	23	75	9	5	46	67	23	35	13	394
4:30 - 5:30	35	46	28	18	58	9	8	39	69	30	29	15	384
4:45 - 5:45	38	59	23	18	51	8	11	39	76	23	42	18	406 *
5:00 - 6:00	39	69	24	15	37	6	9	39	77	24	40	18	397



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Los Angeles, CA 90025
Tel: (310) 473-6508

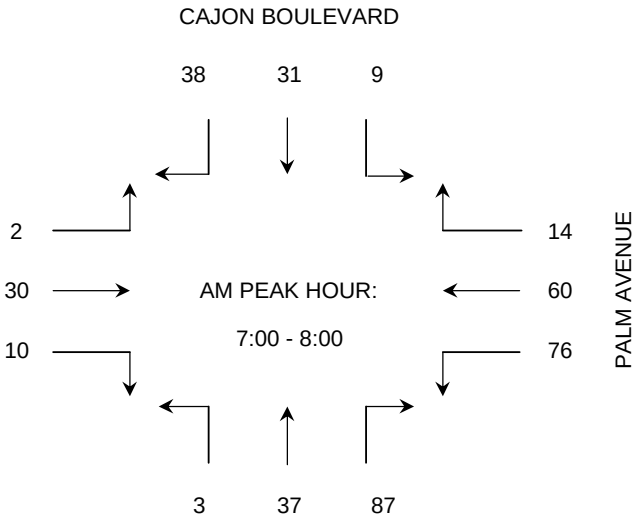
VEHICLE TURNING MOVEMENT COUNT SUMMARY (TOTAL VEHICLES)

N/S STREET: CAJON BOULEVARD **E/W STREET:** PALM AVENUE

PERIOD: AM PEAK HOUR **DATE:** TUESDAY SEPTEMBER 14, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 7:15	5	18	3	0	6	1	2	11	18	3	7	9	83
7:15 - 7:30	21	13	5	1	6	3	1	13	28	2	6	12	111
7:30 - 7:45	25	16	1	0	11	2	0	5	31	1	5	9	106
7:45 - 8:00	25	13	5	1	7	4	0	8	10	3	13	8	97
8:00 - 8:15	15	10	2	0	6	2	1	6	9	4	11	4	70
8:15 - 8:30	13	6	1	0	7	1	1	5	10	3	10	1	58
8:30 - 8:45	11	11	3	0	5	1	2	15	11	0	2	3	64
8:45 - 9:00	21	4	3	2	4	0	2	5	10	0	8	3	62

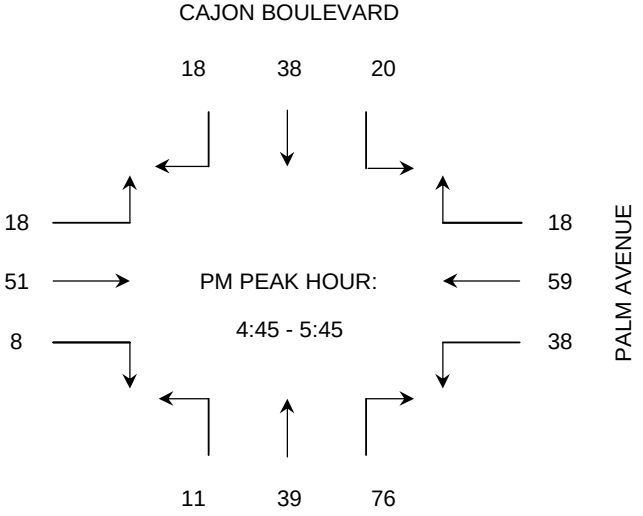
1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
7:00 - 8:00	76	60	14	2	30	10	3	37	87	9	31	38	397 *
7:15 - 8:15	86	52	13	2	30	11	2	32	78	10	35	33	384
7:30 - 8:30	78	45	9	1	31	9	2	24	60	11	39	22	331
7:45 - 8:45	64	40	11	1	25	8	4	34	40	10	36	16	289
8:00 - 9:00	60	31	9	2	22	4	6	31	40	7	31	11	254



PERIOD: PM PEAK HOUR **DATE:** TUESDAY SEPTEMBER 14, 2010

15-MINUTE	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 4:15	7	6	3	3	26	5	3	9	10	8	11	5	96
4:15 - 4:30	12	10	1	5	20	0	0	11	15	4	11	1	90
4:30 - 4:45	10	7	6	2	17	2	1	11	13	10	4	4	87
4:45 - 5:00	9	7	3	5	25	2	4	9	20	5	10	3	102
5:00 - 5:15	8	13	6	9	11	5	0	15	19	2	8	5	101
5:15 - 5:30	7	19	6	0	5	0	3	4	17	8	5	3	77
5:30 - 5:45	14	20	3	4	10	1	4	11	20	5	15	7	114
5:45 - 6:00	10	17	4	2	11	0	2	9	21	6	10	3	95

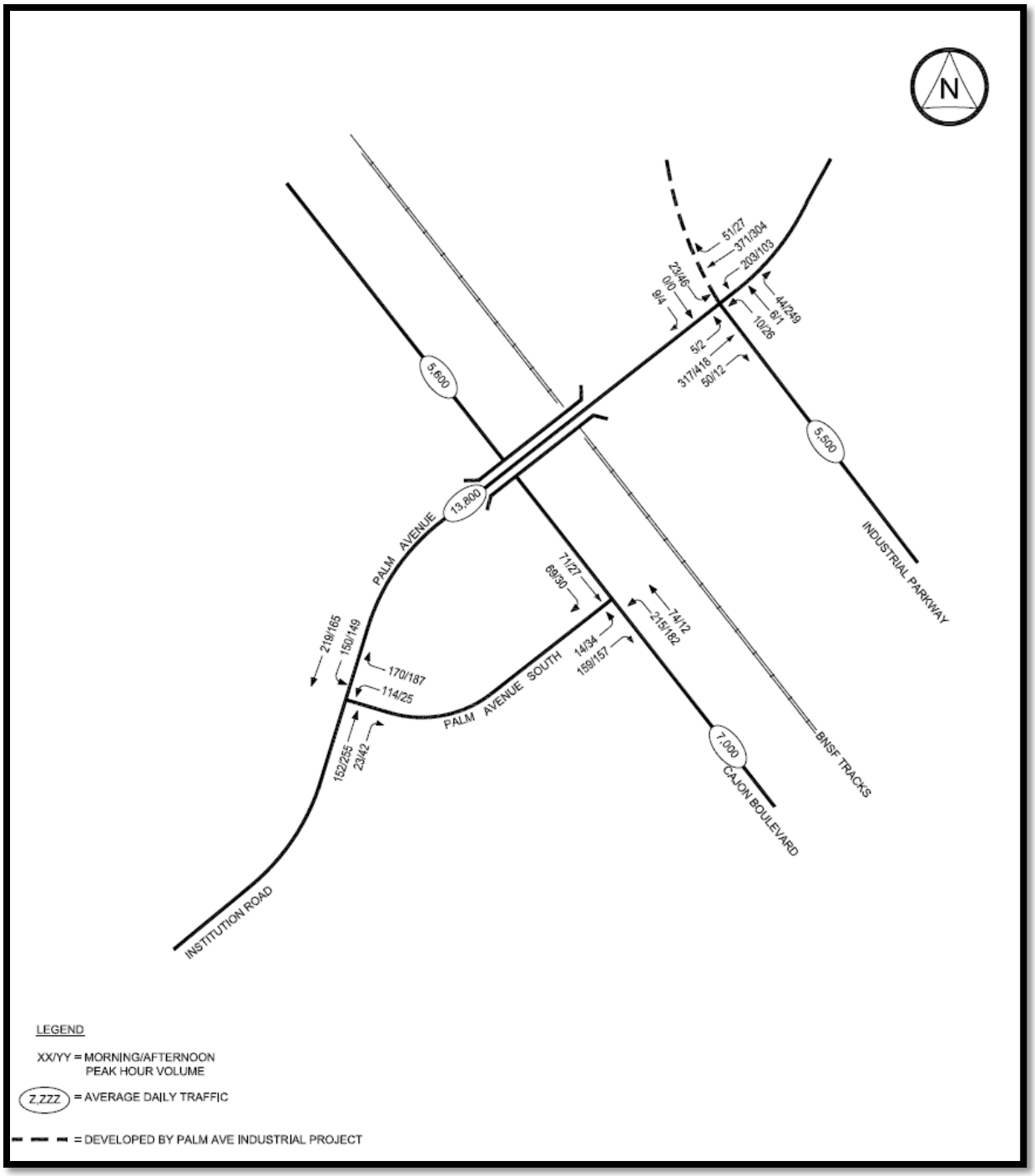
1-HOUR	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			
TOTALS	L	T	R	L	T	R	L	T	R	L	T	R	TOTAL
4:00 - 5:00	38	30	13	15	88	9	8	40	58	27	36	13	375
4:15 - 5:15	39	37	16	21	73	9	5	46	67	21	33	13	380
4:30 - 5:30	34	46	21	16	58	9	8	39	69	25	27	15	367
4:45 - 5:45	38	59	18	18	51	8	11	39	76	20	38	18	394 *
5:00 - 6:00	39	69	19	15	37	6	9	39	77	21	38	18	387



ATTACHMENT B

Future (2035) Traffic Model Volumes from the Palm Avenue Grade Separation Traffic Analysis

FIGURE 2
Year 2035 Traffic Volumes



DRAFT

TRAFFIC IMPACT ANALYSIS REPORT FOR THE PALM AVENUE WAREHOUSE/DISTRIBUTION CENTER PROJECT, CITY OF SAN BERNARDINO

Prepared for:

CITY OF SAN BERNARDINO
AND
IDS REAL ESTATE GROUP

Prepared by:

Crain & Associates
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December 2007

EXECUTIVE SUMMARY

The IDS Real Estate Group plans to develop a warehouse and distribution center in a single building containing approximately 682,408 square feet of floor area. The proposed building will be constructed on an existing vacant lot. The project site is located on the north side of Industrial Park east of Palm Avenue in the northwestern portion of the City of San Bernardino near the Barstow Freeway (I-215) and Palm Avenue intersection.

The project will be completed in one phase and is expected to be occupied by 2010. Upon completion, it is estimated that the project would generate approximately 1,303 passenger-car-equivalent vehicle trips per day, including 89 AM and 89 PM peak-hour trips.

The project will satisfy the City-code parking requirement by providing 608 spaces, all of which will be within the site around the perimeter. Two driveways on Industrial Parkway are planned for access to the project site, with the southerly driveway designed for truck access.

This traffic impact study analyzed existing (year 2007) and future (Opening Year 2010 and 2030) weekday AM and PM peak-hour traffic conditions at five intersections surrounding the site. The analysis took into account a total of 29 related projects for the analysis of cumulative project conditions. Significant traffic impacts are expected to occur at two study intersection locations under the “Opening Day 2010 With Project” condition and four study intersection locations under the “Future 2030 With Project” condition. The following measures are recommended in order to mitigate these significant traffic impacts:

- <u>Palm Ave. & I-215 NB Ramps</u> – Install a traffic signal at this location. (For both Opening Year 2010 and Future 2030 Conditions)

- Palm Ave. & I-215 SB Ramps/Kendall Ave. – Install a traffic signal at this location. (For both Opening Year 2010 and Future 2030 Conditions)
- Palm Ave. & Industrial Pkwy. – Restripe the southbound approach of Palm Avenue to provide a left-turn lane and a shared right/through lane at Industrial Parkway, and a shared through/left lane and a right-turn lane on the westbound approach of Industrial Parkway at Palm Avenue. Install a traffic signal that includes a westbound right-turn phase on Industrial Parkway concurrent with the southbound left-turn phase on Palm Avenue at this location. (For Future 2030 Condition Only)
- Palm Ave./Institution Rd. & Cajon Blvd. – Install a traffic signal at this location. (For Future 2030 Condition Only)

Implementation of the above measures will bring all significantly impacted intersections to an acceptable level of service (LOS D or better).

The cost estimate of the mitigation measures were calculated according to Appendix G of the San Bernardino CMP. The project will contribution its fair-share of the recommended mitigation cost based on the project percentage of total new traffic volumes.

In addition, a review of the freeway segments in the project area was conducted to determine if the project traffic volumes would exceed County growth standards. Based on the County standards, an analysis is required for freeway segments where the project is expected to generate 100 or more peak-hour trips (two-way). Since the project is not expected to generate 100 or more peak-hour trips, no further CMP freeway mainline analyses are warranted.

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I. INTRODUCTION

The IDS Real Estate Group proposes to develop an approximate 682,408 square-foot warehouse and distribution center on the north side of Industrial Parkway east of Palm Avenue in the City of San Bernardino. The irregularly shaped property encompasses 35.02 acres and is currently vacant. The project site location is shown in Figure 1, Site Vicinity Map.

This report was prepared based on methodologies and procedures specified by the San Bernardino Associated Governments (SANBAG) and Southern California Association of Governments (SCAG) in the San Bernardino County Congestion Management Plan (CMP). Detailed analyses were made of existing and future conditions at five intersections in the vicinity of the site. The study intersections are listed below and shown in Figure 2, Study Intersection Locations.

1. Palm Avenue & Kendall Drive/Little League Drive
2. Palm Avenue & I-215 Northbound Ramps
3. Palm Avenue & I-215 Southbound Ramps/Kendall Drive
4. Palm Avenue & Industrial Parkway
5. Palm Avenue & Cajon Boulevard

The selection of the study intersections was based on discussions with City staff to ensure that the study area adequately encompassed intersections that might be significantly impacted by the project.

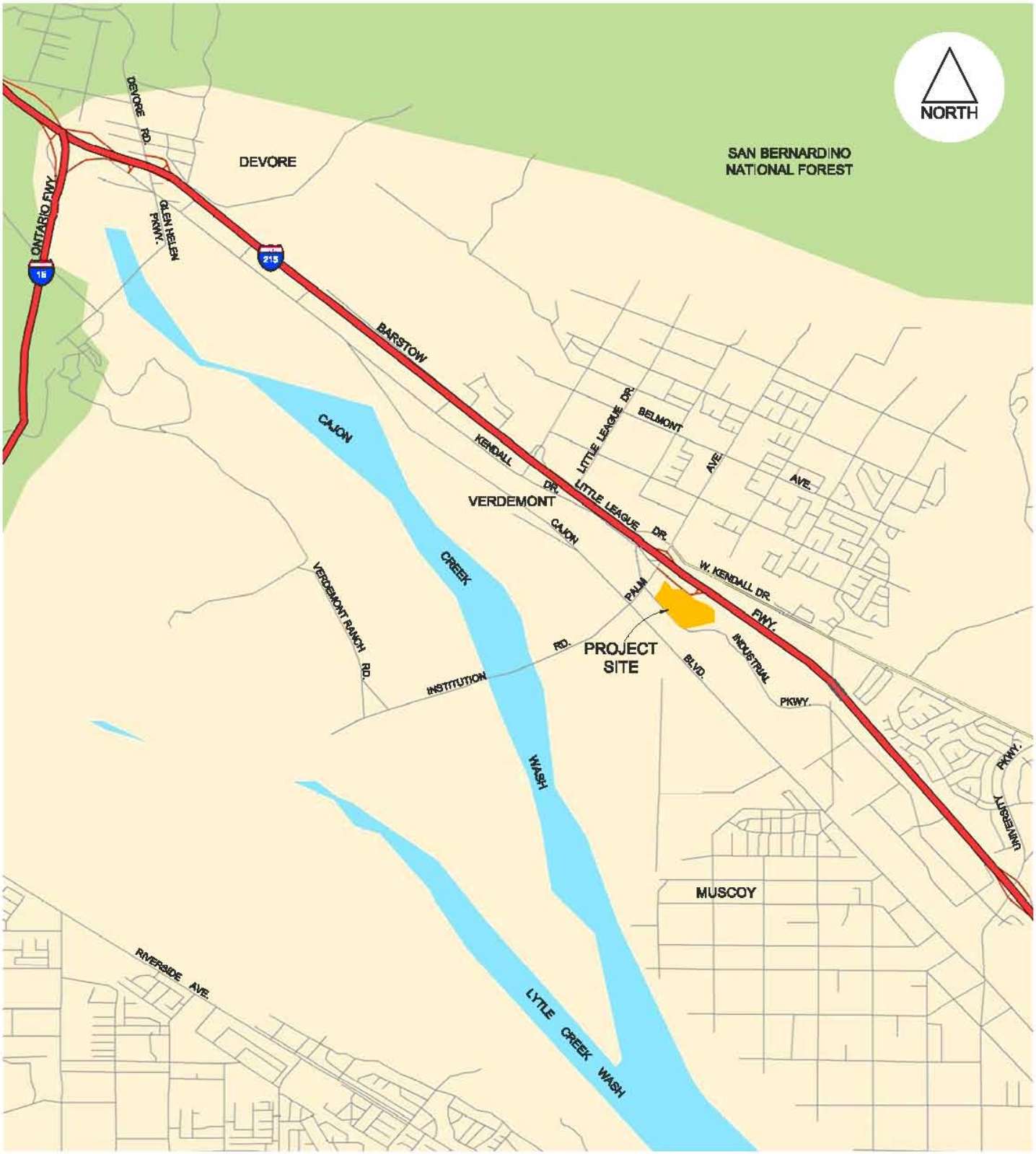

FIGURE 1

12/7/2007

FN: PALM AVE WAREHOUSE SAN BERNARDINO/SITEVINC

SITE VICINITY MAP

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FIGURE 2

STUDY INTERSECTION LOCATIONS

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I.A. PROJECT DESCRIPTION

The project site is currently a vacant site located between the I-215 Freeway and Industrial Parkway, west of Palm Avenue. Immediate site boundaries include Industrial Parkway to the south, the I-215 Freeway to the northeast, Palm Avenue to the west, and vacant land to the east. In this northwestern portion of the City of San Bernardino, the surrounding development along Palm Avenue is primarily single-family residential and open space north and south of the I-215 Freeway, respectively. The conceptual project site plan is shown in Figure 3.

The proposed project will total approximately 682,408 square feet of floor area of warehouse and distribution use in a single building. In addition, the project will provide approximately 608 at-grade spaces on-site for the new warehouse use. Of these spaces, approximately 515 spaces will be at-grade within the site around the perimeter. The remaining approximate 93 spaces will be trailer spaces along the southern portion of the site. The total 608 spaces are expected to provide sufficient parking for the project, as discussed in the *Parking and Access* section of this document. The project is expected to be completed in one phase and occupied by no later than 2010.

The project site will have two driveways on Industrial Parkway. The northerly driveway will directly access parking on the northern portion of the project site and will function as the main project site driveway. Further to the southeast, a second driveway will connect to an internal roadway that curves into the site to directly access the trailer spaces.

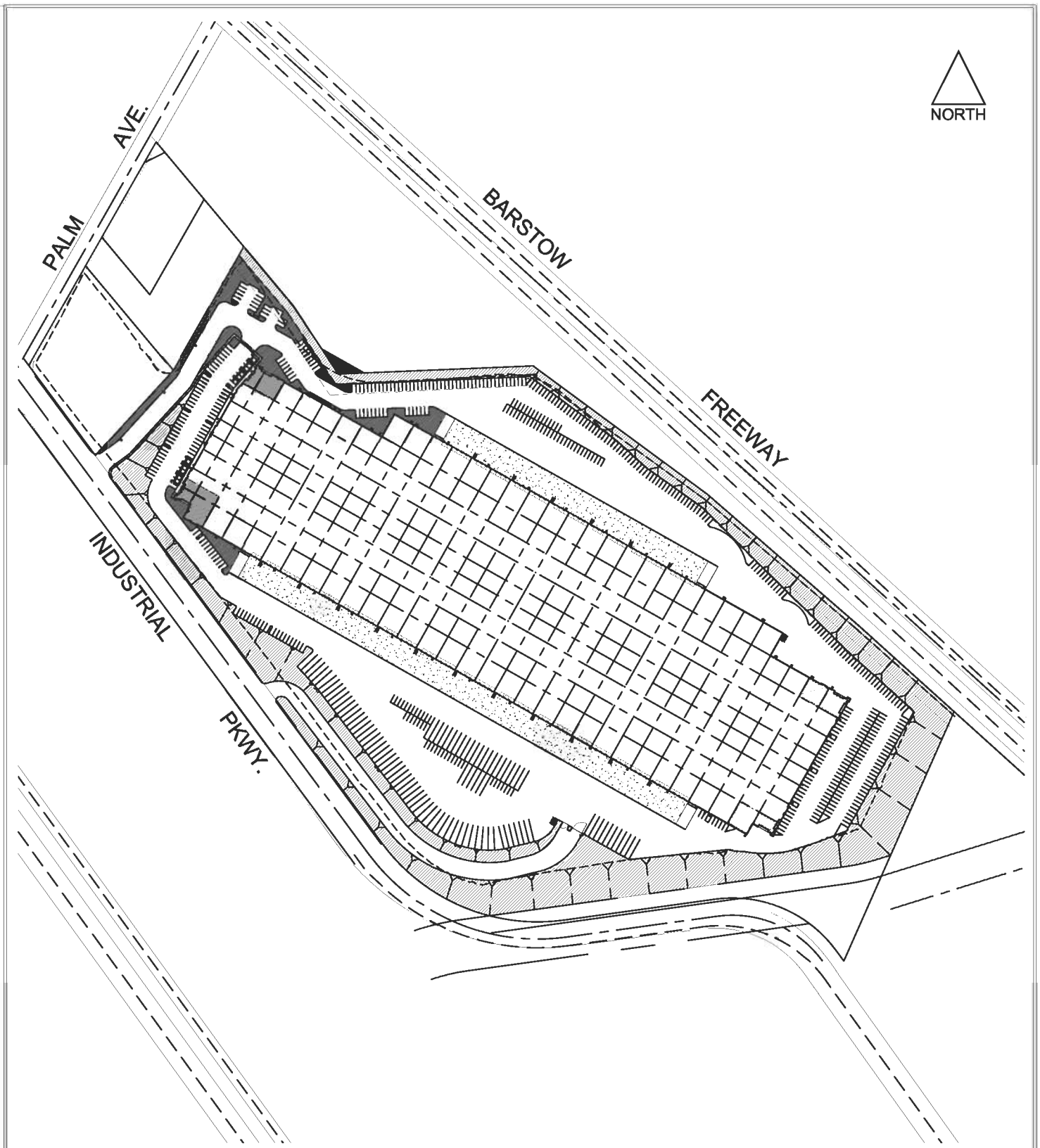

FIGURE 3

12/7/2007

FN: PALM AVE WAREHOUSE SAN BERNARDINO\SITEPLAN

CONCEPTUAL PROJECT SITE PLAN

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I.B ANALYSIS METHODOLOGY

The transportation analysis methodology and scope for the proposed project was determined at onset by the lead jurisdiction (the City of San Bernardino). The City of San Bernardino Staff and the Congestion Management Plan (CMP) for San Bernardino County directed the consultant staff with respect to conducting this analysis. The City approved the list of study intersections to be included in the analysis.

The technical analysis was conducted using a computerized transportation model, which models (replicates) travel demand and traffic volumes. As directed by the SanBAG staff, the East Valley Transportation Model (EVTM), which was developed by the City of San Bernardino, was used for this study. The EVTM, in comparison to the SanBAG model, was developed with greater detail in the study area including additional links and zones that better replicate area traffic patterns. The study team provided the City of San Bernardino staff with the specific details for the project site so that they could incorporate this site specific data into their regional traffic model, thus producing forecasts for the With and Without Project scenarios. The project volumes were determined based on runs of the project select zones. The EVTM produced future year forecasted traffic volume conditions on street segments surrounding the project site. Turning movement traffic volumes at study intersections were determined using procedures developed for SanBAG that are included in a program named B-Turns. B-Turns, a pivot point model, estimates future turning movement volumes at an intersection based on existing turning movement volumes (e.g., intersection turning movement counts) and future street segment volumes (e.g., link volumes from the EVTM). The SanBAG provided this B-Turns program to Crain & Associates, and the City of San Bernardino refined the EVTM and provided the necessary model output.

Traffix 7.9 was the software package used to conduct the intersection level-of-service analysis. The Highway Capacity Manual 2000 (HCM2000) methodology was used to calculate the level-of-service at the study intersections. Based on guidelines from the San Bernardino CMP, the LOS analysis for signalized intersections has been performed using optimized signal timing. A lost time of two seconds per phase was assumed. For existing conditions, saturation flow rates of 1,800 vehicles per hour of green per lane (vphgpl) was assumed for exclusive through lanes and exclusive right-turn lanes, 1,700 vphgpl for exclusive single left-turn lanes and 1,600 vphgpl for exclusive double left-turn lanes. For future conditions, saturation flow rates of 1,900 vphgpl was assumed for exclusive through lanes and exclusive right-turn lanes, 1,800 vphgpl for exclusive single left-turn lanes and double right-turn lanes, and 1,700 vphgpl for exclusive double left-turn lanes.

The EVTM's results and intersection count data, along with intersection geometrics and traffic signal and control data, were combined in Traffix to determine the Levels of Service (LOS) and traffic delays at the signalized and STOP sign-controlled study intersections for both existing and future traffic conditions.

II. EXISTING CONDITIONS

The site of the proposed project is located near the northwestern portion of the City of San Bernardino where other development south of the Barstow Freeway (I-215) is industrial with considerable open space throughout. North of I-215 to the San Bernardino National Forest, it is largely single-family residential. Immediate project site boundaries include Industrial Parkway to the south, I-215 to the northeast, Palm Avenue to the west, and open space to the east. Little League Western Headquarters and the Blast Soccer Complex are located about one mile northwest of the project site.

The facilities that provide regional as well as local access for the project site and the surrounding community are described below.

II.1 Freeways

Interstate 215, known as the Barstow Freeway in the study area, is a north-south oriented freeway adjacent to the northeast side of the project site. This facility provides two mainline travel lanes in each direction in the study area. A full freeway-to-freeway interchange is provided at the Ontario Freeway (I-15) approximately four miles northwest of the project site. From that location, I-215 extends southerly through Riverside County and reconnects with I-15 in the City of Murrieta. According to the most recent (year 2006) Caltrans data available, average traffic volumes on I-215 between Devore Road and Palm Avenue are approximately 71,000 vehicles per day (VPD) and 6,000 vehicles per hour (VPH). Immediate access to the project area surface street network is provided along I-215 by northbound and southbound ramps at Palm Avenue.

II.2 Streets

Palm Avenue, designated a Secondary Arterial between Cajon Boulevard and Ohio Avenue, begins from the San Bernardino National Forest and extends southerly to Cajon Boulevard. Palm Avenue varies from one to two through lanes in each direction. Its intersection with Little League Drive and Kendall Drive is signalized and provides left-turn channelizations in both directions.

Kendall Drive, a Major Arterial, is a continuation of West Little League Drive from the Palm Avenue signalized intersection. Two travel lanes and a bike lane are provided in each direction. Another segment of Kendall Drive extends northwesterly for less than two miles from Palm Avenue, opposite the I-215 southbound ramps to Cajon Boulevard.

Industrial Parkway is a northwest-southeast oriented Secondary Arterial which traverses from Kendall Drive to Lexington Way between I-215 and Cajon Boulevard. East of Lexington Way, this roadway becomes Hallmark Parkway. At Palm Avenue, Industrial Parkway provides one through lane and left –turn channelization in each direction.

Cajon Boulevard, is part of the historic Route 66 and parallels I-215 throughout much of its route. This roadway extends southeasterly from about one-quarter mile northwest of the Devore Road/Glen Helen Parkway/Cajon Boulevard intersection to its southern terminus at 21st Street just south of Highland Avenue in the City of San Bernardino. Another segment of Cajon Boulevard resumes west of I-15. Cajon Boulevard is designated a Mountain Secondary Highway west of Kenwood Avenue and a Major Arterial east of Glen Helen Parkway. This roadway generally has one to two lanes in each direction, with left-turn channelizations at major intersections. No parking is allowed on this roadway.

II.B PUBLIC TRANSPORTATION

Public transportation options are provided within walking distance of the project site. Omnitrans, the local public bus service provider, provides one bus route in the project vicinity. In addition, Metrolink, Southern California's regional rail system, operates the San Bernardino Line south of the project area. An overview of the transit service that is available in and around the study area is provided below.

Omnitrans

The project site is served by one Omnitrans line. Route 7 operates along Kendall Drive and Palm Avenue near the project site. This route connects the northern and southern parts of the City of San Bernardino, stopping at destinations including Cal State San Bernardino, the Carousel Mall, and the 4th Street Transit Mall. Approximate hourly headways are provided seven days a week.

Metrolink

San Bernardino Line provides daily rail service between San Bernardino County, San Gabriel Valley and Downtown Los Angeles. The San Bernardino Line provides a stop at Los Angeles Union Station, thereby providing transfer opportunities to a variety of public transit services. This line stops in close proximity to the San Bernardino Station, located at 1204 West 3rd Street in the southern part of the City. When used in conjunction with Omnitrans Route 7, the San Bernardino Line is accessible to and from the project site. The San Bernardino Line operates seven days a week, with weekday headways of approximately 20 minutes during the peak periods.

II.C EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

The traffic volumes used in the following analyses were based entirely on new traffic count data collected at the five study intersections in May 2007 by The Traffic Solution, an independent traffic data collection firm. The traffic counts were conducted on days representing typical or average traffic conditions in the study area. These counts include passenger-car trips as well as the number and type of truck trips, and were converted to passenger-car equivalent (PCE) trips. The count summary sheets for each of the study intersections are provided in Appendix A. Existing (2007) AM and PM peak-hour PCE volumes at the study intersections are depicted in Figures 4(a) and 4(b), respectively.

To assess existing traffic conditions on the highway system serving the study area, a detailed analysis was made of the five intersections listed below (also, see Figure 2), which were determined in consultation with the City of San Bernardino staff.

1. Palm Avenue & Kendall Drive/Little League Drive
2. Palm Avenue & I-215 Northbound Ramps*
3. Palm Avenue & I-215 Southbound Ramps/Kendall Drive*
4. Palm Avenue & Industrial Parkway*
5. Palm Avenue/Institution Road & Cajon Boulevard*

---

* One-way, two-way or all-way STOP sign-controlled.

In addition, a review of the intersections and freeway segments in the project area was conducted to determine if the project traffic volumes would exceed County growth standards. According to the County growth standards, the analysis must include all

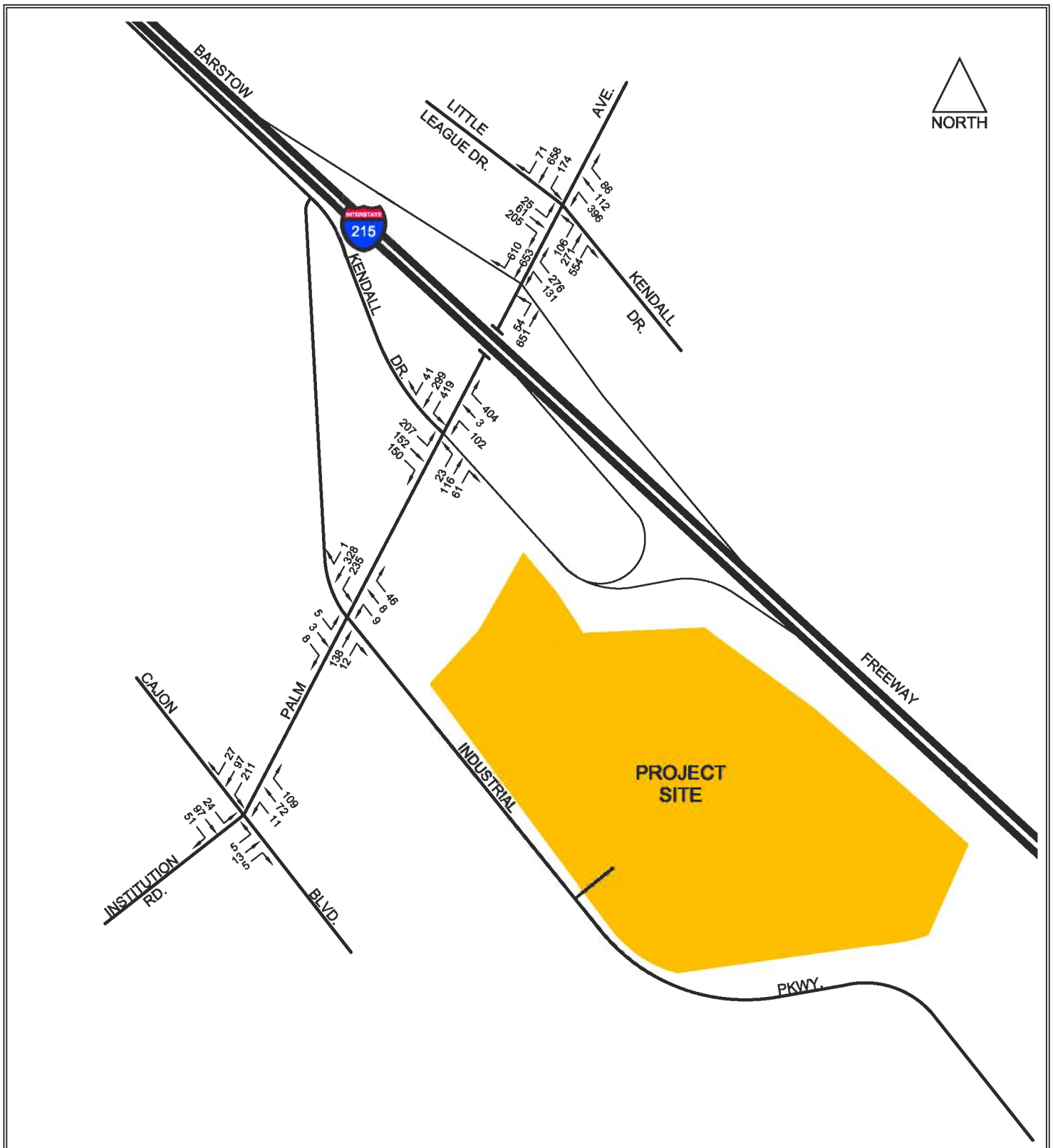

FIGURE 4(a)

12/7/2007

Palm Ave Warehouse San Bernardino\AM2007

EXISTING (2007) TRAFFIC VOLUMES
AM PEAK HOUR

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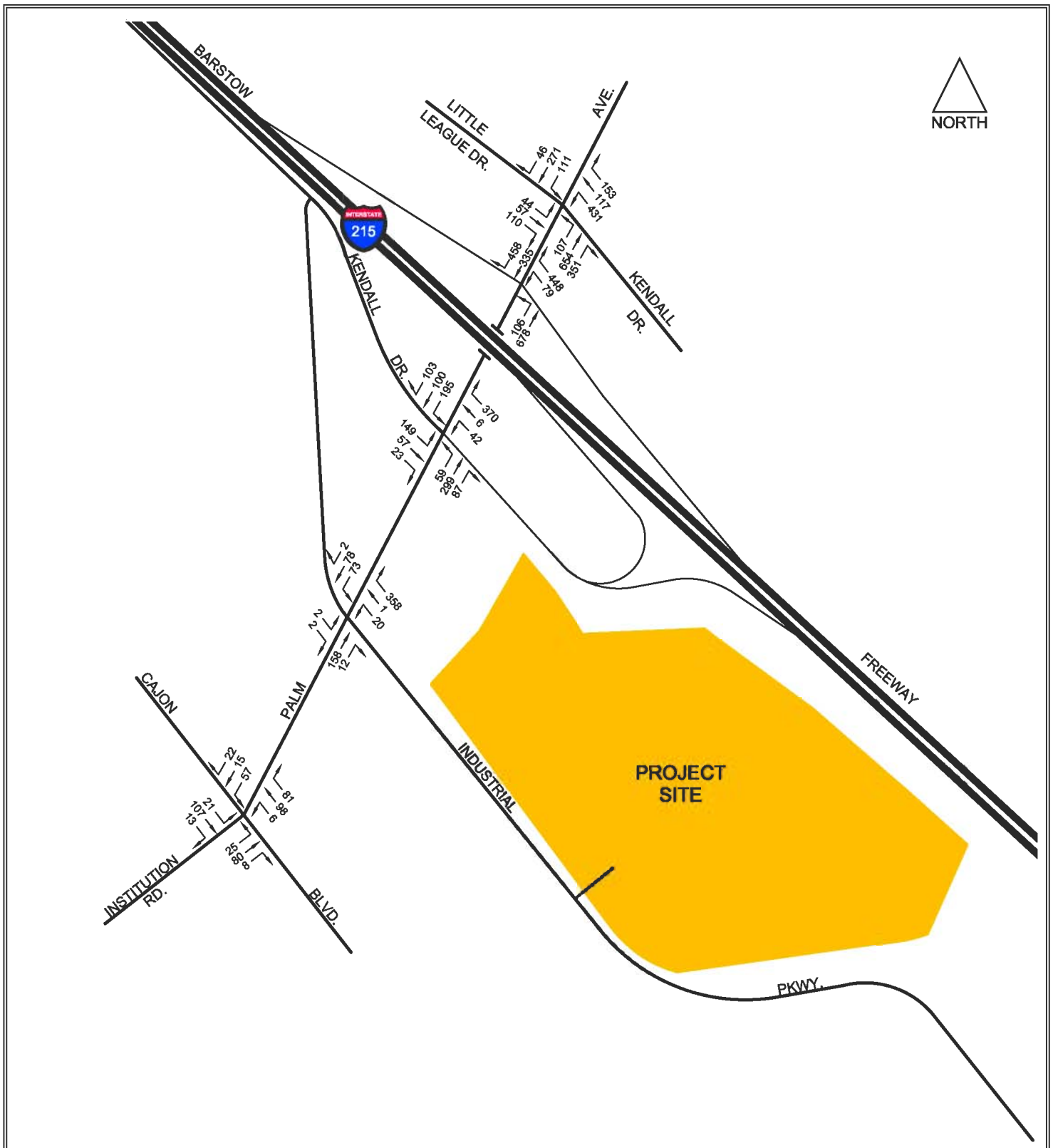

FIGURE 4(b)

12/7/2007

Palm Ave Warehouse San Bernardino\PM2007

EXISTING (2007) TRAFFIC VOLUMES
PM PEAK HOUR

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arterial segments where the anticipated project volume equals or exceeds 80 two-way trips during the peak hours for non-State highway facilities and 50 two-way trips during the peak hours for State highway facilities. Also, an analysis is required for freeway segments where the project is expected to generate 100 or more peak-hour trips (two-way). Based on these standards, no additional intersections other than the five study intersections listed above are required for analyses. Also, the project is not expected to generate 100 or more peak-hour trips (two-way) on any freeway segments. Thus, no further CMP freeway mainline analyses are warranted.

All traffic analyses were performed using traditional and well-established traffic engineering techniques. Traffic volume information, as noted previously, was obtained from recent counts of the study intersections. The counts were conducted specifically for this study to insure that any recent changes in traffic patterns would be reflected in this study. Information pertaining to intersection geometrics and traffic control operations were obtained through recent field surveys of the study locations. The lane configurations and traffic control operations at the study intersections are shown in Appendix B. One study intersection, located at Palm Avenue and Kendall Drive/Little League Drive, is controlled by a traffic signal. The remaining four study intersections are STOP sign-controlled. This analysis, as well as the analysis of future conditions discussed later in this report, focused on the weekday AM and PM peak hours.

The analysis and evaluation of traffic operations at each study intersection is based on procedures outlined in the Highway Capacity Manual (HCM2000), per San Bernardino County CMP guidelines, using the Traffix 7.9 program. This methodology determines the operating characteristics of an intersection in terms of the “Level of Service” (LOS) provided for different levels of traffic volumes and other variables such as lane configurations and type of control. LOS describes the quality of service. Intersections

with a LOS of A, B or C operate quite well. Typically, LOS D is the design level of service for many metropolitan street systems. LOS E represents volumes at or near the capacity of the facility, and might result in stoppages of momentary duration and fairly unstable flow. LOS F occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages for a long duration. Table 1 further explains LOS types used in this study.

Table 1
Level of Service as a Function of Delay

Level of Service	Description of Operating Characteristics	Signalized Avg Total Delay Per Vehicle (Sec)[a]	One, Two and All-Way Stop-Controlled Delay Per Vehicle (Sec)[b, c]
A	Uncongested operations; all vehicles clear in a single cycle.	≤ 10	≤ 10
B	Same as above.	> 10 – 20	> 10 – 15
C	Light congestion; occasional backups on critical approaches.	> 20 – 35	> 15 – 25
D	Congestion on critical approaches.	> 35 – 55	> 25 – 35
E	Severe congestion with some long-standing lines on critical approaches. Blockage of intersection may occur if traffic signal does not provide turning movements	> 55 – 80	> 35 – 50
F	Forced flow with stoppages of long duration.	> 80	> 50

[a] From Exhibit 16-2 of the Highway Capacity Manual (2000), Transportation Research Board, Washington, D.C., 2000.

[b] From Exhibits 17-2 & 17-22 of the Highway Capacity Manual (2000), Transportation Research Board, Washington, D.C., 2000.

C Delay for all-way STOP sign-controlled intersections is the average delay for all vehicles. Delay for one- and two-way STOP sign-controlled intersections is the worst delay for the critical minor approaches. Average delay for all vehicles at two-way STOP sign-controlled intersections is less.

By applying this analysis procedure to the signalized study intersections, average vehicular delay and the corresponding LOS for existing traffic conditions were determined. Similarly, HCM methodologies were used to analyze the one-way, two-way and all-way STOP sign-controlled study intersections. The analysis of existing traffic conditions at the five study area intersections shows that all of these intersections are operating at LOS D or better during the AM and PM peak hours. It should be noted that the delay for signalized and all-way STOP sign-controlled intersections is the average delay for all vehicles entering the intersection during the specified peak-hour period, whereas the delay for one- and two-way STOP sign-controlled intersections is based on the worst-case approach delay for the minor approaches. Thus, the average delay for all vehicles at one- and two-way STOP sign-controlled intersections is substantially less. Table 2 shows the existing AM and PM peak hour Levels of Service (LOS) values for the study intersections.

Table 2
Existing (2007) Level of Service Summary

No.	Intersection	Peak-Hour Period	V/C	Delay(Sec.)	LOS
1.	Palm Ave. & Kendall Dr./Little League Dr.	AM	1.032	35.8	D
		PM	1.020	34.0	C
2.	Palm Ave. & I-215 NB On/Off-Ramps	AM	[1]	32.7	D
		PM	[1]	26.6	D
3.	Palm Ave. & I-215 SB On/Off-Ramps/Kendall Dr.	AM	0.985	33.6	D
		PM	0.596	14.2	B
4.	Palm Ave. & Industrial Pkwy.	AM	[1]	18.2	C
		PM	[1]	14.8	B
5.	Palm Ave./Institution Rd. & Cajon Blvd.	AM	0.545	12.1	B
		PM	0.267	9.2	A

[1] Volume over capacity ratio not provided for one- and two-way STOP sign-controlled intersections.

III. FUTURE TRAFFIC CONDITIONS

III.A TRAFFIC FORECASTS

The future (year 2030) traffic volumes in the project area were forecasted by the City of San Bernardino, using their local refinement of the regional travel demand model, called the East Valley Transportation Model (EVTM). The year 2030 was selected because the CMP requires analysis of long-term horizon year conditions, currently 2030 based on the EVTM. In discussions with the San Bernardino Association of Governments (SanBAG) and City of San Bernardino staff, the EVTM was determined to be the most appropriate long-range transportation-planning tool for this analysis. The EVTM uses a regional land-use database that was developed in close consultation with the relevant local jurisdictions that regulate land-use and acceptable levels of development. The future year street and highway networks assumed for this model were also developed based on input from jurisdictions throughout the region. The parameters within the model (trip generation rates, roadway capacities, etc.) have been calibrated for more than a 20-year period to closely replicate the particular transportation patterns and characteristics specifically for the City of San Bernardino and surround areas including the project vicinity.

The EVTM is based on the SCAG San Bernardino/Riverside Comprehensive Transportation Planning (CTP) model. The San Bernardino/Riverside CTP model is a refinement of the SCAG regional model and was developed jointly by SCAG and San Bernardino Association of Governments (SanBAG). San Bernardino County's Congestion Management Plan (CMP) is formed using model output from this jointly developed CTP model. The EVTM contains somewhat more disaggregate land-use data in the study area than the CTP and SCAG regional models, and it also contains additional roadways (links) in the study area that are not replicated in the CTP and

SCAG regional models. The EVTM was also developed using similar modeling procedures that were used in the CTP and SCAG modeling procedures, so it has a high level of consistency with the original CTP and SCAG regional travel demand models.

The following text describes, in greater detail, the modeling scenarios developed for this study.

1. Existing (2007) Conditions: This scenario replicates existing traffic conditions based on year 2007 socioeconomic data and existing roadway network conditions. Future growth estimates is determined by comparing traffic model volumes from the future "Without Project" conditions and existing (2007) conditions.

2. Opening Day (2010) "Without Project" Conditions: The combined effect of future regional growth in vehicle trips (based on the interpolation of growth projections between future (2030) "Without Project" traffic volumes and Existing traffic volumes), excluding the land use changes due to the project itself, established the future conditions that would occur without the development of the proposed project through the year 2010.

3. Opening Day (2010) "With Project" Conditions: The combined effect of future regional growth in vehicle trips (from the Opening Day "Without Project" Conditions), plus the land use changes due to the project itself, established the future conditions that would occur with the development of the proposed project through the year 2010.

4. Future (2030) "Without Project" Conditions: The combined effect of future regional growth in vehicle trips (based on the greater of the EVTM growth projections and the growth from known, proposed or potential projects in the study area), excluding the land use changes due to the project itself, established the future conditions that

would occur without the development of the proposed project through the year 2030.

5. Future (2030) "With Project" Conditions: The combined effect of future regional growth in vehicle trips (including EVTM forecasts and information on known, proposed or potential projects in the study area), including the land use changes due to the project itself, established the future conditions that would occur with the development of the proposed project through the year 2030.

III.A.1 Ambient Growth

Ambient growth is the background growth in traffic that comes from a multitude of regional projects. This growth generally is viewed as inevitable, since much of the traffic in any area is passing through the study area, rather than being locally generated. In the manual methodology of projecting traffic volumes, an ambient growth factor of approximately one to two percent per annum is usually applied globally to the existing traffic volumes to obtain an estimate of future traffic volumes.

The EVTM explicitly takes into account all growth in the five County Southern California region, including the project study area. Therefore, a generalized ambient growth factor (on traffic volumes) was not considered appropriate. Calculated growth, on a zone-by-zone basis, for future baseline projections was taken into account within the land use databases that were provided by the City of San Bernardino staff. The land use databases were used to calculate trip generations for each zone in the model for the existing and future scenarios.

This methodology of using land use growth projections within a computerized model to replicate changes in travel demand and traffic behavior patterns better replicates real life changes in the transportation element of urban developments.

III.A.2 Cumulative Growth

The EVTM socioeconomic data were augmented by a search for specific development projects within the project study area. These "related projects" included projects that are completed but not fully occupied, are currently under construction or beginning construction, or are presently only proposed but which could become operational within the time frame examined in this study. A list of 18 new building projects that are located within the project area was compiled. The related projects' descriptions and locations are summarized in Table 3(a). Figure 5 depicts the locations of all related projects. The higher socioeconomic data value for each zone, based on a comparison of the EVTM growth projections data and the sum of the known related projects proposed for each zone, was used as the incremental growth for that zone. This incremental growth was then added to the existing data contained in the "Existing Conditions" model.

Growth from 11 other related projects of area-wide significance were also considered in the EVTM for the future 2030 base (Without Project) scenario. These developments are recently proposed related projects. To be conservative, it was assumed that the growth from the EVTM did not include the growth from these related projects. As a result, the related projects growth was added in addition to the EVTM growth. To replicate the related projects, new zones were added into the model. The 11 related projects are summarized in Table 3(b).

Thus, the combination of the local refinements to the traffic model transportation network and the growth projections from EVTM and the related projects formed the basis for the forecasts of future "Without Project" conditions in the study area.

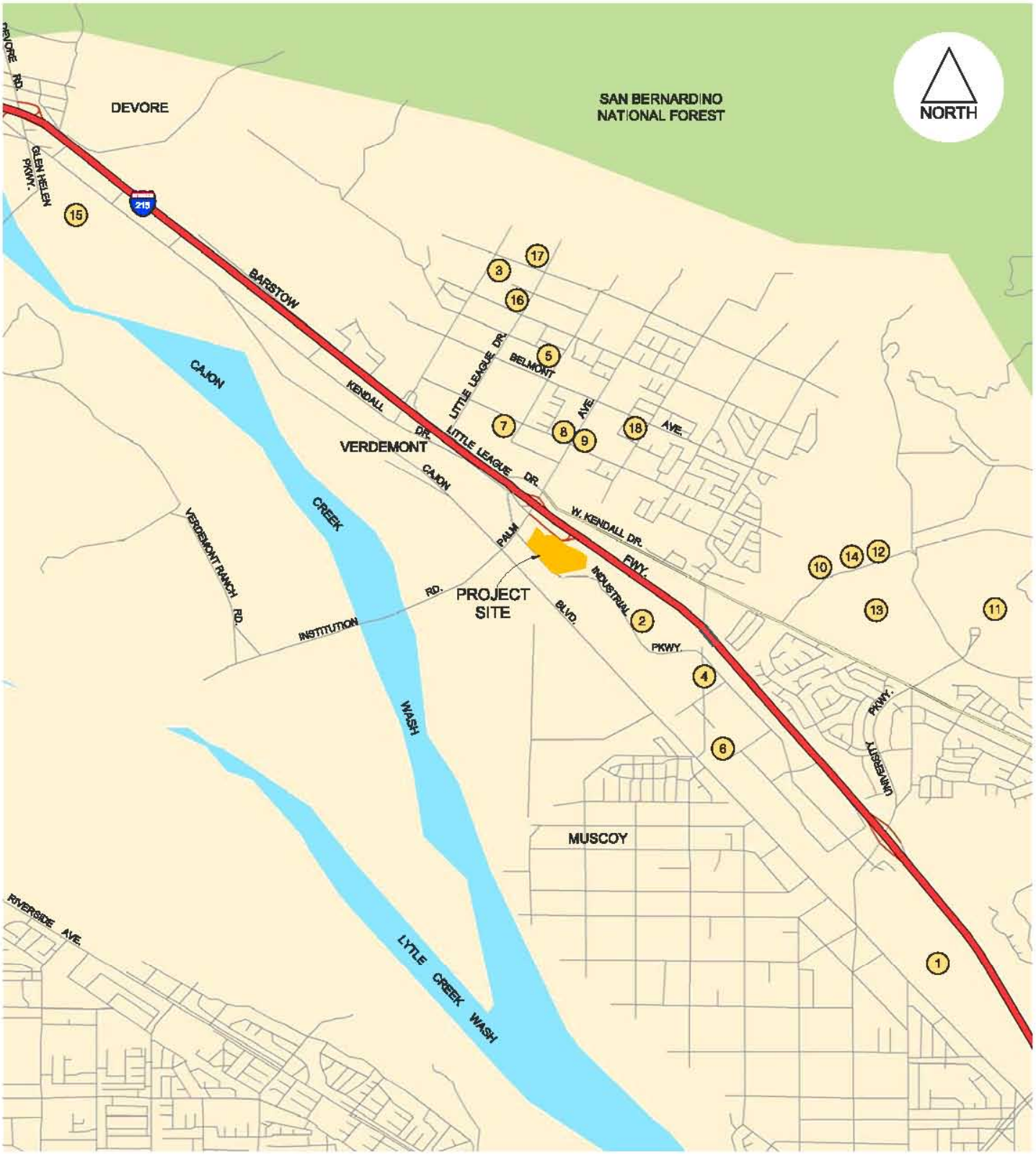

FIGURE 5

12/7/2007

FN: PALM AVE WAREHOUSE SAN BERNARDINO/RELPROJS

RELATED PROJECTS LOCATION MAP

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Table 3(a)

Related Projects Descriptions and Locations from City of San Bernardino

Map No.	Location (Address)	Size	Unit	Description
1.	W/o I-215, s/o University Pkwy., e/o Cajon Blvd. [1]	2,059,383	sf	Distribution Buildings
2.	E/o Industrial Pkwy., btwn. Palm Ave. & Lexington Wy. [2]	250,000	sf	Warehouse
3.	N. Little League Dr. btwn. Verdemont Dr. & Meyers Rd. [3]	92	du	Single-Family Residential
4.	S/o Industrial Pkwy. btwn. Palm Ave. & University Pkwy. [4]	186,922	sf	Warehouse
5.	E/o Belmont Ave., w/o Ohio Ave. [5]	54	du	Single-Family Residential
6.	NWC Shenandoah Wy. & Georgia Blvd. [6]	245,700	sf	Warehouse
7.	W/o Chestnut Ave. [7]	127	du	Single-Family Residential
8.	Palm Ave. & Irvington Ave. (West) [7]	47	du	Single-Family Residential
9.	Palm Ave. & Irvington Ave. (East) [7]	41	du	Single-Family Residential
10.	N/o Campus Pkwy., btwn. Northpark Blvd. & Kendall Dr. [8]			Campus Parkway
		8,800	sf	Specialty Retail
		22	du	Apartment
11.	5500 University Pkwy. [9]			Cal State University San Bernardino
		1,983	st	Student Enrollment Increase
12.	W/o Cal State University San Bernardino [9]			The Promenade
		166	du	Mixed-Use Live/Work
13.	SWC Cal State University San Bernardino [9]	33,055	sf	University Park
				Community Retail
				Restaurant
14.	W/o Devil Canyon Levee Rd.[9]			Watson Group
		202	du	Single-Family Residential
15.	W/o Cajon Blvd., s/o Glen Helen Parkway [10]			FedEx
		1,566,006	sf	Industrial
16.	NWC Magnolia Avenue & Ohio Avenue	40	du	Single-Family Residential
17.	NEC Magnolia Avenue & Verdemont Drive	48	du	Single-Family Residential
18.	SEC Belmont Avenue & Ohio Avenue	14	du	Single-Family Residential

Note:

[1] Traffic Impact Analysis for Culligan Site Distribution Center, City of San Bernardino, LSA Associates, Inc., February, 2006.
[2] Focused Traffic Study Report Industrial Parkway Associates Warehouse, City of San Bernardino, Albert A. Webb Associates, October 6, 2004.
[3] Traffic Impact Analysis for a 92-unit Housing Tract (GFR Tract 17329), City of San Bernardino, Transtech Engineers, Inc., October 5, 2005.
[4] Traffic Impact Analysis for Vic-Vin Enterprises, LLC., City of San Bernardino, Kunzman Associates, May 6, 2005.
[5] Traffic Impact Study for Development of 54 Single Family Dwelling Units, City of San Bernardino, Transtech Engineers, Inc., June 2004.
[6] Traffic Study Report for 246 TSF Warehouse, City of San Bernardino, Albert A. Webb Associates, April 26, 2005.
[7] Retrieved from Traffic Impact Analysis for Martin Ranch, City of San Bernardino, Kunzman Associates, May 8, 2006.
[8] Traffic Impact Analysis for Campus Parkway Live-Work Development, City of Bernardino, Kunzman Associates, June 13, 2006.
[9] Retrieved from Traffic Impact Analysis for Kendall Plaza, City of San Bernardino, Kunzman Associates, June 13, 2006.
[10] Traffic Impact Analysis for the Cajon Boulevard Project, City of San Bernardino, Kunzman Associates, October 5, 2006.

Table 3(b)

Related Projects of Area-Wide Significance

					Employees	
		EVTM	Single-Family	Multi-Family		Non-
No.	Project	Zone	Dwelling Units	Dwelling Units	Retail	Retail
1	Empire North	85	241	312	0	0
2	Lytle Creek North	86	2234	172	218	899
3	CALMAT	87	0	0	0	3448
4	Rolling Hills- Gordon	88	406	0	0	0
5	Rolling Hills- Bice	89	292	0	0	0
6	Martin Ranch	208	329	0	0	0
7	Kendall	747	0	0	420	0
8	Lowes	748	0	0	403	0
9	Culligan	749	0	0	228	0
10	Paradise Hills	750	235	269	0	0
11	Lytle Creek Ranch	80-84	3409	4998	1730	201
Note: Employment includes School, Golf Course & Park						

III.B PROJECT TRAFFIC

The following section describes the methodology used to estimate the trip generation for the proposed project, along with the distribution and assignment of these trips to the street system in the study area.

III.B.1 Project Trip Generation

The vehicle trip generation rates for the project were based on a *San Bernardino/ Riverside County Warehouse/Distribution Center Vehicle Trip Generation Study* prepared by SANBAG in 2005. These formulas for daily, AM peak-hour and PM-peak hour trip generations, along with directional distribution percentages (inbound vs. outbound), are listed in Table 4. These trip rates estimate passenger car equivalent

(PCE) trips in order to provide a direct application for consistency with the existing traffic counts and to account for the volume of truck traffic in the study area.

Table 4
San Bernardino Trip Generation Rates for Warehouse Use
In Passenger Car Equivalents

		Directional Distribution	
Time Period	Trip Generation Rate	I/B	O/B
Daily	T = 1.91 (A)	50%	50%
AM Peak Hour	T = 0.13 (A)	54%	46%
PM Peak Hour	T = 0.13 (A)	41%	59%

Where, T = Total of one-way trips entering and leaving the site.
A = Area of building (gross floor area) in thousands of square feet.

Applying those rates, the traffic expected to be generated by the project is approximately 1,303 daily trips including 89 AM peak-hour trips and 89 PM peak-hour trips, as shown in Table 5

Table 5
Project Trip Generation

			AM Peak Hour			PM Peak Hour		
Proposed Use	**Size**	**Daily**	**I/B**	**O/B**	**Total**	**I/B**	**O/B**	**Total**
Warehouse/Distribution Center	682,408	1,303	48	41	89	36	53	89

III.B.2 Project Trip Distribution

Each trip to and from the project will be linked to another site somewhere within the region. For example, each commute trip to the project in the morning will have started at an employee's residence. The procedure utilized to estimate the location to which each of the project generated trips will be linked was the computerized transportation gravity model of trip linkages for the project. This model also considers the land-use patterns throughout the Southern California area to estimate current trip making

patterns. Additionally, it considers future growth patterns to determine how trip linkages will change over time.

III.B.3 Project Trip Assignment

Using the trip distribution as described above, the EVTM was utilized to assign traffic to individual roadways within the study area. The computer model assumes drivers follow the most rational, direct path. This model accounted for the level of congestion on each roadway and determined which path resulted in the shortest travel time for each trip. This has been shown to produce the most reliable overall traffic projections. Further, this procedure concentrates volumes and improvements on the preferred (major) routes rather than encouraging use of minor routes. Figure 6 shows the traffic volumes for the proposed project.

III.B.4 Project Parking and Access

The current plan shows a total on-site parking supply of 608 spaces. As proposed, 93 of these spaces (about 15 percent) would be trailer spaces provided in the southern portion of the site. The City's parking requirement for warehouse and distribution use is summarized in Table 6. As shown in this table, based on the project's gross floor area of 682,408 square feet, the parking requirement is approximately 569 spaces. Thus, the parking supply will exceed the code requirement by a surplus of about 39 spaces and no parking spillover is anticipated.

The project site will have two driveways on Industrial Parkway. The northerly driveway will directly access parking on the northern portion of the project site and will function as

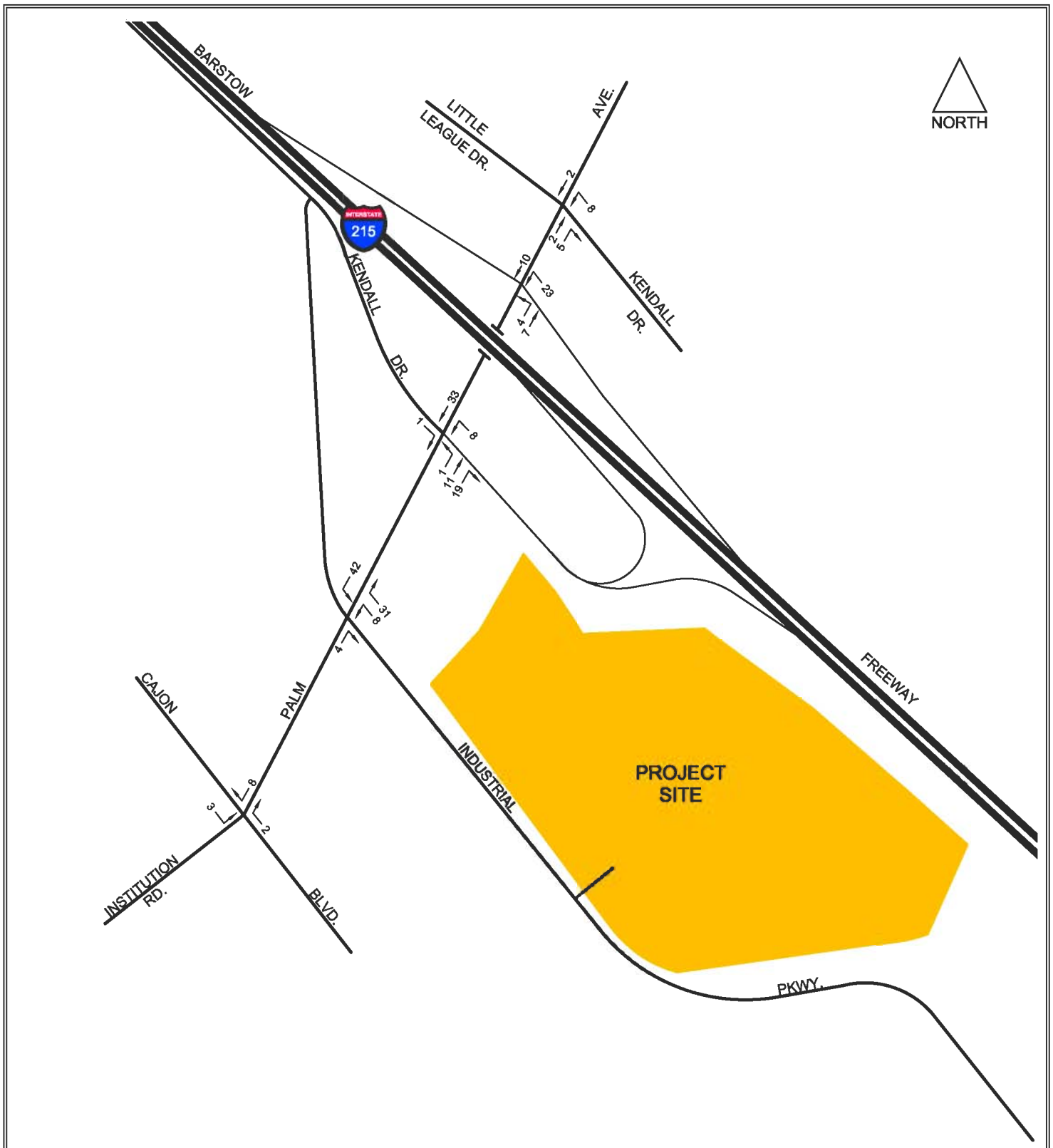

FIGURE 6(a)

12/7/2007

Palm Ave Warehouse San Bernardino\AMPRJVOL

PROJECT ONLY TRAFFIC VOLUMES
AM PEAK HOUR

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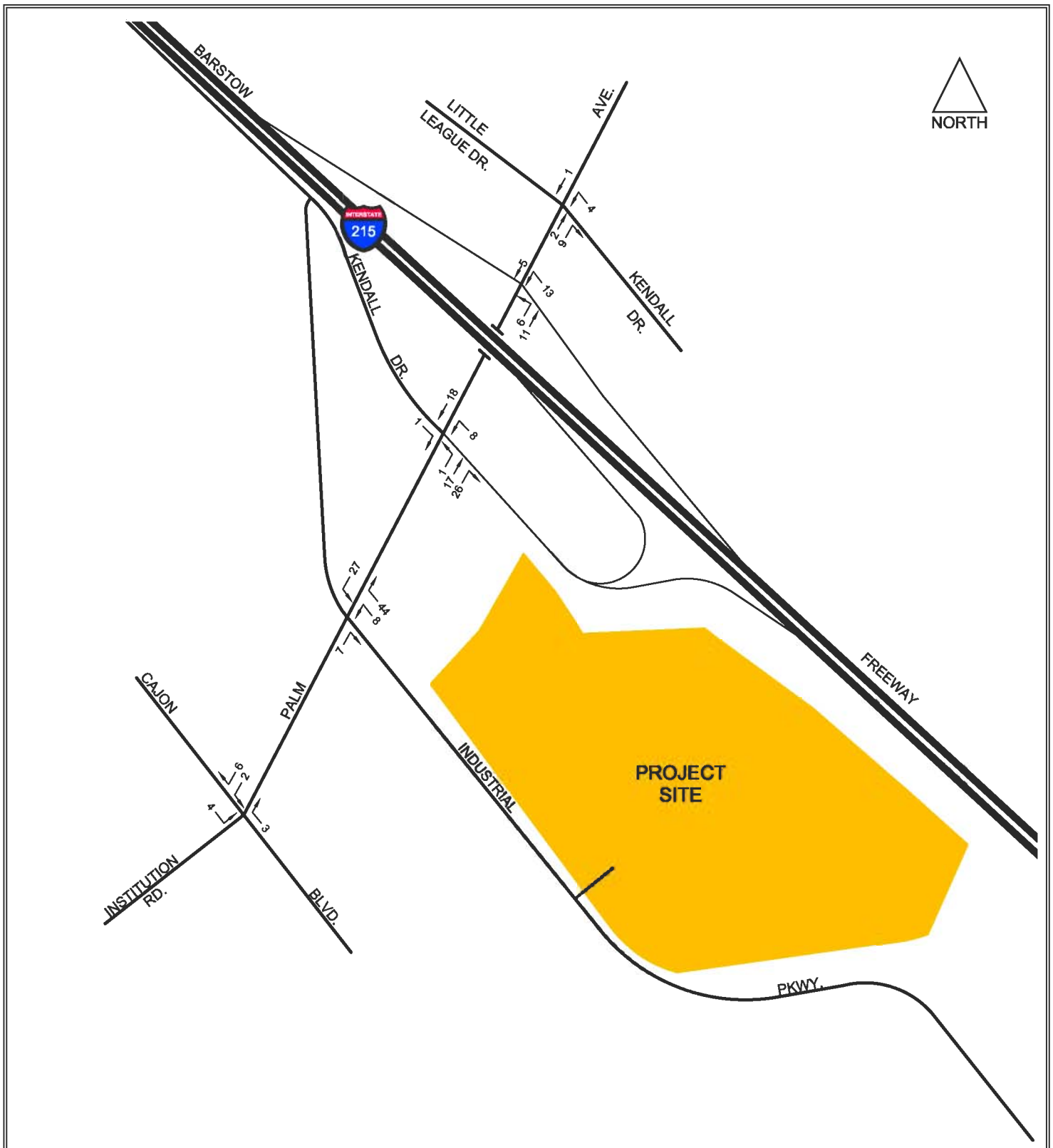

FIGURE 6(b)

12/7/2007

Palm Ave Warehouse San Bernardino\PMPRJVOL

PROJECT ONLY TRAFFIC VOLUMES
PM PEAK HOUR

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Table 6
Project Parking Summary

Proposed Land Use		Size	Code Parking Ratio	Parking Spaces
Required Parking				
682,408	sf Warehouse	1 - 3,000 sf	1 / 250 sf	12
		3,001 - 5,000 sf	1 / 500 sf	4
		5,001 - 10,000 sf	1 / 750 sf	7
		10,001 - 50,000 sf	1 / 1,000 sf	40
		> 50,000 sf	1 / 1,250 sf	506
	Total Parking Spaces Required [A]			**569**
Proposed Project Parking Supply				
Standard Spaces				505
Handicap Spaces				10
Trailer Spaces				93
	Total Parking Spaces Provided [B]			**608**
	Surplus Parking Above Requirement [B - A]			**39**

the main project site driveway. Further to the southeast, a second driveway will connect to an internal roadway that curves into the site to directly access the trailer spaces. The two project driveways will have full left- and right-turn access and egress along Industrial Parkway.

III.C WITHOUT AND WITH PROJECT CONDITIONS

III.C.1 Future Roadway Improvements

Two important roadway improvements will be made in this portion of the City of San Bernardino within the study time-period. The improvements include the reconstruction of the I-215/University Parkway interchange and the University Parkway overpass improvement at Cajun Boulevard. Both of these roadway improvements are located

about 2.5 miles southeast of the project site. These improvements were assumed in the EVTM due to their proximity to the project site.

III.C.2 Surface Street Impacts

Figures 7 and 8 display the Opening Day 2010 peak-hour traffic volumes for the "Without Project" and "With Project" conditions, respectively. Future year 2030 peak-hour traffic volumes for the "Without Project" and "With Project" conditions are shown in Figures 9 and 10, respectively. It should be noted that in some cases, non-project traffic volumes were projected to decrease at a location. This may occur due to traffic shifts as a result of future roadway improvements such as the reconstruction of the University Parkway/I-215 Freeway interchange and the University Parkway overpass improvement at Cajun Boulevard.

The future lane configurations for both the With and Without Project scenarios were assumed to be the same compared to Existing lane configuration conditions. Using the future traffic volumes and lane configuration assumptions, the level of service at the study intersections were calculated. Table 7 presents the results of the AM and PM peak hour analysis (Highway Capacity Manual 2000 methodology) of future 2010 and 2030 traffic conditions.

Under the California Environmental Quality Act (CEQA), each local jurisdiction must determine which traffic (and other environmental) impacts it considers "significant." The City of San Bernardino General Plan states that intersection operations at LOS D or better during the peak hour are generally acceptable. Therefore, any intersection operating at LOS E or F will be considered deficient. A traffic impact is considered significant if the project both 1) contributes measurable traffic to and 2) substantially and

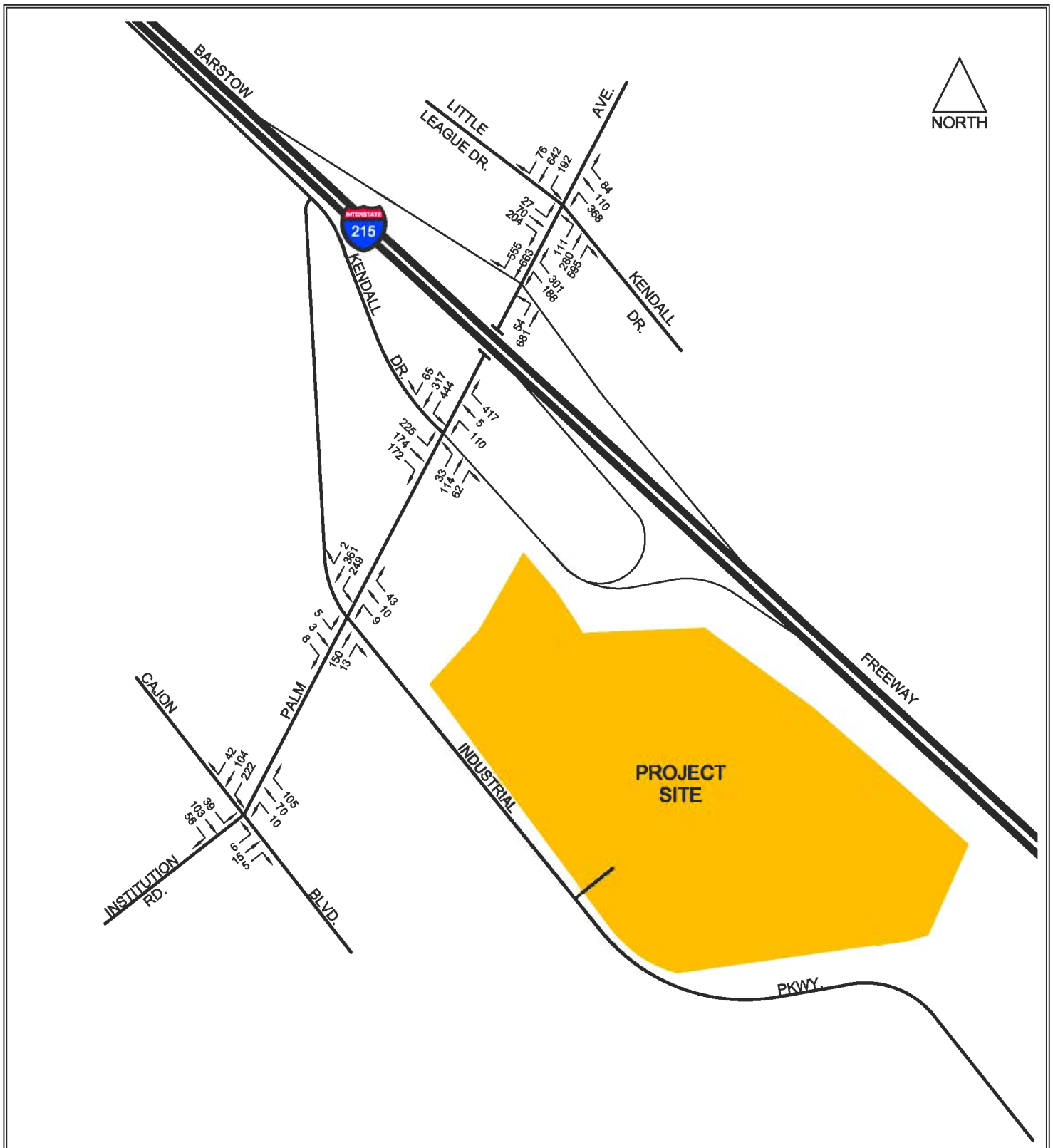

FIGURE 7(a)

12/7/2007

Palm Ave Warehouse San Bernardino\AM2010WO

OPENING YEAR (2010) TRAFFIC VOLUMES
WITHOUT PROJECT
AM PEAK HOUR

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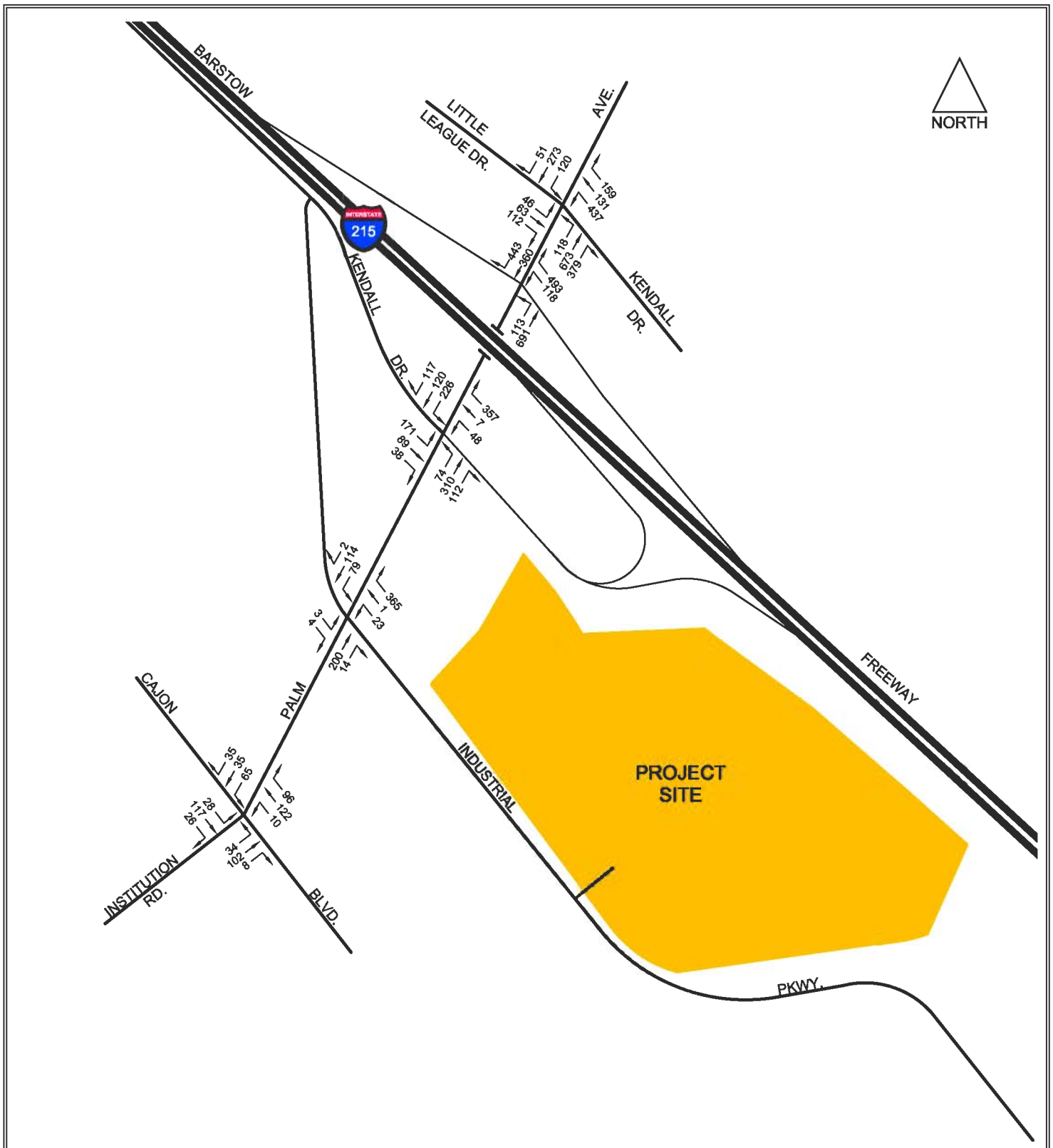

FIGURE 7(b)

12/7/2007

Palm Ave Warehouse San Bernardino\PM2010WO

OPENING YEAR (2010) TRAFFIC VOLUMES
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PM PEAK HOUR

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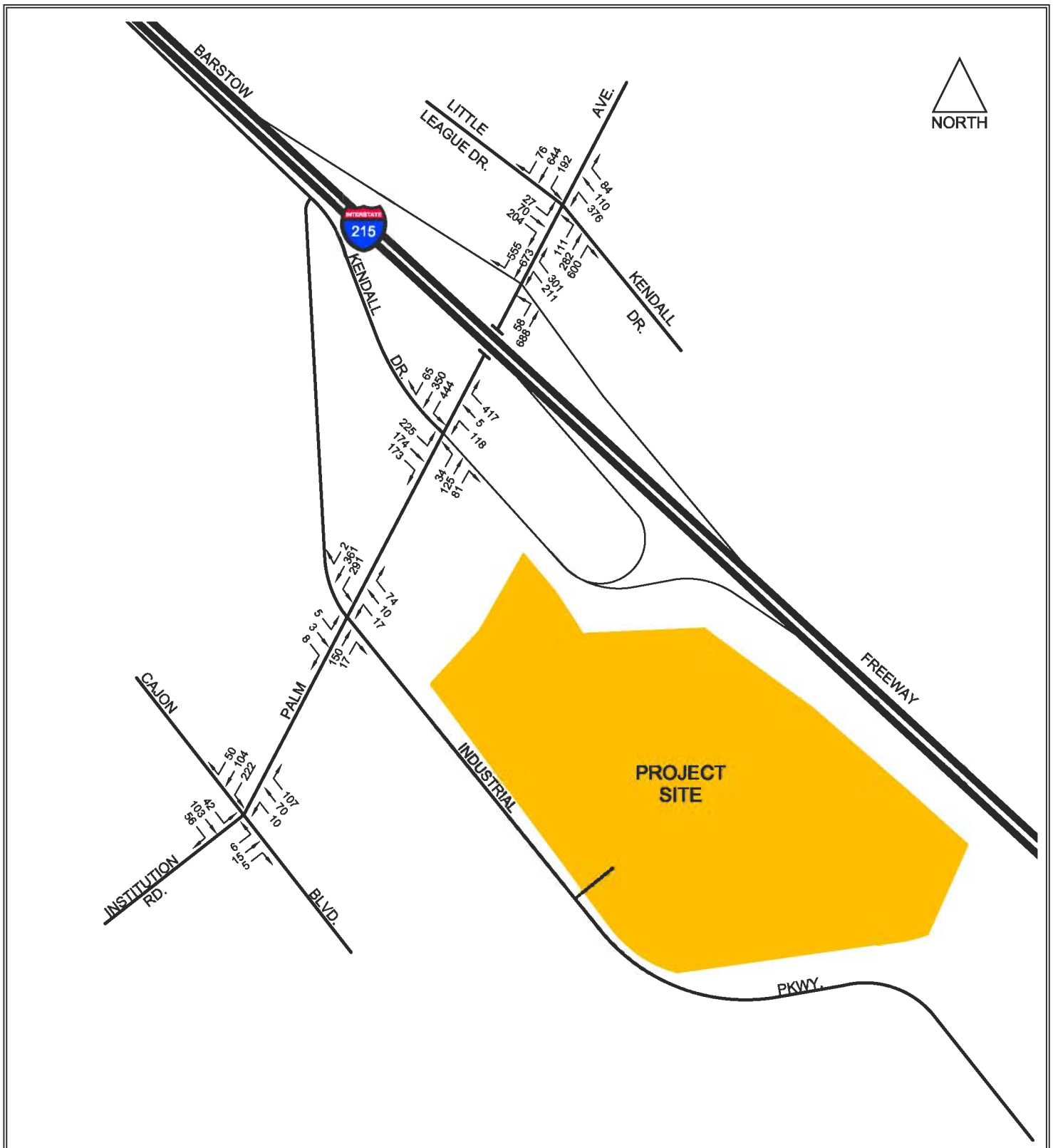

FIGURE 8(a)

12/7/2007

Palm Ave Warehouse San Bernardino\AM2010WP

OPENING YEAR (2010) TRAFFIC VOLUMES
WITH PROJECT
AM PEAK HOUR

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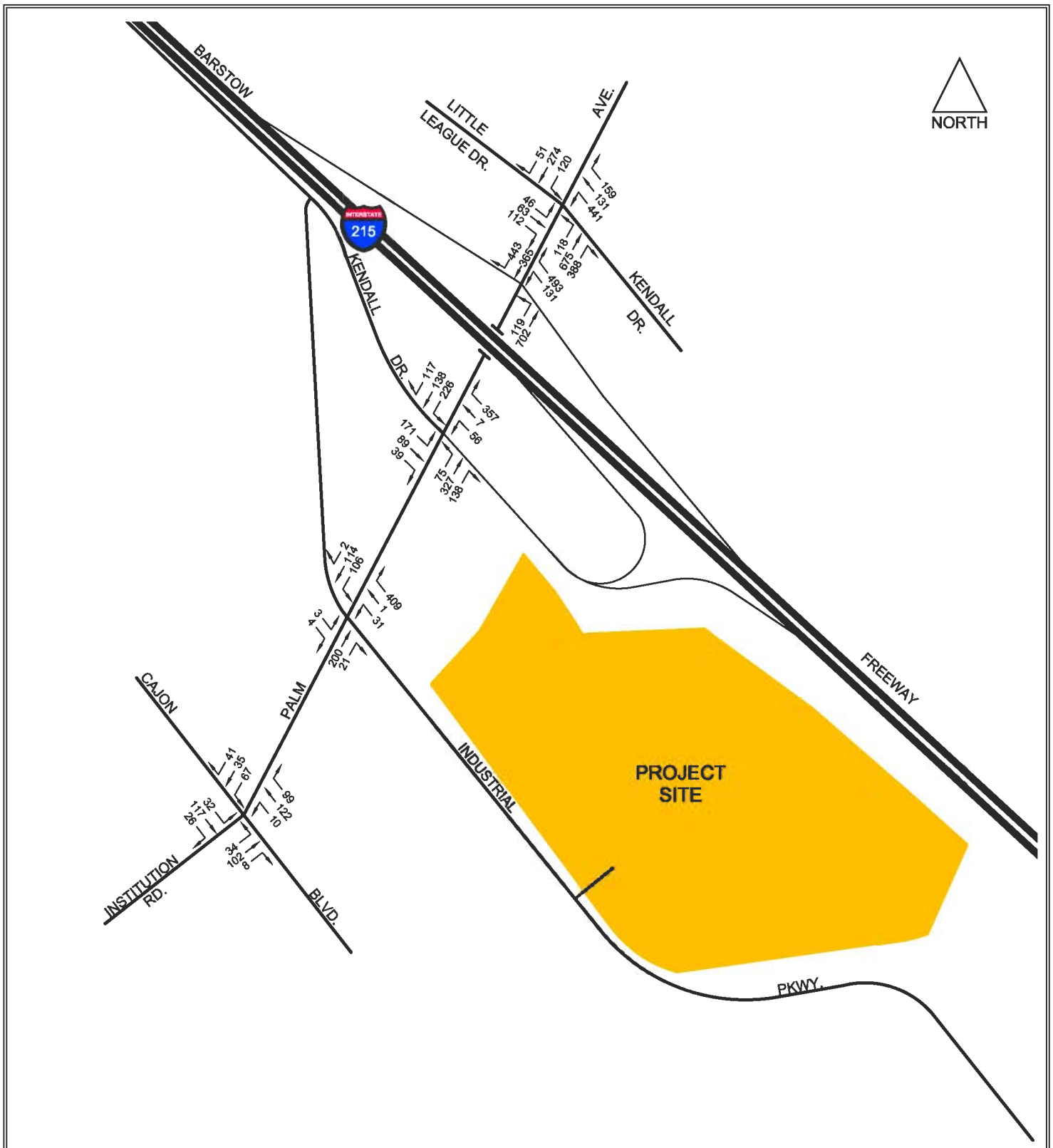

FIGURE 8(b)

12/7/2007

Palm Ave Warehouse San Bernardino\PM2010WP

OPENING YEAR (2010) TRAFFIC VOLUMES
WITH PROJECT
PM PEAK HOUR

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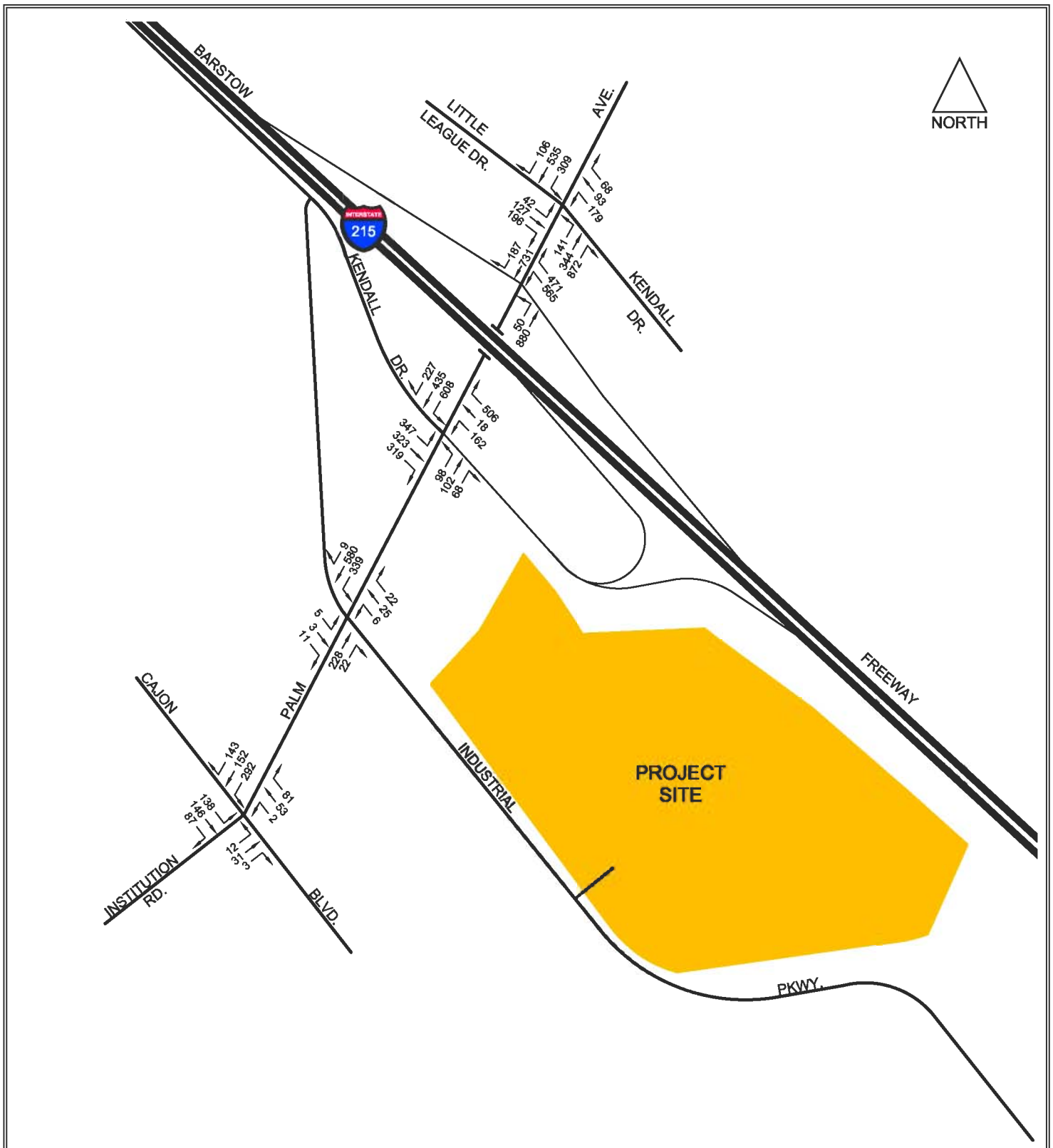

FIGURE 9(a)

12/7/2007

Palm Ave Warehouse San Bernardino\AM2030WO

FUTURE (2030) TRAFFIC VOLUMES
WITHOUT PROJECT
AM PEAK HOUR

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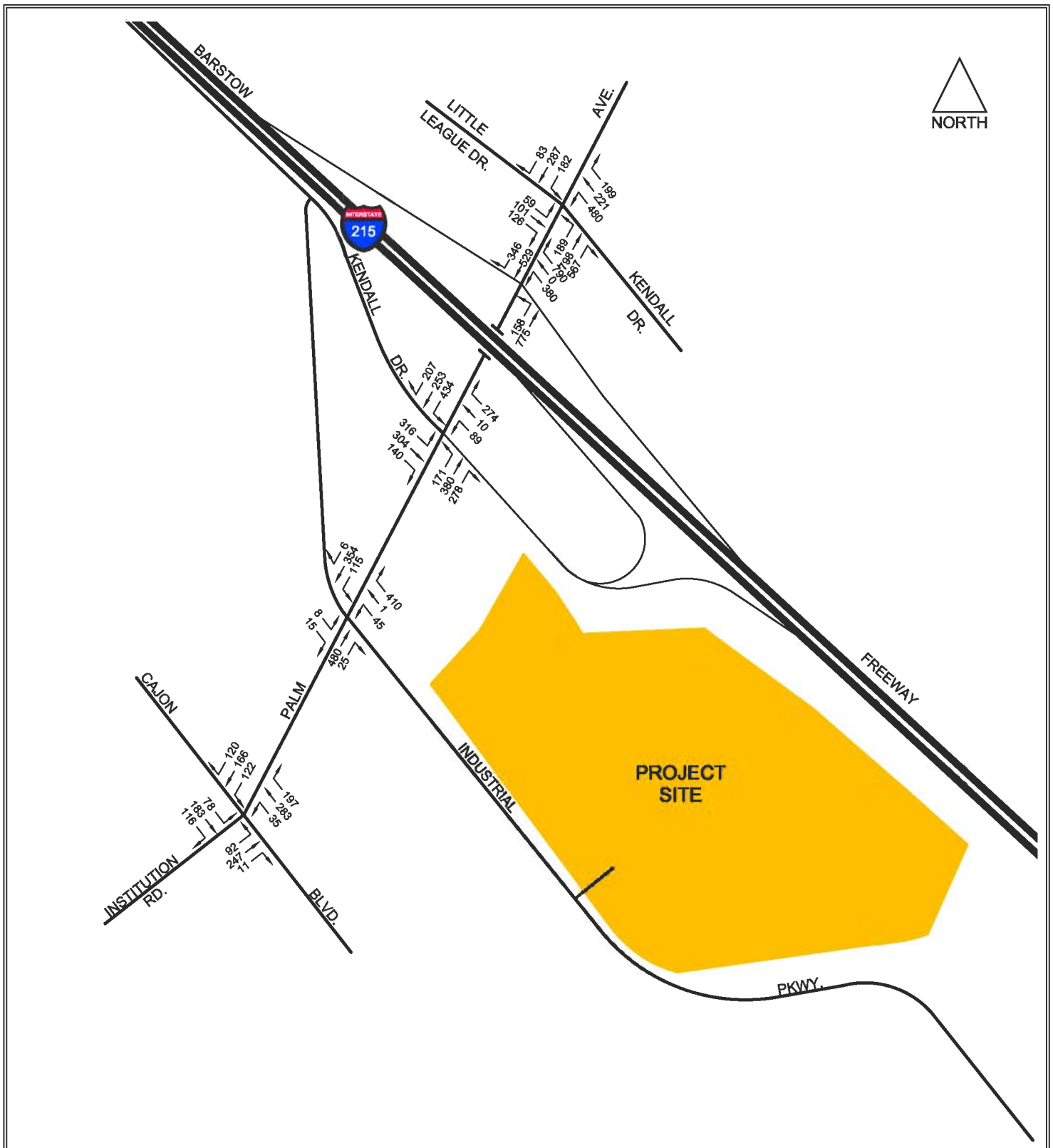

FIGURE 9(b)

12/7/2007

Palm Ave Warehouse San Bernardino\PM2030WO

FUTURE (2030) TRAFFIC VOLUMES
WITHOUT PROJECT
PM PEAK HOUR

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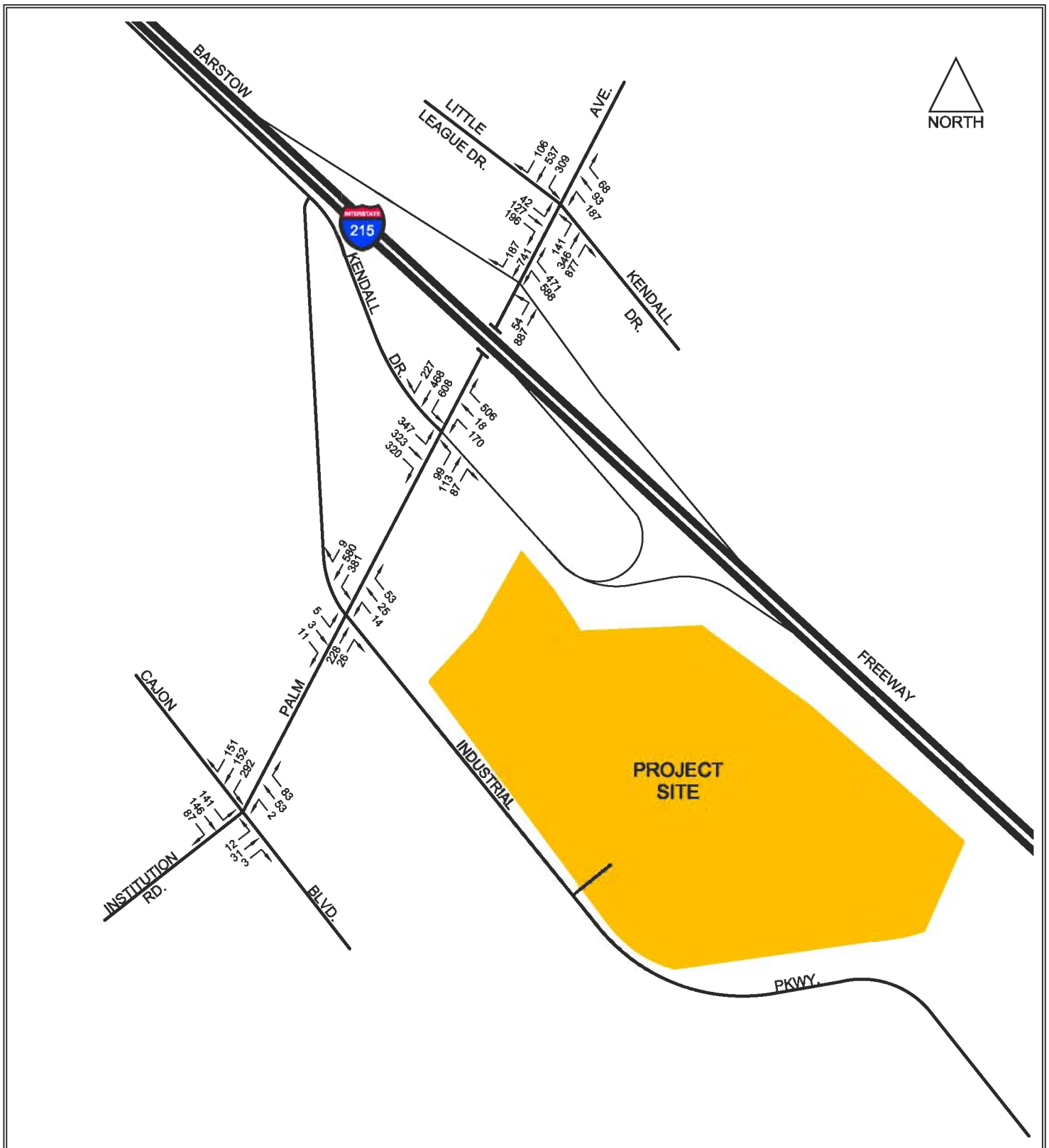

FIGURE 10(a)

12/7/2007

Pa'm Ave Warehouse San Bernardino\AM2030WP

FUTURE (2030) TRAFFIC VOLUMES
WITH PROJECT
AM PEAK HOUR

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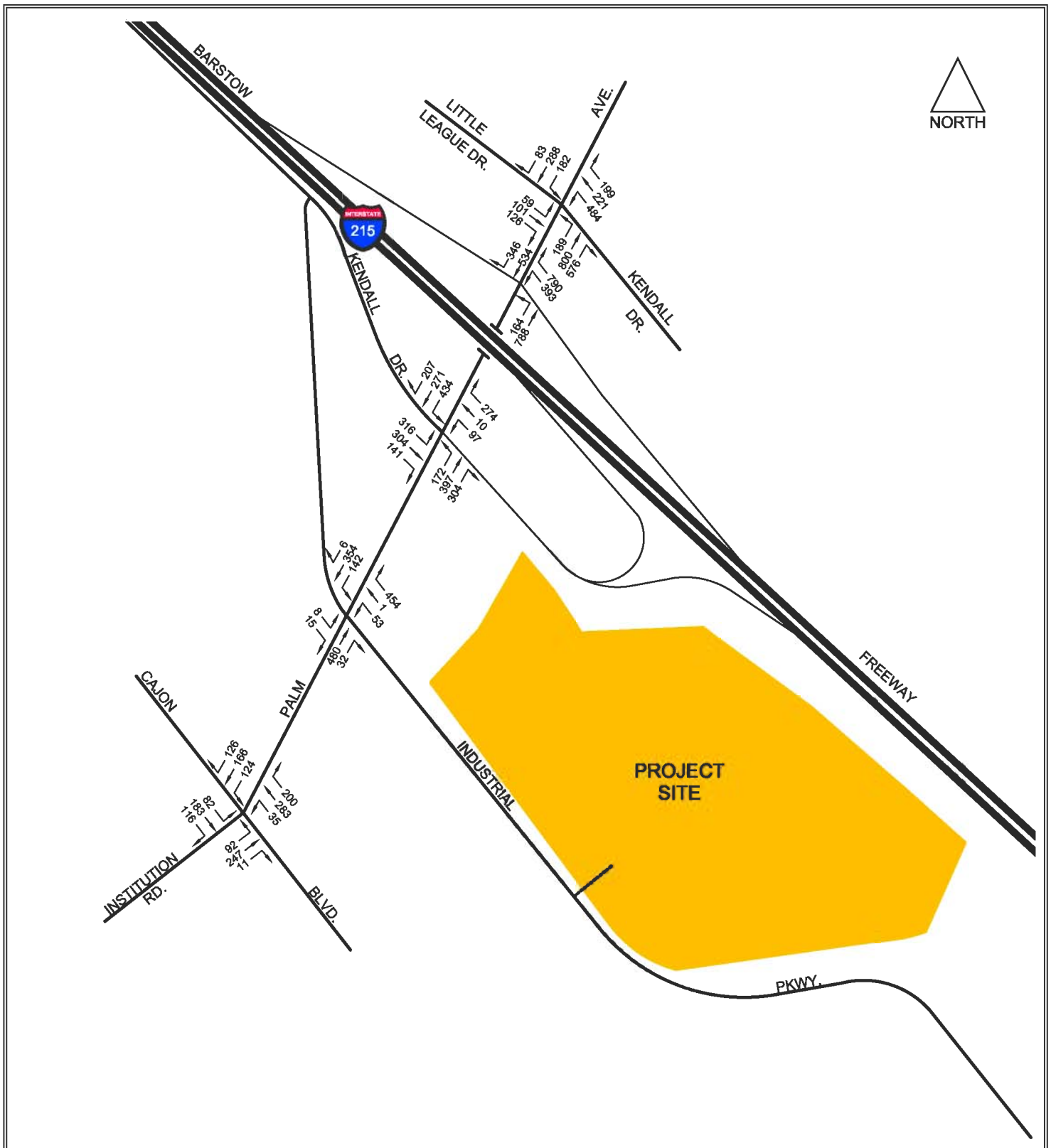

FIGURE 10(b)

12/7/2007

Pa'm Ave Warehouse San Bernardino\PM2030WP

FUTURE (2030) TRAFFIC VOLUMES
WITH PROJECT
PM PEAK HOUR

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Table 7(a)
Intersection Level of Service Summary
Opening Day (2010) Without and With Project Conditions

No.	Intersection	Peak Hour	Without Project V/C	Without Project Delay	Without Project LOS	With Project V/C	With Project Delay	With Project LOS	
1	Palm Ave. & Kendall Dr./Little League Dr.	AM	1.010	35.1	D	1.016	35.5	D	
		PM	1.030	34.9	C	1.033	35.1	D	
2	Palm Ave. & I-215 NB Ramps	AM	[1]	75.9	F	[1]	>100	F	*
		PM	[1]	37.9	E	[1]	44.1	E	*
3	Palm Ave. & I-215 SB Ramps/Kendall Dr.	AM	1.085	45.7	E	1.111	48.4	E	*
		PM	0.666	17.0	C	0.713	18.1	C	
4	Palm Ave. & Industrial Pkwy.	AM	[1]	19.9	C	[1]	23.1	C	
		PM	[1]	15.8	C	[1]	18.4	C	
5	Palm Ave./Institution Rd. & Cajon Blvd	AM	0.583	12.6	B	0.585	12.6	B	
		PM	0.347	10.0	B	0.353	10.1	B	

[1] Volume to capacity ratio not provided for one- or two-way, STOP sign-controlled intersections.

* Indicates a significant project traffic impact, prior to mitigation.

Table 7(b)
Intersection Level of Service Summary
Future (2030) Without and With Project Conditions

No.	Intersection	Peak Hour	Without Project V/C	Without Project Delay	Without Project LOS	With Project V/C	With Project Delay	With Project LOS	
1	Palm Ave. & Kendall Dr./Little League Dr.	AM	1.008	42.5	D	1.006	42.9	D	
		PM	0.988	40.3	D	0.991	40.5	D	
2	Palm Ave. & I-215 NB Ramps	AM	[1]	>100	F	[1]	>100	F	*
		PM	[1]	>100	F	[1]	>100	F	*
3	Palm Ave. & I-215 SB Ramps/Kendall Dr.	AM	1.772	>100	F	1.822	>100	F	*
		PM	1.709	>100	F	1.733	>100	F	*
4	Palm Ave. & Industrial Pkwy.	AM	[1]	46.5	E	[1]	54.2	F	*
		PM	[1]	73.4	F	[1]	>100	F	*
5	Palm Ave./Institution Rd. & Cajon Blvd	AM	0.847	20.7	C	0.849	20.8	C	
		PM	1.140	56.6	F	1.150	57.8	F	*

[1] Volume to capacity ratio not provided for one- or two-way, STOP sign-controlled intersections.

* Indicates a significant project traffic impact, prior to mitigation.

adversely changes the level of service to any location projected to experience deficient operations under foreseeable cumulative conditions. For this study, a significant project traffic impact is defined to be those locations where cumulative traffic would cause conditions to degrade below the General Plan goal of LOS D.

The completed but not mitigated project based on the analysis of the Opening Day 2010 traffic conditions contained in Table 7(a) would have a significant traffic impact at two (2) study intersections. Table 7(b) shows that a significant traffic impact would occur at four study intersections for future 2030 traffic conditions. It should be noted that the significant traffic impacts at the identified study intersection locations would occur with or without the project for both Opening Day 2010 and future 2030 conditions.

CEQA also requires that local jurisdictions consider potential measures to mitigate these significant traffic impacts. Feasible roadway improvements and traffic reduction measures designed to mitigate significant traffic impacts of the project at these intersections have been identified and are described in the Project Mitigation section.

III.C.2a Project Percent of Total Traffic

The Total Net New Volumes (Future With Project Volumes minus Existing Volumes) was summed at the four significantly impacted study intersections for the year 2030 scenario. The project contribution to volumes at intersections was also calculated by determining the total number of vehicles passing through each intersection. Table 8 quantifies the project's contribution to new traffic volumes for the 23-year study period (years 2007 to 2030). Specifically, the ratio of "Project Contribution Volumes" to "Total Net New Volumes" is used to determine the project contribution to total new volumes for each study intersection where applicable.

Table 8
Project Contributions to Total New Volumes
Study Period 2007 - 2030

		AM PEAK HOUR		PM PEAK HOUR			
NO.	INTERSECTION	PROJECT TRAFFIC	TOTAL NET NEW VOLUMES	PROJECT TRAFFIC	TOTAL NET NEW VOLUMES	CRITICAL PEAK PERIOD	CRITICAL PERCENT CONTRIBUTION
1	Palm Ave. & Kendall Dr./Little League Dr.	17	311	16	855	AM	5.5%
2	Palm Ave. & I-215 NB Ramps	44	553	35	909	AM	8.0%
3	Palm Ave. & I-215 SB Ramps/Kendall Dr.	73	1,310	71	1,436	AM	5.6%
4	Palm Ave. & Industrial Pkwy.	85	543	86	839	AM	15.7%
5	Palm Ave./Institution Rd. & Cajon Blvd	13	432	15	1,132	AM	3.0%

IV. PROJECT MITIGATION AND COST SUMMARY

The measures described below are intended to mitigate traffic impacts for Opening Year 2010 and future 2030 conditions.

- Palm Ave. & I-215 NB Ramps – Install a traffic signal at this location. (For both Opening Year 2010 and Future 2030 Conditions)
- Palm Ave. & I-215 SB Ramps/Kendall Ave. – Install a traffic signal at this location. (For both Opening Year 2010 and Future 2030 Conditions)
- Palm Ave. & Industrial Pkwy. – Restripe the southbound approach of Palm Avenue to provide a left-turn lane and a shared right/through lane at Industrial Parkway, and a shared through/left lane and a right-turn lane on the westbound approach of Industrial Parkway at Palm Avenue. Install a traffic signal that includes a westbound right-turn phase on Industrial Parkway concurrent with the southbound left-turn phase on Palm Avenue at this location. (For Future 2030 Condition Only)
- Palm Ave./Institution Rd. & Cajon Blvd. – Install a traffic signal at this location. (For Future 2030 Condition Only)

Traffic signal warrants at these four study intersection locations have been conducted and are found in Appendix E. The anticipated effectiveness of the above mitigation measures at the study intersections is listed in Table 9. As shown in this table, implementation of the above measures will bring all significantly impacted intersections to an acceptable level of service (LOS D or better).

The cost estimate of the mitigation measures were calculated according to Appendix G of the San Bernardino CMP. Using the project percentage contribution from Table 8, the project's share cost estimate is determined and are shown in Table 10.

Table 9(a)
Intersection Level of Service Summary
Opening Day (2010) With Project Plus Mitigation Condition

No.	Intersection	Peak Hour	Without Project V/C	Without Project Delay	Without Project LOS	With Project V/C	With Project Delay	With Project LOS		With Project + Mitigation V/C	With Project + Mitigation Delay	With Project + Mitigation LOS
2	Palm Ave. & I-215 NB Ramps	AM	[1]	75.9	F	[1]	>100	F	*	0.525	5.5	A
		PM	[1]	37.9	E	[1]	44.1	E	*	0.632	7.4	A
3	Palm Ave. & I-215 SB Ramps/Kendall Dr.	AM	1.085	45.7	E	1.111	48.4	E	*	0.680	17.5	B
		PM	0.666	17.0	C	0.713	18.1	C		0.587	12.2	B

[1] Volume to capacity ratio not provided for one- or two-way, STOP sign-controlled intersections.
* Indicates a significant project traffic impact, prior to mitigation.

Table 9(b)
Intersection Level of Service Summary
Future (2030) With Project Plus Mitigation Condition

No.	Intersection	Peak Hour	Without Project V/C	Without Project Delay	Without Project LOS	With Project V/C	With Project Delay	With Project LOS		With Project + Mitigation V/C	With Project + Mitigation Delay	With Project + Mitigation LOS
2	Palm Ave. & I-215 NB Ramps	AM	[1]	>100	F	[1]	>100	F	*	0.698	8.1	A
		PM	[1]	>100	F	[1]	>100	F	*	0.812	10.1	B
3	Palm Ave. & I-215 SB Ramps/Kendall Dr.	AM	1.772	>100	F	1.822	>100	F	*	0.865	30.9	C
		PM	1.709	>100	F	1.733	>100	F	*	0.940	30.3	C
4	Palm Ave. & Industrial Pkwy.	AM	[1]	46.5	E	[1]	54.2	F	*	0.428	8.9	A
		PM	[1]	73.4	F	[1]	>100	F	*	0.693	12.1	B
5	Palm Ave./Institution Rd. & Cajon Blvd	AM	0.847	20.7	C	0.849	20.8	C		0.443	5.9	A
		PM	1.140	56.6	F	1.150	57.8	F	*	0.529	6.3	A

[1] Volume to capacity ratio not provided for one- or two-way, STOP sign-controlled intersections.

* Indicates a significant project traffic impact, prior to mitigation.

Table 10
Traffic Analysis Recommended Transportation Improvement Costs

NO.	INTERSECTION	Improvement Measure Number	Improvement Measure Category	2003 Base Cost	Added Items (50%)	Inflation	2007 Cost	Project Percentage	Project Portion
2	Palm Ave. & I-215 NB Ramps	1	New Traffic Signal	$ 90,000	$ 45,000	$ 16,200	$ 151,200	8.0%	$ 12,100
3	Palm Ave. & I-215 SB Ramps/Kendall Dr.	1	New Traffic Signal	$ 90,000	$ 45,000	$ 16,200	$ 151,200	5.6%	$ 8,470
4	Palm Ave. & Industrial Pkwy.	1	New Traffic Signal	$ 90,000	$ 45,000	$ 16,200	$ 151,200	15.7%	$ 23,740
		1	Added Turn Lanes	$ 50,000	$ 25,000	$ 9,000	$ 84,000	15.7%	$ 13,190
5	Palm Ave./Institution Rd. & Cajon Blvd	1	New Traffic Signal	$ 90,000	$ 45,000	$ 16,200	$ 151,200	3.0%	$ 4,540
	Intersection Total						$ 688,800	9.0%	$ 62,040

APPENDIX A

STUDY INTERSECTION TRAFFIC COUNT

SUMMARY SHEETS

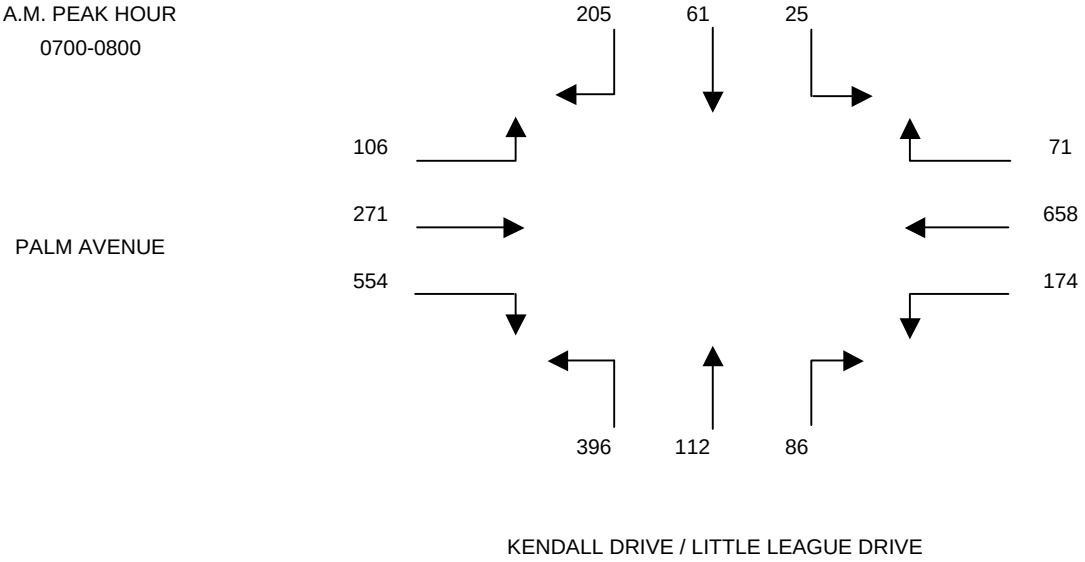
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
PROJECT: PALM AVENUE WAREHOUSE / DISTRIBUTION CENTER
DATE: TUESDAY, MAY 08, 2007
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION: N/S KENDALL DRIVE / LITTLE LEAGUE DRIVE
E/W PALM AVENUE
FILE NUMBER: 1-AM / PCEs

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
700-715	52	7	4	17	147	19	18	29	107	75	50	26
715-730	59	13	4	17	219	46	28	33	101	96	83	24
730-745	49	19	7	20	170	67	24	27	97	183	67	35
745-800	45	22	10	17	122	42	16	23	91	200	71	21
800-815	32	12	6	13	101	29	16	13	72	139	46	27
815-830	30	13	4	19	76	25	19	13	83	71	57	21
830-845	43	14	8	15	90	27	30	29	88	97	63	37
845-900	39	21	9	26	127	34	49	29	63	93	61	27

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-800	205	61	25	71	658	174	86	112	396	554	271	106	2719
715-815	185	66	27	67	612	184	84	96	361	618	267	107	2674
730-830	156	66	27	69	469	163	75	76	343	593	241	104	2382
745-845	150	61	28	64	389	123	81	78	334	507	237	106	2158
800-900	144	60	27	73	394	115	114	84	306	400	227	112	2056

A.M. PEAK HOUR
0700-0800



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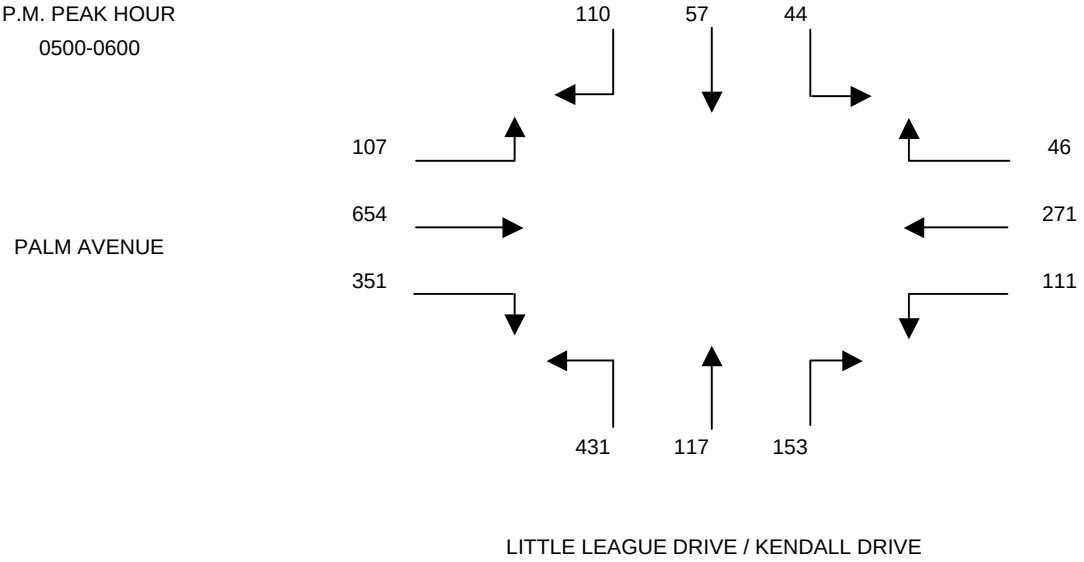
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
PROJECT: PALM AVENUE WAREHOUSE / DISTRIBUTION CENTER
DATE: TUESDAY, MAY 08, 2007
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION: N/S LITTLE LEAGUE DRIVE / KENDALL DRIVE
E/W PALM AVENUE
FILE NUMBER: 1-PM / PCEs

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
400-415	41	18	6	10	69	23	27	28	110	66	97	30
415-430	27	13	6	8	59	22	32	16	97	86	122	24
430-445	35	12	8	13	68	22	22	17	96	84	125	25
445-500	20	15	13	10	55	28	35	21	73	77	148	27
500-515	21	11	10	10	65	20	32	26	92	82	176	23
515-530	27	10	13	12	70	29	37	27	110	91	155	20
530-545	27	19	12	12	64	28	38	31	100	82	145	31
545-600	35	17	9	12	72	34	46	33	129	96	178	33

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-500	123	58	33	41	251	95	116	82	376	313	492	106	2086
415-515	103	51	37	41	247	92	121	80	358	329	571	99	2129
430-530	103	48	44	45	258	99	126	91	371	334	604	95	2218
445-545	95	55	48	44	254	105	142	105	375	332	624	101	2280
500-600	110	57	44	46	271	111	153	117	431	351	654	107	2452

P.M. PEAK HOUR
0500-0600



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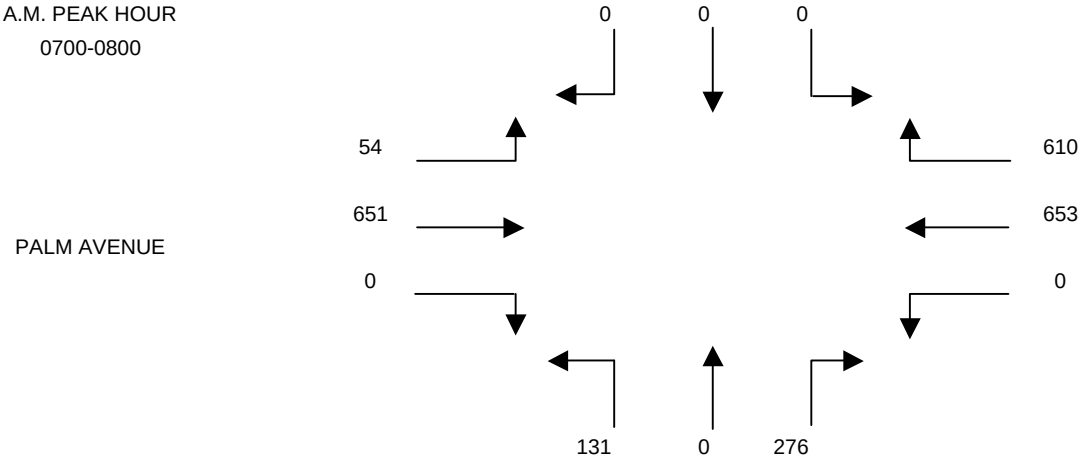
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
PROJECT: PALM AVENUE WAREHOUSE / DISTRIBUTION CENTER
DATE: TUESDAY, MAY 08, 2007
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION: N/S I-215 NB ON - OFF RAMP
E/W PALM AVENUE
FILE NUMBER: 2-AM / PCEs

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
700-715	0	0	0	186	146	0	58	0	36	0	93	16
715-730	0	0	0	147	202	0	78	0	25	0	141	11
730-745	0	0	0	165	173	0	75	0	29	0	224	12
745-800	0	0	0	112	132	0	65	0	41	0	193	15
800-815	0	0	0	100	95	0	56	0	37	0	135	9
815-830	0	0	0	81	105	0	43	0	14	0	136	20
830-845	0	0	0	119	124	0	70	0	14	0	111	16
845-900	0	0	0	100	138	0	74	0	19	0	103	14

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-800	0	0	0	610	653	0	276	0	131	0	651	54	2375
715-815	0	0	0	524	602	0	274	0	132	0	693	47	2272
730-830	0	0	0	458	505	0	239	0	121	0	688	56	2067
745-845	0	0	0	412	456	0	234	0	106	0	575	60	1843
800-900	0	0	0	400	462	0	243	0	84	0	485	59	1733

A.M. PEAK HOUR
0700-0800



I-215 NB ON - OFF RAMP

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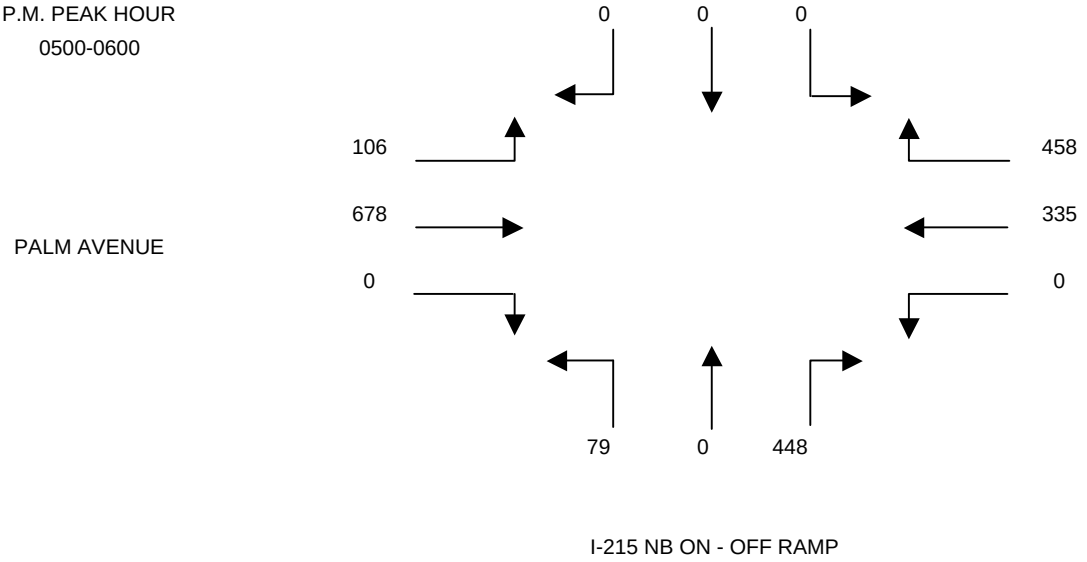
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
PROJECT: PALM AVENUE WAREHOUSE / DISTRIBUTION CENTER
DATE: TUESDAY, MAY 08, 2007
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION: N/S I-215 NB ON - OFF RAMP
E/W PALM AVENUE
FILE NUMBER: 2-PM / PCEs

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
400-415	0	0	0	113	86	0	67	0	21	0	120	34
415-430	0	0	0	106	96	0	84	0	16	0	148	40
430-445	0	0	0	91	101	0	108	0	12	0	134	28
445-500	0	0	0	65	71	0	111	0	19	0	153	31
500-515	0	0	0	98	88	0	112	0	19	0	172	23
515-530	0	0	0	122	71	0	99	0	21	0	164	30
530-545	0	0	0	105	85	0	116	0	17	0	157	27
545-600	0	0	0	133	91	0	121	0	22	0	185	26

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-500	0	0	0	375	354	0	370	0	68	0	555	133	1855
415-515	0	0	0	360	356	0	415	0	66	0	607	122	1926
430-530	0	0	0	376	331	0	430	0	71	0	623	112	1943
445-545	0	0	0	390	315	0	438	0	76	0	646	111	1976
500-600	0	0	0	458	335	0	448	0	79	0	678	106	2104

P.M. PEAK HOUR
0500-0600



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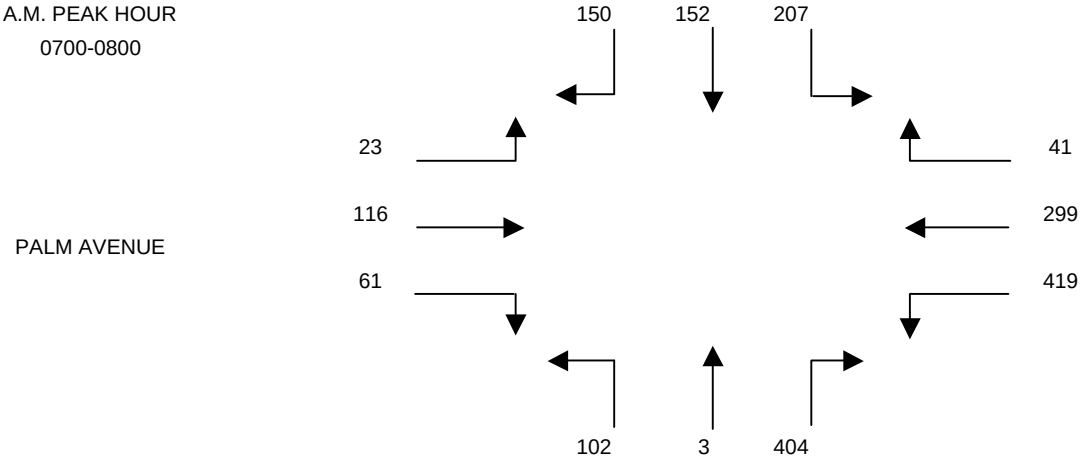
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
PROJECT: PALM AVENUE WAREHOUSE / DISTRIBUTION CENTER
DATE: TUESDAY, MAY 08, 2007
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION: N/S I-215 SB ON - OFF RAMP / KENDALL DRIVE
E/W PALM AVENUE
FILE NUMBER: 3-AM / PCEs

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
700-715	34	35	53	11	79	94	68	1	20	9	27	8
715-730	44	33	56	15	107	110	121	2	37	9	39	6
730-745	42	54	66	10	70	100	101	0	28	17	24	7
745-800	30	30	32	5	43	115	114	0	17	26	26	2
800-815	13	43	41	7	52	79	104	0	22	11	30	5
815-830	10	49	50	10	45	83	95	1	25	9	31	8
830-845	7	26	24	11	66	69	80	0	28	4	24	5
845-900	10	20	10	9	35	73	52	2	18	5	26	3

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-800	150	152	207	41	299	419	404	3	102	61	116	23	1977
715-815	129	160	195	37	272	404	440	2	104	63	119	20	1945
730-830	95	176	189	32	210	377	414	1	92	63	111	22	1782
745-845	60	148	147	33	206	346	393	1	92	50	111	20	1607
800-900	40	138	125	37	198	304	331	3	93	29	111	21	1430

A.M. PEAK HOUR
0700-0800



I-215 SB ON - OFF RAMP / KENDALL DRIVE

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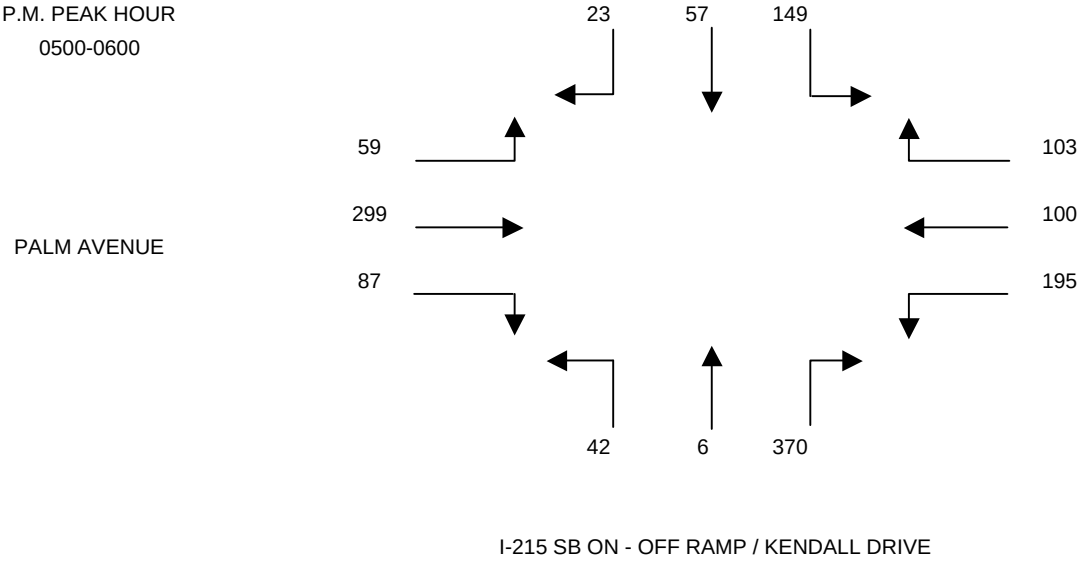
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
PROJECT: PALM AVENUE WAREHOUSE / DISTRIBUTION CENTER
DATE: TUESDAY, MAY 08, 2007
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION: N/S I-215 SB ON - OFF RAMP / KENDALL DRIVE
E/W PALM AVENUE
FILE NUMBER: 3-PM / PCEs

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
400-415	5	17	33	28	34	68	66	1	9	38	50	14
415-430	4	16	28	20	32	60	86	0	13	51	69	10
430-445	9	20	20	19	19	54	78	1	14	29	96	11
445-500	6	18	27	24	22	54	78	0	6	23	78	19
500-515	4	13	34	27	22	60	87	1	7	22	62	18
515-530	4	15	33	27	31	56	93	0	15	22	84	15
530-545	8	17	41	24	25	32	101	1	9	24	70	15
545-600	7	12	41	25	22	47	89	4	11	19	83	11

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTALS
400-500	24	71	108	91	107	236	308	2	42	141	293	54	1477
415-515	23	67	109	90	95	228	329	2	40	125	305	58	1471
430-530	23	66	114	97	94	224	336	2	42	96	320	63	1477
445-545	22	63	135	102	100	202	359	2	37	91	294	67	1474
500-600	23	57	149	103	100	195	370	6	42	87	299	59	1490

P.M. PEAK HOUR
0500-0600



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ARCADIA, CALIFORNIA 91006
626.446.7978

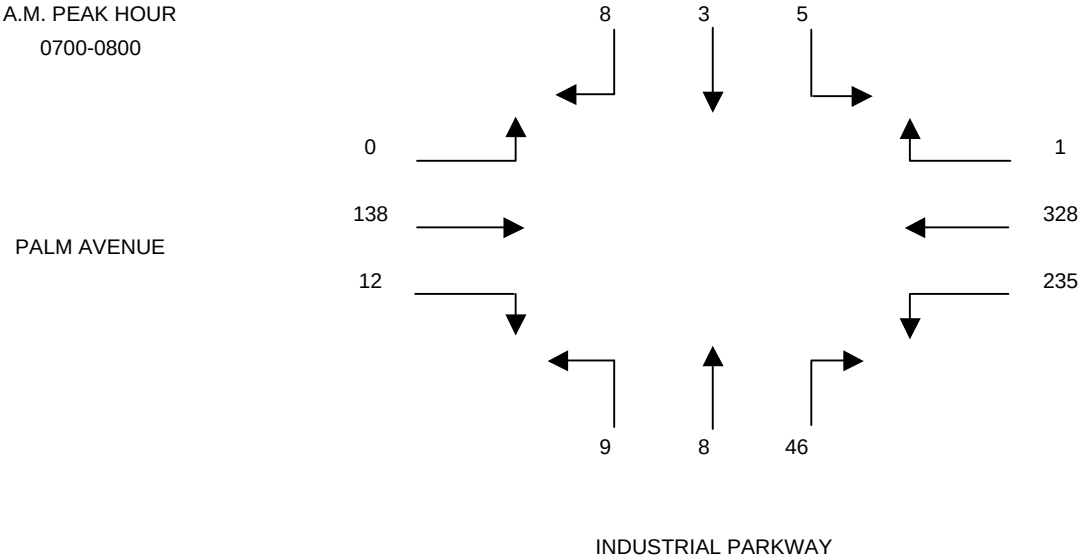
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
PROJECT: PALM AVENUE WAREHOUSE / DISTRIBUTION CENTER
DATE: TUESDAY, MAY 08, 2007
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION: N/S INDUSTRIAL PARKWAY
E/W PALM AVENUE
FILE NUMBER: 4-AM / PCEs

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
700-715	1	2	0	0	57	66	8	2	3	3	35	0
715-730	0	0	4	0	132	66	16	2	4	2	53	0
730-745	5	0	0	1	98	49	11	0	0	4	25	0
745-800	2	1	1	0	41	54	11	4	2	3	25	0
800-815	0	1	2	0	43	30	10	1	3	4	28	0
815-830	0	2	0	0	49	34	19	0	2	2	38	0
830-845	2	0	0	0	38	35	13	1	1	4	34	0
845-900	0	0	0	0	47	28	14	0	0	2	21	0

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-800	8	3	5	1	328	235	46	8	9	12	138	0	793
715-815	7	2	7	1	314	199	48	7	9	13	131	0	738
730-830	7	4	3	1	231	167	51	5	7	13	116	0	605
745-845	4	4	3	0	171	153	53	6	8	13	125	0	540
800-900	2	3	2	0	177	127	56	2	6	12	121	0	508

A.M. PEAK HOUR
0700-0800



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

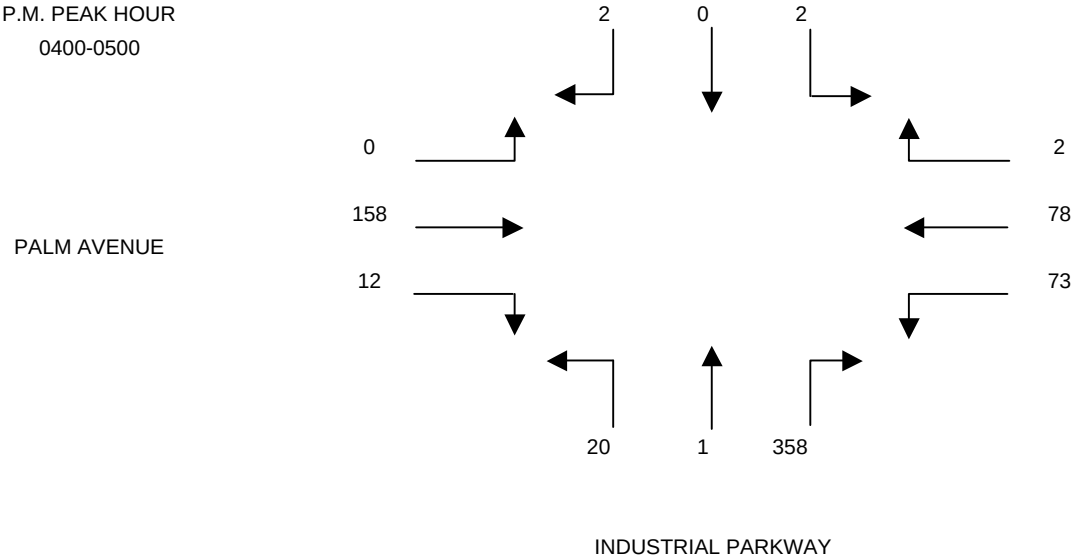
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
PROJECT: PALM AVENUE WAREHOUSE / DISTRIBUTION CENTER
DATE: TUESDAY, MAY 08, 2007
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION: N/S INDUSTRIAL PARKWAY
E/W PALM AVENUE
FILE NUMBER: 4-PM / PCEs

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
400-415	0	0	1	2	24	17	91	0	4	5	63	0
415-430	0	0	1	0	28	18	123	0	7	2	33	0
430-445	2	0	0	0	14	23	85	1	5	4	36	0
445-500	0	0	0	0	12	15	59	0	4	1	26	0
500-515	1	0	1	0	22	15	95	3	5	1	50	0
515-530	0	0	0	0	23	15	74	0	6	0	38	0
530-545	0	0	0	0	25	8	82	0	3	3	41	0
545-600	0	0	0	0	21	13	56	0	3	2	35	0

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-500	2	0	2	2	78	73	358	1	20	12	158	0	706
415-515	3	0	2	0	76	71	362	4	21	8	145	0	692
430-530	3	0	1	0	71	68	313	4	20	6	150	0	636
445-545	1	0	1	0	82	53	310	3	18	5	155	0	628
500-600	1	0	1	0	91	51	307	3	17	6	164	0	641

P.M. PEAK HOUR
0400-0500



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

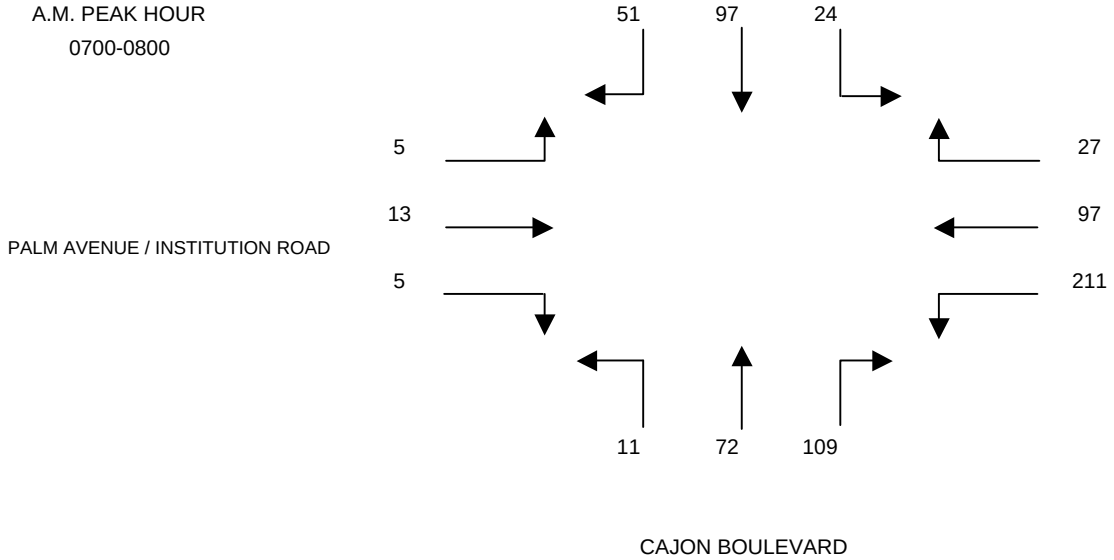
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
PROJECT: PALM AVENUE WAREHOUSE / DISTRIBUTION CENTER
DATE: TUESDAY, MAY 08, 2007
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION: N/S CAJON BOULEVARD
E/W PALM AVENUE / INSTITUTION ROAD
FILE NUMBER: 5-AM / PCEs

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
700-715	5	20	1	7	15	35	27	20	2	0	1	1
715-730	12	24	7	8	37	84	38	21	0	0	1	0
730-745	21	29	10	5	24	69	29	13	4	2	2	2
745-800	13	24	6	7	21	23	15	18	5	3	9	2
800-815	12	18	4	2	22	16	14	10	2	2	13	2
815-830	14	15	0	4	22	24	16	6	4	0	14	2
830-845	9	13	10	7	10	19	24	10	2	3	12	9
845-900	12	12	5	6	22	23	13	17	0	2	7	3

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-800	51	97	24	27	97	211	109	72	11	5	13	5	722
715-815	58	95	27	22	104	192	96	62	11	7	25	6	705
730-830	60	86	20	18	89	132	74	47	15	7	38	8	594
745-845	48	70	20	20	75	82	69	44	13	8	48	15	512
800-900	47	58	19	19	76	82	67	43	8	7	46	16	488

A.M. PEAK HOUR
0700-0800



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

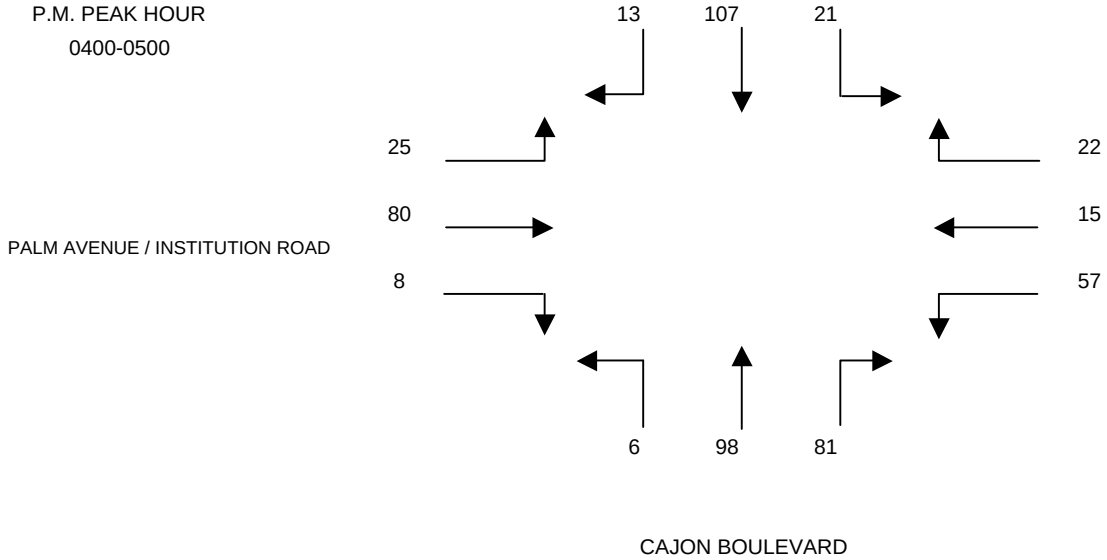
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
PROJECT: PALM AVENUE WAREHOUSE / DISTRIBUTION CENTER
DATE: TUESDAY, MAY 08, 2007
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION: N/S CAJON BOULEVARD
E/W PALM AVENUE / INSTITUTION ROAD
FILE NUMBER: 5-PM / PCEs

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
400-415	7	29	2	5	5	16	27	18	3	2	30	6
415-430	4	25	4	6	6	12	19	32	2	3	21	4
430-445	1	28	6	8	4	17	20	20	0	0	17	6
445-500	1	25	9	3	0	12	15	28	1	3	12	9
500-515	1	26	11	6	6	14	16	31	2	5	19	11
515-530	3	30	2	7	4	12	20	20	3	3	15	7
530-545	7	17	4	3	5	16	26	29	2	2	26	4
545-600	5	16	2	2	8	15	20	20	2	3	17	3

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTALS
400-500	13	107	21	22	15	57	81	98	6	8	80	25	533
415-515	7	104	30	23	16	55	70	111	5	11	69	30	531
430-530	6	109	28	24	14	55	71	99	6	11	63	33	519
445-545	12	98	26	19	15	54	77	108	8	13	72	31	533
500-600	16	89	19	18	23	57	82	100	9	13	77	25	528

P.M. PEAK HOUR
0400-0500

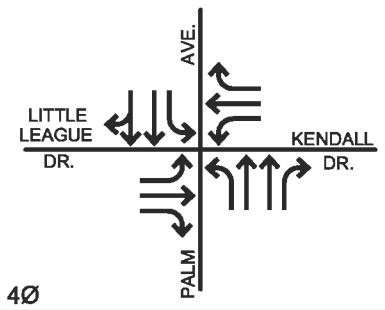
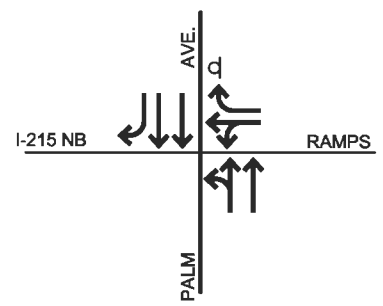
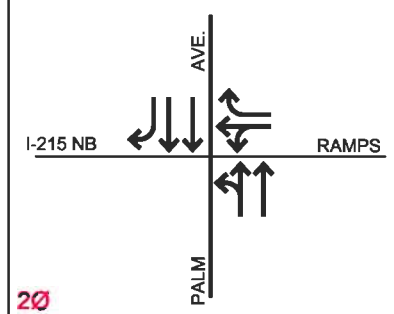
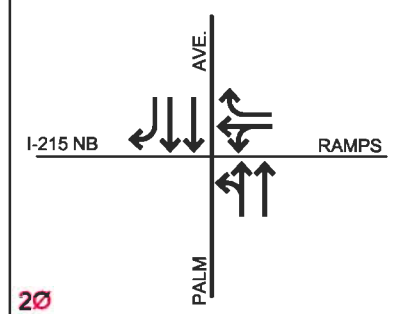
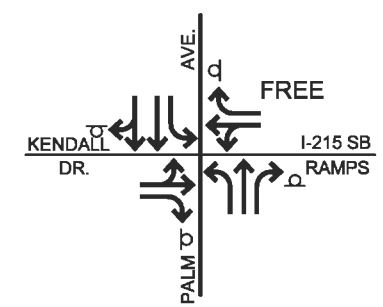
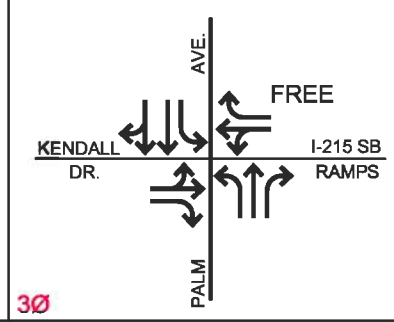
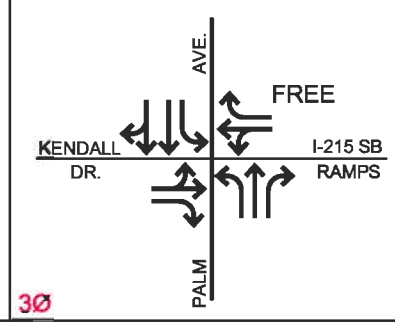
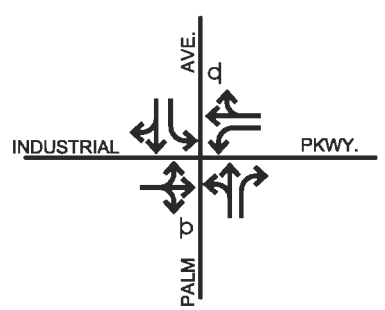
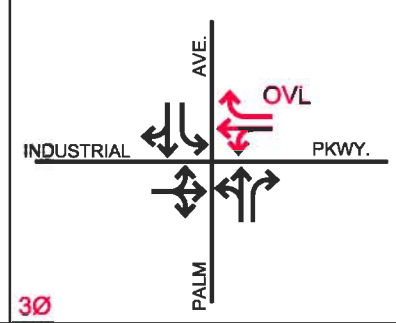
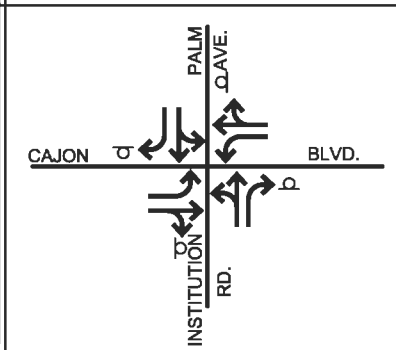
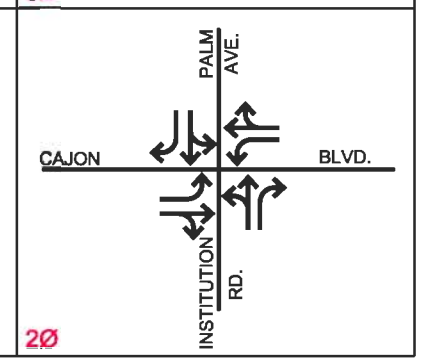


THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

APPENDIX B

STUDY INTERSECTION GEOMETRICS AND

TRAFFIC CONTROL OPERATIONS

INTERSECTION	EXISTING (2007)	OPENING YEAR (2010) WITHOUT & WITH PROJECT	OPENING YEAR (2010) WITH PROJECT + MITIGATION	FUTURE (2030) WITHOUT & WITH PROJECT	FUTURE (2030) WITH PROJECT + MITIGATION
1. PALM AVE. & KENDALL DR./LITTLE LEAGUE DR.		SAME AS EXISTING (2007)	NONE REQUIRED	SAME AS EXISTING (2007)	NONE REQUIRED
2. PALM AVE. & I-215 NB RAMPS		SAME AS EXISTING (2007)		SAME AS EXISTING (2007)	
3. PALM AVE. & I-215 SB RAMPS-KENDALL DR.		SAME AS EXISTING (2007)		SAME AS EXISTING (2007)	
4. PALM AVE. & INDUSTRIAL PKWY.		SAME AS EXISTING (2007)	NONE REQUIRED	SAME AS EXISTING (2007)	
5. PALM AVE./INSTITUTION RD. & CAJON BLVD.		SAME AS EXISTING (2007)	NONE REQUIRED	SAME AS EXISTING (2007)	

LEGEND:

2Ø :NUMBER OF SIGNAL PHASES
σ :STOP-SIGN CONTROLLED
FREE :FREE RIGHT-TURN
OVL :OVERLAP

12/7/2007

APPENDIX B

FN: PALM AVE WAREHOUSE SAN BERNARDINO/LANE CONFIGS

CRAIN & ASSOCIATES
Transportation Planning
Traffic Engineering
2007 Sawtelle Boulevard
Los Angeles, California 90025
PH (310) 473 6508 F (310) 444 9771
www.crainandassociates.com

STUDY INTERSECTION GEOMETRICS AND TRAFFIC CONTROL OPERATIONS

APPENDIX C

POST PROCESSING PROCEDURES

PALM AVENUE WAREHOUSE/DISTRIBUTION CENTER PROJECT

Post Processing Procedures

Existing (2007) Traffic Volumes

Existing turning-movement volumes at the study intersections are based on current (2007) AM and PM peak-hour traffic counts, which were collected by The Traffic Solution, a professional traffic data collection company.

Opening Year 2010 "Without Project" Traffic Volumes

Opening year 2010 "Without Project" traffic volumes were calculated by interpolating the growth between the Existing 2007 traffic volumes and the future 2030 "Without Project" traffic volumes, multiplying that 23-year growth by an incremental factor (3 / 23) to estimate growth from 2007 to 2010, and then adding the 3-year growth estimate to the Existing 2007 traffic counts.

Opening Year 2010 "With Project" Traffic Volumes

Opening year 2010 "With Project" traffic volumes were calculated by adding the Palm Avenue Warehouse/Distribution project traffic volumes to the 2010 "Without Project" traffic volumes. The project turning volumes were based on the model's assignment of the project trips.

Future 2030 "Without Project" Traffic Volumes

Future-year 2030 "Without Project" link volumes were forecasted using the transportation model (EVTM). The traffic volume forecasts in this scenario include cumulative traffic volumes but do not include vehicle trips contributed by the Palm Avenue Warehouse/Distribution project.

The EVTM peak-period link volumes for the "Existing" and future 2030 "Without Project" traffic conditions were converted to peak-hour volumes by using peak-hour to peak-period factors (0.38 for the AM and 0.28 for the PM). Future 2030 "Without Project"

traffic link volumes were calculated by adding the 23-year model growth (from existing 2007 to future 2030 “Without Project” conditions) to the existing counts. In addition, the model growth for truck trips in PCE for a 23-year period was also added to estimate future 2030 “Without Project” traffic link volumes. It should be noted that the model projected non-project growth to decrease at some locations in the project area. This may occur due to traffic shifts as a result of future roadway improvements in the project area such as the reconstruction of the University Parkway/I-215 Freeway interchange and the University Parkway overpass improvement at Cajun Boulevard and in the project vicinity. The non-project growth decrease may also be due to the change in land use patterns to estimate trip making patterns. The model considers future growth patterns to determine how trip linkages will change over time. For example, it considers the amount of housing, employment and shopping growth in each zone to determine how far residents and patrons will decide to travel. The calculation worksheets for the future 2030 “Without Project” traffic link volumes are found in Appendix D.

Future-year 2030 “Without Project” traffic turning movement volumes were calculated using a modified version of the B-Turn program. The B-Turn program file used for the analysis is BTRNWOP.XLS. The B-Turn program file contains four worksheets (BTurns, CountData, ModelVols and ProjectedVolumes). Each worksheet can be thought of as a page of data or a page of calculations. These four worksheets are described in detail below.

1. BTurns – The original B-Turns program that was provided by SanBAG. The existing turning-movement counts and projected 2030 “Without Project” link volumes are entered into this worksheet. The program calculates future turning-movements based on existing turning-movement proportions.

2. CountData – The existing (2007) turning-movement volumes for the study intersections are entered into this worksheet. The existing volumes are used as turning proportions (ratios) for estimating the future turning-movement volumes.

3. ModelVols – The post-processed EVTM link volumes are entered into this worksheet. The B-Turn program uses the model link volumes in this worksheet

along with the existing turning-movement counts from worksheet CountData to calculate the future forecasted turning-movement volumes at the study intersections.

4. ProjectedVolumes – The future-year turning-movement volumes forecasts are stored in this worksheet. A macro called "Calcvolumes" calculates the forecasted turning-movement volumes at the study intersections. Actually, this macro calculates the future-year turning-movement volumes for the first intersection in the spreadsheet, then repeats the set of commands using the data for the second intersection, and so on until the calculations are complete for all study intersections. This macro uses the turning-movement proportions (from the *CountData* worksheet) along with the EVTM link volumes (in the *ModelVols* worksheet) to calculate the future-year turning-movement volumes. These calculations are done in the *BTurns* worksheet. The results from the *BTurns* pivot-point model are copied to the *ProjectedVolumes* worksheet. To run this macro (in Excel), click on "Tools" at the top of the screen, then select "Macro", select "Macro" again, then select the macro named "CalcVolumes."

Future 2030 "With Project" Traffic Volumes

Future 2030 "With Project" traffic volumes were calculated by adding the Palm Avenue Warehouse/Distribution project traffic volumes to the 2030 "Without Project" traffic volumes. The project turning volumes were based on the model's assignment of the project trips.

APPENDIX D

B-TURNS CALCULATION WORKSHEETS

PALM AVENUE WAREHOUSE / DISTRIBUTION PROJECT
B-Turns Worksheets for
Future 2030 Without Project Scenario

2030 AM Peak Hour Without Project Model Link Volume

IS-No.	N-I/B 1	N-O/B 2	S-I/B 3	S-O/B 4	E-I/B 5	E-O/B 6	W-I/B 7	W-O/B 8
1	518	404	280	138	74	68	320	583
2	308	669	404	518	0	184	658	0
3	100	461	669	308	510	292	267	484
4	136	330	461	100	5	31	25	166
5	10	76	330	136	152	283	50	48

2007 AM Peak Hour Existing Conditions Model Link Volume

N-I/B 1	N-O/B 2	S-I/B 3	S-O/B 4	E-I/B 5	E-O/B 6	W-I/B 7	W-O/B 8
92	753	233	68	6	18	571	63
65	197	753	92	0	596	67	0
60	125	197	65	29	16	65	147
63	92	125	60	1	6	16	48
0	7	92	63	62	163	99	19

2030 PM Peak Hour Without Project Model Link Volume

IS-No.	N-I/B 1	N-O/B 2	S-I/B 3	S-O/B 4	E-I/B 5	E-O/B 6	W-I/B 7	W-O/B 8
1	1127	430	205	436	92	197	487	849
2	753	364	430	1127	0	280	588	0
3	371	196	364	753	570	236	513	633
4	323	215	196	371	23	7	138	87
5	63	16	215	323	293	312	184	105

2007 PM Peak Hour Existing Conditions Model Link Volume

N-I/B 1	N-O/B 2	S-I/B 3	S-O/B 4	E-I/B 5	E-O/B 6	W-I/B 7	W-O/B 8
676	389	141	276	20	19	319	472
563	155	389	676	0	284	164	0
129	137	155	563	41	16	514	122
111	141	137	129	4	3	48	27
5	2	141	111	110	137	61	67

PALM AVENUE WAREHOUSE / DISTRIBUTION PROJECT
B-Turns Worksheets for
Future 2030 Without Project Scenario

2007 AM Peak Hour Existing Aggregated Count -- Link Volumes

	N-I/B	N-O/B	S-I/B	S-O/B	E-I/B	E-O/B	W-I/B	W-O/B
IS-No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	931	1259	903	382	291	289	594	789
2	705	784	1263	927	0	664	407	0
3	200	551	759	727	509	67	509	632
4	150	345	564	189	16	9	63	250
5	23	159	335	146	172	104	192	313

AM Peak Hour Truck PCE Model Link Volume Growth (2007-2030

N-I/B	N-O/B	S-I/B	S-O/B	E-I/B	E-O/B	W-I/B	W-O/B
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
-2	0	0	2	6	2	-2	-1
-14	40	0	-2	0	-15	37	0
29	29	40	-14	0	0	-23	30
31	14	29	26	0	0	-18	-3
13	14	14	31	109	-16	-7	99

2007 PM Peak Hour Existing Aggregated Count -- Link Volumes

	N-I/B	N-O/B	S-I/B	S-O/B	E-I/B	E-O/B	W-I/B	W-O/B
IS-No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	1112	812	428	851	211	270	701	519
2	784	414	793	1126	0	564	527	0
3	445	165	398	818	229	168	418	339
4	170	100	153	518	4	3	379	85
5	113	34	94	182	141	145	185	172

PM Peak Hour Truck PCE Model Link Volume Growth (2007-2030

N-I/B	N-O/B	S-I/B	S-O/B	E-I/B	E-O/B	W-I/B	W-O/B
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
-12	39	59	45	2	45	30	-46
-39	286	39	-12	0	-56	221	0
140	258	286	-39	0	0	-45	166
128	240	258	138	0	0	-8	-5
178	269	240	128	52	175	206	106

PALM AVENUE WAREHOUSE / DISTRIBUTION PROJECT
B-Turns Worksheets for
Future 2030 Without Project Scenario

2030 AM Peak Hour Without Project Link Volumes

Use these volumes in the B-Turns program within BTRNWOP.

	N-I/B	N-O/B	S-I/B	S-O/B	E-I/B	E-O/B	W-I/B	W-O/B
IS-No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	1355	910	950	454	365	341	341	1308
2	934	1296	914	1351	0	237	1035	0
3	269	916	1271	956	990	343	688	999
4	254	597	929	255	20	34	54	365
5	46	242	587	250	371	208	136	441

2030 PM Peak Hour Without Project Link Volumes

Use these volumes in the B-Turns program within BTRNWOP.

	N-I/B	N-O/B	S-I/B	S-O/B	E-I/B	E-O/B	W-I/B	W-O/B
IS-No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	1551	892	551	1056	285	493	899	850
2	935	909	873	1565	0	504	1172	0
3	827	482	893	969	758	388	372	1016
4	510	414	470	898	23	7	461	140
5	349	317	408	522	376	495	514	316

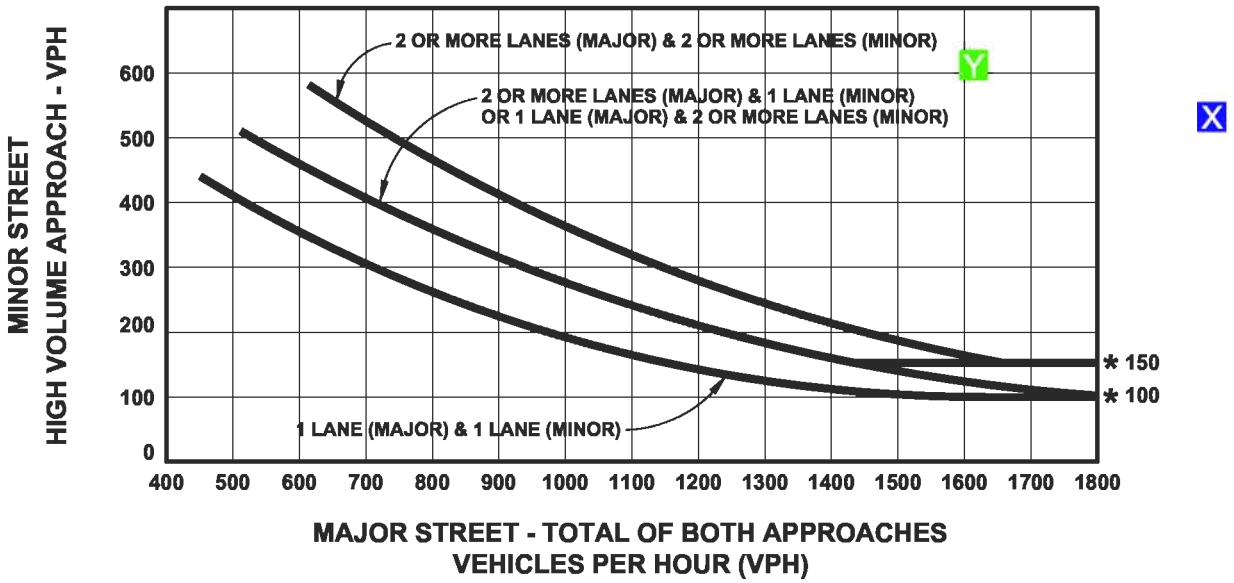
APPENDIX E

TRAFFIC SIGNAL WARRANT WORKSHEETS

Figure 4C-3. Warrant 3, Peak Hour

INTERSECTION A

PALM AVE. & I-215 NB RAMPS
OPENING YEAR (2010) WITH PROJECT TRAFFIC CONDITION



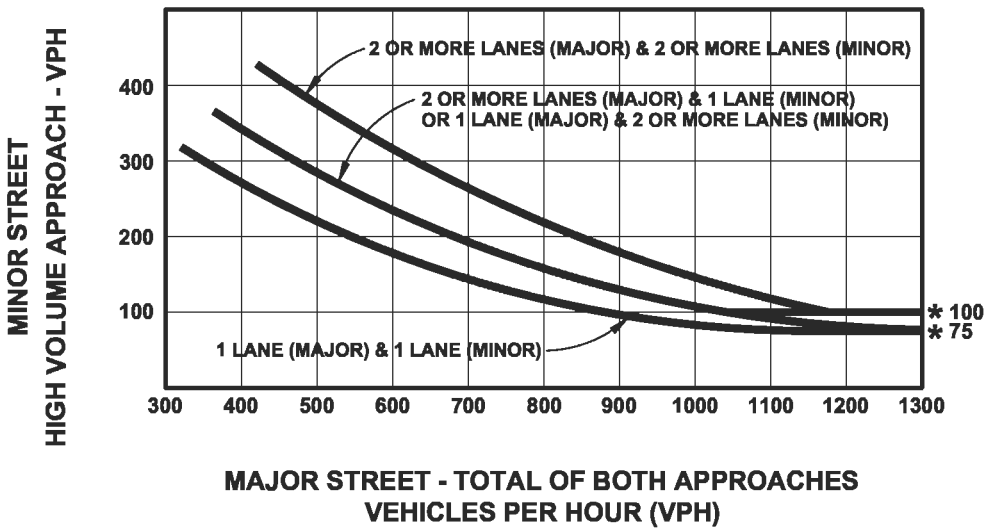
* NOTE:
150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

X A.M. PEAK HOUR (1974, 512)
Y P.M. PEAK HOUR (1629, 624)

NOTE: PEAK HOUR VOLUMES WARRANT A TRAFFIC SIGNAL AT THIS LOCATION.

Figure 4C-4. Warrant 3, Peak Hour (70%) Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70km/h OR ABOVE 40 mph On Major Street)

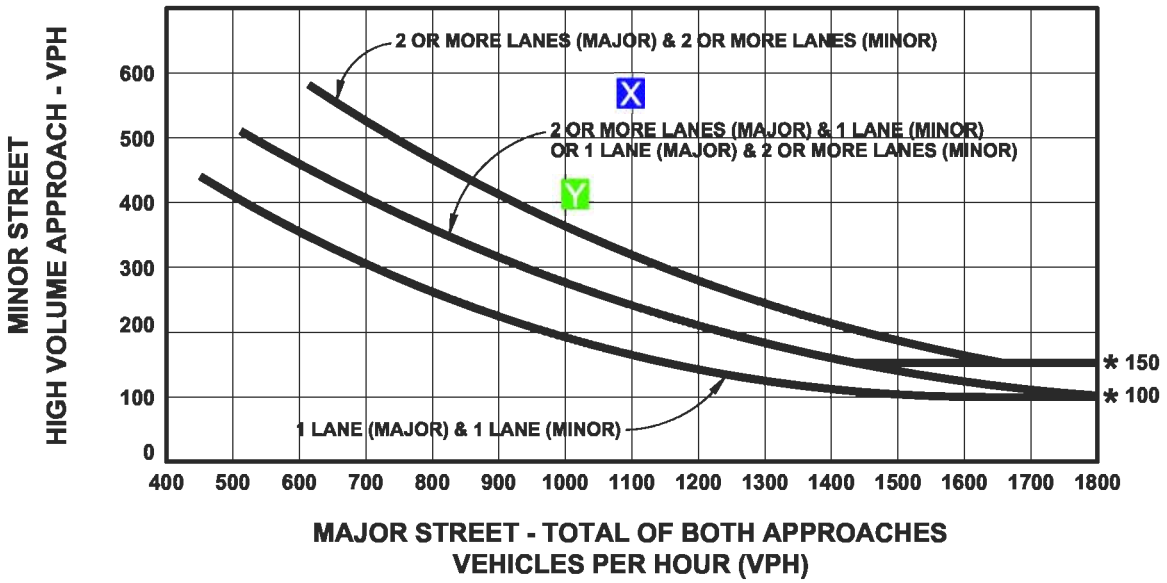


* NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

Figure 4C-3. Warrant 3, Peak Hour

INTERSECTION A

PALM AVE. & I-215 SB RAMPS/KENDALL DRIVE
OPENING YEAR (2010) WITH PROJECT TRAFFIC CONDITION



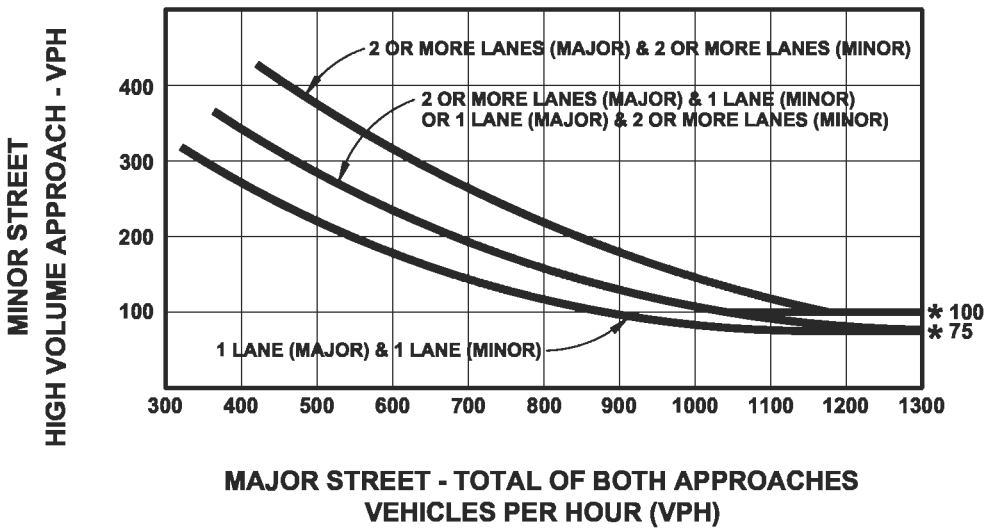
* NOTE:
150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

X A.M. PEAK HOUR (1099, 572)
Y P.M. PEAK HOUR (1021, 420)

NOTE: PEAK HOUR VOLUMES WARRANT A TRAFFIC SIGNAL AT THIS LOCATION.

Figure 4C-4. Warrant 3, Peak Hour (70%) Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70km/h OR ABOVE 40 mph On Major Street)



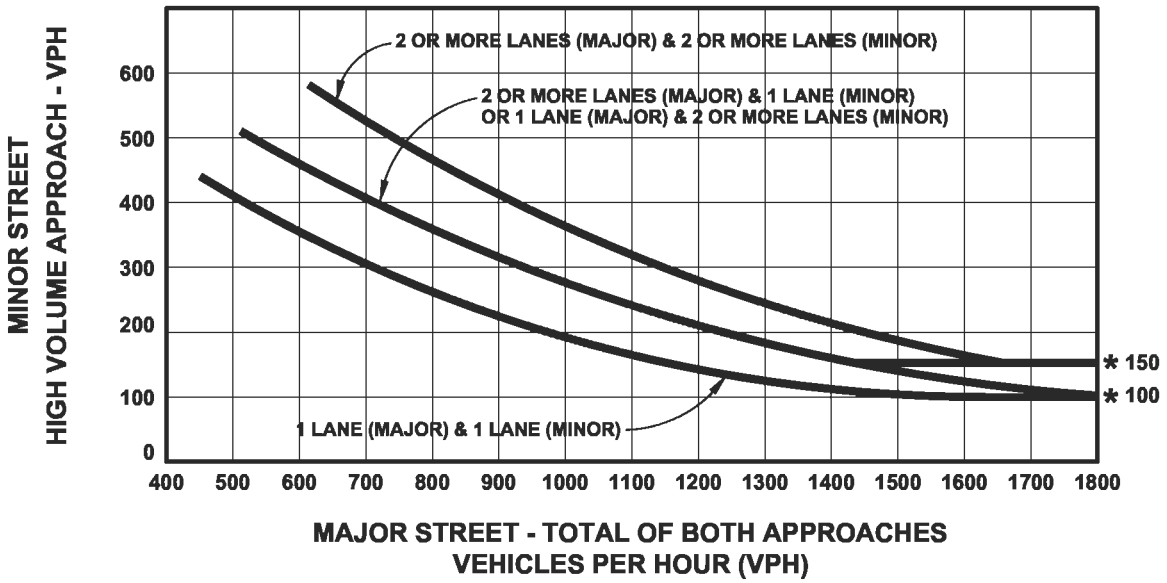
* NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

Figure 4C-3. Warrant 3, Peak Hour

INTERSECTION A

PALM AVE. & I-215 NB RAMPS
FUTURE (2030) WITH PROJECT TRAFFIC CONDITION

Y
X



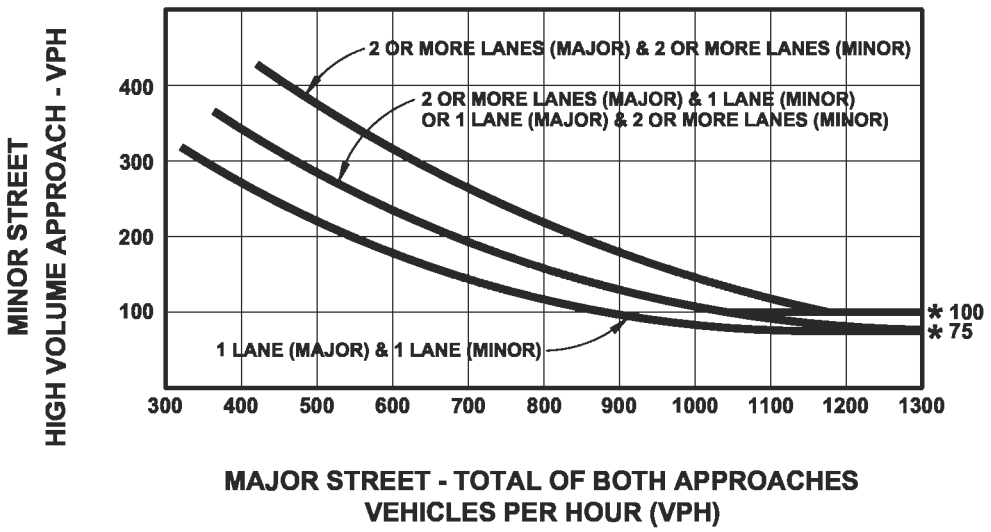
* NOTE:
150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

X A.M. PEAK HOUR (1869, 1059)
Y P.M. PEAK HOUR (1830, 1183)

NOTE: PEAK HOUR VOLUMES WARRANT A TRAFFIC SIGNAL AT THIS LOCATION.

Figure 4C-4. Warrant 3, Peak Hour (70%) Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70km/h OR ABOVE 40 mph On Major Street)

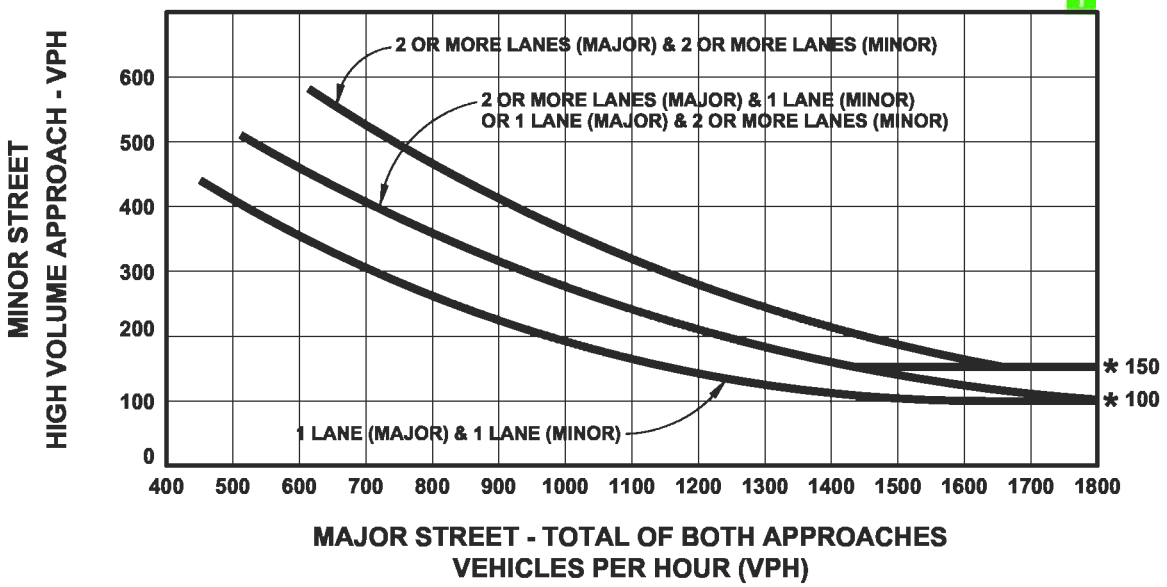


* NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

Figure 4C-3. Warrant 3, Peak Hour

INTERSECTION A

PALM AVE. & I-215 SB RAMPS/KENDALL DR. X
FUTURE (2030) WITH PROJECT TRAFFIC CONDITION Y



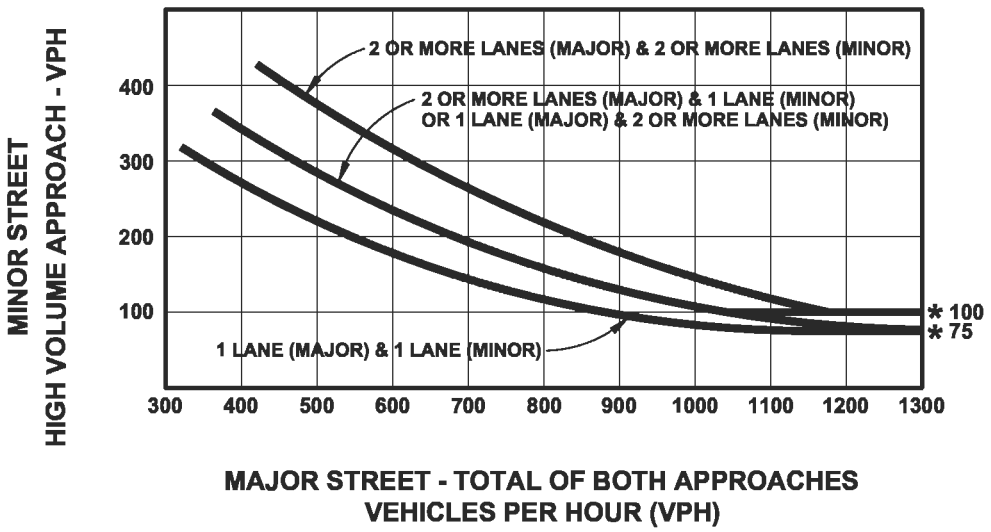
* NOTE:
150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

X A.M. PEAK HOUR (1602, 990)
Y P.M. PEAK HOUR (1785, 761)

NOTE: PEAK HOUR VOLUMES WARRANT A TRAFFIC SIGNAL AT THIS LOCATION.

Figure 4C-4. Warrant 3, Peak Hour (70%) Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70km/h OR ABOVE 40 mph On Major Street)

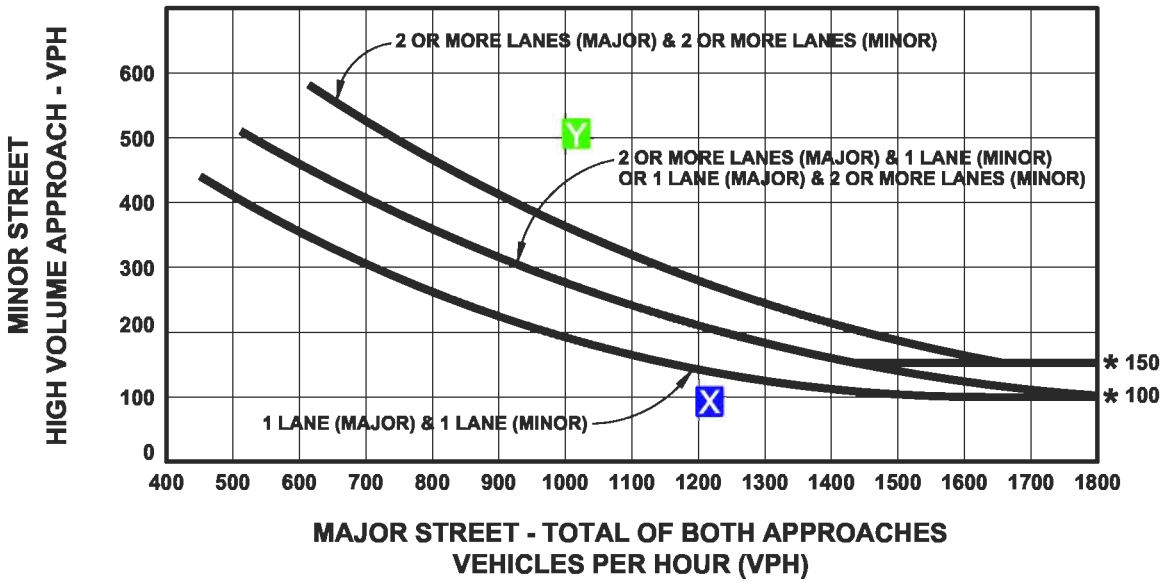


* NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

Figure 4C-3. Warrant 3, Peak Hour

INTERSECTION A

PALM AVE. & INDUSTRIAL PARKWAY
FUTURE (2030) WITH PROJECT TRAFFIC CONDITION



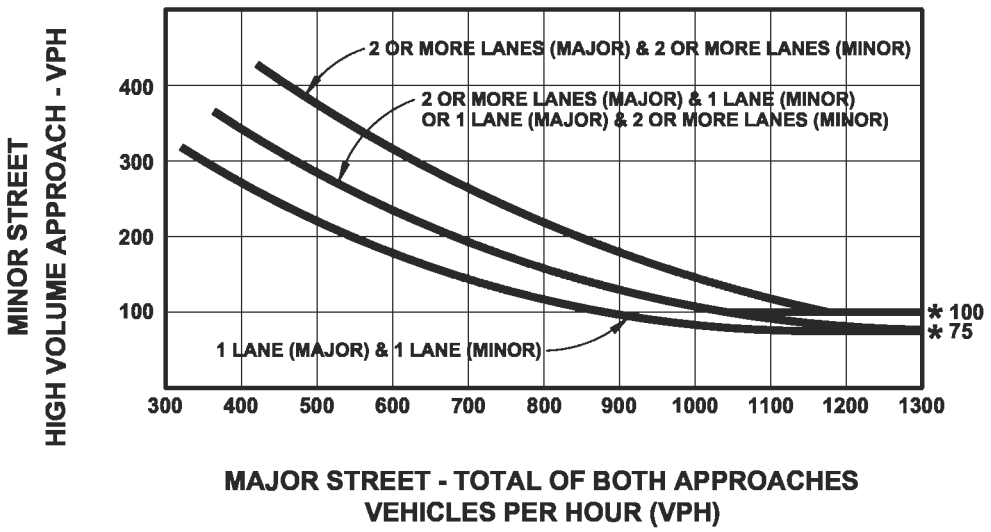
* NOTE:
150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

X A.M. PEAK HOUR (1224, 92)
Y P.M. PEAK HOUR (1014, 508)

NOTE: PEAK HOUR VOLUMES WARRANT A TRAFFIC SIGNAL AT THIS LOCATION.

Figure 4C-4. Warrant 3, Peak Hour (70%) Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70km/h OR ABOVE 40 mph On Major Street)

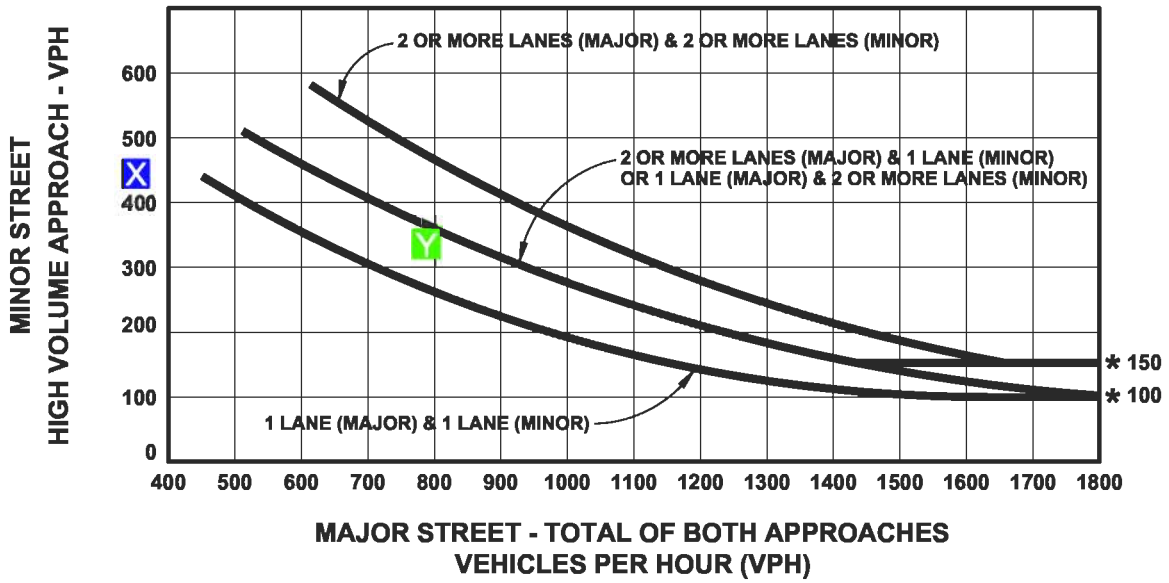


* NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

Figure 4C-3. Warrant 3, Peak Hour

INTERSECTION A

PALM AVE. & INSTITUTION ROAD & CAJON BOULEVARD FUTURE (2030) WITH PROJECT TRAFFIC CONDITION



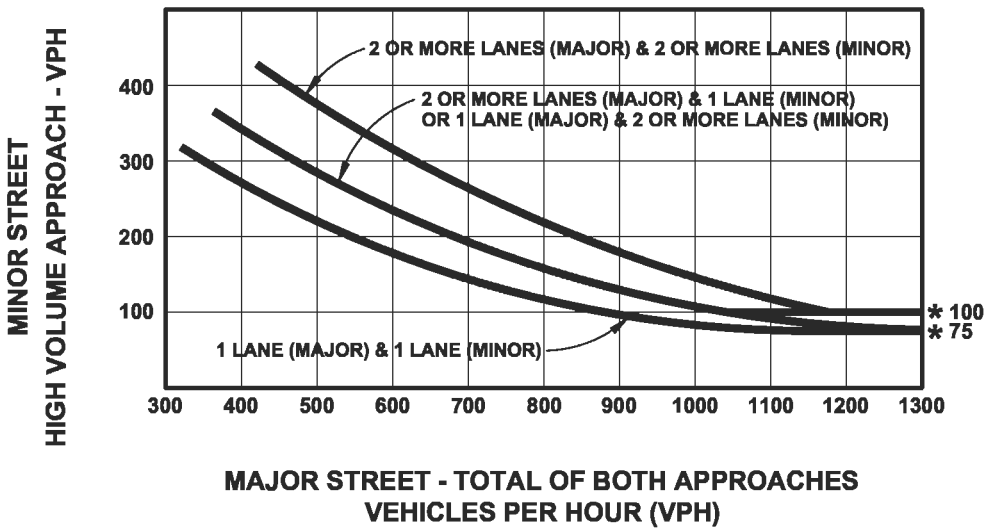
* NOTE:
150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

X A.M. PEAK HOUR (369, 444)
Y P.M. PEAK HOUR (782, 339)

NOTE: PEAK HOUR VOLUMES FROM THE SHARED THROUGH/RIGHT-TURN LANE IN EACH DIRECTION ON CAJON BVLD.(MAJOR STREET) AND FROM THE SHARED THROUGH/LEFT-TURN LANE ON EITHER THE PALM AVENUE OR INSTITUTION RD. APPROACHES (MINOR STREET) WERE ASSUMED FOR THE SIGNAL WARRANT ANALYSIS. BASED ON THESE PEAK-HOUR VLUMNES, A TRAFFIC SIGNAL IS WARRANTED AT THIS LOCATION.

Figure 4C-4. Warrant 3, Peak Hour (70%) Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70km/h OR ABOVE 40 mph On Major Street)



* NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

APPENDIX F

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Existing (2007) Traffic Conditions

Palm Ave. Warehouse/Distribution Center
Existing (2007) Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Palm Ave. & Kendall Dr.

Cycle (sec):	105	Critical Vol./Cap.(X):	1.032
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	35.8
Optimal Cycle:	80	Level Of Service:	D

Street Name:	Palm Ave.						Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	26	26	10	22	22	10	26	26	10	22	22
Lanes:	1 0 2 0 1			1 0 1 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	106	271	554	174	658	71	25	61	205	396	112	86
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	271	554	174	658	71	25	61	205	396	112	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	112	285	583	183	693	75	26	64	216	417	118	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	285	583	183	693	75	26	64	216	417	118	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	112	285	583	183	693	75	26	64	216	417	118	91
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.81	0.19	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3600	1800	1700	3249	351	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.00	0.08	0.32	0.00	0.21	0.21	0.00	0.04	0.12	0.00	0.07	0.05
Crit Moves:	****				****				****	****		
Green/Cycle:	0.12	0.25	0.55	0.13	0.26	0.26	0.17	0.25	0.25	0.30	0.37	0.37
Volume/Cap:	0.56	0.32	0.59	0.82	0.81	0.81	0.09	0.14	0.48	0.82	0.17	0.13
Delay/Veh:	47.5	32.5	17.0	65.8	41.9	41.9	36.8	31.0	34.6	44.8	22.1	21.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.5	32.5	17.0	65.8	41.9	41.9	36.8	31.0	34.6	44.8	22.1	21.7
LOS by Move:	D	C	B	E	D	D	D	C	C	D	C	C
HCM2kAvgQ:	4	4	13	8	14	14	1	2	6	16	3	2

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Existing (2007) Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Average Delay (sec/veh): 5.9 Worst Case Level Of Service: D[32.7]

Street Name:	Palm Ave.						I-215 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	1 0	0	0 0	2 0	1	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	54	651	0	0	653	610	0	0	0	131	0	276
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	651	0	0	653	610	0	0	0	131	0	276
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	57	685	0	0	687	642	0	0	0	138	0	291
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	57	685	0	0	687	642	0	0	0	138	0	291
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1329	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1143	2128	343
Potent Cap.:	526	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	197	50	659
Move Cap.:	526	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	180	45	659
Volume/Cap:	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.77	0.00	0.44
Level Of Service Module:												
2Way95thQ:	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	2.3
Control Del:	12.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	14.7
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	180	xxxx	xxxxx
SharedQueue:	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.0	xxxx	xxxxx
Shrd ConDel:	12.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	70.7	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			32.7		
ApproachLOS:	*			*			*			D		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Existing (2007) Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.985
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	33.6
Optimal Cycle:	0	Level Of Service:	D

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	1 0		0 1 0	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	23	116	61	419	299	41	207	152	150	102	3	404
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	116	61	419	299	41	207	152	150	102	3	404
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	24	122	64	441	315	43	218	160	158	107	3	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	122	64	441	315	43	218	160	158	107	3	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	24	122	64	441	315	43	218	160	158	107	3	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.76	0.24	0.58	0.42	1.00	0.97	0.03	1.00
Final Sat.:	368	390	421	448	832	115	263	193	516	379	11	445
Capacity Analysis Module:												
Vol/Sat:	0.07	0.31	0.15	0.98	0.38	0.37	0.83	0.83	0.31	0.28	0.28	0.00
Crit Moves:		****		****				****			****	
Delay/Veh:	12.7	15.4	12.3	67.1	14.5	14.3	37.8	37.8	12.5	14.9	14.9	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.7	15.4	12.3	67.1	14.5	14.3	37.8	37.8	12.5	14.9	14.9	0.0
LOS by Move:	B	C	B	F	B	B	E	E	B	B	B	*
ApproachDel:		14.1			43.5			30.3			14.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		14.1			43.5			30.3			14.9	
LOS by Appr:		B			E			D			B	
AllWayAvgQ:	0.1	0.4	0.2	7.0	0.6	0.6	3.5	3.5	0.4	0.4	0.4	0.0

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Existing (2007) Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: C[18.2]

Street Name:	Palm Ave.						Industrial Pkwy.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 1		1 0	0 1	0	0 0	1! 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	0	138	12	235	328	1	5	3	8	9	8	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	138	12	235	328	1	5	3	8	9	8	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	145	13	247	345	1	5	3	8	9	8	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	145	13	247	345	1	5	3	8	9	8	48
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	158	xxxx	xxxxx	1021	998	346	992	986	145
Potent Cap.:	xxxx	xxxx	xxxxx	1434	xxxx	xxxxx	217	246	702	227	250	907
Move Cap.:	xxxx	xxxx	xxxxx	1434	xxxx	xxxxx	173	203	702	192	207	907
Volume/Cap:	xxxx	xxxx	xxxx	0.17	xxxx	xxxx	0.03	0.02	0.01	0.05	0.04	0.05
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.6	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	24.7	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	C	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	290	xxxxx	xxxx	xxxx	604
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	0.3
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.2	xxxxx	xxxxx	xxxx	11.6
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	B
ApproachDel:	xxxxxx			xxxxxx			18.2			13.5		
ApproachLOS:	*			*			C			B		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Existing (2007) Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.545
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	12.1
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	5	13	5	211	97	27	24	97	51	11	72	109
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	13	5	211	97	27	24	97	51	11	72	109
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	5	14	5	222	102	28	25	102	54	12	76	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	14	5	222	102	28	25	102	54	12	76	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	14	5	222	102	28	25	102	54	12	76	115
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.72	1.00	0.69	0.31	1.00	1.00	0.66	0.34	1.00	0.40	0.60
Final Sat.:	152	394	626	407	187	711	540	400	211	542	252	382
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.01	0.55	0.55	0.04	0.05	0.26	0.26	0.02	0.30	0.30
Crit Moves:		****			****				****		****	
Delay/Veh:	9.0	9.0	8.0	15.0	15.0	7.7	9.3	10.1	10.1	9.2	10.2	10.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.0	9.0	8.0	15.0	15.0	7.7	9.3	10.1	10.1	9.2	10.2	10.2
LOS by Move:	A	A	A	C	C	A	A	B	B	A	B	B
ApproachDel:		8.8			14.4			10.0			10.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.8			14.4			10.0			10.2	
LOS by Appr:		A			B			A			B	
AllWayAvgQ:	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.3	0.3	0.0	0.4	0.4

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Existing (2007) Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Palm Ave. & Kendall Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 1.020
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: OPTIMIZED Level Of Service: C

Street Name:	Palm Ave.						Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	26	26	10	22	22	10	26	26	10	22	22
Lanes:	1 0 2 0 1			1 0 1 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	107	654	351	111	271	46	44	57	110	431	117	153
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	654	351	111	271	46	44	57	110	431	117	153
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	113	688	369	117	285	48	46	60	116	454	123	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	688	369	117	285	48	46	60	116	454	123	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	113	688	369	117	285	48	46	60	116	454	123	161
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.71	0.29	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3600	1800	1700	3078	522	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.21	0.00	0.09	0.09	0.00	0.03	0.06	0.00	0.07	0.09
Crit Moves:		****		****					****	****		
Green/Cycle:	0.11	0.26	0.56	0.10	0.25	0.25	0.18	0.26	0.26	0.30	0.39	0.39
Volume/Cap:	0.59	0.74	0.37	0.69	0.37	0.37	0.16	0.13	0.25	0.89	0.18	0.23
Delay/Veh:	46.9	36.9	12.4	54.7	31.5	31.5	35.2	28.4	29.5	50.8	20.4	20.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.9	36.9	12.4	54.7	31.5	31.5	35.2	28.4	29.5	50.8	20.4	20.9
LOS by Move:	D	D	B	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	4	11	6	5	4	4	1	1	3	18	2	3

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Existing (2007) Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Average Delay (sec/veh): 7.2 Worst Case Level Of Service: D[26.6]

Street Name:	Palm Ave.						I-215 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	1 0	0	0 0	2 0	1	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	106	678	0	0	335	458	0	0	0	79	0	448
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	678	0	0	335	458	0	0	0	79	0	448
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	112	714	0	0	353	482	0	0	0	83	0	472
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	112	714	0	0	353	482	0	0	0	83	0	472
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	835	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1113	1772	357
Potent Cap.:	807	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	206	84	645
Move Cap.:	807	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	182	72	645
Volume/Cap:	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.46	0.00	0.73
Level Of Service Module:												
2Way95thQ:	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	6.3
Control Del:	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	24.2
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	C
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	182	xxxx	xxxxx
SharedQueue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Shrd ConDel:	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	40.3	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	E	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			26.6		
ApproachLOS:	*			*			*			D		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Existing (2007) Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.596
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.2
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	1 0		0 1 0	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	59	299	87	195	100	103	149	57	23	42	6	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	299	87	195	100	103	149	57	23	42	6	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	62	315	92	205	105	108	157	60	24	44	6	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	315	92	205	105	108	157	60	24	44	6	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	62	315	92	205	105	108	157	60	24	44	6	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.28	1.00	0.87	0.13	1.00
Final Sat.:	487	528	581	482	513	569	345	132	548	376	54	494
Capacity Analysis Module:												
Vol/Sat:	0.13	0.60	0.16	0.43	0.21	0.19	0.45	0.45	0.04	0.12	0.12	0.00
Crit Moves:		****		****			****				****	
Delay/Veh:	10.8	18.1	9.7	14.9	11.1	10.1	15.4	15.4	9.1	11.4	11.4	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.8	18.1	9.7	14.9	11.1	10.1	15.4	15.4	9.1	11.4	11.4	0.0
LOS by Move:	B	C	A	B	B	B	C	C	A	B	B	*
ApproachDel:		15.5			12.7			14.8			11.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		15.5			12.7			14.8			11.4	
LOS by Appr:		C			B			B			B	
AllWayAvgQ:	0.1	1.3	0.2	0.7	0.2	0.2	0.7	0.7	0.0	0.1	0.1	0.0

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Existing (2007) Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Average Delay (sec/veh): 7.4 Worst Case Level Of Service: B[14.8]

Street Name:	Palm Ave.									Industrial Pkwy.								
Approach:	North Bound				South Bound					East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	1	1	0	0	1	0	0	0	1!	0	0	1	0	0	1	0
Volume Module:																				
Base Vol:	0	158		12		73	78		2		2		0		2	20		1	358	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Initial Bse:	0	158		12		73	78		2		2		0		2	20		1	358	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00	1.00	
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.95	0.95		0.95	0.95	
PHF Volume:	0	166		13		77	82		2		2		0		2	21		1	377	
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0	0	
FinalVolume:	0	166		13		77	82		2		2		0		2	21		1	377	
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		7.1		6.5		6.2		7.1	6.5		6.2		
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5		4.0		3.3		3.5	4.0		3.3		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx		179	xxxx	xxxxx		598		416		83		404	404		166		
Potent Cap.:	xxxx	xxxx	xxxxx		1409	xxxx	xxxxx		417		530		982		560	538		883		
Move Cap.:	xxxx	xxxx	xxxxx		1409	xxxx	xxxxx		229		502		982		536	509		883		
Volume/Cap:	xxxx	xxxx	xxxx		0.05	xxxx	xxxx		0.01		0.00		0.00		0.04	0.00		0.43		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx		xxxx		xxxx		xxxxx		0.1	xxxx		xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		7.7	xxxx	xxxxx		xxxxx		xxxx		xxxxx		12.0	xxxx		xxxxx		
LOS by Move:	*	*	*		A	*	*		*		*		*		B	*		*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx		371		xxxxx	xxxx		xxxx		881
SharedQueue:	0.0	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		0.0		xxxxx	xxxxx		xxxx		2.2
Shrd ConDel:	9.0	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		14.8		xxxxx	xxxxx		xxxx		12.1
Shared LOS:	A	*	*			*	*	*			*		B		*	*		*		B
ApproachDel:	xxxxxx					xxxxxx					14.8					12.1				
ApproachLOS:	*					*					B					B				

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Existing (2007) Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.267
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	9.2
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	25	80	8	57	15	22	21	107	13	6	98	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	80	8	57	15	22	21	107	13	6	98	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	26	84	8	60	16	23	22	113	14	6	103	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	84	8	60	16	23	22	113	14	6	103	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	84	8	60	16	23	22	113	14	6	103	85
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	0.76	1.00	0.79	0.21	1.00	1.00	0.89	0.11	1.00	0.55	0.45
Final Sat.:	146	467	709	461	121	705	601	594	72	606	386	319
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.01	0.13	0.13	0.03	0.04	0.19	0.19	0.01	0.27	0.27
Crit Moves:	****			****			****			****		
Delay/Veh:	9.4	9.4	7.5	9.4	9.4	7.6	8.7	9.1	9.1	8.5	9.3	9.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.4	9.4	7.5	9.4	9.4	7.6	8.7	9.1	9.1	8.5	9.3	9.3
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	9.3			9.0			9.0			9.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.3			9.0			9.0			9.3		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.2	0.2	0.0	0.3	0.3

Note: Queue reported is the number of cars per lane.

Opening Year (2010) Traffic Conditions

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) Without Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Palm Ave. & Kendall Dr.

Cycle (sec):	105	Critical Vol./Cap.(X):	1.010
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	35.1
Optimal Cycle:	80	Level Of Service:	D

Street Name:	Palm Ave.						Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	26	26	10	22	22	10	26	26	10	22	22
Lanes:	1 0 2 0 1			1 0 1 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	111	280	595	192	642	76	27	70	204	368	110	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	280	595	192	642	76	27	70	204	368	110	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	117	295	626	202	676	80	28	74	215	387	116	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	295	626	202	676	80	28	74	215	387	116	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	117	295	626	202	676	80	28	74	215	387	116	88
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.79	0.21	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3600	1800	1700	3219	381	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.00	0.08	0.35	0.00	0.21	0.21	0.00	0.04	0.12	0.00	0.06	0.05
Crit Moves:	****				****				****	****		
Green/Cycle:	0.12	0.25	0.53	0.15	0.27	0.27	0.17	0.25	0.25	0.28	0.36	0.36
Volume/Cap:	0.56	0.33	0.66	0.81	0.77	0.77	0.10	0.17	0.48	0.81	0.18	0.14
Delay/Veh:	46.7	32.6	19.5	61.0	39.2	39.2	37.4	31.2	34.6	45.0	22.8	22.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.7	32.6	19.5	61.0	39.2	39.2	37.4	31.2	34.6	45.0	22.8	22.4
LOS by Move:	D	C	B	E	D	D	D	C	C	D	C	C
HCM2kAvgQ:	5	4	15	9	13	13	1	2	6	14	3	2

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) Without Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Average Delay (sec/veh): 15.5 Worst Case Level Of Service: F[75.9]

Street Name:	Palm Ave.									I-215 NB Ramps												
Approach:	North Bound					South Bound					East Bound					West Bound						
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R		
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign						
Rights:	Include					Include					Include					Include						
Lanes:	0	1	1	0	0	0	0	2	0	1	0	0	0	0	0	0	1	0	0	1		
Volume Module:																						
Base Vol:	54	681		0		0	663		555		0		0		0	188		0		301		
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00		
Initial Bse:	54	681		0		0	663		555		0		0		0	188		0		301		
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00		
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.95	0.95		0.95		0.95		
PHF Volume:	57	717		0		0	698		584		0		0		0	198		0		317		
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0		
FinalVolume:	57	717		0		0	698		584		0		0		0	198		0		317		
Critical Gap Module:																						
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8		6.5		6.9							
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5		4.0		3.3							
Capacity Module:																						
Cnflict Vol:	1282	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		1179		2113		358							
Potent Cap.:	548	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		186		52		644							
Move Cap.:	548	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		171		46		644							
Volume/Cap:	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx		1.16		0.00		0.49							
Level Of Service Module:																						
2Way95thQ:	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx		xxxx		2.7							
Control Del:	12.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx		xxxx		15.9							
LOS by Move:	B	*		*		*	*		*		*		*		C							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT							
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		171		xxxx		xxxxx							
SharedQueue:	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		10.5		xxxx		xxxxx							
Shrd ConDel:	12.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		172.0		xxxx		xxxxx							
Shared LOS:	B	*		*		*	*		*		*		F		*							
ApproachDel:	xxxxxx			xxxxxx			xxxxxx						75.9									
ApproachLOS:	*			*			*						F									

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) Without Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.085
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	45.7
Optimal Cycle:	0	Level Of Service:	E

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	1 0		0 1 0	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	33	114	62	444	317	65	225	174	172	110	5	417
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	114	62	444	317	65	225	174	172	110	5	417
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	35	120	65	467	334	68	237	183	181	116	5	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	120	65	467	334	68	237	183	181	116	5	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	35	120	65	467	334	68	237	183	181	116	5	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.66	0.34	0.56	0.44	1.00	0.96	0.04	1.00
Final Sat.:	354	374	402	431	756	158	253	196	505	365	17	433
Capacity Analysis Module:												
Vol/Sat:	0.10	0.32	0.16	1.09	0.44	0.43	0.94	0.94	0.36	0.32	0.32	0.00
Crit Moves:		****		****				****			****	
Delay/Veh:	13.5	16.1	12.9	97.0	16.3	15.9	55.7	55.7	13.5	15.9	15.9	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.5	16.1	12.9	97.0	16.3	15.9	55.7	55.7	13.5	15.9	15.9	0.0
LOS by Move:	B	C	B	F	C	C	F	F	B	C	C	*
ApproachDel:		14.8			59.6			43.0			15.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		14.8			59.6			43.0			15.9	
LOS by Appr:		B			F			E			C	
AllWayAvgQ:	0.1	0.4	0.2	10.3	0.8	0.7	5.6	5.6	0.5	0.4	0.4	0.0

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) Without Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: C[19.9]

Street Name:	Palm Ave.									Industrial Pkwy.								
Approach:	North Bound					South Bound				East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	1	1	0	0	1	0	0	0	1!	0	0	1	0	0	1	0
Volume Module:																				
Base Vol:	0	150		13		249	361		2		5		3		8	9		10		43
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	150		13		249	361		2		5		3		8	9		10		43
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.95	0.95		0.95		0.95
PHF Volume:	0	158		14		262	380		2		5		3		8	9		11		45
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	158		14		262	380		2		5		3		8	9		11		45
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx				7.1		6.5		6.2	7.1		6.5		6.2
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx				3.5		4.0		3.3	3.5		4.0		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx		172	xxxx	xxxxx				1098		1077		381	1069		1064		158
Potent Cap.:	xxxx	xxxx	xxxxx		1418	xxxx	xxxxx				192		221		671	201		225		893
Move Cap.:	xxxx	xxxx	xxxxx		1418	xxxx	xxxxx				150		180		671	168		183		893
Volume/Cap:	xxxx	xxxx	xxxx		0.18	xxxx	xxxx				0.04		0.02		0.01	0.06		0.06		0.05
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		0.7	xxxx	xxxxx				xxxx		xxxx		xxxxx	0.2		xxxx		xxxxx
Control Del:	xxxxx	xxxx	xxxxx		8.1	xxxx	xxxxx				xxxxx		xxxx		xxxxx	27.7		xxxx		xxxxx
LOS by Move:	*	*	*		A	*	*				*		*		*	D		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx		258		xxxxx	xxxx		xxxx		516
SharedQueue:	0.0	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		0.2		xxxxx	xxxxx		xxxx		0.4
Shrd ConDel:	9.0	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		19.9		xxxxx	xxxxx		xxxx		12.8
Shared LOS:	A	*	*			*	*	*			*		C		*	*		*		B
ApproachDel:	xxxxxx					xxxxxx					19.9					15.0				
ApproachLOS:	*					*					C					B				

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) Without Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.583
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	12.6
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	6	15	5	222	104	42	39	103	56	10	70	105
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	15	5	222	104	42	39	103	56	10	70	105
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	6	16	5	234	109	44	41	108	59	11	74	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	16	5	234	109	44	41	108	59	11	74	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	16	5	234	109	44	41	108	59	11	74	111
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.29	0.71	1.00	0.68	0.32	1.00	1.00	0.65	0.35	1.00	0.40	0.60
Final Sat.:	152	381	609	401	188	701	531	389	211	528	246	369
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.01	0.58	0.58	0.06	0.08	0.28	0.28	0.02	0.30	0.30
Crit Moves:	****				****			****			****	
Delay/Veh:	9.2	9.2	8.2	16.2	16.2	7.9	9.7	10.4	10.4	9.3	10.4	10.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.2	9.2	8.2	16.2	16.2	7.9	9.7	10.4	10.4	9.3	10.4	10.4
LOS by Move:	A	A	A	C	C	A	A	B	B	A	B	B
ApproachDel:	9.0			15.3			10.3			10.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.0			15.3			10.3			10.4		
LOS by Appr:	A			C			B			B		
AllWayAvgQ:	0.0	0.0	0.0	1.2	1.2	0.1	0.1	0.3	0.3	0.0	0.4	0.4

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) Without Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Palm Ave. & Kendall Dr.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.030
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	34.9
Optimal Cycle:	80	Level Of Service:	C

Street Name:	Palm Ave.						Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	26	26	10	22	22	10	26	26	10	22	22
Lanes:	1 0 2 0 1			1 0 1 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	118	673	379	120	273	51	46	63	112	437	131	159
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	118	673	379	120	273	51	46	63	112	437	131	159
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	124	708	399	126	287	54	48	66	118	460	138	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	708	399	126	287	54	48	66	118	460	138	167
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	124	708	399	126	287	54	48	66	118	460	138	167
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.69	0.31	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3600	1800	1700	3033	567	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.22	0.00	0.09	0.09	0.00	0.04	0.07	0.00	0.08	0.09
Crit Moves:		****		****					****	****		
Green/Cycle:	0.11	0.26	0.56	0.10	0.25	0.25	0.18	0.26	0.26	0.30	0.39	0.39
Volume/Cap:	0.65	0.76	0.40	0.74	0.38	0.38	0.16	0.14	0.25	0.90	0.20	0.24
Delay/Veh:	50.1	37.7	12.7	59.9	31.6	31.6	35.3	28.6	29.6	52.7	20.6	21.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.1	37.7	12.7	59.9	31.6	31.6	35.3	28.6	29.6	52.7	20.6	21.0
LOS by Move:	D	D	B	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	12	7	6	5	5	1	2	3	18	3	3

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) Without Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Average Delay (sec/veh): 11.0 Worst Case Level Of Service: E[37.9]

Street Name:	Palm Ave.									I-215 NB Ramps									
Approach:	North Bound				South Bound				East Bound				West Bound						
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	1	0	0	0	0	2	0	1	0	0	0	0	0	0	1	0	0	1
Volume Module:																				
Base Vol:	113	691		0		0	360		443		0		0		0	118		0		493
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	113	691		0		0	360		443		0		0		0	118		0		493
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.95	0.95		0.95		0.95
PHF Volume:	119	727		0		0	379		466		0		0		0	124		0		519
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	119	727		0		0	379		466		0		0		0	124		0		519
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.8		6.5		6.9
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5		4.0		3.3
Capacity Module:																				
Cnflict Vol:	845	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							1155		1811		364
Potent Cap.:	800	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							193		80		639
Move Cap.:	800	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							170		67		639
Volume/Cap:	0.15	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx							0.73		0.00		0.81
Level Of Service Module:																				
2Way95thQ:	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx		xxxx		8.3
Control Del:	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx		xxxx		30.4
LOS by Move:	B	*		*		*	*		*							*		*		D
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							170		xxxx		xxxxx
SharedQueue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							4.6		xxxx		xxxxx
Shrd ConDel:	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							69.0		xxxx		xxxxx
Shared LOS:	B	*		*		*	*		*							F		*		*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx							37.9		
ApproachLOS:	*					*					*							E		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) Without Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	17.0
Optimal Cycle:	0	Level Of Service:	C

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	1 0		0 1 0	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	74	310	112	226	120	117	171	89	38	48	7	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	310	112	226	120	117	171	89	38	48	7	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	78	326	118	238	126	123	180	94	40	51	7	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	326	118	238	126	123	180	94	40	51	7	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	78	326	118	238	126	123	180	94	40	51	7	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.01	0.99	0.66	0.34	1.00	0.87	0.13	1.00
Final Sat.:	452	490	533	452	484	519	303	158	521	349	51	454
Capacity Analysis Module:												
Vol/Sat:	0.17	0.67	0.22	0.53	0.26	0.24	0.59	0.59	0.08	0.14	0.14	0.00
Crit Moves:		****		****				****		****		
Delay/Veh:	11.9	22.5	11.0	18.4	12.4	11.2	20.1	20.1	9.8	12.3	12.3	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.9	22.5	11.0	18.4	12.4	11.2	20.1	20.1	9.8	12.3	12.3	0.0
LOS by Move:	B	C	B	C	B	B	C	C	A	B	B	*
ApproachDel:		18.3			15.0			18.8			12.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		18.3			15.0			18.8			12.3	
LOS by Appr:		C			C			C			B	
AllWayAvgQ:	0.2	1.7	0.3	1.0	0.3	0.3	1.3	1.3	0.1	0.1	0.1	0.0

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) Without Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Average Delay (sec/veh): 7.2 Worst Case Level Of Service: C[15.8]

Street Name:	Palm Ave.						Industrial Pkwy.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0 0	1	1 0	0 1	0	0 0	1! 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	0	200	14	79	114	2	3	0	4	23	1	365
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	200	14	79	114	2	3	0	4	23	1	365
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	211	15	83	120	2	3	0	4	24	1	384
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	211	15	83	120	2	3	0	4	24	1	384
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	225	xxxx	xxxxx	698	513	121	500	499	211
Potent Cap.:	xxxx	xxxx	xxxxx	1355	xxxx	xxxxx	358	468	936	484	476	835
Move Cap.:	xxxx	xxxx	xxxxx	1355	xxxx	xxxxx	184	439	936	460	447	835
Volume/Cap:	xxxx	xxxx	xxxx	0.06	xxxx	xxxx	0.02	0.00	0.00	0.05	0.00	0.46
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.3	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	B	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	340	xxxxx	xxxx	xxxx	833
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	2.5
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.8	xxxxx	xxxxx	xxxx	13.0
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	B
ApproachDel:	xxxxxx			xxxxxx			15.8			13.0		
ApproachLOS:	*			*			C			B		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) Without Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.347
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	10.0
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	34	102	8	65	35	35	28	117	26	10	122	96
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	102	8	65	35	35	28	117	26	10	122	96
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	36	107	8	68	37	37	29	123	27	11	128	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	107	8	68	37	37	29	123	27	11	128	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	107	8	68	37	37	29	123	27	11	128	101
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.25	0.75	1.00	0.65	0.35	1.00	1.00	0.82	0.18	1.00	0.56	0.44
Final Sat.:	145	434	662	362	195	660	565	514	114	572	370	291
Capacity Analysis Module:												
Vol/Sat:	0.25	0.25	0.01	0.19	0.19	0.06	0.05	0.24	0.24	0.02	0.35	0.35
Crit Moves:		****		****				****			****	
Delay/Veh:	10.4	10.4	7.8	10.1	10.1	8.1	9.1	9.8	9.8	8.8	10.5	10.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.4	10.4	7.8	10.1	10.1	8.1	9.1	9.8	9.8	8.8	10.5	10.5
LOS by Move:	B	B	A	B	B	A	A	A	A	A	B	B
ApproachDel:		10.2			9.6			9.7			10.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.2			9.6			9.7			10.5	
LOS by Appr:		B			A			A			B	
AllWayAvgQ:	0.3	0.3	0.0	0.2	0.2	0.1	0.1	0.3	0.3	0.0	0.5	0.5

Note: Queue reported is the number of cars per lane.

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Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Palm Ave. & Kendall Dr.

Cycle (sec):	105	Critical Vol./Cap.(X):	1.016
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	35.5
Optimal Cycle:	80	Level Of Service:	D

Street Name:	Palm Ave.						Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	26	26	10	22	22	10	26	26	10	22	22
Lanes:	1 0 2 0 1			1 0 1 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	111	282	600	192	644	76	27	70	204	376	110	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	282	600	192	644	76	27	70	204	376	110	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	117	297	632	202	678	80	28	74	215	396	116	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	297	632	202	678	80	28	74	215	396	116	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	117	297	632	202	678	80	28	74	215	396	116	88
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.79	0.21	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3600	1800	1700	3220	380	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.00	0.08	0.35	0.00	0.21	0.21	0.00	0.04	0.12	0.00	0.06	0.05
Crit Moves:	****				****				****	****		
Green/Cycle:	0.12	0.25	0.53	0.14	0.27	0.27	0.17	0.25	0.25	0.28	0.37	0.37
Volume/Cap:	0.56	0.33	0.66	0.82	0.78	0.78	0.10	0.17	0.48	0.82	0.18	0.13
Delay/Veh:	46.9	32.6	19.5	62.8	39.5	39.5	37.3	31.2	34.6	45.9	22.7	22.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.9	32.6	19.5	62.8	39.5	39.5	37.3	31.2	34.6	45.9	22.7	22.3
LOS by Move:	D	C	B	E	D	D	D	C	C	D	C	C
HCM2kAvgQ:	5	4	15	9	13	13	1	2	6	15	3	2

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Average Delay (sec/veh): 23.1 Worst Case Level Of Service: F[110.7]

Street Name:	Palm Ave.						I-215 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	1 0	0	0 0	2 0	1	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	58	688	0	0	673	555	0	0	0	211	0	301
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	688	0	0	673	555	0	0	0	211	0	301
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	61	724	0	0	708	584	0	0	0	222	0	317
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	61	724	0	0	708	584	0	0	0	222	0	317
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1293	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1201	2139	362
Potent Cap.:	543	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	180	50	640
Move Cap.:	543	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	164	44	640
Volume/Cap:	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	1.35	0.00	0.49
Level Of Service Module:												
2Way95thQ:	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	2.8
Control Del:	12.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	16.0
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	C
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	164	xxxx	xxxxx
SharedQueue:	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.4	xxxx	xxxxx
Shrd ConDel:	12.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	245.7	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			110.7		
ApproachLOS:	*			*			*			F		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.111
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	48.4
Optimal Cycle:	0	Level Of Service:	E

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	1 0		0 1 0	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	34	125	81	444	350	65	225	174	173	118	5	417
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	125	81	444	350	65	225	174	173	118	5	417
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	36	132	85	467	368	68	237	183	182	124	5	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	132	85	467	368	68	237	183	182	124	5	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	36	132	85	467	368	68	237	183	182	124	5	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.69	0.31	0.56	0.44	1.00	0.96	0.04	1.00
Final Sat.:	348	368	395	421	748	141	248	192	492	359	15	424
Capacity Analysis Module:												
Vol/Sat:	0.10	0.36	0.22	1.11	0.49	0.48	0.96	0.96	0.37	0.35	0.35	0.00
Crit Moves:		****		****				****		****		
Delay/Veh:	13.8	17.1	13.8	106.2	17.9	17.4	60.6	60.6	13.9	16.7	16.7	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.8	17.1	13.8	106.2	17.9	17.4	60.6	60.6	13.9	16.7	16.7	0.0
LOS by Move:	B	C	B	F	C	C	F	F	B	C	C	*
ApproachDel:		15.5			63.5			46.5			16.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		15.5			63.5			46.5			16.7	
LOS by Appr:		C			F			E			C	
AllWayAvgQ:	0.1	0.5	0.3	11.1	0.9	0.9	6.1	6.1	0.6	0.5	0.5	0.0

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Average Delay (sec/veh): 4.7 Worst Case Level Of Service: C[23.1]

Street Name:	Palm Ave.									Industrial Pkwy.								
Approach:	North Bound					South Bound				East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	1	1	0	0	1	0	0	0	1!	0	0	1	0	0	1	0
Volume Module:																				
Base Vol:	0	150		17		291	361		2		5		3		8	17		10		74
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	150		17		291	361		2		5		3		8	17		10		74
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.95	0.95		0.95		0.95
PHF Volume:	0	158		18		306	380		2		5		3		8	18		11		78
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	158		18		306	380		2		5		3		8	18		11		78
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		7.1		6.5		6.2	7.1		6.5		6.2
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		3.5		4.0		3.3	3.5		4.0		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		176	xxxx		xxxxx		1205		1169		381	1157		1153		158
Potent Cap.:	xxxx	xxxx		xxxxx		1413	xxxx		xxxxx		162		195		671	175		199		893
Move Cap.:	xxxx	xxxx		xxxxx		1413	xxxx		xxxxx		117		152		671	142		156		893
Volume/Cap:	xxxx	xxxx		xxxx		0.22	xxxx		xxxx		0.04		0.02		0.01	0.13		0.07		0.09
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		0.8	xxxx		xxxxx		xxxx		xxxx		xxxxx	0.4		xxxx		xxxxx
Control Del:	xxxxx	xxxx		xxxxx		8.3	xxxx		xxxxx		xxxxx		xxxx		xxxxx	34.1		xxxx		xxxxx
LOS by Move:	*	*		*		A	*		*		*		*		*	D		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		215		xxxxx	xxxx		xxxx		571
SharedQueue:	0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		0.3		xxxxx	xxxxx		xxxx		0.5
Shrd ConDel:	9.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		23.1		xxxxx	xxxxx		xxxx		12.4
Shared LOS:	A	*		*		*	*		*		*		C		*	*		*		B
ApproachDel:	xxxxxx					xxxxxx					23.1					16.1				
ApproachLOS:	*					*					C					C				

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.585
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	12.6
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	6	15	5	222	104	50	42	103	56	10	70	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	15	5	222	104	50	42	103	56	10	70	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	6	16	5	234	109	53	44	108	59	11	74	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	16	5	234	109	53	44	108	59	11	74	113
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	16	5	234	109	53	44	108	59	11	74	113
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.29	0.71	1.00	0.68	0.32	1.00	1.00	0.65	0.35	1.00	0.40	0.60
Final Sat.:	152	379	606	400	187	699	530	387	211	527	242	370
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.01	0.58	0.58	0.08	0.08	0.28	0.28	0.02	0.30	0.30
Crit Moves:	****			****				****			****	
Delay/Veh:	9.2	9.2	8.2	16.3	16.3	8.0	9.7	10.5	10.5	9.3	10.5	10.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.2	9.2	8.2	16.3	16.3	8.0	9.7	10.5	10.5	9.3	10.5	10.5
LOS by Move:	A	A	A	C	C	A	A	B	B	A	B	B
ApproachDel:	9.0			15.2			10.3			10.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.0			15.2			10.3			10.5		
LOS by Appr:	A			C			B			B		
AllWayAvgQ:	0.0	0.0	0.0	1.2	1.2	0.1	0.1	0.3	0.3	0.0	0.4	0.4

Note: Queue reported is the number of cars per lane.

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Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Palm Ave. & Kendall Dr.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.033
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	35.1
Optimal Cycle:	80	Level Of Service:	D

Street Name:	Palm Ave.						Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	26	26	10	22	22	10	26	26	10	22	22
Lanes:	1 0 2 0 1			1 0 1 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	118	675	388	120	274	51	46	63	112	441	131	159
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	118	675	388	120	274	51	46	63	112	441	131	159
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	124	711	408	126	288	54	48	66	118	464	138	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	711	408	126	288	54	48	66	118	464	138	167
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	124	711	408	126	288	54	48	66	118	464	138	167
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.69	0.31	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	3600	1800	1700	3035	565	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.23	0.00	0.10	0.10	0.00	0.04	0.07	0.00	0.08	0.09
Crit Moves:		****		****					****	****		
Green/Cycle:	0.11	0.26	0.56	0.10	0.25	0.25	0.18	0.26	0.26	0.30	0.39	0.39
Volume/Cap:	0.65	0.76	0.41	0.74	0.38	0.38	0.16	0.14	0.25	0.91	0.20	0.24
Delay/Veh:	50.1	37.8	12.8	59.9	31.6	31.6	35.3	28.6	29.6	54.1	20.6	21.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.1	37.8	12.8	59.9	31.6	31.6	35.3	28.6	29.6	54.1	20.6	21.0
LOS by Move:	D	D	B	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	12	7	6	5	5	1	2	3	19	3	3

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Average Delay (sec/veh): 12.8 Worst Case Level Of Service: E[44.1]

Street Name:	Palm Ave.									I-215 NB Ramps									
Approach:	North Bound				South Bound				East Bound				West Bound						
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	1	0	0	0	0	2	0	1	0	0	0	0	0	0	1	0	0	1
Volume Module:																				
Base Vol:	119	702		0		0	365		443		0		0		0	131		0		493
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	119	702		0		0	365		443		0		0		0	131		0		493
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.95	0.95		0.95		0.95
PHF Volume:	125	739		0		0	384		466		0		0		0	138		0		519
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	125	739		0		0	384		466		0		0		0	138		0		519
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.8		6.5		6.9
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5		4.0		3.3
Capacity Module:																				
Cnflict Vol:	851	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							1182		1840		369
Potent Cap.:	797	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							186		76		633
Move Cap.:	797	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							162		63		633
Volume/Cap:	0.16	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx							0.85		0.00		0.82
Level Of Service Module:																				
2Way95thQ:	0.6	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx		xxxx		8.5
Control Del:	10.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx		xxxx		31.2
LOS by Move:	B	*		*		*	*		*							*		*		D
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							162		xxxx		xxxxx
SharedQueue:	0.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							5.9		xxxx		xxxxx
Shrd ConDel:	10.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							92.5		xxxx		xxxxx
Shared LOS:	B	*		*		*	*		*							F		*		*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx									44.1				
ApproachLOS:	*					*					*					E				

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.713
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	18.1
Optimal Cycle:	0	Level Of Service:	C

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	1 0		0 1 0	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	75	327	138	226	138	117	171	89	39	56	7	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	75	327	138	226	138	117	171	89	39	56	7	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	79	344	145	238	145	123	180	94	41	59	7	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	344	145	238	145	123	180	94	41	59	7	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	79	344	145	238	145	123	180	94	41	59	7	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.08	0.92	0.66	0.34	1.00	0.89	0.11	1.00
Final Sat.:	445	483	524	442	509	467	297	154	507	348	44	445
Capacity Analysis Module:												
Vol/Sat:	0.18	0.71	0.28	0.54	0.29	0.26	0.61	0.61	0.08	0.17	0.17	0.00
Crit Moves:		****		****				****			****	
Delay/Veh:	12.2	25.5	11.7	19.1	12.9	11.8	21.0	21.0	10.0	12.8	12.8	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.2	25.5	11.7	19.1	12.9	11.8	21.0	21.0	10.0	12.8	12.8	0.0
LOS by Move:	B	D	B	C	B	B	C	C	A	B	B	*
ApproachDel:		20.1			15.6			19.5			12.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		20.1			15.6			19.5			12.8	
LOS by Appr:		C			C			C			B	
AllWayAvgQ:	0.2	2.1	0.4	1.0	0.4	0.3	1.3	1.3	0.1	0.2	0.2	0.0

Note: Queue reported is the number of cars per lane.

Traffix 7.9.0415 (c) 2007 Dowling Assoc. Licensed to CRAIN & ASSOC., L.A.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Average Delay (sec/veh): 8.0 Worst Case Level Of Service: C[18.4]

Street Name:	Palm Ave.									Industrial Pkwy.								
Approach:	North Bound					South Bound				East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	1	1	0	0	1	0	0	0	1!	0	0	1	0	0	1	0
Volume Module:																				
Base Vol:	0	200		21		106	114		2		3		0		4	31		1	409	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Initial Bse:	0	200		21		106	114		2		3		0		4	31		1	409	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00	1.00	
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.95	0.95		0.95	0.95	
PHF Volume:	0	211		22		112	120		2		3		0		4	33		1	431	
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0	0	
FinalVolume:	0	211		22		112	120		2		3		0		4	33		1	431	
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		7.1		6.5		6.2	7.1		6.5	6.2	
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		3.5		4.0		3.3	3.5		4.0	3.3	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		233	xxxx		xxxxx		782		577		121	557		556	211	
Potent Cap.:	xxxx	xxxx		xxxxx		1347	xxxx		xxxxx		314		430		936	444		442	835	
Move Cap.:	xxxx	xxxx		xxxxx		1347	xxxx		xxxxx		142		395		936	414		406	835	
Volume/Cap:	xxxx	xxxx		xxxx		0.08	xxxx		xxxx		0.02		0.00		0.00	0.08		0.00	0.52	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		0.3	xxxx		xxxxx		xxxx		xxxx		xxxxx	0.3		xxxx	xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		7.9	xxxx		xxxxx		xxxxx		xxxx		xxxxx	14.4		xxxx	xxxxx	
LOS by Move:	*	*		*		A	*		*		*		*		*	B		*	*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		276		xxxxx	xxxx		xxxx	833	
SharedQueue:	0.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		0.1		xxxxx	xxxxx		xxxx	3.0	
Shrd ConDel:	9.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		18.4		xxxxx	xxxxx		xxxx	13.9	
Shared LOS:	A	*		*		*	*		*		*		C		*	*		*	B	
ApproachDel:	xxxxxx					xxxxxx					18.4					13.9				
ApproachLOS:	*					*					C					B				

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	10.1
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	34	102	8	67	35	41	32	117	26	10	122	99
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	102	8	67	35	41	32	117	26	10	122	99
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	36	107	8	71	37	43	34	123	27	11	128	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	107	8	71	37	43	34	123	27	11	128	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	107	8	71	37	43	34	123	27	11	128	104
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.25	0.75	1.00	0.66	0.34	1.00	1.00	0.82	0.18	1.00	0.55	0.45
Final Sat.:	143	430	656	364	190	656	562	512	114	569	363	295
Capacity Analysis Module:												
Vol/Sat:	0.25	0.25	0.01	0.19	0.19	0.07	0.06	0.24	0.24	0.02	0.35	0.35
Crit Moves:	****				****			****			****	
Delay/Veh:	10.4	10.4	7.9	10.2	10.2	8.1	9.2	9.8	9.8	8.9	10.6	10.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.4	10.4	7.9	10.2	10.2	8.1	9.2	9.8	9.8	8.9	10.6	10.6
LOS by Move:	B	B	A	B	B	A	A	A	A	A	B	B
ApproachDel:	10.3			9.6			9.7			10.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.3			9.6			9.7			10.6		
LOS by Appr:	B			A			A			B		
AllWayAvgQ:	0.3	0.3	0.0	0.2	0.2	0.1	0.1	0.3	0.3	0.0	0.5	0.5

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project+Mitigation Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Cycle (sec):	30	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	5.5
Optimal Cycle:	24	Level Of Service:	A

Street Name:	Palm Ave.						I-215 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	1 0	0	0 0	2 0	1	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	58	688	0	0	673	555	0	0	0	211	0	301
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	688	0	0	673	555	0	0	0	211	0	301
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	61	724	0	0	708	584	0	0	0	222	0	317
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	724	0	0	708	584	0	0	0	222	0	317
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	61	724	0	0	708	584	0	0	0	222	0	317
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.16	1.84	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	279	3305	0	0	3600	1800	0	0	0	1700	0	1800
Capacity Analysis Module:												
Vol/Sat:	0.22	0.22	0.00	0.00	0.20	0.32	0.00	0.00	0.00	0.13	0.00	0.18
Crit Moves:						****				****		
Green/Cycle:	0.53	0.53	0.00	0.00	0.53	0.53	0.00	0.00	0.00	0.33	0.00	0.33
Volume/Cap:	0.41	0.41	0.00	0.00	0.37	0.61	0.00	0.00	0.00	0.39	0.00	0.53
Delay/Veh:	4.3	4.3	0.0	0.0	4.2	6.0	0.0	0.0	0.0	8.1	0.0	9.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	4.3	4.3	0.0	0.0	4.2	6.0	0.0	0.0	0.0	8.1	0.0	9.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	3	3	0	0	2	5	0	0	0	2	0	3

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project+Mitigation Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	45	Critical Vol./Cap.(X):	0.680
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	17.5
Optimal Cycle:	36	Level Of Service:	B

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ignore		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0 1 0 1			1 0 1 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module:												
Base Vol:	34	125	81	444	350	65	225	174	173	118	5	417
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	125	81	444	350	65	225	174	173	118	5	417
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	36	132	85	467	368	68	237	183	182	124	5	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	132	85	467	368	68	237	183	182	124	5	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	36	132	85	467	368	68	237	183	182	124	5	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.69	0.31	0.58	0.42	1.00	0.96	0.04	1.00
Final Sat.:	1700	1800	1800	1700	3036	564	982	760	1800	1635	69	1800
Capacity Analysis Module:												
Vol/Sat:	0.02	0.07	0.05	0.27	0.12	0.12	0.24	0.24	0.10	0.08	0.08	0.00
Crit Moves:		****		****				****				
Green/Cycle:	0.28	0.22	0.22	0.34	0.28	0.28	0.30	0.30	0.30	0.30	0.30	0.00
Volume/Cap:	0.07	0.33	0.21	0.80	0.43	0.43	0.80	0.80	0.34	0.25	0.25	0.00
Delay/Veh:	11.9	15.2	14.6	21.1	13.5	13.5	23.1	23.1	12.6	12.2	12.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.9	15.2	14.6	21.1	13.5	13.5	23.1	23.1	12.6	12.2	12.2	0.0
LOS by Move:	B	B	B	C	B	B	C	C	B	B	B	A
HCM2kAvgQ:	0	2	1	9	3	3	8	8	2	2	2	0

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project+Mitigation Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Cycle (sec):	30	Critical Vol./Cap.(X):	0.632
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	7.4
Optimal Cycle:	26	Level Of Service:	A

Street Name:	Palm Ave.						I-215 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	1 0	0	0 0	2 0	1	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	119	702	0	0	365	443	0	0	0	131	0	493
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	702	0	0	365	443	0	0	0	131	0	493
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	125	739	0	0	384	466	0	0	0	138	0	519
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	739	0	0	384	466	0	0	0	138	0	519
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	739	0	0	384	466	0	0	0	138	0	519
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.30	1.70	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	517	3052	0	0	3600	1800	0	0	0	1700	0	1800
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.00	0.00	0.11	0.26	0.00	0.00	0.00	0.08	0.00	0.29
Crit Moves:						****						****
Green/Cycle:	0.41	0.41	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.46	0.00	0.46
Volume/Cap:	0.59	0.59	0.00	0.00	0.26	0.63	0.00	0.00	0.00	0.18	0.00	0.63
Delay/Veh:	7.5	7.5	0.0	0.0	5.9	8.8	0.0	0.0	0.0	4.9	0.0	7.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.5	7.5	0.0	0.0	5.9	8.8	0.0	0.0	0.0	4.9	0.0	7.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	4	4	0	0	1	5	0	0	0	1	0	5

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Opening Year (2010) With Project+Mitigation Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	35	Critical Vol./Cap.(X):	0.587
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	12.2
Optimal Cycle:	36	Level Of Service:	B

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ignore		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0 1 0 1			1 0 1 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module:												
Base Vol:	75	327	138	226	138	117	171	89	39	56	7	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	75	327	138	226	138	117	171	89	39	56	7	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	79	344	145	238	145	123	180	94	41	59	7	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	344	145	238	145	123	180	94	41	59	7	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	79	344	145	238	145	123	180	94	41	59	7	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.08	0.92	0.67	0.33	1.00	0.89	0.11	1.00
Final Sat.:	1700	1800	1800	1700	1948	1652	1140	593	1800	1520	190	1800
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.08	0.14	0.07	0.07	0.16	0.16	0.02	0.04	0.04	0.00
Crit Moves:		****		****				****				
Green/Cycle:	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.00
Volume/Cap:	0.17	0.69	0.29	0.50	0.27	0.27	0.57	0.57	0.08	0.14	0.14	0.00
Delay/Veh:	10.0	15.6	10.5	11.8	10.3	10.3	12.8	12.8	9.7	9.9	9.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.0	15.6	10.5	11.8	10.3	10.3	12.8	12.8	9.7	9.9	9.9	0.0
LOS by Move:	B	B	B	B	B	B	B	B	A	A	A	A
HCM2kAvgQ:	1	5	2	3	1	1	4	4	0	1	1	0

Note: Queue reported is the number of cars per lane.

Future (2030) Traffic Conditions

Palm Ave. Warehouse/Distribution Center
Year 2030 Without Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Palm Ave. & Kendall Dr.

Cycle (sec):	125	Critical Vol./Cap.(X):	1.008
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	42.5
Optimal Cycle:	80	Level Of Service:	D

Street Name:	Palm Ave.						Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	26	26	10	22	22	10	26	26	10	22	22
Lanes:	1 0 2 0 1			1 0 1 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	141	344	872	309	535	106	42	127	196	179	93	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	344	872	309	535	106	42	127	196	179	93	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	148	362	918	325	563	112	44	134	206	188	98	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	362	918	325	563	112	44	134	206	188	98	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	148	362	918	325	563	112	44	134	206	188	98	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.67	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	3800	1900	1800	3172	628	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.48	0.00	0.18	0.18	0.00	0.07	0.11	0.00	0.05	0.04
Crit Moves:			****	****					****	****		
Green/Cycle:	0.19	0.42	0.53	0.20	0.42	0.42	0.10	0.21	0.21	0.11	0.22	0.22
Volume/Cap:	0.42	0.23	0.91	0.91	0.42	0.42	0.24	0.34	0.52	0.91	0.23	0.17
Delay/Veh:	45.0	23.7	38.9	75.8	25.9	25.9	52.5	42.7	45.2	93.7	40.2	39.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.0	23.7	38.9	75.8	25.9	25.9	52.5	42.7	45.2	93.7	40.2	39.5
LOS by Move:	D	C	D	E	C	C	D	D	D	F	D	D
HCM2kAvgQ:	5	4	36	16	9	9	2	4	7	11	3	2

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 Without Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Average Delay (sec/veh): 359.5 Worst Case Level Of Service: F[1000.2]

Street Name:	Palm Ave.						I-215 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	1 0	0	0 0	2 0	1	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	50	880	0	0	731	187	0	0	0	565	0	471
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	880	0	0	731	187	0	0	0	565	0	471
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	53	926	0	0	769	197	0	0	0	595	0	496
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	53	926	0	0	769	197	0	0	0	595	0	496
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	966	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1416	1998	463
Potent Cap.:	721	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	130	61	551
Move Cap.:	721	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	123	56	551
Volume/Cap:	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	4.84	0.00	0.90
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	10.6
Control Del:	10.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	45.1
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	E
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	123	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	62.5	xxxx	xxxxx
Shrd ConDel:	10.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1796	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			1000.2		
ApproachLOS:	*			*			*			F		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 Without Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec): 100 | Critical Vol./Cap.(X): 1.772
Loss Time (sec): 0 (Y+R=4.0 sec) | Average Delay (sec/veh): 190.0
Optimal Cycle: 0 | Level Of Service: F

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	1 0		0 1 0	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	98	102	68	608	435	227	347	323	319	162	18	506
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	102	68	608	435	227	347	323	319	162	18	506
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	103	107	72	640	458	239	365	340	336	171	19	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	107	72	640	458	239	365	340	336	171	19	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	103	107	72	640	458	239	365	340	336	171	19	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.31	0.69	0.52	0.48	1.00	0.90	0.10	1.00
Final Sat.:	290	302	318	377	528	287	206	192	440	306	34	376
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.22	1.70	0.87	0.83	1.77	1.77	0.76	0.56	0.56	0.00
Crit Moves:	****			****				****		****		
Delay/Veh:	20.6	19.8	16.2	346.7	47.4	41.0	378.8	379	31.7	24.8	24.8	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.6	19.8	16.2	346.7	47.4	41.0	378.8	379	31.7	24.8	24.8	0.0
LOS by Move:	C	C	C	F	E	E	F	F	D	C	C	*
ApproachDel:	19.2			189.6			266.8			24.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	19.2			189.6			266.8			24.8		
LOS by Appr:	C			F			F			C		
AllWayAvgQ:	0.5	0.5	0.3	35.0	4.2	3.5	40.6	40.6	2.6	1.1	1.1	0.0

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 Without Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: E[46.5]

Street Name:	Palm Ave.									Industrial Pkwy.								
Approach:	North Bound				South Bound					East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	1	1	0	0	1	0	0	0	1!	0	0	1	0	0	1	0
Volume Module:																				
Base Vol:	0	228		22		339	580		9		5		3		11	6		25		22
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	228		22		339	580		9		5		3		11	6		25		22
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.95	0.95		0.95		0.95
PHF Volume:	0	240		23		357	611		9		5		3		12	6		26		23
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	240		23		357	611		9		5		3		12	6		26		23
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx				7.1		6.5		6.2	7.1		6.5		6.2
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx				3.5		4.0		3.3	3.5		4.0		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx		263	xxxx	xxxxx				1605		1592		615	1576		1574		240
Potent Cap.:	xxxx	xxxx	xxxxx		1313	xxxx	xxxxx				86		108		495	90		111		804
Move Cap.:	xxxx	xxxx	xxxxx		1313	xxxx	xxxxx				50		79		495	67		81		804
Volume/Cap:	xxxx	xxxx	xxxx		0.27	xxxx	xxxx				0.11		0.04		0.02	0.09		0.33		0.03
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		1.1	xxxx	xxxxx				xxxx		xxxx		xxxxx	0.3		xxxx		xxxxx
Control Del:	xxxxx	xxxx	xxxxx		8.8	xxxx	xxxxx				xxxxx		xxxx		xxxxx	64.0		xxxx		xxxxx
LOS by Move:	*	*	*		A	*	*				*		*		*	F		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx		118		xxxxx	xxxx		xxxx		140
SharedQueue:	0.0	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		0.6		xxxxx	xxxxx		xxxx		1.5
Shrd ConDel:	9.0	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx		41.5		xxxxx	xxxxx		xxxx		44.2
Shared LOS:	A	*	*			*	*	*			*		E		*	*		*		E
ApproachDel:	xxxxxx					xxxxxx					41.5					46.5				
ApproachLOS:	*					*					E					E				

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 Without Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.847
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	20.7
Optimal Cycle:	0	Level Of Service:	C

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	12	31	3	292	152	143	138	146	87	2	53	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	31	3	292	152	143	138	146	87	2	53	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	13	33	3	307	160	151	145	154	92	2	56	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	33	3	307	160	151	145	154	92	2	56	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	33	3	307	160	151	145	154	92	2	56	85
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.72	1.00	0.66	0.34	1.00	1.00	0.63	0.37	1.00	0.40	0.60
Final Sat.:	131	339	527	363	189	646	487	341	203	453	204	311
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.01	0.85	0.85	0.23	0.30	0.45	0.45	0.00	0.27	0.27
Crit Moves:		****			****				****			****
Delay/Veh:	10.5	10.5	9.0	34.3	34.3	9.7	12.7	13.8	13.8	10.2	11.6	11.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.5	10.5	9.0	34.3	34.3	9.7	12.7	13.8	13.8	10.2	11.6	11.6
LOS by Move:	B	B	A	D	D	A	B	B	B	B	B	B
ApproachDel:		10.4			28.3			13.4			11.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.4			28.3			13.4			11.5	
LOS by Appr:		B			D			B			B	
AllWayAvgQ:	0.1	0.1	0.0	3.8	3.8	0.3	0.4	0.7	0.7	0.0	0.3	0.3

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 Without Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Palm Ave. & Kendall Dr.

Cycle (sec):	115	Critical Vol./Cap.(X):	0.988
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	40.3
Optimal Cycle:	80	Level Of Service:	D

Street Name:	Palm Ave.						Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	26	26	10	22	22	10	26	26	10	22	22
Lanes:	1 0 2 0 1			1 0 1 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	189	798	567	182	287	83	59	101	126	480	221	199
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	189	798	567	182	287	83	59	101	126	480	221	199
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	199	840	597	192	302	87	62	106	133	505	233	209
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	199	840	597	192	302	87	62	106	133	505	233	209
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	199	840	597	192	302	87	62	106	133	505	233	209
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.55	0.45	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	3800	1900	1800	2948	852	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.31	0.00	0.10	0.10	0.00	0.06	0.07	0.00	0.12	0.11
Crit Moves:		****		****					****	****		
Green/Cycle:	0.14	0.26	0.58	0.12	0.24	0.24	0.17	0.23	0.23	0.33	0.38	0.38
Volume/Cap:	0.80	0.86	0.54	0.86	0.43	0.43	0.20	0.25	0.31	0.86	0.32	0.29
Delay/Veh:	64.0	48.9	15.3	77.1	37.3	37.3	41.1	36.8	37.4	49.0	25.5	25.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	64.0	48.9	15.3	77.1	37.3	37.3	41.1	36.8	37.4	49.0	25.5	25.2
LOS by Move:	E	D	B	E	D	D	D	D	D	D	C	C
HCM2kAvgQ:	9	17	13	10	6	6	2	3	4	20	6	5

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 Without Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Average Delay (sec/veh): 228.9 Worst Case Level Of Service: F[581.2]

Street Name:	Palm Ave.						I-215 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	1 0	0	0 0	2 0	1	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	158	775	0	0	529	346	0	0	0	380	0	790
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	158	775	0	0	529	346	0	0	0	380	0	790
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	166	816	0	0	557	364	0	0	0	400	0	832
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	166	816	0	0	557	364	0	0	0	400	0	832
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	921	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1427	2069	408
Potent Cap.:	750	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	128	55	598
Move Cap.:	750	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	104	41	598
Volume/Cap:	0.22	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	3.84	0.00	1.39
Level Of Service Module:												
2Way95thQ:	0.8	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	37.5
Control Del:	11.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	205.8
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	F
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	104	xxxx	xxxxx
SharedQueue:	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	40.7	xxxx	xxxxx
Shrd ConDel:	11.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1362	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			581.2		
ApproachLOS:	*			*			*			F		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 Without Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec): 100 Critical Vol./Cap.(X): 1.709
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 143.4
Optimal Cycle: 0 Level Of Service: F

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	1 0		0 1 0	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	171	380	278	434	253	207	316	304	140	89	10	274
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	171	380	278	434	253	207	316	304	140	89	10	274
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	180	400	293	457	266	218	333	320	147	94	11	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	400	293	457	266	218	333	320	147	94	11	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	180	400	293	457	266	218	333	320	147	94	11	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.10	0.90	0.51	0.49	1.00	0.90	0.10	1.00
Final Sat.:	344	365	391	348	403	349	195	187	417	290	33	358
Capacity Analysis Module:												
Vol/Sat:	0.52	1.09	0.75	1.31	0.66	0.62	1.71	1.71	0.35	0.32	0.32	0.00
Crit Moves:		****		****			****				****	
Delay/Veh:	23.6	106	34.0	187.0	29.3	25.6	352.4	352	15.6	18.6	18.6	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.6	106	34.0	187.0	29.3	25.6	352.4	352	15.6	18.6	18.6	0.0
LOS by Move:	C	F	D	F	D	D	F	F	C	C	C	*
ApproachDel:		65.0		105.0			290.4			18.6		
Delay Adj:		1.00		1.00			1.00			1.00		
ApprAdjDel:		65.0		105.0			290.4			18.6		
LOS by Appr:		F		F			F			C		
AllWayAvgQ:	1.0	9.5	2.4	16.8	1.7	1.5	36.1	36.1	0.5	0.4	0.4	0.0

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 Without Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Average Delay (sec/veh): 11.1 Worst Case Level Of Service: F[73.4]

Street Name:	Palm Ave.						Industrial Pkwy.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0 0	1	1 0	0 1	0	0 0	1! 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	0	480	25	115	354	6	8	0	15	45	1	410
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	480	25	115	354	6	8	0	15	45	1	410
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	505	26	121	373	6	8	0	16	47	1	432
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	505	26	121	373	6	8	0	16	47	1	432
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	532	xxxx	xxxxx	1353	1149	376	1131	1126	505
Potent Cap.:	xxxx	xxxx	xxxxx	1046	xxxx	xxxxx	128	200	675	182	206	571
Move Cap.:	xxxx	xxxx	xxxxx	1046	xxxx	xxxxx	28	177	675	162	183	571
Volume/Cap:	xxxx	xxxx	xxxx	0.12	xxxx	xxxx	0.30	0.00	0.02	0.29	0.01	0.76
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	36.1	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	E	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	76	xxxxx	xxxx	xxxx	568
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	xxxx	6.8
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	73.4	xxxxx	xxxxx	xxxx	28.8
Shared LOS:	A	*	*	*	*	*	*	F	*	*	*	D
ApproachDel:	xxxxxx			xxxxxx			73.4			29.5		
ApproachLOS:	*			*			F			D		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 Without Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.140
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	56.6
Optimal Cycle:	0	Level Of Service:	F

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	92	247	11	122	166	120	78	183	116	35	283	197
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	247	11	122	166	120	78	183	116	35	283	197
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	97	260	12	128	175	126	82	193	122	37	298	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	260	12	128	175	126	82	193	122	37	298	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	97	260	12	128	175	126	82	193	122	37	298	207
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.73	1.00	0.42	0.58	1.00	1.00	0.61	0.39	1.00	0.59	0.41
Final Sat.:	111	297	447	169	230	443	385	257	163	400	261	182
Capacity Analysis Module:												
Vol/Sat:	0.88	0.88	0.03	0.76	0.76	0.28	0.21	0.75	0.75	0.09	1.14	1.14
Crit Moves:		****		****				****			****	
Delay/Veh:	47.7	47.7	10.8	33.9	33.9	13.8	14.4	31.5	31.5	12.5	114	114.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.7	47.7	10.8	33.9	33.9	13.8	14.4	31.5	31.5	12.5	114	114.0
LOS by Move:	E	E	B	D	D	B	B	D	D	B	F	F
ApproachDel:		46.5			28.0			27.9			107.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		46.5			28.0			27.9			107.1	
LOS by Appr:		E			D			D			F	
AllWayAvgQ:	4.1	4.1	0.0	2.5	2.5	0.4	0.3	2.4	2.4	0.1	12.7	12.7

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Palm Ave. & Kendall Dr.

Cycle (sec):	125	Critical Vol./Cap.(X):	1.006
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	42.9
Optimal Cycle:	80	Level Of Service:	D

Street Name:	Palm Ave.						Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	26	26	10	22	22	10	26	26	10	22	22
Lanes:	1 0 2 0 1			1 0 1 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	141	346	877	309	537	106	42	127	196	187	93	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	346	877	309	537	106	42	127	196	187	93	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	148	364	923	325	565	112	44	134	206	197	98	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	364	923	325	565	112	44	134	206	197	98	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	148	364	923	325	565	112	44	134	206	197	98	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.67	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	3800	1900	1800	3174	626	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.49	0.00	0.18	0.18	0.00	0.07	0.11	0.00	0.05	0.04
Crit Moves:			****	****					****	****		
Green/Cycle:	0.19	0.41	0.53	0.20	0.42	0.42	0.10	0.21	0.21	0.12	0.23	0.23
Volume/Cap:	0.43	0.23	0.92	0.92	0.43	0.43	0.24	0.34	0.52	0.92	0.23	0.17
Delay/Veh:	45.3	24.0	39.4	76.7	26.1	26.1	52.3	42.7	45.2	93.3	39.8	39.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.3	24.0	39.4	76.7	26.1	26.1	52.3	42.7	45.2	93.3	39.8	39.2
LOS by Move:	D	C	D	E	C	C	D	D	D	F	D	D
HCM2kAvgQ:	6	4	36	17	9	9	2	4	7	11	3	2

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Average Delay (sec/veh): 403.9 Worst Case Level Of Service: F[1116.2]

Street Name:	Palm Ave.						I-215 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	1 0	0	0 0	2 0	1	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	54	887	0	0	741	187	0	0	0	588	0	471
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	887	0	0	741	187	0	0	0	588	0	471
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	57	934	0	0	780	197	0	0	0	619	0	496
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	57	934	0	0	780	197	0	0	0	619	0	496
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	977	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1437	2024	467
Potent Cap.:	714	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	126	59	548
Move Cap.:	714	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	118	54	548
Volume/Cap:	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	5.22	0.00	0.90
Level Of Service Module:												
2Way95thQ:	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	10.8
Control Del:	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	46.1
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	E
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	118	xxxx	xxxxx
SharedQueue:	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	66.1	xxxx	xxxxx
Shrd ConDel:	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1973	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			1116.2		
ApproachLOS:	*			*			*			F		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.822
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	199.2
Optimal Cycle:	0	Level Of Service:	F

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	1 0		0 1 0	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	99	113	87	608	468	227	347	323	320	170	18	506
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	113	87	608	468	227	347	323	320	170	18	506
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	104	119	92	640	493	239	365	340	337	179	19	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	119	92	640	493	239	365	340	337	179	19	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	104	119	92	640	493	239	365	340	337	179	19	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.35	0.65	0.52	0.48	1.00	0.90	0.10	1.00
Final Sat.:	284	296	313	368	528	265	201	187	427	301	32	370
Capacity Analysis Module:												
Vol/Sat:	0.37	0.40	0.29	1.74	0.93	0.90	1.82	1.82	0.79	0.59	0.59	0.00
Crit Moves:		****		****				****		****		
Delay/Veh:	21.4	21.6	17.9	366.0	60.2	52.1	401.3	401	34.9	27.1	27.1	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.4	21.6	17.9	366.0	60.2	52.1	401.3	401	34.9	27.1	27.1	0.0
LOS by Move:	C	C	C	F	F	F	F	F	D	D	D	*
ApproachDel:		20.5			201.5			282.8			27.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		20.5			201.5			282.8			27.1	
LOS by Appr:		C			F			F			D	
AllWayAvgQ:	0.5	0.6	0.4	36.1	5.5	4.6	41.9	41.9	2.8	1.3	1.3	0.0

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Average Delay (sec/veh): 6.7 Worst Case Level Of Service: F[54.2]

Street Name:	Palm Ave.						Industrial Pkwy.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0 0	1	1 0	0 1	0	0 0	1! 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	0	228	26	381	580	9	5	3	11	14	25	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	228	26	381	580	9	5	3	11	14	25	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	240	27	401	611	9	5	3	12	15	26	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	240	27	401	611	9	5	3	12	15	26	56
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	267	xxxx	xxxxx	1712	1685	615	1665	1662	240
Potent Cap.:	xxxx	xxxx	xxxxx	1308	xxxx	xxxxx	72	95	495	78	98	804
Move Cap.:	xxxx	xxxx	xxxxx	1308	xxxx	xxxxx	36	66	495	56	68	804
Volume/Cap:	xxxx	xxxx	xxxx	0.31	xxxx	xxxx	0.14	0.05	0.02	0.26	0.39	0.07
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	1.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.9	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	90.9	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	F	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	93	xxxxx	xxxx	xxxx	180
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	2.1
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	54.2	xxxxx	xxxxx	xxxx	40.8
Shared LOS:	A	*	*	*	*	*	*	F	*	*	*	E
ApproachDel:	xxxxxx			xxxxxx			54.2			48.4		
ApproachLOS:	*			*			F			E		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.849
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	20.8
Optimal Cycle:	0	Level Of Service:	C

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	12	31	3	292	152	151	141	146	87	2	53	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	31	3	292	152	151	141	146	87	2	53	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	13	33	3	307	160	159	148	154	92	2	56	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	33	3	307	160	159	148	154	92	2	56	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	33	3	307	160	159	148	154	92	2	56	87
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.72	1.00	0.66	0.34	1.00	1.00	0.63	0.37	1.00	0.39	0.61
Final Sat.:	131	338	525	362	188	644	486	340	203	452	200	314
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.01	0.85	0.85	0.25	0.31	0.45	0.45	0.00	0.28	0.28
Crit Moves:	****				****			****			****	
Delay/Veh:	10.6	10.6	9.1	34.6	34.6	9.9	12.8	13.9	13.9	10.3	11.6	11.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.6	10.6	9.1	34.6	34.6	9.9	12.8	13.9	13.9	10.3	11.6	11.6
LOS by Move:	B	B	A	D	D	A	B	B	B	B	B	B
ApproachDel:	10.5			28.3			13.5			11.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.5			28.3			13.5			11.6		
LOS by Appr:	B			D			B			B		
AllWayAvgQ:	0.1	0.1	0.0	3.9	3.9	0.3	0.4	0.7	0.7	0.0	0.3	0.3

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Palm Ave. & Kendall Dr.

Cycle (sec):	115	Critical Vol./Cap.(X):	0.991
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	40.5
Optimal Cycle:	80	Level Of Service:	D

Street Name:	Palm Ave.						Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	26	26	10	22	22	10	26	26	10	22	22
Lanes:	1 0 2 0 1			1 0 1 1 0			1 0 1 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	189	800	576	182	288	83	59	101	126	484	221	199
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	189	800	576	182	288	83	59	101	126	484	221	199
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	199	842	606	192	303	87	62	106	133	509	233	209
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	199	842	606	192	303	87	62	106	133	509	233	209
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	199	842	606	192	303	87	62	106	133	509	233	209
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.55	0.45	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	3800	1900	1800	2950	850	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.32	0.00	0.10	0.10	0.00	0.06	0.07	0.00	0.12	0.11
Crit Moves:		****		****					****	****		
Green/Cycle:	0.14	0.26	0.58	0.12	0.24	0.24	0.17	0.23	0.23	0.33	0.38	0.38
Volume/Cap:	0.80	0.87	0.55	0.87	0.43	0.43	0.20	0.25	0.31	0.87	0.32	0.29
Delay/Veh:	64.4	49.3	15.4	78.0	37.4	37.4	41.1	36.8	37.4	49.4	25.5	25.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	64.4	49.3	15.4	78.0	37.4	37.4	41.1	36.8	37.4	49.4	25.5	25.1
LOS by Move:	E	D	B	E	D	D	D	D	D	D	C	C
HCM2kAvgQ:	9	17	13	10	6	6	2	3	4	21	6	5

Note: Queue reported is the number of cars per lane.

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Palm Ave. Warehouse/Distribution Center
Year 2030 With Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Average Delay (sec/veh): 254.0 Worst Case Level Of Service: F[645.4]

Street Name:	Palm Ave.						I-215 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	1 0	0	0 0	2 0	1	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	164	786	0	0	534	346	0	0	0	393	0	790
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	164	786	0	0	534	346	0	0	0	393	0	790
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	173	827	0	0	562	364	0	0	0	414	0	832
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	173	827	0	0	562	364	0	0	0	414	0	832
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	926	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1454	2099	414
Potent Cap.:	746	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	123	53	593
Move Cap.:	746	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	99	39	593
Volume/Cap:	0.23	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	4.18	0.00	1.40
Level Of Service Module:												
2Way95thQ:	0.9	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	38.0
Control Del:	11.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	211.1
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	F
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	99	xxxx	xxxxx
SharedQueue:	0.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	43.0	xxxx	xxxxx
Shrd ConDel:	11.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1519	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			645.4		
ApproachLOS:	*			*			*			F		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.733
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	149.6
Optimal Cycle:	0	Level Of Service:	F

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	1 0		0 1 0	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	172	397	304	434	271	207	316	304	141	97	10	274
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	172	397	304	434	271	207	316	304	141	97	10	274
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	181	418	320	457	285	218	333	320	148	102	11	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	418	320	457	285	218	333	320	148	102	11	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	181	418	320	457	285	218	333	320	148	102	11	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.13	0.87	0.51	0.49	1.00	0.91	0.09	1.00
Final Sat.:	339	360	386	343	410	330	192	185	411	290	30	354
Capacity Analysis Module:												
Vol/Sat:	0.53	1.16	0.83	1.33	0.70	0.66	1.73	1.73	0.36	0.35	0.35	0.00
Crit Moves:		****		****			****				****	
Delay/Veh:	24.3	129	43.3	195.3	32.1	28.1	362.6	363	15.9	19.5	19.5	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.3	129	43.3	195.3	32.1	28.1	362.6	363	15.9	19.5	19.5	0.0
LOS by Move:	C	F	E	F	D	D	F	F	C	C	C	*
ApproachDel:	78.4			108.9			298.4			19.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	78.4			108.9			298.4			19.5		
LOS by Appr:	F			F			F			C		
AllWayAvgQ:	1.0	11.6	3.4	17.4	2.0	1.7	36.6	36.6	0.5	0.5	0.5	0.0

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Average Delay (sec/veh): 15.5 Worst Case Level Of Service: F[157.0]

Street Name:	Palm Ave.						Industrial Pkwy.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0 0	1	1 0	0 1	0	0 0	1! 0	0	1 0	0 1	0
Volume Module:												
Base Vol:	0	480	32	142	354	6	8	0	15	53	1	454
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	480	32	142	354	6	8	0	15	53	1	454
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	505	34	149	373	6	8	0	16	56	1	478
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	505	34	149	373	6	8	0	16	56	1	478
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	539	xxxx	xxxxx	1436	1214	376	1188	1183	505
Potent Cap.:	xxxx	xxxx	xxxxx	1040	xxxx	xxxxx	112	183	675	167	191	571
Move Cap.:	xxxx	xxxx	xxxxx	1040	xxxx	xxxxx	16	157	675	145	164	571
Volume/Cap:	xxxx	xxxx	xxxx	0.14	xxxx	xxxx	0.52	0.00	0.02	0.39	0.01	0.84
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.6	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	44.7	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	E	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	45	xxxxx	xxxx	xxxx	568
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.0	xxxxx	xxxxx	xxxx	9.0
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	157	xxxxx	xxxxx	xxxx	36.5
Shared LOS:	A	*	*	*	*	*	*	F	*	*	*	E
ApproachDel:	xxxxxx			xxxxxx			157.0			37.4		
ApproachLOS:	*			*			F			E		

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.150
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	57.8
Optimal Cycle:	0	Level Of Service:	F

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	92	247	11	124	166	126	82	183	116	35	283	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	247	11	124	166	126	82	183	116	35	283	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	97	260	12	131	175	133	86	193	122	37	298	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	260	12	131	175	133	86	193	122	37	298	211
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	97	260	12	131	175	133	86	193	122	37	298	211
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.73	1.00	0.43	0.57	1.00	1.00	0.61	0.39	1.00	0.59	0.41
Final Sat.:	110	296	447	171	228	443	384	257	163	398	259	183
Capacity Analysis Module:												
Vol/Sat:	0.88	0.88	0.03	0.77	0.77	0.30	0.22	0.75	0.75	0.09	1.15	1.15
Crit Moves:	****				****			****			****	
Delay/Veh:	48.1	48.1	10.9	34.6	34.6	14.0	14.5	31.7	31.7	12.5	118	117.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.1	48.1	10.9	34.6	34.6	14.0	14.5	31.7	31.7	12.5	118	117.9
LOS by Move:	E	E	B	D	D	B	B	D	D	B	F	F
ApproachDel:	47.0			28.3			28.0			110.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	47.0			28.3			28.0			110.8		
LOS by Appr:	E			D			D			F		
AllWayAvgQ:	4.1	4.1	0.0	2.5	2.5	0.4	0.3	2.4	2.4	0.1	13.1	13.1

Note: Queue reported is the number of cars per lane.

Traffix 7.9.0415 (c) 2007 Dowling Assoc. Licensed to CRAIN & ASSOC., L.A.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project+Mitigation Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Cycle (sec):	30	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.1
Optimal Cycle:	29	Level Of Service:	A

Street Name:	Palm Ave.						I-215 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	1 0	0	0 0	2 0	1	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	54	887	0	0	741	187	0	0	0	588	0	471
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	887	0	0	741	187	0	0	0	588	0	471
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	57	934	0	0	780	197	0	0	0	619	0	496
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	934	0	0	780	197	0	0	0	619	0	496
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	934	0	0	780	197	0	0	0	619	0	496
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.12	1.88	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	217	3571	0	0	3800	1900	0	0	0	1800	0	1900
Capacity Analysis Module:												
Vol/Sat:	0.26	0.26	0.00	0.00	0.21	0.10	0.00	0.00	0.00	0.34	0.00	0.26
Crit Moves:		****								****		
Green/Cycle:	0.37	0.37	0.00	0.00	0.37	0.37	0.00	0.00	0.00	0.49	0.00	0.49
Volume/Cap:	0.70	0.70	0.00	0.00	0.55	0.28	0.00	0.00	0.00	0.70	0.00	0.53
Delay/Veh:	9.5	9.5	0.0	0.0	7.8	6.8	0.0	0.0	0.0	8.4	0.0	5.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.5	9.5	0.0	0.0	7.8	6.8	0.0	0.0	0.0	8.4	0.0	5.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	6	6	0	0	4	2	0	0	0	6	0	4

Note: Queue reported is the number of cars per lane.

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Palm Ave. Warehouse/Distribution Center
Year 2030 With Project+Mitigation Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	80	Critical Vol./Cap.(X):	0.865
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	30.9
Optimal Cycle:	72	Level Of Service:	C

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ignore		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0 1 0 1			1 0 1 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module:												
Base Vol:	99	113	87	608	468	227	347	323	320	170	18	506
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	113	87	608	468	227	347	323	320	170	18	506
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	104	119	92	640	493	239	365	340	337	179	19	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	119	92	640	493	239	365	340	337	179	19	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	104	119	92	640	493	239	365	340	337	179	19	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.35	0.65	0.53	0.47	1.00	0.91	0.09	1.00
Final Sat.:	1800	1900	1900	1800	2559	1241	957	890	1900	1636	173	1900
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.05	0.36	0.19	0.19	0.38	0.38	0.18	0.11	0.11	0.00
Crit Moves:		****		****				****				
Green/Cycle:	0.20	0.13	0.13	0.39	0.31	0.31	0.41	0.41	0.41	0.41	0.41	0.00
Volume/Cap:	0.29	0.50	0.39	0.92	0.62	0.62	0.92	0.92	0.43	0.26	0.26	0.00
Delay/Veh:	27.5	34.3	33.2	41.2	24.6	24.6	38.7	38.7	17.1	15.6	15.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.5	34.3	33.2	41.2	24.6	24.6	38.7	38.7	17.1	15.6	15.6	0.0
LOS by Move:	C	C	C	D	C	C	D	D	B	B	B	A
HCM2kAvgQ:	2	3	2	21	9	9	22	22	6	3	3	0

Note: Queue reported is the number of cars per lane.

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Palm Ave. Warehouse/Distribution Center
Year 2030 With Project+Mitigation Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Cycle (sec):	45	Critical Vol./Cap.(X):	0.428
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.9
Optimal Cycle:	36	Level Of Service:	A

Street Name:	Palm Ave.						Industrial Pkwy.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	1 0	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	0	228	26	381	580	9	5	3	11	14	25	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	228	26	381	580	9	5	3	11	14	25	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	240	27	401	611	9	5	3	12	15	26	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	240	27	401	611	9	5	3	12	15	26	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	240	27	401	611	9	5	3	12	15	26	56
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	0.98	0.02	0.27	0.16	0.57	0.37	0.63	1.00
Final Sat.:	0	1900	1900	1800	1871	29	493	296	1084	669	1194	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.01	0.22	0.33	0.33	0.01	0.01	0.01	0.02	0.02	0.03
Crit Moves:		****		****							****	
Green/Cycle:	0.00	0.23	0.23	0.41	0.64	0.64	0.22	0.22	0.22	0.22	0.22	0.63
Volume/Cap:	0.00	0.54	0.06	0.54	0.51	0.51	0.05	0.05	0.05	0.10	0.10	0.05
Delay/Veh:	0.0	16.5	13.5	10.9	4.6	4.6	13.8	13.8	13.8	14.0	14.0	3.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.5	13.5	10.9	4.6	4.6	13.8	13.8	13.8	14.0	14.0	3.1
LOS by Move:	A	B	B	B	A	A	B	B	B	B	B	A
HCM2kAvgQ:	0	4	0	5	5	5	0	0	0	1	1	0

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project+Mitigation Traffic Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	30	Critical Vol./Cap.(X):	0.443
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	5.9
Optimal Cycle:	24	Level Of Service:	A

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	12	31	3	292	152	151	141	146	87	2	53	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	31	3	292	152	151	141	146	87	2	53	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	13	33	3	307	160	159	148	154	92	2	56	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	33	3	307	160	159	148	154	92	2	56	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	33	3	307	160	159	148	154	92	2	56	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.29	0.71	1.00	0.67	0.33	1.00	1.00	0.63	0.37	1.00	0.39	0.61
Final Sat.:	522	1349	1900	1206	628	1900	1800	1191	709	1800	740	1160
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.00	0.25	0.25	0.08	0.08	0.13	0.13	0.00	0.08	0.08
Crit Moves:					****			****				
Green/Cycle:	0.53	0.53	0.53	0.53	0.53	0.53	0.33	0.33	0.33	0.33	0.33	0.33
Volume/Cap:	0.05	0.05	0.00	0.48	0.48	0.16	0.25	0.39	0.39	0.00	0.23	0.23
Delay/Veh:	3.4	3.4	3.3	4.8	4.8	3.6	7.5	8.0	8.0	6.7	7.4	7.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	3.4	3.4	3.3	4.8	4.8	3.6	7.5	8.0	8.0	6.7	7.4	7.4
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	3	3	1	1	2	2	0	1	1

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project + Mitigation Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Palm Ave. & I-215 NB Ramps

Cycle (sec):	30	Critical Vol./Cap.(X):	0.812
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	10.1
Optimal Cycle:	39	Level Of Service:	B

Street Name:	Palm Ave.						I-215 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	1 0	0	0 0	2 0	1	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	164	786	0	0	534	346	0	0	0	393	0	790
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	164	786	0	0	534	346	0	0	0	393	0	790
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	173	827	0	0	562	364	0	0	0	414	0	832
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	827	0	0	562	364	0	0	0	414	0	832
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	173	827	0	0	562	364	0	0	0	414	0	832
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.36	1.64	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	650	3114	0	0	3800	1900	0	0	0	1800	0	1900
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.00	0.00	0.15	0.19	0.00	0.00	0.00	0.23	0.00	0.44
Crit Moves:		****										****
Green/Cycle:	0.33	0.33	0.00	0.00	0.33	0.33	0.00	0.00	0.00	0.53	0.00	0.53
Volume/Cap:	0.80	0.80	0.00	0.00	0.44	0.58	0.00	0.00	0.00	0.43	0.00	0.82
Delay/Veh:	12.7	12.7	0.0	0.0	8.1	9.5	0.0	0.0	0.0	4.6	0.0	11.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.7	12.7	0.0	0.0	8.1	9.5	0.0	0.0	0.0	4.6	0.0	11.2
LOS by Move:	B	B	A	A	A	A	A	A	A	A	A	B
HCM2kAvgQ:	7	7	0	0	3	4	0	0	0	3	0	10

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project + Mitigation Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Palm Ave. & I-215 SB Ramps-Kendall Dr.

Cycle (sec):	50	Critical Vol./Cap.(X):	0.940
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	30.3
Optimal Cycle:	83	Level Of Service:	C

Street Name:	Palm Ave.						I-215 SB Ramps-Kendall Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ignore		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	1 0 1 0 1			1 0 1 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module:												
Base Vol:	172	397	304	434	271	207	316	304	141	97	10	274
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	172	397	304	434	271	207	316	304	141	97	10	274
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	181	418	320	457	285	218	333	320	148	102	11	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	418	320	457	285	218	333	320	148	102	11	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	181	418	320	457	285	218	333	320	148	102	11	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.13	0.87	0.52	0.48	1.00	0.91	0.09	1.00
Final Sat.:	1800	1900	1900	1800	2154	1646	942	906	1900	1640	169	1900
Capacity Analysis Module:												
Vol/Sat:	0.10	0.22	0.17	0.25	0.13	0.13	0.35	0.35	0.08	0.06	0.06	0.00
Crit Moves:		****		****				****				
Green/Cycle:	0.25	0.23	0.23	0.27	0.25	0.25	0.38	0.38	0.38	0.38	0.38	0.00
Volume/Cap:	0.40	0.94	0.72	0.94	0.53	0.53	0.94	0.94	0.21	0.17	0.17	0.00
Delay/Veh:	16.1	46.8	23.3	44.3	16.7	16.7	35.8	35.8	10.7	10.5	10.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.1	46.8	23.3	44.3	16.7	16.7	35.8	35.8	10.7	10.5	10.5	0.0
LOS by Move:	B	D	C	D	B	B	D	D	B	B	B	A
HCM2kAvgQ:	3	11	6	13	4	4	16	16	2	1	1	0

Note: Queue reported is the number of cars per lane.

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Palm Ave. Warehouse/Distribution Center
Year 2030 With Project + Mitigation Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Palm Ave. & Industrial Pkwy.

Cycle (sec):	45	Critical Vol./Cap.(X):	0.693
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	12.1
Optimal Cycle:	36	Level Of Service:	B

Street Name:	Palm Ave.						Industrial Pkwy.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ovl		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	1 0	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	0	480	32	142	354	6	8	0	15	53	1	454
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	480	32	142	354	6	8	0	15	53	1	454
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	505	34	149	373	6	8	0	16	56	1	478
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	505	34	149	373	6	8	0	16	56	1	478
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	505	34	149	373	6	8	0	16	56	1	478
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	0.98	0.02	0.36	0.00	0.64	0.98	0.02	1.00
Final Sat.:	0	1900	1900	1800	1868	32	648	0	1216	1768	33	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.02	0.08	0.20	0.20	0.01	0.00	0.01	0.03	0.03	0.25
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.33	0.33	0.22	0.55	0.55	0.31	0.00	0.31	0.31	0.31	0.54
Volume/Cap:	0.00	0.80	0.05	0.37	0.36	0.36	0.04	0.00	0.04	0.10	0.10	0.47
Delay/Veh:	0.0	21.1	10.3	15.4	5.8	5.8	10.8	0.0	10.8	11.0	11.0	6.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	21.1	10.3	15.4	5.8	5.8	10.8	0.0	10.8	11.0	11.0	6.8
LOS by Move:	A	C	B	B	A	A	B	A	B	B	B	A
HCM2kAvgQ:	0	9	0	2	3	3	0	0	0	1	1	5

Note: Queue reported is the number of cars per lane.

Palm Ave. Warehouse/Distribution Center
Year 2030 With Project + Mitigation Traffic Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Palm Ave. & Cajon Blvd.

Cycle (sec):	30	Critical Vol./Cap.(X):	0.529
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	6.3
Optimal Cycle:	24	Level Of Service:	A

Street Name:	Palm Ave.						Cajon Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	92	247	11	124	166	126	82	183	116	35	283	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	247	11	124	166	126	82	183	116	35	283	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	97	260	12	131	175	133	86	193	122	37	298	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	260	12	131	175	133	86	193	122	37	298	211
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	97	260	12	131	175	133	86	193	122	37	298	211
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.28	0.72	1.00	0.44	0.56	1.00	1.00	0.61	0.39	1.00	0.59	0.41
Final Sat.:	508	1364	1900	794	1062	1900	1800	1163	737	1800	1113	787
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.01	0.16	0.16	0.07	0.05	0.17	0.17	0.02	0.27	0.27
Crit Moves:		****									****	
Green/Cycle:	0.36	0.36	0.36	0.36	0.36	0.36	0.51	0.51	0.51	0.51	0.51	0.51
Volume/Cap:	0.53	0.53	0.02	0.46	0.46	0.19	0.09	0.33	0.33	0.04	0.53	0.53
Delay/Veh:	8.4	8.4	6.2	7.8	7.8	6.7	3.9	4.6	4.6	3.8	5.6	5.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.4	8.4	6.2	7.8	7.8	6.7	3.9	4.6	4.6	3.8	5.6	5.6
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	3	3	0	3	3	1	0	2	2	0	4	4

Note: Queue reported is the number of cars per lane.