

1954-15

Groups Printed- Turning Movement

ROBERTSON BLVD. Southbound					WASHINGTON BLVD. Westbound				HIGUERA ST. Northbound				WASHINGTON BLVD. Eastbound				Int. Total
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	12	20	9	41	66	239	7	312	9	47	5	61	4	103	14	121	535
07:15 AM	15	28	14	57	78	307	9	394	11	60	3	74	6	113	11	130	655
07:30 AM	22	31	26	79	92	348	6	446	6	64	12	82	12	178	21	211	818
07:45 AM	22	57	24	103	72	332	14	418	20	74	11	105	21	178	12	211	837
Total	71	136	73	280	308	1226	36	1570	46	245	31	322	43	572	58	673	2845
08:00 AM	28	49	20	97	79	333	16	428	27	41	21	89	15	227	13	255	869
08:15 AM	24	54	30	108	70	319	18	407	22	43	13	78	20	203	13	236	829
08:30 AM	39	55	19	113	99	364	8	471	24	43	14	81	29	227	16	272	937
08:45 AM	38	71	24	133	84	335	18	437	12	40	13	65	31	196	15	242	877
Total	129	229	93	451	332	1351	60	1743	85	167	61	313	95	853	57	1005	3512

*** BREAK ***

04:00 PM	21	58	51	130	34	191	7	232	11	30	9	50	16	201	12	229	641
04:15 PM	29	53	39	121	24	183	9	216	12	27	8	47	14	236	15	265	649
04:30 PM	22	63	44	129	37	191	10	238	18	35	22	75	11	245	28	284	726
04:45 PM	29	58	36	123	23	200	7	230	12	37	10	59	15	227	32	274	686
Total	101	232	170	503	118	765	33	916	53	129	49	231	56	909	87	1052	2702
05:00 PM	44	62	45	151	50	227	10	287	11	31	11	53	14	219	25	258	749
05:15 PM	39	67	39	145	31	209	13	253	9	45	20	74	16	260	28	304	776
05:30 PM	27	65	46	138	58	203	14	275	11	33	13	57	14	253	29	296	766
05:45 PM	37	65	54	156	44	201	14	259	10	41	13	64	20	246	26	292	771
Total	147	259	184	590	183	840	51	1074	41	150	57	248	64	978	108	1150	3062
Grand Total	448	856	520	1824	941	4182	180	5303	225	691	198	1114	258	3312	310	3880	12121
Apprch %	24.6	46.9	28.5		17.7	78.9	3.4		20.2	62.0	17.8		6.6	85.4	8.0		
Total %	3.7	7.1	4.3	15.0	7.8	34.5	1.5	43.8	1.9	5.7	1.6	9.2	2.1	27.3	2.6	32.0	

	ROBERTSON BLVD. Southbound				WASHINGTON BLVD. Westbound				HIGUERA ST. Northbound				WASHINGTON BLVD. Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	08:00 AM																
Volume	129	229	93	451	332	1351	60	1743	85	167	61	313	95	853	57	1005	3512
Percent	28.6	50.8	20.6		19.0	77.5	3.4		27.2	53.4	19.5		9.5	84.9	5.7		
08:30	39	55	19	113	99	364	8	471	24	43	14	81	29	227	16	272	937
Volume																	
Peak Factor	08:45 AM				08:30 AM				08:00 AM				08:30 AM				0.937
High Int.	38	71	24	133	99	364	8	471	27	41	21	89	29	227	16	272	
Volume				0.848				0.925				0.879				0.924	
Peak Factor																	
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	05:00 PM																
Volume	147	259	184	590	183	840	51	1074	41	150	57	248	64	978	108	1150	3062
Percent	24.9	43.9	31.2		17.0	78.2	4.7		16.5	60.5	23.0		5.6	85.0	9.4		
05:15	39	67	39	145	31	209	13	253	9	45	20	74	16	260	28	304	776
Volume																	
Peak Factor	05:45 PM				05:00 PM				05:15 PM				05:15 PM				0.986
High Int.	37	65	54	156	50	227	10	287	9	45	20	74	16	260	28	304	
Volume				0.946				0.936				0.838				0.946	
Peak Factor																	

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

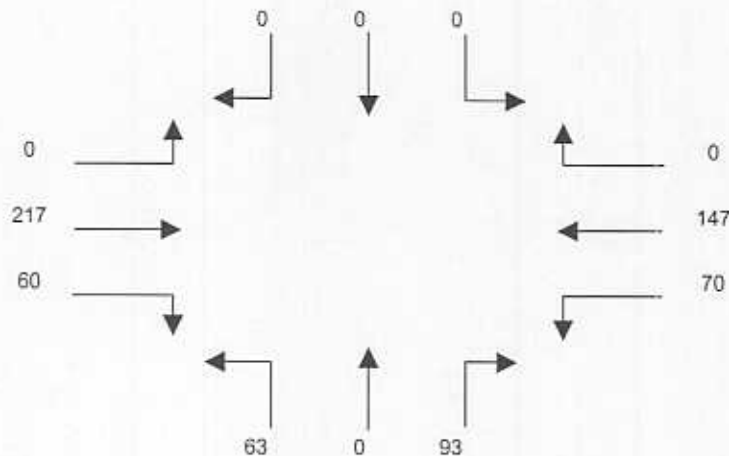
CLIENT: KAKU ASSOCIATES, INC.
 PROJECT: CULVER CITY TMC PROJECT
 DATE: THURSDAY, OCTOBER 06, 2005
 PERIOD: 04:00 PM TO 06:00 PM
 INTERSECTION N/S LUCERNE AVENUE
 E/W HIGUERA STREET
 FILE NUMBER: 3-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
400-415	0	0	0	0	41	18	28	0	13	7	58	0
415-430	0	0	0	0	16	10	20	0	8	14	35	0
430-445	0	0	0	0	39	20	29	0	17	14	48	0
445-500	0	0	0	0	28	17	20	0	10	11	58	0
500-515	0	0	0	0	45	19	24	0	17	14	61	0
515-530	0	0	0	0	35	14	20	0	19	21	50	0
530-545	0	0	0	0	26	19	26	0	12	19	42	0
545-600	0	0	0	0	27	15	27	0	15	12	37	0

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-500	0	0	0	0	124	65	97	0	48	46	199	0	579
415-515	0	0	0	0	128	66	93	0	52	53	202	0	594
430-530	0	0	0	0	147	70	93	0	63	60	217	0	650
445-545	0	0	0	0	134	69	90	0	58	65	211	0	627
500-600	0	0	0	0	133	67	97	0	63	66	190	0	616

P.M. PEAK HOUR
0430-0530

HIGUERA STREET



LUCERNE AVENUE

THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

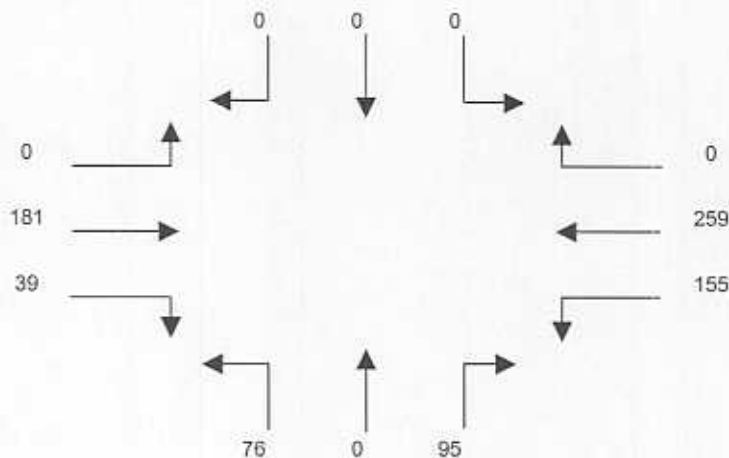
CLIENT: KAKU ASSOCIATES, INC.
 PROJECT: CULVER CITY TMC PROJECT
 DATE: THURSDAY, OCTOBER 06, 2005
 PERIOD: 07:00 AM TO 09:00 AM
 INTERSECTION N/S LUCERNE AVENUE
 E/W HIGUERA STREET
 FILE NUMBER: 3-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
700-715	0	0	0	0	33	8	6	0	10	5	23	0
715-730	0	0	0	0	40	13	10	0	19	6	24	0
730-745	0	0	0	0	73	28	17	0	18	8	39	0
745-800	0	0	0	0	88	53	29	0	23	11	59	0
800-815	0	0	0	0	47	29	18	0	14	7	34	0
815-830	0	0	0	0	51	45	31	0	21	13	49	0
830-845	0	0	0	0	43	32	21	0	25	7	32	0
845-900	0	0	0	0	54	38	19	0	24	9	45	0

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-800	0	0	0	0	234	102	62	0	70	30	145	0	643
715-815	0	0	0	0	248	123	74	0	74	32	156	0	707
730-830	0	0	0	0	259	155	95	0	76	39	181	0	805
745-845	0	0	0	0	229	159	99	0	83	38	174	0	782
800-900	0	0	0	0	195	144	89	0	84	36	160	0	708

A.M. PEAK HOUR
0730-0830

HIGUERA STREET



LUCERNE AVENUE

THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

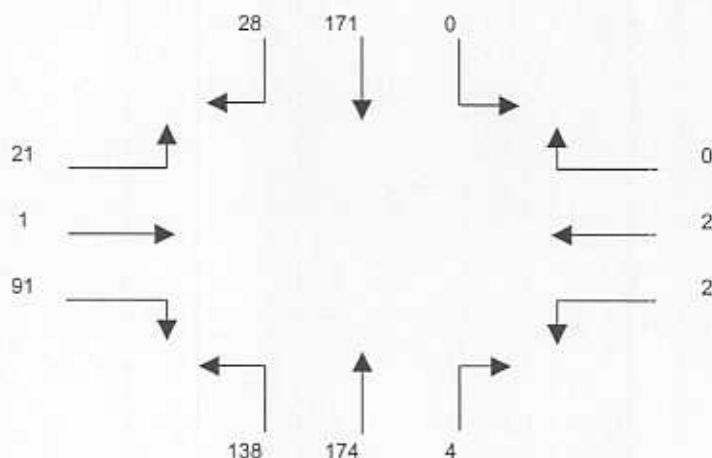
CLIENT: KAKU ASSOCIATES, INC.
 PROJECT: CULVER CITY TMC PROJECT
 DATE: THURSDAY, OCTOBER 06, 2005
 PERIOD: 07:00 AM TO 09:00 AM
 INTERSECTION: N/S LUCERNE AVENUE
 E/W INCE BOULEVARD
 FILE NUMBER: 4-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
700-715	1	22	0	1	1	1	1	16	18	9	2	2
715-730	1	20	0	0	0	0	0	18	19	10	0	1
730-745	4	34	1	0	0	1	0	25	17	20	0	2
745-800	5	24	0	0	0	1	0	34	31	16	0	6
800-815	7	59	0	0	1	0	3	57	28	31	0	7
815-830	9	56	0	0	1	1	1	45	42	29	1	6
830-845	7	32	0	0	0	0	0	38	37	15	0	2
845-900	10	21	2	0	0	1	0	35	34	11	0	2

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-800	11	100	1	1	1	3	1	93	85	55	2	11	364
715-815	17	137	1	0	1	2	3	134	95	77	0	16	483
730-830	25	173	1	0	2	3	4	161	118	96	1	21	605
745-845	28	171	0	0	2	2	4	174	138	91	1	21	632
800-900	33	168	2	0	2	2	4	175	141	86	1	17	631

A.M. PEAK HOUR
0745-0845

INCE BOULEVARD



LUCERNE AVENUE

THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

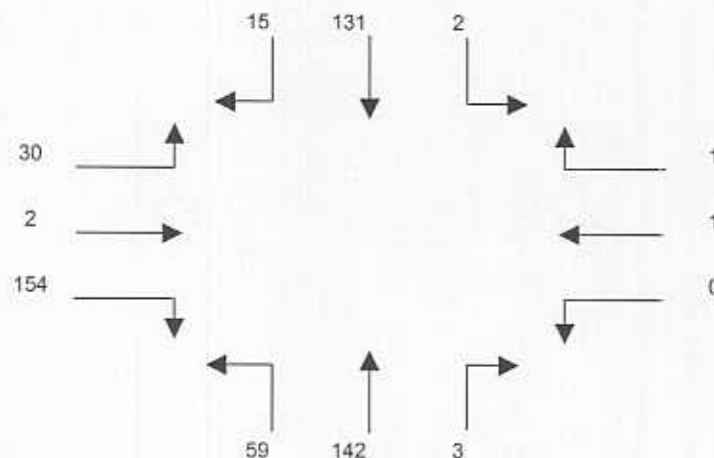
CLIENT: KAKU ASSOCIATES, INC.
 PROJECT: CULVER CITY TMC PROJECT
 DATE: THURSDAY, OCTOBER 06, 2005
 PERIOD: 04:00 PM TO 06:00 PM
 INTERSECTION N/S LUCERNE AVENUE
 E/W INCE BOULEVARD
 FILE NUMBER: 4-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
400-415	2	16	0	0	0	0	0	36	14	24	0	1
415-430	1	24	1	1	0	0	0	30	14	32	0	2
430-445	2	36	0	0	0	0	0	30	24	24	0	5
445-500	2	25	0	0	1	0	1	24	13	25	1	6
500-515	3	35	1	0	0	0	1	24	14	40	1	8
515-530	5	26	0	0	1	0	0	38	16	38	0	8
530-545	4	42	1	1	0	0	1	33	16	33	0	7
545-600	3	28	0	0	0	0	1	47	13	43	1	7

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-500	7	101	1	1	1	0	1	120	65	105	1	14	417
415-515	8	120	2	1	1	0	2	108	65	121	2	21	451
430-530	12	122	1	0	2	0	2	116	67	127	2	27	478
445-545	14	128	2	1	2	0	3	119	59	136	2	29	495
500-600	15	131	2	1	1	0	3	142	59	154	2	30	540

P.M. PEAK HOUR
0500-0600

INCE BOULEVARD



LUCERNE AVENUE

THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

Groups Printed- Turning Movement

	Southbound				NATIONAL BLVD. Westbound				HAYDEN AVE. Northbound				NATIONAL BLVD. Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	0	0	0	0	209	19	228	4	0	121	125	15	63	0	78	431
07:15 AM	0	0	0	0	0	227	21	248	3	0	147	150	23	94	0	117	515
07:30 AM	0	0	0	0	0	229	36	265	7	0	134	141	18	139	0	157	563
07:45 AM	0	0	0	0	0	204	43	247	12	0	163	175	39	220	0	259	681
Total	0	0	0	0	0	869	119	988	26	0	565	591	95	516	0	611	2190
08:00 AM	0	0	0	0	0	182	47	229	21	0	182	203	37	208	0	245	677
08:15 AM	0	0	0	0	0	209	42	251	20	0	160	180	39	171	0	210	641
08:30 AM	0	0	0	0	0	163	32	195	15	0	136	151	49	175	0	224	570
08:45 AM	0	0	0	0	0	146	32	178	10	0	149	159	57	170	0	227	564
Total	0	0	0	0	0	700	153	853	66	0	627	693	182	724	0	906	2452
*** BREAK ***																	
04:00 PM	0	0	0	0	0	83	11	94	23	1	107	131	41	287	0	328	553
04:15 PM	0	0	0	0	0	75	11	86	16	0	91	107	45	306	0	351	544
04:30 PM	0	0	0	0	0	77	8	85	22	0	137	159	50	298	0	348	592
04:45 PM	0	0	0	0	0	75	11	86	25	0	121	146	39	296	0	335	567
Total	0	0	0	0	0	310	41	351	86	1	456	543	175	1187	0	1362	2256
05:00 PM	0	0	0	0	0	92	8	100	32	2	149	183	41	309	0	350	633
05:15 PM	0	0	0	0	0	90	13	103	32	0	141	173	55	290	0	345	621
05:30 PM	0	0	0	0	0	62	7	69	23	0	155	178	51	279	0	330	577
05:45 PM	0	0	0	0	0	68	4	72	12	0	131	143	51	321	0	372	587
Total	0	0	0	0	0	312	32	344	99	2	576	677	198	1199	0	1397	2418
06:00 PM	0	0	0	0	0	75	9	84	16	0	159	175	45	305	0	350	609
06:15 PM	0	0	0	0	0	74	5	79	14	0	127	141	27	308	0	335	555
06:30 PM	0	0	0	0	0	63	4	67	24	0	137	161	41	267	0	308	536
06:45 PM	0	0	0	0	0	77	3	80	23	0	105	128	31	241	0	272	480
Total	0	0	0	0	0	289	21	310	77	0	528	605	144	1121	0	1265	2180
07:00 PM	0	0	0	0	0	62	12	74	15	0	108	123	15	218	0	233	430
07:15 PM	0	0	0	0	0	41	6	47	15	0	90	105	17	205	0	222	374
07:30 PM	0	0	0	0	0	54	9	63	14	0	70	84	20	144	0	164	311
07:45 PM	0	0	0	0	0	44	4	48	18	1	61	80	22	151	0	173	301
Total	0	0	0	0	0	201	31	232	62	1	329	392	74	718	0	792	1416
Grand Total	0	0	0	0	0	2681	397	3078	416	4	3081	3501	868	5465	0	6333	12912
Apprch %	0.0	0.0	0.0		0.0	87.1	12.9		11.9	0.1	88.0		13.7	86.3	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	20.8	3.1	23.8	3.2	0.0	23.9	27.1	6.7	42.3	0.0	49.0	

	Southbound				NATIONAL BLVD. Westbound				HAYDEN AVE. Northbound				NATIONAL BLVD. Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:45 AM																
Volume	0	0	0	0	0	758	164	922	68	0	641	709	164	774	0	938	2569
Percent	0.0	0.0	0.0		0.0	82.2	17.8		9.6	0.0	90.4		17.5	82.5	0.0		
07:45	0	0	0	0	0	204	43	247	12	0	163	175	39	220	0	259	681
Volume																	
Peak Factor																	0.943
High Int.	6:45:00 AM				08:15 AM				08:00 AM				07:45 AM				
Volume	0	0	0	0	0	209	42	251	21	0	182	203	39	220	0	259	
Peak Factor								0.918				0.873					0.905

<< ACCUTEK >>
 << 21114 TRIGGER LANE >>
 << DIAMOND BAR, CA 91765 >>
 << (909) 595-6199 FAX: (909) 595-6022 >

File Name : 347707
 Site Code : 00347707
 Start Date : 10/14/2004
 Page No : 2

	Southbound				NATIONAL BLVD. Westbound				HAYDEN AVE. Northbound				NATIONAL BLVD. Eastbound						
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total		
Peak Hour From 04:00 PM to 07:45 PM - Peak 1 of 1																			
Intersection	05:00 PM																		
Volume	0	0	0	0	0	312	32	344	99	2	576	677	198	1199	0	1397	2418		
Percent	0.0	0.0	0.0		0.0	90.7	9.3		14.6	0.3	85.1		14.2	85.8	0.0				
05:00																			
Volume	0	0	0	0	0	92	8	100	32	2	149	183	41	309	0	350	633		
Peak Factor																	0.955		
High Int.					05:15 PM				05:00 PM				05:45 PM						
Volume	0	0	0	0	0	90	13	103	32	2	149	183	51	321	0	372			
Peak Factor									0.835					0.925					0.939

APPENDIX C

INTERSECTION LEVEL OF SERVICE WORKSHEETS

EXISTING CONDITIONS

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

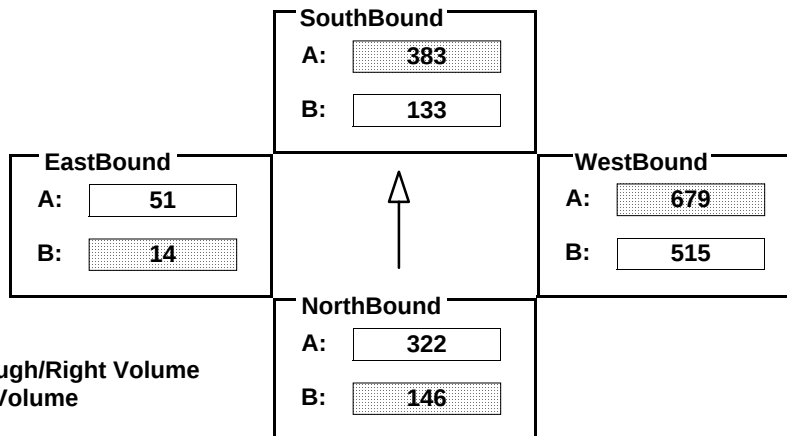
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	146	644	450	133	766	101	937	679	71	14	102	33
AMBIENT												
RELATED												
PROJECT												
TOTAL	146	644	450	133	766	101	937	679	71	14	102	33
LANE	1 0 2 0 0 1 0	1 0 2 0 0 1 0	2 0 1 0 0 1 0	1 0 2 0 0 1 0	1 0 2 0 0 1 0	1 0 2 0 0 1 0	1 0 2 0 0 1 0	1 0 2 0 0 1 0	1 0 2 0 0 1 0	1 0 2 0 0 1 0	1 0 2 0 0 1 0	1 0 2 0 0 1 0
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Free	Perm		Auto	Prot-Fix		Auto	Perm		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{146 + 383 + 679 + 14}{*1425} = 0.788 \quad \text{LOS} = C$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

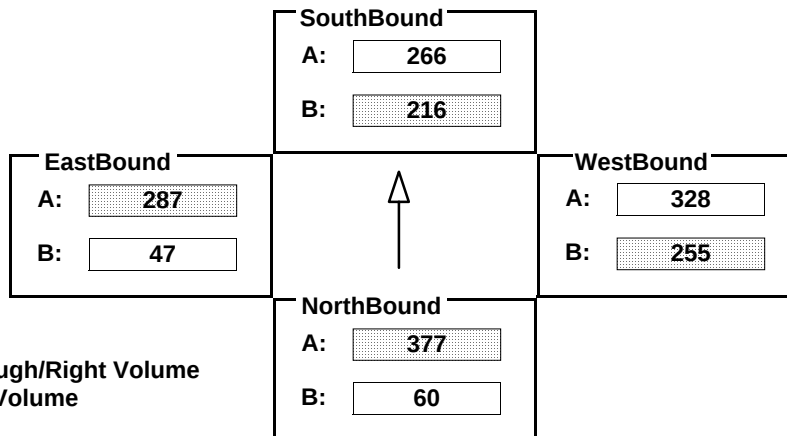
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
	LT		TH		RT			LT		TH		RT			LT		TH		RT			LT		TH		RT		
EXISTING	60		753		1049			216		531		46			464		328		42			47		574		115		
AMBIENT																												
RELATED																												
PROJECT																												
TOTAL	60		753		1049			216		531		46			464		328		42			47		574		115		
LANE	      							      							      							      						
	1	0	2	0	0	1	0	1	0	2	0	0	1	0	2	0	1	0	0	1	0	1	0	2	0	0	1	0
	Phasing			RTOR				Phasing			RTOR				Phasing			RTOR				Phasing			RTOR			
SIGNAL	Perm			Free				Perm			Auto				Prot-Fix			Auto				Perm			Auto			

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{377 + 216 + 255 + 287}{*1425} = 0.726$$

LOS = C

Project Title:		CULVER STUDIOS				
Intersection:		2. Jefferson Boulevard & Duquesne Avenue				
Description:		EXISTING CONDITIONS				
Date/Time:		AM PEAK HOUR (7:45-8:45)				
Thru Lane:	1600 vph			N-S Split Phase :	N	
Left Lane:	1600 vph			E-W Split Phase :	N	
Double Lt Penalty:	20 %			Lost Time (% of cycle) :	10	
ITS:	0 %			V/C Round Off (decs.) :	3	
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	383	1,600	0.076	N-S(1): 0.332
	TH	2.00	1,158	3,200	0.362 *	N-S(2): 0.628 *
	LT	1.00	8	1,600	0.005	E-W(1): 0.217 *
Westbound	RT	1.00	2	1,600	0.000	E-W(2): 0.172
	TH	1.00	12	1,600	0.008	
	LT	1.00	1	1,600	0.001 *	V/C: 0.845
Northbound	RT	0.00	6	0	0.000	Lost Time: 0.100
	TH	2.00	1,040	3,200	0.327	
	LT	1.00	425	1,600	0.266 *	ATSAC -0.070
Eastbound	RT	0.00	336	0	0.000	ICU: 0.875
	TH	1.00	9	1,600	0.216 *	
	LT	1.00	262	1,600	0.164	LOS: D
Date/Time:		PM PEAK HOUR (4:45-5:45)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	229	1,600	0.000	N-S(1): 0.417
	TH	2.00	794	3,200	0.248 *	N-S(2): 0.456 *
	LT	1.00	20	1,600	0.013	E-W(1): 0.277 *
Westbound	RT	1.00	15	1,600	0.000	E-W(2): 0.254
	TH	1.00	15	1,600	0.009	
	LT	1.00	4	1,600	0.003 *	V/C: 0.733
Northbound	RT	0.00	12	0	0.000	Lost Time: 0.100
	TH	2.00	1,281	3,200	0.404	
	LT	1.00	332	1,600	0.208 *	ATSAC -0.070
Eastbound	RT	0.00	407	0	0.000	ICU: 0.763
	TH	1.00	31	1,600	0.274 *	
	LT	1.00	392	1,600	0.245	LOS: C

* - Denotes critical movement

Culver Studios

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

Intersection #3 Lucerne & Duquesne

Cycle (sec): 100 Critical Vol./Cap. (X): 0.951
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 32.1
Optimal Cycle: 0 Level Of Service: D

Street Name:	Lucerne Avenue						Duquesne Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	1	0	1	0	0	0	1

Volume Module:

Base Vol:	0	0	0	147	0	90	78	526	0	0	506	251
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	147	0	90	78	526	0	0	506	251
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:	0	0	0	147	0	90	78	526	0	0	506	251
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	147	0	90	78	526	0	0	506	251
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
Final Vol.:	0	0	0	147	0	90	78	526	0	0	506	251

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.62	0.00	0.38	0.13	0.87	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	336	0	205	82	553	0	0	597	675

Capacity Analysis Module:

Vol/Sat:	xxxx	xxxx	xxxx	0.44	xxxx	0.44	0.95	0.95	xxxx	xxxx	0.85	0.37
Crit Moves:				****			****			****		
Delay/Veh:	0.0	0.0	0.0	14.2	0.0	14.2	47.3	47.3	0.0	0.0	32.8	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	14.2	0.0	14.2	47.3	47.3	0.0	0.0	32.8	11.1
LOS by Move:	*	*	*	B	*	B	E	E	*	*	D	B
ApproachDel:	xxxxxx			14.2			47.3			25.6		
Delay Adj:	xxxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			14.2			47.3			25.6		
LOS by Appr:	*			B			E			D		

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

Intersection #3 Lucerne & Duquesne

Cycle (sec): 100 Critical Vol./Cap. (X): 0.899
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 24.6
Optimal Cycle: 0 Level Of Service: C

Street Name:	Lucerne Avenue						Duquesne Avenue								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0

Volume Module:

Base Vol:	0	0	0	201	0	73	54	525	0	0	357	147
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	201	0	73	54	525	0	0	357	147
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:	0	0	0	201	0	73	54	525	0	0	357	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	201	0	73	54	525	0	0	357	147
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
Final Vol.:	0	0	0	201	0	73	54	525	0	0	357	147

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.73	0.00	0.27	0.09	0.91	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	404	0	147	60	584	0	0	581	655

Capacity Analysis Module:

Vol/Sat:	xxxx	xxxx	xxxx	0.50	xxxx	0.50	0.90	0.90	xxxx	xxxx	0.61	0.22
Crit Moves:						****			****			****
Delay/Veh:	0.0	0.0	0.0	14.9	0.0	14.9	37.4	37.4	0.0	0.0	17.6	9.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	14.9	0.0	14.9	37.4	37.4	0.0	0.0	17.6	9.6
LOS by Move:	*	*	*	B	*	B	E	E	*	*	C	A
ApproachDel:	xxxxxx			14.9			37.4			15.2		
Delay Adj:	xxxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			14.9			37.4			15.2		
LOS by Appr:	*			B			E			C		

Project Title:		CULVER STUDIOS				
Intersection:		4. Culver Boulevard & Madison Avenue				
Description:		EXISTING CONDITIONS				
Date/Time:		AM PEAK HOUR (7:30-8:30)				
Thru Lane:	1600 vph			N-S Split Phase :	N	
Left Lane:	1600 vph			E-W Split Phase :	N	
Double Lt Penalty:	20 %			Lost Time (% of cycle) :	10	
ITS:	0 %			V/C Round Off (decs.) :	3	
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	85	1,600	0.000	N-S(1): 0.094 *
	TH	1.00	24	1,600	0.015	N-S(2): 0.028
	LT	1.00	31	1,600	0.019 *	E-W(1): 0.253
Westbound	RT	1.00	50	1,600	0.012	E-W(2): 0.343 *
	TH	2.00	730	3,200	0.228 *	V/C: 0.437
	LT	1.00	11	1,600	0.007	Lost Time: 0.100
Northbound	RT	0.00	31	0	0.000	ATSAC -0.070
	TH	1.00	69	1,600	0.075 *	ICU: 0.467
	LT	0.00	20	1,600	0.013	LOS: A
Eastbound	RT	0.00	12	0	0.000	
	TH	2.00	774	3,200	0.246	
	LT	1.00	184	1,600	0.115 *	
Date/Time:		PM PEAK HOUR (4:45-5:45)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	174	1,600	0.048	N-S(1): 0.107 *
	TH	1.00	65	1,600	0.041	N-S(2): 0.062
	LT	1.00	83	1,600	0.052 *	E-W(1): 0.254
Westbound	RT	1.00	80	1,600	0.000	E-W(2): 0.323 *
	TH	2.00	839	3,200	0.262 *	V/C: 0.430
	LT	1.00	28	1,600	0.018	Lost Time: 0.100
Northbound	RT	0.00	20	0	0.000	ATSAC -0.070
	TH	1.00	45	1,600	0.055 *	ICU: 0.460
	LT	0.00	23	1,600	0.014	LOS: A
Eastbound	RT	0.00	21	0	0.000	
	TH	2.00	735	3,200	0.236	
	LT	1.00	97	1,600	0.061 *	

* - Denotes critical movement

Project Title:		CULVER STUDIOS				
Intersection:		5. Washington Boulevard & Clarington Avenue				
Description:		EXISTING CONDITIONS				
Date/Time:		AM PEAK HOUR (7:45-8:45)				
Thru Lane:	1600 vph			N-S Split Phase :	N	
Left Lane:	1600 vph			E-W Split Phase :	N	
Double Lt Penalty:	20 %			Lost Time (% of cycle) :	10	
ITS:	0 %			V/C Round Off (decs.) :	3	
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	39	0	0.000	N-S(1): 0.118 *
	TH	1.00	59	1,600	0.061	N-S(2): 0.104
	LT	1.00	24	1,600	0.015 *	E-W(1): 0.232
Westbound	RT	1.00	38	1,600	0.009	E-W(2): 0.287 *
	TH	2.00	829	3,200	0.259 *	
	LT	1.00	17	1,600	0.011	V/C: 0.405
Northbound	RT	1.00	79	1,600	0.039	Lost Time: 0.100
	TH	1.00	164	1,600	0.103 *	
	LT	1.00	68	1,600	0.043	ATSAC -0.070
Eastbound	RT	0.00	68	0	0.000	ICU: 0.435
	TH	2.00	639	3,200	0.221	
	LT	1.00	45	1,600	0.028 *	LOS: A
Date/Time:		PM PEAK HOUR (4:30-5:30)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	40	0	0.000	N-S(1): 0.105
	TH	1.00	165	1,600	0.128 *	N-S(2): 0.168 *
	LT	1.00	32	1,600	0.020	E-W(1): 0.353 *
Westbound	RT	1.00	48	1,600	0.010	E-W(2): 0.248
	TH	2.00	688	3,200	0.215	
	LT	1.00	41	1,600	0.026 *	V/C: 0.521
Northbound	RT	1.00	23	1,600	0.000	Lost Time: 0.100
	TH	1.00	136	1,600	0.085	
	LT	1.00	64	1,600	0.040 *	ATSAC -0.070
Eastbound	RT	0.00	107	0	0.000	ICU: 0.551
	TH	2.00	939	3,200	0.327 *	
	LT	1.00	52	1,600	0.033	LOS: A

* - Denotes critical movement

Project Title:		CULVER STUDIOS				
Intersection:		6. Culver Boulevard & Duquesne Avenue				
Description:		EXISTING CONDITIONS				
Date/Time:		AM PEAK HOUR (7:30-8:30)				
Thru Lane:	1600 vph			N-S Split Phase :	N	
Left Lane:	1600 vph			E-W Split Phase :	N	
Double Lt Penalty:	20 %			Lost Time (% of cycle) :	10	
ITS:	0 %			V/C Round Off (decs.) :	3	
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	60	0	0.000	N-S(1): 0.237 *
	TH	2.00	267	3,200	0.102	N-S(2): 0.163
	LT	1.00	22	1,600	0.014 *	E-W(1): 0.303 *
Westbound	RT	0.00	20	0	0.000	E-W(2): 0.236
	TH	2.00	628	3,200	0.203	V/C: 0.540
	LT	1.00	79	1,600	0.049 *	Lost Time: 0.100
Northbound	RT	1.00	89	1,600	0.006	ATSAC -0.070
	TH	1.00	356	1,600	0.223 *	ICU: 0.570
	LT	1.00	98	1,600	0.061	LOS: A
Eastbound	RT	0.00	65	0	0.000	
	TH	2.00	747	3,200	0.254 *	
	LT	1.00	53	1,600	0.033	
Date/Time:		PM PEAK HOUR (4:45-5:45)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	107	0	0.000	N-S(1): 0.219 *
	TH	2.00	291	3,200	0.124	N-S(2): 0.172
	LT	1.00	88	1,600	0.055 *	E-W(1): 0.307 *
Westbound	RT	0.00	33	0	0.000	E-W(2): 0.287
	TH	2.00	771	3,200	0.251	V/C: 0.526
	LT	1.00	103	1,600	0.064 *	Lost Time: 0.100
Northbound	RT	1.00	119	1,600	0.010	ATSAC -0.070
	TH	1.00	262	1,600	0.164 *	ICU: 0.556
	LT	1.00	77	1,600	0.048	LOS: A
Eastbound	RT	0.00	86	0	0.000	
	TH	2.00	691	3,200	0.243 *	
	LT	1.00	58	1,600	0.036	

* - Denotes critical movement

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

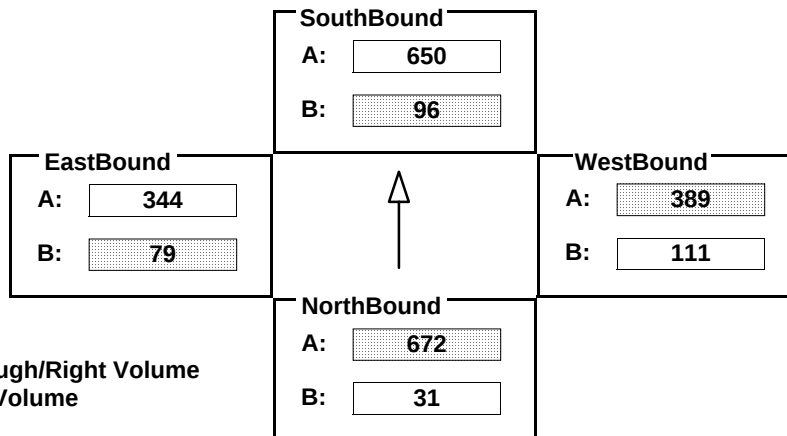
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	31	2015	50	96	1950	44	111	211	67	79	210	55
AMBIENT												
RELATED												
PROJECT												
TOTAL	31	2015	50	96	1950	44	111	211	67	79	210	55
LANE	1 0 3 0 0 1 0	1 0 3 0 0 1 0	0 0 0 1 0 0 0	0 0 0 1 0 0 0	0 0 0 1 0 0 0	0 0 0 1 0 0 0	0 0 0 1 0 0 0	0 0 0 1 0 0 0	0 0 0 1 0 0 0	0 0 0 1 0 0 0	0 0 0 1 0 0 0	0 0 0 1 0 0 0
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{672 + 96 + 389 + 79}{*1500} = 0.754$$

LOS = C

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

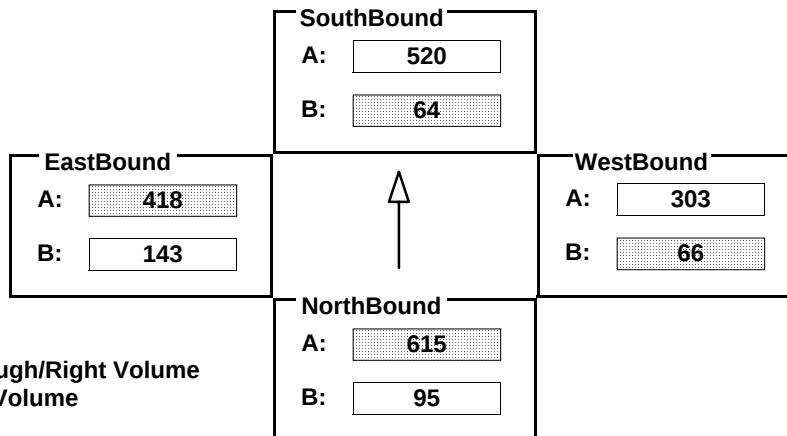
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND							SOUTHBOUND							WESTBOUND							EASTBOUND						
	LT		TH		RT			LT		TH		RT			LT		TH		RT			LT		TH		RT		
EXISTING	95		1844		26			64		1560		71			66		199		38			143		204		71		
AMBIENT																												
RELATED																												
PROJECT																												
TOTAL	95		1844		26			64		1560		71			66		199		38			143		204		71		
LANE	      							      							      							      						
	1	0	3	0	0	1	0	1	0	3	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	
	Phasing			RTOR				Phasing			RTOR				Phasing			RTOR				Phasing			RTOR			
SIGNAL	Perm			Auto				Perm			Auto				Perm			Auto				Perm			Auto			

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

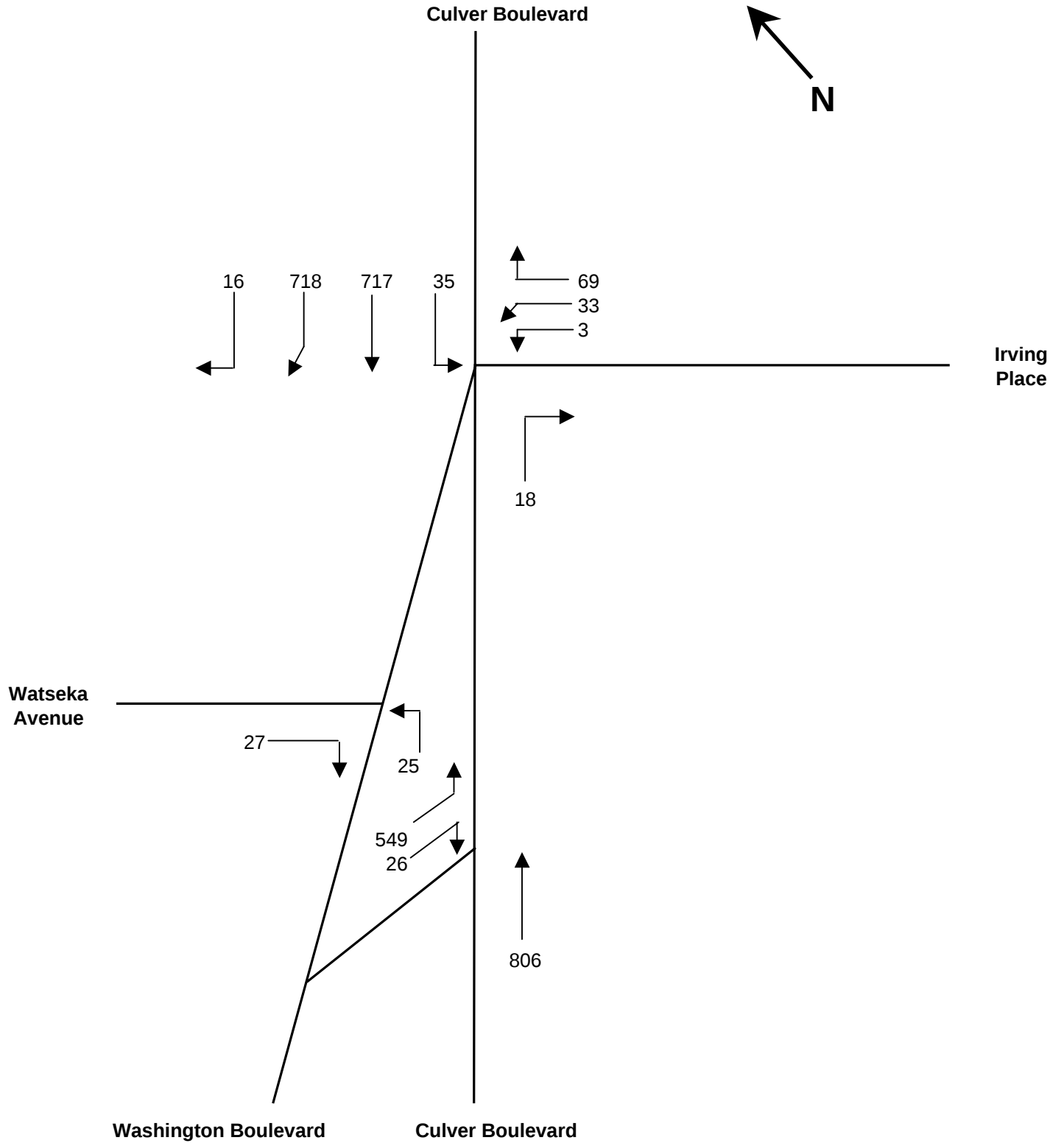
North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{615 + 64 + 66 + 418}{*1500} = 0.705$$

LOS = C

Existing Conditions A.M. Peak Hour



$$\text{Phase 1)} \quad \frac{549}{2} \quad \text{or} \quad \frac{25+27}{1} \quad \& \quad \left\{ \frac{718 + 33 + 16}{1} \right\}$$

$$= \quad \mathbf{275}$$

$$\text{Phase 2)} \quad \frac{806 + 18}{3} \quad \text{or} \quad \frac{717 + 3}{1.5} \quad \& \quad \left\{ \frac{767 - 275}{1.5} \right\}$$

$$= \quad \mathbf{480}$$

$$\text{Phase 3)} \quad \frac{35}{1}$$

$$= \quad \mathbf{35}$$

$$\text{Phase 4)} \quad \frac{33 + 3}{1}$$

$$= \quad \mathbf{36}$$

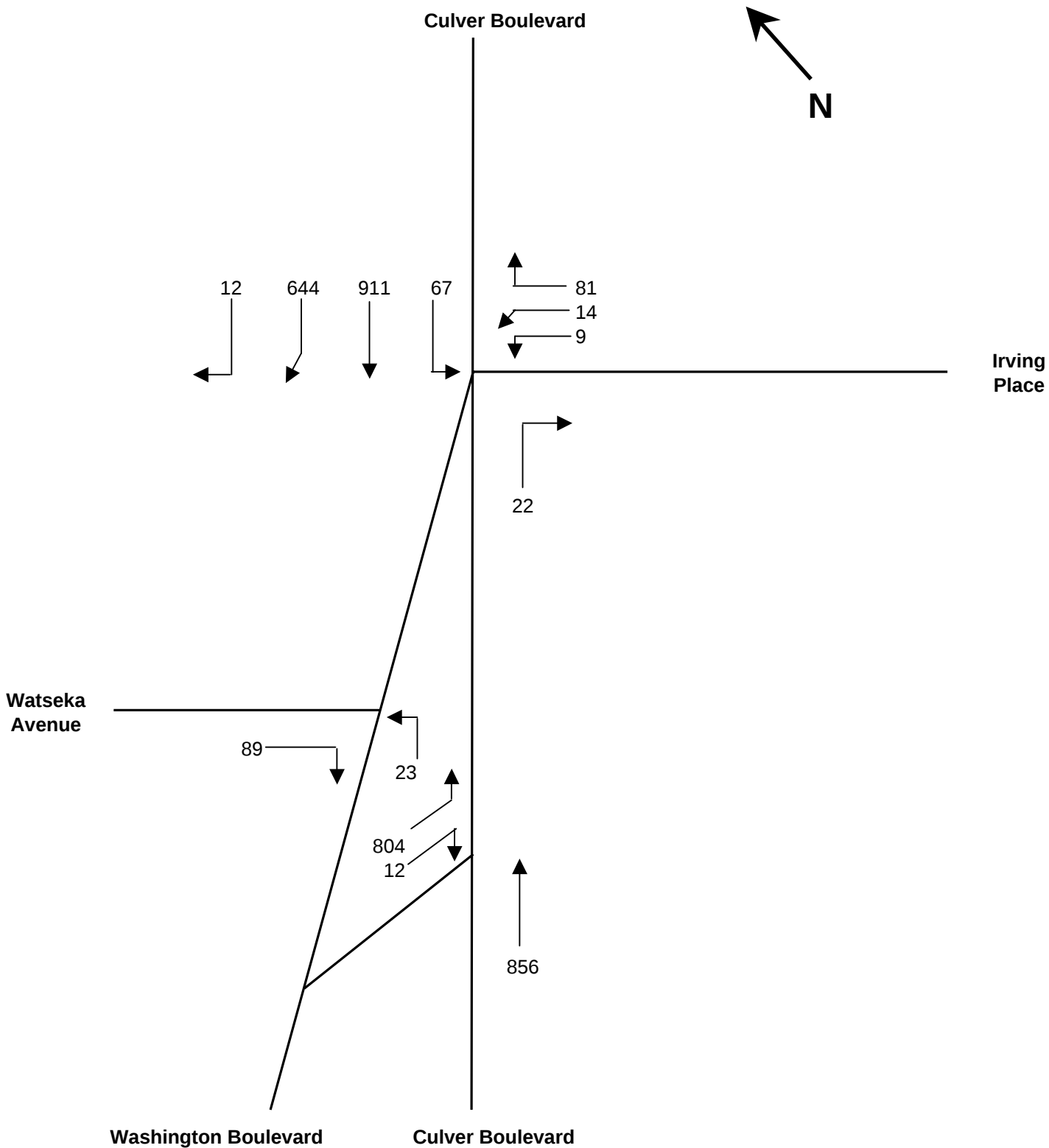
$$\mathbf{\text{Critical Volumes} = \quad 275 \quad + \quad 480 \quad + \quad 35 \quad + \quad 36}$$

$$= \quad \mathbf{826}$$

$$\mathbf{V/C = \quad \frac{826}{1600} \quad + \quad 0.10 \quad - \quad 0.07 \quad = \quad 0.546}$$

LOS A

Existing Conditions P.M. Peak Hour



$$\text{Phase 1) } \frac{804}{2} \quad \text{or} \quad \frac{89 + 23}{1} \quad \& \quad \left\{ \frac{644 + 14 + 12}{1} \right\}$$

$$= \quad \mathbf{402}$$

$$\text{Phase 2) } \frac{856 + 22}{3} \quad \text{or} \quad \frac{911 + 9}{1.5} \quad \& \quad \left\{ \frac{670 - 402}{1.5} \right\}$$

$$= \quad \mathbf{613}$$

$$\text{Phase 3) } \frac{67}{1}$$

$$= \quad \mathbf{67}$$

$$\text{Phase 4) } \frac{14 + 9}{1}$$

$$= \quad \mathbf{23}$$

$$\text{Critical Volumes} = \quad \mathbf{402} \quad + \quad \mathbf{613} \quad + \quad \mathbf{67} \quad + \quad \mathbf{23}$$

$$= \quad \mathbf{1105}$$

$$V/C = \quad \frac{\mathbf{1105}}{\mathbf{1600}} \quad + \quad \mathbf{0.10} \quad - \quad \mathbf{0.07} \quad = \quad \mathbf{0.721}$$

LOS C

Project Title:		CULVER STUDIOS				
Intersection:		9. Culver Boulevard & Main Street & Washington Boulevard				
Description:		EXISTING CONDITIONS				
Date/Time:		AM PEAK HOUR (7:45-8:45)				
Thru Lane:	1600 vph				N-S Split Phase :	Y
Left Lane:	1600 vph				E-W Split Phase :	N
Double Lt Penalty:	20 %				Lost Time (% of cycle) :	10
ITS:	0 %				V/C Round Off (decs.) :	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	73	1,600	0.000	N-S(1): 0.511 *
	TH	1.00	125	1,600	0.086 *	N-S(2): 0.000
	LT	0.00	12	1,600	0.008	E-W(1): 0.209 *
Westbound	RT	0.00	18	0	0.000	E-W(2): 0.152
	TH	2.00	272	3,200	0.091	V/C: 0.720
	LT	1.00	20	1,600	0.013 *	Lost Time: 0.100
Northbound	RT	0.00	9	0	0.000	ATSAC -0.070
	TH	1.00	113	1,600	0.076	ICU: 0.750
	LT	2.00	1,088	2,560	0.425 *	LOS: C
Eastbound	RT	2.00	708	3,200	0.051	
	TH	2.00	626	3,200	0.196 *	
	LT	1.00	98	1,600	0.061	
Date/Time:		PM PEAK HOUR (4:30-5:30)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	141	1,600	0.026	N-S(1): 0.519 *
	TH	1.00	218	1,600	0.149 *	N-S(2): 0.000
	LT	0.00	20	1,600	0.013	E-W(1): 0.256 *
Westbound	RT	0.00	24	0	0.000	E-W(2): 0.233
	TH	2.00	519	3,200	0.170	V/C: 0.775
	LT	1.00	58	1,600	0.036 *	Lost Time: 0.100
Northbound	RT	0.00	7	0	0.000	ATSAC -0.070
	TH	1.00	80	1,600	0.054	ICU: 0.805
	LT	2.00	947	2,560	0.370 *	LOS: D
Eastbound	RT	2.00	975	3,200	0.157	
	TH	2.00	703	3,200	0.220 *	
	LT	1.00	100	1,600	0.063	

* - Denotes critical movement

Project Title:		CULVER STUDIOS				
Intersection:		10. Washington Boulevard & Ince Boulevard				
Description:		EXISTING CONDITIONS				
Date/Time:		AM PEAK HOUR (7:45-8:45)				
Thru Lane:	1600 vph				N-S Split Phase :	Y
Left Lane:	1600 vph				E-W Split Phase :	N
Double Lt Penalty:	20 %				Lost Time (% of cycle) :	10
ITS:	0 %				V/C Round Off (decs.) :	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.047 *
	TH	0.00	0	0	0.000	N-S(2): 0.000
	LT	0.00	0	0	0.000 *	E-W(1): 0.313
Westbound	RT	1.00	45	1,600	0.028	E-W(2): 0.365 *
	TH	2.00	1,159	3,200	0.362 *	V/C: 0.412
	LT	1.00	77	1,600	0.048	Lost Time: 0.100
Northbound	RT	1.00	99	1,600	0.014	ATSAC -0.070
	TH	1.00	32	1,600	0.047 *	ICU: 0.442
	LT	0.00	43	1,600	0.027	LOS: A
Eastbound	RT	0.00	59	0	0.000	
	TH	2.00	790	3,200	0.265	
	LT	1.00	4	1,600	0.003 *	
Date/Time:		PM PEAK HOUR (4:45-5:45)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.048 *
	TH	0.00	0	0	0.000	N-S(2): 0.000
	LT	0.00	0	0	0.000 *	E-W(1): 0.452 *
Westbound	RT	1.00	81	1,600	0.051	E-W(2): 0.323
	TH	2.00	989	3,200	0.309	V/C: 0.500
	LT	1.00	116	1,600	0.073 *	Lost Time: 0.100
Northbound	RT	1.00	81	1,600	0.000	ATSAC -0.070
	TH	1.00	33	1,600	0.048 *	ICU: 0.530
	LT	0.00	44	1,600	0.028	LOS: A
Eastbound	RT	0.00	75	0	0.000	
	TH	2.00	1,137	3,200	0.379 *	
	LT	1.00	22	1,600	0.014	

* - Denotes critical movement

Project Title:		CULVER STUDIOS				
Intersection:		11. Culver Boulevard & Ince Boulevard				
Description:		EXISTING CONDITIONS				
Date/Time:		AM PEAK HOUR (7:45-8:45)				
Thru Lane:	1600 vph				N-S Split Phase :	N
Left Lane:	1600 vph				E-W Split Phase :	N
Double Lt Penalty:	20 %				Lost Time (% of cycle) :	10
ITS:	0 %				V/C Round Off (decs.) :	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.77	10	1,231	0.002	N-S(1): 0.039 *
	TH	0.00	0	0	0.000	N-S(2): 0.011
	LT	0.23	3	369	0.008 *	E-W(1): 0.177 *
Westbound	RT	0.00	3	0	0.000	E-W(2): 0.099
	TH	2.00	297	3,200	0.094	
	LT	0.00	0	0	0.000 *	V/C: 0.216
Northbound	RT	1.00	50	1,600	0.031 *	Lost Time: 0.100
	TH	0.43	5	696	0.007	
	LT	1.57	18	2,003	0.009	
Eastbound	RT	0.00	0	0	0.000	ICU: 0.316
	TH	2.00	566	3,200	0.177 *	
	LT	1.00	8	1,600	0.005	LOS: A
Date/Time:		PM PEAK HOUR (4:45-5:45)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.55	27	882	0.000	N-S(1): 0.105 *
	TH	0.00	0	0	0.000	N-S(2): 0.036
	LT	0.45	22	718	0.031 *	E-W(1): 0.259 *
Westbound	RT	0.00	25	0	0.000	E-W(2): 0.176
	TH	2.00	472	3,200	0.155	
	LT	0.00	0	0	0.000 *	V/C: 0.364
Northbound	RT	1.00	119	1,600	0.074 *	Lost Time: 0.100
	TH	0.46	21	738	0.028	
	LT	1.54	70	1,969	0.036	
Eastbound	RT	0.00	0	0	0.000	ICU: 0.464
	TH	2.00	829	3,200	0.259 *	
	LT	1.00	33	1,600	0.021	LOS: A

* - Denotes critical movement

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

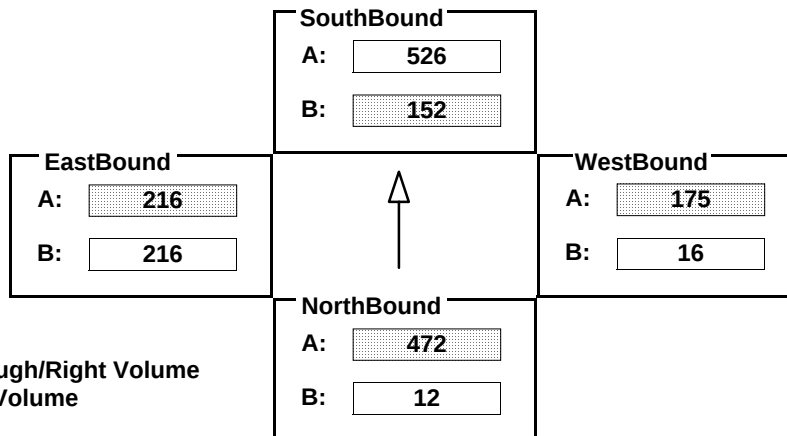
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	12	1879	9	277	1579	127	16	30	595	375	25	31
AMBIENT												
RELATED												
PROJECT												
TOTAL	12	1879	9	277	1579	127	16	30	595	375	25	31
LANE	  			  			  			  		
	1	3	1	2	3		1	1	2	1	1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Prot-Fix		Auto	Split		OLA	Split		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{472 + 152 + 175 + 216}{*1375} = 0.668$$

LOS = B

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

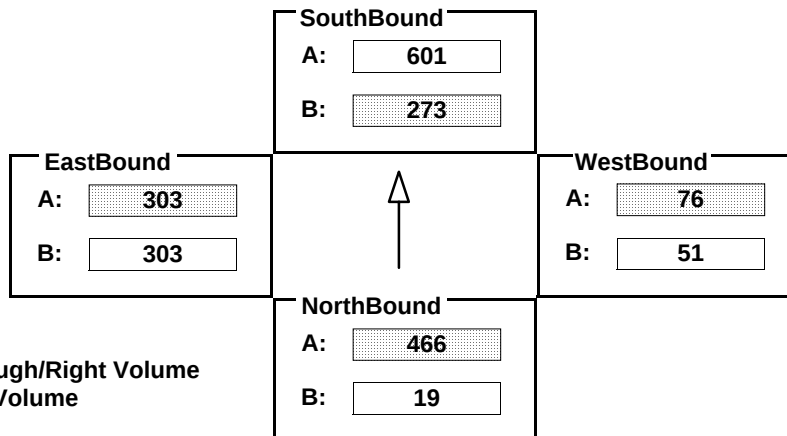
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	19	1841	21	497	1803	162	51	57	635	483	83	40
AMBIENT												
RELATED												
PROJECT												
TOTAL	19	1841	21	497	1803	162	51	57	635	483	83	40
LANE	       			       			       			       		
	1		3		1		2		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Prot-Fix		Auto	Split		OLA	Split		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{466 + 273 + 76 + 303}{*1375} = 0.743 \quad \text{LOS} = C$$

CalcaDB

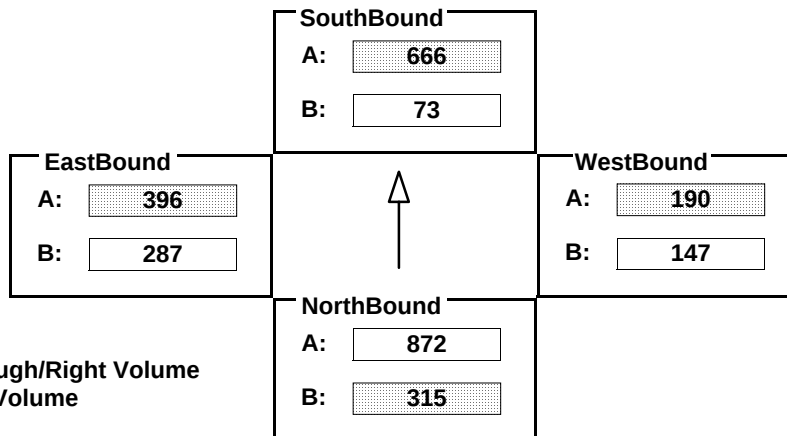
INTERSECTION DATA SUMMARY SHEET

N/S:	Venice Bl	W/E:	Robertson Bl/Exposition	I/S No:	13
AM/PM:	AM	Comments:	EXISTING		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	572	2617	82	73	1999	482	147	380	77	287	396	524
AMBIENT												
RELATED												
PROJECT												
TOTAL	572	2617	82	73	1999	482	147	380	77	287	396	524
LANE	↩ ↩ ↑ ↕ ↕ ↗ ↘	↩ ↩ ↑ ↕ ↕ ↗ ↘	↑ ↕ ↕ ↗ ↘ ↗ ↘	↩ ↩ ↑ ↕ ↕ ↗ ↘	↩ ↩ ↑ ↕ ↕ ↗ ↘	↩ ↩ ↑ ↕ ↕ ↗ ↘	↩ ↩ ↑ ↕ ↕ ↗ ↘	↩ ↩ ↑ ↕ ↕ ↗ ↘	↩ ↩ ↑ ↕ ↕ ↗ ↘	↩ ↩ ↑ ↕ ↕ ↗ ↘	↩ ↩ ↑ ↕ ↕ ↗ ↘	↩ ↩ ↑ ↕ ↕ ↗ ↘
	2	0	3			1			1			1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Var		Auto	Prot-Var		Auto	Split		Auto	Split		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{315 + 666 + 190 + 396}{*1375} = 1.070$$

LOS = F

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

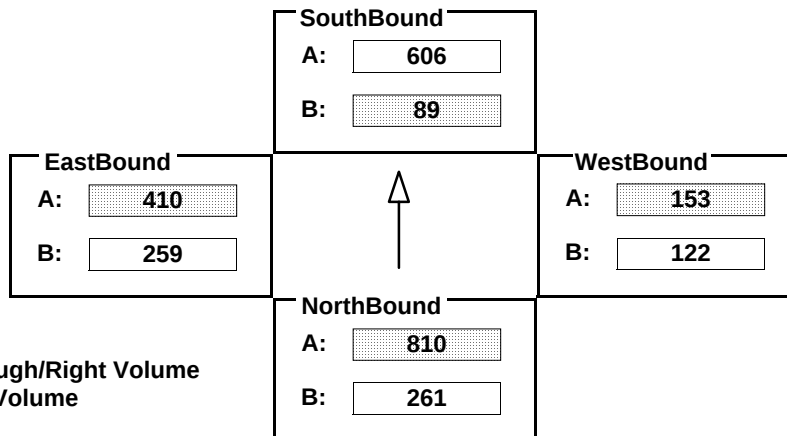
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	475	2431	56	89	1818	117	122	306	54	259	355	541
AMBIENT												
RELATED												
PROJECT												
TOTAL	475	2431	56	89	1818	117	122	306	54	259	355	541
LANE	  			  			  			  		
	2	0	3	1	3	1	1	2	1	0	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Var		Auto	Prot-Var		Auto	Split		Auto	Split		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{810 + 89 + 153 + 410}{*1375} = 0.993$$

LOS = E

Project Title:		CULVER STUDIOS				
Intersection:		14. Washington Boulevard & National Boulevard				
Description:		EXISTING CONDITIONS				
Date/Time:		AM PEAK HOUR (7:45-8:45)				
Thru Lane:	1600 vph			N-S Split Phase :	N	
Left Lane:	1600 vph			E-W Split Phase :	N	
Double Lt Penalty:	20 %			Lost Time (% of cycle) :	10	
ITS:	0 %			V/C Round Off (decs.) :	3	
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	49	0	0.000	N-S(1): 0.365
	TH	2.00	732	3,200	0.244 *	N-S(2): 0.433 *
	LT	2.00	154	2,560	0.060	E-W(1): 0.306
Westbound	RT	1.00	156	1,600	0.049	E-W(2): 0.418 *
	TH	2.00	1,270	3,200	0.397 *	V/C: 0.851
	LT	1.00	82	1,600	0.051	Lost Time: 0.100
Northbound	RT	0.00	75	0	0.000	ATSAC -0.070
	TH	2.00	902	3,200	0.305	ICU: 0.881
	LT	2.00	484	2,560	0.189 *	LOS: D
Eastbound	RT	1.00	203	1,600	0.000	
	TH	2.00	817	3,200	0.255	
	LT	1.00	34	1,600	0.021 *	
Date/Time:		PM PEAK HOUR (5:00-6:00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	64	0	0.000	N-S(1): 0.274
	TH	2.00	977	3,200	0.325 *	N-S(2): 0.416 *
	LT	2.00	143	2,560	0.056	E-W(1): 0.342 *
Westbound	RT	1.00	123	1,600	0.032	E-W(2): 0.256
	TH	2.00	704	3,200	0.220	V/C: 0.758
	LT	1.00	76	1,600	0.048 *	Lost Time: 0.100
Northbound	RT	0.00	78	0	0.000	ATSAC -0.070
	TH	2.00	619	3,200	0.218	ICU: 0.788
	LT	2.00	233	2,560	0.091 *	LOS: C
Eastbound	RT	1.00	276	1,600	0.100	
	TH	2.00	941	3,200	0.294 *	
	LT	1.00	57	1,600	0.036	

* - Denotes critical movement

Project Title:		CULVER STUDIOS				
Intersection:		15. Washington Boulevard & Higuera Street & Robertson Boulevard				
Description:		EXISTING CONDITIONS				
Date/Time:		AM PEAK HOUR (8:00-9:00)				
Thru Lane:		1600 vph			N-S Split Phase :	N
Left Lane:		1600 vph			E-W Split Phase :	N
Double Lt Penalty:		20 %			Lost Time (% of cycle) :	10
ITS:		0 %			V/C Round Off (decs.) :	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	129	1,600	0.045	N-S(1): 0.137
	TH	1.00	229	1,600	0.143 *	N-S(2): 0.181 *
	LT	1.00	93	1,600	0.058	E-W(1): 0.334
Westbound	RT	0.00	332	0	0.000	E-W(2): 0.562 *
	TH	2.00	1,351	3,200	0.526 *	V/C: 0.743
	LT	1.00	60	1,600	0.038	Lost Time: 0.100
Northbound	RT	0.00	85	0	0.000	ATSAC -0.070
	TH	2.00	167	3,200	0.079	ICU: 0.773
	LT	1.00	61	1,600	0.038 *	LOS: C
Eastbound	RT	0.00	95	0	0.000	
	TH	2.00	853	3,200	0.296	
	LT	1.00	57	1,600	0.036 *	
Date/Time:		PM PEAK HOUR (5:00-6:00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	147	1,600	0.024	N-S(1): 0.175
	TH	1.00	259	1,600	0.162 *	N-S(2): 0.198 *
	LT	1.00	184	1,600	0.115	E-W(1): 0.358
Westbound	RT	0.00	183	0	0.000	E-W(2): 0.388 *
	TH	2.00	840	3,200	0.320 *	V/C: 0.586
	LT	1.00	51	1,600	0.032	Lost Time: 0.100
Northbound	RT	0.00	41	0	0.000	ATSAC -0.070
	TH	2.00	150	3,200	0.060	ICU: 0.616
	LT	1.00	57	1,600	0.036 *	LOS: B
Eastbound	RT	0.00	64	0	0.000	
	TH	2.00	978	3,200	0.326	
	LT	1.00	108	1,600	0.068 *	

* - Denotes critical movement

Culver Studios

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

Intersection #16 Lucerne & Higuera

Cycle (sec): 100 Critical Vol./Cap. (X): 0.547
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.3
 Optimal Cycle: 0 Level Of Service: B

Street Name:	Lucerne Avenue						Higuera Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1	0	0	0	0	0	1	0	1	0

Volume Module:

Base Vol:	76	0	95	0	0	0	0	181	39	155	259	0
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:	76	0	95	0	0	0	0	181	39	155	259	0
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:	76	0	95	0	0	0	0	181	39	155	259	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	0	95	0	0	0	0	181	39	155	259	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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
Final Vol.:	76	0	95	0	0	0	0	181	39	155	259	0

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.44	0.00	0.56	0.00	0.00	0.00	0.00	0.82	0.18	0.37	0.63	0.00
Final Sat.:	294	0	367	0	0	0	0	607	131	283	473	0

Capacity Analysis Module:

Vol/Sat:	0.26	xxxx	0.26	xxxx	xxxx	xxxx	xxxx	0.30	0.30	0.55	0.55	xxxx
Crit Moves:	****							****				
Delay/Veh:	9.6	0.0	9.6	0.0	0.0	0.0	0.0	9.6	9.6	12.9	12.9	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.6	0.0	9.6	0.0	0.0	0.0	0.0	9.6	9.6	12.9	12.9	0.0
LOS by Move:	A	*	A	*	*	*	*	A	A	B	B	*
ApproachDel:	9.6			xxxxxx			9.6			12.9		
Delay Adj:	1.00			xxxxxx			1.00			1.00		
ApprAdjDel:	9.6			xxxxxx			9.6			12.9		
LOS by Appr:	A			*			A			B		

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

Intersection #16 Lucerne & Higuera

Cycle (sec): 100 Critical Vol./Cap. (X): 0.347
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.3
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lucerne Avenue						Higuera Street												
Approach:	North Bound			South Bound			East Bound			West Bound									
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R				
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign									
Rights:	Include			Include			Include			Include									
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0							
Lanes:	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0

Volume Module:

Base Vol:	63	0	93	0	0	0	0	217	60	70	147	0
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:	63	0	93	0	0	0	0	217	60	70	147	0
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:	63	0	93	0	0	0	0	217	60	70	147	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	0	93	0	0	0	0	217	60	70	147	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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
Final Vol.:	63	0	93	0	0	0	0	217	60	70	147	0

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.40	0.00	0.60	0.00	0.00	0.00	0.00	0.78	0.22	0.32	0.68	0.00
Final Sat.:	290	0	428	0	0	0	0	625	173	243	511	0

Capacity Analysis Module:

Vol/Sat:	0.22	xxxx	0.22	xxxx	xxxx	xxxx	xxxx	0.35	0.35	0.29	0.29	xxxx
Crit Moves:	****							****	****			
Delay/Veh:	8.8	0.0	8.8	0.0	0.0	0.0	0.0	9.6	9.6	9.4	9.4	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.8	0.0	8.8	0.0	0.0	0.0	0.0	9.6	9.6	9.4	9.4	0.0
LOS by Move:	A	*	A	*	*	*	*	A	A	A	A	*
ApproachDel:	8.8			xxxxxx			9.6			9.4		
Delay Adj:	1.00			xxxxxx			1.00			1.00		
ApprAdjDel:	8.8			xxxxxx			9.6			9.4		
LOS by Appr:	A			*			A			A		

Culver Studios

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

Intersection #17 Lucerne & Ince

Cycle (sec): 100 Critical Vol./Cap. (X): 0.410
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.7
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lucerne Avenue						Ince Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0 0	0	1	0 0 1	0	0	1! 0 0	0	1	0 0 0

Volume Module:

Base Vol:	138	174	4	0	171	28	21	1	91	2	2	0
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:	138	174	4	0	171	28	21	1	91	2	2	0
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:	138	174	4	0	171	28	21	1	91	2	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	174	4	0	171	28	21	1	91	2	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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
Final Vol.:	138	174	4	0	171	28	21	1	91	2	2	0

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.44	0.55	0.01	0.00	1.00	1.00	0.19	0.01	0.80	0.50	0.50	0.00
Final Sat.:	337	425	10	0	701	813	133	6	578	307	307	0

Capacity Analysis Module:

Vol/Sat:	0.41	0.41	0.41	xxxx	0.24	0.03	0.16	0.16	0.16	0.01	0.01	xxxx
Crit Moves:	****			****			****			****		
Delay/Veh:	10.6	10.6	10.6	0.0	9.3	7.2	8.4	8.4	8.4	8.3	8.3	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.6	10.6	10.6	0.0	9.3	7.2	8.4	8.4	8.4	8.3	8.3	0.0
LOS by Move:	B	B	B	*	A	A	A	A	A	A	A	*
ApproachDel:	10.6			9.0			8.4			8.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.6			9.0			8.4			8.3		
LOS by Appr:	B			A			A			A		

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

Intersection #17 Lucerne & Ince

Cycle (sec): 100 Critical Vol./Cap. (X): 0.271
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.8
Optimal Cycle: 0 Level Of Service: A

Street Name:	Lucerne Avenue	Ince Boulevard	
Approach:	North Bound	South Bound	East Bound West Bound
Movement:	L - T - R	L - T - R	L - T - R L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign Stop Sign
Rights:	Include	Include	Include Include
Min. Green:	0 0 0	0 0 0	0 0 0 0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0 0 0 0 1 0

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Volume Module:

Base Vol:	59 142 3	2 131 15	30 2 154	0 1 1
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	59 142 3	2 131 15	30 2 154	0 1 1
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:	59 142 3	2 131 15	30 2 154	0 1 1
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	59 142 3	2 131 15	30 2 154	0 1 1
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
Final Vol.:	59 142 3	2 131 15	30 2 154	0 1 1

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Saturation Flow Module:

Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.29 0.70 0.01	0.02 0.98 1.00	0.16 0.01 0.83	0.00 0.50 0.50
Final Sat.:	218 524 11	10 674 791	129 9 660	0 356 356

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Capacity Analysis Module:

Vol/Sat:	0.27 0.27 0.27	0.19 0.19 0.02	0.23 0.23 0.23	xxxx 0.00 0.00
Crit Moves:	****	****	****	****
Delay/Veh:	9.3 9.3 9.3	9.0 9.0 7.2	8.5 8.5 8.5	0.0 7.6 7.6
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	9.3 9.3 9.3	9.0 9.0 7.2	8.5 8.5 8.5	0.0 7.6 7.6
LOS by Move:	A A A	A A A	A A A	* A A
ApproachDel:	9.3	8.8	8.5	7.6
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	9.3	8.8	8.5	7.6
LOS by Appr:	A	A	A	A

Project Title:		CULVER STUDIOS				
Intersection:		18. Hayden Avenue & National Boulevard				
Description:		EXISTING CONDITIONS				
Date/Time:		AM PEAK HOUR (7:45-8:45)				
Thru Lane:	1600 vph			N-S Split Phase :	N	
Left Lane:	1600 vph			E-W Split Phase :	N	
Double Lt Penalty:	20 %			Lost Time (% of cycle) :	10	
ITS:	0 %			V/C Round Off (decs.) :	3	
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.224
	TH	0.00	0	0	0.000 *	N-S(2): 0.280 *
	LT	0.00	0	0	0.000	E-W(1): 0.400 *
Westbound	RT	0.00	0	0	0.000	E-W(2): 0.239
	TH	2.00	766	3,200	0.239	V/C: 0.680
	LT	1.00	166	1,600	0.104 *	Lost Time: 0.100
Northbound	RT	0.00	69	0	0.000	ATSAC -0.070
	TH	0.19	0	308	0.224	ICU: 0.710
	LT	1.81	647	2,313	0.280 *	LOS: C
Eastbound	RT	0.00	166	0	0.000	
	TH	2.00	782	3,200	0.296 *	
	LT	0.00	0	0	0.000	
Date/Time:		PM PEAK HOUR (5:00-6:00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.214
	TH	0.00	0	0	0.000 *	N-S(2): 0.267 *
	LT	0.00	0	0	0.000	E-W(1): 0.461 *
Westbound	RT	0.00	0	0	0.000	E-W(2): 0.098
	TH	2.00	315	3,200	0.098	V/C: 0.728
	LT	1.00	32	1,600	0.020 *	Lost Time: 0.100
Northbound	RT	0.00	102	0	0.000	ATSAC -0.070
	TH	0.30	0	477	0.214	ICU: 0.758
	LT	1.70	582	2,178	0.267 *	LOS: C
Eastbound	RT	0.00	200	0	0.000	
	TH	2.00	1,211	3,200	0.441 *	
	LT	0.00	0	0	0.000	

* - Denotes critical movement

CUMULATIVE BASE CONDITIONS

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

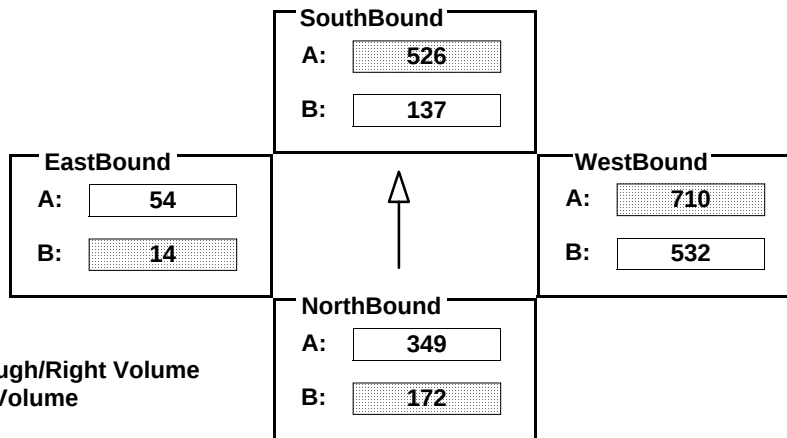
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND						SOUTHBOUND						WESTBOUND						EASTBOUND					
	LT		TH		RT		LT		TH		RT		LT		TH		RT		LT		TH		RT	
EXISTING	172		698		461		137		1052		111		967		710		74		14		108		37	
AMBIENT																								
RELATED																								
PROJECT																								
TOTAL	172		698		461		137		1052		111		967		710		74		14		108		37	
LANE																								
	1	0	2	0	0	1	0	1	0	2	0	0	1	0	2	0	1	0	0	1	0	2	0	0
	Phasing		RTOR				Phasing		RTOR				Phasing		RTOR				Phasing		RTOR			
SIGNAL	Perm		Free				Perm		Auto				Prot-Fix		Auto				Perm		Auto			

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{172 + 526 + 710 + 14}{*1425} = 0.928$$

LOS = E

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

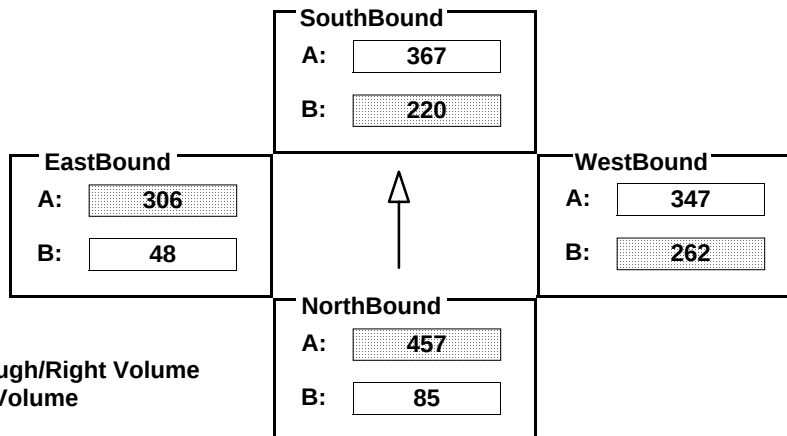
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND						SOUTHBOUND						WESTBOUND						EASTBOUND					
	LT		TH		RT		LT		TH		RT		LT		TH		RT		LT		TH		RT	
EXISTING	85		914		1080		220		733		49		477		347		43		48		612		148	
AMBIENT																								
RELATED																								
PROJECT																								
TOTAL	85		914		1080		220		733		49		477		347		43		48		612		148	
LANE					 		 		 		 		 		 		 		 		 		 	
	1	0	2	0	0	1	0	1	0	2	0	0	1	0	2	0	1	0	2	0	0	1	0	
	Phasing			RTOR			Phasing			RTOR			Phasing			RTOR			Phasing			RTOR		
SIGNAL	Perm			Free			Perm			Auto			Prot-Fix			Auto			Perm			Auto		

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{457 + 220 + 262 + 306}{*1425} = 0.804 \quad \text{LOS} = D$$

Project Title:		CULVER STUDIOS				
Intersection:		2. Jefferson Boulevard & Duquesne Avenue				
Description:		CUMULATIVE BASE CONDITIONS				
Date/Time:		AM PEAK HOUR				
Thru Lane:	1600 vph				N-S Split Phase :	N
Left Lane:	1600 vph				E-W Split Phase :	N
Double Lt Penalty:	20 %				Lost Time (% of cycle) :	10
ITS:	0 %				V/C Round Off (decs.) :	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	396	1,600	0.079	N-S(1): 0.359
	TH	2.00	1,463	3,200	0.457 *	N-S(2): 0.746 *
	LT	1.00	8	1,600	0.005	E-W(1): 0.242 *
Westbound	RT	1.00	2	1,600	0.000	E-W(2): 0.176
	TH	1.00	12	1,600	0.008	
	LT	1.00	1	1,600	0.001 *	V/C: 0.988
Northbound	RT	0.00	6	0	0.000	Lost Time: 0.100
	TH	2.00	1,128	3,200	0.354	
	LT	1.00	462	1,600	0.289 *	ATSAC -0.070
Eastbound	RT	0.00	376	0	0.000	ICU: 1.018
	TH	1.00	9	1,600	0.241 *	
	LT	1.00	269	1,600	0.168	LOS: F
Date/Time:		PM PEAK HOUR				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	238	1,600	0.000	N-S(1): 0.481
	TH	2.00	1,035	3,200	0.323 *	N-S(2): 0.553 *
	LT	1.00	20	1,600	0.013	E-W(1): 0.301 *
Westbound	RT	1.00	15	1,600	0.000	E-W(2): 0.262
	TH	1.00	15	1,600	0.009	
	LT	1.00	4	1,600	0.003 *	V/C: 0.854
Northbound	RT	0.00	12	0	0.000	Lost Time: 0.100
	TH	2.00	1,484	3,200	0.468	
	LT	1.00	368	1,600	0.230 *	ATSAC -0.070
Eastbound	RT	0.00	445	0	0.000	ICU: 0.884
	TH	1.00	32	1,600	0.298 *	
	LT	1.00	405	1,600	0.253	LOS: D

* - Denotes critical movement

 1954 Culver Studios

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

 Intersection #3 Lucerne & Duquesne

Cycle (sec): 100 Critical Vol./Cap. (X): 1.037
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 44.1
 Optimal Cycle: 0 Level Of Service: E

Street Name: Lucerne Avenue Duquesne Avenue
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 0 0 1 0 0 0 0 0 0 1 0 1

Volume Module:
 Base Vol: 0 0 0 154 0 93 82 568 0 0 538 267
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 154 0 93 82 568 0 0 538 267
 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: 0 0 0 154 0 93 82 568 0 0 538 267
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 154 0 93 82 568 0 0 538 267
 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
 Final Vol.: 0 0 0 154 0 93 82 568 0 0 538 267

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.62 0.00 0.38 0.13 0.87 0.00 0.00 1.00 1.00
 Final Sat.: 0 0 0 337 0 204 79 548 0 0 589 665

Capacity Analysis Module:
 Vol/Sat: xxxx xxxx xxxx 0.46 xxxx 0.46 1.04 1.04 xxxx xxxx 0.91 0.40
 Crit Moves: **** *
 Delay/Veh: 0.0 0.0 0.0 14.9 0.0 14.9 69.5 69.5 0.0 0.0 42.8 11.7
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 14.9 0.0 14.9 69.5 69.5 0.0 0.0 42.8 11.7
 LOS by Move: * * * B * B F F * * E B
 ApproachDel: xxxxxx 14.9 69.5 32.5
 Delay Adj: xxxxxx 1.00 1.00 1.00
 ApprAdjDel: xxxxxx 14.9 69.5 32.5
 LOS by Appr: * B F D

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

Intersection #3 Lucerne & Duquesne

Cycle (sec): 100 Critical Vol./Cap. (X): 1.003
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 36.0
Optimal Cycle: 0 Level Of Service: E

Street Name:	Lucerne Avenue						Duquesne Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	1	0	1	0	0	0	1

Volume Module:

Base Vol:	0	0	0	216	0	91	65	560	0	0	392	154
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	216	0	91	65	560	0	0	392	154
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:	0	0	0	216	0	91	65	560	0	0	392	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	216	0	91	65	560	0	0	392	154
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
Final Vol.:	0	0	0	216	0	91	65	560	0	0	392	154

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.70	0.00	0.30	0.10	0.90	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	385	0	162	65	558	0	0	563	632

Capacity Analysis Module:

Vol/Sat:	xxxx	xxxx	xxxx	0.56	xxxx	0.56	1.00	1.00	xxxx	xxxx	0.70	0.24
Crit Moves:				****			****			****		
Delay/Veh:	0.0	0.0	0.0	17.1	0.0	17.1	60.5	60.5	0.0	0.0	22.0	10.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	17.1	0.0	17.1	60.5	60.5	0.0	0.0	22.0	10.1
LOS by Move:	*	*	*	C	*	C	F	F	*	*	C	B
ApproachDel:	xxxxxx			17.1			60.5			18.7		
Delay Adj:	xxxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			17.1			60.5			18.7		
LOS by Appr:	*			C			F			C		

Project Title:		CULVER STUDIOS				
Intersection:		4. Culver Boulevard & Madison Avenue				
Description:		CUMULATIVE BASE CONDITIONS				
Date/Time:		AM PEAK HOUR				
Thru Lane:	1600 vph			N-S Split Phase :	N	
Left Lane:	1600 vph			E-W Split Phase :	N	
Double Lt Penalty:	20 %			Lost Time (% of cycle) :	10	
ITS:	0 %			V/C Round Off (decs.) :	3	
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	87	1,600	0.000	N-S(1): 0.096 *
	TH	1.00	24	1,600	0.015	N-S(2): 0.028
	LT	1.00	32	1,600	0.020 *	E-W(1): 0.285
Westbound	RT	1.00	51	1,600	0.012	E-W(2): 0.409 *
	TH	2.00	932	3,200	0.291 *	V/C: 0.505
	LT	1.00	11	1,600	0.007	Lost Time: 0.100
Northbound	RT	0.00	32	0	0.000	ATSAC -0.070
	TH	1.00	70	1,600	0.076 *	ICU: 0.535
	LT	0.00	20	1,600	0.013	LOS: A
Eastbound	RT	0.00	12	0	0.000	
	TH	2.00	878	3,200	0.278	
	LT	1.00	188	1,600	0.118 *	
Date/Time:		PM PEAK HOUR				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1.00	177	1,600	0.049	N-S(1): 0.109 *
	TH	1.00	66	1,600	0.041	N-S(2): 0.063
	LT	1.00	85	1,600	0.053 *	E-W(1): 0.293
Westbound	RT	1.00	82	1,600	0.000	E-W(2): 0.383 *
	TH	2.00	1,027	3,200	0.321 *	V/C: 0.492
	LT	1.00	29	1,600	0.018	Lost Time: 0.100
Northbound	RT	0.00	20	0	0.000	ATSAC -0.070
	TH	1.00	46	1,600	0.056 *	ICU: 0.522
	LT	0.00	23	1,600	0.014	LOS: A
Eastbound	RT	0.00	21	0	0.000	
	TH	2.00	858	3,200	0.275	
	LT	1.00	99	1,600	0.062 *	

* - Denotes critical movement

Project Title:		CULVER STUDIOS				
Intersection:		5. Washington Boulevard & Clarrington Avenue				
Description:		CUMULATIVE BASE CONDITIONS				
Date/Time:		AM PEAK HOUR				
Thru Lane:		1600 vph			N-S Split Phase :	N
Left Lane:		1600 vph			E-W Split Phase :	N
Double Lt Penalty:		20 %			Lost Time (% of cycle) :	10
ITS:		0 %			V/C Round Off (decs.) :	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	40	0	0.000	N-S(1): 0.119 *
	TH	1.00	60	1,600	0.063	N-S(2): 0.106
	LT	1.00	24	1,600	0.015 *	E-W(1): 0.248
Westbound	RT	1.00	39	1,600	0.009	E-W(2): 0.301 *
	TH	2.00	870	3,200	0.272 *	
	LT	1.00	17	1,600	0.011	V/C: 0.420
Northbound	RT	1.00	81	1,600	0.040	Lost Time: 0.100
	TH	1.00	167	1,600	0.104 *	
	LT	1.00	69	1,600	0.043	ATSAC -0.070
Eastbound	RT	0.00	69	0	0.000	ICU: 0.450
	TH	2.00	688	3,200	0.237	
	LT	1.00	46	1,600	0.029 *	LOS: A
Date/Time:		PM PEAK HOUR				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	41	0	0.000	N-S(1): 0.108
	TH	1.00	168	1,600	0.131 *	N-S(2): 0.172 *
	LT	1.00	33	1,600	0.021	E-W(1): 0.369 *
Westbound	RT	1.00	49	1,600	0.010	E-W(2): 0.261
	TH	2.00	731	3,200	0.228	
	LT	1.00	42	1,600	0.026 *	V/C: 0.541
Northbound	RT	1.00	23	1,600	0.000	Lost Time: 0.100
	TH	1.00	139	1,600	0.087	
	LT	1.00	65	1,600	0.041 *	ATSAC -0.070
Eastbound	RT	0.00	109	0	0.000	ICU: 0.571
	TH	2.00	987	3,200	0.343 *	
	LT	1.00	53	1,600	0.033	LOS: A

* - Denotes critical movement

Project Title:		CULVER STUDIOS				
Intersection:		6. Culver Boulevard & Duquesne Avenue				
Description:		CUMULATIVE BASE CONDITIONS				
Date/Time:		AM PEAK HOUR				
Thru Lane:	1600 vph			N-S Split Phase :	N	
Left Lane:	1600 vph			E-W Split Phase :	N	
Double Lt Penalty:	20 %			Lost Time (% of cycle) :	10	
ITS:	0 %			V/C Round Off (decs.) :	3	
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	106	0	0.000	N-S(1): 0.252 *
	TH	2.00	288	3,200	0.123	N-S(2): 0.187
	LT	1.00	33	1,600	0.021 *	E-W(1): 0.343 *
Westbound	RT	0.00	20	0	0.000	E-W(2): 0.288
	TH	2.00	782	3,200	0.251	V/C: 0.595
	LT	1.00	92	1,600	0.058 *	Lost Time: 0.100
Northbound	RT	1.00	105	1,600	0.008	ATSAC -0.070
	TH	1.00	369	1,600	0.231 *	ICU: 0.625
	LT	1.00	102	1,600	0.064	LOS: B
Eastbound	RT	0.00	67	0	0.000	
	TH	2.00	846	3,200	0.285 *	
	LT	1.00	59	1,600	0.037	
Date/Time:		PM PEAK HOUR				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	140	0	0.000	N-S(1): 0.246 *
	TH	2.00	315	3,200	0.142	N-S(2): 0.193
	LT	1.00	96	1,600	0.060 *	E-W(1): 0.353 *
Westbound	RT	0.00	34	0	0.000	E-W(2): 0.345
	TH	2.00	924	3,200	0.299	V/C: 0.599
	LT	1.00	120	1,600	0.075 *	Lost Time: 0.100
Northbound	RT	1.00	132	1,600	0.008	ATSAC -0.070
	TH	1.00	298	1,600	0.186 *	ICU: 0.629
	LT	1.00	81	1,600	0.051	LOS: B
Eastbound	RT	0.00	91	0	0.000	
	TH	2.00	797	3,200	0.278 *	
	LT	1.00	73	1,600	0.046	

* - Denotes critical movement

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

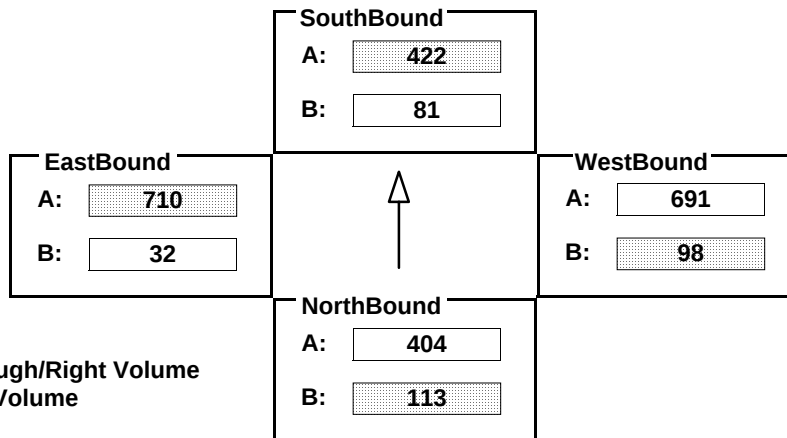
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	113	223	68	81	285	56	98	2072	49	32	2131	51
AMBIENT												
RELATED												
PROJECT												
TOTAL	113	223	68	81	285	56	98	2072	49	32	2131	51
LANE	 0	 0	 0	 1	 0	 0	 0	 1	 0	 3	 0	 1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{113 + 422 + 98 + 710}{*1500} = 0.825$$

LOS = D

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

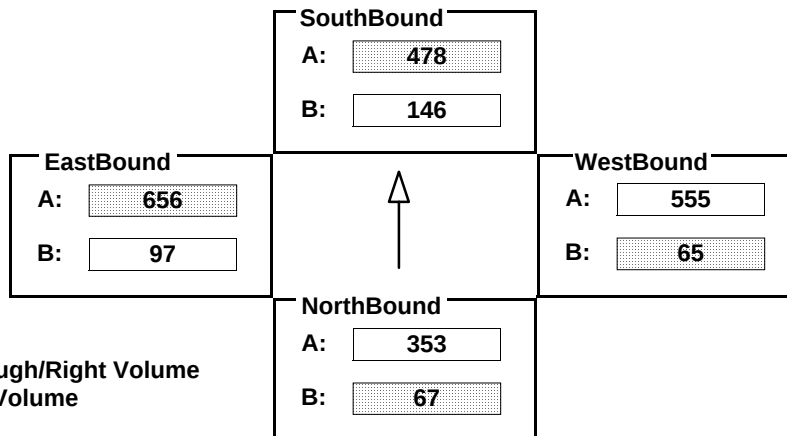
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	67	247	39	146	260	72	65	1665	82	97	1969	27
AMBIENT												
RELATED												
PROJECT												
TOTAL	67	247	39	146	260	72	65	1665	82	97	1969	27
LANE	  	  	  	  	  	  	  	  	  	  	 	
	0	0	0	1	0	0	0	0	0	0	0	0
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

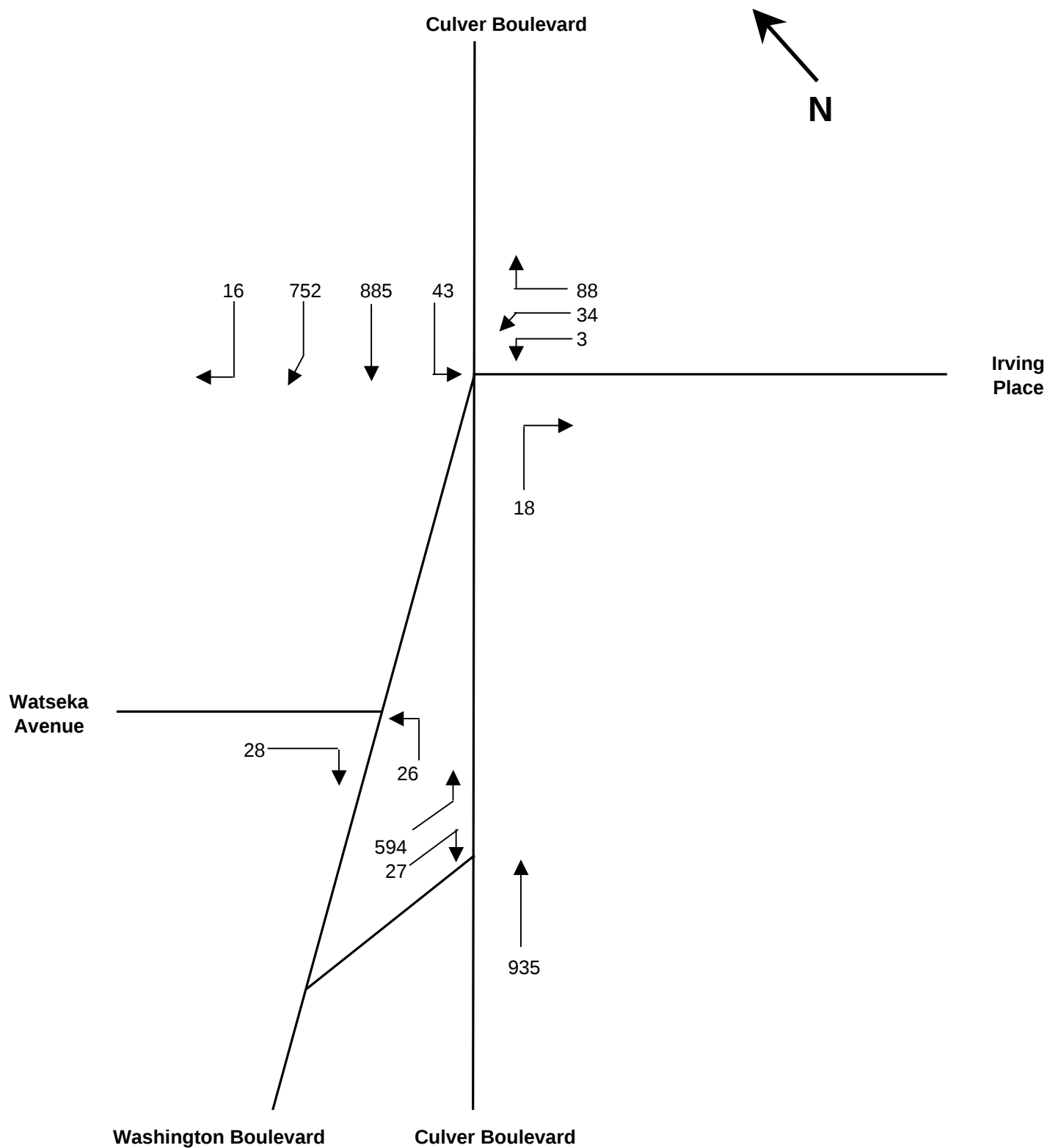
North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{67 + 478 + 65 + 656}{*1500} = 0.774$$

LOS = C

Cumulative Base Conditions A.M. Peak Hour



$$\text{Phase 1)} \quad \frac{594}{2} \quad \text{or} \quad \frac{26+28}{1} \quad \& \quad \left\{ \frac{752 + 34 + 16}{1} \right\}$$

$$= \quad \mathbf{297}$$

$$\text{Phase 2)} \quad \frac{935 + 18}{3} \quad \text{or} \quad \frac{885 + 3}{1.5} \quad \& \quad \left\{ \frac{802 - 297}{1.5} \right\}$$

$$= \quad \mathbf{592}$$

$$\text{Phase 3)} \quad \frac{43}{1}$$

$$= \quad \mathbf{43}$$

$$\text{Phase 4)} \quad \frac{34 + 3}{1}$$

$$= \quad \mathbf{37}$$

$$\mathbf{\text{Critical Volumes} = \quad 297 \quad + \quad 592 \quad + \quad 43 \quad + \quad 37}$$

$$= \quad \mathbf{969}$$

$$\mathbf{V/C = \quad \frac{969}{1600} \quad + \quad 0.10 \quad - \quad 0.07 \quad = \quad 0.636}$$

LOS B