

APPENDIX A: SEGMENT COUNTS



Prepared by: Field Data Services of Arizona (520) 316-6745

Volumes for: Tuesday, May 08, 2012

City: San Diego

Project #: 12-1096-002

Location: Euclid Ave. btwn. SR-94 WB & EB Ramps (on the bridge)

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	28	42			12:00	233	231		
00:15	15	29			12:15	239	216		
00:30	20	34			12:30	263	224		
00:45	14	77	26	131	12:45	245	980	218	889
01:00	8	17			13:00	241	240		
01:15	0	26			13:15	255	246		
01:30	12	14			13:30	358	241		
01:45	13	33	18	75	13:45	363	1217	221	948
02:00	5	11			14:00	385	222		
02:15	12	20			14:15	388	234		
02:30	4	11			14:30	374	233		
02:45	8	29	14	56	14:45	388	1535	235	924
03:00	4	12			15:00	378	280		
03:15	12	12			15:15	389	278		
03:30	15	6			15:30	326	291		
03:45	32	63	6	36	15:45	329	1422	247	1096
04:00	23	14			16:00	333	246		
04:15	21	10			16:15	310	192		
04:30	72	19			16:30	316	209		
04:45	67	183	22	65	16:45	268	1227	259	906
05:00	69	16			17:00	302	232		
05:15	97	27			17:15	294	227		
05:30	152	41			17:30	261	246		
05:45	151	469	39	123	17:45	250	1107	194	899
06:00	165	51			18:00	298	223		
06:15	206	67			18:15	248	186		
06:30	280	131			18:30	207	203		
06:45	232	883	138	387	18:45	170	923	205	817
07:00	306	146			19:00	113	209		
07:15	377	166			19:15	99	188		
07:30	353	139			19:30	71	178		
07:45	257	1293	166	617	19:45	103	386	159	734
08:00	227	138			20:00	82	155		
08:15	218	149			20:15	106	188		
08:30	210	186			20:30	60	152		
08:45	213	868	159	632	20:45	71	319	144	639
09:00	210	197			21:00	72	125		
09:15	225	194			21:15	68	119		
09:30	203	194			21:30	50	136		
09:45	183	821	172	757	21:45	52	242	113	493
10:00	171	185			22:00	48	90		
10:15	107	175			22:15	46	100		
10:30	137	173			22:30	44	94		
10:45	126	541	199	732	22:45	29	167	81	365
11:00	124	175			23:00	37	69		
11:15	180	221			23:15	38	63		
11:30	196	204			23:30	33	50		
11:45	185	685	205	805	23:45	15	123	47	229

Total Vol. 5945 4416 **10361** 9648 8939 **18587**

Daily Totals

NB	SB	EB	WB	Combined
15593	13355			28948

AM

PM

Split % 57.4% 42.6% **35.8%** 51.9% 48.1% **64.2%**

Peak Hour	07:00	11:45	07:00	14:00	15:00	14:45
Volume	1293	876	1910	1535	1096	2565
P.H.F.	0.86	0.95	0.88	0.99	0.94	0.96

Prepared by: Field Data Services of Arizona (520) 316-6745

Volumes for: Tuesday, May 08, 2012

City: San Diego

Project #: 12-1096-003

Location: Euclid Ave. btwn. Geneva Ave. & Hilltop Dr.

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB		
00:00	33	42			12:00	204	214				
00:15	24	23			12:15	183	203				
00:30	24	34			12:30	174	215				
00:45	24	105	18	117	222	12:45	233	794	214	846	1640
01:00	16	20			13:00	198	236				
01:15	19	23			13:15	215	233				
01:30	17	16			13:30	222	235				
01:45	13	65	16	75	140	13:45	210	845	225	929	1774
02:00	11	12			14:00	208	221				
02:15	5	15			14:15	199	255				
02:30	7	11			14:30	232	257				
02:45	10	33	10	48	81	14:45	222	861	261	994	1855
03:00	6	12			15:00	281	299				
03:15	8	7			15:15	234	327				
03:30	16	7			15:30	216	275				
03:45	15	45	4	30	75	15:45	195	926	312	1213	2139
04:00	16	14			16:00	189	363				
04:15	14	18			16:15	164	281				
04:30	36	16			16:30	212	267				
04:45	40	106	23	71	177	16:45	179	744	310	1221	1965
05:00	40	20			17:00	202	297				
05:15	56	34			17:15	160	317				
05:30	106	40			17:30	177	283				
05:45	88	290	46	140	430	17:45	156	695	274	1171	1866
06:00	128	67			18:00	180	267				
06:15	147	86			18:15	210	219				
06:30	236	144			18:30	160	215				
06:45	204	715	151	448	1163	18:45	197	747	224	925	1672
07:00	207	162			19:00	152	227				
07:15	258	197			19:15	138	207				
07:30	245	182			19:30	134	178				
07:45	232	942	199	740	1682	19:45	130	554	173	785	1339
08:00	196	167			20:00	126	168				
08:15	185	184			20:15	144	190				
08:30	171	233			20:30	111	174				
08:45	202	754	180	764	1518	20:45	97	478	137	669	1147
09:00	215	165			21:00	82	129				
09:15	199	164			21:15	114	113				
09:30	191	167			21:30	90	128				
09:45	207	812	169	665	1477	21:45	86	372	110	480	852
10:00	204	175			22:00	83	84				
10:15	193	167			22:15	87	96				
10:30	206	175			22:30	50	107				
10:45	207	810	184	701	1511	22:45	70	290	77	364	654
11:00	193	161			23:00	49	60				
11:15	223	211			23:15	56	61				
11:30	218	181			23:30	52	49				
11:45	217	851	195	748	1599	23:45	48	205	54	224	429

Total Vol. 5528 4547 **10075** 7511 9821 **17332**

Daily Totals				WB	Combined
NB	SB	EB	WB		
13039	14368				27407

Split %	AM			PM		
	54.9%	45.1%	36.8%	43.3%	56.7%	63.2%

Peak Hour	07:00	11:45	07:00	14:30	15:15	15:00
Volume	942	827	1682	969	1277	2139
P.H.F.	0.91	0.96	0.92	0.86	0.88	0.92

EUCLID BTN LISE & GUYMON

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB		
00:00	23	34			12:00	156	141				
00:15	36	39			12:15	183	151				
00:30	30	32			12:30	142	182				
00:45	17	106	22	127	233	12:45	159	640	175	649	1289
01:00	15	16			13:00	151	160				
01:15	24	13			13:15	156	208				
01:30	16	17			13:30	186	189				
01:45	11	66	12	58	124	13:45	158	651	200	757	1408
02:00	19	17			14:00	206	184				
02:15	9	22			14:15	229	184				
02:30	11	8			14:30	249	218				
02:45	12	51	12	59	110	14:45	246	930	250	836	1766
03:00	6	15			15:00	198	261				
03:15	11	16			15:15	261	253				
03:30	4	14			15:30	372	294				
03:45	14	35	14	59	94	15:45	311	1142	303	1111	2253
04:00	15	11			16:00	212	302				
04:15	18	11			16:15	351	231				
04:30	30	12			16:30	403	298				
04:45	33	96	20	54	150	16:45	312	1278	261	1092	2370
05:00	52	26			17:00	269	274				
05:15	45	35			17:15	277	280				
05:30	77	37			17:30	246	272				
05:45	109	283	29	127	410	17:45	225	1017	257	1083	2100
06:00	93	62			18:00	290	261				
06:15	128	64			18:15	239	280				
06:30	164	95			18:30	211	249				
06:45	209	594	108	329	923	18:45	187	927	223	1013	1940
07:00	221	123			19:00	162	197				
07:15	237	143			19:15	176	176				
07:30	306	143			19:30	160	170				
07:45	271	1035	147	556	1591	19:45	128	626	160	703	1329
08:00	245	170			20:00	132	141				
08:15	222	173			20:15	115	126				
08:30	193	160			20:30	105	135				
08:45	242	902	160	663	1565	20:45	88	440	131	533	973
09:00	183	157			21:00	98	141				
09:15	164	135			21:15	88	125				
09:30	142	140			21:30	80	135				
09:45	124	613	159	591	1204	21:45	75	341	125	526	867
10:00	134	132			22:00	65	115				
10:15	157	144			22:15	73	90				
10:30	149	137			22:30	75	84				
10:45	137	577	137	550	1127	22:45	55	268	75	364	632
11:00	138	170			23:00	48	63				
11:15	163	157			23:15	58	83				
11:30	165	141			23:30	39	58				
11:45	159	625	168	636	1261	23:45	23	168	65	269	437

Total Vol.	4983	3809			8792	8428	8936					17364
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		Daily Totals			
	NB	SB	EB	WB	Combined
	13411	12745			26156

Split %	AM			PM		
	56.7%	43.3%	33.6%	48.5%	51.5%	66.4%

Peak Hour	07:15	08:00	07:30	16:15	15:15	15:45
Volume	1059	663	1677	1335	1152	2411
P.H.F.	0.87	0.96	0.93	0.85	0.95	0.86

THURSDAY - OCTOBER 25, 2012

CITY: SAN DIEGO

PROJECT: CA12-1026-01

EUCLID BTN GUYMON & MARKET

AM Period	NB	SB	EB	WB	PM Period	NB	SB	EB	WB
00:00	13	39			12:00	193	174		
00:15	16	34			12:15	195	169		
00:30	19	25			12:30	181	166		
00:45	11	59	27	125	12:45	208	777	175	684
01:00	10	25			13:00	162	143		
01:15	14	16			13:15	184	151		
01:30	12	16			13:30	195	165		
01:45	15	51	21	78	13:45	188	729	177	636
02:00	10	21			14:00	165	184		
02:15	10	11			14:15	174	212		
02:30	14	19			14:30	148	218		
02:45	20	54	16	67	14:45	165	652	203	817
03:00	16	11			15:00	174	184		
03:15	15	19			15:15	159	223		
03:30	24	13			15:30	177	232		
03:45	27	82	13	56	15:45	169	679	275	914
04:00	46	26			16:00	188	268		
04:15	46	36			16:15	215	315		
04:30	65	26			16:30	223	333		
04:45	100	257	26	114	16:45	251	877	305	1221
05:00	99	54			17:00	220	277		
05:15	121	69			17:15	208	312		
05:30	148	104			17:30	219	284		
05:45	214	582	99	326	17:45	235	882	270	1143
06:00	200	132			18:00	206	284		
06:15	210	152			18:15	184	262		
06:30	274	161			18:30	195	241		
06:45	285	969	169	614	18:45	162	747	255	1042
07:00	218	161			19:00	177	241		
07:15	336	135			19:15	151	206		
07:30	277	177			19:30	142	184		
07:45	235	1066	203	676	19:45	132	602	161	792
08:00	205	184			20:00	118	141		
08:15	188	166			20:15	106	132		
08:30	226	151			20:30	95	111		
08:45	195	814	168	669	20:45	80	399	126	510
09:00	263	162			21:00	68	101		
09:15	167	167			21:15	75	98		
09:30	147	163			21:30	44	84		
09:45	147	724	177	669	21:45	51	238	88	371
10:00	168	159			22:00	35	65		
10:15	177	167			22:15	41	43		
10:30	156	184			22:30	28	51		
10:45	175	676	155	665	22:45	33	137	40	199
11:00	182	177			23:00	32	35		
11:15	191	180			23:15	26	44		
11:30	187	215			23:30	29	41		
11:45	162	722	202	774	23:45	22	109	32	152
Total Vol.	6056	4833			10889	6828	8481		15309
								Daily Totals	
						NB	SB	EB	WB
						12884	13314		
									Combined
									26198
Split %		AM					PM		
	55.6%	44.4%		41.6%		44.6%	55.4%		58.4%
Peak Hour	06:45	11:00		06:45		16:15	16:15		16:15
Volume	1116	774		1758		909	1230		2139
P.H.F.	0.83	0.90		0.93		0.94	0.92		0.96

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/2002 to 1/2/2013

1/2/2013

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STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION	WK-DAY VOLUME	STARTING DATE	FILE NUMBER
ENTERPRISE ST	[MIDWAY DR - JESSOP LN]	03500 - 03640	2879	SOUTH *TOTAL	: :	3185 4150	10/28/2010 MC0977-1
ENTERPRISE ST	[JESSOP LN - SPORTS ARENA BL]	03640 - 03699	2878	EAST WEST *TOTAL	: : :	1990 3975 5965	10/28/2010 10/28/2010 MC0976-1 MC0976-1
ESCALA DR	[FERNANDO WY - RESTA WY]	-	5455	NORTH SOUTH *TOTAL	: : :	1390 1205 2595	5/5/2011 5/5/2011 MC0353-1 MC0353-1
ESCALA DR	[CMTO PINERO - DEVEREUX RD]	12000 - 12100	5326	BOTH NORTH SOUTH *TOTAL	: : : :	3210 1525 1830 3355	3/19/2003 11/3/2010 11/3/2010 MC0978-1 MC0978-1
ESTELLE ST	[COLLEGE AV - MADELINE ST]	06100 - 06120	NONE	EAST WEST *TOTAL	: : :	990 960 1950	6/10/2004 6/10/2004 0843-04 0843-04
ETON AV	[SCRIPPS ST - TULANE ST]	03300 - 03320	2886	BOTH	:	940	2/20/2003 0092-03
EUCLID	[CHURCHWARD ST - IMPERIAL AV]	0001 - 00100	3192	NORTH SOUTH *TOTAL NORTH SOUTH *TOTAL	: : : : : :	3800 4640 8440 8570 6390 14960	2/19/2008 2/19/2008 0016-08 0016-08 3/10/2011 3/10/2011 MC0193-1 MC0193-1
EUCLID AV	[HILLTOP DR - LISE AV]	-	7576	NORTH SOUTH *TOTAL	: : :	11915 13570 25485	2/8/2012 2/8/2012 MC0083-1 MC0083-1
EUCLID AV	[CASTANA ST - IMPERIAL AV]	-	3194	NORTH	:	9215	1/12/2010 MC0848-0

APPENDIX B: INTERSECTION COUNTS

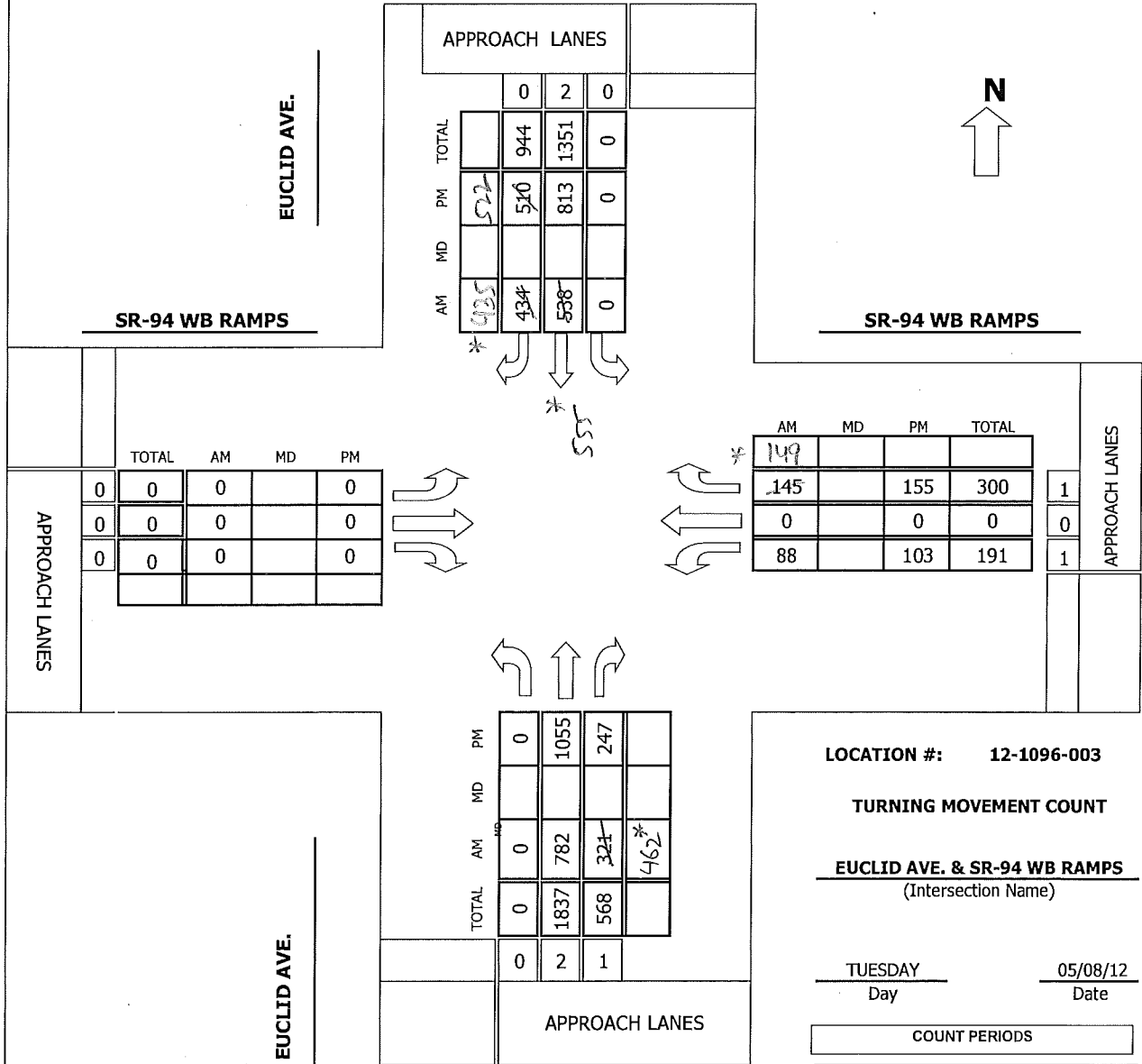


**Intersection Turning Movement
Prepared by:**



Project #: 12-1096-003

TMC SUMMARY OF EUCLID AVE. & SR-94 WB RAMPS



LOCATION #: 12-1096-003

TURNING MOVEMENT COUNT

EUCLID AVE. & SR-94 WB RAMPS
(Intersection Name)

TUESDAY **05/08/12**
Day Date

COUNT PERIODS	
AM	700AM - 900AM
NOON	-
PM	400PM - 600PM

AM PEAK HOUR 730 AM
NOON PEAK HOUR _____
PM PEAK HOUR 445 PM

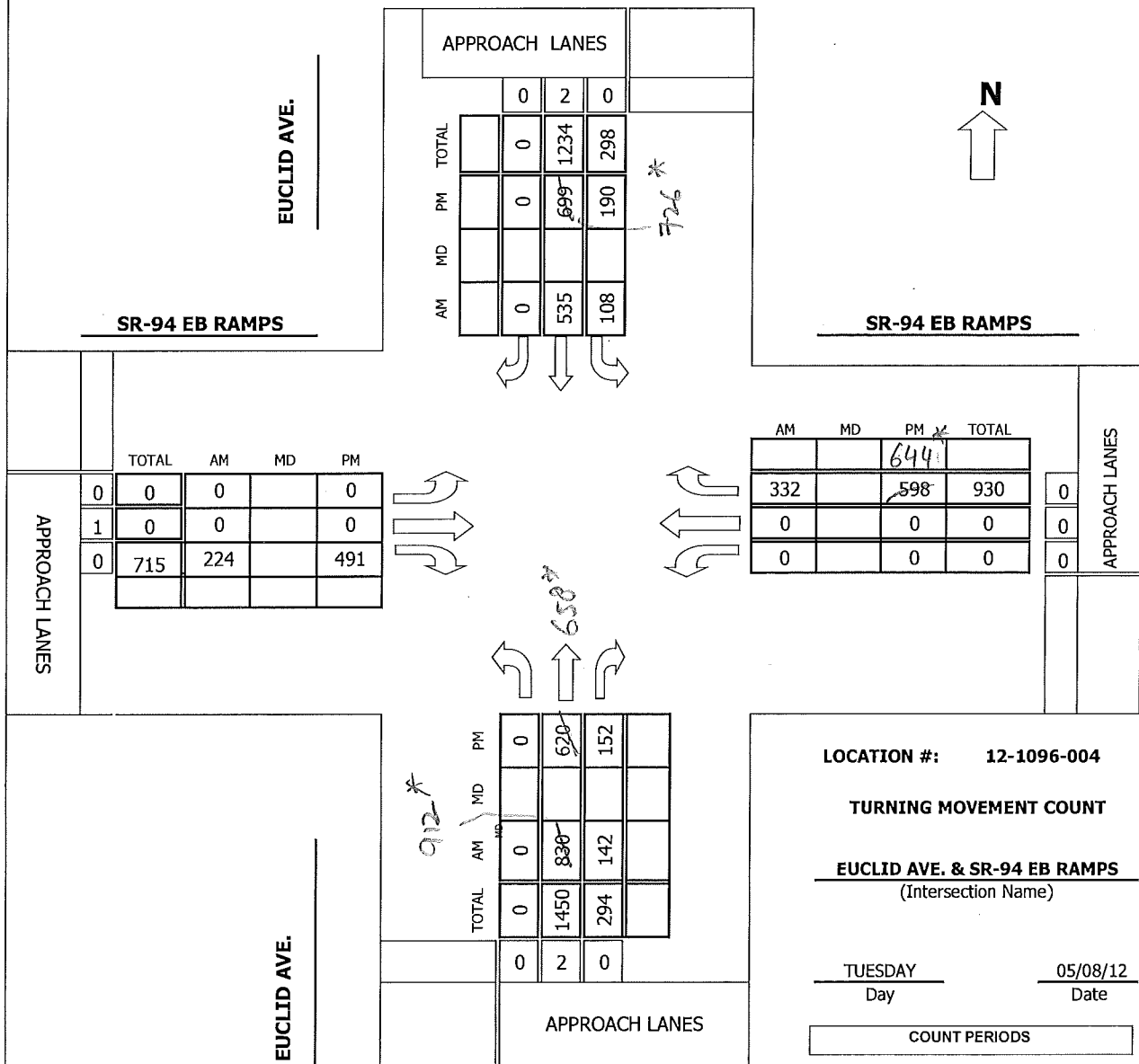
* Balance adjustments

**Intersection Turning Movement
Prepared by:**



Project #: 12-1096-004

TMC SUMMARY OF EUCLID AVE. & SR-94 EB RAMPS



LOCATION #: 12-1096-004

TURNING MOVEMENT COUNT

EUCLID AVE. & SR-94 EB RAMPS
(Intersection Name)

TUESDAY 05/08/12
Day Date

COUNT PERIODS	
AM	700AM - 900AM
NOON	-
PM	400PM - 600PM

AM PEAK HOUR 730 AM
NOON PEAK HOUR _____
PM PEAK HOUR 415 PM

** - Balancing adjustments*

APPENDIX C: TRANSIT DATA



SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Bus - Contract

FY2010 MTS Contract_Weekday Route 916

Route #916 - Clockwise

Sort	Stop	Dir	Stop ID	Trips	All Day			AM Peak			Midday			PM Peak			Bicycle Event	Ramp Event								
					Board	Alight	Avg	Load		Board	Alight	Avg	Load		Board	Alight			Avg	Load						
								Max	Total				Max	Total						Max	Total	Max	Total			
10	EUCLID AV TROLLEY STATION		91033	31	171	.	6	25	171	6	12	.	2	5	12	71	.	6	13	6	65	.	11	25	1	.
20	EUCLID AV/GUYMON ST		12543	31	1	2	5	25	170	6	.	1	2	4	12	.	1	6	12	6	1	.	11	25	.	.
30	EUCLID AV/HILLTOP DR		12544	31	3	6	5	25	167	6	2	1	2	4	12	.	3	6	12	6	1	2	11	25	.	.
40	FEDERAL BL/EUCLID AV		10637	31	7	26	5	21	148	6	3	1	2	5	12	2	12	5	12	6	2	11	9	21	.	.
50	FEDERAL BL/PENTECOST WY		10642	31	4	7	5	19	145	6	1	1	2	5	12	1	.	5	12	6	1	5	9	19	.	.
60	BAYVIEW HEIGHTS DR/1737		13109	31	2	14	4	19	133	6	2	.	3	5	12	.	5	4	12	6	.	8	7	19	.	.
70	BAYVIEW CT/BAYVIEW HEIGHTS P		12916	31	5	20	4	14	118	6	3	1	3	6	12	2	9	4	10	6	.	8	6	14	.	.
80	BAYVIEW CT/HUDSON BAY TER		12919	31	.	8	4	11	110	6	.	1	3	5	12	.	1	4	10	6	.	5	5	11	.	.
90	BAYVIEW CT/GRAPE ST		12555	31	2	10	3	10	102	6	2	1	3	5	12	.	5	3	9	6	.	3	5	10	1	.
100	GRAPE ST/55TH ST		11393	31	2	.	3	10	104	6	.	.	3	5	12	.	.	3	9	6	.	.	5	10	.	.
110	GRAPE ST/CHAMPION ST		11020	31	2	1	3	9	105	6	2	.	3	5	12	.	.	3	9	6	.	1	4	9	.	.
120	54TH ST/GRAPE ST		12898	31	1	7	3	10	99	6	.	5	2	5	12	1	.	3	10	6	.	.	4	9	.	.
130	54TH ST/PIROTTTE DR		12545	31	1	1	3	10	99	6	.	.	2	5	12	1	1	3	10	6	.	.	4	9	.	.
140	54TH ST/LAUREL ST		12907	31	1	2	3	10	98	6	.	.	2	5	12	1	.	3	10	6	.	1	4	9	.	.
150	54TH ST/NUTMEG ST		12908	31	1	.	3	10	99	6	.	.	2	5	12	1	.	4	10	6	.	.	4	9	.	.
160	54TH ST/COLLEGE GROVE DR		12909	31	3	1	3	10	101	6	.	.	2	5	12	1	.	4	10	6	2	.	5	10	.	.
170	54TH ST/REDWOOD ST		12549	31	6	3	3	10	104	6	1	1	2	5	12	.	1	4	10	6	3	1	5	9	.	.
180	54TH ST/MARVIN ST		12550	31	.	.	3	10	104	6	.	.	2	5	12	.	.	4	10	6	.	.	5	9	.	.
190	54TH ST/STREAMVIEW DR		12548	31	6	4	3	10	106	6	.	2	2	4	12	3	1	4	10	6	.	1	5	9	.	.
200	STREAMVIEW DR/55TH ST		10652	31	.	6	3	10	100	6	.	2	2	4	12	.	2	4	10	6	.	1	5	9	.	.
210	STREAMVIEW DR/SPA ST		10656	31	2	.	3	10	102	6	1	.	2	4	12	.	.	4	10	6	1	.	5	9	.	.
220	STREAMVIEW DR/LYNN ST		10266	31	6	2	3	11	106	6	2	.	2	4	12	3	.	4	11	6	.	1	5	9	.	.
230	STREAMVIEW DR/5869		13110	31	11	16	3	12	101	6	3	.	3	5	12	8	6	4	12	6	.	8	3	7	.	.
240	STREAMVIEW DR/5965		13045	31	5	8	3	12	98	6	3	1	3	5	12	.	2	4	12	6	.	5	2	7	.	.
250	STREAMVIEW DR/GLADE ST		10675	31	1	1	3	12	98	6	1	.	3	6	12	.	.	4	12	6	.	.	2	7	.	.
260	STREAMVIEW DR/HASTY DR		10278	31	.	.	3	12	98	6	.	.	3	6	12	.	.	4	12	6	.	.	2	7	.	.
270	COLLEGE AV/STREAMVIEW DR		10685	31	1	18	3	9	81	6	.	4	3	5	12	.	8	3	9	6	1	2	2	7	.	.
280	COLLEGE AV/COLLEGE GROVE DR		11791	31	.	6	2	9	75	6	.	1	2	5	12	.	4	3	9	6	.	.	2	7	.	.

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Bus - Contract

FY2010 MTS Contract_Weekday Route 916

Route #916 - Clockwise

Sort	Stop	Dir	Stop ID	All Day					AM Peak					Midday					PM Peak					Bicycle Event	Ramp Event				
				Trips	Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board			Alight	Load		
							Avg	Max	Total				Avg	Max	Total				Avg	Max	Total						Avg	Max	Total
290	GROVE TRANSIT CENTER		94006	31	19	49	1	7	45	6	1	12	1	2	12	11	27	1	6	6	6	6	2	7	1	.			
310	COLLEGE AV/COLLEGE GROVE DR		99250	17	4	4	3	7	45	3	.	.	1	2	6	2	1	3	6	3	.	.	5	7	.	.			
320	FEDERAL BL/COLLEGE AV		10692	17	3	8	2	6	40	3	.	.	1	2	6	1	1	3	6	3	.	6	3	5	.	.			
330	BROADWAY/7081		40918	17	8	3	3	8	45	3	.	1	1	1	6	5	2	4	8	3	3	.	4	5	.	.			
340	MASSACHUSETTS AV/WESTVIEW		11797	17	2	4	3	8	43	3	.	.	1	1	6	2	2	4	8	3	.	1	3	4	.	.			
350	MASSACHUSETTS AV/CENTRAL A		11796	17	3	1	3	9	45	3	1	.	1	2	6	1	1	4	9	3	.	.	3	4	.	.			
360	MASSACHUSETTS AV/SAN MIGUE		11795	17	3	.	3	10	48	3	.	.	1	2	6	3	.	4	10	3	.	.	3	4	.	1			
370	MASSACHUSETTS AV/ROSEMARY		12236	17	.	1	3	10	47	3	.	.	1	2	6	.	1	4	10	3	.	.	3	4	.	.			
380	MASSACHUSETTS AV/MT VERNON		12235	17	6	6	3	10	47	3	2	.	2	3	6	.	3	3	10	3	.	2	3	3	.	1			
390	MASSACHUSETTS AV/MADERA ST		11798	17	3	4	3	10	46	3	.	.	2	3	6	.	.	3	10	3	3	1	3	6	.	.			
400	MADERA ST/SHIRLEY LN		11062	17	1	.	3	10	47	3	.	.	2	3	6	1	.	4	10	3	.	.	3	6	.	.			
410	MADERA ST/RAMON ST		11793	17	2	1	3	10	48	3	1	.	2	3	6	1	.	4	10	3	.	1	3	5	.	.			
420	MADERA ST/PRIMERA ST		11058	17	3	.	3	10	51	3	1	.	3	3	6	1	.	4	10	3	.	.	3	5	.	.			
430	MADERA ST/BITTERN ST		99240	17	2	1	3	10	52	3	.	.	3	3	6	1	.	4	10	3	.	.	3	5	.	.			
440	BROADWAY/65TH ST		99237	17	1	1	3	10	52	3	.	.	3	3	6	1	.	4	10	3	.	1	3	5	.	.			
450	BROOKLYN AV/65TH ST		99235	17	1	1	3	10	52	3	.	.	3	3	6	.	1	4	10	3	1	.	3	5	.	.			
460	BROOKLYN AV/63RD ST		99233	17	1	4	3	8	49	3	.	.	3	3	6	.	4	3	6	3	.	.	3	5	.	.			
470	AKINS AV/ENCANTO/62ND ST TRO		99087	17	17	19	3	8	47	3	.	4	1	2	6	6	6	3	8	3	8	3	5	6	.	.			
480	MARKET ST/MERLIN DR		11032	17	7	8	3	9	46	3	.	1	1	1	6	5	3	4	9	3	.	4	3	6	.	.			
490	MARKET ST/RADIO DR		11029	17	1	1	3	9	46	3	.	.	1	1	6	.	.	4	9	3	.	1	3	6	.	.			
500	PYRAMID ST/KENWOOD ST		12922	17	1	2	3	9	45	3	1	.	1	2	6	.	.	4	9	3	.	1	3	5	.	.			
510	KELTON RD/BOLLENBACHER ST		12556	17	10	4	3	11	51	3	2	.	2	3	6	2	2	4	9	3	.	.	3	5	.	.			
520	ROSWELL ST/56TH ST		11027	17	14	4	4	14	61	3	1	.	2	3	6	5	4	4	6	3	4	.	4	6	.	.			
530	ROSWELL ST/HANOVER ST		11023	17	3	1	4	14	63	3	2	.	3	5	6	.	1	4	6	3	1	.	4	7	.	.			
540	ROSWELL ST/HILLTOP DR		11019	17	6	1	4	14	68	3	2	.	4	5	6	3	1	4	7	3	.	.	4	7	.	.			
550	ROSWELL ST/51ST ST		11012	17	.	2	4	14	66	3	.	.	4	5	6	.	2	4	6	3	.	.	4	7	.	.			
560	EUCLID AV TROLLEY STATION		91033	17	.	66	0	0	0	3	.	11	0	0	6	.	23	0	0	3	.	13	0	0	.	.			

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Bus - Contract

FY2010 MTS Contract_Weekday Route 916

Route #916 - Clockwise

Sort Stop	Dir	Stop ID	All Day					AM Peak					Midday					PM Peak					Bicycle Event	Ramp Event
			Trips	Board	Alight	Avg Load	Max Load	Total	Trips	Board	Alight	Avg Load	Max Load	Trips	Board	Alight	Avg Load	Max Load	Trips	Board	Alight	Avg Load		
All Stops	Total			365	365			52	52			146	146			103	103			3	2			
	Average			4	3	3		2	3	2		5	4	4		6	4	5						
	Maximum					25				6				13							25			

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Bus - Contract

FY2010 MTS Contract_Weekday Route 917

Route #917 - Counterclo

Sort	Stop	Dir	Stop ID	All Day					AM Peak					Midday					PM Peak					Bicycle Event	Ramp Event				
				Trips	Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board			Alight	Load		
							Avg	Max	Total				Avg	Max	Total				Avg	Max	Total						Avg	Max	Total
10	EUCLID AV TROLLEY STATION		94017	17	113	.	7	21	113	3	7	.	2	3	6	49	.	8	14	3	44	.	15	21	2	2			
20	ROSWELL ST/51ST ST		10638	17	2	2	7	21	113	3	1	.	3	3	6	1	1	8	15	3	.	1	14	21	.	.			
30	ROSWELL ST/HILLTOP DR		41049	17	5	7	7	20	111	3	.	.	3	3	6	3	3	8	15	3	.	3	13	20	.	.			
40	ROSWELL ST/DERBY ST		10651	17	3	13	6	18	101	3	1	.	3	4	6	1	5	7	15	3	.	7	11	18	1	.			
50	ROSWELL ST/KELTON RD		10264	17	10	27	5	15	84	3	6	2	4	5	6	3	7	7	15	3	1	15	6	10	1	1			
60	KELTON RD/PYRAMID ST		11766	17	4	9	5	16	79	3	.	.	4	5	6	3	5	6	16	3	1	3	6	9	.	.			
70	PYRAMID ST/KENWOOD ST		11765	17	2	3	5	16	78	3	2	.	5	7	6	.	1	6	16	3	.	1	5	8	.	.			
80	PITTA ST/MARKET ST		11768	17	9	7	5	14	80	3	2	.	6	8	6	4	5	6	14	3	1	2	5	8	.	.			
90	MARKET ST/MERLIN DR		10267	17	.	7	4	14	73	3	.	.	6	8	6	.	4	5	14	3	.	1	5	8	.	.			
100	AKINS AV/ENCANTO/62ND ST TRO		99108	17	29	28	4	16	74	3	3	10	3	4	6	18	9	7	16	3	3	3	5	7	.	.			
110	BROOKLYN AV/STORK ST		99234	17	2	4	4	16	72	3	.	.	3	4	6	2	2	7	16	3	.	1	4	7	.	.			
120	65TH ST/BROOKLYN AV		99236	17	1	.	4	16	73	3	.	.	3	4	6	1	.	7	16	3	.	.	4	7	.	.			
130	BROADWAY/65TH ST		99238	17	1	7	4	14	67	3	1	2	3	5	6	.	4	6	14	3	.	1	4	6	.	.			
140	BROADWAY/MADERA ST		99239	17	2	7	4	11	62	3	.	1	3	5	6	1	5	6	11	3	1	1	4	5	.	.			
150	MADERA ST/PRIMERA ST		12965	17	5	5	4	12	62	3	2	.	3	6	6	3	2	6	12	3	.	2	3	4	.	1			
160	MADERA ST/RAMON ST		12967	17	1	3	4	11	60	3	.	.	3	6	6	1	2	6	11	3	.	1	3	4	.	.			
170	MADERA ST/MASSACHUSETTS AV		12576	17	2	2	4	10	60	3	1	.	4	6	6	1	2	6	10	3	.	.	3	4	.	.			
180	MASSACHUSETTS AV/MADERA ST		12969	17	1	4	3	10	57	3	.	.	4	6	6	1	.	6	10	3	.	1	3	4	.	.			
190	MASSACHUSETTS AV/MT VERNON		12574	17	8	10	3	9	55	3	5	1	5	8	6	1	7	5	9	3	.	1	2	3	.	.			
200	MASSACHUSETTS AV/BALKIS LN		12968	17	1	7	3	8	49	3	.	.	5	8	6	1	5	4	8	3	.	2	2	3	.	1			
210	MASSACHUSETTS AV/CENTRAL A		12575	17	.	4	3	8	45	3	.	.	5	8	6	.	3	4	8	3	.	.	2	3	.	.			
220	BROADWAY/MASSACHUSETTS AV		11441	17	1	22	1	5	24	3	.	9	2	3	6	1	11	2	5	3	.	.	2	3	.	1			
230	BROADWAY/7080		13088	17	3	5	1	5	22	3	1	3	1	2	6	1	2	2	5	3	1	.	2	4	.	.			
240	COLLEGE AV/FEDERAL BL		12963	17	3	.	1	5	25	3	3	.	2	3	6	.	.	2	5	3	.	.	2	4	.	.			
250	GROVE TRANSIT CENTER		94006	30	59	16	2	11	68	6	4	4	1	3	12	43	7	4	11	6	11	4	2	4	.	1			
270	COLLEGE AV/COLLEGE GROVE DR		12962	30	5	1	2	12	72	6	1	.	1	3	12	3	.	4	12	6	.	1	2	3	.	.			
280	COLLEGE AV/MERIDAN AV		11048	30	1	2	2	12	71	6	.	.	1	3	12	1	1	4	12	6	.	1	2	3	.	.			
290	STREAMVIEW DR/COLLEGE AV		11425	30	17	.	3	14	88	6	1	.	1	3	12	8	.	5	14	6	3	.	2	6	.	.			

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Bus - Contract

FY2010 MTS Contract_Weekday Route 917

Route #917 - Counterclo

Sort	Stop	Dir	Trips	All Day					AM Peak					Midday					PM Peak					Bicycle Event	Ramp Event			
				Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board	Alight			Load		
						Avg	Max	Total				Avg	Max	Avg				Max	Avg	Max						Avg	Max	
300	STREAMVIEW DR/GLADE ST	11415	30	1	.	3	14	89	6	.	.	1	3	12	1	.	5	14	6	.	.	2	6	.	.			
310	STREAMVIEW DR/5948	13016	30	17	12	3	13	94	6	8	.	3	8	12	6	8	5	13	6	1	2	2	6	.	.			
320	STREAMVIEW DR/5854	13081	30	10	5	3	12	99	6	4	1	3	8	12	3	4	5	12	6	.	.	2	6	.	.			
330	STREAMVIEW DR/MICHAEL ST	11405	30	5	.	3	12	104	6	1	.	3	9	12	3	.	5	12	6	.	.	2	6	.	.			
340	STREAMVIEW DR/SPA ST	11400	30	3	.	4	12	107	6	.	.	3	9	12	3	.	5	12	6	.	.	2	6	.	.			
350	STREAMVIEW DR/55TH ST	11026	30	2	.	4	12	109	6	2	.	4	10	12	.	.	5	12	6	.	.	2	6	.	.			
360	STREAMVIEW DR/WINLOW ST	11392	30	.	3	4	12	106	6	.	1	4	10	12	.	1	5	12	6	.	1	2	6	.	.			
370	54TH ST/STREAMVIEW DR	12182	30	2	3	3	11	105	6	1	.	4	10	12	.	1	5	11	6	.	.	2	6	.	.			
380	54TH ST/REDWOOD ST	11761	30	4	1	4	11	108	6	1	.	4	10	12	2	1	5	11	6	1	.	2	7	.	.			
390	54TH ST/KRENNING ST	11760	30	4	1	4	11	111	6	2	1	4	9	12	1	.	5	11	6	1	.	2	7	.	.			
400	54TH ST/NUTMEG ST	12179	30	4	4	4	11	111	6	.	2	4	9	12	1	2	5	11	6	1	.	2	7	.	.			
410	54TH ST/LAUREL ST	11759	30	10	3	4	12	118	6	2	1	4	9	12	6	1	5	12	6	.	.	2	7	.	.			
420	54TH ST/PIROTTE DR	11756	30	1	1	4	12	118	6	1	.	4	9	12	.	1	5	12	6	.	.	2	7	.	.			
430	GRAPE ST/54TH ST	10640	30	2	2	4	12	118	6	2	.	4	9	12	.	.	5	12	6	.	2	2	6	.	.			
440	GRAPE ST/CHAMPION ST	10648	30	2	2	4	12	118	6	1	1	4	10	12	.	1	5	12	6	.	.	2	6	.	.			
450	GRAPE ST/55TH ST	10261	30	2	.	4	12	120	6	1	.	5	10	12	1	.	5	12	6	.	.	2	6	.	.			
460	BAYVIEW CT/GRAPE ST	12195	30	20	5	4	13	135	6	6	.	6	12	12	11	5	6	13	6	1	.	2	6	.	.			
470	BAYVIEW CT/HUDSON BAY TER	11764	30	10	4	5	14	141	6	3	.	6	12	12	5	4	6	13	6	.	.	2	6	.	.			
480	BAYVIEW CT/BAYVIEW HEIGHTS P	12190	30	49	.	6	21	190	6	23	.	10	21	12	18	.	7	15	6	2	.	3	7	1	.			
490	BAYVIEW HEIGHTS DR/1670	11763	30	20	.	7	22	210	6	9	.	11	22	12	6	.	8	16	6	2	.	3	7	.	.			
500	FEDERAL BL/PENTECOST WY	11384	30	3	4	7	22	209	6	1	.	12	22	12	2	2	8	16	6	.	1	3	6	.	.			
510	EUCLID AV/FEDERAL BL	12168	30	50	9	8	24	250	6	7	1	13	24	12	35	6	10	21	6	3	2	3	7	.	1			
520	EUCLID AV/HILLTOP DR	12167	30	9	2	9	24	257	6	1	.	13	24	12	6	2	11	20	6	1	.	3	7	.	.			
530	EUCLID AV/GUYMON ST	11750	30	5	5	9	25	257	6	4	3	13	25	12	1	1	11	20	6	.	.	3	7	.	.			
540	EUCLID AV TROLLEY STATION	94017	30	.	257	0	0	0	6	.	78	0	0	12	.	129	0	0	6	.	19	0	0	.	.			

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Bus - Contract

FY2010 MTS Contract_Weekday Route 917

Route #917 - Counterclo

Sort Stop	Dir	Stop ID	All Day					AM Peak					Midday					PM Peak					Bicycle Event	Ramp Event
			Trips	Board	Alight	Load		Trips	Board	Alight	Load		Trips	Board	Alight	Load		Trips	Board	Alight	Load			
All Stops	Total		525	525			121	121			262	262			79	79			5	8				
	Average		4	5	4		3	7	5		6	7	6		4	3	3							
	Maximum				25				25				21							21				

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Bus - Contract

FY2010 MTS Contract_Weekday Route 955

Route #955 - North

Sort	Stop	Dir	Stop ID	All Day					AM Peak					Midday					PM Peak					Bicycle Event	Ramp Event				
				Trips	Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board			Alight	Load		
							Avg	Max	Total				Avg	Max	Total				Avg	Max	Total						Avg	Max	Total
10	W 8TH ST/8TH ST TROLLEY STATI		70018	61	457	.	7	25	457	12	108	.	9	21	25	154	.	6	25	11	114	.	10	20	3	1			
20	HARBOR DR/W 8TH ST		99406	61	1	1	7	25	457	12	.	.	9	21	25	.	.	6	25	11	1	1	10	20	1	.			
30	CIVIC CENTER DR/WILSON AV		60775	61	18	12	8	23	463	12	4	5	9	23	25	10	6	6	22	11	3	1	11	20	.	.			
40	NATIONAL CITY BL/W 12TH ST (CIT		50142	61	37	5	8	24	495	12	4	.	9	24	25	24	1	7	22	11	6	3	11	22	.	2			
50	NATIONAL CITY BL/PLAZA BL		50141	61	20	3	8	24	512	12	1	.	9	24	25	8	.	8	22	11	10	3	11	23	.	.			
60	8TH ST/NATIONAL CITY BL		10593	61	67	12	9	27	567	12	7	3	10	24	25	42	6	9	27	11	8	1	12	26	1	.			
70	8TH ST/B AV		10600	61	26	8	10	26	585	12	1	.	10	24	25	10	4	9	25	11	3	2	12	26	.	1			
80	8TH ST/D AV		10602	61	33	14	10	27	604	12	7	3	10	24	25	16	5	10	24	11	8	5	12	27	1	.			
90	8TH ST/F AV		10228	61	11	11	10	27	604	12	2	1	10	24	25	6	8	10	24	11	2	2	12	27	.	.			
100	HIGHLAND AV/8TH ST		99337	61	151	26	13	55	779	12	11	6	11	25	25	61	11	14	55	11	39	7	15	31	.	.			
110	HIGHLAND AV/4TH ST		99338	61	39	59	12	55	759	12	10	4	11	26	25	19	33	13	55	11	3	9	15	29	1	.			
120	HIGHLAND AV/DIVISION ST		99339	61	55	39	13	54	775	12	17	3	12	29	25	22	21	13	54	11	9	10	15	33	1	1			
130	HIGHLAND AV/ETA ST		50167	61	67	43	13	54	799	12	33	5	15	30	25	18	14	13	54	11	12	11	15	32	.	.			
140	43RD ST/DELTA ST		12860	61	125	56	14	56	868	12	79	12	20	45	25	31	12	14	56	11	3	21	13	27	2	.			
150	43RD ST/BETA ST		12512	61	35	52	14	56	851	12	17	13	20	47	25	12	27	13	56	11	1	9	12	27	2	1			
160	43RD ST/HWY 805		12513	61	70	44	14	56	877	12	16	2	22	48	25	24	25	13	56	11	18	7	13	28	1	2			
170	43RD ST/KEELER AV		12514	61	57	20	15	56	914	12	13	3	22	45	25	22	9	14	56	11	12	3	14	28	.	.			
180	43RD ST/NATIONAL AV		12861	61	94	164	14	56	844	12	38	76	19	42	25	27	48	13	56	11	12	20	14	25	1	.			
190	LOGAN AV/44TH ST		10613	61	32	21	14	56	855	12	3	1	19	42	25	16	16	13	56	11	9	.	14	25	.	.			
200	LOGAN AV/45TH ST		13441	61	35	35	14	56	855	12	20	10	20	40	25	10	9	13	56	11	2	15	13	24	.	.			
210	LOGAN AV/46TH ST		10622	61	30	14	14	57	871	12	3	2	20	41	25	11	6	13	57	11	8	.	14	24	.	1			
220	47TH ST/LOGAN AV		12878	61	76	59	14	43	838	12	24	7	22	43	25	32	24	12	24	11	17	17	14	18	.	4			
230	47TH ST/T ST		12879	61	36	20	14	46	854	12	17	5	23	46	25	13	6	12	24	11	4	1	14	18	.	.			
240	47TH ST/OCEANVIEW BL		12880	61	20	45	14	34	829	12	6	42	20	34	25	9	2	12	24	11	5	1	15	19	.	.			
250	IMPERIAL AV/47TH ST		10624	61	38	26	14	35	841	12	5	11	19	34	25	22	10	13	35	11	6	.	15	23	.	.			
260	IMPERIAL AV/WILLIE JAMES JONE		99371	61	76	76	14	48	841	12	16	43	17	27	25	33	11	14	48	11	19	15	15	22	1	.			
270	EUCLID AV/IMPERIAL AV		12891	61	27	42	14	43	826	12	10	4	18	29	25	11	26	13	43	11	3	8	15	22	.	.			
280	EUCLID AV/NARANJA ST		12893	61	8	68	13	43	766	12	1	22	16	29	25	5	21	12	43	11	2	10	14	22	.	.			

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Bus - Contract

FY2010 MTS Contract_Weekday Route 955

Route #955 - North

Sort	Stop	Dir	Stop ID	All Day					AM Peak					Midday					PM Peak					Bicycle Event	Ramp Event				
				Trips	Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board			Alight	Load		
							Avg	Max	Total				Avg	Max	Total				Avg	Max	Total						Avg	Max	Total
290	EUCLID AV TROLLEY STATION		91031	61	667	382	17	34	1,051	12	125	79	20	30	25	312	192	17	31	11	116	62	19	26	7	8			
310	EUCLID AV/GUYMON ST		12543	61	18	21	17	33	1,048	12	2	9	19	30	25	7	6	17	31	11	5	20	27	1					
320	EUCLID AV/HILLTOP DR		12544	61	32	40	17	32	1,040	12	3	2	19	30	25	17	24	17	32	11	9	7	20	27					
330	EUCLID AV/FEDERAL BL		12894	61	83	132	16	38	991	12	16	21	19	31	25	28	52	16	38	11	29	36	19	30	1				
340	54TH ST/GRAPE ST		12898	61	43	23	17	40	1,011	12	28	1	21	40	25	8	16	16	38	11	2	1	19	30	1	1			
350	54TH ST/PIROTTE DR		12545	61	33	10	17	40	1,034	12	13	1	22	40	25	8	5	16	38	11	7	1	20	30					
360	54TH ST/LAUREL ST		12907	61	18	20	17	40	1,032	12	7	2	22	40	25	6	2	16	38	11	3	13	19	30				2	
370	54TH ST/NUTMEG ST		12908	61	22	29	17	40	1,025	12	6	4	23	40	25	6	17	15	31	11	7	5	19	35					
380	54TH ST/COLLEGE GROVE DR		12909	61	60	22	17	42	1,063	12	28	4	25	40	25	7	5	15	31	11	14	2	20	42					
390	54TH ST/REDWOOD ST		12549	61	60	17	18	44	1,106	12	27		27	44	25	15	8	16	33	11	11	9	20	44	1	1			
400	54TH ST/MARVIN ST		12550	61	1	10	18	44	1,097	12			27	44	25		4	16	33	11	1	6	20	44					
410	54TH ST/STREAMVIEW DR		12548	61	56	94	17	46	1,059	12	11	1	28	46	25	25	46	15	24	11	15	34	18	39					
420	54TH ST/LEA ST		12910	61	8	17	17	46	1,050	12	3	6	27	46	25	1	5	15	24	11	1	6	18	39					
430	54TH ST/UNIVERSITY AV		12552	61	102	231	15	45	921	12	37	64	25	45	25	35	82	13	25	11	19	37	16	39	2	1			
440	54TH ST/UNIVERSITY AV		12913	61	14	39	15	45	896	12	6	2	25	45	25	4	22	12	25	11	4	12	15	34				1	
450	54TH ST/54TH PL		12551	61	3	69	14	41	830	12		44	22	41	25	3	12	12	25	11		8	15	34				1	
460	54TH ST/TROJAN AV		12912	61	15	62	13	35	783	12	2	32	19	35	25	12	11	12	25	11	1	11	14	34				1	
470	54TH ST/EL CAJON BL		12914	61	51	325	8	31	508	12	22	83	14	31	25	21	111	8	16	11	1	76	7	20	2	4			
480	COLLWOOD BL/MONROE AV		12904	61	23	7	9	31	524	12	3		14	31	25	15	6	8	16	11	1		7	20					
490	COLLWOOD BL/4819		12896	61	10	7	9	31	527	12	6	2	15	31	25	2	5	8	16	11	2		7	20					
500	MONTEZUMA RD/COLLWOOD BL		10634	61	5	14	8	31	518	12	2	4	15	31	25		1	8	16	11	3	8	7	14					
510	MONTEZUMA RD/54TH ST		10258	61	5	14	8	31	509	12	1	1	15	31	25		8	8	16	11	2	5	6	16					
520	MONTEZUMA RD/55TH ST		10654	61		28	8	31	481	12		4	14	31	25		17	7	14	11		4	6	16					
530	CAMPANILE DR/MONTEZUMA RD		13158	61		48	7	28	433	12		21	13	28	25		18	7	14	11		6	6	16					
540	SDSU TRANSIT CENTER		99094	61		434	0	0	0	12		151	0	0	25		164	0	0	11		61	0	0				3	

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Bus - Contract

FY2010 MTS Contract_Weekday Route 955

Route #955 - North

Sort Stop	Dir	Stop ID	All Day					AM Peak					Midday					PM Peak					Bicycle Event	Ramp Event
			Trips	Board	Alight	Load		Trips	Board	Alight	Load		Trips	Board	Alight	Load		Trips	Board	Alight	Load			
All Stops		Total		3,070	3,070			821	821			1,200	1,200			592	592			30	36			
		Average		15	15	13		17	18	17		26	24	12		12	13	14						
		Maximum				57				48				57				44						

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Bus - Contract

FY2010 MTS Contract_Weekday Route 955

Route #955 - South

Sort	Stop	Dir	Stop ID	All Day					AM Peak					Midday					PM Peak					Bicycle Event	Ramp Event				
				Trips	Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board	Alight	Load			Trips	Board			Alight	Load		
							Avg	Max	Total				Avg	Max	Total				Avg	Max	Total						Avg	Max	Total
10	SDSU TRANSIT CENTER		99094	64	471	.	7	22	471	12	27	.	2	7	24	159	.	7	19	12	156	.	13	21	2	1			
20	MONTEZUMA RD/COLLEGE AV		11031	64	19	.	8	24	490	12	1	.	2	7	24	6	.	7	19	12	4	.	13	21	1	1			
30	MONTEZUMA RD/55TH ST		11395	64	15	5	8	24	500	12	.	.	2	7	24	2	1	7	19	12	5	2	14	22	.	.			
40	MONTEZUMA RD/54TH ST		11390	64	13	6	8	24	507	12	1	.	2	7	24	5	3	7	19	12	6	1	14	22	.	.			
50	COLLWOOD BL/MONTEZUMA RD		60771	64	11	3	8	24	515	12	4	.	3	7	24	1	3	7	19	12	5	.	14	22	.	.			
60	COLLWOOD BL/4600		12170	64	11	3	8	24	523	12	1	.	3	7	24	2	2	7	19	12	6	.	15	22	.	.			
70	COLLWOOD BL/4400		12171	64	8	.	8	24	531	12	.	.	3	7	24	.	.	7	19	12	8	.	16	22	.	.			
80	COLLWOOD BL/4200		12176	64	7	.	8	24	538	12	1	.	3	7	24	.	.	7	19	12	6	.	16	22	.	.			
90	COLLWOOD BL/MONROE AV		11755	64	10	18	8	22	530	12	2	1	3	6	24	5	4	7	18	12	1	4	16	21	.	1			
100	54TH ST/EL CAJON BL		12187	64	310	67	12	34	773	12	45	10	6	11	24	155	22	12	27	12	61	22	19	34	3	1			
110	54TH ST/TROJAN AV		12185	64	89	32	13	40	830	12	8	6	6	10	24	48	2	14	38	12	17	10	20	40	.	1			
120	54TH ST/UNIVERSITY AV		12186	64	255	123	15	39	962	12	52	8	10	15	24	109	57	17	39	12	56	35	21	38	5	1			
130	54TH ST/LEA ST		12183	64	23	16	15	39	969	12	3	.	10	15	24	16	7	17	39	12	1	6	21	38	.	.			
140	54TH ST/STREAMVIEW DR		12182	64	50	56	15	38	963	12	10	2	11	16	24	5	30	16	36	12	24	16	22	38	.	.			
150	54TH ST/REDWOOD ST		11761	64	17	47	15	39	933	12	5	4	11	15	24	3	26	15	35	12	7	5	22	39	.	1			
160	54TH ST/KRENNING ST		11760	64	39	31	15	39	941	12	13	1	12	17	24	17	12	15	35	12	5	9	21	39	.	.			
170	54TH ST/NUTMEG ST		12179	64	28	28	15	39	941	12	4	7	11	17	24	18	5	16	35	12	4	8	21	39	.	1			
180	54TH ST/LAUREL ST		11759	64	32	32	15	38	941	12	8	2	12	19	24	12	13	16	33	12	6	13	21	38	.	.			
190	54TH ST/PIROTTE DR		11756	64	13	15	15	37	939	12	3	.	12	19	24	9	8	16	32	12	1	5	20	37	.	.			
200	54TH ST/HANIMAN ST		12172	64	18	32	14	33	925	12	5	.	13	19	24	6	12	15	30	12	.	10	19	33	.	.			
210	EUCLID AV/54TH ST		12169	64	61	61	14	34	925	12	22	5	14	21	24	16	27	15	26	12	17	19	19	34	1	.			
220	EUCLID AV/FEDERAL BL		12168	64	96	48	15	32	973	12	29	9	16	27	24	38	14	16	27	12	14	19	19	32	.	.			
230	EUCLID AV/HILLTOP DR		12167	64	27	27	15	32	973	12	4	8	15	25	24	5	7	16	27	12	9	7	19	32	.	.			
240	EUCLID AV/GUYMON ST		11750	64	10	7	15	32	976	12	1	1	15	25	24	8	4	16	28	12	1	2	19	32	.	.			
250	EUCLID AV TROLLEY STATION		91040	64	401	587	14	89	871	12	94	130	12	23	24	129	223	12	26	12	102	136	23	89	2	3			
270	EUCLID AV/UNITY PLACE DRWY		12166	64	90	6	15	94	955	12	11	2	13	26	24	28	4	13	27	12	42	.	26	94	.	.			
280	EUCLID AV/EUCLID HEALTH CENT		91043	64	31	46	14	94	925	12	8	10	13	24	24	16	13	13	27	12	6	11	26	94	2	1			
290	IMPERIAL AV/50TH ST		11007	64	25	62	14	98	888	12	5	8	13	24	24	7	23	12	27	12	10	13	26	98	1	.			

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Bus - Contract

FY2010 MTS Contract_Weekday Route 955

Route #955 - South

Sort	Stop	Dir	Trips	All Day					AM Peak					Midday					PM Peak					Bicycle Event	Ramp Event	
				Board	Alight	Load			Board	Alight	Load			Board	Alight	Load			Board	Alight	Load					
						Avg	Max	Total			Avg	Max	Total			Avg	Max	Total			Avg	Max	Total			
300	IMPERIAL AV/49TH ST		11375	64	28	62	13	98	854	12	4	50	9	14	24	18	5	13	27	12	4	2	26	98	.	.
310	47TH ST/IMPERIAL AV		12150	64	45	19	14	98	880	12	4	7	9	14	24	27	9	13	31	12	12	.	27	98	.	.
320	47TH ST/OCEAN VIEW BL		12149	64	24	29	14	98	875	12	.	4	8	14	24	12	9	13	33	12	11	9	27	98	.	.
330	47TH ST/T ST		11737	64	18	34	13	96	859	12	4	4	8	15	24	13	12	13	34	12	1	9	26	96	.	.
340	LOGAN AV/47TH ST		11371	64	67	94	12	35	756	12	13	5	9	20	24	32	38	13	35	12	13	38	17	27	1	.
350	LOGAN AV/46TH ST		11370	64	21	23	12	38	754	12	2	3	9	20	24	14	8	14	38	12	.	8	17	26	.	.
360	LOGAN AV/45TH ST		13440	64	26	45	11	34	735	12	9	2	9	19	24	14	21	13	34	12	.	14	16	26	.	1
370	LOGAN AV/DOMINION ST		10987	64	21	22	11	34	734	12	1	5	9	18	24	18	8	14	34	12	.	6	15	26	.	.
380	43RD ST/NATIONAL AV		11724	64	125	69	12	34	790	12	32	13	11	17	24	49	28	15	34	12	19	17	15	26	.	.
390	43RD ST/KEELER AV		12131	64	23	30	12	34	783	12	5	5	11	17	24	9	16	14	34	12	6	2	16	27	1	.
400	43RD ST/HWY 805		13432	64	65	105	12	34	743	12	15	23	10	16	24	34	53	14	34	12	6	16	15	27	.	2
410	43RD ST/GAMMA ST		11723	64	18	32	11	34	729	12	5	1	10	16	24	5	18	13	34	12	4	6	15	27	.	.
420	43RD ST/DELTA ST		99148	64	74	82	11	34	721	12	31	12	12	21	24	16	44	12	34	12	7	14	14	30	1	.
430	HIGHLAND AV/ETA ST		50198	64	82	40	12	34	763	12	34	2	15	26	24	20	6	12	34	12	14	16	14	30	.	.
440	HIGHLAND AV/DIVISION ST		50114	64	50	22	12	34	791	12	20	1	16	31	24	7	12	12	34	12	13	8	14	30	1	.
450	HIGHLAND AV/2ND ST		50115	64	41	26	13	34	806	12	11	4	17	32	24	16	7	13	34	12	3	7	14	30	.	2
460	8TH ST/G AV		11362	64	45	221	10	30	640	12	11	49	14	30	24	20	74	11	25	12	8	69	9	19	.	1
470	4TH ST/E AV		11358	64	22	45	10	26	617	12	9	17	13	26	24	10	23	10	25	12	1	1	9	19	.	1
480	8TH ST/B AV		13411	64	21	25	10	26	613	12	5	4	13	26	24	7	5	10	25	12	6	8	9	19	.	.
490	W 8TH ST/ROOSEVELT AV		10966	64	7	60	9	25	560	12	4	29	11	21	24	.	15	10	25	12	2	5	8	19	1	.
500	W 8TH ST/8TH ST TROLLEY STATI		70018	64	.	560	0	0	0	12	.	132	0	0	24	.	233	0	0	12	.	102	0	0	3	3
All Stops		Total		3,003	3,003					586	586				1,166	1,166				710	710				25	22
		Average		15	16	12				13	15	10			26	26	12				16	17	17			
		Maximum				98						32						39					98			

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Rail

FY2010 MTS Rail_Weekday_520

Route #520 Orange Line - North

Sort	Stop	Dir	Stop ID	All Day			AM Peak			Midday			PM Peak			Bicycle Event	Ramp Event									
				Trips	Board	Alight	Avg	Max	Total	Trips	Board	Alight	Avg	Max	Trips			Board	Alight	Avg	Max					
10	12TH/IMPERIAL TRANSIT CENTER (		75100	68	576	.	8	28	576	12	184	.	15	28	24	192	.	8	19	12	106	.	9	17	1	.
20	GASLAMP QUARTER STATION		75098	68	360	127	12	28	809	12	36	42	15	28	24	175	40	14	24	12	77	20	14	21	1	2
30	CONVENTION CENTER STATION		75096	68	297	158	14	40	948	12	41	69	12	20	24	129	51	17	40	12	87	22	19	28	1	1
40	SEAPORT VILLAGE STATION		75095	68	315	148	16	42	1,115	12	46	35	13	25	24	112	60	19	42	12	94	32	24	37	1	2
50	AMERICA PLAZA STATION		75084	68	733	400	21	64	1,448	12	86	36	18	32	24	233	166	22	64	12	281	107	39	48	8	2
60	CIVIC CENTER STATION		75086	68	1,217	192	36	115	2,473	12	54	33	19	30	24	479	77	39	68	12	483	49	75	115	5	16
70	FIFTH AVENUE STATION		75089	68	1,396	322	52	168	3,547	12	85	61	21	33	24	533	139	55	98	12	453	76	106	168	5	15
80	CITY COLLEGE STATION		75091	68	2,295	555	78	269	5,287	12	167	64	30	39	24	1,266	264	97	269	12	466	101	137	182	12	22
90	PARK/MARKET STATION		75093	68	526	535	78	267	5,278	12	79	33	34	45	24	237	237	97	267	12	114	130	135	183	9	15
100	12TH/IMPERIAL TRANSIT CENTER		75103	68	2,910	1,259	102	235	6,929	12	584	125	72	109	24	939	712	106	235	12	743	223	179	230	43	23
110	25TH/COMMERCIAL ST STATION		75074	72	426	879	90	220	6,476	12	68	59	73	106	24	180	424	96	174	12	86	258	164	220	11	5
120	32ND ST/COMMERCIAL STATION		75073	72	289	669	85	215	6,096	12	48	43	73	105	24	77	289	87	143	12	96	201	156	215	15	3
130	47TH ST STATION		75070	72	190	393	82	214	5,893	12	32	35	73	99	24	57	142	84	136	12	54	126	150	214	8	5
140	EUCLID TROLLEY STATION		75069	72	1,051	1,596	74	177	5,348	12	184	161	75	99	24	443	657	75	123	12	241	470	130	177	22	18
150	ENCANTO/62ND ST STATION		75067	72	515	906	69	156	4,957	12	169	87	82	115	24	176	326	68	93	12	81	312	111	156	28	11
160	MASSACHUSETTS AVE STATION		75040	72	215	331	67	142	4,841	12	65	32	84	117	24	74	81	68	95	12	36	140	103	142	17	1
170	LEMON GROVE DEPOT		75038	72	795	1,189	62	124	4,447	12	184	209	82	113	24	330	445	63	101	12	135	300	89	124	38	28
180	SPRING STREET STATION		75036	72	454	587	60	121	4,314	12	126	94	85	121	24	169	152	64	102	12	68	199	78	107	18	9
190	LA MESA BLVD STATION		75034	72	497	656	58	105	4,155	12	120	173	81	105	24	176	219	62	101	12	97	160	73	98	27	7
200	GROSSMONT TRANSIT CENTER		75030	72	103	1,068	44	88	3,190	12	12	291	57	74	24	33	387	48	88	12	41	193	60	78	26	3
210	AMAYA DRIVE STATION		75029	72	57	500	38	71	2,747	12	8	138	46	66	24	21	151	42	69	12	16	121	51	71	12	2
220	EL CAJON TRANSIT CENTER		75026	72	120	2,016	12	28	851	12	33	412	15	24	24	38	776	11	22	12	14	420	17	28	37	21
230	ARNELE AVENUE STATION		75024	70	49	399	7	23	501	12	7	78	9	16	24	24	154	6	15	12	10	93	10	23	20	4
240	GILLESPIE FIELD STATION		75022	70	.	501	0	0	0	12	.	108	0	0	24	.	144	0	0	12	.	126	0	0	14	2
All Stops				Total	15,386	15,386				2,418	2,418				6,093	6,093				3,879	3,879				379	217
				Average	133	134	49			105	105	45			265	265	52				162	169	80			
				Maximum			269						121						269					230		

SANDAG Passenger Counting Program
Ridership by Route and Stop

MTS Rail

FY2010 MTS Rail_Weekday_520

Route #520 Orange Line - South

Sort	Stop	Dir	Stop ID	All Day					AM Peak					Midday					PM Peak					Bicycle Event	Ramp Event	
				Trips	Board	Alight	Avg	Max	Total	Trips	Board	Alight	Avg	Max	Trips	Board	Alight	Avg	Max	Trips	Board	Alight	Avg			Max
10	GILLESPIE FIELD STATION		75022	70	435	.	6	23	435	12	92	.	8	13	24	126	.	5	10	12	115	.	10	17	16	8
20	ARNELE AVENUE STATION		75025	70	502	25	13	29	912	12	72	7	13	20	24	177	7	12	26	12	134	9	20	29	35	2
30	EL CAJON TRANSIT CENTER		75027	72	1,868	130	37	72	2,650	12	418	21	46	66	24	619	46	36	53	12	443	37	54	72	38	21
40	AMAYA DRIVE STATION		75028	72	499	138	42	85	3,011	12	93	45	50	68	24	181	42	42	59	12	134	29	63	85	18	4
50	GROSSMONT TRANSIT CENTER		75031	72	1,177	214	55	109	3,974	12	118	34	57	82	24	386	80	55	80	12	375	66	88	109	39	6
60	LA MESA BLVD STATION		75035	72	706	510	58	110	4,170	12	154	68	64	100	24	274	193	58	92	12	179	147	91	110	30	8
70	SPRING STREET STATION		75037	72	551	468	59	117	4,253	12	200	54	76	105	24	148	170	57	83	12	102	167	86	117	11	7
80	LEMON GROVE DEPOT		75039	72	1,124	723	65	131	4,654	12	212	76	88	114	24	444	303	63	86	12	243	190	90	131	43	15
90	MASSACHUSETTS AVE STATION		75041	72	303	217	66	129	4,740	12	114	24	95	129	24	78	60	64	88	12	29	68	87	120	18	1
100	ENCANTO/62ND ST STATION		75066	72	923	483	72	162	5,180	12	340	64	118	162	24	298	167	69	97	12	133	152	85	118	17	1
110	EUCLID TROLLEY STATION		75068	73	1,525	1,136	76	183	5,569	12	423	210	136	183	24	579	419	76	103	12	259	305	81	115	26	15
120	47TH ST STATION		75071	73	379	179	79	197	5,769	12	122	31	144	197	24	115	75	78	104	12	87	42	85	122	10	1
130	32ND ST/COMMERCIAL STATION		75072	73	655	308	84	225	6,116	12	286	33	165	225	24	192	126	80	103	12	93	64	87	116	14	4
140	25TH/COMMERCIAL ST STATION		75075	73	838	352	90	272	6,602	12	300	62	185	272	24	297	109	88	109	12	114	87	90	121	11	.
150	12TH/IMPERIAL TRANSIT CENTER		75102	73	665	2,574	64	260	4,693	12	216	497	161	260	24	261	943	60	99	12	91	617	46	67	41	12
160	PARK/MARKET STATION		75092	73	258	419	62	263	4,532	12	89	72	163	263	24	74	141	57	93	12	53	95	42	65	8	5
170	CITY COLLEGE STATION		75090	73	398	1,940	41	150	2,990	12	83	896	95	150	24	198	570	41	66	12	63	207	30	48	21	17
180	FIFTH AVENUE STATION		75088	73	185	1,111	28	115	2,064	12	30	360	67	115	24	89	446	27	42	12	42	157	21	31	10	9
190	CIVIC CENTER STATION		75087	73	153	947	17	62	1,270	12	22	439	33	62	24	70	296	17	29	12	39	72	18	28	5	4
200	AMERICA PLAZA STATION		75085	73	395	675	14	39	990	12	82	242	19	39	24	159	215	15	29	12	100	91	19	32	6	3
210	SEAPORT VILLAGE STATION		75094	73	154	268	12	38	876	12	14	64	15	36	24	59	114	13	25	12	64	54	20	38	4	1
220	CONVENTION CENTER STATION		75097	73	162	271	11	47	767	12	9	71	10	35	24	80	109	11	27	12	42	52	19	47	4	1
230	GASLAMP QUARTER STATION		75099	73	160	273	9	51	654	12	26	64	7	12	24	58	77	11	35	12	48	65	17	51	.	1
240	12TH/IMPERIAL TRANSIT CENTER (		75100	73	.	654	0	0	0	12	.	81	0	0	24	.	254	0	0	12	.	209	0	0	3	.
All Stops		Total		14,015	14,015					3,515	3,515				4,962	4,962				2,982	2,982				428	146
		Average		113	112	44				153	153	76			216	216	43				130	130	52			
		Maximum				272						272						109						131		

APPENDIX D: BICYCLE COUNTS

(Refer to Appendix B: Intersection Counts)



APPENDIX E: PEDESTRIAN COUNTS

(Refer to Appendix B: Intersection Counts)















APPENDIX F: INTERSECTION LEVEL OF SERVICE WORKSHEETS



Euclid Avenue Master Plan
1: Euclid Ave & SR-94 WB Ramps

Existing AM
5/13/2013

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑	↗		↑↑							
Volume (veh/h)	0	782	462	0	555	435	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	850	502	0	603	473	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		507			988							
pX, platoon unblocked												
vC, conflicting volume	1076			1352			1265	2192	538	1152	1926	425
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1076			1352			1265	2192	538	1152	1926	425
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	644			505			126	45	488	153	66	578
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2							
Volume Total	425	425	502	402	674							
Volume Left	0	0	0	0	0							
Volume Right	0	0	502	0	473							
cSH	1700	1700	1700	1700	1700							
Volume to Capacity	0.25	0.25	0.30	0.24	0.40							
Queue Length 95th (ft)	0	0	0	0	0							
Control Delay (s)	0.0	0.0	0.0	0.0	0.0							
Lane LOS												
Approach Delay (s)	0.0			0.0								
Approach LOS												
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			32.6%		ICU Level of Service				A			
Analysis Period (min)			15									



Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations				↑↑			↑↑			↑
Volume (veh/h)	0	0	0	912	142	108	535	0	0	224
Sign Control	Stop			Free			Free		Stop	
Grade	0%			0%			0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	991	154	117	582	0	0	243
Pedestrians										
Lane Width (ft)										
Walking Speed (ft/s)										
Percent Blockage										
Right turn flare (veh)										
Median type				None			None			
Median storage (veh)										
Upstream signal (ft)				704			143			
pX, platoon unblocked	0.81	0.81				0.81			0.81	
vC, conflicting volume	1594	1885	582			1146			1962	291
vC1, stage 1 conf vol										
vC2, stage 2 conf vol										
vCu, unblocked vol	1260	1620	582			705			1715	291
tC, single (s)	7.5	6.5	4.1			4.1			6.5	6.9
tC, 2 stage (s)										
tF (s)	3.5	4.0	2.2			2.2			4.0	3.3
p0 queue free %	100	100	100			84			100	66
cM capacity (veh/h)	59	69	989			718			60	706

Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SE 1
Volume Total	661	485	311	388	243
Volume Left	0	0	117	0	0
Volume Right	0	154	0	0	243
cSH	1700	1700	718	1700	706
Volume to Capacity	0.39	0.29	0.16	0.23	0.34
Queue Length 95th (ft)	0	0	15	0	38
Control Delay (s)	0.0	0.0	5.4	0.0	12.8
Lane LOS			A		B
Approach Delay (s)	0.0		2.4		12.8
Approach LOS					B

Intersection Summary				
Average Delay			2.3	
Intersection Capacity Utilization		54.3%		ICU Level of Service A
Analysis Period (min)		15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	29	15	954	19	40	681
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.4		4.4	5.4
Lane Util. Factor	1.00		0.95		1.00	0.95
Frpb, ped/bikes	0.99		1.00		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.95		1.00		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1705		3526		1769	3539
Flt Permitted	0.97		1.00		0.17	1.00
Satd. Flow (perm)	1705		3526		322	3539
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	30	16	994	20	42	709
RTOR Reduction (vph)	13	0	1	0	0	0
Lane Group Flow (vph)	33	0	1013	0	42	709
Confl. Peds. (#/hr)	9	17		10	10	
Confl. Bikes (#/hr)		1				
Turn Type					pm+pt	
Protected Phases	8		2		1	6
Permitted Phases					6	
Actuated Green, G (s)	8.1		20.6		27.6	27.6
Effective Green, g (s)	8.1		20.6		27.6	27.6
Actuated g/C Ratio	0.18		0.45		0.60	0.60
Clearance Time (s)	4.9		5.4		4.4	5.4
Vehicle Extension (s)	2.0		4.1		2.0	4.0
Lane Grp Cap (vph)	300		1579		275	2123
v/s Ratio Prot	c0.02		c0.29		0.01	c0.20
v/s Ratio Perm					0.08	
v/c Ratio	0.11		0.64		0.15	0.33
Uniform Delay, d1	15.9		9.8		4.9	4.6
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.1		1.0		0.1	0.1
Delay (s)	16.0		10.9		5.0	4.7
Level of Service	B		B		A	A
Approach Delay (s)	16.0		10.9			4.7
Approach LOS	B		B			A

Intersection Summary

HCM Average Control Delay	8.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	46.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	35	57	77	934	614	88
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	38	61	83	1004	660	95
Pedestrians	23					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	2					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				480	460	
pX, platoon unblocked	0.91	0.95	0.95			
vC, conflicting volume	1398	400	778			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	968	255	654			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	81	91	90			
cM capacity (veh/h)	202	691	863			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	99	83	502	502	440	315
Volume Left	38	83	0	0	0	0
Volume Right	61	0	0	0	0	95
cSH	360	863	1700	1700	1700	1700
Volume to Capacity	0.28	0.10	0.30	0.30	0.26	0.19
Queue Length 95th (ft)	28	8	0	0	0	0
Control Delay (s)	18.8	9.6	0.0	0.0	0.0	0.0
Lane LOS	C	A				
Approach Delay (s)	18.8	0.7	0.0			
Approach LOS	C					

Intersection Summary						
Average Delay			1.4			
Intersection Capacity Utilization			39.8%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	20	55	63	983	627	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		4.4	5.5	5.5	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frpb, ped/bikes	0.98		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.90		1.00	1.00	0.99	
Flt Protected	0.99		0.95	1.00	1.00	
Satd. Flow (prot)	1623		1770	3539	3489	
Flt Permitted	0.99		0.95	1.00	1.00	
Satd. Flow (perm)	1623		1770	3539	3489	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	60	68	1068	682	51
RTOR Reduction (vph)	52	0	0	0	4	0
Lane Group Flow (vph)	30	0	68	1068	729	0
Confl. Peds. (#/hr)	75	25	25			25
Confl. Bikes (#/hr)		1				1
Turn Type			Prot			
Protected Phases	4		5	2	6	
Permitted Phases						
Actuated Green, G (s)	6.4		7.3	28.7	17.0	
Effective Green, g (s)	6.4		7.3	28.7	17.0	
Actuated g/C Ratio	0.14		0.16	0.63	0.37	
Clearance Time (s)	4.9		4.4	5.5	5.5	
Vehicle Extension (s)	2.0		2.0	4.1	3.6	
Lane Grp Cap (vph)	228		284	2232	1304	
v/s Ratio Prot	c0.02		0.04	c0.30	c0.21	
v/s Ratio Perm						
v/c Ratio	0.13		0.24	0.48	0.56	
Uniform Delay, d1	17.1		16.7	4.4	11.3	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.1		0.2	0.2	0.6	
Delay (s)	17.2		16.8	4.7	11.9	
Level of Service	B		B	A	B	
Approach Delay (s)	17.2			5.4	11.9	
Approach LOS	B			A	B	

Intersection Summary			
HCM Average Control Delay	8.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	45.5	Sum of lost time (s)	15.9
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	90	54	57	338	307	160	612	63	149	431	75
Ideal Flow (vphpl)	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775
Total Lost time (s)	4.4	4.9		4.4	5.5		4.4	4.9		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		0.97	0.95	
Frt	1.00	0.94		1.00	0.93		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1653	3120		1653	3070		1653	3260		3207	3232	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1653	3120		1653	3070		1653	3260		3207	3232	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	98	59	62	367	334	174	665	68	162	468	82
RTOR Reduction (vph)	0	42	0	0	82	0	0	4	0	0	9	0
Lane Group Flow (vph)	42	115	0	62	619	0	174	729	0	162	541	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.1	29.2		7.3	29.8		16.6	33.1		10.6	26.3	
Effective Green, g (s)	6.1	29.2		7.3	29.8		16.6	33.1		10.6	26.3	
Actuated g/C Ratio	0.06	0.30		0.07	0.30		0.17	0.34		0.11	0.27	
Clearance Time (s)	4.4	4.9		4.4	5.5		4.4	4.9		4.4	5.7	
Vehicle Extension (s)	2.0	3.2		2.0	4.5		2.0	5.3		2.0	5.0	
Lane Grp Cap (vph)	102	922		122	926		278	1092		344	860	
v/s Ratio Prot	0.03	0.04		c0.04	c0.20		c0.11	c0.22		0.05	0.17	
v/s Ratio Perm												
v/c Ratio	0.41	0.13		0.51	0.67		0.63	0.67		0.47	0.63	
Uniform Delay, d1	44.6	25.5		44.0	30.2		38.2	28.1		41.5	32.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	0.1		1.2	2.2		3.1	2.2		0.4	2.0	
Delay (s)	45.6	25.5		45.2	32.4		41.4	30.3		41.8	34.0	
Level of Service	D	C		D	C		D	C		D	C	
Approach Delay (s)		29.8			33.4			32.4			35.8	
Approach LOS		C			C			C			D	

Intersection Summary

HCM Average Control Delay	33.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	98.8	Sum of lost time (s)	8.8
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	88	149	782	0	0	990
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	96	162	850	0	0	1076
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1388	425			850	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1388	425			850	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	28	72			100	
cM capacity (veh/h)	134	578			784	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	96	162	425	425	538	538
Volume Left	96	0	0	0	0	0
Volume Right	0	162	0	0	0	0
cSH	134	578	1700	1700	1700	1700
Volume to Capacity	0.72	0.28	0.25	0.25	0.32	0.32
Queue Length 95th (ft)	102	29	0	0	0	0
Control Delay (s)	80.8	13.6	0.0	0.0	0.0	0.0
Lane LOS	F	B				
Approach Delay (s)	38.6		0.0		0.0	
Approach LOS	E					
Intersection Summary						
Average Delay			4.6			
Intersection Capacity Utilization			38.9%		ICU Level of Service	A
Analysis Period (min)			15			















Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Volume (veh/h)	0	332	912	0	0	643
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	361	991	0	0	699
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			847			
pX, platoon unblocked	0.91	0.91			0.91	
vC, conflicting volume	1341	496			991	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1171	239			785	
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	48			100	
cM capacity (veh/h)	168	692			752	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	361	496	496	349	349
Volume Left	0	0	0	0	0
Volume Right	361	0	0	0	0
cSH	692	1700	1700	1700	1700
Volume to Capacity	0.52	0.29	0.29	0.21	0.21
Queue Length 95th (ft)	76	0	0	0	0
Control Delay (s)	15.7	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	15.7	0.0		0.0	
Approach LOS	C				

Intersection Summary					
Average Delay			2.8		
Intersection Capacity Utilization			52.4%	ICU Level of Service	A
Analysis Period (min)			15		

Euclid Avenue Master Plan
1: Euclid Ave & SR-94 WB Ramps

Existing PM
5/13/2013

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑	↗		↑↑							
Volume (veh/h)	0	1055	247	0	813	522	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1147	268	0	884	567	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					988							
pX, platoon unblocked												
vC, conflicting volume	1451			1415			1741	2583	726	1589	2598	573
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1451			1415			1741	2583	726	1589	2598	573
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	463			477			56	25	367	72	25	462
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2							
Volume Total	573	573	268	589	862							
Volume Left	0	0	0	0	0							
Volume Right	0	0	268	0	567							
cSH	1700	1700	1700	1700	1700							
Volume to Capacity	0.34	0.34	0.16	0.35	0.51							
Queue Length 95th (ft)	0	0	0	0	0							
Control Delay (s)	0.0	0.0	0.0	0.0	0.0							
Lane LOS												
Approach Delay (s)	0.0			0.0								
Approach LOS												
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			42.5%		ICU Level of Service				A			
Analysis Period (min)			15									



Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations				↑↑			↑↑			↑
Volume (veh/h)	0	0	0	658	152	190	726	0	0	491
Sign Control	Stop			Free			Free		Stop	
Grade	0%			0%			0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	715	165	207	789	0	0	534
Pedestrians										
Lane Width (ft)										
Walking Speed (ft/s)										
Percent Blockage										
Right turn flare (veh)										
Median type				None			None			
Median storage (veh)										
Upstream signal (ft)				704						
pX, platoon unblocked	0.86	0.86				0.86			0.86	
vC, conflicting volume	1605	2000	789			880			2083	395
vC1, stage 1 conf vol										
vC2, stage 2 conf vol										
vCu, unblocked vol	1378	1837	789			535			1933	395
tC, single (s)	7.5	6.5	4.1			4.1			6.5	6.9
tC, 2 stage (s)										
tF (s)	3.5	4.0	2.2			2.2			4.0	3.3
p0 queue free %	100	100	100			77			100	12
cM capacity (veh/h)	9	49	826			885			43	605

Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SE 1
Volume Total	477	404	470	526	534
Volume Left	0	0	207	0	0
Volume Right	0	165	0	0	534
cSH	1700	1700	885	1700	605
Volume to Capacity	0.28	0.24	0.23	0.31	0.88
Queue Length 95th (ft)	0	0	23	0	260
Control Delay (s)	0.0	0.0	6.1	0.0	39.9
Lane LOS			A		E
Approach Delay (s)	0.0		2.9		39.9
Approach LOS					E

Intersection Summary				
Average Delay			10.0	
Intersection Capacity Utilization		62.7%		ICU Level of Service
Analysis Period (min)		15		B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	22	24	901	19	99	1279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.4		4.4	5.4
Lane Util. Factor	1.00		0.95		1.00	0.95
Frpb, ped/bikes	0.98		1.00		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.93		1.00		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1660		3525		1769	3539
Flt Permitted	0.98		1.00		0.19	1.00
Satd. Flow (perm)	1660		3525		345	3539
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	23	25	939	20	103	1332
RTOR Reduction (vph)	21	0	1	0	0	0
Lane Group Flow (vph)	27	0	958	0	103	1332
Confl. Peds. (#/hr)	16	30		11	11	
Confl. Bikes (#/hr)		4		2		
Turn Type					pm+pt	
Protected Phases	8		2		1	6
Permitted Phases					6	
Actuated Green, G (s)	7.9		20.8		29.7	29.7
Effective Green, g (s)	7.9		20.8		29.7	29.7
Actuated g/C Ratio	0.16		0.43		0.62	0.62
Clearance Time (s)	4.9		5.4		4.4	5.4
Vehicle Extension (s)	2.0		4.1		2.0	4.0
Lane Grp Cap (vph)	274		1531		348	2194
v/s Ratio Prot	c0.02		0.27		0.03	c0.38
v/s Ratio Perm					0.16	
v/c Ratio	0.10		0.63		0.30	0.61
Uniform Delay, d1	17.0		10.5		4.8	5.5
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.1		0.9		0.2	0.6
Delay (s)	17.0		11.5		5.0	6.1
Level of Service	B		B		A	A
Approach Delay (s)	17.0		11.5			6.0
Approach LOS	B		B			A

Intersection Summary

HCM Average Control Delay	8.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	47.9	Sum of lost time (s)	10.3
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	34	58	36	833	1187	114
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	37	64	40	915	1304	125
Pedestrians	12					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				480	460	
pX, platoon unblocked	0.78	0.75	0.75			
vC, conflicting volume	1916	727	1442			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1243	0	921			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	69	92	93			
cM capacity (veh/h)	120	805	547			
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	101	40	458	458	870	560
Volume Left	37	40	0	0	0	0
Volume Right	64	0	0	0	0	125
cSH	258	547	1700	1700	1700	1700
Volume to Capacity	0.39	0.07	0.27	0.27	0.51	0.33
Queue Length 95th (ft)	44	6	0	0	0	0
Control Delay (s)	27.7	12.1	0.0	0.0	0.0	0.0
Lane LOS	D	B				
Approach Delay (s)	27.7	0.5	0.0			
Approach LOS	D					
Intersection Summary						
Average Delay			1.3			
Intersection Capacity Utilization			48.7%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	31	27	34	850	1198	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		4.4	5.5	5.5	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frbp, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	1.00	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1689		1770	3539	3512	
Flt Permitted	0.97		0.95	1.00	1.00	
Satd. Flow (perm)	1689		1770	3539	3512	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	32	28	35	885	1248	42
RTOR Reduction (vph)	25	0	0	0	1	0
Lane Group Flow (vph)	35	0	35	885	1289	0
Confl. Peds. (#/hr)	5	3	39			39
Turn Type			Prot			
Protected Phases	4		5	2	6	
Permitted Phases						
Actuated Green, G (s)	6.8		6.7	40.0	28.9	
Effective Green, g (s)	6.8		6.7	40.0	28.9	
Actuated g/C Ratio	0.12		0.12	0.70	0.51	
Clearance Time (s)	4.9		4.4	5.5	5.5	
Vehicle Extension (s)	2.0		2.0	4.1	3.6	
Lane Grp Cap (vph)	201		207	2475	1774	
v/s Ratio Prot	c0.02		0.02	c0.25	c0.37	
v/s Ratio Perm						
v/c Ratio	0.18		0.17	0.36	0.73	
Uniform Delay, d1	22.7		22.7	3.4	11.1	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.2		0.1	0.1	1.6	
Delay (s)	22.8		22.9	3.6	12.6	
Level of Service	C		C	A	B	
Approach Delay (s)	22.8			4.3	12.6	
Approach LOS	C			A	B	

Intersection Summary

HCM Average Control Delay	9.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	57.2	Sum of lost time (s)	15.9
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	92	331	126	62	139	202	119	587	82	294	659	59
Ideal Flow (vphpl)	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775
Total Lost time (s)	4.4	4.9		4.4	5.5		4.4	4.9		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		0.97	0.95	
Frt	1.00	0.96		1.00	0.91		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1653	3170		1653	3012		1653	3246		3207	3266	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1653	3170		1653	3012		1653	3246		3207	3266	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	100	360	137	67	151	220	129	638	89	320	716	64
RTOR Reduction (vph)	0	21	0	0	151	0	0	6	0	0	4	0
Lane Group Flow (vph)	100	476	0	67	220	0	129	721	0	320	776	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	12.0	24.9		7.9	20.2		14.0	32.7		16.5	34.4	
Effective Green, g (s)	12.0	24.9		7.9	20.2		14.0	32.7		16.5	34.4	
Actuated g/C Ratio	0.12	0.25		0.08	0.20		0.14	0.33		0.16	0.34	
Clearance Time (s)	4.4	4.9		4.4	5.5		4.4	4.9		4.4	5.7	
Vehicle Extension (s)	2.0	3.2		2.0	4.5		2.0	5.3		2.0	5.0	
Lane Grp Cap (vph)	197	785		130	605		230	1055		526	1117	
v/s Ratio Prot	c0.06	c0.15		0.04	0.07		0.08	0.22		c0.10	c0.24	
v/s Ratio Perm												
v/c Ratio	0.51	0.61		0.52	0.36		0.56	0.68		0.61	0.69	
Uniform Delay, d1	41.5	33.5		44.5	34.7		40.4	29.5		39.0	28.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	1.4		1.4	0.6		1.9	2.5		1.4	2.4	
Delay (s)	42.3	34.9		45.9	35.3		42.3	32.0		40.4	31.0	
Level of Service	D	C		D	D		D	C		D	C	
Approach Delay (s)		36.1			36.9			33.5			33.7	
Approach LOS		D			D			C			C	

Intersection Summary

HCM Average Control Delay	34.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	100.6	Sum of lost time (s)	13.7
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	103	155	1055	0	0	1335
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	112	168	1147	0	0	1451
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						834
pX, platoon unblocked						
vC, conflicting volume	1872	573			1147	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1872	573			1147	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	64			100	
cM capacity (veh/h)	64	462			605	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	112	168	573	573	726	726
Volume Left	112	0	0	0	0	0
Volume Right	0	168	0	0	0	0
cSH	64	462	1700	1700	1700	1700
Volume to Capacity	1.76	0.36	0.34	0.34	0.43	0.43
Queue Length 95th (ft)	254	41	0	0	0	0
Control Delay (s)	505.2	17.2	0.0	0.0	0.0	0.0
Lane LOS	F	C				
Approach Delay (s)	212.0		0.0		0.0	
Approach LOS	F					

Intersection Summary						
Average Delay			20.7			
Intersection Capacity Utilization			49.3%		ICU Level of Service	A
Analysis Period (min)			15			

	↑	↖	↙	↓	↘	↗	
Movement	NBT	NBR	SBL	SBT	NWL	NWR	
Lane Configurations	↑↑			↑↑		↗	
Volume (veh/h)	658	0	0	916	0	664	
Sign Control	Free			Free	Yield		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	715	0	0	996	0	722	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type	None			None			
Median storage (veh)							
Upstream signal (ft)	856						
pX, platoon unblocked							
vC, conflicting volume			715	1213	358		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			715	1213	358		
tC, single (s)			4.1	6.8	6.9		
tC, 2 stage (s)							
tF (s)			2.2	3.5	3.3		
p0 queue free %			100	100	0		
cM capacity (veh/h)			881	174	639		
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	NW 1		
Volume Total	358	358	498	498	722		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	722		
cSH	1700	1700	1700	1700	639		
Volume to Capacity	0.21	0.21	0.29	0.29	1.13		
Queue Length 95th (ft)	0	0	0	0	561		
Control Delay (s)	0.0	0.0	0.0	0.0	100.8		
Lane LOS						F	
Approach Delay (s)	0.0			0.0	100.8		
Approach LOS						F	
Intersection Summary							
Average Delay			29.9				
Intersection Capacity Utilization			66.0%		ICU Level of Service		C
Analysis Period (min)	15						

APPENDIX G: TRANSIT LEVEL OF SERVICE WORKSHEETS



C. Compute Transit LOS

Street: Euclid Ave

1. Input Data

Segment	Bus Stops (#)	Transit Frequency (bus/hr)	On-Time Performance (%)	Stops with Shelter (%)	Stops with Bench (%)	Pk Load Factor (p/seat)	Central Business District
1	1	6	82%	0%	0%	0.71	No
2	0	6	82%	0%	0%	0.71	No
3	1	6	82%	0%	0%	0.78	No
4	0	6	82%	0%	0%	0.78	No
5	0	6	82%	0%	0%	0.78	No
6	0	6	82%	0%	0%	0.78	No

Population 5 million or more: No

2. Compute Average Transit Travel Speed

Segment	Segment Length (ft)	Transit Running Speed (mph)	Accel Decel Delay (sec)	Passenger Service Delay (sec)	Re-entry Delay (sec)	Total Stop Delay (sec)	Transit Running Time (sec)	Delay at Intrscn (sec)	Transit Travel Speed (mph)
1	719	20.9	4.8	12.6	5.0	22.4	45.8	8.2	9.1
2	502	32.8	12.0	0.0	0.0	12.0	10.4	5.7	21.2
3	469	10.9	1.8	9.0	5.0	15.8	45.2	5.3	6.3
4	704	32.0	11.7	0.0	0.0	11.7	15.0	8.0	20.9
5	617	33.7	12.4	0.0	0.0	12.4	12.5	7.0	21.6
6	948	33.6	12.3	0.0	0.0	12.3	19.3	10.8	21.5
Total/Avg	3959								14.0

3. Compute Transit Level of Service

Segment	Headway Factor	Perceived Trvl Time Factor	Transit Wait-Ride Score	Pedestrian Link LOS Score	Transit LOS Score	Transit LOS
1	3.1498	0.7954	2.5054	2.82	2.66	B
2	3.1498	1.0663	3.3585	2.98	1.41	A
3	3.1498	0.7061	2.2241	2.87	3.09	C
4	3.1498	1.0608	3.3413	2.87	1.42	A
5	3.1498	1.0728	3.3791	2.68	1.33	A
6	3.1498	1.0716	3.3752	2.12	1.25	A
Average					1.79	A

C. Compute Transit LOS

Street: Euclid Ave

1. Input Data

Segment	Bus Stops (#)	Transit Frequency (bus/hr)	On-Time Performance (%)	Stops with Shelter (%)	Stops with Bench (%)	Pk Load Factor (p/seat)	Central Business District
1	1	6	79%	0%	0%	0.55	No
2	0	6	79%	0%	0%	0.55	No
3	1	6	79%	0%	0%	0.55	No
4	0	6	79%	0%	0%	0.55	No
5	0	6	79%	0%	0%	0.55	No
6	0	6	79%	0%	0%	0.55	No

Population 5 million or more: No

2. Compute Average Transit Travel Speed

Segment	Segment Length (ft)	Transit Running Speed (mph)	Accel Decel Delay (sec)	Passenger Service Delay (sec)	Re-entry Delay (sec)	Total Stop Delay (sec)	Transit Running Time (sec)	Delay at Intrsctn (sec)	Transit Travel Speed (mph)
1	719	20.9	5.4	14.0	5.0	24.4	47.8	8.2	8.8
2	502	32.9	12.1	0.0	0.0	12.1	10.4	5.7	21.3
3	469	10.9	1.7	8.6	5.0	15.3	44.7	5.3	6.4
4	704	32.2	11.8	0.0	0.0	11.8	14.9	8.0	20.9
5	617	33.5	12.3	0.0	0.0	12.3	12.6	7.0	21.5
6	948	33.6	12.3	0.0	0.0	12.3	19.3	10.8	21.5
Total/Avg	3959								13.9

3. Compute Transit Level of Service

Segment	Headway Factor	Perceived Trvl Time Factor	Transit Wait-Ride Score	Pedestrian Link LOS Score	Transit LOS Score	Transit LOS
1	3.1498	0.7773	2.4484	2.69	2.73	B
2	3.1498	1.0402	3.2764	2.99	1.53	A
3	3.1498	0.7030	2.2142	2.82	3.10	C
4	3.1498	1.0355	3.2618	2.76	1.52	A
5	3.1498	1.0439	3.2880	2.91	1.50	A
6	3.1498	1.0442	3.2891	2.12	1.38	A
Average					1.89	A

C. Compute Transit LOS

Street: Euclid Ave

1. Input Data

Segment	Bus Stops (#)	Transit Frequency (bus/hr)	On-Time Performance (%)	Stops with Shelter (%)	Stops with Bench (%)	Pk Load Factor (p/seat)	Central Business District
1	1	5	86%	100%	0%	0.66	No
2	0	5	86%	0%	0%	0.66	No
3	1	5	86%	0%	0%	0.76	No
4	0	5	86%	0%	0%	0.76	No
5	1	5	86%	0%	100%	0.77	No
6	0	5	86%	0%	0%	0.77	No

Population 5 million or more: No

2. Compute Average Transit Travel Speed

Segment	Segment Length (ft)	Transit Running Speed (mph)	Accel Decel Delay (sec)	Passenger Service Delay (sec)	Re-entry Delay (sec)	Total Stop Delay (sec)	Transit Running Time (sec)	Delay at Intrscn (sec)	Transit Travel Speed (mph)
1	742	21.7	7.9	20.0	5.0	32.9	56.3	8.4	7.8
2	888	36.4	13.3	0.0	0.0	13.3	16.6	10.1	22.6
3	700	20.3	2.1	5.5	5.0	12.6	36.0	8.0	10.8
4	466	32.4	11.9	0.0	0.0	11.9	9.8	5.3	21.0
5	500	12.4	1.7	7.4	5.0	14.1	41.7	5.7	7.2
6	671	29.4	3.1	0.0	0.0	3.1	15.6	7.6	19.7
Total/Avg	3967								12.2

3. Compute Transit Level of Service

Segment	Headway Factor	Perceived Trvl Time Factor	Transit Wait-Ride Score	Pedestrian Link LOS Score	Transit LOS Score	Transit LOS
1	3.0028	0.7812	2.3457	3.00	2.93	C
2	3.0028	1.1212	3.3668	2.87	1.38	A
3	3.0028	0.8584	2.5777	2.66	2.53	B
4	3.0028	1.0927	3.2812	2.67	1.48	A
5	3.0028	0.7449	2.2368	2.49	3.02	C
6	3.0028	1.0681	3.2074	2.49	1.56	A
Average					2.12	B

C. Compute Transit LOS

Street: Euclid Ave

1. Input Data

Segment	Bus Stops (#)	Transit Frequency (bus/hr)	On-Time Performance (%)	Stops with Shelter (%)	Stops with Bench (%)	Pk Load Factor (p/seat)	Central Business District
1	1	5	74%	100%	0%	0.75	No
2	0	5	74%	0%	0%	0.75	No
3	1	5	74%	0%	0%	0.74	No
4	0	5	74%	0%	0%	0.74	No
5	1	5	74%	0%	100%	0.74	No
6	0	5	74%	0%	0%	0.74	No

Population 5 million or more: No

2. Compute Average Transit Travel Speed

Segment	Segment Length (ft)	Transit Running Speed (mph)	Accel Decel Delay (sec)	Passenger Service Delay (sec)	Re-entry Delay (sec)	Total Stop Delay (sec)	Transit Running Time (sec)	Delay at Intrsctn (sec)	Transit Travel Speed (mph)
1	742	21.7	7.9	20.0	5.0	32.9	56.3	8.4	7.8
2	888	36.1	13.2	0.0	0.0	13.2	16.8	10.1	22.5
3	700	20.3	4.6	12.4	5.0	22.0	45.5	8.0	8.9
4	466	31.7	11.6	0.0	0.0	11.6	10.0	5.3	20.7
5	500	12.4	2.3	10.2	5.0	17.5	45.1	5.7	6.7
6	671	28.9	3.5	0.0	0.0	3.5	15.8	7.6	19.5
Total/Avg	3967								11.5

3. Compute Transit Level of Service

Segment	Headway Factor	Perceived Trvl Time Factor	Transit Wait-Ride Score	Pedestrian Link LOS Score	Transit LOS Score	Transit LOS
1	3.0028	0.7508	2.2545	3.23	3.10	C
2	3.0028	1.0118	3.0382	3.12	1.91	A
3	3.0028	0.7667	2.3023	3.34	3.05	C
4	3.0028	0.9885	2.9683	3.30	2.04	B
5	3.0028	0.7053	2.1179	3.13	3.29	C
6	3.0028	0.9719	2.9183	2.82	2.05	B
Average					2.55	B

APPENDIX H: BICYCLE LEVEL OF SERVICE WORKSHEETS



D. Compute Bicycle LOS

Street: Euclid Ave

1. Geometric Input Data

Segment & Downstream	Outside Lane Width	Bike/Shldr Lane Width	Segment Through Lanes	Intrscn Through Lanes	Divided/Undivided	Signal I/S Cross Dist	Unsig Conf Per Mile	Shldr Width	Bike Lane Width
Signal	(ft)	(ft)	(One-Dir)	(One-Dir)	(D / UD)	(ft)	(conf/mi)	(ft)	(ft)
1	18.0	0.0	2	2	D	39.0	0.0	0.0	0.0
2	10.0	8.0	2	2	D	44.0	0.0	8.0	0.0
3	11.0	8.0	2	2	D	49.0	0.0	8.0	0.0
4	10.0	8.0	2	2	UD	14.0	0.0	8.0	0.0
5	15.0	0.0	3	3	D	46.0	0.0	0.0	0.0
6	13.0	0.0	3	2	D	84.0	0.0	0.0	0.0

2. Performance and Other Input Data

Segment & Downstream	Traffic Volume	Heavy Vehicle	Percent On-street Parking	Pavement Rating
Signal	(vph pk 15)	(%)	(%)	(#)
1	1006	2%	0%	3.0
2	969	2%	0%	3.0
3	963	2%	5%	3.0
4	783	2%	5%	3.0
5	826	2%	0%	3.0
6	0	0%	0%	4.0

Pavement Rating: 1=Poor, 5=Excellent

Mid-segment traffic speed = average of auto free-flow speed, and mean auto speed with intersection delay.

3. HCM 2010 Bicycle LOS

Segment & Downstream	Bicycle Running Speed	Bicycle Delay at Intrscn	Bicycle Running Time	Bicycle Travel Speed	Bicycle Intrscn LOS Score	Bicycle Intrscn LOS
Intrscn	(mph)	(sec)	(sec)	(mph)	Score	LOS
1	15.0	3.1	32.7	13.7	1.7000	A
2	15.0	0.0	22.8	15.0	0.0000	A
3	15.0	7.0	21.3	11.3	3.3184	C
4	15.0	0.0	32.0	15.0	0.0000	A
5	15.0	0.0	28.0	15.0	0.0000	A
6	15.0	50.0	43.1	6.9	2.6304	B
Average				11.2		

Segment & Downstream	Outside Lane Width	Paved Shoulder	Outside Th+BL+Shldr	Tot Width Th+BL+Shldr	Eff Width OS Thru	Adjstd HV %	Thru Cntrl Delay	Link LOS Score	Link LOS	Segment LOS Score	Segment
Intrscn	(ft)	Wos (ft)	Wt (ft)	Wv (ft)	We (ft)	(%)	(sec)	Score	LOS	Score	LOS
1	18.0	0.0	18.0	18.0	18.0	2.0%	2.7	3.3455	C	3.4455	C
2	10.0	6.5	16.5	16.5	23.0	2.0%	Infinity	2.3954	B	3.2333	C
3	11.0	6.5	11.0	11.0	16.5	2.0%	9.4	3.2942	C	3.6809	D
4	10.0	6.5	10.0	10.0	15.5	2.0%	Infinity	3.7105	D	4.7562	E
5	15.0	0.0	15.0	15.0	15.0	2.0%	Infinity	3.6521	D	3.4343	C
6	13.0	0.0	13.0	13.0	13.0	0.0%	NaN	1.0988	A	3.7633	D
Average										3.7539	D

D. Compute Bicycle LOS

Street: Euclid Ave

1. Geometric Input Data

Segment & Downstream	Outside Lane Width (ft)	Bike/Shldr Lane Width (ft)	Segment Through Lanes (One-Dir)	Intrsrctn Through Lanes (One-Dir)	Divided/Undivided (D / UD)	Signal I/S Cross Dist (ft)	Unsig Conf Per Mile (conf/mi)	Shldr Width (ft)	Bike Lane Width (ft)
1	18.0	0.0	2	2	D	39.0	0.0	0.0	0.0
2	10.0	8.0	2	2	D	44.0	0.0	8.0	0.0
3	11.0	8.0	2	2	D	49.0	0.0	8.0	0.0
4	10.0	8.0	2	2	UD	14.0	0.0	8.0	0.0
5	15.0	0.0	3	3	D	46.0	0.0	0.0	0.0
6	13.0	0.0	3	2	D	84.0	0.0	0.0	0.0

2. Performance and Other Input Data

Segment & Downstream	Traffic Volume (vph pk 15)	Heavy Vehicle (%)	Percent On-street Parking	Pavement Rating (#)
1	890	2%	0%	3.0
2	867	2%	5%	3.0
3	921	2%	5%	3.0
4	749	2%	10%	3.0
5	1142	2%	0%	3.0
6	0	0%	0%	4.0

Pavement Rating: 1=Poor, 5=Excellent

Mid-segment traffic speed = average of auto free-flow speed, and mean auto speed with intersection delay.

3. HCM 2010 Bicycle LOS

Segment & Downstream	Bicycle Running Speed (mph)	Bicycle Delay at Intrsrctn (sec)	Bicycle Running Time (sec)	Bicycle Travel Speed (mph)	Bicycle Intrsrctn LOS Score	Bicycle Intrsrctn LOS
1	15.0	2.6	32.7	13.9	1.6041	A
2	15.0	0.0	22.8	15.0	0.0000	A
3	15.0	7.8	21.3	11.0	3.2837	C
4	15.0	0.0	32.0	15.0	0.0000	A
5	15.0	0.0	28.0	15.0	0.0000	A
6	15.0	50.0	43.1	6.9	2.6304	B
Average				11.2		

Segment & Downstream	Outside Lane Width (ft)	Paved Shoulder Wos (ft)	Outside Th+BL+Shldr Wt (ft)	Tot Width Th+BL+Shldr Wv (ft)	Eff Width OS Thru We (ft)	Adjstd HV % (%)	Thru Cntrl Delay (sec)	Link LOS Score	Link LOS	Segment LOS Score	Segment LOS
1	18.0	0.0	18.0	18.0	18.0	2.0%	1.2	3.2870	C	3.4306	C
2	10.0	6.5	10.0	10.0	15.5	2.0%	Infinity	3.7860	D	3.4558	C
3	11.0	6.5	11.0	11.0	16.5	2.0%	10.6	3.2740	C	3.6673	D
4	10.0	6.5	10.0	10.0	14.5	2.0%	Infinity	3.8428	D	4.7774	E
5	15.0	0.0	15.0	15.0	15.0	2.0%	Infinity	3.8107	D	3.4597	C
6	13.0	0.0	13.0	13.0	13.0	0.0%	NaN	1.0988	A	3.7633	D
Average										3.7855	D

D. Compute Bicycle LOS

Street: Euclid Ave

1. Geometric Input Data

Segment & Downstream Signal	Outside Lane Width (ft)	Bike/Shldr Lane Width (ft)	Segment Through Lanes (One-Dir)	Intrsrctn Through Lanes (One-Dir)	Divided/ Undivided (D / UD)	Signal I/S Cross Dist (ft)	Unsig Conf Per Mile (conf/mi)	Shldr Width (ft)	Bike Lane Width (ft)
1	14.0	0.0	2	2	D	14.0	0.0	0.0	0.0
2	14.0	0.0	2	3	D	14.0	0.0	0.0	0.0
3	18.0	0.0	2	2	UD	49.0	0.0	0.0	0.0
4	10.0	8.0	2	2	D	44.0	0.0	8.0	0.0
5	10.0	8.0	2	2	D	39.0	0.0	8.0	0.0
6	18.0	0.0	2	2	D	89.0	0.0	0.0	0.0

2. Performance and Other Input Data

Segment & Downstream Signal	Traffic Volume (vph pk 15)	Heavy Vehicle (%)	Percent On-street Parking	Pavement Rating (#)
1	827	2%	0%	3.0
2	624	2%	0%	3.0
3	724	2%	0%	3.0
4	706	2%	0%	3.0
5	691	2%	0%	3.0
6	565	2%	0%	4.0

Pavement Rating: 1=Poor, 5=Excellent

Mid-segment traffic speed = average of auto free-flow speed, and mean auto speed with intersection delay.

3. HCM 2010 Bicycle LOS

Segment & Downstream Intrsrctn	Bicycle Running Speed (mph)	Bicycle Delay at Intrsrctn (sec)	Bicycle Running Time (sec)	Bicycle Travel Speed (mph)	Bicycle Intrsrctn LOS Score	Bicycle Intrsrctn LOS
1	15.0	0.0	33.7	15.0	0.0000	A
2	15.0	0.0	40.4	15.0	0.0000	A
3	15.0	12.1	31.8	10.9	1.6199	A
4	15.0	0.0	21.2	15.0	0.0000	A
5	15.0	9.0	22.7	10.7	1.7617	A
6	15.0	23.1	30.5	8.5	2.1007	B
Average				12.0		

Segment & Downstream Intrsrctn	Outside Lane Width (ft)	Paved Shoulder Wos (ft)	Outside Th+BL+Shldr Wt (ft)	Tot Width Th+BL+Shldr Wv (ft)	Eff Width OS Thru We (ft)	Adjstd HV % (%)	Thru Cntrl Delay (sec)	Link LOS Score	Link LOS	Segment LOS Score	Segment LOS
1	14.0	0.0	14.0	14.0	14.0	2.0%	Infinity	3.9769	D	4.4825	E
2	14.0	0.0	14.0	14.0	14.0	2.0%	Infinity	3.9181	D	3.4769	C
3	18.0	0.0	18.0	18.0	18.0	2.0%	18.8	3.1484	C	3.4093	C
4	10.0	6.5	16.5	16.5	23.0	2.0%	Infinity	2.2254	B	3.2061	C
5	10.0	6.5	16.5	16.5	23.0	2.0%	11.4	1.9345	A	3.2236	C
6	18.0	0.0	18.0	18.0	18.0	2.0%	26.8	2.7032	B	3.6478	D
Average										3.6182	D

D. Compute Bicycle LOS

Street: Euclid Ave

1. Geometric Input Data

Segment & Downstream	Outside Lane Width (ft)	Bike/Shldr Lane Width (ft)	Segment Through Lanes (One-Dir)	Intrsrctn Through Lanes (One-Dir)	Divided/Undivided (D / UD)	Signal I/S Cross Dist (ft)	Unsig Conf Per Mile (conf/mi)	Shldr Width (ft)	Bike Lane Width (ft)
1	14.0	0.0	2	2	D	14.0	0.0	0.0	0.0
2	14.0	0.0	2	3	D	14.0	0.0	0.0	0.0
3	18.0	0.0	2	2	UD	49.0	0.0	0.0	0.0
4	10.0	8.0	2	2	D	44.0	0.0	8.0	0.0
5	10.0	8.0	2	2	D	39.0	0.0	8.0	0.0
6	18.0	0.0	2	2	D	89.0	0.0	0.0	0.0

2. Performance and Other Input Data

Segment & Downstream	Traffic Volume (vph pk 15)	Heavy Vehicle (%)	Percent On-street Parking (%)	Pavement Rating (#)
1	1057	2%	0%	3.0
2	851	2%	0%	3.0
3	1333	2%	0%	3.0
4	1268	2%	0%	3.0
5	1223	2%	10%	3.0
6	867	2%	0%	4.0

Pavement Rating: 1=Poor, 5=Excellent

Mid-segment traffic speed = average of auto free-flow speed, and mean auto speed with intersection delay.

3. HCM 2010 Bicycle LOS

Segment & Downstream	Bicycle Running Speed (mph)	Bicycle Delay at Intrsrctn (sec)	Bicycle Running Time (sec)	Bicycle Travel Speed (mph)	Bicycle Intrsrctn LOS Score	Bicycle Intrsrctn LOS
1	15.0	0.0	33.7	15.0	0.0000	A
2	15.0	0.0	40.4	15.0	0.0000	A
3	15.0	3.5	31.8	13.5	2.1223	B
4	15.0	0.0	21.2	15.0	0.0000	A
5	15.0	6.9	22.7	11.5	3.5943	D
6	15.0	21.0	30.5	8.9	2.3498	B
Average				12.8		

Segment & Downstream	Outside Lane Width (ft)	Paved Shoulder Wos (ft)	Outside Th+BL+Shldr Wt (ft)	Tot Width Th+BL+Shldr Wv (ft)	Eff Width OS Thru We (ft)	Adjstd HV % (%)	Thru Cntrl Delay (sec)	Link LOS Score	Link LOS	Segment LOS Score	Segment LOS
1	14.0	0.0	14.0	14.0	14.0	2.0%	Infinity	4.0672	D	4.4970	E
2	14.0	0.0	14.0	14.0	14.0	2.0%	Infinity	4.0699	D	3.5012	D
3	18.0	0.0	18.0	18.0	18.0	2.0%	3.8	3.4351	C	3.4915	C
4	10.0	6.5	16.5	16.5	23.0	2.0%	Infinity	2.5024	B	3.2504	C
5	10.0	6.5	10.0	10.0	14.5	2.0%	9.5	3.7921	D	3.8570	D
6	18.0	0.0	18.0	18.0	18.0	2.0%	26.3	2.9042	C	3.7054	D
Average										3.7357	D

APPENDIX I: PEDESTRIAN LEVEL OF SERVICE WORKSHEETS



B. Pedestrian LOS

Street: Euclid Ave

1. Pedestrian Flow and Density

Segment	Sidewalk Width (ft)	Ped Flow (pph)	Glogal Growth Factor	Segment Growth Factor	Adj'd Ped Flow (pph)	Space Per Ped (sqft/ped)
1	8	0	1.000	1.000	0	Infinity
2	5	0	1.000	1.000	0	Infinity
3	5	0	1.000	1.000	0	Infinity
4	5	0	1.000	1.000	0	Infinity
5	5	0	1.000	1.000	0	Infinity
6	5	0	1.000	1.000	0	Infinity

2. Compute Pedestrian Intersection LOS

Segment	Free-Flow Walk Speed (ft/sec)	Effective SW Width (ft)	Ped Walk Speed (ft/s)	Pedestrian Delay at Intersection			Ped Travel Speed (ft/s)	Ped Intrscn		Ped Intrscn	
				Parallel Path (sec)	Nearest Sig-Cntrl (sec)	Mid-Seg Crossing (sec)		Cross Street Xing Score	LOS	Segment Xing Score	LOS
1	4.40	6.50	4.40	16.3	16.3	55.5	4.00	1.68	A	2.27	B
2	4.40	3.50	4.40	0.0	50.0	54.4	4.40	0.00	A	0.00	A
3	4.40	3.50	4.40	16.5	16.5	15238.7	3.81	1.68	A	2.27	B
4	4.40	3.50	4.40	0.0	50.0	3531.8	4.40	0.00	A	0.00	A
5	4.40	3.50	4.40	0.0	50.0	13383.0	4.40	0.00	A	0.00	A
6	4.40	3.50	4.40	50.0	50.0	0.0	3.57	2.47	B	2.47	B

3. Compute Pedestrian Link LOS

Segment	Outside lane (ft)	Wos (ft)	Wv (ft)	Wl BL+Shldr (ft)	Barrier (ft/tree)	Fw	Fs	Fv	Ped Link LOS Score	Ped Link LOS
2	10.0	6.5	16.5	6.5	0.0	-4.5956	0.4298	1.1024	2.98	C
3	11.0	6.5	11.0	6.5	0.0	-4.5052	0.2294	1.0958	2.87	C
4	10.0	6.5	10.0	6.5	0.0	-4.4736	0.4098	0.8902	2.87	C
5	15.0	0.0	15.0	0.0	0.0	-4.4492	0.4553	0.6261	2.68	B
6	13.0	0.0	13.0	0.0	0.0	-4.3820	0.4503	0.0000	2.12	B

4. Compute Pedestrian Segment LOS

Segment & Downstream Intrscn	RCDF	Ped Segment LOS Score	Ped Segment LOS
1	0.83	2.40	B
2	1.20	3.07	C
3	0.84	2.41	B
4	1.20	3.02	C
5	1.20	2.95	C
6	1.20	3.39	C
Average		2.92	C

5. Non-signalized Pedestrian Crossing Calculations

Segment	Two-stage Crossing	Crossing Length (ft)	Through Lanes (#)	Critical Headway (sec)	Veh Flow Rate (veh/sec)	Stage 1			
						Prob of Delayed Crossing	Avg Ped Gap Delay (sec)	Non-zero Gap Delay (sec)	Veh Yield Reduction (sec)
1	Yes	28	2	9.36	0.280	0.9270	36.1	38.9	36.1

								Euclid Ave (NB) AM Peak	
2	Yes	29	2	9.59	0.269	0.9244	35.8	38.7	35.8
3	No	70	4	18.91	0.469	0.9999	15238.7	15240.8	15240.8
4	No	70	4	18.91	0.381	0.9993	3531.8	3534.4	3531.8
5	No	69	5	18.68	0.468	0.9998	13383.0	13385.2	13385.2
6	Yes	38	3	11.64	0.000	0.0000	NaN	0.0	0.0

Segment	Motorist	----- Stage 2 -----							
	Yield Rate	Crossing Length (ft)	Through Lanes (#)	Critical Headway (sec)	Veh Flow Rate (veh/sec)	Prob of Delayed Crossing	Avg Ped Gap Delay (sec)	Non-zero Gap Delay (sec)	Veh Yield Reduction (sec)
1	0.000	31	2	10.05	0.186	0.8461	19.5	23.0	19.5
2	0.000	29	2	9.59	0.195	0.8458	18.5	21.9	18.5
3	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0
4	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0
5	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0
6	0.000	26	2	8.91	0.000	0.0000	0.0	0.0	0.0

6. Non-signalized Pedestrian Crossing LOS

Downstream Intrsctn	Average Ped Delay (sec)	Pedestrian Intrsectn LOS
1	55.5	F
2	54.4	F
3	15238.7	F
4	3531.8	F
5	13383.0	F
6	0.0	A

B. Pedestrian LOS

Street: Euclid Ave

1. Pedestrian Flow and Density

Segment	Sidewalk Width (ft)	Ped Flow (pph)	Glogal Growth Factor	Segment Growth Factor	Adj'd Ped Flow (pph)	Space Per Ped (sqft/ped)
1	8	0	1.000	1.000	0	Infinity
2	5	0	1.000	1.000	0	Infinity
3	5	0	1.000	1.000	0	Infinity
4	5	0	1.000	1.000	0	Infinity
5	5	0	1.000	1.000	0	Infinity
6	5	0	1.000	1.000	0	Infinity

2. Compute Pedestrian Intersection LOS

Segment	Free-Flow		Effective		Ped Walk			Ped Travel		Ped Intrscn		Ped Intrscn	
	Walk Speed (ft/sec)	SW Width (ft)	SW Width (ft)	Speed (ft/s)	Parallel Path (sec)	Nearest Sig-Cntrl (sec)	Mid-Seg Crossing (sec)	Speed (ft/s)	Cross Street Score	Xing LOS	Segment Score	Xing LOS	
1	4.40	6.50	6.50	4.40	22.0	22.0	104.9	3.88	1.70	A	2.28	B	
2	4.40	3.50	3.50	4.40	0.0	50.0	104.3	4.40	0.00	A	0.00	A	
3	4.40	3.50	3.50	4.40	17.5	17.5	280187.3	3.78	1.69	A	2.27	B	
4	4.40	3.50	3.50	4.40	0.0	50.0	9705.1	4.40	0.00	A	0.00	A	
5	4.40	3.50	3.50	4.40	0.0	50.0	221347.5	4.40	0.00	A	0.00	A	
6	4.40	3.50	3.50	4.40	50.0	50.0	0.0	3.57	2.47	B	2.47	B	

3. Compute Pedestrian Link LOS

Segment	Outside		Wv (ft)	Wl		Fw	Fs	Fv	Ped Link LOS Score	Ped Link LOS
	lane (ft)	Wos (ft)		BL+Shldr (ft)	Barrier (ft/tree)					
1	18.0	0.0	18.0	0.0	0.0	-4.7212	0.3524	1.0124	2.69	B
2	10.0	6.5	10.0	6.5	0.0	-4.4736	0.4331	0.9864	2.99	C
3	11.0	6.5	11.0	6.5	0.0	-4.5052	0.2300	1.0479	2.82	C
4	10.0	6.5	10.0	6.5	0.0	-4.5513	0.4144	0.8517	2.76	C
5	15.0	0.0	15.0	0.0	0.0	-4.4492	0.4487	0.8660	2.91	C
6	13.0	0.0	13.0	0.0	0.0	-4.3820	0.4503	0.0000	2.12	B

4. Compute Pedestrian Segment LOS

Segment & Downstream Intrscn	Ped RCDF	Ped Segment LOS Score	Ped Segment LOS
1	0.92	2.60	B
2	1.20	3.07	C
3	0.85	2.44	B
4	1.20	2.98	C
5	1.20	3.04	C
6	1.20	3.39	C
Average		2.96	C

5. Non-signalized Pedestrian Crossing Calculations

Segment	----- Stage 1 -----									
	Two-stage	Crossing Length	Through Lanes	Critical Headway	Veh Flow Rate	Prob of Delayed	Avg Ped Gap Delay	Non-zero Gap Delay	Veh Yield Reduction	

	Crossing	(ft)	(#)	(sec)	(veh/sec)	Crossing	(sec)	Euclid Ave (NB) PM Peak	
							(sec)	(sec)	(sec)
1	Yes	28	2	9.36	0.247	0.9012	27.5	30.6	27.5
2	Yes	29	2	9.59	0.241	0.9008	28.1	31.2	28.1
3	No	70	4	18.91	0.640	1.0000	280187.3	280188.8	280188.8
4	No	70	4	18.91	0.443	0.9998	9705.1	9707.4	9707.4
5	No	69	5	18.68	0.634	1.0000	221347.5	221349.1	221349.1
6	Yes	38	3	11.64	0.000	0.0000	NaN	0.0	0.0

Motorist		----- Stage 2 -----								
Segment	Yield Rate	Crossing Length (ft)	Through Lanes (#)	Critical Headway (sec)	Veh Flow Rate (veh/sec)	Prob of Delayed Crossing	Avg Ped Gap Delay (sec)	Non-zero Gap Delay (sec)	Veh Yield Reduction (sec)	
1	0.000	31	2	10.05	0.341	0.9676	77.4	80.0	77.4	
2	0.000	29	2	9.59	0.361	0.9687	76.2	78.6	76.2	
3	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0	
4	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0	
5	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0	
6	0.000	26	2	8.91	0.000	0.0000	0.0	0.0	0.0	

6. Non-signalized Pedestrian Crossing LOS

Downstream Intrsectn	Average Ped Delay (sec)	Pedestrian Intrsectn LOS
1	104.9	F
2	104.3	F
3	280187.3	F
4	9705.1	F
5	221347.5	F
6	0.0	A

									Euclid Ave (SB) AM Peak
1	Yes	26	2	8.91	0.230	0.8709	20.4	23.5	20.4
2	No	69	5	18.68	0.403	0.9995	4621.3	4623.7	4621.3
3	No	70	4	18.91	0.468	0.9999	14749.0	14751.1	14751.1
4	No	70	4	18.91	0.467	0.9999	14680.3	14682.5	14682.5
5	Yes	29	2	9.59	0.192	0.8414	18.0	21.4	18.0
6	Yes	31	2	10.05	0.157	0.7931	14.4	18.1	14.4

Segment	Motorist	----- Stage 2 -----							
	Yield Rate	Crossing Length (ft)	Through Lanes (#)	Critical Headway (sec)	Veh Flow Rate (veh/sec)	Prob of Delayed Crossing	Avg Ped Gap Delay (sec)	Non-zero Gap Delay (sec)	Veh Yield Reduction (sec)
1	0.000	38	3	11.64	0.221	0.9234	42.9	46.5	42.9
2	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0
3	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0
4	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0
5	0.000	29	2	9.59	0.288	0.9368	41.9	44.7	41.9
6	0.000	28	2	9.36	0.226	0.8791	22.9	26.0	22.9

6. Non-signalized Pedestrian Crossing LOS

Downstream Intrsctn	Average Ped Delay (sec)	Pedestrian Intrsctn LOS
1	63.4	F
2	4621.3	F
3	14749.0	F
4	14680.3	F
5	59.9	F
6	37.3	E

Euclid Ave (SB) PM Peak

1	Yes	26	2	8.91	0.294	0.9269	34.3	37.0	34.3
2	No	69	5	18.68	0.446	0.9998	9312.5	9314.7	9314.7
3	No	70	4	18.91	0.617	1.0000	188853.2	188854.9	188854.9
4	No	70	4	18.91	0.587	1.0000	113097.7	113099.4	113099.4
5	Yes	29	2	9.59	0.340	0.9616	64.0	66.6	64.0
6	Yes	31	2	10.05	0.241	0.9109	32.4	35.6	32.4

Segment	Motorist	----- Stage 2 -----							
	Yield Rate	Crossing Length (ft)	Through Lanes (#)	Critical Headway (sec)	Veh Flow Rate (veh/sec)	Prob of Delayed Crossing	Avg Ped Gap Delay (sec)	Non-zero Gap Delay (sec)	Veh Yield Reduction (sec)
1	0.000	38	3	11.64	0.294	0.9672	88.7	91.7	88.7
2	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0
3	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0
4	0.000	0	0	0.00	0.000	0.0000	0.0	0.0	0.0
5	0.000	29	2	9.59	0.246	0.9056	29.4	32.4	29.4
6	0.000	28	2	9.36	0.213	0.8645	20.5	23.7	20.5

6. Non-signalized Pedestrian Crossing LOS

Downstream Intrsctn	Average Ped Delay (sec)	Pedestrian Intrsectn LOS
1	123.0	F
2	9312.5	F
3	188853.2	F
4	113097.7	F
5	93.4	F
6	52.9	F