

MEMORANDUM

To: City of Irvine **JN:** 161832

From: Marc Violett | Michael Baker International

Date: March 02, 2018

Subject: Jeffrey Road/Irvine Center Drive Intersection Improvement Operations Analysis

Attachments:

Appendix A – Count Data Sheets

Appendix B – Intersection Operations Analysis Worksheets

Appendix C – Irvine Village Center Driveway Analysis

Appendix D – Queue Analysis

Jeffrey Road and Irvine Center Drive was one of 80 intersections evaluated by Michael Baker International as part of the North Irvine Transportation Mitigation (NITM). The purpose of this study is to assess the traffic operations of the existing roadway conditions and proposed NITM improvements on Jeffrey Road and Irvine Center Drive. The proposed improvements would include the following:

- Add a fourth westbound through lane
- Add a fourth northbound through lane
- Add a third southbound left-turn lane
- Convert the southbound right-turn lane to a fourth through lane

The project also analyzed the following viable alternatives for the project:

- Convert the eastbound free right-turn into a dedicated right turn lane.
- Eliminate addition of the third southbound Jeffrey Road left-turn lane and minimize the left turn pocket length.

Southbound left-turn pockets on Jeffrey Road could potentially be extended and result in the closure of the existing northbound left-turn access into the Irvine Village Center commercial plaza.

Traffic Forecast

The Traffic Analysis analyzes the following five (5) analysis scenarios:

1. Existing 2017 conditions;
2. Near-Term 2020 without Project conditions;
3. Near-Term 2020 with Project conditions;
4. Post-2035 without Project conditions; and
5. Post-2035 with Project conditions.

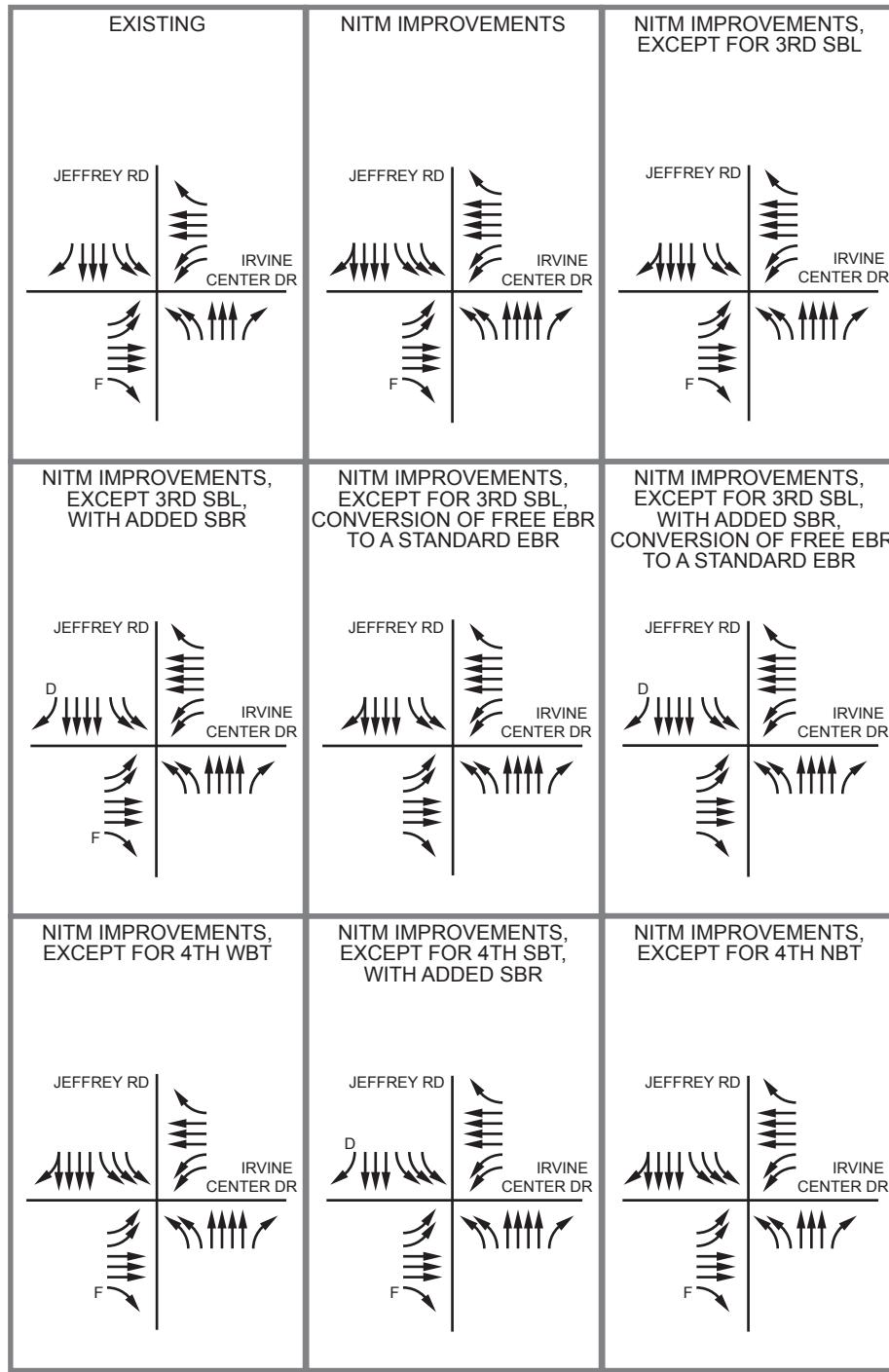
A combination of proposed improvements and viable alternatives were analyzed in the study. The following “with Project conditions” scenarios were assessed in the study:

- NITM Improvements;
- NITM Improvements, Except for 3rd SBL;
- NITM Improvements, Except for 3rd SBL, and with Added SBR (Standard or De-Facto);
- NITM Improvements, Except for 3rd SBL, and with Conversion of Free EBR to a Standard EBR Lane;
- NITM Improvements, Except for 3rd SBL, and with Added SBR (Standard or De-Facto), and Conversion of Free EBR to a Standard EBR Lane;
- NITM Improvements, Except for 4th WBT;
- NITM Improvements, Except for 4th SBT; and with Added SBR (Standard or De-Facto); and
- NITM Improvements, Except for 4th NBT.

Existing intersection traffic count data was collected on a typical weekday in the month of October 2017 during the AM peak period (7:00 AM to 9:00 AM) and PM peak period (4:00 PM to 6:00 PM). The analysis utilized the highest hour within each two-hour period. Michael Baker International coordinated with City Staff to obtain forecast data for the Near-Term 2020 and Post-2035 conditions from the Irvine Traffic Analysis Model (ITAM). Exhibit 1 shows the Intersection Scenarios Geometry. Counts sheets and data provided by the City of Irvine are provided in Appendix A.

Traffic Operations Analysis

An operations analysis was conducted at the intersection of Jeffrey Road and Irvine Center Drive to evaluate the intersection operations for the AM and PM peak hours for the five analysis scenarios. The analysis was conducted based on the Intersection Capacity Utilization (ICU) analysis methodology using the Traffix analysis software. The ICU methodology estimates the volume-to-capacity (V/C) ratio for an intersection based on the individual V/C ratios for the conflicting traffic movements. The ICU value represents the percent signal green time or capacity of the intersection movements. It should be noted that the ICU method assumes uniform traffic distribution per intersection approach lane and optimal signal timing. ICU calculations in this analysis use a lane capacity of 1,700 vehicles per hour (vph) for left-turn, through, and right-turn lanes, and a 5% clearance interval is included in the analysis calculations based on City of Irvine requirements.



Legend:

Free Right-Turn

De-facto Right-Turn

Exhibit 1 Intersection Scenarios Geometry

Intersection Operation Analysis Results

Table 1 summarizes the intersection level of service (LOS) results for Jeffrey Road and Irvine Center Drive for the Existing 2017 Conditions, Near-Term 2020 Conditions, and Post-2035 Conditions. Intersection analysis worksheets are included in Appendix B.

As shown in Table 1, the intersection of Jeffrey Road and Irvine Center Drive is forecast to perform at a deficient LOS for the Near-Term 2020 Condition without Project and Post-2035 without Project. All proposed improvement scenarios are forecast to operate at LOS D or better for the Near-Term 2020 Conditions. For the Post-2035 Conditions, three proposed improvement scenarios have a deficient LOS E, which are With NITM Improvements Except for 4th WBT, With NITM Improvements Except for 4th SBT and with Added SBR, and With NITM Improvements Except for 4th NBT.

Recommended Geometry

Based on the intersection operation analysis, field verifications, and engineering judgment, the recommended geometry for the intersection of Jeffrey Road and Irvine Center Drive is with NITM Improvements Except for 3rd SBL and with Added SBR (Standard or De-Facto) and Conversion of Free EBR to a Standard EBR Lane Scenario. Currently in the existing condition for Jeffrey Road and Irvine Center Drive, a high number of vehicles on the southbound left-turn lane are travelling to Irvine Valley College, which results in vehicles wanting to use the inner southbound left-turn lane to easily access Irvine Valley College without changing lanes. As the inner left-turn lane reaches capacity, the outer left-turn lane becomes inaccessible, resulting in wasted storage and capacity. If a third southbound left-turn lane were to be added, it is predicted the same results would occur. The recommended scenario would be to keep the southbound dual left-turn lane configuration and extend the storage length. Maintaining the dual left-turn configuration would also lessen the impacts on the nearby utilities. Exhibit 2 shows the recommended intersection geometry.

Queue Analysis

A Highway Capacity Manual (HCM) AM and PM peak hour queue analysis has been prepared for the intersection of Jeffrey Road and Irvine Center Drive utilizing a 95th percentile queue analysis for the Post-2035 with NITM Improvements Except for 3rd SBL and with Added SBR (Standard or De-Facto) and Conversion of Free EBR to a Standard EBR Lane Scenario. A queue analysis using SimTraffic was also included. Table 2 summarizes queue analysis per lane for the left-turn lane, through lane, and right-turn lane, shown in feet.

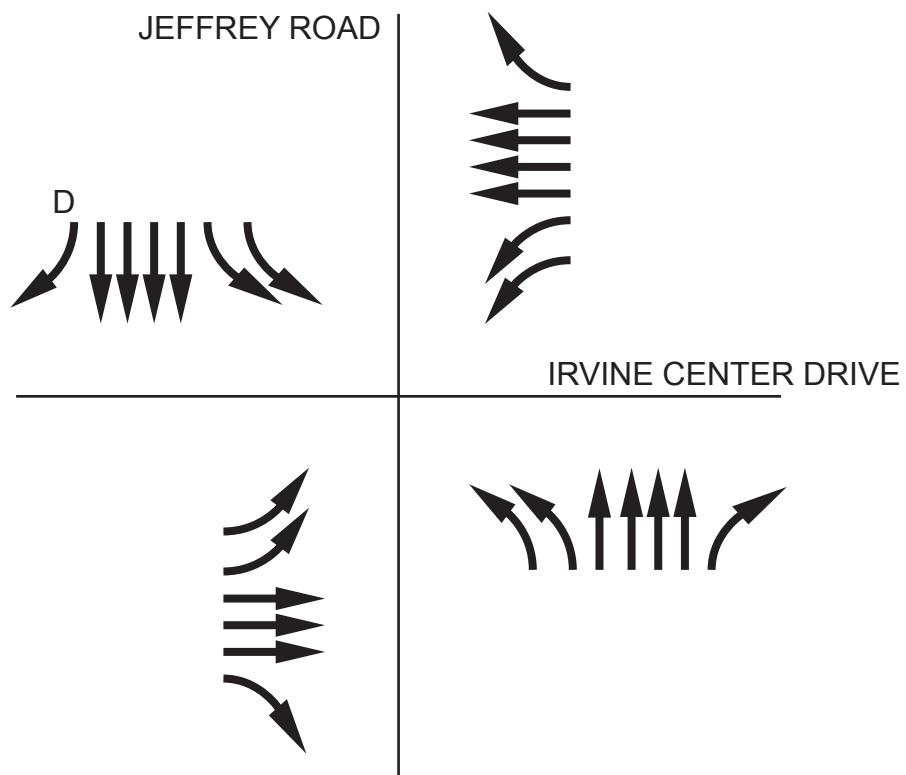
Table 1
Intersection Level of Service Summary

Jeffrey Road and Irvine Center Drive Scenario	Existing 2017 Conditions				Near-Term 2020 Conditions				Post-2035 Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	V/C ¹	LOS	V/C ¹	LOS	V/C ¹	LOS	V/C ¹	LOS	V/C ¹	LOS	V/C ¹	LOS
Without Project Conditions	0.695	B	0.789	C	0.800	D	0.926	E	0.948	E	1.069	F
With NITM Improvements					0.752	C	0.725	C	0.893	D	0.847	D
With NITM Improvements Except for 3rd SBL					0.752	C	0.761	C	0.893	D	0.879	D
With NITM Improvements Except for 3rd SBL and with Added SBR (Standard or De-Facto)					0.723	C	0.761	C	0.869	D	0.879	D
With NITM Improvements Except for 3rd SBL and with Conversion of Free EBR to a Standard EBR Lane					0.752	C	0.761	C	0.893	D	0.879	D
With NITM Improvements Except for 3rd SBL and with Added SBR (Standard or De-Facto) and Conversion of Free EBR to a Standard EBR Lane					0.723	C	0.703	C	0.869	D	0.879	D
With NITM Improvements Except for 4th WBT					0.752	C	0.800	D	0.893	D	0.944	E
With NITM Improvements Except for 4th SBT and with Added SBR (Standard or De-Facto)					0.800	D	0.738	C	0.948	E	0.855	D
With NITM Improvements Except for 4th NBT					0.752	C	0.816	D	0.893	D	0.925	E

Note:

¹ Volume/Capacity Ratio (V/C) Ratio.

NITM IMPROVEMENTS,
EXCEPT FOR 3RD SBL,
WITH ADDED SBR,
CONVERSION OF FREE EBR
TO STANDARD EBR



Legend:



Exhibit 2
Recommended Intersection Geometry

Table 2
Queue Analysis Summary

Jeffrey Road at Irvine Center Drive	Post-2035 with Recommended Project Geometry Conditions		Post-2035 with Recommended Project Geometry Conditions (SimTraffic)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
	Queue ¹	Queue ¹	Queue	Queue
Northbound				
NB Left-Turn Lane	178	229	125	226
NB Through Lane	270	540	378	752
NB Right-Turn Lane	415	157	403	141
Southbound				
SB Left-Turn Lane	504	327	554	479
SB Through Lane	600	345	408	384
SB Right-Turn Lane	116	235	52	191
Eastbound				
EB Left-Turn Lane	176	300	211	275
EB Through Lane	688	301	505	317
EB Right-Turn Lane	335	63	325	118
Westbound				
WB Left-Turn Lane	245	168	223	203
WB Through Lane	130	595	228	997
WB Right-Turn Lane				
• without Overlap	60	516	65	281
• with Overlap	66	475	104	248

Note:

¹ HCM 95th Percentile Queue shown in feet.

As shown in Table 2, the southbound left-turn movement experiences a lengthy queue in the AM peak hour. There is a possibility of extending the southbound left-turn pockets to accommodate the high-volume of queue generated, which would result in the closure of the existing northbound left-turn access on Jeffrey Road into the Irvine Village Center commercial plaza. The westbound right-turn movement also experiences a high-volume of queue generated. A westbound right-turn with overlap was analyzed to assess the potential improvements to the queue.

Irvine Village Center Northbound Left-Turn Access Closure

Located in the northwest corner of Jeffrey Road and Irvine Center Drive is the Irvine Village Center commercial plaza. Irvine Village Center currently has two existing access driveways – a right-in and right-out driveway on Irvine Center Drive; and a left-in, right-in, and right-out driveway on Jeffrey Road. With a recommended design of extending the southbound left-turn pockets to accommodate the high-volume of queue generated, the existing northbound left-turn access on Jeffrey Road into the Irvine Village Center commercial plaza would need to be closed. Northbound left-turn inbound trips on Jeffrey Road into the commercial plaza were redistributed to the driveway on Irvine Center Drive. Driveway counts were taken in November 2017 and can be found in Appendix C. The counts utilized the highest hour within the AM and PM peak period. 26 vehicles were redistributed in the AM peak hour, and 31 vehicles were redistributed in the PM peak hour. It is assumed that outbound trips from the commercial plaza will maintain the same distribution, and therefore, no redistribution changes were made for the outbound vehicles. Exhibit 3 shows the forecast Irvine Village Center Inbound Trip Redistribution. A Synchro analysis using the Highway Capacity Manual (HCM) methodology was performed on the two driveways to assess the impacts of the northbound left-turn access closure on Jeffrey Road and redistribution of inbound trips to the driveway on Irvine Center Drive. Table 3 summarizes the analysis results for the Irvine Village Center driveways. Appendix C contains detailed analysis worksheets.

Table 3
Irvine Village Center Driveway Level of Service Summary

Irvine Village Center Driveways	Near-Term 2020 Conditions				Post-2035 Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS
<u>Driveway at Irvine Center Drive</u>								
• With NB Left-Turn Lane	10.4	B	15.6	C	10.4	B	19.3	C
• Without NB Left-Turn Lane	10.5	B	15.9	C	10.5	B	19.7	C
<u>Driveway at Jeffrey Road</u>								
• With NB Left-Turn Lane	49.3	E	20.5	C	62.8	F	26.7	C
• Without NB Left-Turn Lane	19.2	C	15.1	C	20.9	C	16.9	C

Note:

¹ Average Delay (seconds per vehicle). The lane with the highest delay is presented as the LOS for the intersection.

As shown in Table 3, there is no significant impacts to the Irvine Village Center Driveways with the closure of the northbound left-turn access on Jeffrey Road into the commercial plaza. Additionally, the removal of the northbound left-turn improves the LOS for the driveway on Jeffrey Road, as the northbound left-turn movements into the commercial plaza are experiencing delays.

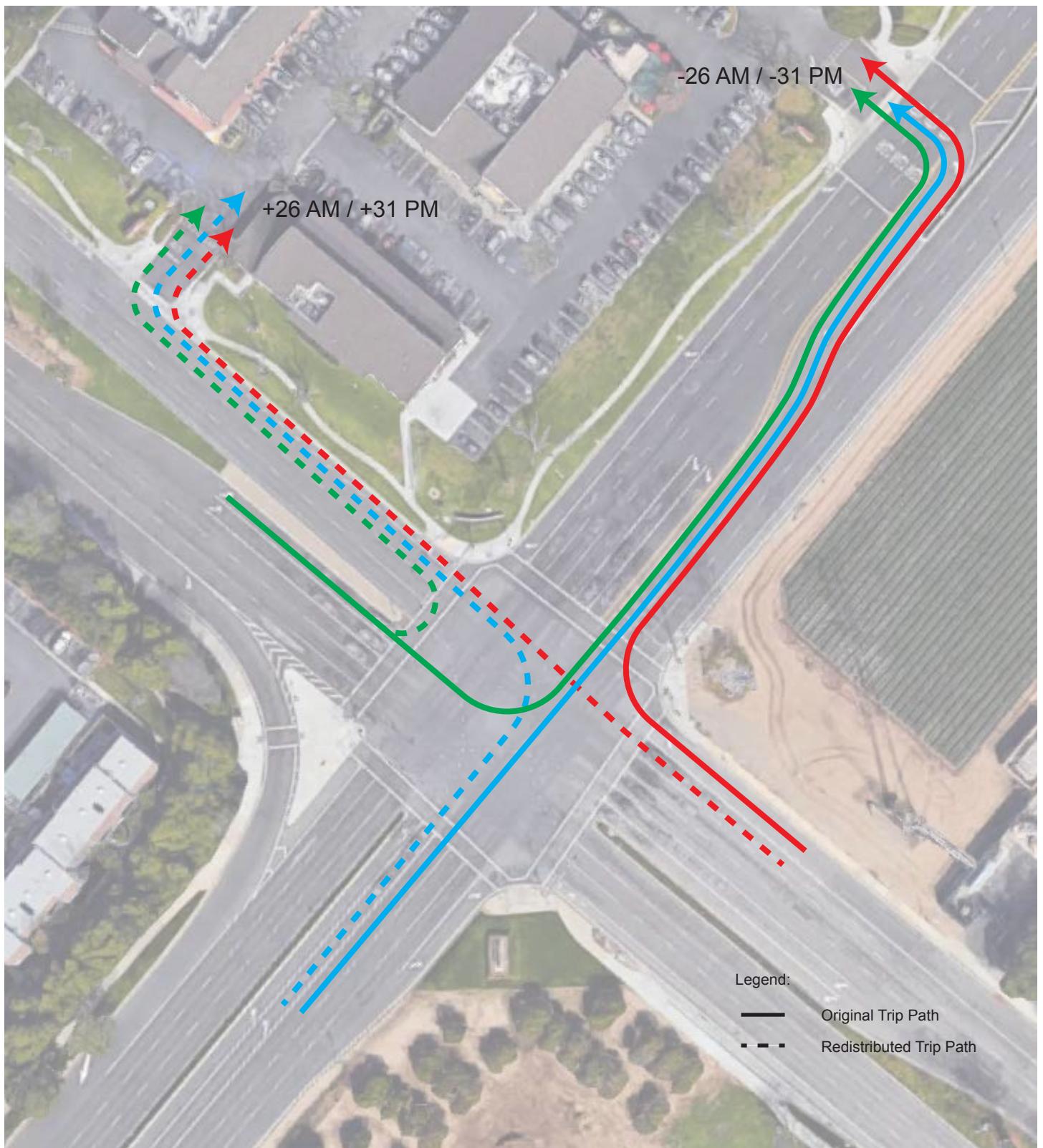


Exhibit 3
Irvine Village Center Inbound Trip Redistribution

Appendix A

Count Data Sheets

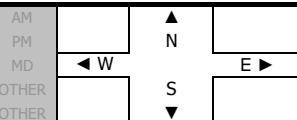
INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

T816

DATE: Tue, Oct 3, 17	LOCATION: Irvine NORTH & SOUTH: Jeffrey EAST & WEST: Irvine Center	PROJECT #: SC1541 LOCATION #: 1 CONTROL: SIGNAL
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NOTES:



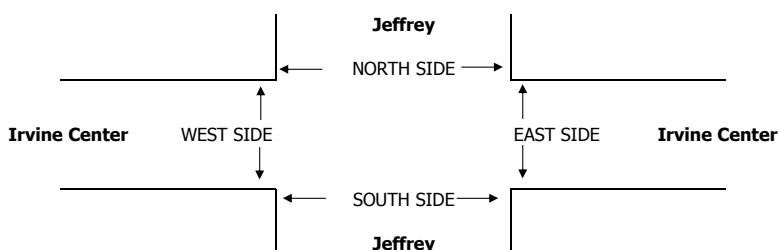
Add U-Turns to Left Turns

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Jeffrey			Jeffrey			Irvine Center			Irvine Center			
LANES:	NL 2	NT 3	NR 1	SL 2	ST 3	SR 1	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL

U-TURNS					
NB	SB	EB	WB	TTL	
0	8	5	0	13	
0	4	5	0	9	
0	6	3	0	9	
0	3	3	0	6	
1	7	5	0	13	
0	5	6	0	11	
0	3	6	0	9	
0	7	7	0	14	
1	43	40	0	84	

AM	7:00 AM	17	87	16	49	224	19	29	89	23	22	52	34	661
	7:15 AM	17	115	37	58	324	59	45	148	42	28	66	33	972
	7:30 AM	21	99	36	104	480	60	35	191	61	49	127	28	1,291
	7:45 AM	37	99	65	145	460	94	29	258	75	73	183	31	1,549
	8:00 AM	38	141	54	125	452	99	48	222	82	47	133	31	1,472
	8:15 AM	40	148	54	124	432	61	44	267	82	33	141	40	1,466
	8:30 AM	32	122	51	109	413	63	51	275	64	39	96	41	1,356
	8:45 AM	38	139	50	132	475	52	35	246	63	45	112	33	1,420
	VOLUMES	240	950	363	846	3,260	507	316	1,696	492	336	910	271	10,187
	APPROACH %	15%	61%	23%	18%	71%	11%	13%	68%	20%	22%	60%	18%	
PM	APP/DEPART	1,553	/	1,540	4,613	/	4,089	2,504	/	2,862	1,517	/	1,696	0
	BEGIN PEAK HR	7:45 AM												
	VOLUMES	147	510	224	503	1,757	317	172	1,022	303	192	553	143	5,843
	APPROACH %	17%	58%	25%	20%	68%	12%	11%	68%	20%	22%	62%	16%	
	PEAK HR FACTOR	0.910			0.922			0.952			0.774			0.943
	APP/DEPART	881	/	823	2,577	/	2,253	1,497	/	1,731	888	/	1,036	0
	4:00 PM	70	308	42	68	253	77	37	98	33	45	292	113	1,436
	4:15 PM	75	351	51	93	250	80	61	105	26	52	301	114	1,559
	4:30 PM	70	333	47	79	245	64	64	109	28	52	293	85	1,469
	4:45 PM	81	340	48	75	243	55	69	119	18	40	290	88	1,466
PM	5:00 PM	86	373	46	95	229	51	74	121	38	55	266	107	1,541
	5:15 PM	86	400	54	78	292	73	78	167	29	46	328	108	1,739
	5:30 PM	93	380	56	64	247	59	95	159	33	59	280	97	1,622
	5:45 PM	81	399	32	83	250	76	95	164	59	50	264	96	1,649
	VOLUMES	642	2,884	376	635	2,009	535	573	1,042	264	399	2,314	808	12,481
	APPROACH %	16%	74%	10%	20%	63%	17%	30%	55%	14%	11%	66%	23%	
	APP/DEPART	3,902	/	4,292	3,179	/	2,690	1,879	/	1,953	3,521	/	3,546	0
	BEGIN PEAK HR	5:00 PM												
	VOLUMES	346	1,552	188	320	1,018	259	342	611	159	210	1,138	408	6,551
	APPROACH %	17%	74%	9%	20%	64%	16%	31%	55%	14%	12%	65%	23%	
	PEAK HR FACTOR	0.966			0.901			0.874			0.911			0.942
	APP/DEPART	2,086	/	2,316	1,597	/	1,396	1,112	/	1,062	1,756	/	1,777	0

3	7	8	0	18
3	8	12	0	23
1	18	5	2	26
4	12	7	0	23
4	15	6	0	25
1	11	12	0	24
3	15	9	1	28
2	17	17	0	36
21	103	76	3	203



Thursday, October 12, 2017

CITY: Irvine

PROJECT: SC1541

Wednesday, October 12, 2011 Prepare
ADT1 Jeffrey between Irvine Center and Smoketree

Prepared by: Field Data Services of Arizona

Prepared by AimTRI LLC tel 714 253 7888

Thursday, October 12, 2017

CITY: Irvine

PROJECT: SC1541

Prepared by Field Data Services of Arizona

Prepared by: Field Data Services of Arizona
and Irvine Center

Prepared by AimTD LLC tel. 714 253 7888

Tuesday, October 03, 2017

CITY: Irvine

PROJECT: SC1541

ADT14 Irvine Center north of Jeffrey**PREPARED BY: AimTD LLC tel: 714 253 7888**

AM Period	NB	SB	PM Period	NB	SB	
0:00	22	6	12:00	183	152	
0:15	11	7	12:15	213	183	
0:30	7	4	12:30	175	141	
0:45	10	50	75	196	767	168 644
						1411
1:00	8	6	13:00	167	161	
1:15	3	4	13:15	148	150	
1:30	3	3	13:30	165	177	
1:45	1	15	29	206	686	164 652
						1338
2:00	5	1	14:00	204	159	
2:15	9	1	14:15	180	136	
2:30	5	5	14:30	208	140	
2:45	3	22	32	282	874	158 593
						1467
3:00	2	2	15:00	306	160	
3:15	3	3	15:15	354	207	
3:30	2	7	15:30	328	143	
3:45	2	9	29	383	1371	185 695
						2066
4:00	6	10	16:00	425	172	
4:15	3	9	16:15	437	188	
4:30	2	24	16:30	412	218	
4:45	6	17	92	415	1689	202 780
						2469
5:00	6	25	17:00	396	239	
5:15	11	50	17:15	489	296	
5:30	16	83	17:30	419	308	
5:45	20	53	311	416	1720	306 1149
						2869
6:00	31	63	18:00	418	245	
6:15	58	85	18:15	393	216	
6:30	45	129	18:30	264	233	
6:45	57	191	656	261	1336	268 962
						2298
7:00	85	146	19:00	250	137	
7:15	143	251	19:15	175	98	
7:30	202	299	19:30	158	103	
7:45	320	750	1840	108	691	84 422
						1113
8:00	286	382	20:00	112	82	
8:15	238	393	20:15	100	69	
8:30	183	342	20:30	97	81	
8:45	200	907	2358	110	419	74 306
						725
9:00	165	290	21:00	139	78	
9:15	189	292	21:15	120	74	
9:30	125	182	21:30	98	50	
9:45	123	602	1503	21:45	85	442 47 249
						691
10:00	105	146	22:00	66	49	
10:15	106	136	22:15	46	38	
10:30	142	155	22:30	35	21	
10:45	183	536	1137	22:45	31	178 27 135
						313
11:00	146	129	23:00	26	19	
11:15	131	119	23:15	27	21	
11:30	157	129	23:30	31	19	
11:45	176	610	1119	23:45	19	103 9 68
						171
Total Vol.	3762	5419	9181	10276	6655	16931
						Daily Totals
				NB	SB	Combined
				14038	12074	26112
						PM
AM						
Split %	41.0%	59.0%	35.2%	60.7%	39.3%	64.8%
Peak Hour	7:30	7:45	7:45	17:15	17:15	17:15
Volume	1046	1511	2538	1742	1155	2897
P.H.F.	0.82	0.96	0.89	0.89	0.94	0.92

PREPARED BY: AimTD LLC tel: 714 253 7888 cs@aimtd.com

Tuesday, October 03, 2017

CITY: Irvine

PROJECT: SC1541

ADT15 Irvine Center north of College**PREPARED BY: AimTD LLC tel: 714 253 7888**

AM Period	NB	SB	PM Period	NB	SB	
0:00	11	8	12:00	227	207	
0:15	9	7	12:15	315	244	
0:30	8	5	12:30	215	214	
0:45	5	33	56	221	978	1880
1:00	12	8	13:00	235	222	
1:15	4	5	13:15	212	208	
1:30	1	5	13:30	209	256	
1:45	2	19	40	263	919	1876
2:00	7	4	14:00	250	185	
2:15	9	4	14:15	212	173	
2:30	7	3	14:30	241	192	
2:45	3	26	40	281	984	1736
3:00	3	5	15:00	319	158	
3:15	2	5	15:15	344	252	
3:30	3	6	15:30	351	181	
3:45	1	9	31	375	1389	2188
4:00	5	10	16:00	454	198	
4:15	4	10	16:15	487	236	
4:30	10	20	16:30	424	218	
4:45	13	32	111	435	1800	2670
5:00	10	31	17:00	458	242	
5:15	14	45	17:15	517	282	
5:30	32	72	17:30	415	260	
5:45	28	84	323	415	1805	2832
6:00	43	68	18:00	411	206	
6:15	63	94	18:15	415	234	
6:30	58	128	18:30	304	272	
6:45	83	247	741	307	1437	2468
7:00	105	151	19:00	292	154	
7:15	145	243	19:15	174	122	
7:30	230	323	19:30	144	101	
7:45	264	744	1912	116	726	1175
8:00	236	386	20:00	113	99	
8:15	203	433	20:15	134	95	
8:30	180	417	20:30	131	79	
8:45	186	805	2452	149	527	871
9:00	146	362	21:00	174	90	
9:15	206	338	21:15	202	84	
9:30	153	230	21:30	122	75	
9:45	124	629	1718	169	667	974
10:00	115	158	22:00	74	52	
10:15	101	175	22:15	50	48	
10:30	190	219	22:30	43	32	
10:45	268	674	1475	34	201	359
11:00	200	164	23:00	21	14	
11:15	173	133	23:15	25	20	
11:30	200	157	23:30	14	10	
11:45	200	773	1409	13	73	128
Total Vol.	4075	6233	10308	11506	7651	19157
					Daily Totals	
				NB	SB	Combined
				15581	13884	29465
						PM
Split %	39.5%	60.5%	35.0%	60.1%	39.9%	65.0%
Peak Hour	11:45	7:45	7:45	16:30	18:00	17:00
Volume	957	1687	2570	1834	1031	2832
P.H.F.	0.76	0.94	0.90	0.97	0.81	0.89

PREPARED BY: AimTD LLC tel: 714 253 7888 cs@aimtd.com

ITAM 15 2020 Cumulative (IRVINE ISEC)							
	LANES	CAPACITY	AM VOL	PK V/C	PM VOL	PK V/C	HOUR
NBL	2	3400	212	.06*	350	.10	
NBT	3	5100	788	.15	1843	.36*	
NBR	1	1700	310	.18	316	.19	
SBL	2	3400	666	.20	364	.11*	
SBT	3	5100	1979	.39*	1287	.25	
SBR	1	1700	335	.20	320	.19	
EBL	2	3400	217	.06	367	.11*	
EBT	3	5100	1134	.22*	771	.15	
EBR	f		319		232		
WBL	2	3400	263	.08*	281	.08	
WBT	3	5100	512	.10	1529	.30*	
WBR	1	1700	185	.11	490	.29	
Clearance Interval				.05*		.05*	
TOTAL CAPACITY UTILIZATION				.80		.93	

ITAM 15 - Description of Intersection Lane Configurations in the Post Processor Databases

8 = De-facto Right turn Lane,	9 = Free flow Right turn lane
11 = Single lane right turn Overlap,	12 = double lane right turn Overlap
Negative = Split Phase	

Loc #	Int.	Intersection (NS & EW)		Intersection Approach Lanes												ATMS	Source	NITM
				Northbound			Southbound			Eastbound			Westbound					
		L	I	R	L	T	R	L	T	R	L	I	R	L	I	R		
289	289 Jeffrey Rd.		ICD														X	
289	Existing 2012	2	3	1	2	3	1	2	3	9	2	3	1					
289	Current 2016																	
289	2030 Improvements																RR Xing/PA12, 4th EBT-PA17 condition of approval rescinded	
289	2035 Improvements	4		3	4	0					4						NITM Program (Fully Funded), convert 1SBR to 4SBR-NITM Program (Fully Funded) advanced to 2030	
289	Buildout (Post-2035) Improvements																PAGC (Work Force Housing)	
289	Final Buildout Conditions	2	4	1	3	4	0	2	3	9	2	4	1	X				

||(s3B289 . Jeffrey Rd. at ICD)(s0B
 JAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
 3 ||(s3BITAM 15 P2035 Cumulative (IRVINE ISEC)
 3
 3
 3 LANES CAPACITY AM PK HOUR PM PK HOUR 3
 3 NBL 2 3400 201 .06* 386 .11* 3
 3 NBT 4 6800 874 .13 1874 .28 3
 3 NBR 1 1700 377 .22 349 .21 3
 3 SBL 3 5100 808 .16 470 .09 3
 3 SBT 4 6800 | 2069 .35* 1408 .27* 3
 3 SBR 0 0 317 413 3
 3 EBL 2 3400 305 .09 417 .12* 3
 3 EBT 3 5100 1745 .34* 951 .19 3
 3 EBR f 422 242 3
 3 WBL 2 3400 308 .09* 310 .09 3
 3 WBT 4 6800 543 .08 1991 .29* 3
 3 WBR 1 1700 230 .14 589 .35 3
 3 Clearance Interval .05* .05* 3
 JAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
 ||(s3BTOTAL CAPACITY UTILIZATION .89 .84||(s

Appendix B

Intersection Operations Analysis Worksheets

E AM

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Jeffrey Road at Irvine Center Drive
Existing 2017 Conditions

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec): 100 Critical Vol./Cap.(X): 0.695
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: B

Street Name: Jeffrey Road ICD
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 Protected Protected
Rights: Include Include Ignore Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1
-----|-----|-----|-----|-----|-----|-----|-----|

Volume Module:

Base Vol:	147	510	224	503	1757	317	172	1022	303	192	553	143
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:	147	510	224	503	1757	317	172	1022	303	192	553	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	147	510	224	503	1757	317	172	1022	0	192	553	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	510	224	503	1757	317	172	1022	0	192	553	143
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	147	510	224	503	1757	317	172	1022	0	192	553	143

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	5100	1700	3400	5100	1700	3400	5100	1700	3400	5100	1700

Capacity Analysis Module:

Vol/Sat:	0.04	0.10	0.13	0.15	0.34	0.19	0.05	0.20	0.00	0.06	0.11	0.08
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

E PM

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Jeffrey Road at Irvine Center Drive
Existing 2017 Conditions

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec): 100 Critical Vol./Cap.(X): 0.789
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: C

Street Name: Jeffrey Road ICD
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 Protected Protected
Rights: Include Include Ignore Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1
-----|-----|-----|-----|-----|-----|-----|-----|

Volume Module:

Base Vol:	346	1552	188	320	1018	259	342	611	159	210	1138	408
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:	346	1552	188	320	1018	259	342	611	159	210	1138	408
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	346	1552	188	320	1018	259	342	611	0	210	1138	408
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	346	1552	188	320	1018	259	342	611	0	210	1138	408
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	346	1552	188	320	1018	259	342	611	0	210	1138	408

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	5100	1700	3400	5100	1700	3400	5100	1700	3400	5100	1700

Capacity Analysis Module:

Vol/Sat:	0.10	0.30	0.11	0.09	0.20	0.15	0.10	0.12	0.00	0.06	0.22	0.24
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

2020 AM

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Jeffrey Road at Irvine Center Drive
Near-Term 2020
without Project Conditions

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec): 100 Critical Vol./Cap.(X): 0.800
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level Of Service: D

Street Name: Jeffrey Road ICD
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 Protected Protected
Rights: Include Include Ignore Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1
-----|-----|-----|-----|

Volume Module:

Base Vol:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	212	788	310	666	1979	335	217	1134	319	263	512	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	788	310	666	1979	335	217	1134	319	263	512	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	212	788	310	666	1979	335	217	1134	0	263	512	185
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	788	310	666	1979	335	217	1134	0	263	512	185
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	212	788	310	666	1979	335	217	1134	0	263	512	185

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	5100	1700	3400	5100	1700	3400	5100	1700	3400	5100	1700

Capacity Analysis Module:

Vol/Sat:	0.06	0.15	0.18	0.20	0.39	0.20	0.06	0.22	0.00	0.08	0.10	0.11
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

2020 PM

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Jeffrey Road at Irvine Center Drive
Near-Term 2020
without Project Conditions

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec): 100 Critical Vol./Cap.(X): 0.926
Loss Time (sec): 5 Average Delay (sec/veh): *****
Optimal Cycle: 105 Level Of Service: E

Street Name: Jeffrey Road ICD
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 Protected Protected
Rights: Include Include Ignore Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1
-----|-----|-----|-----|-----|

Volume Module:

Base Vol:	350	1843	316	364	1287	320	367	771	232	281	1529	490
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:	350	1843	316	364	1287	320	367	771	232	281	1529	490
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	350	1843	316	364	1287	320	367	771	232	281	1529	490
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	350	1843	316	364	1287	320	367	771	0	281	1529	490
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	1843	316	364	1287	320	367	771	0	281	1529	490
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	350	1843	316	364	1287	320	367	771	0	281	1529	490

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	5100	1700	3400	5100	1700	3400	5100	1700	3400	5100	1700

Capacity Analysis Module:

Vol/Sat:	0.10	0.36	0.19	0.11	0.25	0.19	0.11	0.15	0.00	0.08	0.30	0.29
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Jeffrey Road at Irvine Center Drive
Near-Term 2020
NITM Improvements

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Street Name:	Jeffrey Road				ICD
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	Protected	Protected	
Rights:	Include	Include	Ignore	Ovl	
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	2 0 4 0 1	3 0 3 1 0	2 0 3 0 1	2 0 4 0 1	

Volume Module:

Base Vol:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	212	788	310	666	1979	335	217	1134	319	263	512	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	788	310	666	1979	335	217	1134	319	263	512	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	212	788	310	666	1979	335	217	1134	0	263	512	185
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	788	310	666	1979	335	217	1134	0	263	512	185
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	212	788	310	666	1979	335	217	1134	0	263	512	185
OvlAdjVol:	0											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	3.00	3.42	0.58	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	6800	1700	5100	5816	984	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:

Vol/Sat:	0.06	0.12	0.18	0.13	0.34	0.34	0.06	0.22	0.00	0.08	0.08	0.11
OvlAdjV/S:	0.00											
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Jeffrey Road at Irvine Center Drive
Near-Term 2020
With NITM Improvements Except for 3rd SBL

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C
Street Name: Jeffrey Road			ICD
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Ovl	Include	Ignore
Min. Green:	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4	0 1 2	0 3 1
Volume Module:			
Base Vol:	212 788 310	666 1979 335	217 1134 319
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	212 788 310	666 1979 335	217 1134 319
Added Vol:	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	212 788 310	666 1979 335	217 1134 319
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
PHF Volume:	212 788 310	666 1979 335	217 1134 0
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	212 788 310	666 1979 335	217 1134 0
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
FinalVolume:	212 788 310	666 1979 335	217 1134 0
OvlAdjVol:	179		
Saturation Flow Module:			
Sat/Lane:	1700 1700 1700	1700 1700 1700	1700 1700 1700
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	2.00 4.00 1.00	2.00 3.42 0.58	2.00 3.00 1.00
Final Sat.:	3400 6800 1700	3400 5816 984	3400 5100 1700
Capacity Analysis Module:			
Vol/Sat:	0.06 0.12 0.18	0.20 0.34 0.34	0.06 0.22 0.00
OvlAdjV/S:	0.11		
Crit Moves:	****	****	****

 Jeffrey Road at Irvine Center Drive
 Near-Term 2020 With NITM Improvements Except for 3rd SBL
 and with Added SBR (NBR Adjustment .02)

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	C

Street Name:	Jeffrey Road				ICD
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	Protected	Protected	
Rights:	Ovl	Include	Ignore	Ovl	
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	2 0 4 0 1	2 0 4 0 1	2 0 3 0 1	2 0 4 0 1	

Volume Module:												
Base Vol:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	212	788	310	666	1979	335	217	1134	319	263	512	185
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	212	788	310	666	1979	335	217	1134	319	263	512	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	212	788	310	666	1979	335	217	1134	0	263	512	185
Reducet Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	212	788	310	666	1979	335	217	1134	0	263	512	185
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	212	788	310	666	1979	335	217	1134	0	263	512	185
OvlAdjVol:	0											

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.18	0.20	0.29	0.20	0.06	0.22	0.00	0.08	0.08	0.11
OvlAdjV/S:	0.11											
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

 Jeffrey Road at Irvine Center Drive
 Near-Term 2020 With NITM Improvements Except for 3rd SBL and
 with Conversion of Free EBR to a Standard EBR Lane

 Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Street Name:	Jeffrey Road ICD			
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	Protected	Protected
Rights:	Ovl	Include	Include	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	2 0 3 1 0	2 0 3 0 1	2 0 4 0 1

Volume Module:												
Base Vol:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	212	788	310	666	1979	335	217	1134	319	263	512	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	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 Volume:	212	788	310	666	1979	335	217	1134	319	263	512	185
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	212	788	310	666	1979	335	217	1134	319	263	512	185
OvlAdjVol:												0

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	2.00	3.42	0.58	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	6800	1700	3400	5816	984	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.18	0.20	0.34	0.34	0.06	0.22	0.19	0.08	0.08	0.11
OvlAdjV/S:												0.00
Crit Moves:	****		****		****		****		****		****	

 Jeffrey Road at Irvine Center Drive
 Near-Term 2020 With NITM Improvements Except for 3rd SBL and with Added SBR
 and Conversion of Free EBR to a Standard EBR Lane (NBR Adjustment .02)

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

 Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	C

Street Name:	Jeffrey Road ICD			
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	Protected	Protected
Rights:	Ovl	Include	Include	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	2 0 4 0 1	2 0 3 0 1	2 0 4 0 1

Volume Module:												
Base Vol:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	212	788	310	666	1979	335	217	1134	319	263	512	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	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 Volume:	212	788	310	666	1979	335	217	1134	319	263	512	185
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	212	788	310	666	1979	335	217	1134	319	263	512	185
OvlAdjVol:												0

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.18	0.20	0.29	0.20	0.06	0.22	0.19	0.08	0.08	0.11
OvlAdjV/S:												0.00
Crit Moves:	****		****		****		****		****		****	

Jeffrey Road at Irvine Center Drive
Near-Term 2020 With NITM Improvements
Except for 4th WBT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C
Street Name: Jeffrey Road			ICD
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Include	Ignore
Min. Green:	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	3 0 3 1 0	2 0 3 0 1
Volume Module:			
Base Vol:	212 788 310 666 1979	335 217 1134	319 263 512 185
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:	212 788 310 666 1979	335 217 1134	319 263 512 185
Added Vol:	0 0 0 0 0	0 0 0	0 0 0 0
PasserByVol:	0 0 0 0 0	0 0 0	0 0 0 0
Initial Fut:	212 788 310 666 1979	335 217 1134	319 263 512 185
User Adj:	1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00 1.00
PHF Volume:	212 788 310 666 1979	335 217 1134	0 263 512 185
Reduced Vol:	0 0 0 0 0	0 0 0	0 0 0 0
Reduced Vol:	212 788 310 666 1979	335 217 1134	0 263 512 185
PCE Adj:	1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00 1.00
FinalVolume:	212 788 310 666 1979	335 217 1134	0 263 512 185
OvlAdjVol:			0
Saturation Flow Module:			
Sat/Lane:	1700 1700 1700 1700 1700	1700 1700 1700	1700 1700 1700 1700
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:	2.00 4.00 1.00 3.00 3.42	0.58 2.00 3.00	1.00 2.00 3.00 1.00
Final Sat.:	3400 6800 1700 5100 5816	984 3400 5100	1700 3400 5100 1700
Capacity Analysis Module:			
Vol/Sat:	0.06 0.12 0.18 0.13 0.34	0.34 0.06 0.22	0.00 0.08 0.10 0.11
OvlAdjV/S:			0.00
Crit Moves:	****	****	****

Jeffrey Road at Irvine Center Drive
Near-Term 2020 With NITM Improvements Except for 4th SBT and
with Added SBR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	D

Street Name:	Jeffrey Road ICD			
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	Protected	Protected
Rights:	Include	Include	Ignore	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	3 0 3 0 1	2 0 3 0 1	2 0 4 0 1

Volume Module:												
Base Vol:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	212	788	310	666	1979	335	217	1134	319	263	512	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	788	310	666	1979	335	217	1134	319	263	512	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	212	788	310	666	1979	335	217	1134	0	263	512	185
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	788	310	666	1979	335	217	1134	0	263	512	185
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	212	788	310	666	1979	335	217	1134	0	263	512	185
OvlAdjVol:									0			

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	3.00	3.00	1.00	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	6800	1700	5100	5100	1700	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.18	0.13	0.39	0.20	0.06	0.22	0.00	0.08	0.08	0.11
OvlAdjV/S:												0.00
Crit Moves:	****		****		****		****		****		****	

Jeffrey Road at Irvine Center Drive
Near-Term 2020 With NITM Improvements
Except for 4th NBT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C
Street Name: Jeffrey Road			ICD
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Include	Ignore
Min. Green:	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 3 0 1	3 0 3 1 0	2 0 3 0 1
Volume Module:			
Base Vol:	212 788 310	666 1979 335	217 1134 319
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	212 788 310	666 1979 335	217 1134 319
Added Vol:	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	212 788 310	666 1979 335	217 1134 319
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
PHF Volume:	212 788 310	666 1979 335	217 1134 0
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	212 788 310	666 1979 335	217 1134 0
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
FinalVolume:	212 788 310	666 1979 335	217 1134 0
OvlAdjVol:			0
Saturation Flow Module:			
Sat/Lane:	1700 1700 1700	1700 1700 1700	1700 1700 1700
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	2.00 3.00 1.00	3.00 3.42 0.58	2.00 3.00 1.00
Final Sat.:	3400 5100 1700	5100 5816 984	3400 5100 1700
Capacity Analysis Module:			
Vol/Sat:	0.06 0.15 0.18	0.13 0.34 0.34	0.06 0.22 0.00
OvlAdjV/S:			0.00
Crit Moves:	****	****	****

Jeffrey Road at Irvine Center Drive
Near-Term 2020
NITM Improvements

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	C

Street Name:	Jeffrey Road				ICD
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	Protected	Protected	
Rights:	Include	Include	Ignore	Ovl	
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	2 0 4 0 1	3 0 3 1 0	2 0 3 0 1	2 0 4 0 1	

Volume Module:												
Base Vol:	350	1843	316	364	1287	320	367	771	232	281	1529	490
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:	350	1843	316	364	1287	320	367	771	232	281	1529	490
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	350	1843	316	364	1287	320	367	771	232	281	1529	490
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	350	1843	316	364	1287	320	367	771	0	281	1529	490
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	1843	316	364	1287	320	367	771	0	281	1529	490
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	350	1843	316	364	1287	320	367	771	0	281	1529	490
OvlAdjVol:												369

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	3.00	3.20	0.80	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	6800	1700	5100	5446	1354	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:												
Vol/Sat:	0.10	0.27	0.19	0.07	0.24	0.24	0.11	0.15	0.00	0.08	0.22	0.29
OvlAdjV/S:												0.22
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Jeffrey Road at Irvine Center Drive

Near-Term 2020

With NITM Improvements Except for 3rd SBL

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761					
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx					
Optimal Cycle:	45	Level Of Service:	C					
Street Name:	Jeffrey Road ICD							
Approach:	North Bound	South Bound	East Bound					
Movement:	L - T - R	L - T - R	L - T - R					
Control:	Protected	Protected	Protected					
Rights:	Ovl	Include	Ignore					
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	2 0 4	0 1 2	0 3 1	0 2 0	3 0 1	2 0 4	0 1 2	
Volume Module:								
Base Vol:	350 1843	316	364 1287	320	367 771	232	281 1529	490
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:	350 1843	316	364 1287	320	367 771	232	281 1529	490
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	350 1843	316	364 1287	320	367 771	232	281 1529	490
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	0.00	1.00 1.00	1.00
PHF Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	0.00	1.00 1.00	1.00
PHF Volume:	350 1843	316	364 1287	320	367 771	0	281 1529	490
Reduced Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	350 1843	316	364 1287	320	367 771	0	281 1529	490
PCE Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	0.00	1.00 1.00	1.00
MLF Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	0.00	1.00 1.00	1.00
FinalVolume:	350 1843	316	364 1287	320	367 771	0	281 1529	490
OvlAdjVol:	308							
Saturation Flow Module:								
Sat/Lane:	1700 1700	1700	1700 1700	1700	1700 1700	1700	1700 1700	1700
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:	2.00 4.00	1.00	2.00 3.20	0.80	2.00 3.00	1.00	2.00 4.00	1.00
Final Sat.:	3400 6800	1700	3400 5446	1354	3400 5100	1700	3400 6800	1700
Capacity Analysis Module:								
Vol/Sat:	0.10 0.27	0.19	0.11 0.24	0.24	0.11 0.15	0.00	0.08 0.22	0.29
OvlAdjV/S:	0.10 0.18							
Crit Moves:	****	****	****	****	****	****	****	****

Jeffrey Road at Irvine Center Drive
Near-Term 2020 With NITM Improvements Except for 3rd SBL
and with Added SBR

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761	
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	45	Level Of Service:	C	
Street Name: Jeffrey Road			ICD	
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Protected	Protected	Protected	
Rights:	Ovl	Include	Ignore	
Min. Green:	0 0 0	0 0 0	0 0 0	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	2 0 4	0 1 2	0 4 0	
Volume Module:			West Bound	
Base Vol:	350 1843	316 364	1287 320 367 771	232 281 1529 490
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00 1.00
Initial Bse:	350 1843	316 364	1287 320 367 771	232 281 1529 490
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0 0 0
Initial Fut:	350 1843	316 364	1287 320 367 771	232 281 1529 490
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00 1.00 1.00
PHF Volume:	350 1843	316 364	1287 320 367 771	0 281 1529 490
Reduced Vol:	0 0 0	0 0 0	0 0 0	0 0 0 0 0
Reduced Vol:	350 1843	316 364	1287 320 367 771	0 281 1529 490
PCE Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00 1.00 1.00
MLF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00 1.00 1.00
FinalVolume:	350 1843	316 364	1287 320 367 771	0 281 1529 490
OvlAdjVol:	176			308
Saturation Flow Module:			Capacity Analysis Module:	
Sat/Lane:	1700 1700	1700 1700	1700 1700	1700 1700 1700 1700
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00
Lanes:	2.00 4.00	1.00 2.00	4.00 1.00	3.00 1.00 2.00 4.00 1.00
Final Sat.:	3400 6800	1700 3400	6800 1700 3400 5100	1700 3400 6800 1700
Vol/Sat:	0.10 0.27	0.19 0.11	0.19 0.11	0.15 0.00 0.08 0.22 0.29
OvlAdjV/S:	0.10			0.18
Crit Moves:	****	****	****	****

Jeffrey Road at Irvine Center Drive
Near-Term 2020 With NITM Improvements Except for 3rd SBL and
with Conversion of Free EBR to a Standard EBR Lane

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	C

Street Name:	Jeffrey Road ICD			
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	Protected	Protected
Rights:	Ovl	Include	Include	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	2 0 3 1 0	2 0 3 0 1	2 0 4 0 1

Volume Module:												
Base Vol:	350	1843	316	364	1287	320	367	771	232	281	1529	490
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:	350	1843	316	364	1287	320	367	771	232	281	1529	490
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	350	1843	316	364	1287	320	367	771	232	281	1529	490
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:	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 Volume:	350	1843	316	364	1287	320	367	771	232	281	1529	490
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	1843	316	364	1287	320	367	771	232	281	1529	490
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:	350	1843	316	364	1287	320	367	771	232	281	1529	490
OvlAdjVol:												308

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	2.00	3.20	0.80	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	6800	1700	3400	5446	1354	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:												
Vol/Sat:	0.10	0.27	0.19	0.11	0.24	0.24	0.11	0.15	0.14	0.08	0.22	0.29
OvlAdjV/S:			0.10									0.18
Crit Moves:	****		****		****		****		****		****	

 Jeffrey Road at Irvine Center Drive
 Near-Term 2020 With NITM Improvements Except for 3rd SBL and with Added SBR
 and Conversion of Free EBR to a Standard EBR Lane

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

 Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.703
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	C

Street Name:	Jeffrey Road ICD			
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	Protected	Protected
Rights:	Ovl	Include	Include	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	2 0 4 0 1	2 0 3 0 1	2 0 4 0 1

Volume Module:												
Base Vol:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	212	788	310	666	1979	335	217	1134	319	263	512	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	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 Volume:	212	788	310	666	1979	335	217	1134	319	263	512	185
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	788	310	666	1979	335	217	1134	319	263	512	185
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:	212	788	310	666	1979	335	217	1134	319	263	512	185
OvlAdjVol:												0

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.18	0.20	0.29	0.20	0.06	0.22	0.19	0.08	0.08	0.11
OvlAdjV/S:												0.00
Crit Moves:	****		****		****		****		****		****	

Jeffrey Road at Irvine Center Drive
Near-Term 2020 With NITM Improvements
Except for 4th WBT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	D

Street Name:	Jeffrey Road ICD			
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	Protected	Protected
Rights:	Include	Include	Ignore	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	3 0 3 1 0	2 0 3 0 1	2 0 3 0 1

Volume Module:												
Base Vol:	350	1843	316	364	1287	320	367	771	232	281	1529	490
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:	350	1843	316	364	1287	320	367	771	232	281	1529	490
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	350	1843	316	364	1287	320	367	771	232	281	1529	490
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	350	1843	316	364	1287	320	367	771	0	281	1529	490
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	1843	316	364	1287	320	367	771	0	281	1529	490
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	350	1843	316	364	1287	320	367	771	0	281	1529	490
OvlAdjVol:												369

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	3.00	3.20	0.80	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	5100	5446	1354	3400	5100	1700	3400	5100	1700

Capacity Analysis Module:												
Vol/Sat:	0.10	0.27	0.19	0.07	0.24	0.24	0.11	0.15	0.00	0.08	0.30	0.29
OvlAdjV/S:												0.22
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Jeffrey Road at Irvine Center Drive
Near-Term 2020 With NITM Improvements Except for 4th SBT and
with Added SBR

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.738
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C
Street Name: Jeffrey Road			ICD
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Include	Ignore
Min. Green:	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	3 0 3 0 1	2 0 3 0 1
Volume Module:			
Base Vol:	350 1843	316 364 1287	320 367 771
Growth Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	350 1843	316 364 1287	320 367 771
Added Vol:	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	350 1843	316 364 1287	320 367 771
User Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	350 1843	316 364 1287	320 367 771
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	350 1843	316 364 1287	320 367 771
PCE Adj:	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
FinalVolume:	350 1843	316 364 1287	320 367 771
OvlAdjVol:			369
Saturation Flow Module:			
Sat/Lane:	1700 1700	1700 1700 1700	1700 1700 1700
Adjustment:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	2.00 4.00	1.00 3.00 3.00	2.00 3.00 1.00
Final Sat.:	3400 6800	1700 5100 5100	3400 5100 1700
Capacity Analysis Module:			
Vol/Sat:	0.10 0.27	0.19 0.07 0.25	0.19 0.11 0.15
OvlAdjV/S:			0.22
Crit Moves:	****	****	****

Jeffrey Road at Irvine Center Drive
Near-Term 2020 With NITM Improvements
Except for 4th NBT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.816			
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx			
Optimal Cycle:	55	Level Of Service:	D			
<hr/>						
Street Name:	Jeffrey Road ICD					
Approach:	North Bound	South Bound	East Bound			
Movement:	L - T - R	L - T - R	L - T - R			
	-----	-----	-----			
Control:	Protected	Protected	Protected			
Rights:	Include	Include	Ignore			
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0		
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0		
Lanes:	2 0 3 0 1	3 0 3 1 0	2 0 3 0 1	2 0 4 0 1		
	-----	-----	-----			
Volume Module:						
Base Vol:	350 1843	316 364	1287 320	367 771	232 281	1529 490
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:	350 1843	316 364	1287 320	367 771	232 281	1529 490
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	350 1843	316 364	1287 320	367 771	232 281	1529 490
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00	1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00	1.00 1.00
PHF Volume:	350 1843	316 364	1287 320	367 771	0 281	1529 490
Reducet Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	350 1843	316 364	1287 320	367 771	0 281	1529 490
PCE Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00	1.00 1.00
MLF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00	1.00 1.00
FinalVolume:	350 1843	316 364	1287 320	367 771	0 281	1529 490
OvlAdjVol:	369					
	-----	-----	-----	-----		
Saturation Flow Module:						
Sat/Lane:	1700 1700	1700 1700	1700 1700	1700 1700	1700 1700	1700 1700
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:	2.00 3.00	1.00 3.00	3.00 3.20	0.80 2.00	3.00 1.00	2.00 4.00
Final Sat.:	3400 5100	1700 5100	5446 1354	3400 5100	1700 3400	6800 1700
	-----	-----	-----	-----		
Capacity Analysis Module:						
Vol/Sat:	0.10 0.36	0.19 0.07	0.24 0.24	0.11 0.15	0.00 0.08	0.22 0.29
OvlAdjV/S:	0.22					
Crit Moves:	****	****	****	****	****	****

Jeffrey Road at Irvine Center Drive
Post 2035
without Project Conditions

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.948
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	127	Level Of Service:	E

Street Name:	Jeffrey Road				ICD
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	Protected	Protected	
Rights:	Include	Include	Ignore	Include	
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	2 0 3 0 1	2 0 3 0 1	2 0 3 0 1	2 0 3 0 1	

Volume Module:												
Base Vol:	201	874	377	808	2069	317	305	1745	422	308	543	230
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:	201	874	377	808	2069	317	305	1745	422	308	543	230
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	201	874	377	808	2069	317	305	1745	422	308	543	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	201	874	377	808	2069	317	305	1745	0	308	543	230
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	874	377	808	2069	317	305	1745	0	308	543	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	201	874	377	808	2069	317	305	1745	0	308	543	230

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	5100	1700	3400	5100	1700	3400	5100	1700	3400	5100	1700

Capacity Analysis Module:												
Vol/Sat:	0.06	0.17	0.22	0.24	0.41	0.19	0.09	0.34	0.00	0.09	0.11	0.14
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Jeffrey Road at Irvine Center Drive
Post 2035
without Project Conditions

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec): 100 Critical Vol./Cap.(X): 1.069
 Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

Street Name: Jeffrey Road ICD

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 Protected Protected
 Rights: Include Include Ignore Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1

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Volume Module:

Base Vol: 386 1874 349 470 1408 413 417 951 242 310 1991 589

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 1.00 1.00 1.00

Initial Bse: 386 1874 349 470 1408 413 417 951 242 310 1991 589

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 386 1874 349 470 1408 413 417 951 242 310 1991 589

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00

PHF Volume: 386 1874 349 470 1408 413 417 951 0 310 1991 589

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 386 1874 349 470 1408 413 417 951 0 310 1991 589

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00

FinalVolume: 386 1874 349 470 1408 413 417 951 0 310 1991 589

-----|-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700

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: 2.00 3.00 1.00 2.00 3.00 1.00 2.00 3.00 1.00 2.00 3.00 1.00

Final Sat.: 3400 5100 1700 3400 5100 1700 3400 5100 1700 3400 5100 1700

-----|-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.11 0.37 0.21 0.14 0.28 0.24 0.12 0.19 0.00 0.09 0.39 0.35

Crit Moves: **** **** **** ****

Jeffrey Road at Irvine Center Drive
Post 2035
NITM Improvements

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D

Street Name:	Jeffrey Road				ICD
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	Protected	Protected	
Rights:	Include	Include	Ignore	Ovl	
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	2 0 4 0 1	3 0 3 1 0	2 0 3 0 1	2 0 4 0 1	

Volume Module:												
Base Vol:	201	874	377	808	2069	317	305	1745	422	308	543	230
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:	201	874	377	808	2069	317	305	1745	422	308	543	230
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	201	874	377	808	2069	317	305	1745	422	308	543	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	201	874	377	808	2069	317	305	1745	0	308	543	230
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	874	377	808	2069	317	305	1745	0	308	543	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	201	874	377	808	2069	317	305	1745	0	308	543	230
OvlAdjVol:									0			

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	3.00	3.47	0.53	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	6800	1700	5100	5897	903	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.22	0.16	0.35	0.35	0.09	0.34	0.00	0.09	0.08	0.14
OvlAdjV/S:												0.00
Crit Moves:	****		****		****		****		****		****	

Jeffrey Road at Irvine Center Drive

Post 2035

With NITM Improvements Except for 3rd SBL

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893					
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx					
Optimal Cycle:	83	Level Of Service:	D					
Street Name:	Jeffrey Road ICD							
Approach:	North Bound	South Bound	East Bound					
Movement:	L - T - R	L - T - R	L - T - R					
Control:	Protected	Protected	Protected					
Rights:	Ovl	Include	Ignore					
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	2 0 4	0 1 2	0 3 1	0 2 0	3 0 1	2 0 4	0 1 2	
Volume Module:								
Base Vol:	201 874 377	808 2069	317	305 1745	422	308 543	230	
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	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	
Initial Bse:	201 874 377	808 2069	317	305 1745	422	308 543	230	
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	
Initial Fut:	201 874 377	808 2069	317	305 1745	422	308 543	230	
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	0.00 0.00 0.00	1.00 1.00 1.00	1.00 1.00 1.00	
PHF 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	0.00 0.00 0.00	1.00 1.00 1.00	1.00 1.00 1.00	
PHF Volume:	201 874 377	808 2069	317	305 1745	0	308 543	230	
Reducet Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	
Reduced Vol:	201 874 377	808 2069	317	305 1745	0	308 543	230	
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	0.00 0.00 0.00	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	0.00 0.00 0.00	1.00 1.00 1.00	1.00 1.00 1.00	
FinalVolume:	201 874 377	808 2069	317	305 1745	0	308 543	230	
OvlAdjVol:	223							0
Saturation Flow Module:								
Sat/Lane:	1700 1700 1700	1700 1700	1700 1700	1700 1700	1700 1700	1700 1700	1700 1700	
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	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	
Lanes:	2.00 4.00 1.00	2.00 3.47 0.53	2.00 3.00 1.00	2.00 3.00 1.00	2.00 4.00 1.00	2.00 4.00 1.00	2.00 4.00 1.00	
Final Sat.:	3400 6800 1700	3400 5897	903	3400 5100	1700	3400 6800	1700	
Capacity Analysis Module:								
Vol/Sat:	0.06 0.13 0.22	0.24 0.35 0.35	0.09 0.34 0.00	0.09 0.08 0.09	0.08 0.14 0.00			
OvlAdjV/S:	0.13							0.00
Crit Moves:	****	****	****	****	****	****	****	

 Jeffrey Road at Irvine Center Drive
 Post 2035 With NITM Improvements Except for 3rd SBL
 and with Added SBR (NBR Right Turn Adjustment .02)

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

 Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.869	
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	79	Level Of Service:	D	

Street Name:	Jeffrey Road ICD			
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
	-----	-----	-----	-----
Control:	Protected	Protected	Protected	Protected
Rights:	Ovl	Include	Ignore	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	2 0 4 0 1	2 0 3 0 1	2 0 4 0 1
	-----	-----	-----	-----
Volume Module:				
Base Vol:	201 874 377	808 2069	317 305 1745	422 308 543 230
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 1.00
Initial Bse:	201 874 377	808 2069	317 305 1745	422 308 543 230
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	201 874 377	808 2069	317 305 1745	422 308 543 230
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 1.00
PHF 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 1.00
PHF Volume:	201 874 377	808 2069	317 305 1745	0 308 543 230
Reducet Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	201 874 377	808 2069	317 305 1745	0 308 543 230
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 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 1.00
FinalVolume:	201 874 377	808 2069	317 305 1745	0 308 543 230
OvlAdjVol:	223 0			
	-----	-----	-----	-----
Saturation Flow Module:				
Sat/Lane:	1700 1700 1700	1700 1700	1700 1700	1700 1700 1700
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 1.00
Lanes:	2.00 4.00 1.00	2.00 4.00 1.00	2.00 3.00 1.00	2.00 4.00 1.00
Final Sat.:	3400 6800 1700	3400 6800 1700	3400 5100 1700	3400 6800 1700
	-----	-----	-----	-----
Capacity Analysis Module:				
Vol/Sat:	0.06 0.13 0.22	0.24 0.30 0.19	0.09 0.34 0.00	0.09 0.08 0.14
OvlAdjV/S:	0.13			0.00
Crit Moves:	****	****	****	****

 Jeffrey Road at Irvine Center Drive
 Post 2035 With NITM Improvements Except for 3rd SBL and
 with Conversion of Free EBR to a Standard EBR Lane

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D
Street Name: Jeffrey Road			ICD
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Ovl	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4	0 1 2	0 3 1
Volume Module:			West Bound
Base Vol:	201 874 377	808 2069 317	305 1745 422
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	201 874 377	808 2069 317	305 1745 422
Added Vol:	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	201 874 377	808 2069 317	305 1745 422
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	201 874 377	808 2069 317	305 1745 422
Reducet Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	201 874 377	808 2069 317	305 1745 422
PCE Adj:	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
FinalVolume:	201 874 377	808 2069 317	305 1745 422
OvlAdjVol:	223		
Saturation Flow Module:			0
Sat/Lane:	1700 1700 1700	1700 1700 1700	1700 1700 1700
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	2.00 4.00 1.00	2.00 3.47 0.53	2.00 3.00 1.00
Final Sat.:	3400 6800 1700	3400 5897 903	3400 5100 1700
Capacity Analysis Module:			1700
Vol/Sat:	0.06 0.13 0.22	0.24 0.35 0.35	0.09 0.34 0.25
OvlAdjV/S:	0.13		
Crit Moves:	****	****	****

 Jeffrey Road at Irvine Center Drive
 Post 2035 With NITM Improvements Except for 3rd SBL and with Added SBR
 and Conversion of Free EBR to a Standard EBR Lane (NBR RT Adjustment .02)

 Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.869	
Loss Time (sec):	7	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	79	Level Of Service:	D	

Street Name:	Jeffrey Road ICD			
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
	-----	-----	-----	
Control:	Protected	Protected	Protected	
Rights:	Ovl	Include	Include	
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4	0 1 2	0 4 0	1 2 0
	-----	-----	-----	
Volume Module:				
Base Vol:	201 874 377	808 2069 317	305 1745 422	308 543 230
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:	201 874 377	808 2069 317	305 1745 422	308 543 230
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	201 874 377	808 2069 317	305 1745 422	308 543 230
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:	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 Volume:	201 874 377	808 2069 317	305 1745 422	308 543 230
Reducet Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	201 874 377	808 2069 317	305 1745 422	308 543 230
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:	201 874 377	808 2069 317	305 1745 422	308 543 230
OvlAdjVol:	223			0
	-----	-----	-----	
Saturation Flow Module:				
Sat/Lane:	1700 1700 1700	1700 1700 1700	1700 1700 1700	1700 1700 1700
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:	2.00 4.00 1.00	2.00 4.00 1.00	2.00 3.00 1.00	2.00 4.00 1.00
Final Sat.:	3400 6800 1700	3400 6800 1700	3400 5100 1700	3400 6800 1700
	-----	-----	-----	
Capacity Analysis Module:				
Vol/Sat:	0.06 0.13 0.22	0.24 0.30 0.19	0.09 0.34 0.25	0.09 0.08 0.14
OvlAdjV/S:	0.13			0.00
Crit Moves:	****	****	****	****
	-----	-----	-----	

Jeffrey Road at Irvine Center Drive
 Post 2035 With NITM Improvements
 Except for 4th WBT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec): 100 Critical Vol./Cap.(X): 0.893
 Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 83 Level Of Service: D

Street Name: Jeffrey Road ICD
 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	Protected	Protected
Rights:	Include	Include	Ignore	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	3 0 3 1 0	2 0 3 0 1	2 0 3 0 1

Volume Module:

Base Vol:	201	874	377	808	2069	317	305	1745	422	308	543	230
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:	201	874	377	808	2069	317	305	1745	422	308	543	230
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	201	874	377	808	2069	317	305	1745	422	308	543	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	201	874	377	808	2069	317	305	1745	0	308	543	230
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	874	377	808	2069	317	305	1745	0	308	543	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	201	874	377	808	2069	317	305	1745	0	308	543	230
OvlAdjVol:									0			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	3.00	3.47	0.53	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	5100	5897	903	3400	5100	1700	3400	5100	1700

Capacity Analysis Module:

Vol/Sat:	0.06	0.13	0.22	0.16	0.35	0.35	0.09	0.34	0.00	0.09	0.11	0.14
OvlAdjV/S:												0.00
Crit Moves:	****		****		****		****		****		****	

Jeffrey Road at Irvine Center Drive
Post 2035 With NITM Improvements Except for 4th SBT and
with Added SBR

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.948
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	127	Level Of Service:	E
Street Name: Jeffrey Road			ICD
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Include	Ignore
Min. Green:	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	3 0 3 0 1	2 0 3 0 1
Volume Module:			
Base Vol:	201 874 377	808 2069	317 305 1745
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	201 874 377	808 2069	317 305 1745
Added Vol:	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	201 874 377	808 2069	317 305 1745
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
PHF Volume:	201 874 377	808 2069	317 305 1745
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	201 874 377	808 2069	317 305 1745
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	0.00 1.00 1.00
FinalVolume:	201 874 377	808 2069	317 305 1745
OvlAdjVol:			0
Saturation Flow Module:			
Sat/Lane:	1700 1700 1700	1700 1700	1700 1700 1700
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	2.00 4.00 1.00	3.00 3.00 1.00	2.00 3.00 1.00
Final Sat.:	3400 6800 1700	5100 5100 1700	3400 5100 1700
Capacity Analysis Module:			
Vol/Sat:	0.06 0.13 0.22	0.16 0.41 0.19	0.09 0.34 0.00
OvlAdjV/S:			0.00
Crit Moves:	****	****	****

Jeffrey Road at Irvine Center Drive
Post 2035 With NITM Improvements
Except for 4th NBT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D

Street Name:	Jeffrey Road ICD			
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	Protected	Protected
Rights:	Include	Include	Ignore	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 3 0 1	3 0 3 1 0	2 0 3 0 1	2 0 4 0 1

Volume Module:												
Base Vol:	201	874	377	808	2069	317	305	1745	422	308	543	230
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:	201	874	377	808	2069	317	305	1745	422	308	543	230
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	201	874	377	808	2069	317	305	1745	422	308	543	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	201	874	377	808	2069	317	305	1745	0	308	543	230
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	874	377	808	2069	317	305	1745	0	308	543	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	201	874	377	808	2069	317	305	1745	0	308	543	230
OvlAdjVol:									0			

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	3.00	1.00	3.00	3.47	0.53	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	5100	1700	5100	5897	903	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:												
Vol/Sat:	0.06	0.17	0.22	0.16	0.35	0.35	0.09	0.34	0.00	0.09	0.08	0.14
OvlAdjV/S:												0.00
Crit Moves:	****		****		****		****		****		****	

Jeffrey Road at Irvine Center Drive
Post 2035
NITM Improvements

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.847
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	D

Street Name:	Jeffrey Road ICD			
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	Protected	Protected
Rights:	Include	Include	Ignore	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	3 0 3 1 0	2 0 3 0 1	2 0 4 0 1

Volume Module:

Base Vol:	386	1874	349	470	1408	413	417	951	242	310	1991	589
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:	386	1874	349	470	1408	413	417	951	242	310	1991	589
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	386	1874	349	470	1408	413	417	951	242	310	1991	589
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	386	1874	349	470	1408	413	417	951	0	310	1991	589
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	386	1874	349	470	1408	413	417	951	0	310	1991	589
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	386	1874	349	470	1408	413	417	951	0	310	1991	589
OvlAdjVol:									432			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	3.00	3.09	0.91	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	6800	1700	5100	5258	1542	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:

Vol/Sat:	0.11	0.28	0.21	0.09	0.27	0.27	0.12	0.19	0.00	0.09	0.29	0.35
OvlAdjV/S:												0.25
Crit Moves:	****		****		****		****					

Jeffrey Road at Irvine Center Drive

Post 2035

With NITM Improvements Except for 3rd SBL

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.879	
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	76	Level Of Service:	D	
Street Name:	Jeffrey Road ICD			
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Protected	Protected	Protected	
Rights:	Ovl	Include	Ignore	
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4	0 1 2	0 3 1	0 2 0
Volume Module:				
Base Vol:	386 1874	349 470	1408 413	417 951
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Initial Bse:	386 1874	349 470	1408 413	417 951
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	386 1874	349 470	1408 413	417 951
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00
PHF Volume:	386 1874	349 470	1408 413	417 951
Reduced Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	386 1874	349 470	1408 413	417 951
PCE Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00
MLF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00
FinalVolume:	386 1874	349 470	1408 413	417 951
OvlAdjVol:	354			
Saturation Flow Module:				
Sat/Lane:	1700 1700	1700 1700	1700 1700	1700 1700
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Lanes:	2.00 4.00	1.00 2.00	3.09 0.91	3.00 2.00
Final Sat.:	3400 6800	1700 3400	5258 1542	5100 3400
Capacity Analysis Module:				
Vol/Sat:	0.11 0.28	0.21 0.14	0.27 0.27	0.12 0.19
OvlAdjV/S:	0.11			0.21
Crit Moves:	****	****	****	****

 Jeffrey Road at Irvine Center Drive
 Post 2035 With NITM Improvements Except for 3rd SBL
 and with Added SBR

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.879		
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	76	Level Of Service:	D		
<hr/>					
Street Name:	Jeffrey Road ICD				
Approach:	North Bound	South Bound	East Bound		
Movement:	L - T - R	L - T - R	L - T - R		
	-----	-----	-----		
Control:	Protected	Protected	Protected		
Rights:	Ovl	Include	Ignore		
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	2 0 4	0 1 2	0 4 0	1 2 0	
	-----	-----	-----		
Volume Module:					
Base Vol:	386 1874	349 470	1408 413 417 951	242 310 1991 589	
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00	
Initial Bse:	386 1874	349 470	1408 413 417 951	242 310 1991 589	
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0	
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0	
Initial Fut:	386 1874	349 470	1408 413 417 951	242 310 1991 589	
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00 1.00 1.00	
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00 1.00 1.00	
PHF Volume:	386 1874	349 470	1408 413 417 951	0 310 1991 589	
Reduced Vol:	0 0 0	0 0 0	0 0 0	0 0 0	
Reduced Vol:	386 1874	349 470	1408 413 417 951	0 310 1991 589	
PCE Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00 1.00 1.00	
MLF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	0.00 1.00 1.00 1.00	
FinalVolume:	386 1874	349 470	1408 413 417 951	0 310 1991 589	
OvlAdjVol:	194 354				
	-----	-----	-----		
Saturation Flow Module:					
Sat/Lane:	1700 1700	1700 1700	1700 1700	1700 1700 1700 1700	
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00	
Lanes:	2.00 4.00	1.00 2.00	4.00 2.00	3.00 1.00 2.00 4.00 1.00	
Final Sat.:	3400 6800	1700 3400	6800 1700	3400 5100 1700 3400 6800 1700	
	-----	-----	-----		
Capacity Analysis Module:					
Vol/Sat:	0.11 0.28	0.21 0.14	0.21 0.24	0.12 0.19 0.00 0.09 0.29 0.35	
OvlAdjV/S:	0.11 0.21				
Crit Moves:	****	****	****	****	
	-----	-----	-----		

 Jeffrey Road at Irvine Center Drive
 Post 2035 With NITM Improvements Except for 3rd SBL and
 with Conversion of Free EBR to a Standard EBR Lane

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.879
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D
Street Name: Jeffrey Road			ICD
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Ovl	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4	0 1 2	0 3 1
Volume Module:			West Bound
Base Vol:	386 1874	349 470 1408	413 417 951
Growth Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	386 1874	349 470 1408	413 417 951
Added Vol:	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	386 1874	349 470 1408	413 417 951
User Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	386 1874	349 470 1408	413 417 951
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	386 1874	349 470 1408	413 417 951
PCE Adj:	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
FinalVolume:	386 1874	349 470 1408	413 417 951
OvlAdjVol:		194	354
Saturation Flow Module:			1700 1700 1700
Sat/Lane:	1700 1700	1700 1700 1700	1700 1700 1700
Adjustment:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	2.00 4.00	1.00 2.00 3.09	0.91 2.00 3.00
Final Sat.:	3400 6800	1700 3400 5258	1542 3400 5100
Capacity Analysis Module:			1700 1700 1700
Vol/Sat:	0.11 0.28	0.21 0.14 0.27	0.27 0.12 0.19
OvlAdjV/S:		0.11	0.21
Crit Moves:	****	****	****

 Jeffrey Road at Irvine Center Drive
 Post 2035 With NITM Improvements Except for 3rd SBL and with Added SBR
 and Conversion of Free EBR to a Standard EBR Lane

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.879
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D

Street Name:	Jeffrey Road ICD			
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	Protected	Protected
Rights:	Ovl	Include	Include	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	2 0 4 0 1	2 0 3 0 1	2 0 4 0 1

Volume Module:												
Base Vol:	386	1874	349	470	1408	413	417	951	242	310	1991	589
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:	386	1874	349	470	1408	413	417	951	242	310	1991	589
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	386	1874	349	470	1408	413	417	951	242	310	1991	589
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:	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 Volume:	386	1874	349	470	1408	413	417	951	242	310	1991	589
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	386	1874	349	470	1408	413	417	951	242	310	1991	589
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:	386	1874	349	470	1408	413	417	951	242	310	1991	589
OvlAdjVol:			194									354

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	6800	1700	3400	6800	1700	3400	5100	1700	3400	6800	1700

Capacity Analysis Module:												
Vol/Sat:	0.11	0.28	0.21	0.14	0.21	0.24	0.12	0.19	0.14	0.09	0.29	0.35
OvlAdjV/S:			0.11									0.21
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Jeffrey Road at Irvine Center Drive
Post 2035 With NITM Improvements
Except for 4th WBT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.944
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	123	Level Of Service:	E

Street Name:	Jeffrey Road ICD			
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	Protected	Protected
Rights:	Include	Include	Ignore	Ovl
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	3 0 3 1 0	2 0 3 0 1	2 0 3 0 1

Volume Module:

Base Vol:	386	1874	349	470	1408	413	417	951	242	310	1991	589
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:	386	1874	349	470	1408	413	417	951	242	310	1991	589
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	386	1874	349	470	1408	413	417	951	242	310	1991	589
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	386	1874	349	470	1408	413	417	951	0	310	1991	589
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	386	1874	349	470	1408	413	417	951	0	310	1991	589
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	386	1874	349	470	1408	413	417	951	0	310	1991	589
OvlAdjVol:									432			

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
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:	2.00	4.00	1.00	3.00	3.09	0.91	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	6800	1700	5100	5258	1542	3400	5100	1700	3400	5100	1700

Capacity Analysis Module:

Vol/Sat:	0.11	0.28	0.21	0.09	0.27	0.27	0.12	0.19	0.00	0.09	0.39	0.35
OvlAdjV/S:												0.25
Crit Moves:	****		****		****		****		****		****	

Jeffrey Road at Irvine Center Drive
Post 2035 With NITM Improvements Except for 4th SBT and
with Added SBR

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.855
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D
Street Name: Jeffrey Road			ICD
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Include	Ignore
Min. Green:	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 4 0 1	3 0 3 0 1	2 0 3 0 1
Volume Module:			West Bound
Base Vol:	386 1874	349 470 1408	413 417 951
Growth Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	386 1874	349 470 1408	413 417 951
Added Vol:	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	386 1874	349 470 1408	413 417 951
User Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	386 1874	349 470 1408	413 417 951
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	386 1874	349 470 1408	413 417 951
PCE Adj:	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
FinalVolume:	386 1874	349 470 1408	413 417 951
OvlAdjVol:			432
Saturation Flow Module:			1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Sat/Lane:	1700 1700	1700 1700 1700	1700 1700 1700 1700
Adjustment:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
Lanes:	2.00 4.00	1.00 3.00 3.00	1.00 2.00 3.00 1.00
Final Sat.:	3400 6800	1700 5100 5100	1700 3400 5100 1700 3400 6800
Capacity Analysis Module:			1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Vol/Sat:	0.11 0.28	0.21 0.09 0.28	0.24 0.12 0.19 0.00 0.09 0.29 0.35
OvlAdjV/S:			0.25
Crit Moves:	****	****	****

Jeffrey Road at Irvine Center Drive
Post 2035 With NITM Improvements
Except for 4th NBT

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Jeffrey Road at ICD

Cycle (sec):	100	Critical Vol./Cap.(X):	0.925
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	104	Level Of Service:	E
Street Name: Jeffrey Road			ICD
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Include	Ignore
Min. Green:	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	2 0 3 0 1	3 0 3 1 0	2 0 3 0 1
Volume Module:			West Bound
Base Vol:	386 1874	349 470 1408	413 417 951
Growth Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	386 1874	349 470 1408	413 417 951
Added Vol:	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	386 1874	349 470 1408	413 417 951
User Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	386 1874	349 470 1408	413 417 951
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	386 1874	349 470 1408	413 417 951
PCE Adj:	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
FinalVolume:	386 1874	349 470 1408	413 417 951
OvlAdjVol:			432
Saturation Flow Module:			1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Sat/Lane:	1700 1700	1700 1700 1700	1700 1700 1700 1700
Adjustment:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
Lanes:	2.00 3.00	1.00 3.00 3.09	0.91 2.00 3.00 1.00
Final Sat.:	3400 5100	1700 5100 5258	1542 3400 5100 1700 3400 6800
Capacity Analysis Module:			1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Vol/Sat:	0.11 0.37	0.21 0.09 0.27	0.27 0.12 0.19 0.00 0.09 0.29 0.35
OvlAdjV/S:			0.25
Crit Moves:	****	****	****

Appendix C

Irvine Village Center Driveway Analysis

Thursday, November 30, 2017

CITY: Irvine Edinger

PROJECT: SC15551

VADT1 Driveway north of Irvine Center Drive

Prepared by: Field Data Services of Arizona

Prepared by AimTD LLC tel. 714 253 7888

AM Period	NB	IN	SB	OUT	PM Period	NB	IN	SB	OUT	
0:00	0	1	0	0	12:00	36	25	0	0	
0:15	0	0	0	0	12:15	35	28	0	0	
0:30	0	1	0	0	12:30	26	28	0	0	
0:45	1	1	0	2	12:45	20	117	20	101	218
1:00	0	0	0	0	13:00	25	22	0	0	
1:15	0	0	0	0	13:15	25	13	0	0	
1:30	1	0	0	0	13:30	20	23	0	0	
1:45	0	1	0	0	13:45	21	91	18	76	167
2:00	0	0	0	0	14:00	25	13	0	0	
2:15	0	0	0	0	14:15	32	15	0	0	
2:30	0	0	0	0	14:30	13	11	0	0	
2:45	0	0	0	0	14:45	20	90	11	50	140
3:00	0	0	0	0	15:00	20	17	0	0	
3:15	0	0	0	0	15:15	20	19	0	0	
3:30	0	0	0	0	15:30	27	18	0	0	
3:45	0	0	0	0	15:45	19	86	12	66	152
4:00	0	0	0	0	16:00	32	20	0	0	
4:15	0	0	0	0	16:15	27	24	0	0	
4:30	1	0	0	0	16:30	20	33	0	0	
4:45	1	2	1	1	16:45	30	109	19	96	205
5:00	0	0	0	0	17:00	25	22	0	0	
5:15	0	1	0	0	17:15	26	26	0	0	
5:30	0	0	0	0	17:30	27	26	0	0	
5:45	4	4	1	2	17:45	35	113	20	94	207
6:00	4	0	0	0	18:00	33	31	0	0	
6:15	1	1	0	0	18:15	27	25	0	0	
6:30	5	0	0	0	18:30	29	15	0	0	
6:45	4	14	4	5	18:45	24	113	25	96	209
7:00	4	3	0	0	19:00	28	25	0	0	
7:15	13	5	0	0	19:15	24	29	0	0	
7:30	7	8	0	0	19:30	19	23	0	0	
7:45	11	35	11	27	19:45	17	88	14	91	179
8:00	7	7	0	0	20:00	8	12	0	0	
8:15	13	11	0	0	20:15	3	4	0	0	
8:30	14	8	0	0	20:30	10	11	0	0	
8:45	24	58	9	35	20:45	7	28	8	35	63
9:00	26	20	0	0	21:00	5	9	0	0	
9:15	13	5	0	0	21:15	5	10	0	0	
9:30	20	8	0	0	21:30	6	6	0	0	
9:45	17	76	10	43	21:45	4	20	9	34	54
10:00	10	8	0	0	22:00	0	6	0	0	
10:15	10	10	0	0	22:15	1	5	0	0	
10:30	15	12	0	0	22:30	2	2	0	0	
10:45	19	54	14	44	22:45	1	4	0	13	17
11:00	26	11	0	0	23:00	1	1	0	0	
11:15	31	18	0	0	23:15	1	2	0	0	
11:30	30	11	0	0	23:30	2	0	0	0	
11:45	41	128	20	60	23:45	1	5	0	3	8
Total Vol.	373	219		592		864	755		1619	

Daily Totals

	NB	IN	SB	OUT	Combined
	1237	974			2211

AM

Split %	63.0%	37.0%	26.8%	53.4%	46.6%	73.2%
Peak Hour	11:30	11:45	11:45	17:45	17:15	17:15
Volume	142	101	239	124	103	224
P.H.F.	0.87	0.90	0.95	0.87	0.83	0.88

Thursday, November 30, 2017

CITY: Irvine Edinger

PROJECT: SC15551

VADT2 Driveway west of Jeffrey.

Prepared by: Field Data Services of Arizona

Prepared by AimTD LLC tel. 714 253 7888

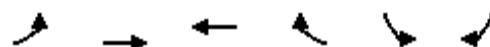
AM Period	EL illegal	NL	ER	WR	PM Period	EL illegal	NL	ER	WR		
0:00	0	0	1	1	12:00	1	18	48	30		
0:15	0	1	2	0	12:15	0	6	40	29		
0:30	0	1	0	1	12:30	0	11	49	22		
0:45	0 0	0 2	0 3	0 2 7	12:45	0 1	13 48	35 172	23 104 325		
1:00	0	0	0	0	13:00	1	3	48	22		
1:15	0	0	0	0	13:15	0	8	40	21		
1:30	0	0	0	1	13:30	0	3	34	17		
1:45	0 0	0 0	0 0	0 0 1 1	13:45	0 1	8 22	42 164	19 79 266		
2:00	0	0	0	0	14:00	0	5	32	13		
2:15	0	0	1	0	14:15	0	10	42	20		
2:30	0	0	0	0	14:30	0	11	31	13		
2:45	0 0	0 0	0 1	0 0 0 1	14:45	0 0	6 32	45 150	23 69 251		
3:00	0	0	0	0	15:00	0	6	35	21		
3:15	0	0	0	0	15:15	0	4	22	18		
3:30	0	0	0	1	15:30	0	5	38	16		
3:45	0 0	0 0	0 0	0 0 1 1	15:45	0 0	14 29	41 136	20 75 240		
4:00	0	0	0	1	16:00	0	8	27	23		
4:15	0	0	0	1	16:15	0	8	20	39		
4:30	0	1	1	0	16:30	0	1	30	21		
4:45	0 0	1 2	3 4	2 4 10	16:45	0 0	7 24	30 107	26 109 240		
5:00	0	1	5	4	17:00	0	10	37	16		
5:15	0	1	2	5	17:15	0	9	24	19		
5:30	0	2	9	8	17:30	0	4	30	17		
5:45	0 0	2 6	6 22	3 20 48	17:45	0 0	8 31	33 124	32 84 239		
6:00	0	1	8	9	18:00	0	6	50	26		
6:15	0	3	2	6	18:15	0	5	32	31		
6:30	0	4	14	9	18:30	0	7	35	29		
6:45	0 0	2 10	12 36	9 33 79	18:45	0 0	9 27	49 166	33 119 312		
7:00	0	3	11	13	19:00	0	4	47	22		
7:15	0	2	12	11	19:15	0	7	35	21		
7:30	0	4	16	14	19:30	0	11	47	20		
7:45	0 0	2 11	17 56	18 56 123	19:45	0 0	4 26	28 157	9 72 255		
8:00	0	5	18	20	20:00	0	10	26	11		
8:15	0	7	18	21	20:15	0	9	29	9		
8:30	0	7	30	18	20:30	0	1	19	13		
8:45	0 0	7 26	17 83	22 81 190	20:45	0 0	5 25	37 111	6 39 175		
9:00	0	5	19	25	21:00	0	9	31	6		
9:15	0	8	16	17	21:15	1	4	21	6		
9:30	0	9	25	25	21:30	1	3	30	1		
9:45	0 0	9 31	29 89	24 91 211	21:45	0 2	0 16	14 96	6 19 133		
10:00	0	5	19	25	22:00	0	2	6	3		
10:15	0	12	22	24	22:15	0	0	5	1		
10:30	0	6	34	25	22:30	0	3	8	2		
10:45	0 0	10 33	35 110	24 98 241	22:45	0 0	0 5	4 23	0 6 34		
11:00	0	10	27	26	23:00	0	0	10	0		
11:15	0	8	35	25	23:15	0	0	4	1		
11:30	0	10	31	26	23:30	0	1	5	1		
11:45	0 0	16 44	44 137	29 106 287	23:45	0 0	0 1	4 23	0 2 26		
Total Vol.		165	541	493	1199		4	286	1429	777	2496

Daily Totals

EL illegal	NL	ER	WR	Combined
4	451	1970	1270	3695

AM

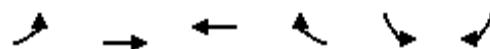
Split %	13.8%	45.1%	41.1% 32.4%	0.2%	11.5%	57.3%	31.1%	67.6%
Peak Hour	11:15	11:15	11:45 11:30 11:45	20:45	12:00	18:45	18:00	12:00
Volume	1	52	181 114 343	2	48	178	119	325
P.H.F.	0.25	0.72	0.92 0.95 0.88	0.50	0.67	0.91	0.90	0.84



Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations		↑↑↑	↑↑↑			↑			
Volume (veh/h)	0	1670	1059	58	0	37			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	1670	1059	58	0	37			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type		Raised	Raised						
Median storage veh		1	1						
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	1117			1506	294				
vC1, stage 1 conf vol				1088					
vC2, stage 2 conf vol				418					
vCu, unblocked vol	1117			1506	294				
tC, single (s)	4.1			6.8	6.9				
tC, 2 stage (s)				5.8					
tF (s)	2.2			3.5	3.3				
p0 queue free %	100			100	95				
cM capacity (veh/h)	621			220	703				
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	SB 1
Volume Total	418	418	418	418	303	303	303	209	37
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	58	37
cSH	1700	1700	1700	1700	1700	1700	1700	1700	703
Volume to Capacity	0.25	0.25	0.25	0.25	0.18	0.18	0.18	0.12	0.05
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4
Lane LOS									B
Approach Delay (s)	0.0				0.0				10.4
Approach LOS									B
Intersection Summary									
Average Delay			0.1						
Intersection Capacity Utilization		27.5%		ICU Level of Service					A
Analysis Period (min)		15							



Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations									
Volume (veh/h)	0	83	26	1190	2980	81			
Sign Control	Stop			Free	Free				
Grade	0%			0%	0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	83	26	1190	2980	81			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type				None	None				
Median storage (veh)									
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	3469	786	3061						
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	3469	786	3061						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)									
tF (s)	3.5	3.3	2.2						
p0 queue free %	100	75	76						
cM capacity (veh/h)	4	335	107						
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	83	26	397	397	397	851	851	851	507
Volume Left	0	26	0	0	0	0	0	0	0
Volume Right	83	0	0	0	0	0	0	0	81
cSH	335	107	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.25	0.24	0.23	0.23	0.23	0.50	0.50	0.50	0.30
Queue Length 95th (ft)	24	22	0	0	0	0	0	0	0
Control Delay (s)	19.2	49.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	E							
Approach Delay (s)	19.2	1.1				0.0			
Approach LOS	C								
Intersection Summary									
Average Delay			0.7						
Intersection Capacity Utilization		56.3%		ICU Level of Service			B		
Analysis Period (min)		15							



Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations		↑↑↑	↑↑↑			↑			
Volume (veh/h)	0	1370	2199	113	0	100			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	1370	2199	113	0	100			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type		Raised	Raised						
Median storage veh		1	1						
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	2312			2598	606				
vC1, stage 1 conf vol				2256					
vC2, stage 2 conf vol				342					
vCu, unblocked vol	2312			2598	606				
tC, single (s)	4.1			6.8	6.9				
tC, 2 stage (s)				5.8					
tF (s)	2.2			3.5	3.3				
p0 queue free %	100			100	77				
cM capacity (veh/h)	213			57	440				
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	SB 1
Volume Total	342	342	342	342	628	628	628	427	100
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	113	100
cSH	1700	1700	1700	1700	1700	1700	1700	1700	440
Volume to Capacity	0.20	0.20	0.20	0.20	0.37	0.37	0.37	0.25	0.23
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	22
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6
Lane LOS									C
Approach Delay (s)	0.0				0.0				15.6
Approach LOS									C
Intersection Summary									
Average Delay			0.4						
Intersection Capacity Utilization		46.6%			ICU Level of Service			A	
Analysis Period (min)			15						



Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations									
Volume (veh/h)	0	124	31	2700	1971	109			
Sign Control	Stop			Free	Free				
Grade	0%			0%	0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	124	31	2700	1971	109			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type				None	None				
Median storage veh									
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	2988	547	2080						
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	2988	547	2080						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)									
tF (s)	3.5	3.3	2.2						
p0 queue free %	100	74	88						
cM capacity (veh/h)	10	481	263						
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	124	31	900	900	900	563	563	563	391
Volume Left	0	31	0	0	0	0	0	0	0
Volume Right	124	0	0	0	0	0	0	0	109
cSH	481	263	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.26	0.12	0.53	0.53	0.53	0.33	0.33	0.33	0.23
Queue Length 95th (ft)	25	10	0	0	0	0	0	0	0
Control Delay (s)	15.1	20.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	C							
Approach Delay (s)	15.1	0.2				0.0			
Approach LOS	C								
Intersection Summary									
Average Delay			0.5						
Intersection Capacity Utilization		55.5%		ICU Level of Service			B		
Analysis Period (min)			15						



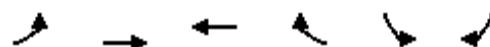
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations		↑↑↑	↑↑↑			↑			
Volume (veh/h)	0	1670	1059	84	0	37			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	1670	1059	84	0	37			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type		Raised	Raised						
Median storage veh		1	1						
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	1143			1518	307				
vC1, stage 1 conf vol				1101					
vC2, stage 2 conf vol				418					
vCu, unblocked vol	1143			1518	307				
tC, single (s)	4.1			6.8	6.9				
tC, 2 stage (s)				5.8					
tF (s)	2.2			3.5	3.3				
p0 queue free %	100			100	95				
cM capacity (veh/h)	607			217	689				
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	SB 1
Volume Total	418	418	418	418	303	303	303	235	37
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	84	37
cSH	1700	1700	1700	1700	1700	1700	1700	1700	689
Volume to Capacity	0.25	0.25	0.25	0.25	0.18	0.18	0.18	0.14	0.05
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5
Lane LOS									B
Approach Delay (s)	0.0				0.0				10.5
Approach LOS									B
Intersection Summary									
Average Delay			0.1						
Intersection Capacity Utilization		27.5%		ICU Level of Service					A
Analysis Period (min)		15							

Movement	EBL	EBC	NBL	NBT	SBT	SBR
Lane Configurations				↑↑↑	↑↑↑↑	
Volume (veh/h)	0	83	0	1190	2980	81
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	83	0	1190	2980	81
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3417	786	3061			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3417	786	3061			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	75	100			
cM capacity (veh/h)	5	335	107			
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	83	397	397	397	851	851
Volume Left	0	0	0	0	0	0
Volume Right	83	0	0	0	0	0
cSH	335	1700	1700	1700	1700	1700
Volume to Capacity	0.25	0.23	0.23	0.23	0.50	0.50
Queue Length 95th (ft)	24	0	0	0	0	0
Control Delay (s)	19.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	C					
Approach Delay (s)	19.2	0.0			0.0	
Approach LOS	C					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization		56.3%		ICU Level of Service		B
Analysis Period (min)		15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations		↑↑↑	↑↑↑			↑			
Volume (veh/h)	0	1370	2199	144	0	100			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	1370	2199	144	0	100			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type		Raised	Raised						
Median storage veh)		1	1						
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	2343			2614	622				
vC1, stage 1 conf vol				2271					
vC2, stage 2 conf vol				342					
vCu, unblocked vol	2343			2614	622				
tC, single (s)	4.1			6.8	6.9				
tC, 2 stage (s)				5.8					
tF (s)	2.2			3.5	3.3				
p0 queue free %	100			100	77				
cM capacity (veh/h)	207			56	430				
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	SB 1
Volume Total	342	342	342	342	628	628	628	458	100
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	144	100
cSH	1700	1700	1700	1700	1700	1700	1700	1700	430
Volume to Capacity	0.20	0.20	0.20	0.20	0.37	0.37	0.37	0.27	0.23
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	22
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.9
Lane LOS									C
Approach Delay (s)	0.0				0.0				15.9
Approach LOS									C
Intersection Summary									
Average Delay			0.4						
Intersection Capacity Utilization		47.1%		ICU Level of Service				A	
Analysis Period (min)		15							

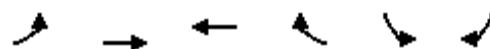
Movement	EBL	EBC	NBL	NBT	SBT	SBR		
Lane Configurations								
Volume (veh/h)	0	124	0	2700	1971	109		
Sign Control	Stop			Free	Free			
Grade	0%			0%	0%			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Hourly flow rate (vph)	0	124	0	2700	1971	109		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None	None			
Median storage (veh)								
Upstream signal (ft)								
pX, platoon unblocked								
vC, conflicting volume	2926	547	2080					
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	2926	547	2080					
tC, single (s)	6.8	6.9	4.1					
tC, 2 stage (s)								
tF (s)	3.5	3.3	2.2					
p0 queue free %	100	74	100					
cM capacity (veh/h)	12	481	263					
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	124	900	900	900	563	563	563	391
Volume Left	0	0	0	0	0	0	0	0
Volume Right	124	0	0	0	0	0	0	109
cSH	481	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.26	0.53	0.53	0.53	0.33	0.33	0.33	0.23
Queue Length 95th (ft)	25	0	0	0	0	0	0	0
Control Delay (s)	15.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C							
Approach Delay (s)	15.1	0.0			0.0			
Approach LOS	C							
Intersection Summary								
Average Delay			0.4					
Intersection Capacity Utilization		55.5%		ICU Level of Service		B		
Analysis Period (min)		15						



Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations		↑↑↑	↑↑↑			↑			
Volume (veh/h)	0	2472	1061	58	0	37			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	2472	1061	58	0	37			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type		Raised	Raised						
Median storage veh		1	1						
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	1119			1708	294				
vC1, stage 1 conf vol				1090					
vC2, stage 2 conf vol				618					
vCu, unblocked vol	1119			1708	294				
tC, single (s)	4.1			6.8	6.9				
tC, 2 stage (s)				5.8					
tF (s)	2.2			3.5	3.3				
p0 queue free %	100			100	95				
cM capacity (veh/h)	620			199	702				
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	SB 1
Volume Total	618	618	618	618	303	303	303	210	37
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	58	37
cSH	1700	1700	1700	1700	1700	1700	1700	1700	702
Volume to Capacity	0.36	0.36	0.36	0.36	0.18	0.18	0.18	0.12	0.05
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4
Lane LOS									B
Approach Delay (s)	0.0				0.0				10.4
Approach LOS									B
Intersection Summary									
Average Delay			0.1						
Intersection Capacity Utilization		39.2%		ICU Level of Service					A
Analysis Period (min)		15							



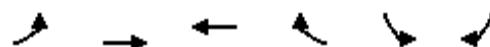
Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations									
Volume (veh/h)	0	83	26	1409	3194	81			
Sign Control	Stop			Free	Free				
Grade	0%			0%	0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	83	26	1409	3194	81			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type				None	None				
Median storage (veh)									
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	3756	839	3275						
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	3756	839	3275						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)									
tF (s)	3.5	3.3	2.2						
p0 queue free %	100	73	70						
cM capacity (veh/h)	2	309	87						
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	83	26	470	470	470	913	913	913	537
Volume Left	0	26	0	0	0	0	0	0	0
Volume Right	83	0	0	0	0	0	0	0	81
cSH	309	87	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.27	0.30	0.28	0.28	0.28	0.54	0.54	0.54	0.32
Queue Length 95th (ft)	27	28	0	0	0	0	0	0	0
Control Delay (s)	20.9	62.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	F							
Approach Delay (s)	20.9	1.1				0.0			
Approach LOS	C								
Intersection Summary									
Average Delay			0.7						
Intersection Capacity Utilization		59.4%		ICU Level of Service			B		
Analysis Period (min)		15							



Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations			>			>			
Volume (veh/h)	0	1610	2790	113	0	100			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	1610	2790	113	0	100			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type		Raised	Raised						
Median storage veh		1	1						
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	2903			3249	754				
vC1, stage 1 conf vol				2846					
vC2, stage 2 conf vol				402					
vCu, unblocked vol	2903			3249	754				
tC, single (s)	4.1			6.8	6.9				
tC, 2 stage (s)				5.8					
tF (s)	2.2			3.5	3.3				
p0 queue free %	100			100	72				
cM capacity (veh/h)	124			27	352				
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	SB 1
Volume Total	402	402	402	402	797	797	797	512	100
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	113	100
cSH	1700	1700	1700	1700	1700	1700	1700	1700	352
Volume to Capacity	0.24	0.24	0.24	0.24	0.47	0.47	0.47	0.30	0.28
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	29
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3
Lane LOS									C
Approach Delay (s)	0.0				0.0				19.3
Approach LOS									C
Intersection Summary									
Average Delay			0.4						
Intersection Capacity Utilization		55.2%			ICU Level of Service			B	
Analysis Period (min)		15							



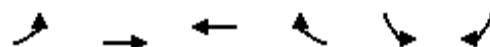
Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations									
Volume (veh/h)	0	124	31	2880	2291	109			
Sign Control	Stop			Free	Free				
Grade	0%			0%	0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	124	31	2880	2291	109			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type				None	None				
Median storage veh									
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	3368	627	2400						
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	3368	627	2400						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)									
tF (s)	3.5	3.3	2.2						
p0 queue free %	100	71	84						
cM capacity (veh/h)	5	426	197						
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	124	31	960	960	960	655	655	655	436
Volume Left	0	31	0	0	0	0	0	0	0
Volume Right	124	0	0	0	0	0	0	0	109
cSH	426	197	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.29	0.16	0.56	0.56	0.56	0.39	0.39	0.39	0.26
Queue Length 95th (ft)	30	14	0	0	0	0	0	0	0
Control Delay (s)	16.9	26.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	D							
Approach Delay (s)	16.9	0.3				0.0			
Approach LOS	C								
Intersection Summary									
Average Delay			0.5						
Intersection Capacity Utilization		59.0%		ICU Level of Service			B		
Analysis Period (min)			15						



Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations		↑↑↑	↑↑↑			↑			
Volume (veh/h)	0	2472	1061	84	0	37			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	2472	1061	84	0	37			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type		Raised	Raised						
Median storage veh		1	1						
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	1145			1721	307				
vC1, stage 1 conf vol				1103					
vC2, stage 2 conf vol				618					
vCu, unblocked vol	1145			1721	307				
tC, single (s)	4.1			6.8	6.9				
tC, 2 stage (s)				5.8					
tF (s)	2.2			3.5	3.3				
p0 queue free %	100			100	95				
cM capacity (veh/h)	606			197	689				
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	SB 1
Volume Total	618	618	618	618	303	303	303	236	37
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	84	37
cSH	1700	1700	1700	1700	1700	1700	1700	1700	689
Volume to Capacity	0.36	0.36	0.36	0.36	0.18	0.18	0.18	0.14	0.05
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5
Lane LOS									B
Approach Delay (s)	0.0				0.0				10.5
Approach LOS									B
Intersection Summary									
Average Delay			0.1						
Intersection Capacity Utilization		39.2%		ICU Level of Service					A
Analysis Period (min)		15							



Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations				↑↑↑	↑↑↑↑			
Volume (veh/h)	0	83	0	1409	3194	81		
Sign Control	Stop			Free	Free			
Grade	0%			0%	0%			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Hourly flow rate (vph)	0	83	0	1409	3194	81		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None	None			
Median storage (veh)								
Upstream signal (ft)								
pX, platoon unblocked								
vC, conflicting volume	3704	839	3275					
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	3704	839	3275					
tC, single (s)	6.8	6.9	4.1					
tC, 2 stage (s)								
tF (s)	3.5	3.3	2.2					
p0 queue free %	100	73	100					
cM capacity (veh/h)	3	309	87					
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	83	470	470	470	913	913	913	537
Volume Left	0	0	0	0	0	0	0	0
Volume Right	83	0	0	0	0	0	0	81
cSH	309	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.27	0.28	0.28	0.28	0.54	0.54	0.54	0.32
Queue Length 95th (ft)	27	0	0	0	0	0	0	0
Control Delay (s)	20.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C							
Approach Delay (s)	20.9	0.0			0.0			
Approach LOS	C							
Intersection Summary								
Average Delay				0.4				
Intersection Capacity Utilization				59.4%	ICU Level of Service			B
Analysis Period (min)				15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations		↑↑↑	↑↑↑			↑			
Volume (veh/h)	0	1610	2790	144	0	100			
Sign Control		Free	Free		Stop				
Grade		0%	0%		0%				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Hourly flow rate (vph)	0	1610	2790	144	0	100			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type		Raised	Raised						
Median storage veh		1	1						
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	2934			3264	770				
vC1, stage 1 conf vol				2862					
vC2, stage 2 conf vol				402					
vCu, unblocked vol	2934			3264	770				
tC, single (s)	4.1			6.8	6.9				
tC, 2 stage (s)				5.8					
tF (s)	2.2			3.5	3.3				
p0 queue free %	100			100	71				
cM capacity (veh/h)	120			26	344				
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	SB 1
Volume Total	402	402	402	402	797	797	797	543	100
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	144	100
cSH	1700	1700	1700	1700	1700	1700	1700	1700	344
Volume to Capacity	0.24	0.24	0.24	0.24	0.47	0.47	0.47	0.32	0.29
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	30
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.7
Lane LOS									C
Approach Delay (s)	0.0				0.0				19.7
Approach LOS									C
Intersection Summary									
Average Delay			0.4						
Intersection Capacity Utilization		55.7%			ICU Level of Service			B	
Analysis Period (min)		15							



Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations				↑↑↑	↑↑↑↑			
Volume (veh/h)	0	124	0	2880	2291	109		
Sign Control	Stop			Free	Free			
Grade	0%			0%	0%			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Hourly flow rate (vph)	0	124	0	2880	2291	109		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None	None			
Median storage veh								
Upstream signal (ft)								
pX, platoon unblocked								
vC, conflicting volume	3306	627	2400					
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	3306	627	2400					
tC, single (s)	6.8	6.9	4.1					
tC, 2 stage (s)								
tF (s)	3.5	3.3	2.2					
p0 queue free %	100	71	100					
cM capacity (veh/h)	6	426	197					
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	124	960	960	960	655	655	655	436
Volume Left	0	0	0	0	0	0	0	0
Volume Right	124	0	0	0	0	0	0	109
cSH	426	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.29	0.56	0.56	0.56	0.39	0.39	0.39	0.26
Queue Length 95th (ft)	30	0	0	0	0	0	0	0
Control Delay (s)	16.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C							
Approach Delay (s)	16.9	0.0			0.0			
Approach LOS	C							
Intersection Summary								
Average Delay				0.4				
Intersection Capacity Utilization				59.0%	ICU Level of Service			B
Analysis Period (min)				15				

Jeffrey Road and Irvine Center Drive
"with" and "without project" scenario
SYNCHRO worksheets

2035 with Existing Geometry
1: Jeffrey Road & ICD

AM
HCM 2010 Signalized Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	XX	↑↑	X	XX	↑↑	X	XX	↑↑	X	XX	↑↑	X
Volume (veh/h)	305	1745	422	308	543	230	201	874	377	808	2069	317
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00			1.00			1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667
Adj Flow Rate, veh/h	305	1745	0	308	543	230	201	874	377	808	2069	317
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	1528	476	264	1202	374	176	942	293	792	1852	577
Arrive On Green	0.16	0.34	0.00	0.09	0.26	0.26	0.06	0.21	0.21	0.26	0.41	0.41
Sat Flow, veh/h	3079	4550	1417	3079	4550	1417	3079	4550	1417	3079	4550	1417
Grp Volume(v), veh/h	305	1745	0	308	543	230	201	874	377	808	2069	317
Grp Sat Flow(s),veh/h/ln	1540	1517	1417	1540	1517	1417	1540	1517	1417	1540	1517	1417
Q Serve(g_s), s	13.0	47.0	0.0	12.0	14.0	20.0	8.0	26.4	29.0	36.0	57.0	23.9
Cycle Q Clear(g_c), s	13.0	47.0	0.0	12.0	14.0	20.0	8.0	26.4	29.0	36.0	57.0	23.9
Prop In Lane	1.00			1.00			1.00			1.00		1.00
Lane Grp Cap(c), veh/h	484	1528	476	264	1203	374	176	943	293	792	1853	577
V/C Ratio(X)	0.63	1.14	0.00	1.17	0.45	0.61	1.14	0.93	1.28	1.02	1.12	0.55
Avail Cap(c_a), veh/h	484	1528	476	264	1203	374	176	943	293	792	1853	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter()	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	46.5	0.0	64.0	43.0	45.2	66.0	54.5	55.5	52.0	41.5	31.7
Incr Delay (d2), s/veh	6.1	72.4	0.0	108.2	1.2	7.3	111.3	16.3	151.5	37.2	60.6	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	29.9	0.0	9.1	6.0	8.6	6.1	12.5	23.7	19.4	34.2	9.9
LnGrp Delay(d),s/veh	61.3	118.9	0.0	172.2	44.3	52.6	177.3	70.7	207.0	89.2	102.1	35.4
LnGrp LOS	E	F		F	D	D	F	E	F	F	F	D
Approach Vol, veh/h		2050			1081			1452			3194	
Approach Delay, s/veh		110.4			82.5			120.9			92.3	
Approach LOS		F			F			F			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	40.0	33.0	16.0	51.0	12.0	61.0	26.0	41.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	36.0	29.0	12.0	47.0	8.0	57.0	22.0	37.0				
Max Q Clear Time (g_c+l1), s	38.0	31.0	14.0	49.0	10.0	59.0	15.0	22.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.6	12.0				
Intersection Summary												
HCM 2010 Ctrl Delay			101.0									
HCM 2010 LOS			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	XX	↑↑↑	X	XX	↑↑↑	X	XX	↑↑↑	X	XX	↑↑↑	X
Volume (veh/h)	417	951	242	310	1991	589	386	1874	349	470	1408	413
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667
Adj Flow Rate, veh/h	417	951	0	310	1991	589	386	1874	349	470	1408	413
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	1304	406	472	1547	482	390	1547	482	349	1486	463
Arrive On Green	0.10	0.29	0.00	0.15	0.34	0.34	0.13	0.34	0.34	0.11	0.33	0.33
Sat Flow, veh/h	3079	4550	1417	3079	4550	1417	3079	4550	1417	3079	4550	1417
Grp Volume(v), veh/h	417	951	0	310	1991	589	386	1874	349	470	1408	413
Grp Sat Flow(s), veh/h/ln	1540	1517	1417	1540	1517	1417	1540	1517	1417	1540	1517	1417
Q Serve(g_s), s	15.0	28.3	0.0	14.2	51.0	51.0	18.8	51.0	32.4	17.0	45.3	41.6
Cycle Q Clear(g_c), s	15.0	28.3	0.0	14.2	51.0	51.0	18.8	51.0	32.4	17.0	45.3	41.6
Prop In Lane	1.00			1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	1304	406	472	1547	482	390	1547	482	349	1486	463
V/C Ratio(X)	1.35	0.73	0.00	0.66	1.29	1.22	0.99	1.21	0.72	1.35	0.95	0.89
Avail Cap(c_a), veh/h	308	1304	406	472	1547	482	390	1547	482	349	1486	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter()	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.5	48.2	0.0	59.8	49.5	49.5	65.4	49.5	43.3	66.5	49.2	48.0
Incr Delay (d2), s/veh	179.3	3.6	0.0	7.0	134.2	117.7	43.1	101.4	9.2	174.0	13.8	22.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	14.0	12.3	0.0	6.5	40.6	35.7	10.3	35.9	13.9	15.7	20.8	19.1
LnGrp Delay(d), s/veh	246.8	51.9	0.0	66.8	183.7	167.2	108.5	150.9	52.5	240.5	63.0	70.1
LnGrp LOS	F	D		E	F	F	F	F	D	F	E	E
Approach Vol, veh/h		1368			2890			2609			2291	
Approach Delay, s/veh		111.3			167.8			131.4			100.7	
Approach LOS		F			F			F			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.0	55.0	27.0	47.0	23.0	53.0	19.0	55.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	17.0	51.0	23.0	43.0	19.0	49.0	15.0	51.0				
Max Q Clear Time (g_c+l1), s	19.0	53.0	16.2	30.3	20.8	47.3	17.0	53.0				
Green Ext Time (p_c), s	0.0	0.0	0.6	11.9	0.0	1.7	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			132.2									
HCM 2010 LOS			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	2	2	2	2	2	2	2	2	2	2	2	2
Volume (veh/h)	305	1745	422	308	543	230	201	874	377	808	2069	317
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667
Adj Flow Rate, veh/h	305	1745	422	308	543	230	201	874	377	808	2069	317
Adj No. of Lanes	2	3	1	2	4	1	2	4	1	2	4	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	474	1645	512	284	1720	425	189	970	240	782	2073	512
Arrive On Green	0.15	0.36	0.36	0.09	0.30	0.30	0.06	0.17	0.17	0.25	0.36	0.36
Sat Flow, veh/h	3079	4550	1417	3079	5733	1417	3079	5733	1417	3079	5733	1417
Grp Volume(v), veh/h	305	1745	422	308	543	230	201	874	377	808	2069	317
Grp Sat Flow(s),veh/h/ln	1540	1517	1417	1540	1433	1417	1540	1433	1417	1540	1433	1417
Q Serve(g_s), s	12.1	47.0	35.2	12.0	9.5	17.6	8.0	19.4	22.0	33.0	46.9	23.9
Cycle Q Clear(g_c), s	12.1	47.0	35.2	12.0	9.5	17.6	8.0	19.4	22.0	33.0	46.9	23.9
Prop In Lane	1.00			1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	474	1645	512	284	1720	425	189	970	240	782	2073	512
V/C Ratio(X)	0.64	1.06	0.82	1.08	0.32	0.54	1.06	0.90	1.57	1.03	1.00	0.62
Avail Cap(c_a), veh/h	474	1645	512	284	1720	425	189	970	240	782	2073	512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter()	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	41.5	37.7	59.0	35.2	38.0	61.0	52.9	54.0	48.5	41.5	34.1
Incr Delay (d2), s/veh	6.6	40.3	14.0	77.5	0.5	4.9	82.4	13.0	276.8	41.2	19.3	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	25.8	15.7	8.2	3.8	7.5	5.6	8.6	27.0	18.5	21.3	10.1
LnGrp Delay(d),s/veh	58.3	81.8	51.7	136.5	35.7	42.9	143.4	66.0	330.8	89.7	60.8	39.7
LnGrp LOS	E	F	D	F	D	D	F	E	F	F	E	D
Approach Vol, veh/h		2472			1081			1452			3194	
Approach Delay, s/veh		73.8			65.9			145.4			66.0	
Approach LOS		E			E			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.0	26.0	16.0	51.0	12.0	51.0	24.0	43.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	33.0	22.0	12.0	47.0	8.0	47.0	20.0	39.0				
Max Q Clear Time (g_c+l1), s	35.0	24.0	14.0	49.0	10.0	48.9	14.1	19.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.5	15.8				
Intersection Summary												
HCM 2010 Ctrl Delay				82.4								
HCM 2010 LOS				F								

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	XX	↑↑↑	X	XX	↑↑↑	X	XX	↑↑↑	X	XX	↑↑↑	X
Volume (veh/h)	417	951	242	310	1991	589	386	1874	349	470	1408	413
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667	1667
Adj Flow Rate, veh/h	417	951	242	310	1991	589	386	1874	349	470	1408	413
Adj No. of Lanes	2	3	1	2	4	1	2	4	1	2	4	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	1251	390	462	1768	437	462	1768	437	411	1672	413
Arrive On Green	0.12	0.28	0.28	0.15	0.31	0.31	0.15	0.31	0.31	0.13	0.29	0.29
Sat Flow, veh/h	3079	4550	1417	3079	5733	1417	3079	5733	1417	3079	5733	1417
Grp Volume(v), veh/h	417	951	242	310	1991	589	386	1874	349	470	1408	413
Grp Sat Flow(s),veh/h/ln	1540	1517	1417	1540	1433	1417	1540	1433	1417	1540	1433	1417
Q Serve(g_s), s	14.0	23.0	17.9	11.4	37.0	37.0	14.6	37.0	27.1	16.0	27.7	35.0
Cycle Q Clear(g_c), s	14.0	23.0	17.9	11.4	37.0	37.0	14.6	37.0	27.1	16.0	27.7	35.0
Prop In Lane	1.00			1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	1251	390	462	1768	437	462	1768	437	411	1672	413
V/C Ratio(X)	1.16	0.76	0.62	0.67	1.13	1.35	0.84	1.06	0.80	1.14	0.84	1.00
Avail Cap(c_a), veh/h	359	1251	390	462	1768	437	462	1768	437	411	1672	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter()	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	39.9	38.0	48.2	41.5	41.5	49.6	41.5	38.1	52.0	39.9	42.5
Incr Delay (d2), s/veh	98.8	4.4	7.3	7.6	64.8	171.4	16.2	39.4	14.2	90.2	5.3	44.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	10.1	7.8	5.4	22.6	35.2	7.3	19.4	12.3	11.9	11.6	18.7
LnGrp Delay(d),s/veh	151.8	44.2	45.3	55.8	106.3	212.9	65.8	80.9	52.2	142.2	45.2	86.7
LnGrp LOS	F	D	D	E	F	F	E	F	D	F	D	F
Approach Vol, veh/h	1610				2890			2609			2291	
Approach Delay, s/veh	72.3				122.6			74.8			72.6	
Approach LOS	E				F			E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.0	41.0	22.0	37.0	22.0	39.0	18.0	41.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	16.0	37.0	18.0	33.0	18.0	35.0	14.0	37.0				
Max Q Clear Time (g_c+l1), s	18.0	39.0	13.4	25.0	16.6	37.0	16.0	39.0				
Green Ext Time (p_c), s	0.0	0.0	0.4	7.7	0.2	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				88.5								
HCM 2010 LOS				F								

Appendix D

Queue Analysis

2035 WITH SB2LTL
1: Jeffrey Road & ICD

AM
Queues



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	305	1745	422	308	543	230	201	874	377	808	2069	317
v/c Ratio	0.65	1.06	0.70	1.09	0.32	0.39	1.06	0.90	1.01	1.04	1.00	0.47
Control Delay	58.8	80.4	30.2	133.2	35.8	6.3	140.2	66.1	80.1	89.3	60.8	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.8	80.4	30.2	133.2	35.8	6.3	140.2	66.1	80.1	89.3	60.8	9.6
Queue Length 50th (ft)	126	~591	206	~150	102	0	~95	212	~204	~377	503	37
Queue Length 95th (ft)	176	#688	335	#245	130	60	#178	#270	#415	#504	#600	116
Internal Link Dist (ft)		3441			3077			2432			2448	
Turn Bay Length (ft)												
Base Capacity (vph)	472	1645	602	283	1719	586	189	970	373	779	2072	673
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	1.06	0.70	1.09	0.32	0.39	1.06	0.90	1.01	1.04	1.00	0.47

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

2035 WITH SB2LTL
1: Jeffrey Road & ICD

PM
Queues

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	417	951	242	310	1991	589	386	1874	349	470	1408	413
v/c Ratio	1.16	0.76	0.43	0.67	1.13	0.95	0.84	1.06	0.57	1.15	0.84	0.70
Control Delay	146.8	44.6	6.7	56.3	103.7	47.4	66.6	79.7	14.1	138.1	45.5	21.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	146.8	44.6	6.7	56.3	103.7	47.4	66.6	79.7	14.1	138.1	45.5	21.4
Queue Length 50th (ft)	~197	247	0	118	~518	273	151	~463	58	~220	297	111
Queue Length 95th (ft)	#300	301	63	168	#595	#516	#229	#540	157	#327	345	235
Internal Link Dist (ft)		1132			920			1028			714	
Turn Bay Length (ft)												
Base Capacity (vph)	358	1251	565	460	1767	623	460	1767	609	409	1672	591
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.76	0.43	0.67	1.13	0.95	0.84	1.06	0.57	1.15	0.84	0.70

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

2035 WITH SB2LTL with WB RT OVR

AM

Queues

1: Jeffrey Road & ICD



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	305	1745	422	308	543	230	201	874	377	808	2069	317
v/c Ratio	0.65	1.06	0.70	1.09	0.32	0.43	1.06	0.90	1.01	1.04	1.00	0.47
Control Delay	58.8	80.4	30.2	133.2	35.8	7.4	140.2	66.1	80.1	89.3	60.8	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.8	80.4	30.2	133.2	35.8	7.4	140.2	66.1	80.1	89.3	60.8	9.6
Queue Length 50th (ft)	126	~591	206	~150	102	0	~95	212	~204	~377	503	37
Queue Length 95th (ft)	176	#688	335	#245	130	66	#178	#270	#415	#504	#600	116
Internal Link Dist (ft)		3441			3077			2432			2448	
Turn Bay Length (ft)												
Base Capacity (vph)	472	1645	602	283	1719	531	189	970	373	779	2072	673
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	1.06	0.70	1.09	0.32	0.43	1.06	0.90	1.01	1.04	1.00	0.47

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

2035 WITH SB2LTL with WB RT OVR

PM

Queues

1: Jeffrey Road & ICD

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	417	951	242	310	1991	589	386	1874	349	470	1408	413
v/c Ratio	1.16	0.76	0.43	0.67	1.13	1.12	0.84	1.06	0.57	1.15	0.84	0.70
Control Delay	146.8	44.6	6.7	56.3	103.7	94.9	66.6	79.7	14.1	138.1	45.5	21.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	146.8	44.6	6.7	56.3	103.7	94.9	66.6	79.7	14.1	138.1	45.5	21.4
Queue Length 50th (ft)	~197	247	0	118	~518	~249	151	~463	58	~220	297	111
Queue Length 95th (ft)	#300	301	63	168	#595	#475	#229	#540	157	#327	345	235
Internal Link Dist (ft)		1132			920			1028			714	
Turn Bay Length (ft)												
Base Capacity (vph)	358	1251	565	460	1767	524	460	1767	609	409	1672	591
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.76	0.43	0.67	1.13	1.12	0.84	1.06	0.57	1.15	0.84	0.70

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queuing and Blocking Report
2035 WITH RECOMMENDED GEOMETRY

AM

Intersection: 1: Jeffrey Road & ICD

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	T
Maximum Queue (ft)	177	188	453	495	448	340	202	239	202	203	152	118
Average Queue (ft)	136	137	394	410	376	167	104	131	166	174	90	24
95th Queue (ft)	205	211	481	505	438	325	186	223	210	228	187	101
Link Distance (ft)	3432	3432	3432	3432	3432	3432	3069	3069	3069	3069	3069	3069
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Jeffrey Road & ICD

Movement	WB	NB	SB	SB	SB	SB						
Directions Served	R	L	L	T	T	T	T	R	L	L	T	T
Maximum Queue (ft)	62	128	118	327	342	293	155	416	538	537	410	397
Average Queue (ft)	48	90	59	294	300	248	142	263	474	472	370	360
95th Queue (ft)	65	125	109	337	378	308	167	403	554	537	408	399
Link Distance (ft)	3069	2436	2436	2436	2436	2436	2436	2436	2440	2440	2440	2440
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Jeffrey Road & ICD

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	336	322	48
Average Queue (ft)	299	259	29
95th Queue (ft)	349	320	52
Link Distance (ft)	2440	2440	2440
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report
2035 WITH RECOMMENDED GEOMETRY

PM

Intersection: 1: Jeffrey Road & ICD

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	T
Maximum Queue (ft)	280	264	318	284	229	125	172	145	925	859	705	562
Average Queue (ft)	247	223	231	216	142	57	135	103	727	653	530	382
95th Queue (ft)	275	264	317	286	247	118	203	178	997	938	733	553
Link Distance (ft)	1122	1122	1122	1122	1122	1122	910	910	910	910	910	910
Upstream Blk Time (%)												2
Queuing Penalty (veh)												0
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Jeffrey Road & ICD

Movement	WB	NB	SB	SB	SB	SB						
Directions Served	R	L	L	T	T	T	T	R	L	L	T	T
Maximum Queue (ft)	258	202	174	749	738	579	426	129	458	372	370	348
Average Queue (ft)	197	164	151	613	608	511	335	80	381	328	336	297
95th Queue (ft)	281	226	186	752	750	616	480	141	479	405	384	378
Link Distance (ft)	910	1032	1032	1032	1032	1032	1032	1032	708	708	708	708
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Jeffrey Road & ICD

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	290	152	176
Average Queue (ft)	223	100	131
95th Queue (ft)	290	183	191
Link Distance (ft)	708	708	708
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report
2035 WITH SB2LTL with WB RT OVR

AM

Intersection: 1: Jeffrey Road & ICD

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	153	170	545	564	554	222	175	177	194	207	158	128
Average Queue (ft)	116	134	488	502	452	128	140	142	133	145	48	48
95th Queue (ft)	160	167	589	599	565	226	196	185	185	205	144	104
Link Distance (ft)	3432	3432	3432	3432	3432	3432	3069	3069	3069	3069	3069	3069
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Jeffrey Road & ICD

Movement	NB	SB	SB	SB	SB	SB						
Directions Served	L	L	T	T	T	T	R	L	L	T	T	T
Maximum Queue (ft)	240	224	366	390	344	291	285	707	696	528	533	504
Average Queue (ft)	192	171	324	320	273	160	218	518	523	405	404	366
95th Queue (ft)	240	225	386	397	346	289	317	665	660	519	520	506
Link Distance (ft)	2436	2436	2436	2436	2436	2436	2436	2440	2440	2440	2440	2440
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Jeffrey Road & ICD

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	373	56
Average Queue (ft)	288	34
95th Queue (ft)	403	56
Link Distance (ft)	2440	2440
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report
2035 WITH SB2LTL with WB RT OVR

PM

Intersection: 1: Jeffrey Road & ICD

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	T
Maximum Queue (ft)	473	415	271	282	250	76	155	130	703	692	554	459
Average Queue (ft)	383	347	229	223	196	35	134	100	609	572	485	354
95th Queue (ft)	507	456	277	287	253	69	165	158	737	720	565	466
Link Distance (ft)	1122	1122	1122	1122	1122	1122	910	910	910	910	910	910
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Jeffrey Road & ICD

Movement	WB	NB	SB	SB	SB	SB						
Directions Served	R	L	L	T	T	T	T	R	L	L	T	T
Maximum Queue (ft)	273	196	182	711	691	540	404	259	263	244	438	402
Average Queue (ft)	167	166	148	513	502	430	306	147	236	182	372	325
95th Queue (ft)	248	196	190	662	651	529	414	243	280	240	445	420
Link Distance (ft)	910	1032	1032	1032	1032	1032	1032	1032	708	708	708	708
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Jeffrey Road & ICD

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	318	166	343
Average Queue (ft)	244	144	138
95th Queue (ft)	317	170	280
Link Distance (ft)	708	708	708
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0