APPENDICES

Mount Vernon Avenue Bridge
Pedestrian and Vehicular Detour Analysis

Prepared for
The City of San Bernardino

June 15, 2010

J09-1638

APPENDIX A

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT (SBCUSD) DISTRICT MAPS 2009-10

TO: KIMBARK ES
NORTH VERDEMONT ES
PALM AVENUE ES
CHAVEZ MS
(see inset to right)
Elementary Schools
MULTI-TRACK
D-TRACK ONLY
TRADITIONAL
Middle Schools
D-TRACK ONLY
TRADITIONAL
High Schools
TRADITIONAL
KIMBARK
NORTH VERDEMONT
PALM
NORTH PARK
NORTHPARK ES
HILLSIDE ES
HILLSIDE
KENDALL ES
KENDALL
SHANDIN HILLS MS
NEWMARK ES
NEWMARK
ARROWHEAD
ARROWHEAD ES
PARKSIDE
PARKSIDE ES
GOLDEN VALLEY MS
DEL ROSA
DEL ROSA ES
BELVEDERE
VERMONT
VERMONT ES
MUSCOY ES
MUSCOY
MARSHALL ES
MARSHALL
DAVIDSON
DAVIDSON ES
WILSON ES
WILSON
SALINAS
SALINAS ES
ARROWVIEW MS
HUNT
HUNT ES
DEL VALLEJO MS
BARTON
BARTON ES
SERRANO MS
BONNIE OEHL ES
INGHRAM
INGHRAM ES
SAN BERNARDINO HS
RIO VISTA ES
ROOSEVELT ES
ROOSEVELT
KING MS
RIO VISTA
ARROYO VALLEY HS
RILEY
RILEY ES
LINCOLN ES
LINCOLN
ADULT ED SCHOOL POLICE
BRADLEY
BRADLEY ES
ANTON
ANTON ES
PACIFIC HS
PACIFIC ST
FAIRFAX ES
FAIRFAX
EMMERTON-RODRIGUEZ
EMMERTON ES
RODRIGUEZ PREP ACADEMY
SAN GORGONIO HS
HIGHLAND-PACIFIC
PACIFIC ES
COLE
COLE ES
THOMPSON ES
THOMPSON
MT VERNON ES
MT VERNON
BLDG SERVICES WAREHOUSE
BOARD OF EDUCATION
SMART BLDG
JONES ES
JONES
RAMONA-ALESSANDRO ES
RAMONA-ALESSANDRO
E NEAL ROBERTS ES
SIERRA HS
ROBERTS
WONG ES
CURTIS MS
WARM SPRINGS
LANKERSHIM ES
WARM SPRINGS ES
LANKERSHIM
CYPRESS ES
CYPRESS
MONTEREY ES
ANDERSON
MONTEREY
WONG
ED. SUPPORT CENTER
LYTLE CREEK
LYTLE CREEK ES
RICHARDSON PREP
BURBANK
BURBANK ES
URBITA
URBITA ES
CAJON BLVD
KENDALL DR
GLEN HELEN RD
DEVORE RD
KENWOOD AV
KIMBARK ES
N VERDEMONT ES
CHAVEZ MS
PALM ES
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
DISTRICT MAP 2009-10
ELEMENTARY SCHOOL BOUNDARIES
(For Reference Only-Please contact local school for specific attendance/school assignment)
0 0.5 1 2 Miles
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
DISTRICT MAP 2009-10
MIDDLE SCHOOL BOUNDARIES
(For Reference Only-Please contact local school for specific attendance/school assignment)
Elementary Schools
MULTI-TRACK
D-TRACK ONLY
TRADITIONAL
Middle Schools
D-TRACK ONLY
TRADITIONAL
High Schools
TRADITIONAL
TO: KIMBARK ES
NORTH VERDEMONT ES
PALM AVENUE ES
CHAVEZ MS
(see inset to right)
SHANDIN HILLS
CHAVEZ
GOLDEN VALLEY
DEL VALLEJO
SERRANO
ARROWVIEW
KING
CURTIS
NORTHPARK ES
HILLSIDE ES
KENDALL ES
NEWMARK ES
VERMONT ES
MUSCOY ES
MARSHALL ES
ARROWHEAD ES
GOLDEN VALLEY MS
PARKSIDE ES
DAVIDSON ES
SALINAS ES
WILSON ES
DEL ROSA ES
HUNT ES
BARTON ES
BELVEDERE ES
DEL VALLEJO MS
SERRANO MS
BONNIE OEHL ES
RODRIGUEZ PREP ACADEMY
EMMERTON ES
HIGHLAND PACIFIC ES
COLE ES
THOMPSON ES
LANKERSHIM ES
WARM SPRINGS ES
CYPRESS ES
ARROWVIEW MS
SAN BERNARDINO HS
PACIFIC HS
FAIRFAX ES
ANTON ES
SAN GORGONIO HS
INGHRAM ES
RIO VISTA ES
KING MS
ARROYO VALLEY HS
ROOSEVELT ES
RILEY ES
LINCOLN ES
BRADLEY ES
E NEAL ROBERTS ES
SIERRA HS
WONG ES
CURTIS MS
MT VERNON ES
RAMONA-ALESSANDRO ES
MONTEREY ES
LYTLE CREEK ES
RICHARDSON PREP
BURBANK ES
URBITA ES
KIMBARK ES
N VERDEMONT ES
PALM ES
CHAVEZ MS
CAJON HS
SHANDIN HILLS MS
WHAA
WAREHOUSE
BLDG SERVICES
NUTRITION SERVICES
ADULT ED SCHOOL POLICE
ED. SUPPORT CENTER
ANDERSON
JONES ES
EDUCATION
HARMON
CARMACK
CAJON BLVD
KENDALL DR
GLEN HELEN RD
DEVORE RD
LITTLE LEAGUE DR
BELMONT AV
IRVINGTON AV
PIEDMONT
MT VERNON AVE
WESTERN AVE
MEDICAL CENTER DR
GARNER AVE
MTN VIEW AVE
SIERRA WAY
WATERMAN AVE
CRESTVIEW AVE
VALENCIA AVE
HARRISON ST
BOLDEN AVE
DEL ROSA AVE
MOUNTAIN AVE
ELM AVE
STERLING AVE
BELVEDERE AVE
ARDEN AVE
CENTRAL AVE
ORANGE ST
PALM AVE
BOULDER AVE
BANGOR AVE
VICTORIA AVE
CUNNINGHAM ST
OLIVE TREE LN
CHURCH AVE
PEDLE RD
PALM LN
TIPPECANOE AVE
DEL ROSA DR
WAND CENTER DR
CALIFORNIA ST
STATE ST
UNIVERSITY PKWY
COLLEGE AVE
MACY ST
DUFFY ST
JUNE ST
KERRY ST
VERMONT ST
MOUNTAIN DR
3RD AVE
1ST AVE
E ST
H ST
G ST
J ST
K ST
I ST
CRESCENT AVE
DAVIDSON AVE
3RD ST
4TH ST
5TH ST
6TH ST
7TH ST
8TH ST
10TH ST
14TH ST
16TH ST
17TH ST
18TH ST
19TH ST
27TH ST
28TH ST
29TH ST
30TH ST
33RD ST
39TH ST
40TH ST
41ST ST
48TH ST
KERN ST
DARBY ST
MARSHALL BLVD
LYNWOOD DR
FOOTHILL DR
EUREKA ST
HIGHLAND AVE
MERITO AVE
DATE ST
CITRUS ST
ATLANTIC AVE
PACIFIC ST
GILBERT ST
CLIFTON AVE
BASELINE RD
BASELINE ST
CYPRESS ST
NORWOOD ST
RIALTO AVE
BRYANT ST
KING ST
MILL ST
GRANT AVE
CENTRAL AVE
PARKDALE ST
HILL DR
215
18
210
15
0
0.5
1
2
Miles

TO: KIMBARK ES
NORTH VERDEMONT ES
PALM AVENUE ES
CHAVEZ MS
(see inset to right)
CAJON
SAN BERNARDINO
ARROYO VALLEY
PACIFIC
SAN GORGONIO
Elementary Schools
MULTI-TRACK
D-TRACK ONLY
TRADITIONAL
Middle Schools
D-TRACK ONLY
TRADITIONAL
High Schools
TRADITIONAL
KIMBARK ES
N VERDEMONT ES
CHAVEZ MS
SERRANO MS
BONNIE OEHL ES
NORTHPARK ES
NUTRITION SERVICES
CAJON HS
KENDALL ES
HARMON
CARMACK
HILLSIDE ES
NEWMARK ES
SHANDIN HILLS MS
ARROWHEAD ES
GOLDEN VALLEY MS
PARKSIDE ES
VERMONT ES
MUSCOY ES
MARSHALL ES
DEL ROSA ES
DEL VALLEJO MS
DAVIDSON ES
SALINAS ES
WILSON ES
HUNT ES
BARTON ES
ARROWVIEW MS
WHAA
INGHRAM ES
SAN BERNARDINO HS
RODRIGUEZ PREP ACADEMY
EMMERTON ES
ROOSEVELT ES
ANTON ES
PACIFIC HS
FAIRFAX ES
SAN ANDREAS HS
HIGHLAND-PACIFIC ES
SAN GORGONIO HS
RIO VISTA ES
KING MS
ARROYO VALLEY HS
ADULT ED SCHOOL POLICE
LINCOLN ES
RILEY ES
BRADLEY ES
COLE ES
THOMPSON ES
LANKERSHIM ES
WARM SPRINGS ES
MT VERNON ES
BLDG SERVICES
WAREHOUSE
E NEAL ROBERTS ES
SIERRA HS
WONG ES
CURTIS MS
RAMONA-ALESSANDRO ES
JONES ES
SMART BLDG
BOARD OF EDUCATION
CYPRESS ES
ANDERSON
MONTEREY ES
ED. SUPPORT CENTER
LYTLE CREEK ES
RICHARDSON PREP
BURBANK ES
URBITA ES
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT
DISTRICT MAP 2009-10
HIGH SCHOOL BOUNDARIES
(For Reference Only-Please contact local school for specific attendance/school assignment)
0 0.5 1 2 Miles

APPENDIX B

2009 MANUAL TURNING MOVEMENT COUNTS

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Rancho Avenue
E/W: Foothill Boulevard
Weather: Sunny

File Name : SBCRAFOAM
Site Code : 9268092
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	Foothill Boulevard Westbound			Rancho Avenue Northbound			Foothill Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	20	84	104	7	25	32	109	15	124	260
07:15 AM	35	92	127	11	38	49	123	25	148	324
07:30 AM	30	103	133	12	38	50	155	20	175	358
07:45 AM	30	88	118	16	48	64	197	26	223	405
Total	115	367	482	46	149	195	584	86	670	1347
08:00 AM	23	98	121	12	30	42	136	20	156	319
08:15 AM	18	85	103	9	35	44	148	15	163	310
08:30 AM	25	88	113	13	27	40	121	12	133	286
08:45 AM	19	113	132	5	18	23	118	18	136	291
Total	85	384	469	39	110	149	523	65	588	1206
Grand Total	200	751	951	85	259	344	1107	151	1258	2553
Apprch %	21	79		24.7	75.3		88	12		
Total %	7.8	29.4	37.3	3.3	10.1	13.5	43.4	5.9	49.3	

	Foothill Boulevard Westbound			Rancho Avenue Northbound			Foothill Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	**35**	92	127	11	38	49	123	25	148	324
07:30 AM	30	**103**	**133**	12	38	50	155	20	175	358
07:45 AM	30	88	118	**16**	**48**	**64**	**197**	**26**	**223**	**405**
08:00 AM	23	98	121	12	30	42	136	20	156	319
Total Volume	118	381	499	51	154	205	611	91	702	1406
% App. Total	23.6	76.4		24.9	75.1		87	13		
PHF	.843	.925	.938	.797	.802	.801	.775	.875	.787	.868

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Rancho Avenue
E/W: Foothill Boulevard
Weather: Sunny

File Name : SBCRAFOAM
Site Code : 9268092
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:30 AM		
+0 mins.	**35**	92	127	11	38	49	155	20	175
+15 mins.	30	**103**	**133**	12	38	50	**197**	**26**	**223**
+30 mins.	30	88	118	**16**	**48**	**64**	136	20	156
+45 mins.	23	98	121	12	30	42	148	15	163
Total Volume	118	381	499	51	154	205	636	81	717
% App. Total	23.6	76.4		24.9	75.1		88.7	11.3	
PHF	.843	.925	.938	.797	.802	.801	.807	.779	.804

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Rancho Avenue
E/W: Foothill Boulevard
Weather: Sunny

File Name : SBCRAFOPM
Site Code : 9268092
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	Foothill Boulevard Westbound			Rancho Avenue Northbound			Foothill Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	33	153	186	20	40	60	128	15	143	389
04:15 PM	38	152	190	21	34	55	121	16	137	382
04:30 PM	27	145	172	11	53	64	151	26	177	413
04:45 PM	31	137	168	27	48	75	126	18	144	387
Total	129	587	716	79	175	254	526	75	601	1571
05:00 PM	23	161	184	20	39	59	131	16	147	390
05:15 PM	19	161	180	22	46	68	95	18	113	361
05:30 PM	27	148	175	17	46	63	133	16	149	387
05:45 PM	19	115	134	18	39	57	134	20	154	345
Total	88	585	673	77	170	247	493	70	563	1483
Grand Total	217	1172	1389	156	345	501	1019	145	1164	3054
Apprch %	15.6	84.4		31.1	68.9		87.5	12.5		
Total %	7.1	38.4	45.5	5.1	11.3	16.4	33.4	4.7	38.1	

	Foothill Boulevard Westbound			Rancho Avenue Northbound			Foothill Boulevard Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	**38**	152	**190**	21	34	55	121	16	137	382
04:30 PM	27	145	172	11	**53**	64	**151**	**26**	**177**	**413**
04:45 PM	31	137	168	**27**	48	**75**	126	18	144	387
05:00 PM	23	**161**	184	20	39	59	131	16	147	390
Total Volume	119	595	714	79	174	253	529	76	605	1572
% App. Total	16.7	83.3		31.2	68.8		87.4	12.6		
PHF	.783	.924	.939	.731	.821	.843	.876	.731	.855	.952

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Rancho Avenue
E/W: Foothill Boulevard
Weather: Sunny

File Name : SBCRAFOPM
Site Code : 9268092
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			04:30 PM			04:15 PM		
+0 mins.	33	**153**	186	11	**53**	64	121	16	137
+15 mins.	**38**	152	**190**	**27**	48	**75**	**151**	**26**	**177**
+30 mins.	27	145	172	20	39	59	126	18	144
+45 mins.	31	137	168	22	46	68	131	16	147
Total Volume	129	587	716	80	186	266	529	76	605
% App. Total	18	82		30.1	69.9		87.4	12.6	
PHF	.849	.959	.942	.741	.877	.887	.876	.731	.855

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Medical Center Drive
E/W: 5th Street
Weather: Sunny

File Name : SBCMC5AM
Site Code : 9268099
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	Medical Center Drive Southbound				5th Street Westbound				Medical Center Drive Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	15	1	24	40	0	58	11	69	0	0	2	2	18	92	0	110	221
07:15 AM	23	0	24	47	1	69	25	95	1	0	0	1	15	111	0	126	269
07:30 AM	35	0	26	61	0	71	21	92	0	0	1	1	26	139	1	166	320
07:45 AM	20	0	29	49	0	74	19	93	0	0	0	0	37	158	0	195	337
Total	93	1	103	197	1	272	76	349	1	0	3	4	96	500	1	597	1147
08:00 AM	16	0	25	41	0	69	20	89	0	0	0	0	21	118	0	139	269
08:15 AM	10	0	32	42	1	57	8	66	1	0	0	1	25	112	0	137	246
08:30 AM	19	0	30	49	0	65	24	89	0	0	1	1	25	97	1	123	262
08:45 AM	17	0	31	48	1	76	8	85	1	0	0	1	16	100	0	116	250
Total	62	0	118	180	2	267	60	329	2	0	1	3	87	427	1	515	1027
Grand Total	155	1	221	377	3	539	136	678	3	0	4	7	183	927	2	1112	2174
Apprch %	41.1	0.3	58.6		0.4	79.5	20.1		42.9	0	57.1		16.5	83.4	0.2		
Total %	7.1	0	10.2	17.3	0.1	24.8	6.3	31.2	0.1	0	0.2	0.3	8.4	42.6	0.1	51.1	

	Medical Center Drive Southbound				5th Street Westbound				Medical Center Drive Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	23	0	24	47	**1**	69	**25**	**95**	**1**	0	0	**1**	15	111	0	126	269
07:30 AM	**35**	0	26	**61**	0	71	21	92	0	0	**1**	1	26	139	**1**	166	320
07:45 AM	20	0	**29**	49	0	**74**	19	93	0	0	0	0	**37**	**158**	0	**195**	**337**
08:00 AM	16	0	25	41	0	69	20	89	0	0	0	0	21	118	0	139	269
Total Volume	94	0	104	198	1	283	85	369	1	0	1	2	99	526	1	626	1195
% App. Total	47.5	0	52.5		0.3	76.7	23		50	0	50		15.8	84	0.2		
PHF	.671	.000	.897	.811	.250	.956	.850	.971	.250	.000	.250	.500	.669	.832	.250	.803	.886

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Medical Center Drive
E/W: 5th Street
Weather: Sunny

File Name : SBCMC5AM
Site Code : 9268099
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:30 AM			
+0 mins.	23	0	24	47	**1**	69	**25**	**95**	0	0	**2**	**2**	26	139	**1**	166
+15 mins.	**35**	0	26	**61**	0	71	21	92	**1**	0	0	1	**37**	**158**	0	**195**
+30 mins.	20	0	**29**	49	0	**74**	19	93	0	0	1	1	21	118	0	139
+45 mins.	16	0	25	41	0	69	20	89	0	0	0	0	25	112	0	137
Total Volume	94	0	104	198	1	283	85	369	1	0	3	4	109	527	1	637
% App. Total	47.5	0	52.5		0.3	76.7	23		25	0	75		17.1	82.7	0.2	
PHF	.671	.000	.897	.811	.250	.956	.850	.971	.250	.000	.375	.500	.736	.834	.250	.817

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Medical Center Drive
E/W: 5th Street
Weather: Sunny

File Name : SBCMC5PM
Site Code : 9268991
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	Medical Center Drive Southbound				5th Street Westbound				Medical Center Drive Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	23	0	44	67	0	133	17	150	1	0	0	1	43	117	0	160	378
04:15 PM	16	1	33	50	0	136	25	161	0	0	0	0	30	109	0	139	350
04:30 PM	21	1	32	54	0	110	22	132	0	1	0	1	42	116	1	159	346
04:45 PM	24	0	32	56	1	110	14	125	1	0	0	1	34	105	0	139	321
Total	84	2	141	227	1	489	78	568	2	1	0	3	149	447	1	597	1395
05:00 PM	30	1	32	63	1	145	30	176	0	0	3	3	29	101	2	132	374
05:15 PM	15	2	25	42	6	128	17	151	0	1	1	2	38	101	1	140	335
05:30 PM	20	2	34	56	8	115	17	140	0	0	1	1	37	114	2	153	350
05:45 PM	18	3	28	49	1	107	16	124	2	2	3	7	22	124	0	146	326
Total	83	8	119	210	16	495	80	591	2	3	8	13	126	440	5	571	1385
Grand Total	167	10	260	437	17	984	158	1159	4	4	8	16	275	887	6	1168	2780
Apprch %	38.2	2.3	59.5		1.5	84.9	13.6		25	25	50		23.5	75.9	0.5		
Total %	6	0.4	9.4	15.7	0.6	35.4	5.7	41.7	0.1	0.1	0.3	0.6	9.9	31.9	0.2	42	

	Medical Center Drive Southbound				5th Street Westbound				Medical Center Drive Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	23	0	**44**	**67**	0	133	17	150	**1**	0	0	**1**	**43**	**117**	0	**160**	**378**
04:15 PM	16	**1**	33	50	0	**136**	**25**	**161**	0	0	0	0	30	109	0	139	350
04:30 PM	21	1	32	54	0	110	22	132	0	**1**	0	1	42	116	**1**	159	346
04:45 PM	**24**	0	32	56	**1**	110	14	125	1	0	0	1	34	105	0	139	321
Total Volume	84	2	141	227	1	489	78	568	2	1	0	3	149	447	1	597	1395
% App. Total	37	0.9	62.1		0.2	86.1	13.7		66.7	33.3	0		25	74.9	0.2		
PHF	.875	.500	.801	.847	.250	.899	.780	.882	.500	.250	.000	.750	.866	.955	.250	.933	.923

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Medical Center Drive
E/W: 5th Street
Weather: Sunny

File Name : SBCMC5PM
Site Code : 9268991
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				05:00 PM				04:00 PM			
+0 mins.	23	0	**44**	**67**	0	136	25	161	0	0	**3**	3	**43**	**117**	0	**160**
+15 mins.	16	**1**	33	50	0	110	22	132	0	1	1	2	30	109	0	139
+30 mins.	21	1	32	54	**1**	110	14	125	0	0	1	1	42	116	**1**	159
+45 mins.	**24**	0	32	56	1	**145**	**30**	**176**	**2**	**2**	3	**7**	34	105	0	139
Total Volume	84	2	141	227	2	501	91	594	2	3	8	13	149	447	1	597
% App. Total	37	0.9	62.1		0.3	84.3	15.3		15.4	23.1	61.5		25	74.9	0.2	
PHF	.875	.500	.801	.847	.500	.864	.758	.844	.250	.375	.667	.464	.866	.955	.250	.933

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Cabrera Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCCA5AM
Site Code : 9268991
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	Cabrera Avenue Southbound				5th Street Westbound				Cabrera Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	1	1	1	69	0	70	4	0	5	9	0	113	1	114	194
07:15 AM	1	0	0	1	2	86	1	89	4	1	1	6	1	145	2	148	244
07:30 AM	1	0	0	1	3	94	1	98	2	1	8	11	1	166	3	170	280
07:45 AM	0	2	2	4	3	89	1	93	0	2	3	5	3	187	0	190	292
Total	2	2	3	7	9	338	3	350	10	4	17	31	5	611	6	622	1010
08:00 AM	0	1	0	1	6	77	1	84	1	3	2	6	0	128	1	129	220
08:15 AM	1	3	0	4	6	82	1	89	0	4	1	5	1	143	0	144	242
08:30 AM	2	0	0	2	1	87	3	91	1	0	7	8	0	107	0	107	208
08:45 AM	2	3	0	5	6	85	3	94	1	6	1	8	2	119	1	122	229
Total	5	7	0	12	19	331	8	358	3	13	11	27	3	497	2	502	899
Grand Total	7	9	3	19	28	669	11	708	13	17	28	58	8	1108	8	1124	1909
Apprch %	36.8	47.4	15.8		4	94.5	1.6		22.4	29.3	48.3		0.7	98.6	0.7		
Total %	0.4	0.5	0.2	1	1.5	35	0.6	37.1	0.7	0.9	1.5	3	0.4	58	0.4	58.9	

	Cabrera Avenue Southbound				5th Street Westbound				Cabrera Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	0	0	1	2	86	**1**	89	**4**	1	1	6	1	145	2	148	244
07:30 AM	1	0	0	1	3	**94**	1	**98**	2	1	**8**	**11**	1	166	**3**	170	280
07:45 AM	0	**2**	**2**	**4**	3	89	1	93	0	2	3	5	**3**	**187**	0	**190**	**292**
08:00 AM	0	1	0	1	**6**	77	1	84	1	**3**	2	6	0	128	1	129	220
Total Volume	2	3	2	7	14	346	4	364	7	7	14	28	5	626	6	637	1036
% App. Total	28.6	42.9	28.6		3.8	95.1	1.1		25	25	50		0.8	98.3	0.9		
PHF	.500	.375	.250	.438	.583	.920	1.000	.929	.438	.583	.438	.636	.417	.837	.500	.838	.887

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Cabrera Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCCA5AM
Site Code : 9268991
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	0	1	0	1	2	86	**1**	89	**4**	0	5	9	1	145	2	148
+15 mins.	1	**3**	0	4	3	**94**	1	**98**	4	1	1	6	1	166	**3**	170
+30 mins.	**2**	0	0	2	3	89	1	93	2	1	**8**	**11**	**3**	**187**	0	**190**
+45 mins.	2	3	0	**5**	**6**	77	1	84	0	**2**	3	5	0	128	1	129
Total Volume	5	7	0	12	14	346	4	364	10	4	17	31	5	626	6	637
% App. Total	41.7	58.3	0		3.8	95.1	1.1		32.3	12.9	54.8		0.8	98.3	0.9	
PHF	.625	.583	.000	.600	.583	.920	1.000	.929	.625	.500	.531	.705	.417	.837	.500	.838

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Cabrera Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCCA5PM
Site Code : 9268099
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	Cabrera Avenue Southbound				5th street Westbound				Cabrera Avenue Northbound				5th street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	1	3	6	6	142	2	150	3	1	13	17	1	143	1	145	318
04:15 PM	2	0	0	2	5	160	5	170	2	1	6	9	2	117	1	120	301
04:30 PM	1	2	1	4	6	125	3	134	0	4	9	13	2	125	2	129	280
04:45 PM	5	1	2	8	3	137	2	142	3	2	8	13	3	119	3	125	288
Total	10	4	6	20	20	564	12	596	8	8	36	52	8	504	7	519	1187
05:00 PM	1	1	0	2	2	153	2	157	2	1	5	8	1	125	1	127	294
05:15 PM	0	2	0	2	4	143	6	153	0	4	6	10	0	118	1	119	284
05:30 PM	0	2	2	4	8	135	1	144	4	1	6	11	1	121	3	125	284
05:45 PM	0	0	1	1	7	120	2	129	1	0	9	10	1	145	3	149	289
Total	1	5	3	9	21	551	11	583	7	6	26	39	3	509	8	520	1151
Grand Total	11	9	9	29	41	1115	23	1179	15	14	62	91	11	1013	15	1039	2338
Apprch %	37.9	31	31		3.5	94.6	2		16.5	15.4	68.1		1.1	97.5	1.4		
Total %	0.5	0.4	0.4	1.2	1.8	47.7	1	50.4	0.6	0.6	2.7	3.9	0.5	43.3	0.6	44.4	

	Cabrera Avenue Southbound				5th street Westbound				Cabrera Avenue Northbound				5th street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	2	1	**3**	6	**6**	142	2	150	**3**	1	**13**	**17**	1	**143**	1	**145**	**318**
04:15 PM	2	0	0	2	5	**160**	**5**	**170**	2	1	6	9	2	117	1	120	301
04:30 PM	1	**2**	1	4	6	125	3	134	0	**4**	9	13	2	125	2	129	280
04:45 PM	**5**	1	2	**8**	3	137	2	142	3	2	8	13	**3**	119	**3**	125	288
Total Volume	10	4	6	20	20	564	12	596	8	8	36	52	8	504	7	519	1187
% App. Total	50	20	30		3.4	94.6	2		15.4	15.4	69.2		1.5	97.1	1.3		
PHF	.500	.500	.500	.625	.833	.881	.600	.876	.667	.500	.692	.765	.667	.881	.583	.895	.933

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Cabrera Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCCA5PM
Site Code : 9268099
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:00 PM				05:00 PM			
+0 mins.	2	1	**3**	6	5	**160**	**5**	**170**	**3**	1	**13**	**17**	**1**	125	1	127
+15 mins.	2	0	0	2	**6**	125	3	134	2	1	6	9	0	118	1	119
+30 mins.	1	**2**	1	4	3	137	2	142	0	**4**	9	13	1	121	**3**	125
+45 mins.	**5**	1	2	**8**	2	153	2	157	3	2	8	13	1	**145**	3	**149**
Total Volume	10	4	6	20	16	575	12	603	8	8	36	52	3	509	8	520
% App. Total	50	20	30		2.7	95.4	2		15.4	15.4	69.2		0.6	97.9	1.5	
PHF	.500	.500	.500	.625	.667	.898	.600	.887	.667	.500	.692	.765	.750	.878	.667	.872

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5AM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	14	50	12	76	7	52	12	71	7	38	3	48	16	88	7	111	306
07:15 AM	28	56	16	100	7	69	16	92	6	27	6	39	6	124	18	148	379
07:30 AM	33	77	18	128	8	64	13	85	9	61	4	74	12	131	31	174	461
07:45 AM	44	112	11	167	7	76	24	107	5	71	11	87	13	146	26	185	546
Total	119	295	57	471	29	261	65	355	27	197	24	248	47	489	82	618	1692
08:00 AM	32	78	11	121	8	64	13	85	6	50	10	66	9	102	17	128	400
08:15 AM	19	58	16	93	6	60	13	79	8	51	6	65	13	104	18	135	372
08:30 AM	12	51	9	72	5	68	15	88	14	58	8	80	12	87	18	117	357
08:45 AM	20	57	13	90	5	71	22	98	10	37	1	48	9	94	19	122	358
Total	83	244	49	376	24	263	63	350	38	196	25	259	43	387	72	502	1487
Grand Total	202	539	106	847	53	524	128	705	65	393	49	507	90	876	154	1120	3179
Apprch %	23.8	63.6	12.5		7.5	74.3	18.2		12.8	77.5	9.7		8	78.2	13.8		
Total %	6.4	17	3.3	26.6	1.7	16.5	4	22.2	2	12.4	1.5	15.9	2.8	27.6	4.8	35.2	
Passenger Vehicles	191	526	98	815	51	486	115	652	64	383	48	495	86	823	154	1063	3025
% Passenger Vehicles	94.6	97.6	92.5	96.2	96.2	92.7	89.8	92.5	98.5	97.5	98	97.6	95.6	93.9	100	94.9	95.2
Large 2 Axle Vehicles	10	11	7	28	1	28	11	40	0	7	1	8	3	26	0	29	105
% Large 2 Axle Vehicles	5	2	6.6	3.3	1.9	5.3	8.6	5.7	0	1.8	2	1.6	3.3	3	0	2.6	3.3
3 Axle Vehicles	0	1	1	2	1	6	2	9	1	3	0	4	1	3	0	4	19
% 3 Axle Vehicles	0	0.2	0.9	0.2	1.9	1.1	1.6	1.3	1.5	0.8	0	0.8	1.1	0.3	0	0.4	0.6
4+ Axle Trucks	1	1	0	2	0	4	0	4	0	0	0	0	0	24	0	24	30
% 4+ Axle Trucks	0.5	0.2	0	0.2	0	0.8	0	0.6	0	0	0	0	0	2.7	0	2.1	0.9

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	28	56	16	100	7	69	16	92	6	27	6	39	6	124	18	148	379
07:30 AM	33	77	**18**	128	**8**	64	13	85	**9**	61	4	74	12	131	**31**	174	461
07:45 AM	**44**	**112**	11	**167**	7	**76**	**24**	**107**	5	**71**	**11**	**87**	**13**	**146**	26	**185**	**546**
08:00 AM	32	78	11	121	8	64	13	85	6	50	10	66	9	102	17	128	400
Total Volume	137	323	56	516	30	273	66	369	26	209	31	266	40	503	92	635	1786
% App. Total	26.6	62.6	10.9		8.1	74	17.9		9.8	78.6	11.7		6.3	79.2	14.5		
PHF	.778	.721	.778	.772	.938	.898	.688	.862	.722	.736	.705	.764	.769	.861	.742	.858	.818

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5AM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	28	56	16	100	7	69	16	92	6	27	6	39	6	124	18	148
+15 mins.	33	77	**18**	128	**8**	64	13	85	**9**	61	4	74	12	131	**31**	174
+30 mins.	**44**	**112**	11	**167**	7	**76**	**24**	**107**	5	**71**	**11**	**87**	**13**	**146**	26	**185**
+45 mins.	32	78	11	121	8	64	13	85	6	50	10	66	9	102	17	128
Total Volume	137	323	56	516	30	273	66	369	26	209	31	266	40	503	92	635
% App. Total	26.6	62.6	10.9		8.1	74	17.9		9.8	78.6	11.7		6.3	79.2	14.5	
PHF	.778	.721	.778	.772	.938	.898	.688	.862	.722	.736	.705	.764	.769	.861	.742	.858

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5AM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 1

Groups Printed- Passenger Vehicles

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	14	47	11	72	7	46	10	63	7	38	3	48	16	81	7	104	287
07:15 AM	27	56	15	98	7	66	15	88	6	27	6	39	6	112	18	136	361
07:30 AM	30	77	17	124	8	61	13	82	9	60	4	73	12	127	31	170	449
07:45 AM	43	109	11	163	5	72	20	97	5	69	11	85	12	143	26	181	526
Total	114	289	54	457	27	245	58	330	27	194	24	245	46	463	82	591	1623
08:00 AM	30	75	11	116	8	62	13	83	6	49	10	65	9	97	17	123	387
08:15 AM	17	56	13	86	6	54	11	71	8	50	6	64	11	96	18	125	346
08:30 AM	11	50	7	68	5	60	15	80	13	57	7	77	11	80	18	109	334
08:45 AM	19	56	13	88	5	65	18	88	10	33	1	44	9	87	19	115	335
Total	77	237	44	358	24	241	57	322	37	189	24	250	40	360	72	472	1402
Grand Total	191	526	98	815	51	486	115	652	64	383	48	495	86	823	154	1063	3025
Apprch %	23.4	64.5	12		7.8	74.5	17.6		12.9	77.4	9.7		8.1	77.4	14.5		
Total %	6.3	17.4	3.2	26.9	1.7	16.1	3.8	21.6	2.1	12.7	1.6	16.4	2.8	27.2	5.1	35.1	

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	27	56	15	98	7	66	15	88	6	27	6	39	6	112	18	136	361
07:30 AM	30	77	**17**	124	**8**	61	13	82	**9**	60	4	73	**12**	127	**31**	170	449
07:45 AM	**43**	**109**	11	**163**	5	**72**	**20**	**97**	5	**69**	**11**	**85**	12	**143**	26	**181**	**526**
08:00 AM	30	75	11	116	8	62	13	83	6	49	10	65	9	97	17	123	387
Total Volume	130	317	54	501	28	261	61	350	26	205	31	262	39	479	92	610	1723
% App. Total	25.9	63.3	10.8		8	74.6	17.4		9.9	78.2	11.8		6.4	78.5	15.1		
PHF	.756	.727	.794	.768	.875	.906	.763	.902	.722	.743	.705	.771	.813	.837	.742	.843	.819

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5AM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	27	56	15	98	7	66	15	88	6	27	6	39	6	112	18	136
+15 mins.	30	77	**17**	124	**8**	61	13	82	**9**	60	4	73	**12**	127	**31**	170
+30 mins.	**43**	**109**	11	**163**	5	**72**	**20**	**97**	5	**69**	**11**	**85**	12	**143**	26	**181**
+45 mins.	30	75	11	116	8	62	13	83	6	49	10	65	9	97	17	123
Total Volume	130	317	54	501	28	261	61	350	26	205	31	262	39	479	92	610
% App. Total	25.9	63.3	10.8		8	74.6	17.4		9.9	78.2	11.8		6.4	78.5	15.1	
PHF	.756	.727	.794	.768	.875	.906	.763	.902	.722	.743	.705	.771	.813	.837	.742	.843

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5AM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	3	1	4	0	5	1	6	0	0	0	0	0	2	0	2	12
07:15 AM	1	0	1	2	0	2	1	3	0	0	0	0	0	6	0	6	11
07:30 AM	3	0	0	3	0	3	0	3	0	1	0	1	0	3	0	3	10
07:45 AM	1	3	0	4	1	4	3	8	0	1	0	1	1	3	0	4	17
Total	5	6	2	13	1	14	5	20	0	2	0	2	1	14	0	15	50
08:00 AM	1	2	0	3	0	1	0	1	0	1	0	1	0	3	0	3	8
08:15 AM	2	1	3	6	0	2	2	4	0	1	0	1	2	5	0	7	18
08:30 AM	1	1	2	4	0	6	0	6	0	1	1	2	0	3	0	3	15
08:45 AM	1	1	0	2	0	5	4	9	0	2	0	2	0	1	0	1	14
Total	5	5	5	15	0	14	6	20	0	5	1	6	2	12	0	14	55
Grand Total	10	11	7	28	1	28	11	40	0	7	1	8	3	26	0	29	105
Apprch %	35.7	39.3	25		2.5	70	27.5		0	87.5	12.5		10.3	89.7	0		
Total %	9.5	10.5	6.7	26.7	1	26.7	10.5	38.1	0	6.7	1	7.6	2.9	24.8	0	27.6	

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	0	**1**	2	0	2	1	3	0	0	0	0	0	**6**	0	**6**	11
07:30 AM	**3**	0	0	3	0	3	0	3	0	**1**	0	**1**	0	3	0	3	10
07:45 AM	1	**3**	0	**4**	**1**	**4**	**3**	**8**	0	1	0	1	**1**	3	0	4	**17**
08:00 AM	1	2	0	3	0	1	0	1	0	1	0	1	0	3	0	3	8
Total Volume	6	5	1	12	1	10	4	15	0	3	0	3	1	15	0	16	46
% App. Total	50	41.7	8.3		6.7	66.7	26.7		0	100	0		6.2	93.8	0		
PHF	.500	.417	.250	.750	.250	.625	.333	.469	.000	.750	.000	.750	.250	.625	.000	.667	.676

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5AM
Site Code : 9268063
Start Date : 10/20/2009
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	0	**1**	2	0	2	1	3	0	0	0	0	0	**6**	0	**6**
+15 mins.	**3**	0	0	3	0	3	0	3	0	**1**	0	**1**	0	3	0	3
+30 mins.	1	**3**	0	**4**	**1**	**4**	**3**	**8**	0	1	0	1	**1**	3	0	4
+45 mins.	1	2	0	3	0	1	0	1	0	1	0	1	0	3	0	3
Total Volume	6	5	1	12	1	10	4	15	0	3	0	3	1	15	0	16
% App. Total	50	41.7	8.3		6.7	66.7	26.7		0	100	0		6.2	93.8	0	
PHF	.500	.417	.250	.750	.250	.625	.333	.469	.000	.750	.000	.750	.250	.625	.000	.667

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File Name : SBCMV5AM
Site Code : 9268063
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Groups Printed- 3 Axle Vehicles

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	2	0	2	4
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	1	0	1	2	0	1	0	1	0	0	0	0	3
Total	0	0	1	1	1	1	2	4	0	1	0	1	0	2	0	2	8
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	1	0	1	0	2	0	2	0	0	0	0	0	1	0	1	4
08:30 AM	0	0	0	0	0	1	0	1	1	0	0	1	1	0	0	1	3
08:45 AM	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	3
Total	0	1	0	1	0	5	0	5	1	2	0	3	1	1	0	2	11
Grand Total	0	1	1	2	1	6	2	9	1	3	0	4	1	3	0	4	19
Apprch %	0	50	50		11.1	66.7	22.2		25	75	0		25	75	0		
Total %	0	5.3	5.3	10.5	5.3	31.6	10.5	47.4	5.3	15.8	0	21.1	5.3	15.8	0	21.1	

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	**1**	0	**1**	**2**	0	**1**	0	**1**	0	0	0	0	**3**
08:00 AM	0	0	0	0	0	**1**	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	1	1	1	1	1	3	0	1	0	1	0	0	0	0	5
% App. Total	0	0	100		33.3	33.3	33.3		0	100	0		0	0	0		
PHF	.000	.000	.250	.250	.250	.250	.250	.375	.000	.250	.000	.250	.000	.000	.000	.000	.417

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File Name : SBCMV5AM
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	**1**	0	**1**	**2**	0	**1**	0	**1**	0	0	0	0
+45 mins.	0	0	0	0	0	**1**	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	1	1	1	3	0	1	0	1	0	0	0	0
% App. Total	0	0	100		33.3	33.3	33.3		0	100	0		0	0	0	
PHF	.000	.000	.250	.250	.250	.250	.250	.375	.000	.250	.000	.250	.000	.000	.000	.000

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Groups Printed- 4+ Axle Trucks

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	6	0	6	7
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	10	0	10	11
08:00 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	2	0	2	4
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	6
Total	1	1	0	2	0	3	0	3	0	0	0	0	0	14	0	14	19
Grand Total	1	1	0	2	0	4	0	4	0	0	0	0	0	24	0	24	30
Apprch %	50	50	0		0	100	0		0	0	0		0	100	0		
Total %	3.3	3.3	0	6.7	0	13.3	0	13.3	0	0	0	0	0	80	0	80	

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**6**	0	**6**	**7**
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	**1**	**1**	0	**2**	0	0	0	0	0	0	0	0	0	2	0	2	4
Total Volume	1	1	0	2	0	1	0	1	0	0	0	0	0	9	0	9	12
% App. Total	50	50	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.250	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375	.429

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**6**	0	**6**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	**1**	**1**	0	**2**	0	0	0	0	0	0	0	0	0	2	0	2
Total Volume	1	1	0	2	0	1	0	1	0	0	0	0	0	9	0	9
% App. Total	50	50	0		0	100	0		0	0	0		0	100	0	
PHF	.250	.250	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375

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Groups Printed- Passanger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	25	91	14	130	12	102	21	135	18	122	14	154	23	95	24	142	561
04:15 PM	20	86	21	127	15	93	27	135	24	82	12	118	20	91	25	136	516
04:30 PM	15	74	24	113	15	106	26	147	23	113	11	147	23	96	29	148	555
04:45 PM	13	90	12	115	21	95	19	135	27	108	12	147	24	89	23	136	533
Total	73	341	71	485	63	396	93	552	92	425	49	566	90	371	101	562	2165
05:00 PM	18	92	18	128	20	143	29	192	31	105	13	149	17	67	19	103	572
05:15 PM	17	97	16	130	15	113	14	142	23	99	8	130	22	92	20	134	536
05:30 PM	21	101	21	143	14	97	29	140	32	127	12	171	17	97	36	150	604
05:45 PM	17	104	10	131	23	66	27	116	37	120	9	166	22	99	36	157	570
Total	73	394	65	532	72	419	99	590	123	451	42	616	78	355	111	544	2282
Grand Total	146	735	136	1017	135	815	192	1142	215	876	91	1182	168	726	212	1106	4447
Apprch %	14.4	72.3	13.4		11.8	71.4	16.8		18.2	74.1	7.7		15.2	65.6	19.2		
Total %	3.3	16.5	3.1	22.9	3	18.3	4.3	25.7	4.8	19.7	2	26.6	3.8	16.3	4.8	24.9	
Passanger Vehicles	137	727	132	996	135	788	182	1105	211	868	91	1170	164	689	212	1065	4336
% Passanger Vehicles	93.8	98.9	97.1	97.9	100	96.7	94.8	96.8	98.1	99.1	100	99	97.6	94.9	100	96.3	97.5
Large 2 Axle Vehicles	9	5	2	16	0	15	10	25	4	5	0	9	3	18	0	21	71
% Large 2 Axle Vehicles	6.2	0.7	1.5	1.6	0	1.8	5.2	2.2	1.9	0.6	0	0.8	1.8	2.5	0	1.9	1.6
3 Axle Vehicles	0	2	1	3	0	3	0	3	0	2	0	2	0	13	0	13	21
% 3 Axle Vehicles	0	0.3	0.7	0.3	0	0.4	0	0.3	0	0.2	0	0.2	0	1.8	0	1.2	0.5
4+ Axle Trucks	0	1	1	2	0	9	0	9	0	1	0	1	1	6	0	7	19
% 4+ Axle Trucks	0	0.1	0.7	0.2	0	1.1	0	0.8	0	0.1	0	0.1	0.6	0.8	0	0.6	0.4

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	18	92	18	128	20	**143**	**29**	**192**	31	105	**13**	149	17	67	19	103	572
05:15 PM	17	97	16	130	15	113	14	142	23	99	8	130	**22**	92	20	134	536
05:30 PM	**21**	101	**21**	**143**	14	97	29	140	32	**127**	12	**171**	17	97	**36**	150	**604**
05:45 PM	17	**104**	10	131	**23**	66	27	116	**37**	120	9	166	22	**99**	36	**157**	570
Total Volume	73	394	65	532	72	419	99	590	123	451	42	616	78	355	111	544	2282
% App. Total	13.7	74.1	12.2		12.2	71	16.8		20	73.2	6.8		14.3	65.3	20.4		
PHF	.869	.947	.774	.930	.783	.733	.853	.768	.831	.888	.808	.901	.886	.896	.771	.866	.945

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Bernardino
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				05:00 PM				04:00 PM			
+0 mins.	18	92	18	128	15	106	26	147	31	105	**13**	149	23	95	24	142
+15 mins.	17	97	16	130	**21**	95	19	135	23	99	8	130	20	91	25	136
+30 mins.	**21**	101	**21**	**143**	20	**143**	**29**	**192**	32	**127**	12	**171**	23	**96**	**29**	**148**
+45 mins.	17	**104**	10	131	15	113	14	142	**37**	120	9	166	**24**	89	23	136
Total Volume	73	394	65	532	71	457	88	616	123	451	42	616	90	371	101	562
% App. Total	13.7	74.1	12.2		11.5	74.2	14.3		20	73.2	6.8		16	66	18	
PHF	.869	.947	.774	.930	.845	.799	.759	.802	.831	.888	.808	.901	.938	.966	.871	.949

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File Name : SBCMV5PM
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Groups Printed- Passanger Vehicles

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	24	90	14	128	12	100	19	131	18	119	14	151	23	91	24	138	548
04:15 PM	19	85	20	124	15	91	25	131	23	82	12	117	19	86	25	130	502
04:30 PM	14	72	22	108	15	102	25	142	22	112	11	145	21	90	29	140	535
04:45 PM	12	90	12	114	21	94	18	133	27	106	12	145	24	83	23	130	522
Total	69	337	68	474	63	387	87	537	90	419	49	558	87	350	101	538	2107
05:00 PM	16	91	18	125	20	138	27	185	30	105	13	148	16	63	19	98	556
05:15 PM	16	95	16	127	15	107	14	136	23	99	8	130	22	90	20	132	525
05:30 PM	20	101	20	141	14	91	28	133	31	125	12	168	17	94	36	147	589
05:45 PM	16	103	10	129	23	65	26	114	37	120	9	166	22	92	36	150	559
Total	68	390	64	522	72	401	95	568	121	449	42	612	77	339	111	527	2229
Grand Total	137	727	132	996	135	788	182	1105	211	868	91	1170	164	689	212	1065	4336
Apprch %	13.8	73	13.3		12.2	71.3	16.5		18	74.2	7.8		15.4	64.7	19.9		
Total %	3.2	16.8	3	23	3.1	18.2	4.2	25.5	4.9	20	2.1	27	3.8	15.9	4.9	24.6	

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	16	91	18	125	20	**138**	27	**185**	30	105	**13**	148	16	63	19	98	556
05:15 PM	16	95	16	127	15	107	14	136	23	99	8	130	**22**	90	20	132	525
05:30 PM	**20**	101	**20**	**141**	14	91	**28**	133	31	**125**	12	**168**	17	**94**	**36**	147	**589**
05:45 PM	16	**103**	10	129	**23**	65	26	114	**37**	120	9	166	22	92	36	**150**	559
Total Volume	68	390	64	522	72	401	95	568	121	449	42	612	77	339	111	527	2229
% App. Total	13	74.7	12.3		12.7	70.6	16.7		19.8	73.4	6.9		14.6	64.3	21.1		
PHF	.850	.947	.800	.926	.783	.726	.848	.768	.818	.898	.808	.911	.875	.902	.771	.878	.946

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25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5PM
Site Code : 9268063
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	16	91	18	125	20	**138**	27	**185**	30	105	**13**	148	16	63	19	98
+15 mins.	16	95	16	127	15	107	14	136	23	99	8	130	**22**	90	20	132
+30 mins.	**20**	101	**20**	**141**	14	91	**28**	133	31	**125**	12	**168**	17	**94**	**36**	147
+45 mins.	16	**103**	10	129	**23**	65	26	114	**37**	120	9	166	22	92	36	**150**
Total Volume	68	390	64	522	72	401	95	568	121	449	42	612	77	339	111	527
% App. Total	13	74.7	12.3		12.7	70.6	16.7		19.8	73.4	6.9		14.6	64.3	21.1	
PHF	.850	.947	.800	.926	.783	.726	.848	.768	.818	.898	.808	.911	.875	.902	.771	.878

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5PM
Site Code : 9268063
Start Date : 10/21/2009
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	1	0	2	0	2	2	4	0	2	0	2	0	2	0	2	10
04:15 PM	1	0	0	1	0	1	2	3	1	0	0	1	0	2	0	2	7
04:30 PM	1	1	1	3	0	2	1	3	1	0	0	1	2	4	0	6	13
04:45 PM	1	0	0	1	0	1	1	2	0	1	0	1	0	4	0	4	8
Total	4	2	1	7	0	6	6	12	2	3	0	5	2	12	0	14	38
05:00 PM	2	1	0	3	0	3	2	5	1	0	0	1	1	2	0	3	12
05:15 PM	1	1	0	2	0	2	0	2	0	0	0	0	0	1	0	1	5
05:30 PM	1	0	1	2	0	3	1	4	1	2	0	3	0	1	0	1	10
05:45 PM	1	1	0	2	0	1	1	2	0	0	0	0	0	2	0	2	6
Total	5	3	1	9	0	9	4	13	2	2	0	4	1	6	0	7	33
Grand Total	9	5	2	16	0	15	10	25	4	5	0	9	3	18	0	21	71
Apprch %	56.2	31.2	12.5		0	60	40		44.4	55.6	0		14.3	85.7	0		
Total %	12.7	7	2.8	22.5	0	21.1	14.1	35.2	5.6	7	0	12.7	4.2	25.4	0	29.6	

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**2**	**1**	0	**3**	0	**3**	**2**	**5**	**1**	0	0	1	**1**	**2**	0	**3**	**12**
05:15 PM	1	1	0	2	0	2	0	2	0	0	0	0	0	1	0	1	5
05:30 PM	1	0	**1**	2	0	3	1	4	1	**2**	0	**3**	0	1	0	1	10
05:45 PM	1	1	0	2	0	1	1	2	0	0	0	0	0	2	0	2	6
Total Volume	5	3	1	9	0	9	4	13	2	2	0	4	1	6	0	7	33
% App. Total	55.6	33.3	11.1		0	69.2	30.8		50	50	0		14.3	85.7	0		
PHF	.625	.750	.250	.750	.000	.750	.500	.650	.500	.250	.000	.333	.250	.750	.000	.583	.688

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
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File Name : SBCMV5PM
Site Code : 9268063
Start Date : 10/21/2009
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Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	**2**	**1**	0	**3**	0	**3**	**2**	**5**	**1**	0	0	1	**1**	**2**	0	**3**
+15 mins.	1	1	0	2	0	2	0	2	0	0	0	0	0	1	0	1
+30 mins.	1	0	**1**	2	0	3	1	4	1	**2**	0	**3**	0	1	0	1
+45 mins.	1	1	0	2	0	1	1	2	0	0	0	0	0	2	0	2
Total Volume	5	3	1	9	0	9	4	13	2	2	0	4	1	6	0	7
% App. Total	55.6	33.3	11.1		0	69.2	30.8		50	50	0		14.3	85.7	0	
PHF	.625	.750	.250	.750	.000	.750	.500	.650	.500	.250	.000	.333	.250	.750	.000	.583

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5PM
Site Code : 9268063
Start Date : 10/21/2009
Page No : 1

Groups Printed- 3 Axle Vehicles

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	2	3
04:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
Total	0	1	1	2	0	0	0	0	0	2	0	2	0	4	0	4	8
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:15 PM	0	1	0	1	0	2	0	2	0	0	0	0	0	1	0	1	4
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
Total	0	1	0	1	0	3	0	3	0	0	0	0	0	9	0	9	13
Grand Total	0	2	1	3	0	3	0	3	0	2	0	2	0	13	0	13	21
Apprch %	0	66.7	33.3		0	100	0		0	100	0		0	100	0		
Total %	0	9.5	4.8	14.3	0	14.3	0	14.3	0	9.5	0	9.5	0	61.9	0	61.9	

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:15 PM	0	**1**	0	**1**	0	**2**	0	**2**	0	0	0	0	0	1	0	1	**4**
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**	0	**4**	4
Total Volume	0	1	0	1	0	3	0	3	0	0	0	0	0	9	0	9	13
% App. Total	0	100	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.250	.000	.250	.000	.375	.000	.375	.000	.000	.000	.000	.000	.563	.000	.563	.813

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5PM
Site Code : 9268063
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+15 mins.	0	**1**	0	**1**	0	**2**	0	**2**	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**	0	**4**
Total Volume	0	1	0	1	0	3	0	3	0	0	0	0	0	9	0	9
% App. Total	0	100	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.250	.000	.250	.000	.375	.000	.375	.000	.000	.000	.000	.000	.563	.000	.563

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5PM
Site Code : 9268063
Start Date : 10/21/2009
Page No : 1

Groups Printed- 4+ Axle Trucks

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:15 PM	0	1	0	1	0	1	0	1	0	0	0	0	1	1	0	2	4
04:30 PM	0	0	1	1	0	2	0	2	0	1	0	1	0	1	0	1	5
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	1	1	2	0	3	0	3	0	1	0	1	1	5	0	6	12
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	6	0	6	0	0	0	0	0	1	0	1	7
Grand Total	0	1	1	2	0	9	0	9	0	1	0	1	1	6	0	7	19
Apprch %	0	50	50		0	100	0		0	100	0		14.3	85.7	0		
Total %	0	5.3	5.3	10.5	0	47.4	0	47.4	0	5.3	0	5.3	5.3	31.6	0	36.8	

	Mount Vernon Avenue Southbound				5th Street Westbound				Mount Vernon Avenue Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	**3**	0	**3**	0	0	0	0	0	0	0	0	**3**
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	1	0	1	7
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.583

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 5th Street
Weather: Sunny

File Name : SBCMV5PM
Site Code : 9268063
Start Date : 10/21/2009
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Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	**3**	0	**3**	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	1	0	1
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "L" Street
E/W: 5th Street
Weather: Sunny

File Name : SBCL5AM
Site Code : 9268051
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	"L" Street Southbound				5th Street Westbound				"L" Street Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	8	0	4	12	0	74	2	76	0	0	0	0	3	111	0	114	202
07:15 AM	8	0	4	12	0	80	4	84	0	0	0	0	1	159	0	160	256
07:30 AM	13	0	7	20	1	92	3	96	0	0	0	0	1	169	2	172	288
07:45 AM	6	0	3	9	0	98	5	103	1	0	0	1	3	197	4	204	317
Total	35	0	18	53	1	344	14	359	1	0	0	1	8	636	6	650	1063
08:00 AM	10	0	3	13	1	88	4	93	0	0	0	0	4	146	0	150	256
08:15 AM	9	0	4	13	1	84	4	89	0	0	1	1	1	130	2	133	236
08:30 AM	7	0	2	9	0	96	6	102	0	0	1	1	2	108	0	110	222
08:45 AM	13	0	4	17	2	103	7	112	0	0	1	1	2	121	3	126	256
Total	39	0	13	52	4	371	21	396	0	0	3	3	9	505	5	519	970
Grand Total	74	0	31	105	5	715	35	755	1	0	3	4	17	1141	11	1169	2033
Apprch %	70.5	0	29.5		0.7	94.7	4.6		25	0	75		1.5	97.6	0.9		
Total %	3.6	0	1.5	5.2	0.2	35.2	1.7	37.1	0	0	0.1	0.2	0.8	56.1	0.5	57.5	

	"L" Street Southbound				5th Street Westbound				"L" Street Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	8	0	4	12	0	80	4	84	0	0	0	0	1	159	0	160	256
07:30 AM	**13**	0	**7**	**20**	**1**	92	3	96	0	0	0	0	1	169	2	172	288
07:45 AM	6	0	3	9	0	**98**	**5**	**103**	**1**	0	0	**1**	3	**197**	**4**	**204**	**317**
08:00 AM	10	0	3	13	1	88	4	93	0	0	0	0	**4**	146	0	150	256
Total Volume	37	0	17	54	2	358	16	376	1	0	0	1	9	671	6	686	1117
% App. Total	68.5	0	31.5		0.5	95.2	4.3		100	0	0		1.3	97.8	0.9		
PHF	.712	.000	.607	.675	.500	.913	.800	.913	.250	.000	.000	.250	.563	.852	.375	.841	.881

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "L" Street
E/W: 5th Street
Weather: Sunny

File Name : SBCL5AM
Site Code : 9268051
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				08:00 AM				07:45 AM				07:15 AM			
+0 mins.	**13**	0	**7**	**20**	1	88	4	93	**1**	0	0	**1**	1	159	0	160
+15 mins.	6	0	3	9	1	84	4	89	0	0	0	0	1	169	2	172
+30 mins.	10	0	3	13	0	96	6	102	0	0	**1**	1	3	**197**	**4**	**204**
+45 mins.	9	0	4	13	**2**	**103**	**7**	**112**	0	0	1	1	**4**	146	0	150
Total Volume	38	0	17	55	4	371	21	396	1	0	2	3	9	671	6	686
% App. Total	69.1	0	30.9		1	93.7	5.3		33.3	0	66.7		1.3	97.8	0.9	
PHF	.731	.000	.607	.688	.500	.900	.750	.884	.250	.000	.500	.750	.563	.852	.375	.841

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "L" Street
E/W: 5 Street
Weather: Sunny

File Name : SBCL5PM
Site Code : 9268051
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volumen

	"L" Street Southbound				5th Street Westbound				"L" Street Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	23	0	2	25	3	143	11	157	0	0	3	3	4	141	1	146	331
04:15 PM	17	0	5	22	2	130	26	158	2	2	0	4	3	128	2	133	317
04:30 PM	17	3	5	25	1	137	15	153	2	1	1	4	5	120	2	127	309
04:45 PM	15	1	6	22	4	134	14	152	1	1	2	4	3	114	0	117	295
Total	72	4	18	94	10	544	66	620	5	4	6	15	15	503	5	523	1252
05:00 PM	15	0	6	21	1	183	12	196	2	0	1	3	5	100	0	105	325
05:15 PM	19	2	5	26	1	145	16	162	0	0	2	2	4	108	0	112	302
05:30 PM	12	1	2	15	0	144	12	156	2	0	2	4	5	130	1	136	311
05:45 PM	11	0	10	21	2	118	15	135	1	0	4	5	5	129	2	136	297
Total	57	3	23	83	4	590	55	649	5	0	9	14	19	467	3	489	1235
Grand Total	129	7	41	177	14	1134	121	1269	10	4	15	29	34	970	8	1012	2487
Apprch %	72.9	4	23.2		1.1	89.4	9.5		34.5	13.8	51.7		3.4	95.8	0.8		
Total %	5.2	0.3	1.6	7.1	0.6	45.6	4.9	51	0.4	0.2	0.6	1.2	1.4	39	0.3	40.7	

	"L" Street Southbound				5th Street Westbound				"L" Street Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**23**	0	2	**25**	3	**143**	11	157	0	0	**3**	3	4	**141**	1	**146**	**331**
04:15 PM	17	0	5	22	2	130	**26**	**158**	**2**	**2**	0	**4**	3	128	**2**	133	317
04:30 PM	17	**3**	5	25	1	137	15	153	2	1	1	4	**5**	120	2	127	309
04:45 PM	15	1	**6**	22	**4**	134	14	152	1	1	2	4	3	114	0	117	295
Total Volume	72	4	18	94	10	544	66	620	5	4	6	15	15	503	5	523	1252
% App. Total	76.6	4.3	19.1		1.6	87.7	10.6		33.3	26.7	40		2.9	96.2	1		
PHF	.783	.333	.750	.940	.625	.951	.635	.981	.625	.500	.500	.938	.750	.892	.625	.896	.946

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "L" Street
E/W: 5 Street
Weather: Sunny

File Name : SBCL5PM
Site Code : 9268051
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:45 PM				04:00 PM				04:00 PM			
+0 mins.	**23**	0	2	**25**	**4**	134	14	152	0	0	**3**	3	4	**141**	1	**146**
+15 mins.	17	0	5	22	1	**183**	12	**196**	**2**	**2**	0	**4**	3	128	**2**	133
+30 mins.	17	**3**	5	25	1	145	**16**	162	2	1	1	4	**5**	120	2	127
+45 mins.	15	1	**6**	22	0	144	12	156	1	1	2	4	3	114	0	117
Total Volume	72	4	18	94	6	606	54	666	5	4	6	15	15	503	5	523
% App. Total	76.6	4.3	19.1		0.9	91	8.1		33.3	26.7	40		2.9	96.2	1	
PHF	.783	.333	.750	.940	.375	.828	.844	.849	.625	.500	.500	.938	.750	.892	.625	.896

Counts Unlimited Inc.
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(951) 485-7934

City of San Bernardino
N/S: Foothill Boulevard
E/W: 4th Street
Weather: Sunny

File Name : SBCFO4AM
Site Code : 9268001
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	4th Street Westbound			Foothill Boulevard Northbound			4th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	1	84	85	25	4	29	106	22	128	242
07:15 AM	2	107	109	13	5	18	141	18	159	286
07:30 AM	1	113	114	20	0	20	178	18	196	330
07:45 AM	0	107	107	10	3	13	212	33	245	365
Total	4	411	415	68	12	80	637	91	728	1223
08:00 AM	2	100	102	17	2	19	140	25	165	286
08:15 AM	4	82	86	22	5	27	151	28	179	292
08:30 AM	9	87	96	28	5	33	123	19	142	271
08:45 AM	3	106	109	21	5	26	123	15	138	273
Total	18	375	393	88	17	105	537	87	624	1122
Grand Total	22	786	808	156	29	185	1174	178	1352	2345
Apprch %	2.7	97.3		84.3	15.7		86.8	13.2		
Total %	0.9	33.5	34.5	6.7	1.2	7.9	50.1	7.6	57.7	

	4th Street Westbound			Foothill Boulevard Northbound			4th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	1	**113**	**114**	20	0	20	178	18	196	330
07:45 AM	0	107	107	10	3	13	**212**	**33**	**245**	**365**
08:00 AM	2	100	102	17	2	19	140	25	165	286
08:15 AM	**4**	82	86	**22**	**5**	**27**	151	28	179	292
Total Volume	7	402	409	69	10	79	681	104	785	1273
% App. Total	1.7	98.3		87.3	12.7		86.8	13.2		
PHF	.438	.889	.897	.784	.500	.731	.803	.788	.801	.872

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City of San Bernardino
N/S: Foothill Boulevard
E/W: 4th Street
Weather: Sunny

File Name : SBCFO4AM
Site Code : 9268001
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM			08:00 AM			07:30 AM		
+0 mins.	**2**	107	109	17	2	19	178	18	196
+15 mins.	1	**113**	**114**	22	**5**	27	**212**	**33**	**245**
+30 mins.	0	107	107	**28**	5	**33**	140	25	165
+45 mins.	2	100	102	21	5	26	151	28	179
Total Volume	5	427	432	88	17	105	681	104	785
% App. Total	1.2	98.8		83.8	16.2		86.8	13.2	
PHF	.625	.945	.947	.786	.850	.795	.803	.788	.801

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City of San Bernardino
N/S: Foothill Boulevard
E/W: 4th Street
Weather: Sunny

File Name : SBCFO4PM
Site Code : 9268001
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	4th Street Westbound			Foothill Boulevard Northbound			4th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	1	188	189	13	5	18	154	15	169	376
04:15 PM	3	168	171	21	5	26	130	22	152	349
04:30 PM	1	146	147	22	2	24	176	23	199	370
04:45 PM	2	156	158	13	2	15	153	23	176	349
Total	7	658	665	69	14	83	613	83	696	1444
05:00 PM	0	179	179	18	1	19	141	21	162	360
05:15 PM	1	163	164	21	1	22	133	14	147	333
05:30 PM	3	168	171	14	0	14	160	14	174	359
05:45 PM	4	129	133	12	4	16	155	18	173	322
Total	8	639	647	65	6	71	589	67	656	1374
Grand Total	15	1297	1312	134	20	154	1202	150	1352	2818
Apprch %	1.1	98.9		87	13		88.9	11.1		
Total %	0.5	46	46.6	4.8	0.7	5.5	42.7	5.3	48	

	4th Street Westbound			Foothill Boulevard Northbound			4th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	1	**188**	**189**	13	**5**	18	154	15	169	**376**
04:15 PM	**3**	168	171	21	5	**26**	130	22	152	349
04:30 PM	1	146	147	**22**	2	24	**176**	**23**	**199**	370
04:45 PM	2	156	158	13	2	15	153	23	176	349
Total Volume	7	658	665	69	14	83	613	83	696	1444
% App. Total	1.1	98.9		83.1	16.9		88.1	11.9		
PHF	.583	.875	.880	.784	.700	.798	.871	.902	.874	.960

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City of San Bernardino
N/S: Foothill Boulevard
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Weather: Sunny

File Name : SBCFO4PM
Site Code : 9268001
Start Date : 10/20/2009
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:15 PM			04:00 PM		
+0 mins.	2	156	158	21	**5**	**26**	154	15	169
+15 mins.	0	**179**	**179**	**22**	2	24	130	22	152
+30 mins.	1	163	164	13	2	15	**176**	**23**	**199**
+45 mins.	**3**	168	171	18	1	19	153	23	176
Total Volume	6	666	672	74	10	84	613	83	696
% App. Total	0.9	99.1		88.1	11.9		88.1	11.9	
PHF	.500	.930	.939	.841	.500	.808	.871	.902	.874

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City of San Bernardino
N/S: "H" Street
E/W: 5th Street
Weather: Sunny

File Name : SBCH5AM
Site Code : 9268051
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"H" Street Southbound				5th Street Westbound				"H" Street Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	9	30	33	72	11	38	1	50	7	8	2	17	4	49	57	110	249
07:15 AM	15	37	49	101	12	33	2	47	4	14	2	20	1	86	78	165	333
07:30 AM	17	86	55	158	15	48	9	72	6	10	3	19	6	91	84	181	430
07:45 AM	13	87	55	155	17	55	9	81	10	16	3	29	6	109	85	200	465
Total	54	240	192	486	55	174	21	250	27	48	10	85	17	335	304	656	1477
08:00 AM	12	61	43	116	18	43	12	73	3	14	3	20	5	83	58	146	355
08:15 AM	13	41	53	107	14	61	12	87	5	15	5	25	6	83	60	149	368
08:30 AM	12	48	59	119	13	47	10	70	17	10	2	29	5	67	63	135	353
08:45 AM	7	47	47	101	22	57	14	93	10	11	2	23	8	87	59	154	371
Total	44	197	202	443	67	208	48	323	35	50	12	97	24	320	240	584	1447
Grand Total	98	437	394	929	122	382	69	573	62	98	22	182	41	655	544	1240	2924
Apprch %	10.5	47	42.4		21.3	66.7	12		34.1	53.8	12.1		3.3	52.8	43.9		
Total %	3.4	14.9	13.5	31.8	4.2	13.1	2.4	19.6	2.1	3.4	0.8	6.2	1.4	22.4	18.6	42.4	

	"H" Street Southbound				5th Street Westbound				"H" Street Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**17**	86	**55**	**158**	15	48	9	72	6	10	3	19	**6**	91	84	181	430
07:45 AM	13	**87**	55	155	17	55	9	81	**10**	**16**	3	**29**	6	**109**	**85**	**200**	**465**
08:00 AM	12	61	43	116	**18**	43	**12**	73	3	14	3	20	5	83	58	146	355
08:15 AM	13	41	53	107	14	**61**	12	**87**	5	15	**5**	25	6	83	60	149	368
Total Volume	55	275	206	536	64	207	42	313	24	55	14	93	23	366	287	676	1618
% App. Total	10.3	51.3	38.4		20.4	66.1	13.4		25.8	59.1	15.1		3.4	54.1	42.5		
PHF	.809	.790	.936	.848	.889	.848	.875	.899	.600	.859	.700	.802	.958	.839	.844	.845	.870

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City of San Bernardino
N/S: "H" Street
E/W: 5th Street
Weather: Sunny

File Name : SBCH5AM
Site Code : 9268051
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				08:00 AM				07:45 AM				07:15 AM			
+0 mins.	**17**	86	**55**	**158**	18	43	12	73	10	**16**	3	**29**	1	86	78	165
+15 mins.	13	**87**	55	155	14	**61**	12	87	3	14	3	20	**6**	91	84	181
+30 mins.	12	61	43	116	13	47	10	70	5	15	**5**	25	6	**109**	**85**	**200**
+45 mins.	13	41	53	107	**22**	57	**14**	**93**	**17**	10	2	29	5	83	58	146
Total Volume	55	275	206	536	67	208	48	323	35	55	13	103	18	369	305	692
% App. Total	10.3	51.3	38.4		20.7	64.4	14.9		34	53.4	12.6		2.6	53.3	44.1	
PHF	.809	.790	.936	.848	.761	.852	.857	.868	.515	.859	.650	.888	.750	.846	.897	.865

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City of San Bernardino
N/S: "H" Street
E/W: 5th Street
Weather: Sunny

File Name : SBCH5PM
Site Code : 9268051
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	"H" Street Southbound				5th Street Westbound				"H" Street Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	13	64	36	113	48	123	13	184	26	30	6	62	12	112	91	215	574
04:15 PM	8	52	47	107	38	103	9	150	26	40	4	70	20	88	74	182	509
04:30 PM	7	69	43	119	50	111	15	176	25	27	4	56	8	85	61	154	505
04:45 PM	8	64	53	125	36	109	14	159	32	35	2	69	10	67	82	159	512
Total	36	249	179	464	172	446	51	669	109	132	16	257	50	352	308	710	2100
05:00 PM	3	47	61	111	51	156	12	219	48	36	7	91	12	67	96	175	596
05:15 PM	6	57	30	93	45	110	9	164	24	40	3	67	13	63	77	153	477
05:30 PM	4	64	55	123	21	93	14	128	24	32	4	60	12	72	80	164	475
05:45 PM	5	69	41	115	17	92	11	120	20	41	4	65	13	76	78	167	467
Total	18	237	187	442	134	451	46	631	116	149	18	283	50	278	331	659	2015
Grand Total	54	486	366	906	306	897	97	1300	225	281	34	540	100	630	639	1369	4115
Apprch %	6	53.6	40.4		23.5	69	7.5		41.7	52	6.3		7.3	46.7			
Total %	1.3	11.8	8.9	22	7.4	21.8	2.4	31.6	5.5	6.8	0.8	13.1	2.4	15.3	15.5	33.3	

	"H" Street Southbound				5th Street Westbound				"H" Street Northbound				5th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**8**	52	47	107	38	103	9	150	26	**40**	4	70	**20**	**88**	74	**182**	509
04:30 PM	7	**69**	43	119	50	111	**15**	176	25	27	4	56	8	85	61	154	505
04:45 PM	8	64	53	**125**	36	109	14	159	32	35	2	69	10	67	82	159	512
05:00 PM	3	47	**61**	111	**51**	**156**	12	**219**	**48**	36	**7**	**91**	12	67	**96**	175	**596**
Total Volume	26	232	204	462	175	479	50	704	131	138	17	286	50	307	313	670	2122
% App. Total	5.6	50.2	44.2		24.9	68	7.1		45.8	48.3	5.9		7.5	45.8	46.7		
PHF	.813	.841	.836	.924	.858	.768	.833	.804	.682	.863	.607	.786	.625	.872	.815	.920	.890

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City of San Bernardino
N/S: "H" Street
E/W: 5th Street
Weather: Sunny

File Name : SBCH5PM
Site Code : 9268051
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:45 PM				04:00 PM			
+0 mins.	**13**	64	36	113	50	111	**15**	176	32	35	2	69	12	**112**	**91**	**215**
+15 mins.	8	52	47	107	36	109	14	159	**48**	36	**7**	**91**	**20**	88	74	182
+30 mins.	7	**69**	43	119	**51**	**156**	12	**219**	24	**40**	3	67	8	85	61	154
+45 mins.	8	64	**53**	**125**	45	110	9	164	24	32	4	60	10	67	82	159
Total Volume	36	249	179	464	182	486	50	718	128	143	16	287	50	352	308	710
% App. Total	7.8	53.7	38.6		25.3	67.7	7		44.6	49.8	5.6		7	49.6	43.4	
PHF	.692	.902	.844	.928	.892	.779	.833	.820	.667	.894	.571	.788	.625	.786	.846	.826

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City of San Bernardino
N/S: "H" Street
E/W: 4th Street
Weather: Sunny

File Name : SBCH4AM
Site Code : 9268035
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"H" Street Southbound				4th Street Westbound				"H" Street Northbound				I-215 On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	21	77	98	0	16	1	17	6	17	0	23	0	0	0	0	138
07:15 AM	0	35	91	126	0	30	1	31	6	20	0	26	0	0	0	0	183
07:30 AM	0	58	125	183	0	35	0	35	5	20	0	25	0	0	0	0	243
07:45 AM	0	78	103	181	0	17	2	19	4	25	0	29	0	0	0	0	229
Total	0	192	396	588	0	98	4	102	21	82	0	103	0	0	0	0	793
08:00 AM	0	53	91	144	0	28	0	28	7	19	1	27	0	0	0	0	199
08:15 AM	0	34	76	110	2	31	2	35	5	21	0	26	0	0	0	0	171
08:30 AM	0	37	83	120	0	24	1	25	7	25	0	32	0	0	0	0	177
08:45 AM	0	32	101	133	0	28	1	29	7	23	0	30	0	0	0	0	192
Total	0	156	351	507	2	111	4	117	26	88	1	115	0	0	0	0	739
Grand Total	0	348	747	1095	2	209	8	219	47	170	1	218	0	0	0	0	1532
Apprch %	0	31.8	68.2		0.9	95.4	3.7		21.6	78.5	0.5		0	0	0		
Total %	0	22.7	48.8	71.5	0.1	13.6	0.5	14.3	3.1	11.1	0.1	14.2	0	0	0	0	

	"H" Street Southbound				4th Street Westbound				"H" Street Northbound				I-215 On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	35	91	126	0	30	1	31	6	20	0	26	0	0	0	0	183
07:30 AM	0	58	**125**	**183**	0	**35**	0	**35**	5	20	0	25	0	0	0	0	**243**
07:45 AM	0	**78**	103	181	0	17	**2**	19	4	**25**	0	**29**	0	0	0	0	229
08:00 AM	0	53	91	144	0	28	0	28	**7**	19	**1**	27	0	0	0	0	199
Total Volume	0	224	410	634	0	110	3	113	22	84	1	107	0	0	0	0	854
% App. Total	0	35.3	64.7		0	97.3	2.7		20.6	78.5	0.9		0	0	0		
PHF	.000	.718	.820	.866	.000	.786	.375	.807	.786	.840	.250	.922	.000	.000	.000	.000	.879

Counts Unlimited Inc.
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City of San Bernardino
N/S: "H" Street
E/W: 4th Street
Weather: Sunny

File Name : SBCH4AM
Site Code : 9268035
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				08:00 AM				07:00 AM			
+0 mins.	0	35	91	126	0	**35**	0	**35**	**7**	19	**1**	27	0	0	0	0
+15 mins.	0	58	**125**	**183**	0	17	**2**	19	5	21	0	26	0	0	0	0
+30 mins.	0	**78**	103	181	0	28	0	28	7	**25**	0	**32**	0	0	0	0
+45 mins.	0	53	91	144	**2**	31	2	35	7	23	0	30	0	0	0	0
Total Volume	0	224	410	634	2	111	4	117	26	88	1	115	0	0	0	0
% App. Total	0	35.3	64.7		1.7	94.9	3.4		22.6	76.5	0.9		0	0	0	
PHF	.000	.718	.820	.866	.250	.793	.500	.836	.929	.880	.250	.898	.000	.000	.000	.000

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(951) 485-7934

City of San Bernardino
N/S: "H" Street
E/W: 4th Street
Weather: Sunny

File Name : SBCH4PM
Site Code : 9268035
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	"H" Street Southbound				4th Street Westbound				"H" Street Northbound				I-215 On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	50	148	198	1	161	2	164	11	57	0	68	0	0	0	0	430
04:15 PM	0	36	123	159	4	116	6	126	14	59	0	73	0	0	0	0	358
04:30 PM	0	43	123	166	3	192	3	198	24	61	0	85	0	0	0	0	449
04:45 PM	0	50	132	182	1	136	5	142	37	55	0	92	0	0	0	0	416
Total	0	179	526	705	9	605	16	630	86	232	0	318	0	0	0	0	1653
05:00 PM	0	40	140	180	3	222	2	227	23	79	0	102	0	0	0	0	509
05:15 PM	0	46	121	167	0	124	6	130	42	62	0	104	0	0	0	0	401
05:30 PM	0	36	127	163	1	122	7	130	27	58	0	85	0	0	0	0	378
05:45 PM	0	40	111	151	0	88	1	89	44	58	0	102	0	0	0	0	342
Total	0	162	499	661	4	556	16	576	136	257	0	393	0	0	0	0	1630
Grand Total	0	341	1025	1366	13	1161	32	1206	222	489	0	711	0	0	0	0	3283
Apprch %	0	25	75		1.1	96.3	2.7		31.2	68.8	0		0	0	0		
Total %	0	10.4	31.2	41.6	0.4	35.4	1	36.7	6.8	14.9	0	21.7	0	0	0	0	

	"H" Street Southbound				4th Street Westbound				"H" Street Northbound				I-215 On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	43	123	166	**3**	192	3	198	24	61	0	85	0	0	0	0	449
04:45 PM	0	**50**	132	**182**	1	136	5	142	37	55	0	92	0	0	0	0	416
05:00 PM	0	40	**140**	180	3	**222**	2	**227**	23	**79**	0	102	0	0	0	0	**509**
05:15 PM	0	46	121	167	0	124	**6**	130	**42**	62	0	**104**	0	0	0	0	401
Total Volume	0	179	516	695	7	674	16	697	126	257	0	383	0	0	0	0	1775
% App. Total	0	25.8	74.2		1	96.7	2.3		32.9	67.1	0		0	0	0		
PHF	.000	.895	.921	.955	.583	.759	.667	.768	.750	.813	.000	.921	.000	.000	.000	.000	.872

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "H" Street
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File Name : SBCH4PM
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				05:00 PM				04:00 PM			
+0 mins.	0	**50**	**148**	**198**	**3**	192	3	198	23	**79**	0	102	0	0	0	0
+15 mins.	0	36	123	159	1	136	5	142	42	62	0	**104**	0	0	0	0
+30 mins.	0	43	123	166	3	**222**	2	**227**	27	58	0	85	0	0	0	0
+45 mins.	0	50	132	182	0	124	**6**	130	**44**	58	0	102	0	0	0	0
Total Volume	0	179	526	705	7	674	16	697	136	257	0	393	0	0	0	0
% App. Total	0	25.4	74.6		1	96.7	2.3		34.6	65.4	0		0	0	0	
PHF	.000	.895	.889	.890	.583	.759	.667	.768	.773	.813	.000	.945	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "I" Street
E/W: 3rd Street
Weather: Sunny

File Name : SBCI3AM
Site Code : 9268066
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"I" Street Southbound				3rd Street Westbound				"I" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	40	93	23	156	4	7	0	11	3	0	5	8	0	9	1	10	185
07:15 AM	46	108	14	168	6	8	0	14	2	1	6	9	0	9	0	9	200
07:30 AM	32	83	21	136	12	7	0	19	5	0	4	9	0	9	3	12	176
07:45 AM	41	107	9	157	8	7	0	15	1	1	11	13	0	15	0	15	200
Total	159	391	67	617	30	29	0	59	11	2	26	39	0	42	4	46	761
08:00 AM	38	89	13	140	9	20	0	29	2	1	10	13	0	13	1	14	196
08:15 AM	31	95	13	139	3	5	0	8	3	1	7	11	0	5	0	5	163
08:30 AM	28	86	8	122	5	7	0	12	1	1	5	7	0	9	0	9	150
08:45 AM	31	73	8	112	5	9	0	14	3	0	5	8	0	10	3	13	147
Total	128	343	42	513	22	41	0	63	9	3	27	39	0	37	4	41	656
Grand Total	287	734	109	1130	52	70	0	122	20	5	53	78	0	79	8	87	1417
Apprch %	25.4	65	9.6		42.6	57.4	0		25.6	6.4	67.9		0	90.8	9.2		
Total %	20.3	51.8	7.7	79.7	3.7	4.9	0	8.6	1.4	0.4	3.7	5.5	0	5.6	0.6	6.1	

	"I" Street Southbound				3rd Street Westbound				"I" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**46**	**108**	14	**168**	6	8	0	14	2	**1**	6	9	0	9	0	9	**200**
07:30 AM	32	83	**21**	136	**12**	7	0	19	**5**	0	4	9	0	9	**3**	12	176
07:45 AM	41	107	9	157	8	7	0	15	1	1	**11**	**13**	0	**15**	0	**15**	200
08:00 AM	38	89	13	140	9	**20**	0	**29**	2	1	10	13	0	13	1	14	196
Total Volume	157	387	57	601	35	42	0	77	10	3	31	44	0	46	4	50	772
% App. Total	26.1	64.4	9.5		45.5	54.5	0		22.7	6.8	70.5		0	92	8		
PHF	.853	.896	.679	.894	.729	.525	.000	.664	.500	.750	.705	.846	.000	.767	.333	.833	.965

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File Name : SBCI3AM
Site Code : 9268066
Start Date : 10/21/2009
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:30 AM				07:15 AM			
+0 mins.	40	93	**23**	156	6	8	0	14	**5**	0	4	9	0	9	0	9
+15 mins.	**46**	**108**	14	**168**	**12**	7	0	19	1	**1**	**11**	**13**	0	9	**3**	12
+30 mins.	32	83	21	136	8	7	0	15	2	1	10	13	0	**15**	0	**15**
+45 mins.	41	107	9	157	9	**20**	0	**29**	3	1	7	11	0	13	1	14
Total Volume	159	391	67	617	35	42	0	77	11	3	32	46	0	46	4	50
% App. Total	25.8	63.4	10.9		45.5	54.5	0		23.9	6.5	69.6		0	92	8	
PHF	.864	.905	.728	.918	.729	.525	.000	.664	.550	.750	.727	.885	.000	.767	.333	.833

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City of San Bernardino
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File Name : SBCI3PM
Site Code : 9268066
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	"I" Street Southbound				3rd Street Westbound				"I" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	18	58	14	90	12	13	0	25	2	0	10	12	1	19	4	24	151
04:15 PM	9	51	9	69	7	14	1	22	2	0	8	10	0	11	1	12	113
04:30 PM	18	61	13	92	11	11	0	22	1	1	7	9	0	16	1	17	140
04:45 PM	18	67	18	103	12	14	0	26	1	0	10	11	0	29	7	36	176
Total	63	237	54	354	42	52	1	95	6	1	35	42	1	75	13	89	580
05:00 PM	16	60	20	96	12	14	0	26	3	1	8	12	0	12	5	17	151
05:15 PM	10	57	9	76	7	12	0	19	3	0	7	10	0	26	6	32	137
05:30 PM	10	53	15	78	6	16	0	22	0	0	7	7	0	16	0	16	123
05:45 PM	16	55	9	80	11	14	0	25	0	1	7	8	0	50	9	59	172
Total	52	225	53	330	36	56	0	92	6	2	29	37	0	104	20	124	583
Grand Total	115	462	107	684	78	108	1	187	12	3	64	79	1	179	33	213	1163
Apprch %	16.8	67.5	15.6		41.7	57.8	0.5		15.2	3.8	81		0.5	84	15.5		
Total %	9.9	39.7	9.2	58.8	6.7	9.3	0.1	16.1	1	0.3	5.5	6.8	0.1	15.4	2.8	18.3	

	"I" Street Southbound				3rd Street Westbound				"I" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**18**	61	13	92	11	11	0	22	1	**1**	7	9	0	16	1	17	140
04:45 PM	18	**67**	18	**103**	**12**	**14**	0	**26**	1	0	**10**	11	0	**29**	**7**	**36**	**176**
05:00 PM	16	60	**20**	96	12	14	0	26	**3**	1	8	**12**	0	12	5	17	151
05:15 PM	10	57	9	76	7	12	0	19	3	0	7	10	0	26	6	32	137
Total Volume	62	245	60	367	42	51	0	93	8	2	32	42	0	83	19	102	604
% App. Total	16.9	66.8	16.3		45.2	54.8	0		19	4.8	76.2		0	81.4	18.6		
PHF	.861	.914	.750	.891	.875	.911	.000	.894	.667	.500	.800	.875	.000	.716	.679	.708	.858

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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:15 PM				04:00 PM				05:00 PM			
+0 mins.	**18**	61	13	92	7	**14**	**1**	22	**2**	0	**10**	**12**	0	12	5	17
+15 mins.	18	**67**	18	**103**	11	11	0	22	2	0	8	10	0	26	6	32
+30 mins.	16	60	**20**	96	**12**	14	0	**26**	1	**1**	7	9	0	16	0	16
+45 mins.	10	57	9	76	12	14	0	26	1	0	10	11	0	**50**	**9**	**59**
Total Volume	62	245	60	367	42	53	1	96	6	1	35	42	0	104	20	124
% App. Total	16.9	66.8	16.3		43.8	55.2	1		14.3	2.4	83.3		0	83.9	16.1	
PHF	.861	.914	.750	.891	.875	.946	.250	.923	.750	.250	.875	.875	.000	.520	.556	.525

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City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : SBCHG3AM
Site Code : 9268063
Start Date : 10/21/2009
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	18	3	21	5	6	1	12	1	15	5	21	4	34	13	51	105
07:15 AM	1	23	7	31	5	7	1	13	0	15	15	30	6	27	17	50	124
07:30 AM	1	45	12	58	10	7	0	17	0	20	15	35	5	23	16	44	154
07:45 AM	1	66	7	74	12	8	3	23	0	21	22	43	8	29	21	58	198
Total	3	152	29	184	32	28	5	65	1	71	57	129	23	113	67	203	581
08:00 AM	5	35	14	54	9	13	4	26	0	17	16	33	9	33	14	56	169
08:15 AM	6	24	3	33	14	4	0	18	0	16	7	23	6	18	15	39	113
08:30 AM	1	33	5	39	16	7	5	28	2	24	7	33	4	17	11	32	132
08:45 AM	4	25	2	31	7	8	3	18	4	25	9	38	5	25	15	45	132
Total	16	117	24	157	46	32	12	90	6	82	39	127	24	93	55	172	546
Grand Total	19	269	53	341	78	60	17	155	7	153	96	256	47	206	122	375	1127
Apprch %	5.6	78.9	15.5		50.3	38.7	11		2.7	59.8	37.5		12.5	54.9	32.5		
Total %	1.7	23.9	4.7	30.3	6.9	5.3	1.5	13.8	0.6	13.6	8.5	22.7	4.2	18.3	10.8	33.3	
Passenger Vehicles	15	258	44	317	64	57	17	138	7	139	91	237	40	198	110	348	1040
% Passenger Vehicles	78.9	95.9	83	93	82.1	95	100	89	100	90.8	94.8	92.6	85.1	96.1	90.2	92.8	92.3
Large 2 Axle Vehicles	3	6	7	16	12	3	0	15	0	12	5	17	6	7	11	24	72
% Large 2 Axle Vehicles	15.8	2.2	13.2	4.7	15.4	5	0	9.7	0	7.8	5.2	6.6	12.8	3.4	9	6.4	6.4
3 Axle Vehicles	0	1	1	2	0	0	0	0	0	0	0	0	1	0	0	1	3
% 3 Axle Vehicles	0	0.4	1.9	0.6	0	0	0	0	0	0	0	0	2.1	0	0	0.3	0.3
4+ Axle Trucks	1	4	1	6	2	0	0	2	0	2	0	2	0	1	1	2	12
% 4+ Axle Trucks	5.3	1.5	1.9	1.8	2.6	0	0	1.3	0	1.3	0	0.8	0	0.5	0.8	0.5	1.1

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	23	7	31	5	7	1	13	0	15	15	30	6	27	17	50	124
07:30 AM	1	45	12	58	10	7	0	17	0	20	15	35	5	23	16	44	154
07:45 AM	1	**66**	7	**74**	**12**	8	3	23	0	**21**	**22**	**43**	8	29	**21**	**58**	**198**
08:00 AM	**5**	35	**14**	54	9	**13**	**4**	**26**	0	17	16	33	**9**	**33**	14	56	169
Total Volume	8	169	40	217	36	35	8	79	0	73	68	141	28	112	68	208	645
% App. Total	3.7	77.9	18.4		45.6	44.3	10.1		0	51.8	48.2		13.5	53.8	32.7		
PHF	.400	.640	.714	.733	.750	.673	.500	.760	.000	.869	.773	.820	.778	.848	.810	.897	.814

Counts Unlimited Inc.
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	23	7	31	5	7	1	13	0	15	15	30	6	27	17	50
+15 mins.	1	45	12	58	10	7	0	17	0	20	15	35	5	23	16	44
+30 mins.	1	**66**	7	**74**	**12**	8	3	23	0	**21**	**22**	**43**	8	29	**21**	**58**
+45 mins.	**5**	35	**14**	54	9	**13**	**4**	**26**	0	17	16	33	**9**	**33**	14	56
Total Volume	8	169	40	217	36	35	8	79	0	73	68	141	28	112	68	208
% App. Total	3.7	77.9	18.4		45.6	44.3	10.1		0	51.8	48.2		13.5	53.8	32.7	
PHF	.400	.640	.714	.733	.750	.673	.500	.760	.000	.869	.773	.820	.778	.848	.810	.897

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File Name : SBCHG3AM
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Start Date : 10/21/2009
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Groups Printed- Passenger Vehicles

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	16	0	16	3	6	1	10	1	12	5	18	4	32	11	47	91
07:15 AM	1	21	4	26	4	6	1	11	0	11	14	25	6	27	16	49	111
07:30 AM	0	44	11	55	8	7	0	15	0	18	15	33	4	20	15	39	142
07:45 AM	1	65	7	73	12	8	3	23	0	19	21	40	7	29	19	55	191
Total	2	146	22	170	27	27	5	59	1	60	55	116	21	108	61	190	535
08:00 AM	4	33	13	50	7	13	4	24	0	16	15	31	7	33	12	52	157
08:15 AM	5	23	2	30	11	4	0	15	0	16	6	22	4	17	12	33	100
08:30 AM	1	32	5	38	13	6	5	24	2	23	7	32	4	16	11	31	125
08:45 AM	3	24	2	29	6	7	3	16	4	24	8	36	4	24	14	42	123
Total	13	112	22	147	37	30	12	79	6	79	36	121	19	90	49	158	505
Grand Total	15	258	44	317	64	57	17	138	7	139	91	237	40	198	110	348	1040
Apprch %	4.7	81.4	13.9		46.4	41.3	12.3		3	58.6	38.4		11.5	56.9	31.6		
Total %	1.4	24.8	4.2	30.5	6.2	5.5	1.6	13.3	0.7	13.4	8.8	22.8	3.8	19	10.6	33.5	

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	21	4	26	4	6	1	11	0	11	14	25	6	27	16	49	111
07:30 AM	0	44	11	55	8	7	0	15	0	18	15	33	4	20	15	39	142
07:45 AM	1	**65**	7	**73**	**12**	8	3	23	0	**19**	**21**	**40**	**7**	29	**19**	**55**	**191**
08:00 AM	**4**	33	**13**	50	7	**13**	**4**	**24**	0	16	15	31	7	**33**	12	52	157
Total Volume	6	163	35	204	31	34	8	73	0	64	65	129	24	109	62	195	601
% App. Total	2.9	79.9	17.2		42.5	46.6	11		0	49.6	50.4		12.3	55.9	31.8		
PHF	.375	.627	.673	.699	.646	.654	.500	.760	.000	.842	.774	.806	.857	.826	.816	.886	.787

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : SBCHG3AM
Site Code : 9268063
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	21	4	26	4	6	1	11	0	11	14	25	6	27	16	49
+15 mins.	0	44	11	55	8	7	0	15	0	18	15	33	4	20	15	39
+30 mins.	1	**65**	7	**73**	**12**	8	3	23	0	**19**	**21**	**40**	**7**	29	**19**	**55**
+45 mins.	**4**	33	**13**	50	7	**13**	**4**	**24**	0	16	15	31	7	**33**	12	52
Total Volume	6	163	35	204	31	34	8	73	0	64	65	129	24	109	62	195
% App. Total	2.9	79.9	17.2		42.5	46.6	11		0	49.6	50.4		12.3	55.9	31.8	
PHF	.375	.627	.673	.699	.646	.654	.500	.760	.000	.842	.774	.806	.857	.826	.816	.886

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : SBCHG3AM
Site Code : 9268063
Start Date : 10/21/2009
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	2	3	2	0	0	2	0	1	0	1	0	2	2	4	10
07:15 AM	0	2	3	5	0	1	0	1	0	4	1	5	0	0	1	1	12
07:30 AM	0	0	0	0	2	0	0	2	0	2	0	2	1	2	1	4	8
07:45 AM	0	1	0	1	0	0	0	0	0	2	1	3	0	0	2	2	6
Total	0	4	5	9	4	1	0	5	0	9	2	11	1	4	6	11	36
08:00 AM	1	2	1	4	2	0	0	2	0	1	1	2	2	0	2	4	12
08:15 AM	1	0	1	2	2	0	0	2	0	0	1	1	2	1	2	5	10
08:30 AM	0	0	0	0	3	1	0	4	0	1	0	1	0	1	0	1	6
08:45 AM	1	0	0	1	1	1	0	2	0	1	1	2	1	1	1	3	8
Total	3	2	2	7	8	2	0	10	0	3	3	6	5	3	5	13	36
Grand Total	3	6	7	16	12	3	0	15	0	12	5	17	6	7	11	24	72
Apprch %	18.8	37.5	43.8		80	20	0		0	70.6	29.4		25	29.2	45.8		
Total %	4.2	8.3	9.7	22.2	16.7	4.2	0	20.8	0	16.7	6.9	23.6	8.3	9.7	15.3	33.3	

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**2**	**3**	**5**	0	**1**	0	1	0	**4**	**1**	**5**	0	0	1	1	**12**
07:30 AM	0	0	0	0	**2**	0	0	**2**	0	2	0	2	1	**2**	1	**4**	8
07:45 AM	0	1	0	1	0	0	0	0	0	2	1	3	0	0	**2**	2	6
08:00 AM	**1**	2	1	4	2	0	0	2	0	1	1	2	**2**	0	2	4	12
Total Volume	1	5	4	10	4	1	0	5	0	9	3	12	3	2	6	11	38
% App. Total	10	50	40		80	20	0		0	75	25		27.3	18.2	54.5		
PHF	.250	.625	.333	.500	.500	.250	.000	.625	.000	.563	.750	.600	.375	.250	.750	.688	.792

Counts Unlimited Inc.
25286 Jaclyn Avenue
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(951) 485-7934

City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : SBCHG3AM
Site Code : 9268063
Start Date : 10/21/2009
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**2**	**3**	**5**	0	**1**	0	1	0	**4**	**1**	**5**	0	0	1	1
+15 mins.	0	0	0	0	**2**	0	0	**2**	0	2	0	2	1	**2**	1	**4**
+30 mins.	0	1	0	1	0	0	0	0	0	2	1	3	0	0	**2**	2
+45 mins.	**1**	2	1	4	2	0	0	2	0	1	1	2	**2**	0	2	4
Total Volume	1	5	4	10	4	1	0	5	0	9	3	12	3	2	6	11
% App. Total	10	50	40		80	20	0		0	75	25		27.3	18.2	54.5	
PHF	.250	.625	.333	.500	.500	.250	.000	.625	.000	.563	.750	.600	.375	.250	.750	.688

Counts Unlimited Inc.
25286 Jaclyn Avenue
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(951) 485-7934

City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : SBCHG3AM
Site Code : 9268063
Start Date : 10/21/2009
Page No : 1

Groups Printed- 3 Axle Vehicles

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	1	1	2	0	0	0	0	0	0	0	0	1	0	0	1	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	1	2	0	0	0	0	0	0	0	0	1	0	0	1	3
Apprch %	0	50	50		0	0	0		0	0	0		100	0	0		
Total %	0	33.3	33.3	66.7	0	0	0	0	0	0	0	0	33.3	0	0	33.3	

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	**1**	**1**	**2**	0	0	0	0	0	0	0	0	0	0	0	0	**2**
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	2	0	0	0	0	0	0	0	0	1	0	0	1	3
% App. Total	0	50	50		0	0	0		0	0	0		100	0	0		
PHF	.000	.250	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.375

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25286 Jaclyn Avenue
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City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : SBCHG3AM
Site Code : 9268063
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	**1**	**1**	**2**	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	2	0	0	0	0	0	0	0	0	1	0	0	1
% App. Total	0	50	50		0	0	0		0	0	0		100	0	0	
PHF	.000	.250	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250

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City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : SBCHG3AM
Site Code : 9268063
Start Date : 10/21/2009
Page No : 1

Groups Printed- 4+ Axle Trucks

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	1	2	0	0	0	0	0	2	0	2	0	0	0	0	4
07:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	1	3	1	0	0	1	0	2	0	2	0	1	0	1	7
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	1	1	3
08:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	3	0	3	1	0	0	1	0	0	0	0	0	0	1	1	5
Grand Total	1	4	1	6	2	0	0	2	0	2	0	2	0	1	1	2	12
Apprch %	16.7	66.7	16.7		100	0	0		0	100	0		0	50	50		
Total %	8.3	33.3	8.3	50	16.7	0	0	16.7	0	16.7	0	16.7	0	8.3	8.3	16.7	

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0	1
07:30 AM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	**1**	0	**1**	**2**
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	1	0	0	1	0	0	0	0	0	1	0	1	3
% App. Total	100	0	0		100	0	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.250	.000	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.375

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25286 Jaclyn Avenue
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City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : SBCHG3AM
Site Code : 9268063
Start Date : 10/21/2009
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0
+15 mins.	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	1	0	0	1	0	0	0	0	0	1	0	1
% App. Total	100	0	0		100	0	0		0	0	0		0	100	0	
PHF	.250	.000	.000	.250	.250	.000	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250

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City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : 0631020PM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 1

Groups Printed- Passanger Vehicle - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	43	8	54	22	19	2	43	0	57	13	70	9	23	13	45	212
04:15 PM	1	35	5	41	14	17	3	34	3	58	13	74	13	15	4	32	181
04:30 PM	2	36	4	42	20	15	0	35	2	74	13	89	13	15	9	37	203
04:45 PM	3	40	3	46	16	19	4	39	3	61	10	74	23	28	11	62	221
Total	9	154	20	183	72	70	9	151	8	250	49	307	58	81	37	176	817
05:00 PM	3	33	8	44	21	16	3	40	2	89	18	109	8	16	11	35	228
05:15 PM	2	41	4	47	15	14	6	35	4	76	16	96	20	16	7	43	221
05:30 PM	1	28	3	32	20	15	6	41	5	63	11	79	12	13	7	32	184
05:45 PM	2	32	4	38	15	17	4	36	3	54	11	68	44	24	11	79	221
Total	8	134	19	161	71	62	19	152	14	282	56	352	84	69	36	189	854
Grand Total	17	288	39	344	143	132	28	303	22	532	105	659	142	150	73	365	1671
Apprch %	4.9	83.7	11.3		47.2	43.6	9.2		3.3	80.7	15.9		38.9	41.1	20		
Total %	1	17.2	2.3	20.6	8.6	7.9	1.7	18.1	1.3	31.8	6.3	39.4	8.5	9	4.4	21.8	
Passanger Vehicle	16	283	35	334	133	127	28	288	19	512	99	630	135	142	62	339	1591
% Passanger Vehicle																	
Large 2 Axle Vehicles	0	3	3	6	9	3	0	12	1	6	6	13	5	4	10	19	50
% Large 2 Axle Vehicles	0	1	7.7	1.7	6.3	2.3	0	4	4.5	1.1	5.7	2	3.5	2.7	13.7	5.2	3
3 Axle Vehicles	1	1	1	3	1	2	0	3	1	7	0	8	2	0	0	2	16
% 3 Axle Vehicles	5.9	0.3	2.6	0.9	0.7	1.5	0	1	4.5	1.3	0	1.2	1.4	0	0	0.5	1
4+ Axle Trucks	0	1	0	1	0	0	0	0	1	7	0	8	0	4	1	5	14
% 4+ Axle Trucks	0	0.3	0	0.3	0	0	0	0	4.5	1.3	0	1.2	0	2.7	1.4	1.4	0.8

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	36	4	42	20	15	0	35	2	74	13	89	13	15	9	37	203
04:45 PM	**3**	40	3	46	16	**19**	4	39	3	61	10	74	**23**	**28**	**11**	**62**	221
05:00 PM	3	33	**8**	44	**21**	16	3	**40**	2	**89**	**18**	**109**	8	16	11	35	**228**
05:15 PM	2	**41**	4	**47**	15	14	**6**	35	**4**	76	16	96	20	16	7	43	221
Total Volume	10	150	19	179	72	64	13	149	11	300	57	368	64	75	38	177	873
% App. Total	5.6	83.8	10.6		48.3	43	8.7		3	81.5	15.5		36.2	42.4	21.5		
PHF	.833	.915	.594	.952	.857	.842	.542	.931	.688	.843	.792	.844	.696	.670	.864	.714	.957

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : 0631020PM
Site Code : 9268063
Start Date : 10/20/2009
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	2	36	4	42	20	15	0	35	2	74	13	89	13	15	9	37
+15 mins.	**3**	40	3	46	16	**19**	4	39	3	61	10	74	**23**	**28**	**11**	**62**
+30 mins.	3	33	**8**	44	**21**	16	3	**40**	2	**89**	**18**	**109**	8	16	11	35
+45 mins.	2	**41**	4	**47**	15	14	**6**	35	**4**	76	16	96	20	16	7	43
Total Volume	10	150	19	179	72	64	13	149	11	300	57	368	64	75	38	177
% App. Total	5.6	83.8	10.6		48.3	43	8.7		3	81.5	15.5		36.2	42.4	21.5	
PHF	.833	.915	.594	.952	.857	.842	.542	.931	.688	.843	.792	.844	.696	.670	.864	.714

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City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : 0631020PM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 1

Groups Printed- Passanger Vehicle

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	43	6	52	20	18	2	40	0	55	12	67	9	23	11	43	202
04:15 PM	1	34	5	40	13	16	3	32	3	54	12	69	12	15	3	30	171
04:30 PM	2	34	4	40	19	15	0	34	1	72	13	86	12	14	7	33	193
04:45 PM	3	40	2	45	16	19	4	39	3	60	10	73	20	25	9	54	211
Total	9	151	17	177	68	68	9	145	7	241	47	295	53	77	30	160	777
05:00 PM	3	32	8	43	17	16	3	36	1	86	17	104	8	16	10	34	217
05:15 PM	1	41	3	45	15	14	6	35	3	74	15	92	19	14	5	38	210
05:30 PM	1	28	3	32	18	14	6	38	5	60	11	76	12	12	6	30	176
05:45 PM	2	31	4	37	15	15	4	34	3	51	9	63	43	23	11	77	211
Total	7	132	18	157	65	59	19	143	12	271	52	335	82	65	32	179	814
Grand Total	16	283	35	334	133	127	28	288	19	512	99	630	135	142	62	339	1591
Apprch %	4.8	84.7	10.5		46.2	44.1	9.7		3	81.3	15.7		39.8	41.9	18.3		
Total %	1	17.8	2.2	21	8.4	8	1.8	18.1	1.2	32.2	6.2	39.6	8.5	8.9	3.9	21.3	

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	34	4	40	**19**	15	0	34	1	72	13	86	12	14	7	33	193
04:45 PM	**3**	40	2	**45**	16	**19**	4	**39**	**3**	60	10	73	**20**	**25**	9	**54**	211
05:00 PM	3	32	**8**	43	17	16	3	36	1	**86**	**17**	**104**	8	16	**10**	34	**217**
05:15 PM	1	**41**	3	45	15	14	**6**	35	3	74	15	92	19	14	5	38	210
Total Volume	9	147	17	173	67	64	13	144	8	292	55	355	59	69	31	159	831
% App. Total	5.2	85	9.8		46.5	44.4	9		2.3	82.3	15.5		37.1	43.4	19.5		
PHF	.750	.896	.531	.961	.882	.842	.542	.923	.667	.849	.809	.853	.738	.690	.775	.736	.957

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : 0631020PM
Site Code : 9268063
Start Date : 10/20/2009
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	2	34	4	40	**19**	15	0	34	1	72	13	86	12	14	7	33
+15 mins.	**3**	40	2	**45**	16	**19**	4	**39**	**3**	60	10	73	**20**	**25**	9	**54**
+30 mins.	3	32	**8**	43	17	16	3	36	1	**86**	**17**	**104**	8	16	**10**	34
+45 mins.	1	**41**	3	45	15	14	**6**	35	3	74	15	92	19	14	5	38
Total Volume	9	147	17	173	67	64	13	144	8	292	55	355	59	69	31	159
% App. Total	5.2	85	9.8		46.5	44.4	9		2.3	82.3	15.5		37.1	43.4	19.5	
PHF	.750	.896	.531	.961	.882	.842	.542	.923	.667	.849	.809	.853	.738	.690	.775	.736

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : 0631020PM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	1	1	2	0	0	2	0	1	1	2	0	0	1	1	6
04:15 PM	0	1	0	1	0	1	0	1	0	1	1	2	1	0	1	2	6
04:30 PM	0	2	0	2	1	0	0	1	0	1	0	1	1	0	2	3	7
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	2	0	2	4	5
Total	0	3	2	5	3	1	0	4	0	3	2	5	4	0	6	10	24
05:00 PM	0	0	0	0	4	0	0	4	1	1	1	3	0	0	1	1	8
05:15 PM	0	0	1	1	0	0	0	0	0	0	1	1	0	2	2	4	6
05:30 PM	0	0	0	0	2	1	0	3	0	2	0	2	0	1	1	2	7
05:45 PM	0	0	0	0	0	1	0	1	0	0	2	2	1	1	0	2	5
Total	0	0	1	1	6	2	0	8	1	3	4	8	1	4	4	9	26
Grand Total	0	3	3	6	9	3	0	12	1	6	6	13	5	4	10	19	50
Apprch %	0	50	50		75	25	0		7.7	46.2	46.2		26.3	21.1	52.6		
Total %	0	6	6	12	18	6	0	24	2	12	12	26	10	8	20	38	

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**2**	0	**2**	1	0	0	1	0	**1**	0	1	1	0	**2**	3	7
04:45 PM	0	0	**1**	1	0	0	0	0	0	0	0	0	**2**	0	2	**4**	5
05:00 PM	0	0	0	0	**4**	0	0	**4**	**1**	1	**1**	**3**	0	0	1	1	**8**
05:15 PM	0	0	1	1	0	0	0	0	0	0	1	1	0	**2**	2	4	6
Total Volume	0	2	2	4	5	0	0	5	1	2	2	5	3	2	7	12	26
% App. Total	0	50	50		100	0	0		20	40	40		25	16.7	58.3		
PHF	.000	.250	.500	.500	.313	.000	.000	.313	.250	.500	.500	.417	.375	.250	.875	.750	.813

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : 0631020PM
Site Code : 9268063
Start Date : 10/20/2009
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	**2**	0	**2**	1	0	0	1	0	**1**	0	1	1	0	**2**	3
+15 mins.	0	0	**1**	1	0	0	0	0	0	0	0	0	**2**	0	2	**4**
+30 mins.	0	0	0	0	**4**	0	0	**4**	**1**	1	**1**	**3**	0	0	1	1
+45 mins.	0	0	1	1	0	0	0	0	0	0	1	1	0	**2**	2	4
Total Volume	0	2	2	4	5	0	0	5	1	2	2	5	3	2	7	12
% App. Total	0	50	50		100	0	0		20	40	40		25	16.7	58.3	
PHF	.000	.250	.500	.500	.313	.000	.000	.313	.250	.500	.500	.417	.375	.250	.875	.750

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : 0631020PM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 1

Groups Printed- 3 Axle Vehicles

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	3
04:15 PM	0	0	0	0	1	0	0	1	0	3	0	3	0	0	0	0	4
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	1	1	1	1	0	2	0	4	0	4	1	0	0	1	8
05:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
05:15 PM	1	0	0	1	0	0	0	0	1	0	0	1	1	0	0	1	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	3
Total	1	1	0	2	0	1	0	1	1	3	0	4	1	0	0	1	8
Grand Total	1	1	1	3	1	2	0	3	1	7	0	8	2	0	0	2	16
Apprch %	33.3	33.3	33.3		33.3	66.7	0		12.5	87.5	0		100	0	0		
Total %	6.2	6.2	6.2	18.8	6.2	12.5	0	18.8	6.2	43.8	0	50	12.5	0	0	12.5	

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**	1
05:00 PM	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	0	0	2
05:15 PM	**1**	0	0	**1**	0	0	0	0	**1**	0	0	1	1	0	0	1	**3**
Total Volume	1	0	0	1	0	0	0	0	1	2	0	3	2	0	0	2	6
% App. Total	100	0	0		0	0	0		33.3	66.7	0		100	0	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.250	.250	.000	.375	.500	.000	.000	.500	.500

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : 0631020PM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	0	0
+45 mins.	**1**	0	0	**1**	0	0	0	0	**1**	0	0	1	1	0	0	1
Total Volume	1	0	0	1	0	0	0	0	1	2	0	3	2	0	0	2
% App. Total	100	0	0		0	0	0		33.3	66.7	0		100	0	0	
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.250	.250	.000	.375	.500	.000	.000	.500

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City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : 0631020PM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 1

Groups Printed- 4+ Axle Trucks

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	1	3
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	3	4
Total	0	0	0	0	0	0	0	0	1	2	0	3	0	4	1	5	8
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	1	0	1	0	0	0	0	0	5	0	5	0	0	0	0	6
Grand Total	0	1	0	1	0	0	0	0	1	7	0	8	0	4	1	5	14
Apprch %	0	100	0		0	0	0		12.5	87.5	0		0	80	20		
Total %	0	7.1	0	7.1	0	0	0	0	7.1	50	0	57.1	0	28.6	7.1	35.7	

	"H" Street Southbound				3rd Street Westbound				"G" Street Northbound				3rd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	**1**	1	0	**2**	0	1	0	1	3
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	**3**	0	**3**	**4**
05:00 PM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	**2**	0	2	0	0	0	0	2
Total Volume	0	1	0	1	0	0	0	0	1	4	0	5	0	4	0	4	10
% App. Total	0	100	0		0	0	0		20	80	0		0	100	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.250	.500	.000	.625	.000	.333	.000	.333	.625

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25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "H" Street - "G" Street
E/W: 3rd Street
Weather: Sunny

File Name : 0631020PM
Site Code : 9268063
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	**1**	1	0	**2**	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	**3**	0	**3**
+30 mins.	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	**2**	0	2	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	1	4	0	5	0	4	0	4
% App. Total	0	100	0		0	0	0		20	80	0		0	100	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.250	.500	.000	.625	.000	.333	.000	.333

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2AM
Site Code : 9268066
Start Date : 10/20/2009
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	27	45	1	73	14	0	12	26	0	32	12	44	1	0	0	1	144
07:15 AM	20	57	0	77	18	0	12	30	0	36	20	56	0	0	3	3	166
07:30 AM	34	73	0	107	21	1	23	45	1	53	35	89	0	3	0	3	244
07:45 AM	48	112	1	161	17	0	29	46	0	73	37	110	1	1	0	2	319
Total	129	287	2	418	70	1	76	147	1	194	104	299	2	4	3	9	873
08:00 AM	27	86	1	114	16	2	17	35	3	58	25	86	1	0	1	2	237
08:15 AM	27	55	1	83	20	2	23	45	1	46	18	65	1	0	2	3	196
08:30 AM	32	47	0	79	22	0	16	38	3	62	17	82	0	0	2	2	201
08:45 AM	24	58	1	83	26	1	25	52	2	45	25	72	1	1	1	3	210
Total	110	246	3	359	84	5	81	170	9	211	85	305	3	1	6	10	844
Grand Total	239	533	5	777	154	6	157	317	10	405	189	604	5	5	9	19	1717
Apprch %	30.8	68.6	0.6		48.6	1.9	49.5		1.7	67.1	31.3		26.3	26.3	47.4		
Total %	13.9	31	0.3	45.3	9	0.3	9.1	18.5	0.6	23.6	11	35.2	0.3	0.3	0.5	1.1	
Passenger Vehicles	238	517	5	760	124	6	155	285	10	392	135	537	5	5	9	19	1601
% Passenger Vehicles	99.6	97	100	97.8	80.5	100	98.7	89.9	100	96.8	71.4	88.9	100	100	100	100	93.2
Large 2 Axle Vehicles	1	12	0	13	11	0	1	12	0	7	19	26	0	0	0	0	51
% Large 2 Axle Vehicles	0.4	2.3	0	1.7	7.1	0	0.6	3.8	0	1.7	10.1	4.3	0	0	0	0	3
3 Axle Vehicles	0	2	0	2	5	0	1	6	0	3	4	7	0	0	0	0	15
% 3 Axle Vehicles	0	0.4	0	0.3	3.2	0	0.6	1.9	0	0.7	2.1	1.2	0	0	0	0	0.9
4+ Axle Trucks	0	2	0	2	14	0	0	14	0	3	31	34	0	0	0	0	50
% 4+ Axle Trucks	0	0.4	0	0.3	9.1	0	0	4.4	0	0.7	16.4	5.6	0	0	0	0	2.9

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	34	73	0	107	**21**	1	23	45	1	53	35	89	0	**3**	0	**3**	244
07:45 AM	**48**	**112**	**1**	**161**	17	0	**29**	**46**	0	**73**	**37**	**110**	**1**	1	0	2	**319**
08:00 AM	27	86	1	114	16	**2**	17	35	**3**	58	25	86	1	0	1	2	237
08:15 AM	27	55	1	83	20	2	23	45	1	46	18	65	1	0	**2**	3	196
Total Volume	136	326	3	465	74	5	92	171	5	230	115	350	3	4	3	10	996
% App. Total	29.2	70.1	0.6		43.3	2.9	53.8		1.4	65.7	32.9		30	40	30		
PHF	.708	.728	.750	.722	.881	.625	.793	.929	.417	.788	.777	.795	.750	.333	.375	.833	.781

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2AM
Site Code : 9268066
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:15 AM			
+0 mins.	34	73	0	107	**21**	1	23	45	1	53	35	89	0	0	**3**	**3**
+15 mins.	**48**	**112**	**1**	**161**	17	0	**29**	**46**	0	**73**	**37**	**110**	0	**3**	0	3
+30 mins.	27	86	1	114	16	**2**	17	35	**3**	58	25	86	**1**	1	0	2
+45 mins.	27	55	1	83	20	2	23	45	1	46	18	65	1	0	1	2
Total Volume	136	326	3	465	74	5	92	171	5	230	115	350	2	4	4	10
% App. Total	29.2	70.1	0.6		43.3	2.9	53.8		1.4	65.7	32.9		20	40	40	
PHF	.708	.728	.750	.722	.881	.625	.793	.929	.417	.788	.777	.795	.500	.333	.333	.833

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2AM
Site Code : 9268066
Start Date : 10/20/2009
Page No : 1

Groups Printed- Passenger Vehicles

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	27	42	1	70	12	0	12	24	0	32	9	41	1	0	0	1	136
07:15 AM	20	56	0	76	15	0	12	27	0	36	12	48	0	0	3	3	154
07:30 AM	34	73	0	107	16	1	23	40	1	51	28	80	0	3	0	3	230
07:45 AM	48	107	1	156	13	0	29	42	0	71	28	99	1	1	0	2	299
Total	129	278	2	409	56	1	76	133	1	190	77	268	2	4	3	9	819
08:00 AM	27	82	1	110	13	2	17	32	3	56	18	77	1	0	1	2	221
08:15 AM	27	53	1	81	19	2	22	43	1	44	14	59	1	0	2	3	186
08:30 AM	32	46	0	78	16	0	16	32	3	62	10	75	0	0	2	2	187
08:45 AM	23	58	1	82	20	1	24	45	2	40	16	58	1	1	1	3	188
Total	109	239	3	351	68	5	79	152	9	202	58	269	3	1	6	10	782
Grand Total	238	517	5	760	124	6	155	285	10	392	135	537	5	5	9	19	1601
Apprch %	31.3	68	0.7		43.5	2.1	54.4		1.9	73	25.1		26.3	26.3	47.4		
Total %	14.9	32.3	0.3	47.5	7.7	0.4	9.7	17.8	0.6	24.5	8.4	33.5	0.3	0.3	0.6	1.2	

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	34	73	0	107	16	1	23	40	1	51	**28**	80	0	**3**	0	**3**	230
07:45 AM	**48**	**107**	**1**	**156**	13	0	**29**	42	0	**71**	28	**99**	**1**	1	0	2	**299**
08:00 AM	27	82	1	110	13	**2**	17	32	**3**	56	18	77	1	0	1	2	221
08:15 AM	27	53	1	81	**19**	2	22	**43**	1	44	14	59	1	0	**2**	3	186
Total Volume	136	315	3	454	61	5	91	157	5	222	88	315	3	4	3	10	936
% App. Total	30	69.4	0.7		38.9	3.2	58		1.6	70.5	27.9		30	40	30		
PHF	.708	.736	.750	.728	.803	.625	.784	.913	.417	.782	.786	.795	.750	.333	.375	.833	.783

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2AM
Site Code : 9268066
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	34	73	0	107	16	1	23	40	1	51	**28**	80	0	**3**	0	**3**
+15 mins.	**48**	**107**	**1**	**156**	13	0	**29**	42	0	**71**	28	**99**	**1**	1	0	2
+30 mins.	27	82	1	110	13	**2**	17	32	**3**	56	18	77	1	0	1	2
+45 mins.	27	53	1	81	**19**	2	22	**43**	1	44	14	59	1	0	**2**	3
Total Volume	136	315	3	454	61	5	91	157	5	222	88	315	3	4	3	10
% App. Total	30	69.4	0.7		38.9	3.2	58		1.6	70.5	27.9		30	40	30	
PHF	.708	.736	.750	.728	.803	.625	.784	.913	.417	.782	.786	.795	.750	.333	.375	.833

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2AM
Site Code : 9268066
Start Date : 10/20/2009
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	0	2	1	0	0	1	0	0	1	1	0	0	0	0	4
07:15 AM	0	1	0	1	1	0	0	1	0	0	2	2	0	0	0	0	4
07:30 AM	0	0	0	0	1	0	0	1	0	1	2	3	0	0	0	0	4
07:45 AM	0	5	0	5	1	0	0	1	0	1	5	6	0	0	0	0	12
Total	0	8	0	8	4	0	0	4	0	2	10	12	0	0	0	0	24
08:00 AM	0	2	0	2	1	0	0	1	0	1	3	4	0	0	0	0	7
08:15 AM	0	1	0	1	1	0	0	1	0	2	1	3	0	0	0	0	5
08:30 AM	0	1	0	1	1	0	0	1	0	0	2	2	0	0	0	0	4
08:45 AM	1	0	0	1	4	0	1	5	0	2	3	5	0	0	0	0	11
Total	1	4	0	5	7	0	1	8	0	5	9	14	0	0	0	0	27
Grand Total	1	12	0	13	11	0	1	12	0	7	19	26	0	0	0	0	51
Apprch %	7.7	92.3	0		91.7	0	8.3		0	26.9	73.1		0	0	0		
Total %	2	23.5	0	25.5	21.6	0	2	23.5	0	13.7	37.3	51	0	0	0	0	

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	**1**	0	0	**1**	0	1	2	3	0	0	0	0	4
07:45 AM	0	**5**	0	**5**	1	0	0	1	0	1	**5**	**6**	0	0	0	0	**12**
08:00 AM	0	2	0	2	1	0	0	1	0	1	3	4	0	0	0	0	7
08:15 AM	0	1	0	1	1	0	0	1	0	**2**	1	3	0	0	0	0	5
Total Volume	0	8	0	8	4	0	0	4	0	5	11	16	0	0	0	0	28
% App. Total	0	100	0		100	0	0		0	31.2	68.8		0	0	0		
PHF	.000	.400	.000	.400	1.000	.000	.000	1.000	.000	.625	.550	.667	.000	.000	.000	.000	.583

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2AM
Site Code : 9268066
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	**1**	0	0	**1**	0	1	2	3	0	0	0	0
+15 mins.	0	**5**	0	**5**	1	0	0	1	0	1	**5**	**6**	0	0	0	0
+30 mins.	0	2	0	2	1	0	0	1	0	1	3	4	0	0	0	0
+45 mins.	0	1	0	1	1	0	0	1	0	**2**	1	3	0	0	0	0
Total Volume	0	8	0	8	4	0	0	4	0	5	11	16	0	0	0	0
% App. Total	0	100	0		100	0	0		0	31.2	68.8		0	0	0	
PHF	.000	.400	.000	.400	1.000	.000	.000	1.000	.000	.625	.550	.667	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2AM
Site Code : 9268066
Start Date : 10/20/2009
Page No : 1

Groups Printed- 3 Axle Vehicles

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
07:30 AM	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	3
07:45 AM	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
Total	0	1	0	1	4	0	0	4	0	1	2	3	0	0	0	0	8
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:15 AM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:45 AM	0	0	0	0	1	0	0	1	0	2	0	2	0	0	0	0	3
Total	0	1	0	1	1	0	1	2	0	2	2	4	0	0	0	0	7
Grand Total	0	2	0	2	5	0	1	6	0	3	4	7	0	0	0	0	15
Apprch %	0	100	0		83.3	0	16.7		0	42.9	57.1		0	0	0		
Total %	0	13.3	0	13.3	33.3	0	6.7	40	0	20	26.7	46.7	0	0	0	0	

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	**2**	0	0	**2**	0	0	**1**	**1**	0	0	0	0	**3**
07:45 AM	0	0	0	0	1	0	0	1	0	**1**	0	1	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:15 AM	0	**1**	0	**1**	0	0	**1**	1	0	0	0	0	0	0	0	0	2
Total Volume	0	1	0	1	3	0	1	4	0	1	2	3	0	0	0	0	8
% App. Total	0	100	0		75	0	25		0	33.3	66.7		0	0	0		
PHF	.000	.250	.000	.250	.375	.000	.250	.500	.000	.250	.500	.750	.000	.000	.000	.000	.667

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2AM
Site Code : 9268066
Start Date : 10/20/2009
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	**2**	0	0	**2**	0	0	**1**	**1**	0	0	0	0
+15 mins.	0	0	0	0	1	0	0	1	0	**1**	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
+45 mins.	0	**1**	0	**1**	0	0	**1**	1	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	3	0	1	4	0	1	2	3	0	0	0	0
% App. Total	0	100	0		75	0	25		0	33.3	66.7		0	0	0	
PHF	.000	.250	.000	.250	.375	.000	.250	.500	.000	.250	.500	.750	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2AM
Site Code : 9268066
Start Date : 10/20/2009
Page No : 1

Groups Printed- 4+ Axle Trucks

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	0	0	1	0	0	2	2	0	0	0	0	3
07:15 AM	0	0	0	0	1	0	0	1	0	0	5	5	0	0	0	0	6
07:30 AM	0	0	0	0	2	0	0	2	0	1	4	5	0	0	0	0	7
07:45 AM	0	0	0	0	2	0	0	2	0	0	4	4	0	0	0	0	6
Total	0	0	0	0	6	0	0	6	0	1	15	16	0	0	0	0	22
08:00 AM	0	2	0	2	2	0	0	2	0	1	3	4	0	0	0	0	8
08:15 AM	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	3
08:30 AM	0	0	0	0	5	0	0	5	0	0	4	4	0	0	0	0	9
08:45 AM	0	0	0	0	1	0	0	1	0	1	6	7	0	0	0	0	8
Total	0	2	0	2	8	0	0	8	0	2	16	18	0	0	0	0	28
Grand Total	0	2	0	2	14	0	0	14	0	3	31	34	0	0	0	0	50
Apprch %	0	100	0		100	0	0		0	8.8	91.2		0	0	0		
Total %	0	4	0	4	28	0	0	28	0	6	62	68	0	0	0	0	

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	**2**	0	0	**2**	0	**1**	**4**	**5**	0	0	0	0	7
07:45 AM	0	0	0	0	2	0	0	2	0	0	4	4	0	0	0	0	6
08:00 AM	0	**2**	0	**2**	2	0	0	2	0	1	3	4	0	0	0	0	**8**
08:15 AM	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	3
Total Volume	0	2	0	2	6	0	0	6	0	2	14	16	0	0	0	0	24
% App. Total	0	100	0		100	0	0		0	12.5	87.5		0	0	0		
PHF	.000	.250	.000	.250	.750	.000	.000	.750	.000	.500	.875	.800	.000	.000	.000	.000	.750

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2AM
Site Code : 9268066
Start Date : 10/20/2009
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	**2**	0	0	**2**	0	**1**	**4**	**5**	0	0	0	0
+15 mins.	0	0	0	0	2	0	0	2	0	0	4	4	0	0	0	0
+30 mins.	0	**2**	0	**2**	2	0	0	2	0	1	3	4	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
Total Volume	0	2	0	2	6	0	0	6	0	2	14	16	0	0	0	0
% App. Total	0	100	0		100	0	0		0	12.5	87.5		0	0	0	
PHF	.000	.250	.000	.250	.750	.000	.000	.750	.000	.500	.875	.800	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2PM
Site Code : 9268066
Start Date : 10/21/2009
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	36	116	1	153	35	0	34	69	0	120	33	153	0	1	1	2	377
04:15 PM	29	91	1	121	30	2	36	68	0	97	25	122	0	1	4	5	316
04:30 PM	41	83	2	126	33	1	35	69	2	104	39	145	0	2	2	4	344
04:45 PM	18	106	0	124	44	2	50	96	1	110	27	138	0	3	1	4	362
Total	124	396	4	524	142	5	155	302	3	431	124	558	0	7	8	15	1399
05:00 PM	31	96	3	130	37	2	48	87	4	111	35	150	2	3	1	6	373
05:15 PM	33	106	2	141	52	1	51	104	0	104	36	140	4	3	3	10	395
05:30 PM	30	119	3	152	28	0	56	84	1	112	36	149	2	1	1	4	389
05:45 PM	32	133	2	167	49	2	52	103	1	116	36	153	3	1	1	5	428
Total	126	454	10	590	166	5	207	378	6	443	143	592	11	8	6	25	1585
Grand Total	250	850	14	1114	308	10	362	680	9	874	267	1150	11	15	14	40	2984
Apprch %	22.4	76.3	1.3		45.3	1.5	53.2		0.8	76	23.2		27.5	37.5	35		
Total %	8.4	28.5	0.5	37.3	10.3	0.3	12.1	22.8	0.3	29.3	8.9	38.5	0.4	0.5	0.5	1.3	
Passenger Vehicles	247	843	14	1104	274	10	355	639	9	869	242	1120	11	15	14	40	2903
% Passenger Vehicles	98.8	99.2	100	99.1	89	100	98.1	94	100	99.4	90.6	97.4	100	100	100	100	97.3
Large 2 Axle Vehicles	1	6	0	7	10	0	6	16	0	3	13	16	0	0	0	0	39
% Large 2 Axle Vehicles	0.4	0.7	0	0.6	3.2	0	1.7	2.4	0	0.3	4.9	1.4	0	0	0	0	1.3
3 Axle Vehicles	2	0	0	2	0	0	1	1	0	1	4	5	0	0	0	0	8
% 3 Axle Vehicles	0.8	0	0	0.2	0	0	0.3	0.1	0	0.1	1.5	0.4	0	0	0	0	0.3
4+ Axle Trucks	0	1	0	1	24	0	0	24	0	1	8	9	0	0	0	0	34
% 4+ Axle Trucks	0	0.1	0	0.1	7.8	0	0	3.5	0	0.1	3	0.8	0	0	0	0	1.1

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	31	96	**3**	130	37	**2**	48	87	**4**	111	35	150	2	**3**	1	6	373
05:15 PM	**33**	106	2	141	**52**	1	51	**104**	0	104	**36**	140	**4**	3	**3**	**10**	395
05:30 PM	30	119	3	152	28	0	**56**	84	1	112	36	149	2	1	1	4	389
05:45 PM	32	**133**	2	**167**	49	2	52	103	1	**116**	36	**153**	3	1	1	5	**428**
Total Volume	126	454	10	590	166	5	207	378	6	443	143	592	11	8	6	25	1585
% App. Total	21.4	76.9	1.7		43.9	1.3	54.8		1	74.8	24.2		44	32	24		
PHF	.955	.853	.833	.883	.798	.625	.924	.909	.375	.955	.993	.967	.688	.667	.500	.625	.926

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2PM
Site Code : 9268066
Start Date : 10/21/2009
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	31	96	**3**	130	37	**2**	48	87	**4**	111	35	150	2	**3**	1	6
+15 mins.	**33**	106	2	141	**52**	1	51	**104**	0	104	**36**	140	**4**	3	**3**	**10**
+30 mins.	30	119	3	152	28	0	**56**	84	1	112	36	149	2	1	1	4
+45 mins.	32	**133**	2	**167**	49	2	52	103	1	**116**	36	**153**	3	1	1	5
Total Volume	126	454	10	590	166	5	207	378	6	443	143	592	11	8	6	25
% App. Total	21.4	76.9	1.7		43.9	1.3	54.8		1	74.8	24.2		44	32	24	
PHF	.955	.853	.833	.883	.798	.625	.924	.909	.375	.955	.993	.967	.688	.667	.500	.625

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2PM
Site Code : 9268066
Start Date : 10/21/2009
Page No : 1

Groups Printed- Passenger Vehicles

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	36	113	1	150	31	0	33	64	0	119	30	149	0	1	1	2	365
04:15 PM	29	90	1	120	28	2	35	65	0	96	23	119	0	1	4	5	309
04:30 PM	39	83	2	124	29	1	35	65	2	103	36	141	0	2	2	4	334
04:45 PM	18	106	0	124	38	2	48	88	1	110	25	136	0	3	1	4	352
Total	122	392	4	518	126	5	151	282	3	428	114	545	0	7	8	15	1360
05:00 PM	31	95	3	129	34	2	47	83	4	111	33	148	2	3	1	6	366
05:15 PM	32	105	2	139	44	1	50	95	0	104	33	137	4	3	3	10	381
05:30 PM	30	119	3	152	25	0	55	80	1	111	30	142	2	1	1	4	378
05:45 PM	32	132	2	166	45	2	52	99	1	115	32	148	3	1	1	5	418
Total	125	451	10	586	148	5	204	357	6	441	128	575	11	8	6	25	1543
Grand Total	247	843	14	1104	274	10	355	639	9	869	242	1120	11	15	14	40	2903
Apprch %	22.4	76.4	1.3		42.9	1.6	55.6		0.8	77.6	21.6		27.5	37.5	35		
Total %	8.5	29	0.5	38	9.4	0.3	12.2	22	0.3	29.9	8.3	38.6	0.4	0.5	0.5	1.4	

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	31	95	**3**	129	34	**2**	47	83	**4**	111	**33**	**148**	2	**3**	1	6	366
05:15 PM	**32**	105	2	139	44	1	50	95	0	104	33	137	**4**	3	**3**	**10**	381
05:30 PM	30	119	3	152	25	0	**55**	80	1	111	30	142	2	1	1	4	378
05:45 PM	32	**132**	2	**166**	**45**	2	52	**99**	1	**115**	32	148	3	1	1	5	**418**
Total Volume	125	451	10	586	148	5	204	357	6	441	128	575	11	8	6	25	1543
% App. Total	21.3	77	1.7		41.5	1.4	57.1		1	76.7	22.3		44	32	24		
PHF	.977	.854	.833	.883	.822	.625	.927	.902	.375	.959	.970	.971	.688	.667	.500	.625	.923

Counts Unlimited Inc.
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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2PM
Site Code : 9268066
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	31	95	**3**	129	34	**2**	47	83	**4**	111	**33**	**148**	2	**3**	1	6
+15 mins.	**32**	105	2	139	44	1	50	95	0	104	33	137	**4**	3	**3**	**10**
+30 mins.	30	119	3	152	25	0	**55**	80	1	111	30	142	2	1	1	4
+45 mins.	32	**132**	2	**166**	**45**	2	52	**99**	1	**115**	32	148	3	1	1	5
Total Volume	125	451	10	586	148	5	204	357	6	441	128	575	11	8	6	25
% App. Total	21.3	77	1.7		41.5	1.4	57.1		1	76.7	22.3		44	32	24	
PHF	.977	.854	.833	.883	.822	.625	.927	.902	.375	.959	.970	.971	.688	.667	.500	.625

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2PM
Site Code : 9268066
Start Date : 10/21/2009
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	3	0	3	2	0	1	3	0	0	1	1	0	0	0	0	7
04:15 PM	0	0	0	0	1	0	1	2	0	1	2	3	0	0	0	0	5
04:30 PM	1	0	0	1	0	0	0	0	0	0	2	2	0	0	0	0	3
04:45 PM	0	0	0	0	2	0	1	3	0	0	1	1	0	0	0	0	4
Total	1	3	0	4	5	0	3	8	0	1	6	7	0	0	0	0	19
05:00 PM	0	1	0	1	1	0	1	2	0	0	2	2	0	0	0	0	5
05:15 PM	0	1	0	1	2	0	1	3	0	0	1	1	0	0	0	0	5
05:30 PM	0	0	0	0	0	0	1	1	0	1	2	3	0	0	0	0	4
05:45 PM	0	1	0	1	2	0	0	2	0	1	2	3	0	0	0	0	6
Total	0	3	0	3	5	0	3	8	0	2	7	9	0	0	0	0	20
Grand Total	1	6	0	7	10	0	6	16	0	3	13	16	0	0	0	0	39
Apprch %	14.3	85.7	0		62.5	0	37.5		0	18.8	81.2		0	0	0		
Total %	2.6	15.4	0	17.9	25.6	0	15.4	41	0	7.7	33.3	41	0	0	0	0	

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**1**	0	**1**	1	0	**1**	2	0	0	**2**	2	0	0	0	0	5
05:15 PM	0	1	0	1	**2**	0	1	**3**	0	0	1	1	0	0	0	0	5
05:30 PM	0	0	0	0	0	0	1	1	0	**1**	2	**3**	0	0	0	0	4
05:45 PM	0	1	0	1	2	0	0	2	0	1	2	3	0	0	0	0	**6**
Total Volume	0	3	0	3	5	0	3	8	0	2	7	9	0	0	0	0	20
% App. Total	0	100	0		62.5	0	37.5		0	22.2	77.8		0	0	0		
PHF	.000	.750	.000	.750	.625	.000	.750	.667	.000	.500	.875	.750	.000	.000	.000	.000	.833

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25286 Jaclyn Avenue
Moreno Valley, CA 92557
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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2PM
Site Code : 9268066
Start Date : 10/21/2009
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Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	**1**	0	**1**	1	0	**1**	2	0	0	**2**	2	0	0	0	0
+15 mins.	0	1	0	1	**2**	0	1	**3**	0	0	1	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	1	1	0	**1**	2	**3**	0	0	0	0
+45 mins.	0	1	0	1	2	0	0	2	0	1	2	3	0	0	0	0
Total Volume	0	3	0	3	5	0	3	8	0	2	7	9	0	0	0	0
% App. Total	0	100	0		62.5	0	37.5		0	22.2	77.8		0	0	0	
PHF	.000	.750	.000	.750	.625	.000	.750	.667	.000	.500	.875	.750	.000	.000	.000	.000

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2PM
Site Code : 9268066
Start Date : 10/21/2009
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Groups Printed- 3 Axle Vehicles

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	0	1	1	0	1	1	2	0	0	0	0	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	1	0	0	1	0	0	0	0	0	0	2	2	0	0	0	0	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	3	3	0	0	0	0	4
Grand Total	2	0	0	2	0	0	1	1	0	1	4	5	0	0	0	0	8
Apprch %	100	0	0		0	0	100		0	20	80		0	0	0		
Total %	25	0	0	25	0	0	12.5	12.5	0	12.5	50	62.5	0	0	0	0	

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	**1**	0	0	**1**	0	0	0	0	0	0	**2**	**2**	0	0	0	0	**3**
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	0	3	3	0	0	0	0	4
% App. Total	100	0	0		0	0	0		0	0	100		0	0	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.375	.375	.000	.000	.000	.000	.333

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2PM
Site Code : 9268066
Start Date : 10/21/2009
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Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	**1**	0	0	**1**	0	0	0	0	0	0	**2**	**2**	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	0	3	3	0	0	0	0
% App. Total	100	0	0		0	0	0		0	0	100		0	0	0	
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.375	.375	.000	.000	.000	.000

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2PM
Site Code : 9268066
Start Date : 10/21/2009
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Groups Printed- 4+ Axle Trucks

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	3
04:15 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	4	0	0	4	0	1	1	2	0	0	0	0	6
04:45 PM	0	0	0	0	4	0	0	4	0	0	1	1	0	0	0	0	5
Total	0	1	0	1	11	0	0	11	0	1	3	4	0	0	0	0	16
05:00 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	6
05:30 PM	0	0	0	0	3	0	0	3	0	0	3	3	0	0	0	0	6
05:45 PM	0	0	0	0	2	0	0	2	0	0	2	2	0	0	0	0	4
Total	0	0	0	0	13	0	0	13	0	0	5	5	0	0	0	0	18
Grand Total	0	1	0	1	24	0	0	24	0	1	8	9	0	0	0	0	34
Apprch %	0	100	0		100	0	0		0	11.1	88.9		0	0	0		
Total %	0	2.9	0	2.9	70.6	0	0	70.6	0	2.9	23.5	26.5	0	0	0	0	

	Mount Vernon Avenue Southbound				2nd Street Westbound				Mount Vernon Avenue Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	**6**	0	0	**6**	0	0	0	0	0	0	0	0	**6**
05:30 PM	0	0	0	0	3	0	0	3	0	0	**3**	**3**	0	0	0	0	6
05:45 PM	0	0	0	0	2	0	0	2	0	0	2	2	0	0	0	0	4
Total Volume	0	0	0	0	13	0	0	13	0	0	5	5	0	0	0	0	18
% App. Total	0	0	0		100	0	0		0	0	100		0	0	0		
PHF	.000	.000	.000	.000	.542	.000	.000	.542	.000	.000	.417	.417	.000	.000	.000	.000	.750

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: 2nd Street
Weather: Sunny

File Name : SBCMV2PM
Site Code : 9268066
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	**6**	0	0	**6**	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	3	0	0	3	0	0	**3**	**3**	0	0	0	0
+45 mins.	0	0	0	0	2	0	0	2	0	0	2	2	0	0	0	0
Total Volume	0	0	0	0	13	0	0	13	0	0	5	5	0	0	0	0
% App. Total	0	0	0		100	0	0		0	0	100		0	0	0	
PHF	.000	.000	.000	.000	.542	.000	.000	.542	.000	.000	.417	.417	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "K" Street
E/W: 2nd Street
Weather: Sunny

File Name : SBCK2AM
Site Code : 9268991
Start Date : 10/21/2009
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Groups Printed- Total Volume

	"K" Street Southbound				2nd Street Westbound				"K" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	3	5	8	4	30	4	38	2	0	8	10	2	39	5	46	102
07:15 AM	2	9	0	11	11	29	3	43	6	0	10	16	1	58	1	60	130
07:30 AM	1	5	4	10	9	29	7	45	3	0	9	12	2	55	5	62	129
07:45 AM	1	2	2	5	6	33	5	44	5	1	11	17	4	70	2	76	142
Total	4	19	11	34	30	121	19	170	16	1	38	55	9	222	13	244	503
08:00 AM	3	7	5	15	10	28	5	43	1	2	8	11	0	57	4	61	130
08:15 AM	2	1	2	5	2	32	1	35	6	2	6	14	1	40	1	42	96
08:30 AM	0	1	1	2	6	26	2	34	10	2	7	19	0	32	7	39	94
08:45 AM	1	4	2	7	3	42	0	45	6	1	3	10	2	37	1	40	102
Total	6	13	10	29	21	128	8	157	23	7	24	54	3	166	13	182	422
Grand Total	10	32	21	63	51	249	27	327	39	8	62	109	12	388	26	426	925
Apprch %	15.9	50.8	33.3		15.6	76.1	8.3		35.8	7.3	56.9		2.8	91.1	6.1		
Total %	1.1	3.5	2.3	6.8	5.5	26.9	2.9	35.4	4.2	0.9	6.7	11.8	1.3	41.9	2.8	46.1	

	"K" Street Southbound				2nd Street Westbound				"K" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	**9**	0	11	**11**	29	3	43	**6**	0	10	16	1	58	1	60	130
07:30 AM	1	5	4	10	9	29	**7**	**45**	3	0	9	12	2	55	**5**	62	129
07:45 AM	1	2	2	5	6	**33**	5	44	5	1	**11**	**17**	**4**	**70**	2	**76**	**142**
08:00 AM	**3**	7	**5**	**15**	10	28	5	43	1	**2**	8	11	0	57	4	61	130
Total Volume	7	23	11	41	36	119	20	175	15	3	38	56	7	240	12	259	531
% App. Total	17.1	56.1	26.8		20.6	68	11.4		26.8	5.4	67.9		2.7	92.7	4.6		
PHF	.583	.639	.550	.683	.818	.902	.714	.972	.625	.375	.864	.824	.438	.857	.600	.852	.935

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "K" Street
E/W: 2nd Street
Weather: Sunny

File Name : SBCK2AM
Site Code : 9268991
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:45 AM				07:15 AM			
+0 mins.	2	**9**	0	11	**11**	29	3	43	5	1	**11**	17	1	58	1	60
+15 mins.	1	5	4	10	9	29	**7**	**45**	1	**2**	8	11	2	55	**5**	62
+30 mins.	1	2	2	5	6	**33**	5	44	6	2	6	14	**4**	**70**	2	**76**
+45 mins.	**3**	7	**5**	**15**	10	28	5	43	**10**	2	7	**19**	0	57	4	61
Total Volume	7	23	11	41	36	119	20	175	22	7	32	61	7	240	12	259
% App. Total	17.1	56.1	26.8		20.6	68	11.4		36.1	11.5	52.5		2.7	92.7	4.6	
PHF	.583	.639	.550	.683	.818	.902	.714	.972	.550	.875	.727	.803	.438	.857	.600	.852

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Moreno Valley, CA 92557
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City of San Bernardino
N/S: "K" Street
E/W: 2nd Street
Weather: Sunny

File Name : SBCK2PM
Site Code : 9268098
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"K" Street Southbound				2nd Street Westbound				"K" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	4	9	16	7	56	0	63	8	1	13	22	0	57	5	62	163
04:15 PM	1	4	5	10	4	60	1	65	6	1	9	16	1	50	3	54	145
04:30 PM	3	2	7	12	4	59	3	66	7	1	9	17	3	67	2	72	167
04:45 PM	10	3	4	17	6	61	2	69	10	0	8	18	3	57	3	63	167
Total	17	13	25	55	21	236	6	263	31	3	39	73	7	231	13	251	642
05:00 PM	5	6	3	14	3	59	1	63	8	1	1	10	0	74	10	84	171
05:15 PM	4	4	7	15	6	82	3	91	7	1	4	12	3	51	2	56	174
05:30 PM	6	8	5	19	8	66	0	74	9	0	7	16	2	63	3	68	177
05:45 PM	8	4	6	18	8	64	3	75	11	3	4	18	2	75	8	85	196
Total	23	22	21	66	25	271	7	303	35	5	16	56	7	263	23	293	718
Grand Total	40	35	46	121	46	507	13	566	66	8	55	129	14	494	36	544	1360
Apprch %	33.1	28.9	38		8.1	89.6	2.3		51.2	6.2	42.6		2.6	90.8	6.6		
Total %	2.9	2.6	3.4	8.9	3.4	37.3	1	41.6	4.9	0.6	4	9.5	1	36.3	2.6	40	

	"K" Street Southbound				2nd Street Westbound				"K" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	5	6	3	14	3	59	1	63	8	1	1	10	0	74	**10**	84	171
05:15 PM	4	4	**7**	15	6	**82**	**3**	**91**	7	1	4	12	**3**	51	2	56	174
05:30 PM	6	**8**	5	**19**	**8**	66	0	74	9	0	**7**	16	2	63	3	68	177
05:45 PM	**8**	4	6	18	8	64	3	75	**11**	**3**	4	**18**	2	**75**	8	**85**	**196**
Total Volume	23	22	21	66	25	271	7	303	35	5	16	56	7	263	23	293	718
% App. Total	34.8	33.3	31.8		8.3	89.4	2.3		62.5	8.9	28.6		2.4	89.8	7.8		
PHF	.719	.688	.750	.868	.781	.826	.583	.832	.795	.417	.571	.778	.583	.877	.575	.862	.916

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City of San Bernardino
N/S: "K" Street
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Weather: Sunny

File Name : SBCK2PM
Site Code : 9268098
Start Date : 10/21/2009
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:00 PM				05:00 PM			
+0 mins.	5	6	3	14	3	59	1	63	8	**1**	**13**	**22**	0	74	**10**	84
+15 mins.	4	4	**7**	15	6	**82**	**3**	**91**	6	1	9	16	**3**	51	2	56
+30 mins.	6	**8**	5	**19**	**8**	66	0	74	7	1	9	17	2	63	3	68
+45 mins.	**8**	4	6	18	8	64	3	75	**10**	0	8	18	2	**75**	8	**85**
Total Volume	23	22	21	66	25	271	7	303	31	3	39	73	7	263	23	293
% App. Total	34.8	33.3	31.8		8.3	89.4	2.3		42.5	4.1	53.4		2.4	89.8	7.8	
PHF	.719	.688	.750	.868	.781	.826	.583	.832	.775	.750	.750	.830	.583	.877	.575	.862

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City of San Bernardino
N/S: "I" Street
E/W: 2nd Street
Weather: Sunny

File Name : SBCI2AM
Site Code : 9268137
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"I" Street Southbound				2nd Street Westbound				"I" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	37	57	4	98	2	39	2	43	0	3	21	24	1	53	3	57	222
07:15 AM	22	82	6	110	8	37	4	49	0	1	28	29	1	80	1	82	270
07:30 AM	24	64	3	91	8	43	3	54	2	1	41	44	1	80	0	81	270
07:45 AM	28	73	5	106	14	42	1	57	2	8	32	42	1	75	3	79	284
Total	111	276	18	405	32	161	10	203	4	13	122	139	4	288	7	299	1046
08:00 AM	37	53	3	93	6	36	4	46	0	6	24	30	2	70	0	72	241
08:15 AM	24	45	3	72	3	23	5	31	1	7	17	25	0	39	3	42	170
08:30 AM	27	39	5	71	1	20	1	22	0	4	24	28	0	34	1	35	156
08:45 AM	21	52	3	76	5	24	3	32	3	5	32	40	1	48	1	50	198
Total	109	189	14	312	15	103	13	131	4	22	97	123	3	191	5	199	765
Grand Total	220	465	32	717	47	264	23	334	8	35	219	262	7	479	12	498	1811
Apprch %	30.7	64.9	4.5		14.1	79	6.9		3.1	13.4	83.6		1.4	96.2	2.4		
Total %	12.1	25.7	1.8	39.6	2.6	14.6	1.3	18.4	0.4	1.9	12.1	14.5	0.4	26.4	0.7	27.5	

	"I" Street Southbound				2nd Street Westbound				"I" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	22	**82**	**6**	**110**	8	37	**4**	49	0	1	28	29	1	**80**	1	**82**	270
07:30 AM	24	64	3	91	8	**43**	3	54	**2**	1	**41**	**44**	1	80	0	81	270
07:45 AM	28	73	5	106	**14**	42	1	**57**	2	**8**	32	42	1	75	**3**	79	**284**
08:00 AM	**37**	53	3	93	6	36	4	46	0	6	24	30	**2**	70	0	72	241
Total Volume	111	272	17	400	36	158	12	206	4	16	125	145	5	305	4	314	1065
% App. Total	27.8	68	4.2		17.5	76.7	5.8		2.8	11	86.2		1.6	97.1	1.3		
PHF	.750	.829	.708	.909	.643	.919	.750	.904	.500	.500	.762	.824	.625	.953	.333	.957	.938

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25286 Jaclyn Avenue
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City of San Bernardino
N/S: "I" Street
E/W: 2nd Street
Weather: Sunny

File Name : SBCI2AM
Site Code : 9268137
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**37**	57	4	98	8	37	**4**	49	0	1	28	29	1	**80**	1	**82**
+15 mins.	22	**82**	**6**	**110**	8	**43**	3	54	**2**	1	**41**	**44**	1	80	0	81
+30 mins.	24	64	3	91	**14**	42	1	**57**	2	**8**	32	42	1	75	**3**	79
+45 mins.	28	73	5	106	6	36	4	46	0	6	24	30	**2**	70	0	72
Total Volume	111	276	18	405	36	158	12	206	4	16	125	145	5	305	4	314
% App. Total	27.4	68.1	4.4		17.5	76.7	5.8		2.8	11	86.2		1.6	97.1	1.3	
PHF	.750	.841	.750	.920	.643	.919	.750	.904	.500	.500	.762	.824	.625	.953	.333	.957

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S:"I" Street
E/W: 2nd Street
Weather: Sunny

File Name : SBCI2PM
Site Code : 9268137
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"I" Street Southbound				2nd Street Westbound				"I" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	13	44	9	66	5	48	0	53	0	9	61	70	4	82	4	90	279
04:15 PM	19	43	6	68	9	48	4	61	8	6	47	61	2	53	3	58	248
04:30 PM	24	49	10	83	7	55	1	63	4	8	52	64	2	75	2	79	289
04:45 PM	35	32	4	71	7	43	1	51	2	2	47	51	3	82	3	88	261
Total	91	168	29	288	28	194	6	228	14	25	207	246	11	292	12	315	1077
05:00 PM	24	30	9	63	11	49	2	62	4	8	57	69	1	94	2	97	291
05:15 PM	21	45	10	76	12	68	2	82	2	12	38	52	3	66	1	70	280
05:30 PM	21	41	6	68	5	61	3	69	3	6	54	63	2	79	1	82	282
05:45 PM	19	54	8	81	9	62	2	73	2	9	47	58	0	79	4	83	295
Total	85	170	33	288	37	240	9	286	11	35	196	242	6	318	8	332	1148
Grand Total	176	338	62	576	65	434	15	514	25	60	403	488	17	610	20	647	2225
Apprch %	30.6	58.7	10.8		12.6	84.4	2.9		5.1	12.3	82.6		2.6	94.3	3.1		
Total %	7.9	15.2	2.8	25.9	2.9	19.5	0.7	23.1	1.1	2.7	18.1	21.9	0.8	27.4	0.9	29.1	

	"I" Street Southbound				2nd Street Westbound				"I" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**24**	30	9	63	11	49	2	62	**4**	8	**57**	**69**	1	**94**	2	**97**	291
05:15 PM	21	45	**10**	76	**12**	**68**	2	**82**	2	**12**	38	52	**3**	66	1	70	280
05:30 PM	21	41	6	68	5	61	**3**	69	3	6	54	63	2	79	1	82	282
05:45 PM	19	**54**	8	**81**	9	62	2	73	2	9	47	58	0	79	**4**	83	**295**
Total Volume	85	170	33	288	37	240	9	286	11	35	196	242	6	318	8	332	1148
% App. Total	29.5	59	11.5		12.9	83.9	3.1		4.5	14.5	81		1.8	95.8	2.4		
PHF	.885	.787	.825	.889	.771	.882	.750	.872	.688	.729	.860	.877	.500	.846	.500	.856	.973

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City of San Bernardino
N/S:"I" Street
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Weather: Sunny

File Name : SBCI2PM
Site Code : 9268137
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				05:00 PM				04:00 PM				04:45 PM			
+0 mins.	24	**49**	**10**	**83**	11	49	2	62	0	**9**	**61**	**70**	**3**	82	**3**	88
+15 mins.	**35**	32	4	71	**12**	**68**	2	**82**	**8**	6	47	61	1	**94**	2	**97**
+30 mins.	24	30	9	63	5	61	**3**	69	4	8	52	64	3	66	1	70
+45 mins.	21	45	10	76	9	62	2	73	2	2	47	51	2	79	1	82
Total Volume	104	156	33	293	37	240	9	286	14	25	207	246	9	321	7	337
% App. Total	35.5	53.2	11.3		12.9	83.9	3.1		5.7	10.2	84.1		2.7	95.3	2.1	
PHF	.743	.796	.825	.883	.771	.882	.750	.872	.438	.694	.848	.879	.750	.854	.583	.869

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City of San Bernardino
N/S: I-215 Southbound On Ramp
E/W: 2nd Street
Weather: Sunny

File Name : SBC215S2AM
Site Code : 9268131
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	2nd Street Westbound			I-215 Southbound On Ramp Northbound			2nd Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	44	35	79	0	0	0	85	22	107	186
07:15 AM	45	51	96	0	0	0	105	35	140	236
07:30 AM	48	58	106	0	0	0	105	47	152	258
07:45 AM	56	60	116	0	0	0	104	41	145	261
Total	193	204	397	0	0	0	399	145	544	941
08:00 AM	48	49	97	0	0	0	104	37	141	238
08:15 AM	53	44	97	0	0	0	86	21	107	204
08:30 AM	71	36	107	0	0	0	78	21	99	206
08:45 AM	61	37	98	0	0	0	80	28	108	206
Total	233	166	399	0	0	0	348	107	455	854
Grand Total	426	370	796	0	0	0	747	252	999	1795
Apprch %	53.5	46.5		0	0		74.8	25.2		
Total %	23.7	20.6	44.3	0	0	0	41.6	14	55.7	

	2nd Street Westbound			I-215 Southbound On Ramp Northbound			2nd Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	45	51	96	0	0	0	**105**	35	140	236
07:30 AM	48	58	106	0	0	0	105	**47**	**152**	258
07:45 AM	**56**	**60**	**116**	0	0	0	104	41	145	**261**
08:00 AM	48	49	97	0	0	0	104	37	141	238
Total Volume	197	218	415	0	0	0	418	160	578	993
% App. Total	47.5	52.5		0	0		72.3	27.7		
PHF	.879	.908	.894	.000	.000	.000	.995	.851	.951	.951

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City of San Bernardino
N/S: I-215 Southbound On Ramp
E/W: 2nd Street
Weather: Sunny

File Name : SBC215S2AM
Site Code : 9268131
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM			07:00 AM			07:15 AM		
+0 mins.	56	**60**	**116**	0	0	0	**105**	35	140
+15 mins.	48	49	97	0	0	0	105	**47**	**152**
+30 mins.	53	44	97	0	0	0	104	41	145
+45 mins.	**71**	36	107	0	0	0	104	37	141
Total Volume	228	189	417	0	0	0	418	160	578
% App. Total	54.7	45.3		0	0		72.3	27.7	
PHF	.803	.788	.899	.000	.000	.000	.995	.851	.951

Counts Unlimited Inc.
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City of San Bernardino
N/S: I-215 Southbound On Ramp
E/W: 2nd Street
Weather: Sunny

File Name : SBC215S2PM
Site Code : 9268131
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	2nd Street Westbound			I-215 Southbound On Ramp Northbound			2nd Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	143	49	192	0	0	0	132	35	167	359
04:15 PM	124	71	195	0	0	0	94	25	119	314
04:30 PM	171	63	234	0	0	0	103	39	142	376
04:45 PM	144	64	208	0	0	0	116	40	156	364
Total	582	247	829	0	0	0	445	139	584	1413
05:00 PM	190	69	259	0	0	0	112	55	167	426
05:15 PM	160	89	249	0	0	0	110	23	133	382
05:30 PM	180	73	253	0	0	0	122	40	162	415
05:45 PM	120	83	203	0	0	0	124	41	165	368
Total	650	314	964	0	0	0	468	159	627	1591
Grand Total	1232	561	1793	0	0	0	913	298	1211	3004
Apprch %	68.7	31.3		0	0		75.4	24.6		
Total %	41	18.7	59.7	0	0	0	30.4	9.9	40.3	

	2nd Street Westbound			I-215 Southbound On Ramp Northbound			2nd Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	**190**	69	**259**	0	0	0	112	**55**	**167**	**426**
05:15 PM	160	**89**	249	0	0	0	110	23	133	382
05:30 PM	180	73	253	0	0	0	122	40	162	415
05:45 PM	120	83	203	0	0	0	**124**	41	165	368
Total Volume	650	314	964	0	0	0	468	159	627	1591
% App. Total	67.4	32.6		0	0		74.6	25.4		
PHF	.855	.882	.931	.000	.000	.000	.944	.723	.939	.934

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City of San Bernardino
N/S: I-215 Southbound On Ramp
E/W: 2nd Street
Weather: Sunny

File Name : SBC215S2PM
Site Code : 9268131
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM			04:00 PM			05:00 PM		
+0 mins.	144	64	208	0	0	0	112	**55**	**167**
+15 mins.	**190**	69	**259**	0	0	0	110	23	133
+30 mins.	160	**89**	249	0	0	0	122	40	162
+45 mins.	180	73	253	0	0	0	**124**	41	165
Total Volume	674	295	969	0	0	0	468	159	627
% App. Total	69.6	30.4		0	0		74.6	25.4	
PHF	.887	.829	.935	.000	.000	.000	.944	.723	.939

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: 2nd Street
Weather: Sunny

File Name : SBC215N2AM
Site Code : 9268135
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	I-215 Northbound On Ramp Southbound				2nd Street Westbound				I-215 Northbound Off Ramp Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	47	20	67	42	0	222	264	38	47	0	85	416
07:15 AM	0	0	0	0	0	60	42	102	49	0	317	366	55	51	0	106	574
07:30 AM	0	0	0	0	0	74	39	113	36	0	242	278	68	36	0	104	495
07:45 AM	0	0	0	0	0	78	43	121	57	0	291	348	49	53	0	102	571
Total	0	0	0	0	0	259	144	403	184	0	1072	1256	210	187	0	397	2056
08:00 AM	0	0	0	0	0	59	46	105	38	0	225	263	57	55	0	112	480
08:15 AM	0	0	0	0	0	88	53	141	26	0	194	220	36	52	0	88	449
08:30 AM	0	0	0	0	0	87	51	138	23	1	204	228	39	41	0	80	446
08:45 AM	0	0	0	0	0	76	29	105	21	0	173	194	33	38	0	71	370
Total	0	0	0	0	0	310	179	489	108	1	796	905	165	186	0	351	1745
Grand Total	0	0	0	0	0	569	323	892	292	1	1868	2161	375	373	0	748	3801
Apprch %	0	0	0		0	63.8	36.2		13.5	0	86.4		50.1	49.9	0		
Total %	0	0	0	0	0	15	8.5	23.5	7.7	0	49.1	56.9	9.9	9.8	0	19.7	

	I-215 Northbound On Ramp Southbound				2nd Street Westbound				I-215 Northbound Off Ramp Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	60	42	102	49	0	**317**	**366**	55	51	0	106	**574**
07:30 AM	0	0	0	0	0	74	39	113	36	0	242	278	**68**	36	0	104	495
07:45 AM	0	0	0	0	0	**78**	43	**121**	**57**	0	291	348	49	53	0	102	571
08:00 AM	0	0	0	0	0	59	**46**	105	38	0	225	263	57	**55**	0	**112**	480
Total Volume	0	0	0	0	0	271	170	441	180	0	1075	1255	229	195	0	424	2120
% App. Total	0	0	0		0	61.5	38.5		14.3	0	85.7		54	46	0		
PHF	.000	.000	.000	.000	.000	.869	.924	.911	.789	.000	.848	.857	.842	.886	.000	.946	.923

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25286 Jaclyn Avenue
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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: 2nd Street
Weather: Sunny

File Name : SBC215N2AM
Site Code : 9268135
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:00 AM				07:15 AM			
+0 mins.	0	0	0	0	0	78	43	121	42	0	222	264	55	51	0	106
+15 mins.	0	0	0	0	0	59	46	105	49	0	**317**	**366**	**68**	36	0	104
+30 mins.	0	0	0	0	0	**88**	**53**	**141**	36	0	242	278	49	53	0	102
+45 mins.	0	0	0	0	0	87	51	138	**57**	0	291	348	57	**55**	0	**112**
Total Volume	0	0	0	0	0	312	193	505	184	0	1072	1256	229	195	0	424
% App. Total	0	0	0		0	61.8	38.2		14.6	0	85.4		54	46	0	
PHF	.000	.000	.000	.000	.000	.886	.910	.895	.807	.000	.845	.858	.842	.886	.000	.946

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: 2nd Street
Weather: Sunny

File Name : SBC215N2PM
Site Code : 9268135
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	I-215 Northbound On Ramp Southbound				2nd Street Westbound				I-210 Northbound Off Ramp Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	168	113	281	33	0	97	130	79	50	0	129	540
04:15 PM	0	0	0	0	0	163	99	262	27	0	66	93	67	43	0	110	465
04:30 PM	0	0	0	0	0	222	128	350	32	0	76	108	62	48	0	110	568
04:45 PM	0	0	0	0	0	199	125	324	27	1	69	97	58	45	0	103	524
Total	0	0	0	0	0	752	465	1217	119	1	308	428	266	186	0	452	2097
05:00 PM	0	0	0	0	0	241	114	355	30	0	52	82	60	51	0	111	548
05:15 PM	0	0	0	0	0	222	134	356	36	0	61	97	74	49	0	123	576
05:30 PM	0	0	0	0	0	233	137	370	25	0	42	67	63	57	0	120	557
05:45 PM	0	0	0	0	0	160	106	266	38	0	44	82	78	51	0	129	477
Total	0	0	0	0	0	856	491	1347	129	0	199	328	275	208	0	483	2158
Grand Total	0	0	0	0	0	1608	956	2564	248	1	507	756	541	394	0	935	4255
Apprch %	0	0	0		0	62.7	37.3		32.8	0.1	67.1		57.9	42.1	0		
Total %	0	0	0	0	0	37.8	22.5	60.3	5.8	0	11.9	17.8	12.7	9.3	0	22	

	I-215 Northbound On Ramp Southbound				2nd Street Westbound				I-210 Northbound Off Ramp Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	222	128	350	32	0	**76**	**108**	62	48	0	110	568
04:45 PM	0	0	0	0	0	199	125	324	27	**1**	69	97	58	45	0	103	524
05:00 PM	0	0	0	0	0	**241**	114	355	30	0	52	82	60	**51**	0	111	548
05:15 PM	0	0	0	0	0	222	**134**	**356**	**36**	0	61	97	**74**	49	0	**123**	**576**
Total Volume	0	0	0	0	0	884	501	1385	125	1	258	384	254	193	0	447	2216
% App. Total	0	0	0		0	63.8	36.2		32.6	0.3	67.2		56.8	43.2	0		
PHF	.000	.000	.000	.000	.000	.917	.935	.973	.868	.250	.849	.889	.858	.946	.000	.909	.962

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: 2nd Street
Weather: Sunny

File Name : SBC215N2PM
Site Code : 9268135
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:45 PM				04:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	199	125	324	**33**	0	**97**	**130**	60	51	0	111
+15 mins.	0	0	0	0	0	**241**	114	355	27	0	66	93	74	49	0	123
+30 mins.	0	0	0	0	0	222	134	356	32	0	76	108	63	**57**	0	120
+45 mins.	0	0	0	0	0	233	**137**	**370**	27	**1**	69	97	**78**	51	0	**129**
Total Volume	0	0	0	0	0	895	510	1405	119	1	308	428	275	208	0	483
% App. Total	0	0	0		0	63.7	36.3		27.8	0.2	72		56.9	43.1	0	
PHF	.000	.000	.000	.000	.000	.928	.931	.949	.902	.250	.794	.823	.881	.912	.000	.936

Counts Unlimited Inc.
25286 Jaclyn Avenue
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(951) 485-7934

City of San Bernardino
N/S: "G" Street
E/W: 2nd Street
Weather: Sunny

File Name : SBCG2AM
Site Code : 9268001
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"G" Street Southbound				2nd Street Westbound				"G" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	18	12	4	34	5	44	6	55	20	9	5	34	15	223	27	265	388
07:15 AM	17	20	7	44	2	68	6	76	17	24	10	51	27	289	25	341	512
07:30 AM	24	27	9	60	5	65	12	82	29	19	5	53	23	213	29	265	460
07:45 AM	17	62	13	92	11	71	6	88	17	23	5	45	31	245	23	299	524
Total	76	121	33	230	23	248	30	301	83	75	25	183	96	970	104	1170	1884
08:00 AM	27	22	11	60	8	61	7	76	28	11	9	48	24	232	29	285	469
08:15 AM	18	32	13	63	7	84	5	96	27	12	7	46	12	180	20	212	417
08:30 AM	15	33	16	64	7	69	9	85	25	20	3	48	14	192	20	226	423
08:45 AM	21	34	3	58	16	89	10	115	23	21	3	47	12	161	14	187	407
Total	81	121	43	245	38	303	31	372	103	64	22	189	62	765	83	910	1716
Grand Total	157	242	76	475	61	551	61	673	186	139	47	372	158	1735	187	2080	3600
Apprch %	33.1	50.9	16		9.1	81.9	9.1		50	37.4	12.6		7.6	83.4	9		
Total %	4.4	6.7	2.1	13.2	1.7	15.3	1.7	18.7	5.2	3.9	1.3	10.3	4.4	48.2	5.2	57.8	

	"G" Street Southbound				2nd Street Westbound				"G" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	17	20	7	44	2	68	6	76	17	**24**	**10**	51	27	**289**	25	**341**	512
07:30 AM	24	27	9	60	5	65	**12**	82	**29**	19	5	**53**	23	213	**29**	265	460
07:45 AM	17	**62**	**13**	**92**	**11**	**71**	6	**88**	17	23	5	45	**31**	245	23	299	**524**
08:00 AM	**27**	22	11	60	8	61	7	76	28	11	9	48	24	232	29	285	469
Total Volume	85	131	40	256	26	265	31	322	91	77	29	197	105	979	106	1190	1965
% App. Total	33.2	51.2	15.6		8.1	82.3	9.6		46.2	39.1	14.7		8.8	82.3	8.9		
PHF	.787	.528	.769	.696	.591	.933	.646	.915	.784	.802	.725	.929	.847	.847	.914	.872	.938

Counts Unlimited Inc.
25286 Jaclyn Avenue
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(951) 485-7934

City of San Bernardino
N/S: "G" Street
E/W: 2nd Street
Weather: Sunny

File Name : SBCG2AM
Site Code : 9268001
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				07:15 AM				07:15 AM			
+0 mins.	17	**62**	13	**92**	8	61	7	76	17	**24**	**10**	51	27	**289**	25	**341**
+15 mins.	**27**	22	11	60	7	84	5	96	**29**	19	5	**53**	23	213	**29**	265
+30 mins.	18	32	13	63	7	69	9	85	17	23	5	45	**31**	245	23	299
+45 mins.	15	33	**16**	64	**16**	**89**	**10**	**115**	28	11	9	48	24	232	29	285
Total Volume	77	149	53	279	38	303	31	372	91	77	29	197	105	979	106	1190
% App. Total	27.6	53.4	19		10.2	81.5	8.3		46.2	39.1	14.7		8.8	82.3	8.9	
PHF	.713	.601	.828	.758	.594	.851	.775	.809	.784	.802	.725	.929	.847	.847	.914	.872

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "G" Street
E/W: 2nd Street
Weather: Sunny

File Name : SBCG2PM
Site Code : 9268001
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"G" Street Southbound				2nd Street Westbound				"G" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	16	23	26	65	13	188	16	217	80	39	11	130	22	96	9	127	539
04:15 PM	10	34	14	58	19	177	14	210	48	42	15	105	13	86	13	112	485
04:30 PM	12	31	22	65	19	228	14	261	64	46	8	118	19	92	6	117	561
04:45 PM	15	39	16	70	20	213	16	249	59	34	17	110	7	83	7	97	526
Total	53	127	78	258	71	806	60	937	251	161	51	463	61	357	35	453	2111
05:00 PM	15	28	21	64	15	277	22	314	76	55	11	142	23	65	7	95	615
05:15 PM	11	41	27	79	27	224	25	276	58	50	12	120	25	65	7	97	572
05:30 PM	16	39	23	78	21	248	25	294	66	38	5	109	17	50	5	72	553
05:45 PM	6	37	25	68	22	167	18	207	58	41	7	106	16	64	5	85	466
Total	48	145	96	289	85	916	90	1091	258	184	35	477	81	244	24	349	2206
Grand Total	101	272	174	547	156	1722	150	2028	509	345	86	940	142	601	59	802	4317
Apprch %	18.5	49.7	31.8		7.7	84.9	7.4		54.1	36.7	9.1		17.7	74.9	7.4		
Total %	2.3	6.3	4	12.7	3.6	39.9	3.5	47	11.8	8	2	21.8	3.3	13.9	1.4	18.6	

	"G" Street Southbound				2nd Street Westbound				"G" Street Northbound				2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	12	31	22	65	19	228	14	261	64	46	8	118	19	**92**	6	**117**	561
04:45 PM	**15**	39	16	70	20	213	16	249	59	34	**17**	110	7	83	**7**	97	526
05:00 PM	15	28	21	64	15	**277**	22	**314**	**76**	**55**	11	**142**	23	65	7	95	**615**
05:15 PM	11	**41**	**27**	**79**	**27**	224	**25**	276	58	50	12	120	**25**	65	7	97	572
Total Volume	53	139	86	278	81	942	77	1100	257	185	48	490	74	305	27	406	2274
% App. Total	19.1	50	30.9		7.4	85.6	7		52.4	37.8	9.8		18.2	75.1	6.7		
PHF	.883	.848	.796	.880	.750	.850	.770	.876	.845	.841	.706	.863	.740	.829	.964	.868	.924

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "G" Street
E/W: 2nd Street
Weather: Sunny

File Name : SBCG2PM
Site Code : 9268001
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:30 PM				04:00 PM			
+0 mins.	15	39	16	70	20	213	16	249	64	46	8	118	**22**	**96**	9	**127**
+15 mins.	15	28	21	64	15	**277**	22	**314**	59	34	**17**	110	13	86	**13**	112
+30 mins.	11	**41**	**27**	**79**	**27**	224	**25**	276	**76**	**55**	11	**142**	19	92	6	117
+45 mins.	**16**	39	23	78	21	248	25	294	58	50	12	120	7	83	7	97
Total Volume	57	147	87	291	83	962	88	1133	257	185	48	490	61	357	35	453
% App. Total	19.6	50.5	29.9		7.3	84.9	7.8		52.4	37.8	9.8		13.5	78.8	7.7	
PHF	.891	.896	.806	.921	.769	.868	.880	.902	.845	.841	.706	.863	.693	.930	.673	.892

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Rancho Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCRARIAM
Site Code : 9268083
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	Rancho Avenue Southbound				Rialto Avenue Westbound				Rancho Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	7	25	4	36	12	38	4	54	18	22	22	62	5	49	20	74	226
07:15 AM	10	48	6	64	14	29	9	52	16	47	36	99	6	53	21	80	295
07:30 AM	17	29	4	50	18	33	10	61	23	38	33	94	4	91	30	125	330
07:45 AM	21	33	1	55	13	30	14	57	20	40	44	104	10	90	26	126	342
Total	55	135	15	205	57	130	37	224	77	147	135	359	25	283	97	405	1193
08:00 AM	17	29	1	47	7	39	8	54	17	21	21	59	11	61	22	94	254
08:15 AM	13	21	1	35	8	27	10	45	11	33	23	67	7	72	18	97	244
08:30 AM	9	26	5	40	7	41	11	59	12	25	17	54	4	52	21	77	230
08:45 AM	9	27	6	42	13	39	4	56	21	18	17	56	3	48	17	68	222
Total	48	103	13	164	35	146	33	214	61	97	78	236	25	233	78	336	950
Grand Total	103	238	28	369	92	276	70	438	138	244	213	595	50	516	175	741	2143
Apprch %	27.9	64.5	7.6		21	63	16		23.2	41	35.8		6.7	69.6	23.6		
Total %	4.8	11.1	1.3	17.2	4.3	12.9	3.3	20.4	6.4	11.4	9.9	27.8	2.3	24.1	8.2	34.6	

	Rancho Avenue Southbound				Rialto Avenue Westbound				Rancho Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	10	**48**	**6**	**64**	14	29	9	52	16	**47**	36	99	6	53	21	80	295
07:30 AM	17	29	4	50	**18**	33	10	**61**	**23**	38	33	94	4	**91**	**30**	125	330
07:45 AM	**21**	33	1	55	13	30	**14**	57	20	40	**44**	**104**	10	90	26	**126**	**342**
08:00 AM	17	29	1	47	7	**39**	8	54	17	21	21	59	**11**	61	22	94	254
Total Volume	65	139	12	216	52	131	41	224	76	146	134	356	31	295	99	425	1221
% App. Total	30.1	64.4	5.6		23.2	58.5	18.3		21.3	41	37.6		7.3	69.4	23.3		
PHF	.774	.724	.500	.844	.722	.840	.732	.918	.826	.777	.761	.856	.705	.810	.825	.843	.893

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Rancho Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCRARIAM
Site Code : 9268083
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:00 AM				07:30 AM			
+0 mins.	10	**48**	**6**	**64**	12	**38**	4	54	18	22	22	62	4	**91**	**30**	125
+15 mins.	17	29	4	50	14	29	9	52	16	**47**	36	99	10	90	26	**126**
+30 mins.	**21**	33	1	55	**18**	33	10	**61**	**23**	38	33	94	**11**	61	22	94
+45 mins.	17	29	1	47	13	30	**14**	57	20	40	**44**	**104**	7	72	18	97
Total Volume	65	139	12	216	57	130	37	224	77	147	135	359	32	314	96	442
% App. Total	30.1	64.4	5.6		25.4	58	16.5		21.4	40.9	37.6		7.2	71	21.7	
PHF	.774	.724	.500	.844	.792	.855	.661	.918	.837	.782	.767	.863	.727	.863	.800	.877

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Rancho Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCRARIPM
Site Code : 9268083
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	Rancho Avenue Southbound				Rialto Avenue Westbound				Rancho Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:15 PM	11	50	6	67	21	71	9	101	36	53	20	109	8	65	20	93	370
04:30 PM	21	30	7	58	28	75	9	112	20	42	18	80	2	61	24	87	337
04:45 PM	11	39	5	55	24	89	11	124	38	58	20	116	6	61	16	83	378
Total	43	119	18	180	73	235	29	337	94	153	58	305	16	187	60	263	1085
05:00 PM	11	41	3	55	23	84	15	122	30	42	26	98	8	50	23	81	356
05:15 PM	9	37	6	52	45	118	12	175	28	36	22	86	7	52	20	79	392
05:30 PM	15	42	3	60	32	89	13	134	44	54	23	121	7	48	24	79	394
05:45 PM	9	31	5	45	28	78	9	115	24	42	16	82	10	48	28	86	328
Total	44	151	17	212	128	369	49	546	126	174	87	387	32	198	95	325	1470
06:00 PM	14	28	3	45	23	76	12	111	29	40	28	97	6	49	26	81	334
Grand Total	101	298	38	437	224	680	90	994	249	367	173	789	54	434	181	669	2889
Apprch %	23.1	68.2	8.7		22.5	68.4	9.1		31.6	46.5	21.9		8.1	64.9	27.1		
Total %	3.5	10.3	1.3	15.1	7.8	23.5	3.1	34.4	8.6	12.7	6	27.3	1.9	15	6.3	23.2	

	Rancho Avenue Southbound				Rialto Avenue Westbound				Rancho Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	11	39	5	55	24	89	11	124	38	**58**	20	116	6	**61**	16	**83**	378
05:00 PM	11	41	3	55	23	84	**15**	122	30	42	**26**	98	**8**	50	23	81	356
05:15 PM	9	37	**6**	52	**45**	**118**	12	**175**	28	36	22	86	7	52	20	79	392
05:30 PM	**15**	**42**	3	**60**	32	89	13	134	**44**	54	23	**121**	7	48	**24**	79	**394**
Total Volume	46	159	17	222	124	380	51	555	140	190	91	421	28	211	83	322	1520
% App. Total	20.7	71.6	7.7		22.3	68.5	9.2		33.3	45.1	21.6		8.7	65.5	25.8		
PHF	.767	.946	.708	.925	.689	.805	.850	.793	.795	.819	.875	.870	.875	.865	.865	.970	.964

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Rancho Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCRARIPM
Site Code : 9268083
Start Date : 10/20/2009
Page No : 2

Peak Hour Analysis From 04:15 PM to 06:00 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				04:45 PM				04:45 PM				04:15 PM			
+0 mins.	11	**50**	6	**67**	24	89	11	124	38	**58**	20	116	**8**	**65**	20	**93**
+15 mins.	**21**	30	**7**	58	23	84	**15**	122	30	42	**26**	98	2	61	**24**	87
+30 mins.	11	39	5	55	**45**	**118**	12	**175**	28	36	22	86	6	61	16	83
+45 mins.	11	41	3	55	32	89	13	134	**44**	54	23	**121**	8	50	23	81
Total Volume	54	160	21	235	124	380	51	555	140	190	91	421	24	237	83	344
% App. Total	23	68.1	8.9		22.3	68.5	9.2		33.3	45.1	21.6		7	68.9	24.1	
PHF	.643	.800	.750	.877	.689	.805	.850	.793	.795	.819	.875	.870	.750	.912	.865	.925

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Santa Fe Way
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCSFRIAM
Site Code : 9268009
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	Santa Fe Way Southbound			Rialto Avenue Westbound			Rialto Avenue Eastbound			
Start Time	Left	Rght	App. Total	Thru	Rght	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	3	2	5	47	9	56	2	80	82	143
07:15 AM	4	11	15	44	7	51	2	100	102	168
07:30 AM	6	4	10	52	4	56	8	133	141	207
07:45 AM	2	4	6	45	5	50	1	183	184	240
Total	15	21	36	188	25	213	13	496	509	758
08:00 AM	2	7	9	54	7	61	4	96	100	170
08:15 AM	9	4	13	41	4	45	2	103	105	163
08:30 AM	1	5	6	51	2	53	2	94	96	155
08:45 AM	3	3	6	57	1	58	3	72	75	139
Total	15	19	34	203	14	217	11	365	376	627
Grand Total	30	40	70	391	39	430	24	861	885	1385
Apprch %	42.9	57.1		90.9	9.1		2.7	97.3		
Total %	2.2	2.9	5.1	28.2	2.8	31	1.7	62.2	63.9	

	Santa Fe Way Southbound			Rialto Avenue Westbound			Rialto Avenue Eastbound			
Start Time	Left	Rght	App. Total	Thru	Rght	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	4	**11**	**15**	44	**7**	51	2	100	102	168
07:30 AM	**6**	4	10	52	4	56	**8**	133	141	207
07:45 AM	2	4	6	45	5	50	1	**183**	**184**	**240**
08:00 AM	2	7	9	**54**	7	**61**	4	96	100	170
Total Volume	14	26	40	195	23	218	15	512	527	785
% App. Total	35	65		89.4	10.6		2.8	97.2		
PHF	.583	.591	.667	.903	.821	.893	.469	.699	.716	.818

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Santa Fe Way
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCSFRIAM
Site Code : 9268009
Start Date : 10/20/2009
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:30 AM		
+0 mins.	4	**11**	**15**	44	**7**	51	**8**	133	141
+15 mins.	**6**	4	10	52	4	56	1	**183**	**184**
+30 mins.	2	4	6	45	5	50	4	96	100
+45 mins.	2	7	9	**54**	7	**61**	2	103	105
Total Volume	14	26	40	195	23	218	15	515	530
% App. Total	35	65		89.4	10.6		2.8	97.2	
PHF	.583	.591	.667	.903	.821	.893	.469	.704	.720

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Santa Fe Way
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCSFRIPM
Site Code : 9268009
Start Date : 10/20/2009
Page No : 1

Groups Printed- Total Volume

	Santa Fe Way Southbound			Rialto Avenue Westbound			Rialto Avenue Eastbound			
Start Time	Left	Rght	App. Total	Thru	Rght	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	6	3	9	100	3	103	7	80	87	199
04:15 PM	2	7	9	112	0	112	6	86	92	213
04:30 PM	7	7	14	127	1	128	10	96	106	248
04:45 PM	4	6	10	115	6	121	1	81	82	213
Total	19	23	42	454	10	464	24	343	367	873
05:00 PM	4	4	8	154	4	158	0	89	89	255
05:15 PM	1	5	6	142	3	145	3	74	77	228
05:30 PM	3	4	7	113	0	113	3	68	71	191
05:45 PM	1	2	3	114	4	118	5	76	81	202
Total	9	15	24	523	11	534	11	307	318	876
Grand Total	28	38	66	977	21	998	35	650	685	1749
Apprch %	42.4	57.6		97.9	2.1		5.1	94.9		
Total %	1.6	2.2	3.8	55.9	1.2	57.1	2	37.2	39.2	

	Santa Fe Way Southbound			Rialto Avenue Westbound			Rialto Avenue Eastbound			
Start Time	Left	Rght	App. Total	Thru	Rght	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**7**	**7**	**14**	127	1	128	**10**	**96**	**106**	248
04:45 PM	4	6	10	115	**6**	121	1	81	82	213
05:00 PM	4	4	8	**154**	4	**158**	0	89	89	**255**
05:15 PM	1	5	6	142	3	145	3	74	77	228
Total Volume	16	22	38	538	14	552	14	340	354	944
% App. Total	42.1	57.9		97.5	2.5		4	96		
PHF	.571	.786	.679	.873	.583	.873	.350	.885	.835	.925

Counts Unlimited Inc.
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City of San Bernardino
N/S: Santa Fe Way
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Weather: Sunny

File Name : SBCSFRIPM
Site Code : 9268009
Start Date : 10/20/2009
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:30 PM			04:15 PM		
+0 mins.	6	3	9	127	1	128	6	86	92
+15 mins.	2	**7**	9	115	**6**	121	**10**	**96**	**106**
+30 mins.	**7**	7	**14**	**154**	4	**158**	1	81	82
+45 mins.	4	6	10	142	3	145	0	89	89
Total Volume	19	23	42	538	14	552	17	352	369
% App. Total	45.2	54.8		97.5	2.5		4.6	95.4	
PHF	.679	.821	.750	.873	.583	.873	.425	.917	.870

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCMVRIAM
Site Code : 9268001
Start Date : 10/22/2009
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	7	39	20	66	8	30	2	40	3	44	14	61	13	60	5	78	245
07:15 AM	11	53	24	88	11	42	7	60	10	53	12	75	12	86	8	106	329
07:30 AM	11	115	10	136	6	39	4	49	6	61	9	76	23	108	17	148	409
07:45 AM	11	152	24	187	13	34	5	52	9	88	19	116	28	117	20	165	520
Total	40	359	78	477	38	145	18	201	28	246	54	328	76	371	50	497	1503
08:00 AM	14	78	20	112	11	27	5	43	3	80	10	93	21	73	13	107	355
08:15 AM	10	50	14	74	16	42	7	65	5	49	14	68	14	77	6	97	304
08:30 AM	13	96	14	123	14	44	8	66	8	66	8	82	15	78	11	104	375
08:45 AM	12	92	13	117	9	33	9	51	6	83	10	99	13	60	11	84	351
Total	49	316	61	426	50	146	29	225	22	278	42	342	63	288	41	392	1385
Grand Total	89	675	139	903	88	291	47	426	50	524	96	670	139	659	91	889	2888
Apprch %	9.9	74.8	15.4		20.7	68.3	11		7.5	78.2	14.3		15.6	74.1	10.2		
Total %	3.1	23.4	4.8	31.3	3	10.1	1.6	14.8	1.7	18.1	3.3	23.2	4.8	22.8	3.2	30.8	
Passenger Vehicles	88	654	123	865	83	276	47	406	46	507	95	648	102	641	84	827	2746
% Passenger Vehicles	98.9	96.9	88.5	95.8	94.3	94.8	100	95.3	92	96.8	99	96.7	73.4	97.3	92.3	93	95.1
Large 2 Axle Vehicles	1	17	3	21	4	11	0	15	1	14	1	16	4	8	3	15	67
% Large 2 Axle Vehicles	1.1	2.5	2.2	2.3	4.5	3.8	0	3.5	2	2.7	1	2.4	2.9	1.2	3.3	1.7	2.3
3 Axle Vehicles	0	1	3	4	0	0	0	0	2	0	0	2	1	3	3	7	13
% 3 Axle Vehicles	0	0.1	2.2	0.4	0	0	0	0	4	0	0	0.3	0.7	0.5	3.3	0.8	0.5
4+ Axle Trucks	0	3	10	13	1	4	0	5	1	3	0	4	32	7	1	40	62
% 4+ Axle Trucks	0	0.4	7.2	1.4	1.1	1.4	0	1.2	2	0.6	0	0.6	23	1.1	1.1	4.5	2.1

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	11	53	**24**	88	11	**42**	**7**	**60**	**10**	53	12	75	12	86	8	106	329
07:30 AM	11	115	10	136	6	39	4	49	6	61	9	76	23	108	17	148	409
07:45 AM	11	**152**	24	**187**	**13**	34	5	52	9	**88**	**19**	**116**	**28**	**117**	**20**	**165**	**520**
08:00 AM	**14**	78	20	112	11	27	5	43	3	80	10	93	21	73	13	107	355
Total Volume	47	398	78	523	41	142	21	204	28	282	50	360	84	384	58	526	1613
% App. Total	9	76.1	14.9		20.1	69.6	10.3		7.8	78.3	13.9		16	73	11		
PHF	.839	.655	.813	.699	.788	.845	.750	.850	.700	.801	.658	.776	.750	.821	.725	.797	.775

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCMVRIAM
Site Code : 9268001
Start Date : 10/22/2009
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:15 AM				07:15 AM			
+0 mins.	11	53	**24**	88	13	34	5	52	**10**	53	12	75	12	86	8	106
+15 mins.	11	115	10	136	11	27	5	43	6	61	9	76	23	108	17	148
+30 mins.	11	**152**	24	**187**	**16**	42	7	65	9	**88**	**19**	**116**	**28**	**117**	**20**	**165**
+45 mins.	**14**	78	20	112	14	**44**	**8**	**66**	3	80	10	93	21	73	13	107
Total Volume	47	398	78	523	54	147	25	226	28	282	50	360	84	384	58	526
% App. Total	9	76.1	14.9		23.9	65	11.1		7.8	78.3	13.9		16	73	11	
PHF	.839	.655	.813	.699	.844	.835	.781	.856	.700	.801	.658	.776	.750	.821	.725	.797

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCMVRIAM
Site Code : 9268001
Start Date : 10/22/2009
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Groups Printed- Passenger Vehicles

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	7	36	18	61	7	30	2	39	3	41	14	58	10	58	4	72	230
07:15 AM	11	51	23	85	11	42	7	60	10	51	12	73	12	83	8	103	321
07:30 AM	11	114	7	132	6	34	4	44	6	59	8	73	12	104	14	130	379
07:45 AM	11	151	20	182	10	27	5	42	7	86	19	112	20	114	19	153	489
Total	40	352	68	460	34	133	18	185	26	237	53	316	54	359	45	458	1419
08:00 AM	14	76	17	107	11	26	5	42	3	76	10	89	17	72	13	102	340
08:15 AM	10	47	13	70	16	42	7	65	3	47	14	64	12	74	6	92	291
08:30 AM	12	93	13	118	14	43	8	65	8	65	8	81	11	76	9	96	360
08:45 AM	12	86	12	110	8	32	9	49	6	82	10	98	8	60	11	79	336
Total	48	302	55	405	49	143	29	221	20	270	42	332	48	282	39	369	1327
Grand Total	88	654	123	865	83	276	47	406	46	507	95	648	102	641	84	827	2746
Apprch %	10.2	75.6	14.2		20.4	68	11.6		7.1	78.2	14.7		12.3	77.5	10.2		
Total %	3.2	23.8	4.5	31.5	3	10.1	1.7	14.8	1.7	18.5	3.5	23.6	3.7	23.3	3.1	30.1	

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	11	51	**23**	85	**11**	**42**	**7**	**60**	**10**	51	12	73	12	83	8	103	321
07:30 AM	11	114	7	132	6	34	4	44	6	59	8	73	12	104	14	130	379
07:45 AM	11	**151**	20	**182**	10	27	5	42	7	**86**	**19**	**112**	**20**	**114**	**19**	**153**	**489**
08:00 AM	**14**	76	17	107	11	26	5	42	3	76	10	89	17	72	13	102	340
Total Volume	47	392	67	506	38	129	21	188	26	272	49	347	61	373	54	488	1529
% App. Total	9.3	77.5	13.2		20.2	68.6	11.2		7.5	78.4	14.1		12.5	76.4	11.1		
PHF	.839	.649	.728	.695	.864	.768	.750	.783	.650	.791	.645	.775	.763	.818	.711	.797	.782

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCMVRIAM
Site Code : 9268001
Start Date : 10/22/2009
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	11	51	**23**	85	**11**	**42**	**7**	**60**	**10**	51	12	73	12	83	8	103
+15 mins.	11	114	7	132	6	34	4	44	6	59	8	73	12	104	14	130
+30 mins.	11	**151**	20	**182**	10	27	5	42	7	**86**	**19**	**112**	**20**	**114**	**19**	**153**
+45 mins.	**14**	76	17	107	11	26	5	42	3	76	10	89	17	72	13	102
Total Volume	47	392	67	506	38	129	21	188	26	272	49	347	61	373	54	488
% App. Total	9.3	77.5	13.2		20.2	68.6	11.2		7.5	78.4	14.1		12.5	76.4	11.1	
PHF	.839	.649	.728	.695	.864	.768	.750	.783	.650	.791	.645	.775	.763	.818	.711	.797

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCMVRIAM
Site Code : 9268001
Start Date : 10/22/2009
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
07:15 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	2	0	2	6
07:30 AM	0	1	0	1	0	4	0	4	0	2	1	3	0	1	1	2	10
07:45 AM	0	0	2	2	3	5	0	8	0	1	0	1	3	2	1	6	17
Total	0	5	2	7	3	9	0	12	0	6	1	7	3	5	2	10	36
08:00 AM	0	2	1	3	0	1	0	1	0	4	0	4	1	1	0	2	10
08:15 AM	0	3	0	3	0	0	0	0	1	2	0	3	0	1	0	1	7
08:30 AM	1	2	0	3	0	0	0	0	0	1	0	1	0	1	1	2	6
08:45 AM	0	5	0	5	1	1	0	2	0	1	0	1	0	0	0	0	8
Total	1	12	1	14	1	2	0	3	1	8	0	9	1	3	1	5	31
Grand Total	1	17	3	21	4	11	0	15	1	14	1	16	4	8	3	15	67
Apprch %	4.8	81	14.3		26.7	73.3	0		6.2	87.5	6.2		26.7	53.3	20		
Total %	1.5	25.4	4.5	31.3	6	16.4	0	22.4	1.5	20.9	1.5	23.9	6	11.9	4.5	22.4	

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**2**	0	2	0	0	0	0	0	2	0	2	0	**2**	0	2	6
07:30 AM	0	1	0	1	0	4	0	4	0	2	**1**	3	0	1	**1**	2	10
07:45 AM	0	0	**2**	2	**3**	**5**	0	**8**	0	1	0	1	**3**	2	1	**6**	**17**
08:00 AM	0	2	1	**3**	0	1	0	1	0	**4**	0	**4**	1	1	0	2	10
Total Volume	0	5	3	8	3	10	0	13	0	9	1	10	4	6	2	12	43
% App. Total	0	62.5	37.5		23.1	76.9	0		0	90	10		33.3	50	16.7		
PHF	.000	.625	.375	.667	.250	.500	.000	.406	.000	.563	.250	.625	.333	.750	.500	.500	.632

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCMVRIAM
Site Code : 9268001
Start Date : 10/22/2009
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**2**	0	2	0	0	0	0	0	2	0	2	0	**2**	0	2
+15 mins.	0	1	0	1	0	4	0	4	0	2	**1**	3	0	1	**1**	2
+30 mins.	0	0	**2**	2	**3**	**5**	0	**8**	0	1	0	1	**3**	2	1	**6**
+45 mins.	0	2	1	**3**	0	1	0	1	0	**4**	0	**4**	1	1	0	2
Total Volume	0	5	3	8	3	10	0	13	0	9	1	10	4	6	2	12
% App. Total	0	62.5	37.5		23.1	76.9	0		0	90	10		33.3	50	16.7	
PHF	.000	.625	.375	.667	.250	.500	.000	.406	.000	.563	.250	.625	.333	.750	.500	.500

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCMVRIAM
Site Code : 9268001
Start Date : 10/22/2009
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Groups Printed- 3 Axle Vehicles

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4	4
07:45 AM	0	1	2	3	0	0	0	0	1	0	0	1	0	1	0	1	5
Total	0	1	2	3	0	0	0	0	1	0	0	1	1	3	3	7	11
08:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	1	0	0	1	0	0	0	0	2
Grand Total	0	1	3	4	0	0	0	0	2	0	0	2	1	3	3	7	13
Apprch %	0	25	75		0	0	0		100	0	0		14.3	42.9	42.9		
Total %	0	7.7	23.1	30.8	0	0	0	0	15.4	0	0	15.4	7.7	23.1	23.1	53.8	

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**	**4**	4
07:45 AM	0	**1**	**2**	**3**	0	0	0	0	**1**	0	0	**1**	0	1	0	1	**5**
08:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	3	4	0	0	0	0	1	0	0	1	1	2	2	5	10
% App. Total	0	25	75		0	0	0		100	0	0		20	40	40		
PHF	.000	.250	.375	.333	.000	.000	.000	.000	.250	.000	.000	.250	.250	.500	.250	.313	.500

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCMVRIAM
Site Code : 9268001
Start Date : 10/22/2009
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**	**4**
+30 mins.	0	**1**	**2**	**3**	0	0	0	0	**1**	0	0	**1**	0	1	0	1
+45 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	3	4	0	0	0	0	1	0	0	1	1	2	2	5
% App. Total	0	25	75		0	0	0		100	0	0		20	40	40	
PHF	.000	.250	.375	.333	.000	.000	.000	.000	.250	.000	.000	.250	.250	.500	.250	.313

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25286 Jaclyn Avenue
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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCMVRIAM
Site Code : 9268001
Start Date : 10/22/2009
Page No : 1

Groups Printed- 4+ Axle Trucks

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	2	3	1	0	0	1	0	2	0	2	3	1	0	4	10
07:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
07:30 AM	0	0	3	3	0	1	0	1	0	0	0	0	10	2	0	12	16
07:45 AM	0	0	0	0	0	2	0	2	1	1	0	2	5	0	0	5	9
Total	0	1	6	7	1	3	0	4	1	3	0	4	18	4	0	22	37
08:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	3	0	0	3	4
08:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	2	2	0	4	5
08:30 AM	0	1	1	2	0	1	0	1	0	0	0	0	4	1	1	6	9
08:45 AM	0	1	1	2	0	0	0	0	0	0	0	0	5	0	0	5	7
Total	0	2	4	6	0	1	0	1	0	0	0	0	14	3	1	18	25
Grand Total	0	3	10	13	1	4	0	5	1	3	0	4	32	7	1	40	62
Apprch %	0	23.1	76.9		20	80	0		25	75	0		80	17.5	2.5		
Total %	0	4.8	16.1	21	1.6	6.5	0	8.1	1.6	4.8	0	6.5	51.6	11.3	1.6	64.5	

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
07:30 AM	0	0	**3**	**3**	0	1	0	1	0	0	0	0	**10**	**2**	0	**12**	**16**
07:45 AM	0	0	0	0	0	**2**	0	**2**	**1**	**1**	0	**2**	5	0	0	5	9
08:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	3	0	0	3	4
Total Volume	0	0	5	5	0	3	0	3	1	1	0	2	18	3	0	21	31
% App. Total	0	0	100		0	100	0		50	50	0		85.7	14.3	0		
PHF	.000	.000	.417	.417	.000	.375	.000	.375	.250	.250	.000	.250	.450	.375	.000	.438	.484

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCMVRIAM
Site Code : 9268001
Start Date : 10/22/2009
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	**3**	**3**	0	1	0	1	0	0	0	0	**10**	**2**	0	**12**
+30 mins.	0	0	0	0	0	**2**	0	**2**	**1**	**1**	0	**2**	5	0	0	5
+45 mins.	0	0	1	1	0	0	0	0	0	0	0	0	3	0	0	3
Total Volume	0	0	5	5	0	3	0	3	1	1	0	2	18	3	0	21
% App. Total	0	0	100		0	100	0		50	50	0		85.7	14.3	0	
PHF	.000	.000	.417	.417	.000	.375	.000	.375	.250	.250	.000	.250	.450	.375	.000	.438

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather Sunny

File Name : SBCMVRIPM
Site Code : 9268035
Start Date : 10/21/2009
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	10	110	27	147	25	77	8	110	15	132	24	171	19	65	10	94	522
04:15 PM	10	92	18	120	17	71	5	93	12	103	10	125	19	66	9	94	432
04:30 PM	8	81	26	115	21	80	14	115	14	107	26	147	18	60	12	90	467
04:45 PM	6	129	23	158	27	86	6	119	8	119	7	134	15	44	16	75	486
Total	34	412	94	540	90	314	33	437	49	461	67	577	71	235	47	353	1907
05:00 PM	5	96	28	129	32	122	16	170	19	117	18	154	20	78	13	111	564
05:15 PM	6	128	33	167	16	110	15	141	14	105	17	136	24	70	20	114	558
05:30 PM	6	106	22	134	32	82	11	125	11	119	23	153	20	53	15	88	500
05:45 PM	7	157	21	185	27	90	7	124	14	128	18	160	23	68	13	104	573
Total	24	487	104	615	107	404	49	560	58	469	76	603	87	269	61	417	2195
Grand Total	58	899	198	1155	197	718	82	997	107	930	143	1180	158	504	108	770	4102
Apprch %	5	77.8	17.1		19.8	72	8.2		9.1	78.8	12.1		20.5	65.5	14		
Total %	1.4	21.9	4.8	28.2	4.8	17.5	2	24.3	2.6	22.7	3.5	28.8	3.9	12.3	2.6	18.8	
Passenger Vehicles	56	882	171	1109	191	693	82	966	101	913	139	1153	145	487	104	736	3964
% Passenger Vehicles	96.6	98.1	86.4	96	97	96.5	100	96.9	94.4	98.2	97.2	97.7	91.8	96.6	96.3	95.6	96.6
Large 2 Axle Vehicles	2	14	1	17	3	6	0	9	3	13	3	19	3	12	2	17	62
% Large 2 Axle Vehicles	3.4	1.6	0.5	1.5	1.5	0.8	0	0.9	2.8	1.4	2.1	1.6	1.9	2.4	1.9	2.2	1.5
3 Axle Vehicles	0	2	3	5	1	6	0	7	2	2	0	4	3	3	0	6	22
% 3 Axle Vehicles	0	0.2	1.5	0.4	0.5	0.8	0	0.7	1.9	0.2	0	0.3	1.9	0.6	0	0.8	0.5
4+ Axle Trucks	0	1	23	24	2	13	0	15	1	2	1	4	7	2	2	11	54
% 4+ Axle Trucks	0	0.1	11.6	2.1	1	1.8	0	1.5	0.9	0.2	0.7	0.3	4.4	0.4	1.9	1.4	1.3

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	5	96	28	129	**32**	**122**	**16**	**170**	**19**	117	18	154	20	**78**	13	111	564
05:15 PM	6	128	**33**	167	16	110	15	141	14	105	17	136	**24**	70	**20**	**114**	558
05:30 PM	6	106	22	134	32	82	11	125	11	119	**23**	153	20	53	15	88	500
05:45 PM	**7**	**157**	21	**185**	27	90	7	124	14	**128**	18	**160**	23	68	13	104	**573**
Total Volume	24	487	104	615	107	404	49	560	58	469	76	603	87	269	61	417	2195
% App. Total	3.9	79.2	16.9		19.1	72.1	8.8		9.6	77.8	12.6		20.9	64.5	14.6		
PHF	.857	.775	.788	.831	.836	.828	.766	.824	.763	.916	.826	.942	.906	.862	.763	.914	.958

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather Sunny

File Name : SBCMVRIPM
Site Code : 9268035
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	5	96	28	129	**32**	**122**	**16**	**170**	**19**	117	18	154	20	**78**	13	111
+15 mins.	6	128	**33**	167	16	110	15	141	14	105	17	136	**24**	70	**20**	**114**
+30 mins.	6	106	22	134	32	82	11	125	11	119	**23**	153	20	53	15	88
+45 mins.	**7**	**157**	21	**185**	27	90	7	124	14	**128**	18	**160**	23	68	13	104
Total Volume	24	487	104	615	107	404	49	560	58	469	76	603	87	269	61	417
% App. Total	3.9	79.2	16.9		19.1	72.1	8.8		9.6	77.8	12.6		20.9	64.5	14.6	
PHF	.857	.775	.788	.831	.836	.828	.766	.824	.763	.916	.826	.942	.906	.862	.763	.914

Counts Unlimited Inc.
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City of San Bernardino
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Weather Sunny

File Name : SBCMVRIPM
Site Code : 9268035
Start Date : 10/21/2009
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Groups Printed- Passenger Vehicles

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	9	105	24	138	24	75	8	107	14	129	23	166	18	65	7	90	501
04:15 PM	10	90	17	117	17	69	5	91	12	101	8	121	17	64	9	90	419
04:30 PM	7	80	22	109	20	77	14	111	14	104	25	143	17	59	12	88	451
04:45 PM	6	128	19	153	27	79	6	112	7	117	7	131	14	40	15	69	465
Total	32	403	82	517	88	300	33	421	47	451	63	561	66	228	43	337	1836
05:00 PM	5	94	26	125	31	119	16	166	17	116	18	151	20	74	13	107	549
05:15 PM	6	124	24	154	16	105	15	136	13	103	17	133	23	68	20	111	534
05:30 PM	6	106	19	131	29	82	11	122	11	117	23	151	16	50	15	81	485
05:45 PM	7	155	20	182	27	87	7	121	13	126	18	157	20	67	13	100	560
Total	24	479	89	592	103	393	49	545	54	462	76	592	79	259	61	399	2128
Grand Total	56	882	171	1109	191	693	82	966	101	913	139	1153	145	487	104	736	3964
Apprch %	5	79.5	15.4		19.8	71.7	8.5		8.8	79.2	12.1		19.7	66.2	14.1		
Total %	1.4	22.3	4.3	28	4.8	17.5	2.1	24.4	2.5	23	3.5	29.1	3.7	12.3	2.6	18.6	

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	5	94	**26**	125	**31**	**119**	**16**	**166**	**17**	116	18	151	20	**74**	13	107	549
05:15 PM	6	124	24	154	16	105	15	136	13	103	17	133	**23**	68	**20**	**111**	534
05:30 PM	6	106	19	131	29	82	11	122	11	117	**23**	151	16	50	15	81	485
05:45 PM	**7**	**155**	20	**182**	27	87	7	121	13	**126**	18	**157**	20	67	13	100	**560**
Total Volume	24	479	89	592	103	393	49	545	54	462	76	592	79	259	61	399	2128
% App. Total	4.1	80.9	15		18.9	72.1	9		9.1	78	12.8		19.8	64.9	15.3		
PHF	.857	.773	.856	.813	.831	.826	.766	.821	.794	.917	.826	.943	.859	.875	.763	.899	.950

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather Sunny

File Name : SBCMVRIPM
Site Code : 9268035
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	5	94	**26**	125	**31**	**119**	**16**	**166**	**17**	116	18	151	20	**74**	13	107
+15 mins.	6	124	24	154	16	105	15	136	13	103	17	133	**23**	68	**20**	**111**
+30 mins.	6	106	19	131	29	82	11	122	11	117	**23**	151	16	50	15	81
+45 mins.	**7**	**155**	20	**182**	27	87	7	121	13	**126**	18	**157**	20	67	13	100
Total Volume	24	479	89	592	103	393	49	545	54	462	76	592	79	259	61	399
% App. Total	4.1	80.9	15		18.9	72.1	9		9.1	78	12.8		19.8	64.9	15.3	
PHF	.857	.773	.856	.813	.831	.826	.766	.821	.794	.917	.826	.943	.859	.875	.763	.899

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather Sunny

File Name : SBCMVRIPM
Site Code : 9268035
Start Date : 10/21/2009
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	5	1	7	1	1	0	2	1	1	0	2	0	0	1	1	12
04:15 PM	0	1	0	1	0	1	0	1	0	2	2	4	2	0	0	2	8
04:30 PM	1	0	0	1	1	0	0	1	0	2	1	3	0	1	0	1	6
04:45 PM	0	1	0	1	0	1	0	1	1	2	0	3	0	3	1	4	9
Total	2	7	1	10	2	3	0	5	2	7	3	12	2	4	2	8	35
05:00 PM	0	2	0	2	0	1	0	1	0	1	0	1	0	4	0	4	8
05:15 PM	0	3	0	3	0	2	0	2	0	1	0	1	0	1	0	1	7
05:30 PM	0	0	0	0	1	0	0	1	0	2	0	2	0	2	0	2	5
05:45 PM	0	2	0	2	0	0	0	0	1	2	0	3	1	1	0	2	7
Total	0	7	0	7	1	3	0	4	1	6	0	7	1	8	0	9	27
Grand Total	2	14	1	17	3	6	0	9	3	13	3	19	3	12	2	17	62
Apprch %	11.8	82.4	5.9		33.3	66.7	0		15.8	68.4	15.8		17.6	70.6	11.8		
Total %	3.2	22.6	1.6	27.4	4.8	9.7	0	14.5	4.8	21	4.8	30.6	4.8	19.4	3.2	27.4	

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	2	0	2	0	1	0	1	0	1	0	1	0	**4**	0	**4**	**8**
05:15 PM	0	**3**	0	**3**	0	**2**	0	**2**	0	1	0	1	0	1	0	1	7
05:30 PM	0	0	0	0	**1**	0	0	1	0	**2**	0	2	0	2	0	2	5
05:45 PM	0	2	0	2	0	0	0	0	**1**	2	0	**3**	**1**	1	0	2	7
Total Volume	0	7	0	7	1	3	0	4	1	6	0	7	1	8	0	9	27
% App. Total	0	100	0		25	75	0		14.3	85.7	0		11.1	88.9	0		
PHF	.000	.583	.000	.583	.250	.375	.000	.500	.250	.750	.000	.583	.250	.500	.000	.563	.844

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City of San Bernardino
N/S: Mount Vernon Avenue
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Weather Sunny

File Name : SBCMVRIPM
Site Code : 9268035
Start Date : 10/21/2009
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Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	2	0	2	0	1	0	1	0	1	0	1	0	**4**	0	**4**
+15 mins.	0	**3**	0	**3**	0	**2**	0	**2**	0	1	0	1	0	1	0	1
+30 mins.	0	0	0	0	**1**	0	0	1	0	**2**	0	2	0	2	0	2
+45 mins.	0	2	0	2	0	0	0	0	**1**	2	0	**3**	**1**	1	0	2
Total Volume	0	7	0	7	1	3	0	4	1	6	0	7	1	8	0	9
% App. Total	0	100	0		25	75	0		14.3	85.7	0		11.1	88.9	0	
PHF	.000	.583	.000	.583	.250	.375	.000	.500	.250	.750	.000	.583	.250	.500	.000	.563

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather Sunny

File Name : SBCMVRIPM
Site Code : 9268035
Start Date : 10/21/2009
Page No : 1

Groups Printed- 3 Axle Vehicles

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:30 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	1	0	1	0	3	0	3	0	1	0	1	1	3	0	4	9
05:00 PM	0	0	0	0	1	1	0	2	1	0	0	1	0	0	0	0	3
05:15 PM	0	1	3	4	0	1	0	1	1	1	0	2	1	0	0	1	8
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	1	3	4	1	3	0	4	2	1	0	3	2	0	0	2	13
Grand Total	0	2	3	5	1	6	0	7	2	2	0	4	3	3	0	6	22
Apprch %	0	40	60		14.3	85.7	0		50	50	0		50	50	0		
Total %	0	9.1	13.6	22.7	4.5	27.3	0	31.8	9.1	9.1	0	18.2	13.6	13.6	0	27.3	

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	**1**	**1**	0	**2**	**1**	0	0	1	0	0	0	0	3
05:15 PM	0	**1**	**3**	**4**	0	1	0	1	1	**1**	0	**2**	**1**	0	0	**1**	**8**
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	1	3	4	1	3	0	4	2	1	0	3	2	0	0	2	13
% App. Total	0	25	75		25	75	0		66.7	33.3	0		100	0	0		
PHF	.000	.250	.250	.250	.250	.750	.000	.500	.500	.250	.000	.375	.500	.000	.000	.500	.406

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather Sunny

File Name : SBCMVRIPM
Site Code : 9268035
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	**1**	**1**	0	**2**	**1**	0	0	1	0	0	0	0
+15 mins.	0	**1**	**3**	**4**	0	1	0	1	1	**1**	0	**2**	**1**	0	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	1	3	4	1	3	0	4	2	1	0	3	2	0	0	2
% App. Total	0	25	75		25	75	0		66.7	33.3	0		100	0	0	
PHF	.000	.250	.250	.250	.250	.750	.000	.500	.500	.250	.000	.375	.500	.000	.000	.500

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather Sunny

File Name : SBCMVRIPM
Site Code : 9268035
Start Date : 10/21/2009
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Groups Printed- 4+ Axle Trucks

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	2	2	0	1	0	1	0	1	1	2	0	0	2	2	7
04:15 PM	0	1	1	2	0	1	0	1	0	0	0	0	0	0	0	0	3
04:30 PM	0	0	4	4	0	2	0	2	0	1	0	1	1	0	0	1	8
04:45 PM	0	0	4	4	0	4	0	4	0	0	0	0	1	0	0	1	9
Total	0	1	11	12	0	8	0	8	0	2	1	3	2	0	2	4	27
05:00 PM	0	0	2	2	0	1	0	1	1	0	0	1	0	0	0	0	4
05:15 PM	0	0	6	6	0	2	0	2	0	0	0	0	0	1	0	1	9
05:30 PM	0	0	3	3	2	0	0	2	0	0	0	0	3	1	0	4	9
05:45 PM	0	0	1	1	0	2	0	2	0	0	0	0	2	0	0	2	5
Total	0	0	12	12	2	5	0	7	1	0	0	1	5	2	0	7	27
Grand Total	0	1	23	24	2	13	0	15	1	2	1	4	7	2	2	11	54
Apprch %	0	4.2	95.8		13.3	86.7	0		25	50	25		63.6	18.2	18.2		
Total %	0	1.9	42.6	44.4	3.7	24.1	0	27.8	1.9	3.7	1.9	7.4	13	3.7	3.7	20.4	

	Mount Vernon Avenue Southbound				Rialto Avenue Westbound				Mount Vernon Avenue Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	2	2	0	1	0	1	**1**	0	0	**1**	0	0	0	0	4
05:15 PM	0	0	**6**	**6**	0	**2**	0	**2**	0	0	0	0	0	**1**	0	1	**9**
05:30 PM	0	0	3	3	**2**	0	0	2	0	0	0	0	**3**	1	0	**4**	9
05:45 PM	0	0	1	1	0	2	0	2	0	0	0	0	2	0	0	2	5
Total Volume	0	0	12	12	2	5	0	7	1	0	0	1	5	2	0	7	27
% App. Total	0	0	100		28.6	71.4	0		100	0	0		71.4	28.6	0		
PHF	.000	.000	.500	.500	.250	.625	.000	.875	.250	.000	.000	.250	.417	.500	.000	.438	.750

Counts Unlimited Inc.
25286 Jaclyn Avenue
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(951) 485-7934

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Rialto Avenue
Weather Sunny

File Name : SBCMVRIPM
Site Code : 9268035
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	2	2	0	1	0	1	**1**	0	0	**1**	0	0	0	0
+15 mins.	0	0	**6**	**6**	0	**2**	0	**2**	0	0	0	0	0	**1**	0	1
+30 mins.	0	0	3	3	**2**	0	0	2	0	0	0	0	**3**	1	0	**4**
+45 mins.	0	0	1	1	0	2	0	2	0	0	0	0	2	0	0	2
Total Volume	0	0	12	12	2	5	0	7	1	0	0	1	5	2	0	7
% App. Total	0	0	100		28.6	71.4	0		100	0	0		71.4	28.6	0	
PHF	.000	.000	.500	.500	.250	.625	.000	.875	.250	.000	.000	.250	.417	.500	.000	.438

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City of San Bernardino
N/S: "K" Street
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCKRIAM
Site Code : 9268099
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"K" Street Southbound				Rialto Avenue Westbound				"K" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	4	1	6	13	29	1	43	6	2	18	26	4	79	7	90	165
07:15 AM	0	10	8	18	22	36	0	58	10	6	34	50	3	89	8	100	226
07:30 AM	1	8	8	17	22	53	0	75	8	5	35	48	2	111	7	120	260
07:45 AM	1	8	4	13	40	49	0	89	11	4	28	43	4	123	11	138	283
Total	3	30	21	54	97	167	1	265	35	17	115	167	13	402	33	448	934
08:00 AM	1	3	2	6	27	45	1	73	6	5	22	33	2	84	8	94	206
08:15 AM	0	4	1	5	10	29	4	43	3	4	10	17	2	64	3	69	134
08:30 AM	1	5	1	7	19	42	1	62	9	8	13	30	3	71	16	90	189
08:45 AM	2	5	2	9	22	46	2	70	12	5	25	42	1	65	14	80	201
Total	4	17	6	27	78	162	8	248	30	22	70	122	8	284	41	333	730
Grand Total	7	47	27	81	175	329	9	513	65	39	185	289	21	686	74	781	1664
Apprch %	8.6	58	33.3		34.1	64.1	1.8		22.5	13.5	64		2.7	87.8	9.5		
Total %	0.4	2.8	1.6	4.9	10.5	19.8	0.5	30.8	3.9	2.3	11.1	17.4	1.3	41.2	4.4	46.9	

	"K" Street Southbound				Rialto Avenue Westbound				"K" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**10**	**8**	**18**	22	36	0	58	10	**6**	34	**50**	3	89	8	100	226
07:30 AM	**1**	8	8	17	22	**53**	0	75	8	5	**35**	48	2	111	7	120	260
07:45 AM	1	8	4	13	**40**	49	0	**89**	**11**	4	28	43	**4**	**123**	**11**	**138**	**283**
08:00 AM	1	3	2	6	27	45	**1**	73	6	5	22	33	2	84	8	94	206
Total Volume	3	29	22	54	111	183	1	295	35	20	119	174	11	407	34	452	975
% App. Total	5.6	53.7	40.7		37.6	62	0.3		20.1	11.5	68.4		2.4	90	7.5		
PHF	.750	.725	.688	.750	.694	.863	.250	.829	.795	.833	.850	.870	.688	.827	.773	.819	.861

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Bernardino
N/S: "K" Street
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCKRIAM
Site Code : 9268099
Start Date : 10/21/2009
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**1**	4	1	6	22	36	0	58	10	**6**	34	**50**	3	89	8	100
+15 mins.	0	**10**	**8**	**18**	22	**53**	0	75	8	5	**35**	48	2	111	7	120
+30 mins.	1	8	8	17	**40**	49	0	**89**	**11**	4	28	43	**4**	**123**	**11**	**138**
+45 mins.	1	8	4	13	27	45	**1**	73	6	5	22	33	2	84	8	94
Total Volume	3	30	21	54	111	183	1	295	35	20	119	174	11	407	34	452
% App. Total	5.6	55.6	38.9		37.6	62	0.3		20.1	11.5	68.4		2.4	90	7.5	
PHF	.750	.750	.656	.750	.694	.863	.250	.829	.795	.833	.850	.870	.688	.827	.773	.819

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Bernardino
N/S: "K" Street
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCKRIPM
Site Code : 9268099
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"K" Street Southbound				Rialto Avenue Westbound				"K" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	4	6	12	24	97	2	123	15	10	41	66	2	80	7	89	290
04:15 PM	1	6	2	9	20	80	4	104	7	9	36	52	5	78	8	91	256
04:30 PM	0	6	1	7	26	120	2	148	5	6	21	32	5	83	9	97	284
04:45 PM	2	7	3	12	24	111	4	139	5	9	27	41	3	52	6	61	253
Total	5	23	12	40	94	408	12	514	32	34	125	191	15	293	30	338	1083
05:00 PM	1	14	3	18	23	156	0	179	8	6	29	43	1	93	11	105	345
05:15 PM	2	6	4	12	21	127	2	150	9	7	37	53	1	80	9	90	305
05:30 PM	2	7	8	17	28	106	4	138	9	12	30	51	1	84	5	90	296
05:45 PM	0	14	7	21	34	120	7	161	5	8	32	45	3	87	9	99	326
Total	5	41	22	68	106	509	13	628	31	33	128	192	6	344	34	384	1272
Grand Total	10	64	34	108	200	917	25	1142	63	67	253	383	21	637	64	722	2355
Apprch %	9.3	59.3	31.5		17.5	80.3	2.2		16.4	17.5	66.1		2.9	88.2	8.9		
Total %	0.4	2.7	1.4	4.6	8.5	38.9	1.1	48.5	2.7	2.8	10.7	16.3	0.9	27	2.7	30.7	

	"K" Street Southbound				Rialto Avenue Westbound				"K" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	**14**	3	18	23	**156**	0	**179**	8	6	29	43	1	**93**	**11**	**105**	**345**
05:15 PM	**2**	6	4	12	21	127	2	150	**9**	7	**37**	**53**	1	80	9	90	305
05:30 PM	2	7	**8**	17	28	106	4	138	9	**12**	30	51	1	84	5	90	296
05:45 PM	0	14	7	**21**	**34**	120	**7**	161	5	8	32	45	**3**	87	9	99	326
Total Volume	5	41	22	68	106	509	13	628	31	33	128	192	6	344	34	384	1272
% App. Total	7.4	60.3	32.4		16.9	81.1	2.1		16.1	17.2	66.7		1.6	89.6	8.9		
PHF	.625	.732	.688	.810	.779	.816	.464	.877	.861	.688	.865	.906	.500	.925	.773	.914	.922

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "K" Street
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCKRIPM
Site Code : 9268099
Start Date : 10/21/2009
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	1	**14**	3	18	23	**156**	0	**179**	8	6	29	43	1	**93**	**11**	**105**
+15 mins.	**2**	6	4	12	21	127	2	150	**9**	7	**37**	**53**	1	80	9	90
+30 mins.	2	7	**8**	17	28	106	4	138	9	**12**	30	51	1	84	5	90
+45 mins.	0	14	7	**21**	**34**	120	**7**	161	5	8	32	45	**3**	87	9	99
Total Volume	5	41	22	68	106	509	13	628	31	33	128	192	6	344	34	384
% App. Total	7.4	60.3	32.4		16.9	81.1	2.1		16.1	17.2	66.7		1.6	89.6	8.9	
PHF	.625	.732	.688	.810	.779	.816	.464	.877	.861	.688	.865	.906	.500	.925	.773	.914

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "I" Street
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCIRIAM
Site Code : 9268083
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"I" Street Southbound				Rialto Avenue Westbound				"I" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	35	8	18	61	8	32	1	41	3	13	9	25	9	64	2	75	202
07:15 AM	37	25	23	85	10	35	2	47	0	7	15	22	23	83	4	110	264
07:30 AM	26	34	25	85	5	46	7	58	0	15	15	30	26	113	5	144	317
07:45 AM	27	34	27	88	10	71	4	85	3	18	17	38	17	120	2	139	350
Total	125	101	93	319	33	184	14	231	6	53	56	115	75	380	13	468	1133
08:00 AM	30	28	20	78	14	54	3	71	5	23	17	45	17	101	8	126	320
08:15 AM	28	18	23	69	10	40	3	53	1	15	16	32	20	84	4	108	262
08:30 AM	24	21	19	64	15	59	2	76	0	16	13	29	12	85	1	98	267
08:45 AM	27	17	24	68	11	61	4	76	1	16	15	32	11	89	3	103	279
Total	109	84	86	279	50	214	12	276	7	70	61	138	60	359	16	435	1128
Grand Total	234	185	179	598	83	398	26	507	13	123	117	253	135	739	29	903	2261
Apprch %	39.1	30.9	29.9		16.4	78.5	5.1		5.1	48.6	46.2		15	81.8	3.2		
Total %	10.3	8.2	7.9	26.4	3.7	17.6	1.1	22.4	0.6	5.4	5.2	11.2	6	32.7	1.3	39.9	

	"I" Street Southbound				Rialto Avenue Westbound				"I" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**37**	25	23	85	10	35	2	47	0	7	15	22	23	83	4	110	264
07:30 AM	26	**34**	25	85	5	46	**7**	58	0	15	15	30	**26**	113	5	**144**	317
07:45 AM	27	34	**27**	**88**	10	**71**	4	**85**	3	18	**17**	38	17	**120**	2	139	**350**
08:00 AM	30	28	20	78	**14**	54	3	71	**5**	**23**	17	**45**	17	101	**8**	126	320
Total Volume	120	121	95	336	39	206	16	261	8	63	64	135	83	417	19	519	1251
% App. Total	35.7	36	28.3		14.9	78.9	6.1		5.9	46.7	47.4		16	80.3	3.7		
PHF	.811	.890	.880	.955	.696	.725	.571	.768	.400	.685	.941	.750	.798	.869	.594	.901	.894

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25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "I" Street
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCIRIAM
Site Code : 9268083
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				07:15 AM			
+0 mins.	**37**	25	23	85	10	**71**	**4**	**85**	0	15	15	30	23	83	4	110
+15 mins.	26	**34**	25	85	14	54	3	71	3	18	**17**	38	**26**	113	5	**144**
+30 mins.	27	34	**27**	**88**	10	40	3	53	**5**	**23**	17	**45**	17	**120**	2	139
+45 mins.	30	28	20	78	**15**	59	2	76	1	15	16	32	17	101	**8**	126
Total Volume	120	121	95	336	49	224	12	285	9	71	65	145	83	417	19	519
% App. Total	35.7	36	28.3		17.2	78.6	4.2		6.2	49	44.8		16	80.3	3.7	
PHF	.811	.890	.880	.955	.817	.789	.750	.838	.450	.772	.956	.806	.798	.869	.594	.901

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "I" Street
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCIRIPM
Site Code : 9268083
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"I" Street Southbound				Rialto Avenue Westbound				"I" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	17	27	19	63	5	110	5	120	3	43	22	68	17	91	3	111	362
04:15 PM	12	21	18	51	6	101	10	117	1	35	21	57	29	82	5	116	341
04:30 PM	12	24	22	58	13	106	12	131	3	28	19	50	14	71	5	90	329
04:45 PM	14	19	23	56	12	130	5	147	2	21	17	40	27	65	5	97	340
Total	55	91	82	228	36	447	32	515	9	127	79	215	87	309	18	414	1372
05:00 PM	11	17	26	54	11	164	14	189	5	32	22	59	13	81	2	96	398
05:15 PM	9	30	24	63	13	134	8	155	3	25	16	44	23	93	7	123	385
05:30 PM	9	18	27	54	11	107	9	127	4	39	14	57	22	80	2	104	342
05:45 PM	14	24	24	62	10	139	6	155	2	37	13	52	26	103	6	135	404
Total	43	89	101	233	45	544	37	626	14	133	65	212	84	357	17	458	1529
Grand Total	98	180	183	461	81	991	69	1141	23	260	144	427	171	666	35	872	2901
Apprch %	21.3	39	39.7		7.1	86.9	6		5.4	60.9	33.7		19.6	76.4	4		
Total %	3.4	6.2	6.3	15.9	2.8	34.2	2.4	39.3	0.8	9	5	14.7	5.9	23	1.2	30.1	

	"I" Street Southbound				Rialto Avenue Westbound				"I" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	11	17	26	54	11	**164**	**14**	**189**	**5**	32	**22**	**59**	13	81	2	96	398
05:15 PM	9	**30**	24	**63**	**13**	134	8	155	3	25	16	44	23	93	**7**	123	385
05:30 PM	9	18	**27**	54	11	107	9	127	4	**39**	14	57	22	80	2	104	342
05:45 PM	**14**	24	24	62	10	139	6	155	2	37	13	52	**26**	**103**	6	**135**	**404**
Total Volume	43	89	101	233	45	544	37	626	14	133	65	212	84	357	17	458	1529
% App. Total	18.5	38.2	43.3		7.2	86.9	5.9		6.6	62.7	30.7		18.3	77.9	3.7		
PHF	.768	.742	.935	.925	.865	.829	.661	.828	.700	.853	.739	.898	.808	.867	.607	.848	.946

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25286 Jaclyn Avenue
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City of San Bernardino
N/S: "I" Street
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCIRIPM
Site Code : 9268083
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:00 PM				05:00 PM			
+0 mins.	11	17	26	54	11	**164**	**14**	**189**	**3**	**43**	**22**	**68**	13	81	2	96
+15 mins.	9	**30**	24	**63**	**13**	134	8	155	1	35	21	57	23	93	**7**	123
+30 mins.	9	18	**27**	54	11	107	9	127	3	28	19	50	22	80	2	104
+45 mins.	**14**	24	24	62	10	139	6	155	2	21	17	40	**26**	**103**	6	**135**
Total Volume	43	89	101	233	45	544	37	626	9	127	79	215	84	357	17	458
% App. Total	18.5	38.2	43.3		7.2	86.9	5.9		4.2	59.1	36.7		18.3	77.9	3.7	
PHF	.768	.742	.935	.925	.865	.829	.661	.828	.750	.738	.898	.790	.808	.867	.607	.848

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "G" Street
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCGRIAM
Site Code : 9268092
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"G" Street Southbound				Rialto Avenue Westbound				"G" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	22	6	2	30	5	31	8	44	2	13	5	20	5	96	15	116	210
07:15 AM	15	11	5	31	3	51	9	63	1	12	5	18	13	127	8	148	260
07:30 AM	26	8	6	40	3	55	12	70	2	18	2	22	13	122	7	142	274
07:45 AM	34	35	5	74	10	78	13	101	4	13	3	20	14	151	8	173	368
Total	97	60	18	175	21	215	42	278	9	56	15	80	45	496	38	579	1112
08:00 AM	19	13	9	41	6	49	14	69	1	12	2	15	11	111	4	126	251
08:15 AM	10	16	18	44	8	48	18	74	4	8	8	20	14	100	9	123	261
08:30 AM	15	13	13	41	10	63	16	89	4	15	8	27	11	98	9	118	275
08:45 AM	10	21	5	36	10	54	20	84	3	9	3	15	10	94	7	111	246
Total	54	63	45	162	34	214	68	316	12	44	21	77	46	403	29	478	1033
Grand Total	151	123	63	337	55	429	110	594	21	100	36	157	91	899	67	1057	2145
Apprch %	44.8	36.5	18.7		9.3	72.2	18.5		13.4	63.7	22.9		8.6	85.1	6.3		
Total %	7	5.7	2.9	15.7	2.6	20	5.1	27.7	1	4.7	1.7	7.3	4.2	41.9	3.1	49.3	

	"G" Street Southbound				Rialto Avenue Westbound				"G" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**34**	**35**	5	**74**	**10**	**78**	13	**101**	**4**	13	3	20	**14**	**151**	8	**173**	**368**
08:00 AM	19	13	9	41	6	49	14	69	1	12	2	15	11	111	4	126	251
08:15 AM	10	16	**18**	44	8	48	**18**	74	4	8	**8**	20	14	100	**9**	123	261
08:30 AM	15	13	13	41	10	63	16	89	4	**15**	8	**27**	11	98	9	118	275
Total Volume	78	77	45	200	34	238	61	333	13	48	21	82	50	460	30	540	1155
% App. Total	39	38.5	22.5		10.2	71.5	18.3		15.9	58.5	25.6		9.3	85.2	5.6		
PHF	.574	.550	.625	.676	.850	.763	.847	.824	.813	.800	.656	.759	.893	.762	.833	.780	.785

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
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City of San Bernardino
N/S: "G" Street
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCGRIAM
Site Code : 9268092
Start Date : 10/21/2009
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:15 AM			
+0 mins.	**34**	**35**	5	**74**	**10**	**78**	13	**101**	**4**	13	3	20	13	127	**8**	148
+15 mins.	19	13	9	41	6	49	14	69	1	12	2	15	13	122	7	142
+30 mins.	10	16	**18**	44	8	48	**18**	74	4	8	**8**	20	**14**	**151**	8	**173**
+45 mins.	15	13	13	41	10	63	16	89	4	**15**	8	**27**	11	111	4	126
Total Volume	78	77	45	200	34	238	61	333	13	48	21	82	51	511	27	589
% App. Total	39	38.5	22.5		10.2	71.5	18.3		15.9	58.5	25.6		8.7	86.8	4.6	
PHF	.574	.550	.625	.676	.850	.763	.847	.824	.813	.800	.656	.759	.911	.846	.844	.851

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
N/S: "G" Street
E/W: Rialto Avenue
Weather: Sunny

File Name : SBCGRIPM
Site Code : 9268092
Start Date : 10/21/2009
Page No : 1

Groups Printed- Total Volume

	"G" Street Southbound				Rialto Avenue Westbound				"G" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	14	16	5	35	7	99	46	152	13	33	8	54	16	98	11	125	366
04:15 PM	13	22	5	40	1	78	14	93	11	48	5	64	16	93	4	113	310
04:30 PM	9	24	11	44	1	114	40	155	12	42	1	55	15	73	6	94	348
04:45 PM	11	25	18	54	6	96	27	129	14	30	2	46	11	66	9	86	315
Total	47	87	39	173	15	387	127	529	50	153	16	219	58	330	30	418	1339
05:00 PM	9	17	25	51	11	155	32	198	14	53	6	73	15	86	0	101	423
05:15 PM	9	23	13	45	4	111	46	161	12	41	3	56	12	98	9	119	381
05:30 PM	9	19	8	36	6	100	32	138	11	32	4	47	11	79	1	91	312
05:45 PM	9	17	16	42	1	104	29	134	12	28	0	40	13	104	3	120	336
Total	36	76	62	174	22	470	139	631	49	154	13	216	51	367	13	431	1452
Grand Total	83	163	101	347	37	857	266	1160	99	307	29	435	109	697	43	849	2791
Apprch %	23.9	47	29.1		3.2	73.9	22.9		22.8	70.6	6.7		12.8	82.1	5.1		
Total %	3	5.8	3.6	12.4	1.3	30.7	9.5	41.6	3.5	11	1	15.6	3.9	25	1.5	30.4	

	"G" Street Southbound				Rialto Avenue Westbound				"G" Street Northbound				Rialto Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	9	24	11	44	1	114	40	155	12	42	1	55	**15**	73	6	94	348
04:45 PM	**11**	**25**	18	**54**	6	96	27	129	**14**	30	2	46	11	66	**9**	86	315
05:00 PM	9	17	**25**	51	**11**	**155**	32	**198**	14	**53**	**6**	**73**	15	86	0	101	**423**
05:15 PM	9	23	13	45	4	111	**46**	161	12	41	3	56	12	**98**	9	**119**	381
Total Volume	38	89	67	194	22	476	145	643	52	166	12	230	53	323	24	400	1467
% App. Total	19.6	45.9	34.5		3.4	74	22.6		22.6	72.2	5.2		13.2	80.8	6		
PHF	.864	.890	.670	.898	.500	.768	.788	.812	.929	.783	.500	.788	.883	.824	.667	.840	.867

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Bernardino
N/S: "G" Street
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File Name : SBCGRIPM
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:15 PM				05:00 PM			
+0 mins.	9	24	11	44	1	114	40	155	11	48	5	64	**15**	86	0	101
+15 mins.	**11**	**25**	18	**54**	6	96	27	129	12	42	1	55	12	98	**9**	119
+30 mins.	9	17	**25**	51	**11**	**155**	32	**198**	**14**	30	2	46	11	79	1	91
+45 mins.	9	23	13	45	4	111	**46**	161	14	**53**	**6**	**73**	13	**104**	3	**120**
Total Volume	38	89	67	194	22	476	145	643	51	173	14	238	51	367	13	431
% App. Total	19.6	45.9	34.5		3.4	74	22.6		21.4	72.7	5.9		11.8	85.2	3	
PHF	.864	.890	.670	.898	.500	.768	.788	.812	.911	.816	.583	.815	.850	.882	.361	.898

ITERIS

I-215 SB Ramp & 2nd Street

04/22/2010

5:00 - 5:15 PM

WBL	WBT
20 + 21 + 23 + 30 + 28 + 30 + 28 + 31 + 29 + 21	73
289	

5:15 - 5:30 PM

29 + 21 + 26 + 25 + 14 + 13 + 18 + 23 + 16 + 16 + 20	63
221	

ITERIS

I-215 SB Ramp & 2nd Street

04/22/2010

5:00 - 5:15 PM

EBT	EBR
98	111

5:15 - 5:30 PM

130	70

228 → (1hr) compared to 483

181 ↓ (1h) compared to 164

ITERIS

I-215 SB Ramp & 2nd Street

04/23/2010

7:30 - 7:45 AM

WBL	WBT
14 + 11 + 8 + 3 + 12 + 15 + 16 + 6 + 3 13 + 10 + 9 + 13 127	53

7:45 - 8:00 AM

8 + 12 + 12 + 7 + 5 + 6 + 10 + 8 + 7 8 + 10 + 93	57

ITERIS

I-215 SB Ramp & 2nd Street

04/23/2010

7:30 - 7:45 AM

EBT	EBR
93	84

7:45 - 8:00 AM

107	58

I-215 Southbound Ramp & 2nd Street

AM Peak	Eastbound			Westbound		
4/23/2010	Left	Thru	Right	Left	Thru	Right
7:30 - 7:45 AM	0	93	84	127	53	0
7:45 - 8:00 AM	0	107	58	93	57	0

PM Peak	Eastbound			Westbound		
4/22/2010	Left	Thru	Right	Left	Thru	Right
5:00 - 5:15 PM	0	98	111	289	73	0
5:15 - 5:30 PM	0	130	70	221	63	0

APPENDIX C

VOLUME DEVELOPMENT WORKSHEETS

TABLE C-1

INTERSECTION	AM 2009 VEHICLE TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave	51	0	154	0	611	91	0	0	0	118	381	0
2. 5th St and Medical Center Dr	1	0	1	99	526	1	94	0	104	1	283	85
3. 5th St and Cabrera Ave	7	7	14	5	626	6	2	3	2	14	346	4
4. 5th St and Mount Vernon Ave	26	209	31	40	503	92	137	323	56	30	273	66
5. 5th St and L St	1	0	0	9	671	6	37	0	17	2	358	16
6. 5th St (Foothill Blvd) and 4th St	69	0	10	0	681	104	0	0	0	7	402	0
7. 5th St and H St	24	55	14	23	366	287	55	275	206	64	207	42
8. 4th St (I-215 On Ramps) and H St	22	84	1	0	0	0	0	224	410	0	110	3
9. 3rd St and I St	10	3	31	0	46	4	157	387	57	35	42	0
10. 3rd St and H St	0	73	68	28	112	68	8	169	40	36	35	8
11. 2nd St and Mount Vernon Ave	5	230	115	3	4	3	136	326	3	74	5	92
12. 2nd St and K St	15	3	38	7	240	12	7	23	11	36	119	20
13. 2nd St and I St	4	16	125	5	305	4	111	272	17	36	158	12
14. 2nd St and I-215 SB On Ramp	0	0	0	0	418	160	0	0	0	197	218	0
15. 2nd St and I-215 NB Ramps	180	0	1075	229	195	0	0	0	0	0	271	170
16. 2nd St and G St	91	77	29	105	979	106	85	131	40	26	265	31
17. Rialto Ave and Rancho Ave	76	146	134	31	295	99	65	139	12	52	131	41
18. Rialto Ave and Santa Fe Wy	0	0	0	15	512	0	14	0	26	0	195	23
19. Rialto Ave and Mount Vernon Ave	28	282	50	84	384	58	47	398	78	41	142	21
20. Rialto Ave and K St	35	20	119	11	407	34	3	29	22	111	183	1
21. Rialto Ave and I St	8	63	64	83	417	19	120	121	95	39	206	16
22. Rialto Ave and G St	13	48	21	50	460	30	78	77	45	34	238	61

TABLE C-2

INTERSECTION	AM 2009 AUTO TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave	49	0	148	0	589	88	0	0	0	114	367	0
2. 5th St and Medical Center Dr	1	0	1	95	507	1	91	0	100	1	273	82
3. 5th St and Cabrera Ave	7	7	13	5	603	6	2	3	2	13	333	4
4. 5th St and Mount Vernon Ave	26	205	31	40	479	91	130	317	54	28	261	61
5. 5th St and L St	1	0	0	9	646	6	36	0	16	2	345	15
6. 5th St (Foothill Blvd) and 4th St	66	0	10	0	656	100	0	0	0	7	387	0
7. 5th St and H St	22	51	13	21	339	266	51	255	191	59	192	39
8. 4th St (I-215 On Ramps) and H St	20	78	1	0	0	0	0	208	380	0	102	3
9. 3rd St and I St	9	3	29	0	43	4	146	359	53	32	39	0
10. 3rd St and H St	0	64	65	24	109	62	6	163	35	31	34	8
11. 2nd St and Mount Vernon Ave	5	222	88	3	4	3	136	315	3	61	5	91
12. 2nd St and K St	14	3	36	7	225	11	7	22	10	34	111	19
13. 2nd St and I St	4	15	117	5	285	4	104	255	16	34	148	11
14. 2nd St and I-215 SB On Ramp	0	0	0	0	391	150	0	0	0	184	204	0
15. 2nd St and I-215 NB Ramps	168	0	1006	214	183	0	0	0	0	0	254	159
16. 2nd St and G St	84	71	27	97	907	98	79	121	37	24	246	29
17. Rialto Ave and Rancho Ave	72	138	127	29	279	94	61	131	11	49	124	39
18. Rialto Ave and Santa Fe Wy	0	0	0	14	484	0	13	0	25	0	184	22
19. Rialto Ave and Mount Vernon Ave	26	272	49	61	373	54	47	392	67	38	129	21
20. Rialto Ave and K St	33	19	112	10	385	32	3	27	21	105	173	1
21. Rialto Ave and I St	8	60	60	78	394	18	113	114	90	37	195	15
22. Rialto Ave and G St	12	44	19	46	426	28	72	71	42	32	221	57

TABLE C-3

INTERSECTION	AM 2009 TRUCK TURNING MOVEMENT COUNTS												AM PEAK PERCENT TRUCK	AM PEAK HOUR FACTOR
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND				
	L	T	R	L	T	R	L	T	R	L	T	R		
1. Foothill Blvd and Rancho Ave	2	0	6	0	22	3	0	0	0	4	14	0	0.0366	0.868
2. 5th St and Medical Center Dr	0	0	0	4	19	0	3	0	4	0	10	3	0.0366	0.886
3. 5th St and Cabrera Ave	0	0	1	0	23	0	0	0	0	1	13	0	0.0366	0.887
4. 5th St and Mount Vernon Ave	0	4	0	0	24	1	7	6	2	2	12	5	0.0366	0.818
5. 5th St and L St	0	0	0	0	25	0	1	0	1	0	13	1	0.0366	0.881
6. 5th St (Foothill Blvd) and 4th St	3	0	0	0	25	4	0	0	0	0	15	0	0.0366	0.872
7. 5th St and H St	2	4	1	2	27	21	4	20	15	5	15	3	0.0732	0.870
8. 4th St (I-215 On Ramps) and H St	2	6	0	0	0	0	0	16	30	0	8	0	0.0732	0.879
9. 3rd St and I St	1	0	2	0	3	0	11	28	4	3	3	0	0.0732	0.965
10. 3rd St and H St	0	9	3	4	3	6	2	6	5	5	1	0	0.0732	0.814
11. 2nd St and Mount Vernon Ave	0	8	27	0	0	0	0	11	0	13	0	1	0.0641	0.781
12. 2nd St and K St	1	0	2	0	15	1	0	1	1	2	8	1	0.0641	0.935
13. 2nd St and I St	0	1	8	0	20	0	7	17	1	2	10	1	0.0641	0.938
14. 2nd St and I-215 SB On Ramp	0	0	0	0	27	10	0	0	0	13	14	0	0.0641	0.951
15. 2nd St and I-215 NB Ramps	12	0	69	15	13	0	0	0	0	0	17	11	0.0641	0.923
16. 2nd St and G St	7	6	2	8	72	8	6	10	3	2	19	2	0.0732	0.938
17. Rialto Ave and Rancho Ave	4	8	7	2	16	5	4	8	1	3	7	2	0.0549	0.893
18. Rialto Ave and Santa Fe Wy	0	0	0	1	28	0	1	0	1	0	11	1	0.0549	0.818
19. Rialto Ave and Mount Vernon Ave	2	10	1	23	11	4	0	6	11	3	13	0	0.0549	0.775
20. Rialto Ave and K St	2	1	7	1	22	2	0	2	1	6	10	0	0.0549	0.861
21. Rialto Ave and I St	0	3	4	5	23	1	7	7	5	2	11	1	0.0549	0.894
22. Rialto Ave and G St	1	4	2	4	34	2	6	6	3	2	17	4	0.0732	0.785

TABLE C-4

INTERSECTION	AM 2009 2 AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave												
2. 5th St and Medical Center Dr												
3. 5th St and Cabrera Ave												
4. 5th St and Mount Vernon Ave	0	3	0	0	15	1	6	5	1	1	10	4
5. 5th St and L St												
6. 5th St (Foothill Blvd) and 4th St												
7. 5th St and H St												
8. 4th St (I-215 On Ramps) and H St												
9. 3rd St and I St												
10. 3rd St and H St	0	9	3	3	2	6	1	5	4	4	1	0
11. 2nd St and Mount Vernon Ave	0	5	11	0	0	0	0	8	0	4	0	0
12. 2nd St and K St												
13. 2nd St and I St												
14. 2nd St and I-215 SB On Ramp												
15. 2nd St and I-215 NB Ramps												
16. 2nd St and G St												
17. Rialto Ave and Rancho Ave												
18. Rialto Ave and Santa Fe Wy												
19. Rialto Ave and Mount Vernon Ave	0	9	1	4	6	2	0	5	3	3	10	0
20. Rialto Ave and K St												
21. Rialto Ave and I St												
22. Rialto Ave and G St												

TABLE C-5

INTERSECTION	AM 2009 3 AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave												
2. 5th St and Medical Center Dr												
3. 5th St and Cabrera Ave												
4. 5th St and Mount Vernon Ave	0	1	0	0	0	0	0	0	1	1	1	1
5. 5th St and L St												
6. 5th St (Foothill Blvd) and 4th St												
7. 5th St and H St												
8. 4th St (I-215 On Ramps) and H St												
9. 3rd St and I St												
10. 3rd St and H St	0	0	0	1	0	0	0	1	1	0	0	0
11. 2nd St and Mount Vernon Ave	0	1	2	0	0	0	0	1	0	3	0	1
12. 2nd St and K St												
13. 2nd St and I St												
14. 2nd St and I-215 SB On Ramp												
15. 2nd St and I-215 NB Ramps												
16. 2nd St and G St												
17. Rialto Ave and Rancho Ave												
18. Rialto Ave and Santa Fe Wy												
19. Rialto Ave and Mount Vernon Ave	1	0	0	1	2	2	0	1	3	0	0	0
20. Rialto Ave and K St												
21. Rialto Ave and I St												
22. Rialto Ave and G St												

TABLE C-6

INTERSECTION	AM 2009 4+ AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave												
2. 5th St and Medical Center Dr												
3. 5th St and Cabrera Ave												
4. 5th St and Mount Vernon Ave	0	0	0	0	9	0	1	1	0	0	1	0
5. 5th St and L St												
6. 5th St (Foothill Blvd) and 4th St												
7. 5th St and H St												
8. 4th St (I-215 On Ramps) and H St												
9. 3rd St and I St												
10. 3rd St and H St	0	0	0	0	1	0	1	0	0	1	0	0
11. 2nd St and Mount Vernon Ave	0	2	14	0	0	0	0	2	0	6	0	0
12. 2nd St and K St												
13. 2nd St and I St												
14. 2nd St and I-215 SB On Ramp												
15. 2nd St and I-215 NB Ramps												
16. 2nd St and G St												
17. Rialto Ave and Rancho Ave												
18. Rialto Ave and Santa Fe Wy												
19. Rialto Ave and Mount Vernon Ave	1	1	0	18	3	0	0	0	5	0	3	0
20. Rialto Ave and K St												
21. Rialto Ave and I St												
22. Rialto Ave and G St												

TABLE C-7

INTERSECTION	AM 2009 TOTAL TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave												
2. 5th St and Medical Center Dr												
3. 5th St and Cabrera Ave												
4. 5th St and Mount Vernon Ave	0	4	0	0	24	1	7	6	2	2	12	5
5. 5th St and L St												
6. 5th St (Foothill Blvd) and 4th St												
7. 5th St and H St												
8. 4th St (I-215 On Ramps) and H St												
9. 3rd St and I St												
10. 3rd St and H St	0	9	3	4	3	6	2	6	5	5	1	0
11. 2nd St and Mount Vernon Ave	0	8	27	0	0	0	0	11	0	13	0	1
12. 2nd St and K St												
13. 2nd St and I St												
14. 2nd St and I-215 SB On Ramp												
15. 2nd St and I-215 NB Ramps												
16. 2nd St and G St												
17. Rialto Ave and Rancho Ave												
18. Rialto Ave and Santa Fe Wy												
19. Rialto Ave and Mount Vernon Ave	2	10	1	23	11	4	0	6	11	3	13	0
20. Rialto Ave and K St												
21. Rialto Ave and I St												
22. Rialto Ave and G St												

TABLE C-8

INTERSECTION	AM 2009 TOTAL PCE TRUCKS TURNING MOVEMENT COUNTS 2 AXLE= 1.5 3 AXLE= 2 4+ AXLE=3												AM TRUCKS AVERAGE PCE FACTOR
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Foothill Blvd and Rancho Ave													1.8254
2. 5th St and Medical Center Dr													1.8254
3. 5th St and Cabrera Ave													1.8254
4. 5th St and Mount Vernon Ave	0	7	0	0	50	2	12	11	4	4	20	8	1.8254
5. 5th St and L St													1.8254
6. 5th St (Foothill Blvd) and 4th St													1.8254
7. 5th St and H St													1.6364
8. 4th St (I-215 On Ramps) and H St													1.6364
9. 3rd St and I St													1.6364
10. 3rd St and H St	0	14	5	7	6	9	5	10	8	9	2	0	1.6364
11. 2nd St and Mount Vernon Ave	0	16	63	0	0	0	0	20	0	30	0	2	2.1667
12. 2nd St and K St													2.1667
13. 2nd St and I St													2.1667
14. 2nd St and I-215 SB On Ramp													2.1667
15. 2nd St and I-215 NB Ramps													2.1667
16. 2nd St and G St													1.6364
17. Rialto Ave and Rancho Ave													1.8254
18. Rialto Ave and Santa Fe Wy													1.8254
19. Rialto Ave and Mount Vernon Ave	5	17	2	62	22	7	0	10	26	5	24	0	1.8254
20. Rialto Ave and K St													1.8254
21. Rialto Ave and I St													1.8254
22. Rialto Ave and G St													1.6364

TABLE C-9

Intersection	2009 AM AUTO TURNING MOVEMENT COUNTS												PCE Factors
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Foothill Blvd and Rancho Ave	49	0	148	0	589	88	0	0	0	114	367	0	1.00
2. 5th St and Medical Center Dr	1	0	1	95	507	1	91	0	100	1	273	82	1.00
3. 5th St and Cabrera Ave	7	7	13	5	603	6	2	3	2	13	333	4	1.00
4. 5th St and Mount Vernon Ave	26	205	31	40	479	91	130	317	54	28	261	61	1.00
5. 5th St and L St	1	0	0	9	646	6	36	0	16	2	345	15	1.00
6. 5th St (Foothill Blvd) and 4th St	66	0	10	0	656	100	0	0	0	7	387	0	1.00
7. 5th St and H St	22	51	13	21	339	266	51	255	191	59	192	39	1.00
8. 4th St (I-215 On Ramps) and H St	20	78	1	0	0	0	0	208	380	0	102	3	1.00
9. 3rd St and I St	9	3	29	0	43	4	146	359	53	32	39	0	1.00
10. 3rd St and H St	0	64	65	24	109	62	6	163	35	31	34	8	1.00
11. 2nd St and Mount Vernon Ave	5	222	88	3	4	3	136	315	3	61	5	91	1.00
12. 2nd St and K St	14	3	36	7	225	11	7	22	10	34	111	19	1.00
13. 2nd St and I St	4	15	117	5	285	4	104	255	16	34	148	11	1.00
14. 2nd St and I-215 SB On Ramp	0	0	0	0	391	150	0	0	0	184	204	0	1.00
15. 2nd St and I-215 NB Ramps	168	0	1006	214	183	0	0	0	0	0	254	159	1.00
16. 2nd St and G St	84	71	27	97	907	98	79	121	37	24	246	29	1.00
17. Rialto Ave and Rancho Ave	72	138	127	29	279	94	61	131	11	49	124	39	1.00
18. Rialto Ave and Santa Fe Wy	0	0	0	14	484	0	13	0	25	0	184	22	1.00
19. Rialto Ave and Mount Vernon Ave	26	272	49	61	373	54	47	392	67	38	129	21	1.00
20. Rialto Ave and K St	33	19	112	10	385	32	3	27	21	105	173	1	1.00
21. Rialto Ave and I St	8	60	60	78	394	18	113	114	90	37	195	15	1.00
22. Rialto Ave and G St	12	44	19	46	426	28	72	71	42	32	221	57	1.00

TABLE C-10

Intersection	2009 AM TRUCK TURNING MOVEMENT COUNTS												PCE Factors
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Foothill Blvd and Rancho Ave	2	0	6	0	22	3	0	0	0	4	14	0	1.83
2. 5th St and Medical Center Dr	0	0	0	4	19	0	3	0	4	0	10	3	1.83
3. 5th St and Cabrera Ave	0	0	1	0	23	0	0	0	0	1	13	0	1.83
4. 5th St and Mount Vernon Ave	0	4	0	0	24	1	7	6	2	2	12	5	1.83
5. 5th St and L St	0	0	0	0	25	0	1	0	1	0	13	1	1.83
6. 5th St (Foothill Blvd) and 4th St	3	0	0	0	25	4	0	0	0	0	15	0	1.83
7. 5th St and H St	2	4	1	2	27	21	4	20	15	5	15	3	1.64
8. 4th St (I-215 On Ramps) and H St	2	6	0	0	0	0	0	16	30	0	8	0	1.64
9. 3rd St and I St	1	0	2	0	3	0	11	28	4	3	3	0	1.64
10. 3rd St and H St	0	9	3	4	3	6	2	6	5	5	1	0	1.64
11. 2nd St and Mount Vernon Ave	0	8	27	0	0	0	0	11	0	13	0	1	2.17
12. 2nd St and K St	1	0	2	0	15	1	0	1	1	2	8	1	2.17
13. 2nd St and I St	0	1	8	0	20	0	7	17	1	2	10	1	2.17
14. 2nd St and I-215 SB On Ramp	0	0	0	0	27	10	0	0	0	13	14	0	2.17
15. 2nd St and I-215 NB Ramps	12	0	69	15	13	0	0	0	0	0	17	11	2.17
16. 2nd St and G St	7	6	2	8	72	8	6	10	3	2	19	2	1.64
17. Rialto Ave and Rancho Ave	4	8	7	2	16	5	4	8	1	3	7	2	1.83
18. Rialto Ave and Santa Fe Wy	0	0	0	1	28	0	1	0	1	0	11	1	1.83
19. Rialto Ave and Mount Vernon Ave	2	10	1	23	11	4	0	6	11	3	13	0	1.83
20. Rialto Ave and K St	2	1	7	1	22	2	0	2	1	6	10	0	1.83
21. Rialto Ave and I St	0	3	4	5	23	1	7	7	5	2	11	1	1.83
22. Rialto Ave and G St	1	4	2	4	34	2	6	6	3	2	17	4	1.64

TABLE C-11

Intersection	2009 AM AUTO TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave	49	0	148	0	589	88	0	0	0	114	367	0
2. 5th St and Medical Center Dr	1	0	1	95	507	1	91	0	100	1	273	82
3. 5th St and Cabrera Ave	7	7	13	5	603	6	2	3	2	13	333	4
4. 5th St and Mount Vernon Ave	26	205	31	40	479	91	130	317	54	28	261	61
5. 5th St and L St	1	0	0	9	646	6	36	0	16	2	345	15
6. 5th St (Foothill Blvd) and 4th St	66	0	10	0	656	100	0	0	0	7	387	0
7. 5th St and H St	22	51	13	21	339	266	51	255	191	59	192	39
8. 4th St (I-215 On Ramps) and H St	20	78	1	0	0	0	0	208	380	0	102	3
9. 3rd St and I St	9	3	29	0	43	4	146	359	53	32	39	0
10. 3rd St and H St	0	64	65	24	109	62	6	163	35	31	34	8
11. 2nd St and Mount Vernon Ave	5	222	88	3	4	3	136	315	3	61	5	91
12. 2nd St and K St	14	3	36	7	225	11	7	22	10	34	111	19
13. 2nd St and I St	4	15	117	5	285	4	104	255	16	34	148	11
14. 2nd St and I-215 SB On Ramp	0	0	0	0	391	150	0	0	0	184	204	0
15. 2nd St and I-215 NB Ramps	168	0	1006	214	183	0	0	0	0	0	254	159
16. 2nd St and G St	84	71	27	97	907	98	79	121	37	24	246	29
17. Rialto Ave and Rancho Ave	72	138	127	29	279	94	61	131	11	49	124	39
18. Rialto Ave and Santa Fe Wy	0	0	0	14	484	0	13	0	25	0	184	22
19. Rialto Ave and Mount Vernon Ave	26	272	49	61	373	54	47	392	67	38	129	21
20. Rialto Ave and K St	33	19	112	10	385	32	3	27	21	105	173	1
21. Rialto Ave and I St	8	60	60	78	394	18	113	114	90	37	195	15
22. Rialto Ave and G St	12	44	19	46	426	28	72	71	42	32	221	57

TABLE C-12

Intersection	2009 AM PCE TRUCK TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave	3	0	10	0	41	6	0	0	0	8	25	0
2. 5th St and Medical Center Dr	0	0	0	7	35	0	6	0	7	0	19	6
3. 5th St and Cabrera Ave	0	0	1	0	42	0	0	0	0	1	23	0
4. 5th St and Mount Vernon Ave	0	7	0	0	44	2	13	11	4	4	22	9
5. 5th St and L St	0	0	0	1	45	0	2	0	1	0	24	1
6. 5th St (Foothill Blvd) and 4th St	5	0	1	0	45	7	0	0	0	0	27	0
7. 5th St and H St	3	7	2	3	44	34	7	33	25	8	25	5
8. 4th St (I-215 On Ramps) and H St	3	10	0	0	0	0	0	27	49	0	13	0
9. 3rd St and I St	1	0	4	0	6	0	19	46	7	4	5	0
10. 3rd St and H St	0	15	5	7	5	10	3	10	8	8	2	0
11. 2nd St and Mount Vernon Ave	0	17	59	0	0	0	0	24	0	28	0	2
12. 2nd St and K St	2	0	5	1	33	2	1	3	2	5	17	3
13. 2nd St and I St	1	2	17	1	42	1	15	38	2	5	22	2
14. 2nd St and I-215 SB On Ramp	0	0	0	0	58	22	0	0	0	27	30	0
15. 2nd St and I-215 NB Ramps	25	0	149	32	27	0	0	0	0	0	38	24
16. 2nd St and G St	11	9	3	13	117	13	10	16	5	3	32	4
17. Rialto Ave and Rancho Ave	8	15	13	3	30	10	7	14	1	5	13	4
18. Rialto Ave and Santa Fe Wy	0	0	0	2	51	0	1	0	3	0	20	2
19. Rialto Ave and Mount Vernon Ave	4	18	2	42	20	7	0	11	20	5	24	0
20. Rialto Ave and K St	4	2	12	1	41	3	0	3	2	11	18	0
21. Rialto Ave and I St	1	6	6	8	42	2	12	12	10	4	21	2
22. Rialto Ave and G St	2	6	3	6	55	4	9	9	5	4	29	7

TABLE C-13

Intersection	2009 AM TURNING MOVEMENT COUNTS - TOTAL (AUTO + PCE TRUCK)												
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	Total
1. Foothill Blvd and Rancho Ave	53	0	159	0	629	94	0	0	0	122	392	0	1448
2. 5th St and Medical Center Dr	1	0	1	102	542	1	97	0	107	1	292	88	1231
3. 5th St and Cabrera Ave	7	7	14	5	645	6	2	3	2	14	356	4	1067
4. 5th St and Mount Vernon Ave	26	212	31	40	523	93	143	328	58	32	283	70	1838
5. 5th St and L St	1	0	0	9	691	6	38	0	18	2	369	16	1151
6. 5th St (Foothill Blvd) and 4th St	71	0	10	0	702	107	0	0	0	7	414	0	1311
7. 5th St and H St	25	58	15	24	383	300	58	288	216	67	217	44	1693
8. 4th St (I-215 On Ramps) and H St	23	88	1	0	0	0	0	234	429	0	115	3	894
9. 3rd St and I St	10	3	32	0	48	4	164	405	60	37	44	0	808
10. 3rd St and H St	0	79	70	31	114	72	9	173	43	39	36	8	673
11. 2nd St and Mount Vernon Ave	5	239	147	3	4	3	136	339	3	89	5	93	1066
12. 2nd St and K St	16	3	41	8	258	13	8	25	12	39	128	21	571
13. 2nd St and I St	4	17	134	5	328	4	119	292	18	39	170	13	1145
14. 2nd St and I-215 SB On Ramp	0	0	0	0	449	172	0	0	0	212	234	0	1067
15. 2nd St and I-215 NB Ramps	193	0	1155	246	210	0	0	0	0	0	291	183	2279
16. 2nd St and G St	95	81	30	110	1025	111	89	137	42	27	277	32	2057
17. Rialto Ave and Rancho Ave	79	153	140	32	308	103	68	145	13	54	137	43	1276
18. Rialto Ave and Santa Fe Wy	0	0	0	16	535	0	15	0	27	0	204	24	821
19. Rialto Ave and Mount Vernon Ave	30	290	51	103	393	61	47	403	87	43	153	21	1682
20. Rialto Ave and K St	37	21	124	11	425	36	3	30	23	116	191	1	1019
21. Rialto Ave and I St	8	66	67	87	436	20	125	126	99	41	215	17	1308
22. Rialto Ave and G St	14	50	22	52	481	31	82	81	47	36	249	64	1209

TABLE C-14

INTERSECTION	PM 2009 VEHICLE TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave	79	0	174	0	529	76	0	0	0	119	595	0
2. 5th St and Medical Center Dr	2	1	0	149	447	1	84	2	141	1	489	78
3. 5th St and Cabrera Ave	8	8	36	8	504	7	10	4	6	20	564	12
4. 5th St and Mount Vernon Ave	123	451	42	78	355	111	73	394	65	72	419	99
5. 5th St and L St	5	4	6	15	503	5	72	4	18	10	544	66
6. 5th St (Foothill Blvd) and 4th St	69	0	14	0	613	83	0	0	0	7	658	0
7. 5th St and H St	131	138	17	50	307	313	26	232	204	175	479	50
8. 4th St (I-215 On Ramps) and H St	126	257	0	0	0	0	0	179	516	7	674	16
9. 3rd St and I St	8	2	32	0	83	19	62	245	60	42	51	0
10. 3rd St and H St	11	300	57	64	75	38	10	150	19	72	64	13
11. 2nd St and Mount Vernon Ave	6	443	143	11	8	6	126	454	10	166	5	207
12. 2nd St and K St	35	5	16	7	263	23	23	22	21	25	271	7
13. 2nd St and I St	11	35	196	6	318	8	85	170	33	37	240	9
14. 2nd St and I-215 SB On Ramp	0	0	0	0	468	159	0	0	0	650	314	0
15. 2nd St and I-215 NB Ramps	125	1	258	254	193	0	0	0	0	0	884	501
16. 2nd St and G St	257	185	48	74	305	27	53	139	86	81	942	77
17. Rialto Ave and Rancho Ave	140	190	91	28	211	83	46	159	17	124	380	51
18. Rialto Ave and Santa Fe Wy	0	0	0	14	340	0	16	0	22	0	538	14
19. Rialto Ave and Mount Vernon Ave	58	469	76	87	269	61	24	487	104	107	404	49
20. Rialto Ave and K St	31	33	128	6	344	34	5	41	22	106	509	13
21. Rialto Ave and I St	14	133	65	84	357	17	43	89	101	45	544	37
22. Rialto Ave and G St	52	166	12	53	323	24	38	89	67	22	476	145

TABLE C-15

INTERSECTION	PM 2009 AUTO TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave	77	0	170	0	516	74	0	0	0	116	581	0
2. 5th St and Medical Center Dr	2	1	0	145	436	1	82	2	138	1	477	76
3. 5th St and Cabrera Ave	8	8	35	8	492	7	10	4	6	20	551	12
4. 5th St and Mount Vernon Ave	121	449	42	78	339	110	68	390	64	72	401	95
5. 5th St and L St	5	4	6	15	491	5	70	4	18	10	531	64
6. 5th St (Foothill Blvd) and 4th St	67	0	14	0	598	81	0	0	0	7	642	0
7. 5th St and H St	124	131	16	47	290	296	25	219	193	165	453	47
8. 4th St (I-215 On Ramps) and H St	119	243	0	0	0	0	0	169	488	7	637	15
9. 3rd St and I St	8	2	30	0	78	18	59	232	57	40	48	0
10. 3rd St and H St	8	292	52	59	69	31	9	147	17	67	64	13
11. 2nd St and Mount Vernon Ave	6	441	128	11	8	6	125	451	10	148	5	204
12. 2nd St and K St	34	5	16	7	256	22	22	21	20	24	264	7
13. 2nd St and I St	11	34	191	6	309	8	83	165	32	36	233	9
14. 2nd St and I-215 SB On Ramp	0	0	0	0	455	155	0	0	0	632	305	0
15. 2nd St and I-215 NB Ramps	122	1	251	247	188	0	0	0	0	0	860	487
16. 2nd St and G St	243	175	45	70	288	26	50	131	81	77	891	73
17. Rialto Ave and Rancho Ave	136	184	88	27	204	80	45	154	16	120	368	49
18. Rialto Ave and Santa Fe Wy	0	0	0	14	329	0	15	0	21	0	521	14
19. Rialto Ave and Mount Vernon Ave	54	462	76	79	259	61	24	479	89	103	393	49
20. Rialto Ave and K St	30	32	124	6	333	33	5	40	21	103	493	13
21. Rialto Ave and I St	14	129	63	81	346	16	42	86	98	44	527	36
22. Rialto Ave and G St	49	157	11	50	305	23	36	84	63	21	450	137

TABLE C-16

INTERSECTION	PM 2009 TRUCK TURNING MOVEMENT COUNTS												PM PEAK PERCENT TRUCK	PM PEAK HOUR FACTOR
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND				
	L	T	R	L	T	R	L	T	R	L	T	R		
1. Foothill Blvd and Rancho Ave	2	0	4	0	13	2	0	0	0	3	14	0	0.0238	0.952
2. 5th St and Medical Center Dr	0	0	0	4	11	0	2	0	3	0	12	2	0.0238	0.923
3. 5th St and Cabrera Ave	0	0	1	0	12	0	0	0	0	0	13	0	0.0238	0.933
4. 5th St and Mount Vernon Ave	2	2	0	0	16	1	5	4	1	0	18	4	0.0238	0.945
5. 5th St and L St	0	0	0	0	12	0	2	0	0	0	13	2	0.0238	0.946
6. 5th St (Foothill Blvd) and 4th St	2	0	0	0	15	2	0	0	0	0	16	0	0.0238	0.960
7. 5th St and H St	7	8	1	3	17	17	1	13	11	10	26	3	0.0543	0.890
8. 4th St (I-215 On Ramps) and H St	7	14	0	0	0	0	0	10	28	0	37	1	0.0543	0.872
9. 3rd St and I St	0	0	2	0	5	1	3	13	3	2	3	0	0.0543	0.858
10. 3rd St and H St	3	8	5	5	6	7	1	3	2	5	0	0	0.0543	0.957
11. 2nd St and Mount Vernon Ave	0	2	15	0	0	0	1	3	0	18	0	3	0.0272	0.926
12. 2nd St and K St	1	0	0	0	7	1	1	1	1	1	7	0	0.0272	0.916
13. 2nd St and I St	0	1	5	0	9	0	2	5	1	1	7	0	0.0272	0.973
14. 2nd St and I-215 SB On Ramp	0	0	0	0	13	4	0	0	0	18	9	0	0.0272	0.934
15. 2nd St and I-215 NB Ramps	3	0	7	7	5	0	0	0	0	0	24	14	0.0272	0.962
16. 2nd St and G St	14	10	3	4	17	1	3	8	5	4	51	4	0.0543	0.924
17. Rialto Ave and Rancho Ave	4	6	3	1	7	3	1	5	1	4	12	2	0.0315	0.964
18. Rialto Ave and Santa Fe Wy	0	0	0	0	11	0	1	0	1	0	17	0	0.0315	0.925
19. Rialto Ave and Mount Vernon Ave	4	7	0	8	10	0	0	8	15	4	11	0	0.0315	0.958
20. Rialto Ave and K St	1	1	4	0	11	1	0	1	1	3	16	0	0.0315	0.922
21. Rialto Ave and I St	0	4	2	3	11	1	1	3	3	1	17	1	0.0315	0.946
22. Rialto Ave and G St	3	9	1	3	18	1	2	5	4	1	26	8	0.0543	0.867

TABLE C-17

INTERSECTION	PM 2009 2 AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave												
2. 5th St and Medical Center Dr												
3. 5th St and Cabrera Ave												
4. 5th St and Mount Vernon Ave	2	2	0	0	6	1	5	3	1	0	9	4
5. 5th St and L St												
6. 5th St (Foothill Blvd) and 4th St												
7. 5th St and H St												
8. 4th St (I-215 On Ramps) and H St												
9. 3rd St and I St												
10. 3rd St and H St	1	2	2	3	2	7	0	2	2	5	0	0
11. 2nd St and Mount Vernon Ave	0	2	7	0	0	0	0	3	0	5	0	3
12. 2nd St and K St												
13. 2nd St and I St												
14. 2nd St and I-215 SB On Ramp												
15. 2nd St and I-215 NB Ramps												
16. 2nd St and G St												
17. Rialto Ave and Rancho Ave												
18. Rialto Ave and Santa Fe Wy												
19. Rialto Ave and Mount Vernon Ave	1	6	0	1	8	0	0	7	0	1	3	0
20. Rialto Ave and K St												
21. Rialto Ave and I St												
22. Rialto Ave and G St												

TABLE C-18

INTERSECTION	PM 2009 3 AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave												
2. 5th St and Medical Center Dr												
3. 5th St and Cabrera Ave												
4. 5th St and Mount Vernon Ave	0	0	0	0	9	0	0	1	0	0	3	0
5. 5th St and L St												
6. 5th St (Foothill Blvd) and 4th St												
7. 5th St and H St												
8. 4th St (I-215 On Ramps) and H St												
9. 3rd St and I St												
10. 3rd St and H St	1	2	3	2	0	0	1	0	0	0	0	0
11. 2nd St and Mount Vernon Ave	0	0	3	0	0	0	1	0	0	0	0	0
12. 2nd St and K St												
13. 2nd St and I St												
14. 2nd St and I-215 SB On Ramp												
15. 2nd St and I-215 NB Ramps												
16. 2nd St and G St												
17. Rialto Ave and Rancho Ave												
18. Rialto Ave and Santa Fe Wy												
19. Rialto Ave and Mount Vernon Ave	2	1	0	2	0	0	0	1	3	1	3	0
20. Rialto Ave and K St												
21. Rialto Ave and I St												
22. Rialto Ave and G St												

TABLE C-19

INTERSECTION	PM 2009 4+ AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave												
2. 5th St and Medical Center Dr												
3. 5th St and Cabrera Ave												
4. 5th St and Mount Vernon Ave	0	0	0	0	1	0	0	0	0	0	6	0
5. 5th St and L St												
6. 5th St (Foothill Blvd) and 4th St												
7. 5th St and H St												
8. 4th St (I-215 On Ramps) and H St												
9. 3rd St and I St												
10. 3rd St and H St	1	4	0	0	4	0	0	1	0	0	0	0
11. 2nd St and Mount Vernon Ave	0	0	5	0	0	0	0	0	0	13	0	0
12. 2nd St and K St												
13. 2nd St and I St												
14. 2nd St and I-215 SB On Ramp												
15. 2nd St and I-215 NB Ramps												
16. 2nd St and G St												
17. Rialto Ave and Rancho Ave												
18. Rialto Ave and Santa Fe Wy												
19. Rialto Ave and Mount Vernon Ave	1	0	0	5	2	0	0	0	12	2	5	0
20. Rialto Ave and K St												
21. Rialto Ave and I St												
22. Rialto Ave and G St												

TABLE C-20

INTERSECTION	PM 2009 TOTAL TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave												
2. 5th St and Medical Center Dr												
3. 5th St and Cabrera Ave												
4. 5th St and Mount Vernon Ave	2	2	0	0	16	1	5	4	1	0	18	4
5. 5th St and L St												
6. 5th St (Foothill Blvd) and 4th St												
7. 5th St and H St												
8. 4th St (I-215 On Ramps) and H St												
9. 3rd St and I St												
10. 3rd St and H St	3	8	5	5	6	7	1	3	2	5	0	0
11. 2nd St and Mount Vernon Ave	0	2	15	0	0	0	1	3	0	18	0	3
12. 2nd St and K St												
13. 2nd St and I St												
14. 2nd St and I-215 SB On Ramp												
15. 2nd St and I-215 NB Ramps												
16. 2nd St and G St												
17. Rialto Ave and Rancho Ave												
18. Rialto Ave and Santa Fe Wy												
19. Rialto Ave and Mount Vernon Ave	4	7	0	8	10	0	0	8	15	4	11	0
20. Rialto Ave and K St												
21. Rialto Ave and I St												
22. Rialto Ave and G St												

TABLE C-21

INTERSECTION	PM 2009 TOTAL PCE TRUCKS TURNING MOVEMENT COUNTS 2 AXLE= 1.5 3 AXLE= 2 4+ AXLE=3												PM TRUCKS AVERAGE PCE FACTOR
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Foothill Blvd and Rancho Ave													1.8208
2. 5th St and Medical Center Dr													1.8208
3. 5th St and Cabrera Ave													1.8208
4. 5th St and Mount Vernon Ave	3	3	0	0	30	2	8	7	2	0	38	6	1.8208
5. 5th St and L St													1.8208
6. 5th St (Foothill Blvd) and 4th St													1.8208
7. 5th St and H St													1.9333
8. 4th St (I-215 On Ramps) and H St													1.9333
9. 3rd St and I St													1.9333
10. 3rd St and H St	7	19	9	9	15	11	2	6	3	8	0	0	1.9333
11. 2nd St and Mount Vernon Ave	0	3	32	0	0	0	2	5	0	47	0	5	2.1905
12. 2nd St and K St													2.1905
13. 2nd St and I St													2.1905
14. 2nd St and I-215 SB On Ramp													2.1905
15. 2nd St and I-215 NB Ramps													2.1905
16. 2nd St and G St													1.9333
17. Rialto Ave and Rancho Ave													1.8208
18. Rialto Ave and Santa Fe Wy													1.8208
19. Rialto Ave and Mount Vernon Ave	9	11	0	21	18	0	0	13	42	10	26	0	1.8208
20. Rialto Ave and K St													1.8208
21. Rialto Ave and I St													1.8208
22. Rialto Ave and G St													1.9333

TABLE C-22

Intersection	2009 PM AUTO TURNING MOVEMENT COUNTS												PCE Factors
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Foothill Blvd and Rancho Ave	77	0	170	0	516	74	0	0	0	116	581	0	1.00
2. 5th St and Medical Center Dr	2	1	0	145	436	1	82	2	138	1	477	76	1.00
3. 5th St and Cabrera Ave	8	8	35	8	492	7	10	4	6	20	551	12	1.00
4. 5th St and Mount Vernon Ave	121	449	42	78	339	110	68	390	64	72	401	95	1.00
5. 5th St and L St	5	4	6	15	491	5	70	4	18	10	531	64	1.00
6. 5th St (Foothill Blvd) and 4th St	67	0	14	0	598	81	0	0	0	7	642	0	1.00
7. 5th St and H St	124	131	16	47	290	296	25	219	193	165	453	47	1.00
8. 4th St (I-215 On Ramps) and H St	119	243	0	0	0	0	0	169	488	7	637	15	1.00
9. 3rd St and I St	8	2	30	0	78	18	59	232	57	40	48	0	1.00
10. 3rd St and H St	8	292	52	59	69	31	9	147	17	67	64	13	1.00
11. 2nd St and Mount Vernon Ave	6	441	128	11	8	6	125	451	10	148	5	204	1.00
12. 2nd St and K St	34	5	16	7	256	22	22	21	20	24	264	7	1.00
13. 2nd St and I St	11	34	191	6	309	8	83	165	32	36	233	9	1.00
14. 2nd St and I-215 SB On Ramp	0	0	0	0	455	155	0	0	0	632	305	0	1.00
15. 2nd St and I-215 NB Ramps	122	1	251	247	188	0	0	0	0	0	860	487	1.00
16. 2nd St and G St	243	175	45	70	288	26	50	131	81	77	891	73	1.00
17. Rialto Ave and Rancho Ave	136	184	88	27	204	80	45	154	16	120	368	49	1.00
18. Rialto Ave and Santa Fe Wy	0	0	0	14	329	0	15	0	21	0	521	14	1.00
19. Rialto Ave and Mount Vernon Ave	54	462	76	79	259	61	24	479	89	103	393	49	1.00
20. Rialto Ave and K St	30	32	124	6	333	33	5	40	21	103	493	13	1.00
21. Rialto Ave and I St	14	129	63	81	346	16	42	86	98	44	527	36	1.00
22. Rialto Ave and G St	49	157	11	50	305	23	36	84	63	21	450	137	1.00

TABLE C-23

Intersection	2009 PM TRUCK TURNING MOVEMENT COUNTS												PCE Factors
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Foothill Blvd and Rancho Ave	2	0	4	0	13	2	0	0	0	3	14	0	1.82
2. 5th St and Medical Center Dr	0	0	0	4	11	0	2	0	3	0	12	2	1.82
3. 5th St and Cabrera Ave	0	0	1	0	12	0	0	0	0	0	13	0	1.82
4. 5th St and Mount Vernon Ave	2	2	0	0	16	1	5	4	1	0	18	4	1.82
5. 5th St and L St	0	0	0	0	12	0	2	0	0	0	13	2	1.82
6. 5th St (Foothill Blvd) and 4th St	2	0	0	0	15	2	0	0	0	0	16	0	1.82
7. 5th St and H St	7	8	1	3	17	17	1	13	11	10	26	3	1.93
8. 4th St (I-215 On Ramps) and H St	7	14	0	0	0	0	0	10	28	0	37	1	1.93
9. 3rd St and I St	0	0	2	0	5	1	3	13	3	2	3	0	1.93
10. 3rd St and H St	3	8	5	5	6	7	1	3	2	5	0	0	1.93
11. 2nd St and Mount Vernon Ave	0	2	15	0	0	0	1	3	0	18	0	3	2.19
12. 2nd St and K St	1	0	0	0	7	1	1	1	1	1	7	0	2.19
13. 2nd St and I St	0	1	5	0	9	0	2	5	1	1	7	0	2.19
14. 2nd St and I-215 SB On Ramp	0	0	0	0	13	4	0	0	0	18	9	0	2.19
15. 2nd St and I-215 NB Ramps	3	0	7	7	5	0	0	0	0	0	24	14	2.19
16. 2nd St and G St	14	10	3	4	17	1	3	8	5	4	51	4	1.93
17. Rialto Ave and Rancho Ave	4	6	3	1	7	3	1	5	1	4	12	2	1.82
18. Rialto Ave and Santa Fe Wy	0	0	0	0	11	0	1	0	1	0	17	0	1.82
19. Rialto Ave and Mount Vernon Ave	4	7	0	8	10	0	0	8	15	4	11	0	1.82
20. Rialto Ave and K St	1	1	4	0	11	1	0	1	1	3	16	0	1.82
21. Rialto Ave and I St	0	4	2	3	11	1	1	3	3	1	17	1	1.82
22. Rialto Ave and G St	3	9	1	3	18	1	2	5	4	1	26	8	1.93

TABLE C-24

Intersection	2009 PM AUTO TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave	77	0	170	0	516	74	0	0	0	116	581	0
2. 5th St and Medical Center Dr	2	1	0	145	436	1	82	2	138	1	477	76
3. 5th St and Cabrera Ave	8	8	35	8	492	7	10	4	6	20	551	12
4. 5th St and Mount Vernon Ave	121	449	42	78	339	110	68	390	64	72	401	95
5. 5th St and L St	5	4	6	15	491	5	70	4	18	10	531	64
6. 5th St (Foothill Blvd) and 4th St	67	0	14	0	598	81	0	0	0	7	642	0
7. 5th St and H St	124	131	16	47	290	296	25	219	193	165	453	47
8. 4th St (I-215 On Ramps) and H St	119	243	0	0	0	0	0	169	488	7	637	15
9. 3rd St and I St	8	2	30	0	78	18	59	232	57	40	48	0
10. 3rd St and H St	8	292	52	59	69	31	9	147	17	67	64	13
11. 2nd St and Mount Vernon Ave	6	441	128	11	8	6	125	451	10	148	5	204
12. 2nd St and K St	34	5	16	7	256	22	22	21	20	24	264	7
13. 2nd St and I St	11	34	191	6	309	8	83	165	32	36	233	9
14. 2nd St and I-215 SB On Ramp	0	0	0	0	455	155	0	0	0	632	305	0
15. 2nd St and I-215 NB Ramps	122	1	251	247	188	0	0	0	0	0	860	487
16. 2nd St and G St	243	175	45	70	288	26	50	131	81	77	891	73
17. Rialto Ave and Rancho Ave	136	184	88	27	204	80	45	154	16	120	368	49
18. Rialto Ave and Santa Fe Wy	0	0	0	14	329	0	15	0	21	0	521	14
19. Rialto Ave and Mount Vernon Ave	54	462	76	79	259	61	24	479	89	103	393	49
20. Rialto Ave and K St	30	32	124	6	333	33	5	40	21	103	493	13
21. Rialto Ave and I St	14	129	63	81	346	16	42	86	98	44	527	36
22. Rialto Ave and G St	49	157	11	50	305	23	36	84	63	21	450	137

TABLE C-25

Intersection	2009 PM PCE TRUCK TURNING MOVEMENT COUNTS											
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Foothill Blvd and Rancho Ave	3	0	8	0	23	3	0	0	0	5	26	0
2. 5th St and Medical Center Dr	0	0	0	6	19	0	4	0	6	0	21	3
3. 5th St and Cabrera Ave	0	0	2	0	22	0	0	0	0	1	24	1
4. 5th St and Mount Vernon Ave	4	4	0	0	29	2	9	7	2	0	33	7
5. 5th St and L St	0	0	0	1	22	0	3	0	1	0	24	3
6. 5th St (Foothill Blvd) and 4th St	3	0	1	0	27	4	0	0	0	0	28	0
7. 5th St and H St	14	15	2	5	32	33	3	24	21	18	50	5
8. 4th St (I-215 On Ramps) and H St	13	27	0	0	0	0	0	19	54	1	71	2
9. 3rd St and I St	1	0	3	0	9	2	7	26	6	4	5	0
10. 3rd St and H St	6	15	10	10	12	14	2	6	4	10	0	0
11. 2nd St and Mount Vernon Ave	0	4	33	0	0	0	2	7	0	39	0	7
12. 2nd St and K St	2	0	1	0	16	1	1	1	1	1	16	0
13. 2nd St and I St	1	2	12	0	19	0	5	10	2	2	14	1
14. 2nd St and I-215 SB On Ramp	0	0	0	0	28	9	0	0	0	39	19	0
15. 2nd St and I-215 NB Ramps	7	0	15	15	12	0	0	0	0	0	53	30
16. 2nd St and G St	27	19	5	8	32	3	6	15	9	9	99	8
17. Rialto Ave and Rancho Ave	8	11	5	2	12	5	3	9	1	7	22	3
18. Rialto Ave and Santa Fe Wy	0	0	0	1	19	0	1	0	1	0	31	1
19. Rialto Ave and Mount Vernon Ave	7	13	0	15	18	0	0	15	27	7	20	0
20. Rialto Ave and K St	2	2	7	0	20	2	0	2	1	6	29	1
21. Rialto Ave and I St	1	8	4	5	20	1	2	5	6	3	31	2
22. Rialto Ave and G St	5	17	1	6	34	3	4	9	7	2	50	15

TABLE C-26

Intersection	2009 PM TURNING MOVEMENT COUNTS - TOTAL (AUTO + PCE TRUCK)												
	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	Total
1. Foothill Blvd and Rancho Ave	81	0	177	0	539	77	0	0	0	121	607	0	1603
2. 5th St and Medical Center Dr	2	1	0	152	456	1	86	2	144	1	499	80	1422
3. 5th St and Cabrera Ave	8	8	37	8	514	7	10	4	6	20	575	12	1210
4. 5th St and Mount Vernon Ave	125	453	42	78	368	112	77	397	66	72	434	102	2326
5. 5th St and L St	5	4	6	15	513	5	73	4	18	10	555	67	1276
6. 5th St (Foothill Blvd) and 4th St	70	0	14	0	625	85	0	0	0	7	671	0	1472
7. 5th St and H St	138	145	18	53	323	329	27	244	214	184	503	53	2230
8. 4th St (I-215 On Ramps) and H St	132	270	0	0	0	0	0	188	542	7	708	17	1865
9. 3rd St and I St	8	2	34	0	87	20	65	257	63	44	54	0	635
10. 3rd St and H St	14	307	62	69	81	45	11	153	21	77	64	13	915
11. 2nd St and Mount Vernon Ave	6	445	161	11	8	6	127	458	10	187	5	211	1635
12. 2nd St and K St	36	5	17	7	272	24	24	23	22	26	280	7	741
13. 2nd St and I St	11	36	202	6	328	8	88	176	34	38	248	9	1185
14. 2nd St and I-215 SB On Ramp	0	0	0	0	483	164	0	0	0	671	324	0	1643
15. 2nd St and I-215 NB Ramps	129	1	266	262	199	0	0	0	0	0	913	517	2288
16. 2nd St and G St	270	194	50	78	320	28	56	146	90	85	990	81	2389
17. Rialto Ave and Rancho Ave	144	195	93	29	216	85	47	163	17	127	390	52	1559
18. Rialto Ave and Santa Fe Wy	0	0	0	14	349	0	16	0	23	0	552	14	968
19. Rialto Ave and Mount Vernon Ave	61	475	76	94	277	61	24	494	116	110	413	49	2250
20. Rialto Ave and K St	32	34	131	6	353	35	5	42	23	109	522	13	1305
21. Rialto Ave and I St	14	136	67	86	366	17	44	91	104	46	558	38	1569
22. Rialto Ave and G St	55	174	13	56	339	25	40	94	70	23	500	152	1541

APPENDIX D

24 HOUR DIRECTIONAL VOLUME COUNTS

Counts Unlimited, Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of San Bernardino
Mount Vernon Avenue
B/ 4th Street - 3rd Street
24 Hour Directional Volume Count

SBCMV43
Site Code: 0429268
Date Start: 22-Oct-09
Date End: 22-Oct-09

Start Time	22-Oct-09 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		12	110			13	107				
12:15		12	132			7	122				
12:30		9	113			4	130				
12:45		17	113	50	468	4	127	28	486	78	954
01:00		5	129			5	130				
01:15		10	114			6	107				
01:30		7	140			3	121				
01:45		12	157	34	540	7	119	21	477	55	1017
02:00		6	94			7	87				
02:15		2	138			4	92				
02:30		4	124			6	123				
02:45		8	153	20	509	7	137	24	439	44	948
03:00		6	160			3	121				
03:15		4	110			7	122				
03:30		6	141			7	121				
03:45		6	160	22	571	18	144	35	508	57	1079
04:00		7	156			11	139				
04:15		10	135			16	128				
04:30		10	142			30	111				
04:45		26	153	53	586	36	134	93	512	146	1098
05:00		16	152			20	125				
05:15		17	142			31	**135**				
05:30		17	**170**			34	**138**				
05:45		26	**176**	76	640	44	**167**	129	565	205	1205
06:00		18	**162**			32	**152**				
06:15		24	**147**			37	112				
06:30		26	113			38	110				
06:45		40	115	108	537	89	107	196	481	304	1018
07:00		49	119			75	109				
07:15		58	116			**91**	85				
07:30		69	109			**148**	79				
07:45		101	126	277	470	**185**	65	499	338	776	808
08:00		93	112			**113**	76				
08:15		62	119			81	68				
08:30		77	89			126	47				
08:45		99	89	331	409	127	59	447	250	778	659
09:00		93	86			108	51				
09:15		94	81			103	46				
09:30		93	78			116	38				
09:45		81	59	361	304	105	29	432	164	793	468
10:00		87	68			81	42				
10:15		100	39			103	36				
10:30		92	41			95	37				
10:45		122	32	401	180	120	22	399	137	800	317
11:00		**129**	31			122	14				
11:15		**117**	25			104	12				
11:30		**122**	11			104	14				
11:45		**126**	11	494	78	117	11	447	51	941	129
Total		2227	5292	2227	5292	2750	4408	2750	4408	4977	9700
Combined Total		7519		7519		7158		7158		14677	
AM Peak		11:00				07:15					
Vol.		494				537					
P.H.F.		0.957				0.726					
PM Peak			05:30				05:15				
Vol.			655				592				
P.H.F.			0.930				0.886				
Percentage		29.6%	70.4%			38.4%	61.6%				
ADT/AADT		ADT 14,677		AADT 14,677							

APPENDIX E

EXISTING (2009) LOS CALCULATION SHEETS

AM PEAK HOUR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	629	94	122	392	53	159
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	723	108	140	451	61	183
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					TWLTL	
Median storage veh)					0	
Upstream signal (ft)				832		
pX, platoon unblocked						
vC, conflicting volume			831		1283	416
vC1, stage 1 conf vol					777	
vC2, stage 2 conf vol					506	
vCu, unblocked vol			831		1283	416
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			83		69	69
cM capacity (veh/h)			810		196	592

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	482	349	140	225	225	61	183
Volume Left	0	0	140	0	0	61	0
Volume Right	0	108	0	0	0	0	183
cSH	1700	1700	810	1700	1700	196	592
Volume to Capacity	0.28	0.21	0.17	0.13	0.13	0.31	0.31
Queue Length 95th (ft)	0	0	16	0	0	31	33
Control Delay (s)	0.0	0.0	10.4	0.0	0.0	31.4	13.8
Lane LOS			B			D	B
Approach Delay (s)	0.0		2.5			18.2	
Approach LOS						C	

Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			0.95	
Frt	1.00	1.00		1.00	0.97			0.93			0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1615	3419		1615	3301			1638			3078	
Flt Permitted	0.95	1.00		0.95	1.00			0.87			0.84	
Satd. Flow (perm)	1615	3419		1615	3301			1453			2633	
Volume (vph)	102	542	1	1	292	88	1	0	1	97	0	107
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	115	609	1	1	328	99	1	0	1	109	0	120
RTOR Reduction (vph)	0	0	0	0	28	0	0	1	0	0	96	0
Lane Group Flow (vph)	115	610	0	1	399	0	0	1	0	0	133	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	5.9	25.7		1.0	20.8			7.1			7.1	
Effective Green, g (s)	7.9	27.7		3.0	22.8			9.1			9.1	
Actuated g/C Ratio	0.17	0.60		0.07	0.50			0.20			0.20	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	279	2068		106	1643			289			523	
v/s Ratio Prot	c0.07	c0.18		0.00	0.12							
v/s Ratio Perm								0.00			c0.05	
v/c Ratio	0.41	0.29		0.01	0.24			0.00			0.25	
Uniform Delay, d1	16.9	4.4		20.0	6.6			14.7			15.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	0.1		0.0	0.1			0.0			0.3	
Delay (s)	17.9	4.4		20.0	6.6			14.7			15.7	
Level of Service	B	A		C	A			B			B	
Approach Delay (s)		6.6			6.7			14.7			15.7	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	45.8	Sum of lost time (s)	4.0
Intersection Capacity Utilization	40.3%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.93			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1615	3415		1615	3415			1658			1706	
Flt Permitted	0.51	1.00		0.37	1.00			0.92			0.96	
Satd. Flow (perm)	874	3415		631	3415			1536			1659	
Volume (vph)	5	645	6	14	356	4	7	7	14	2	3	2
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	6	725	7	16	400	4	8	8	16	2	3	2
RTOR Reduction (vph)	0	0	0	0	0	0	0	15	0	0	2	0
Lane Group Flow (vph)	6	732	0	16	404	0	0	17	0	0	5	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	70.6	70.6		70.6	70.6			2.9			2.9	
Effective Green, g (s)	72.6	72.6		72.6	72.6			4.9			4.9	
Actuated g/C Ratio	0.89	0.89		0.89	0.89			0.06			0.06	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	779	3042		562	3042			92			100	
v/s Ratio Prot		c0.21			0.12							
v/s Ratio Perm	0.01			0.03				c0.01			0.00	
v/c Ratio	0.01	0.24		0.03	0.13			0.18			0.05	
Uniform Delay, d1	0.5	0.6		0.5	0.6			36.4			36.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.0			1.0			0.2	
Delay (s)	0.5	0.7		0.5	0.6			37.4			36.3	
Level of Service	A	A		A	A			D			D	
Approach Delay (s)		0.7			0.6			37.4			36.3	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM Average Control Delay	1.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	81.5	Sum of lost time (s)	4.0
Intersection Capacity Utilization	29.0%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.97		1.00	0.98		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)	1615	3343		1615	3319		1615	3354		1615	3343	
Flt Permitted	0.95	1.00		0.95	1.00		0.41	1.00		0.55	1.00	
Satd. Flow (perm)	1615	3343		1615	3319		699	3354		931	3343	
Volume (vph)	40	523	93	32	283	70	26	212	31	143	328	58
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	49	638	113	39	345	85	32	259	38	174	400	71
RTOR Reduction (vph)	0	18	0	0	27	0	0	16	0	0	21	0
Lane Group Flow (vph)	49	733	0	39	403	0	32	281	0	174	450	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	2.2	16.0		2.2	16.0		15.0	15.0		15.0	15.0	
Effective Green, g (s)	4.2	18.0		4.2	18.0		17.0	17.0		17.0	17.0	
Actuated g/C Ratio	0.09	0.40		0.09	0.40		0.38	0.38		0.38	0.38	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	150	1331		150	1322		263	1261		350	1257	
v/s Ratio Prot	c0.03	c0.22		0.02	0.12			0.08			0.13	
v/s Ratio Perm							0.05			c0.19		
v/c Ratio	0.33	0.55		0.26	0.30		0.12	0.22		0.50	0.36	
Uniform Delay, d1	19.2	10.5		19.1	9.3		9.2	9.6		10.8	10.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.3	0.5		0.9	0.1		0.2	0.1		1.1	0.2	
Delay (s)	20.5	11.0		20.0	9.4		9.4	9.7		11.9	10.3	
Level of Service	C	B		B	A		A	A		B	B	
Approach Delay (s)		11.6			10.3			9.7			10.8	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	45.2	Sum of lost time (s)	6.0
Intersection Capacity Utilization	51.1%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			1.00			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.95			0.97	
Satd. Flow (prot)	1615	3415		1615	3399			1710			1666	
Flt Permitted	0.50	1.00		0.34	1.00			0.75			0.83	
Satd. Flow (perm)	847	3415		577	3399			1358			1423	
Volume (vph)	9	691	6	2	369	16	1	0	0	38	0	18
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	10	785	7	2	419	18	1	0	0	43	0	20
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	17	0
Lane Group Flow (vph)	10	792	0	2	435	0	0	1	0	0	46	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	54.4	54.4		54.4	54.4			7.3			7.3	
Effective Green, g (s)	56.4	56.4		56.4	56.4			9.3			9.3	
Actuated g/C Ratio	0.81	0.81		0.81	0.81			0.13			0.13	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	685	2763		467	2750			181			190	
v/s Ratio Prot		c0.23			0.13							
v/s Ratio Perm	0.01			0.00				0.00			c0.03	
v/c Ratio	0.01	0.29		0.00	0.16			0.01			0.24	
Uniform Delay, d1	1.3	1.7		1.3	1.5			26.2			27.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.1		0.0	0.0			0.0			0.7	
Delay (s)	1.3	1.7		1.3	1.5			26.2			27.7	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		1.7			1.5			26.2			27.7	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	2.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	69.7	Sum of lost time (s)	4.0
Intersection Capacity Utilization	30.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1700	1800	1700	1800
Total Lost time (s)	2.0		2.0	2.0	2.0	2.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3352		1615	3420	1615	1530
Flt Permitted	1.00		0.29	1.00	0.95	1.00
Satd. Flow (perm)	3352		489	3420	1615	1530
Volume (vph)	702	107	7	414	71	10
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	807	123	8	476	82	11
RTOR Reduction (vph)	10	0	0	0	0	9
Lane Group Flow (vph)	920	0	8	476	82	2
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Perm			Perm
Protected Phases	2			6	8	
Permitted Phases			6			8
Actuated Green, G (s)	47.7		47.7	47.7	7.8	7.8
Effective Green, g (s)	49.7		49.7	49.7	9.8	9.8
Actuated g/C Ratio	0.78		0.78	0.78	0.15	0.15
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2624		383	2677	249	236
v/s Ratio Prot	c0.27			0.14	c0.05	
v/s Ratio Perm			0.02			0.00
v/c Ratio	0.35		0.02	0.18	0.33	0.01
Uniform Delay, d1	2.1		1.5	1.7	23.9	22.7
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.0	0.0	0.8	0.0
Delay (s)	2.1		1.5	1.8	24.7	22.7
Level of Service	A		A	A	C	C
Approach Delay (s)	2.1			1.8	24.5	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	3.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	63.5	Sum of lost time (s)	4.0
Intersection Capacity Utilization	35.1%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1615	3420	1530	1615	3333		1615	3316		1615	3420	1530
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.54	1.00		0.62	1.00	1.00
Satd. Flow (perm)	1615	3420	1530	1615	3333		926	3316		1051	3420	1530
Volume (vph)	24	383	300	67	217	44	25	58	15	58	288	216
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	28	440	345	77	249	51	29	67	17	67	331	248
RTOR Reduction (vph)	0	0	225	0	18	0	0	13	0	0	0	177
Lane Group Flow (vph)	28	440	120	77	282	0	29	71	0	67	331	71
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot		Perm	Prot			pm+pt			pm+pt		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2				8			4		4
Actuated Green, G (s)	2.2	15.6	15.6	4.5	17.9		12.9	10.9		16.3	12.6	12.6
Effective Green, g (s)	4.2	17.6	17.6	6.5	19.9		16.9	12.9		20.3	14.6	14.6
Actuated g/C Ratio	0.08	0.35	0.35	0.13	0.39		0.33	0.25		0.40	0.29	0.29
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	134	1187	531	207	1308		363	844		484	985	441
v/s Ratio Prot	0.02	c0.13		c0.05	0.08		0.01	0.02		c0.02	c0.10	
v/s Ratio Perm			0.08				0.02			0.04		0.05
v/c Ratio	0.21	0.37	0.23	0.37	0.22		0.08	0.08		0.14	0.34	0.16
Uniform Delay, d1	21.7	12.4	11.7	20.2	10.2		11.5	14.4		9.5	14.2	13.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.8	0.2	0.2	1.1	0.1		0.1	0.0		0.1	0.2	0.2
Delay (s)	22.5	12.6	11.9	21.4	10.3		11.6	14.4		9.7	14.4	13.7
Level of Service	C	B	B	C	B		B	B		A	B	B
Approach Delay (s)		12.7			12.6			13.7			13.6	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	50.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.2%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1800	1800	1800
Total Lost time (s)					2.0		2.0	2.0			2.0	
Lane Util. Factor					0.91		1.00	0.95			0.95	
Frt					1.00		1.00	1.00			0.90	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					4897		1615	3420			3088	
Flt Permitted					1.00		0.34	1.00			1.00	
Satd. Flow (perm)					4897		586	3420			3088	
Volume (vph)	0	0	0	0	115	3	23	89	0	0	234	429
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	0	131	3	26	101	0	0	266	488
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	148	0
Lane Group Flow (vph)	0	0	0	0	132	0	26	101	0	0	606	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				Perm			Perm					
Protected Phases					8			2			6	
Permitted Phases				8			2					
Actuated Green, G (s)					7.0		27.8	27.8			27.8	
Effective Green, g (s)					9.0		29.8	29.8			29.8	
Actuated g/C Ratio					0.21		0.70	0.70			0.70	
Clearance Time (s)					4.0		4.0	4.0			4.0	
Vehicle Extension (s)					3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)					1030		408	2381			2150	
v/s Ratio Prot					c0.03			0.03			c0.20	
v/s Ratio Perm							0.04					
v/c Ratio					0.13		0.06	0.04			0.28	
Uniform Delay, d1					13.7		2.1	2.0			2.5	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					0.1		0.1	0.0			0.1	
Delay (s)					13.8		2.1	2.0			2.5	
Level of Service					B		A	A			A	
Approach Delay (s)		0.0			13.8			2.1			2.5	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	4.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	42.8	Sum of lost time (s)	4.0
Intersection Capacity Utilization	31.4%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)		2.0			2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor		0.95			0.95		1.00	1.00		1.00	0.95	
Frt		0.99			1.00		1.00	0.86		1.00	0.98	
Flt Protected		1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3382			3343		1615	1552		1615	3354	
Flt Permitted		1.00			0.83		0.48	1.00		0.73	1.00	
Satd. Flow (perm)		3382			2854		809	1552		1247	3354	
Volume (vph)	0	48	4	37	44	0	10	3	32	164	405	60
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	50	4	39	46	0	10	3	33	171	422	62
RTOR Reduction (vph)	0	3	0	0	0	0	0	7	0	0	7	0
Lane Group Flow (vph)	0	51	0	0	85	0	10	29	0	171	477	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		4.8			4.8		36.7	36.7		36.7	36.7	
Effective Green, g (s)		6.8			6.8		38.7	38.7		38.7	38.7	
Actuated g/C Ratio		0.14			0.14		0.78	0.78		0.78	0.78	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		465			392		632	1213		975	2622	
v/s Ratio Prot		0.01						0.02			c0.14	
v/s Ratio Perm					c0.03		0.01			0.14		
v/c Ratio		0.11			0.22		0.02	0.02		0.18	0.18	
Uniform Delay, d1		18.7			19.0		1.2	1.2		1.4	1.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			0.3		0.0	0.0		0.1	0.0	
Delay (s)		18.8			19.3		1.2	1.2		1.5	1.4	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		18.8			19.3			1.2			1.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	4.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	49.5	Sum of lost time (s)	4.0
Intersection Capacity Utilization	32.3%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95		1.00	0.95	
Frt	1.00	0.94		1.00	0.97			0.93		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1615	3221		1615	3325			3180		1615	3318	
Flt Permitted	0.95	1.00		0.95	1.00			1.00		0.64	1.00	
Satd. Flow (perm)	1615	3221		1615	3325			3180		1081	3318	
Volume (vph)	31	114	72	39	36	8	0	79	70	9	173	43
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	38	141	89	48	44	10	0	98	86	11	214	53
RTOR Reduction (vph)	0	52	0	0	6	0	0	62	0	0	32	0
Lane Group Flow (vph)	38	178	0	48	48	0	0	122	0	11	235	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	1.1	10.9		1.2	11.0			6.6		6.6	6.6	
Effective Green, g (s)	3.1	12.9		3.2	13.0			8.6		8.6	8.6	
Actuated g/C Ratio	0.10	0.42		0.10	0.42			0.28		0.28	0.28	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	163	1353		168	1408			891		303	929	
v/s Ratio Prot	0.02	c0.06		c0.03	0.01			0.04			c0.07	
v/s Ratio Perm										0.01		
v/c Ratio	0.23	0.13		0.29	0.03			0.14		0.04	0.25	
Uniform Delay, d1	12.7	5.5		12.7	5.2			8.3		8.0	8.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.0		0.9	0.0			0.1		0.0	0.1	
Delay (s)	13.4	5.5		13.6	5.2			8.3		8.1	8.7	
Level of Service	B	A		B	A			A		A	A	
Approach Delay (s)		6.6			9.2			8.3			8.7	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	30.7	Sum of lost time (s)	6.0
Intersection Capacity Utilization	27.5%	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												
Ideal Flow (vphpl)	1800	1800	1800	1600	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor		1.00		0.95	0.95			0.95			0.95	
Frt		0.96		1.00	0.87			0.94			1.00	
Flt Protected		0.98		0.95	1.00			1.00			0.99	
Satd. Flow (prot)		1699		1444	1478			3225			3369	
Flt Permitted		0.98		0.95	1.00			1.00			0.99	
Satd. Flow (perm)		1699		1444	1478			3225			3369	
Volume (vph)	3	4	3	89	5	93	5	239	147	136	339	3
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	4	5	4	114	6	119	6	306	188	174	435	4
RTOR Reduction (vph)	0	4	0	0	97	0	0	107	0	0	1	0
Lane Group Flow (vph)	0	9	0	104	38	0	0	393	0	0	612	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split			Split			Split			Split		
Protected Phases	4	4		8	8		2	2		6	6	
Permitted Phases												
Actuated Green, G (s)		0.9		7.0	7.0			10.8			13.5	
Effective Green, g (s)		2.9		9.0	9.0			12.8			15.5	
Actuated g/C Ratio		0.06		0.19	0.19			0.27			0.32	
Clearance Time (s)		4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		102		270	276			856			1083	
v/s Ratio Prot		c0.01		c0.07	0.03			c0.12			c0.18	
v/s Ratio Perm												
v/c Ratio		0.09		0.39	0.14			0.46			0.57	
Uniform Delay, d1		21.4		17.2	16.4			14.8			13.6	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		0.4		0.9	0.2			0.4			0.7	
Delay (s)		21.8		18.1	16.6			15.2			14.2	
Level of Service		C		B	B			B			B	
Approach Delay (s)		21.8			17.2			15.2			14.2	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	48.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

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

Intersection #12 K Street and 2nd Street [2009 Analysis]

Cycle (sec):	100	Critical Vol./Cap.(X):	0.202
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.5
Optimal Cycle:	0	Level Of Service:	A

Street Name:	K Street						2nd 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 1!	0 0		1 0 1	1 0		1 0 1	1 0	
Volume Module: >> Count Date: 21 Oct 2009 << AM Peak Period												
Base Vol:	16	3	41	8	25	12	8	258	13	39	128	21
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:	16	3	41	8	25	12	8	258	13	39	128	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	17	3	44	9	27	13	9	276	14	42	137	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	3	44	9	27	13	9	276	14	42	137	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	3	44	9	27	13	9	276	14	42	137	22
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.05	0.68	0.18	0.55	0.27	1.00	1.90	0.10	1.00	1.72	0.28
Final Sat.:	190	36	487	120	376	181	649	1368	69	637	1221	205
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.07	0.07	0.07	0.01	0.20	0.20	0.07	0.11	0.11
Crit Moves:	****				****			****			****	
Delay/Veh:	8.1	8.1	8.1	8.3	8.3	8.3	8.2	8.8	8.8	8.6	8.3	8.1
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:	8.1	8.1	8.1	8.3	8.3	8.3	8.2	8.8	8.8	8.6	8.3	8.1
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	8.1			8.3			8.8			8.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.1			8.3			8.8			8.3		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.1

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	1.00		1.00	0.99			0.87			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1615	3414		1615	3383			2972			3352	
Flt Permitted	0.63	1.00		0.54	1.00			0.94			0.85	
Satd. Flow (perm)	1070	3414		919	3383			2809			2883	
Volume (vph)	5	328	4	39	170	13	4	17	134	119	292	18
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	5	349	4	41	181	14	4	18	143	127	311	19
RTOR Reduction (vph)	0	1	0	0	8	0	0	80	0	0	4	0
Lane Group Flow (vph)	5	352	0	41	187	0	0	85	0	0	453	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	8.7	8.7		8.7	8.7			9.5			9.5	
Effective Green, g (s)	10.7	10.7		10.7	10.7			11.5			11.5	
Actuated g/C Ratio	0.41	0.41		0.41	0.41			0.44			0.44	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	437	1394		375	1382			1233			1265	
v/s Ratio Prot		c0.10			0.06							
v/s Ratio Perm	0.00			0.04				0.03			c0.16	
v/c Ratio	0.01	0.25		0.11	0.14			0.07			0.36	
Uniform Delay, d1	4.6	5.1		4.8	4.9			4.3			4.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.1		0.1	0.0			0.0			0.2	
Delay (s)	4.6	5.2		4.9	4.9			4.3			5.1	
Level of Service	A	A		A	A			A			A	
Approach Delay (s)		5.2			4.9			4.3			5.1	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	26.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1600	1800	1800	1800
Total Lost time (s)	2.0		2.0	2.0		
Lane Util. Factor	0.95		0.97	1.00		
Frt	0.96		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3278		2949	1800		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3278		2949	1800		
Volume (vph)	449	172	212	234	0	0
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	473	181	223	246	0	0
RTOR Reduction (vph)	44	0	0	0	0	0
Lane Group Flow (vph)	610	0	223	246	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Prot			
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	19.4		7.5	34.9		
Effective Green, g (s)	21.4		9.5	34.9		
Actuated g/C Ratio	0.61		0.27	1.00		
Clearance Time (s)	4.0		4.0	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	2010		803	1800		
v/s Ratio Prot	c0.19		c0.08	0.14		
v/s Ratio Perm						
v/c Ratio	0.30		0.28	0.14		
Uniform Delay, d1	3.2		10.0	0.0		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.1		0.2	0.0		
Delay (s)	3.3		10.2	0.0		
Level of Service	A		B	A		
Approach Delay (s)	3.3			4.9	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	3.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	34.9	Sum of lost time (s)	4.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800	1800	1800	1800	1900	1900	1900
Total Lost time (s)	2.0	2.0			2.0	2.0		2.0	2.0			
Lane Util. Factor	1.00	0.95			0.91	1.00		1.00	0.88			
Frt	1.00	1.00			1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1615	3420			4914	1530		1710	2693			
Flt Permitted	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (perm)	1615	3420			4914	1530		1710	2693			
Volume (vph)	246	210	0	0	291	183	193	0	1155	0	0	0
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)	267	228	0	0	316	199	210	0	1255	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	165	0	0	596	0	0	0
Lane Group Flow (vph)	267	228	0	0	316	34	0	210	659	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot					Perm	Perm		Prot			
Protected Phases	5	2			6			8	8			
Permitted Phases						6	8					
Actuated Green, G (s)	11.1	22.2			7.1	7.1		22.4	22.4			
Effective Green, g (s)	13.1	24.2			9.1	9.1		24.4	24.4			
Actuated g/C Ratio	0.25	0.46			0.17	0.17		0.46	0.46			
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	402	1573			850	265		793	1249			
v/s Ratio Prot	c0.17	0.07			c0.06				c0.24			
v/s Ratio Perm						0.02		0.12				
v/c Ratio	0.66	0.14			0.37	0.13		0.26	0.53			
Uniform Delay, d1	17.8	8.2			19.2	18.4		8.6	10.0			
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00			
Incremental Delay, d2	4.1	0.0			0.3	0.2		0.2	0.4			
Delay (s)	21.9	8.3			19.5	18.6		8.8	10.4			
Level of Service	C	A			B	B		A	B			
Approach Delay (s)		15.6			19.2			10.2			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	52.6	Sum of lost time (s)	6.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	4842		1615	4838		1615	3281		1615	3299	
Flt Permitted	0.95	1.00		0.95	1.00		0.54	1.00		0.68	1.00	
Satd. Flow (perm)	1615	4842		1615	4838		920	3281		1151	3299	
Volume (vph)	110	1025	111	27	277	32	95	81	30	89	137	42
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	117	1090	118	29	295	34	101	86	32	95	146	45
RTOR Reduction (vph)	0	10	0	0	12	0	0	27	0	0	36	0
Lane Group Flow (vph)	117	1198	0	29	317	0	101	91	0	95	155	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases							8			4		
Actuated Green, G (s)	7.3	35.9		3.0	31.6		14.8	9.0		14.6	8.9	
Effective Green, g (s)	9.3	37.9		5.0	33.6		18.8	11.0		18.6	10.9	
Actuated g/C Ratio	0.13	0.54		0.07	0.48		0.27	0.16		0.27	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	216	2637		116	2336		326	519		359	517	
v/s Ratio Prot	c0.07	c0.25		0.02	0.07		c0.03	0.03		0.03	c0.05	
v/s Ratio Perm							0.05			0.04		
v/c Ratio	0.54	0.45		0.25	0.14		0.31	0.18		0.26	0.30	
Uniform Delay, d1	28.2	9.6		30.5	10.0		19.8	25.4		19.9	26.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.8	0.1		1.1	0.0		0.5	0.2		0.4	0.3	
Delay (s)	30.9	9.7		31.7	10.0		20.3	25.5		20.2	26.3	
Level of Service	C	A		C	A		C	C		C	C	
Approach Delay (s)		11.6			11.7			23.1			24.3	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	14.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	69.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.5%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1615	3291		1615	3298		1615	1800	1530	1615	1777	
Flt Permitted	0.62	1.00		0.47	1.00		0.61	1.00	1.00	0.62	1.00	
Satd. Flow (perm)	1062	3291		806	3298		1041	1800	1530	1055	1777	
Volume (vph)	32	308	103	54	137	43	79	153	140	68	145	13
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	36	346	116	61	154	48	89	172	157	76	163	15
RTOR Reduction (vph)	0	37	0	0	21	0	0	0	104	0	5	0
Lane Group Flow (vph)	36	425	0	61	181	0	89	172	53	76	173	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	17.8	17.8		17.8	17.8		10.0	10.0	10.0	10.0	10.0	
Effective Green, g (s)	19.8	19.8		19.8	19.8		12.0	12.0	12.0	12.0	12.0	
Actuated g/C Ratio	0.55	0.55		0.55	0.55		0.34	0.34	0.34	0.34	0.34	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	587	1820		446	1824		349	603	513	354	596	
v/s Ratio Prot		c0.13			0.05			0.10			c0.10	
v/s Ratio Perm	0.03			0.08			0.09		0.03	0.07		
v/c Ratio	0.06	0.23		0.14	0.10		0.26	0.29	0.10	0.21	0.29	
Uniform Delay, d1	3.7	4.1		3.9	3.8		8.7	8.7	8.2	8.5	8.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	0.1		0.1	0.0		0.4	0.3	0.1	0.3	0.3	
Delay (s)	3.7	4.2		4.0	3.8		9.0	9.0	8.3	8.8	9.0	
Level of Service	A	A		A	A		A	A	A	A	A	
Approach Delay (s)		4.1			3.9			8.7			9.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	35.8	Sum of lost time (s)	4.0
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.91	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1615	3420	3420	1530	1614	
Flt Permitted	0.60	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	1016	3420	3420	1530	1614	
Volume (vph)	16	535	204	24	15	27
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	20	652	249	29	18	33
RTOR Reduction (vph)	0	0	0	5	29	0
Lane Group Flow (vph)	20	652	249	24	22	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm		
Protected Phases		2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)	61.3	61.3	61.3	61.3	6.7	
Effective Green, g (s)	63.3	63.3	63.3	63.3	8.7	
Actuated g/C Ratio	0.83	0.83	0.83	0.83	0.11	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	846	2849	2849	1274	185	
v/s Ratio Prot		c0.19	0.07		c0.01	
v/s Ratio Perm	0.02			0.02		
v/c Ratio	0.02	0.23	0.09	0.02	0.12	
Uniform Delay, d1	1.1	1.3	1.1	1.1	30.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	0.0	0.0	0.0	0.3	
Delay (s)	1.1	1.4	1.2	1.1	30.5	
Level of Service	A	A	A	A	C	
Approach Delay (s)		1.3	1.2		30.5	
Approach LOS		A	A		C	

Intersection Summary			
HCM Average Control Delay	2.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	76.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	25.6%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.98		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	3351		1615	3358		1615	3344		1615	3329	
Flt Permitted	0.61	1.00		0.38	1.00		0.36	1.00		0.48	1.00	
Satd. Flow (perm)	1041	3351		646	3358		604	3344		813	3329	
Volume (vph)	103	393	61	43	153	21	30	290	51	47	403	87
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	132	504	78	55	196	27	38	372	65	60	517	112
RTOR Reduction (vph)	0	18	0	0	15	0	0	20	0	0	26	0
Lane Group Flow (vph)	132	564	0	55	208	0	38	417	0	60	603	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	11.4	11.4		11.4	11.4		11.7	11.7		11.7	11.7	
Effective Green, g (s)	13.4	13.4		13.4	13.4		13.7	13.7		13.7	13.7	
Actuated g/C Ratio	0.43	0.43		0.43	0.43		0.44	0.44		0.44	0.44	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	449	1444		278	1447		266	1473		358	1466	
v/s Ratio Prot		c0.17			0.06			0.12			c0.18	
v/s Ratio Perm	0.13			0.09			0.06			0.07		
v/c Ratio	0.29	0.39		0.20	0.14		0.14	0.28		0.17	0.41	
Uniform Delay, d1	5.8	6.1		5.5	5.4		5.2	5.6		5.3	5.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.2		0.4	0.0		0.2	0.1		0.2	0.2	
Delay (s)	6.1	6.2		5.9	5.4		5.4	5.7		5.5	6.1	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		6.2			5.5			5.7			6.1	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	31.1	Sum of lost time (s)	4.0
Intersection Capacity Utilization	48.2%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			1.00			0.91			0.94	
Flt Protected		1.00			0.98			0.99			1.00	
Satd. Flow (prot)		3377			3355			1618			1695	
Flt Permitted		0.95			0.72			0.99			1.00	
Satd. Flow (perm)		3200			2450			1618			1695	
Volume (vph)	11	425	36	116	191	1	37	21	124	3	30	23
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	13	494	42	135	222	1	43	24	144	3	35	27
RTOR Reduction (vph)	0	6	0	0	0	0	0	112	0	0	24	0
Lane Group Flow (vph)	0	543	0	0	358	0	0	99	0	0	41	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Split			Split		
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Actuated Green, G (s)		20.5			20.5			7.7			2.8	
Effective Green, g (s)		22.5			22.5			9.7			4.8	
Actuated g/C Ratio		0.52			0.52			0.23			0.11	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1674			1282			365			189	
v/s Ratio Prot								c0.06			c0.02	
v/s Ratio Perm		c0.17			0.15							
v/c Ratio		0.32			0.28			0.27			0.22	
Uniform Delay, d1		5.9			5.7			13.7			17.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.1			0.4			0.6	
Delay (s)		6.0			5.8			14.1			18.0	
Level of Service		A			A			B			B	
Approach Delay (s)		6.0			5.8			14.1			18.0	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	43.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	51.2%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.99			0.93			0.96	
Flt Protected		0.99			0.99			1.00			0.98	
Satd. Flow (prot)		3374			3363			3167			3218	
Flt Permitted		0.87			0.86			0.93			0.82	
Satd. Flow (perm)		2956			2906			2954			2683	
Volume (vph)	87	436	20	41	215	17	8	66	67	125	126	99
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	98	490	22	46	242	19	9	74	75	140	142	111
RTOR Reduction (vph)	0	3	0	0	6	0	0	48	0	0	63	0
Lane Group Flow (vph)	0	607	0	0	301	0	0	110	0	0	330	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		13.4			13.4			9.0			9.0	
Effective Green, g (s)		15.4			15.4			11.0			11.0	
Actuated g/C Ratio		0.51			0.51			0.36			0.36	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1497			1472			1069			971	
v/s Ratio Prot												
v/s Ratio Perm		c0.21			0.10			0.04			c0.12	
v/c Ratio		0.41			0.20			0.10			0.34	
Uniform Delay, d1		4.7			4.1			6.4			7.1	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.2			0.1			0.0			0.2	
Delay (s)		4.8			4.2			6.5			7.3	
Level of Service		A			A			A			A	
Approach Delay (s)		4.8			4.2			6.5			7.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	30.4	Sum of lost time (s)	4.0
Intersection Capacity Utilization	52.8%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	3389		1615	3315		1615	3262		1615	3233	
Flt Permitted	0.52	1.00		0.38	1.00		0.65	1.00		0.69	1.00	
Satd. Flow (perm)	878	3389		643	3315		1104	3262		1181	3233	
Volume (vph)	52	481	31	36	249	64	14	50	22	82	81	47
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	66	609	39	46	315	81	18	63	28	104	103	59
RTOR Reduction (vph)	0	5	0	0	23	0	0	20	0	0	42	0
Lane Group Flow (vph)	66	643	0	46	373	0	18	71	0	104	120	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	23.9	23.9		23.9	23.9		10.1	10.1		10.1	10.1	
Effective Green, g (s)	25.9	25.9		25.9	25.9		12.1	12.1		12.1	12.1	
Actuated g/C Ratio	0.62	0.62		0.62	0.62		0.29	0.29		0.29	0.29	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	541	2090		397	2044		318	940		340	931	
v/s Ratio Prot		c0.19			0.11			0.02			0.04	
v/s Ratio Perm	0.08			0.07			0.02			c0.09		
v/c Ratio	0.12	0.31		0.12	0.18		0.06	0.08		0.31	0.13	
Uniform Delay, d1	3.3	3.8		3.3	3.5		10.8	10.9		11.7	11.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.1	0.0		0.1	0.0		0.5	0.1	
Delay (s)	3.4	3.9		3.5	3.5		10.9	10.9		12.2	11.1	
Level of Service	A	A		A	A		B	B		B	B	
Approach Delay (s)		3.9			3.5			10.9			11.5	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	5.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	42.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

PM PEAK HOUR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	539	77	121	607	81	177
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	567	81	127	639	85	186
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					TWLTL	
Median storage veh)					0	
Upstream signal (ft)				832		
pX, platoon unblocked						
vC, conflicting volume			648		1182	324
vC1, stage 1 conf vol					608	
vC2, stage 2 conf vol					574	
vCu, unblocked vol			648		1182	324
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			87		61	72
cM capacity (veh/h)			947		219	677

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	378	270	127	319	319	85	186
Volume Left	0	0	127	0	0	85	0
Volume Right	0	81	0	0	0	0	186
cSH	1700	1700	947	1700	1700	219	677
Volume to Capacity	0.22	0.16	0.13	0.19	0.19	0.39	0.28
Queue Length 95th (ft)	0	0	12	0	0	43	28
Control Delay (s)	0.0	0.0	9.4	0.0	0.0	31.5	12.3
Lane LOS			A			D	B
Approach Delay (s)	0.0		1.6			18.3	
Approach LOS						C	

Intersection Summary			
Average Delay	3.7		
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			0.95	
Frt	1.00	1.00		1.00	0.98			1.00			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1615	3419		1615	3349			1742			3044	
Flt Permitted	0.95	1.00		0.95	1.00			0.81			0.86	
Satd. Flow (perm)	1615	3419		1615	3349			1453			2655	
Volume (vph)	152	456	1	1	499	80	2	1	0	86	2	144
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)	165	496	1	1	542	87	2	1	0	93	2	157
RTOR Reduction (vph)	0	0	0	0	13	0	0	0	0	0	131	0
Lane Group Flow (vph)	165	497	0	1	616	0	0	3	0	0	121	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	8.7	30.8		0.9	23.0			6.3			6.3	
Effective Green, g (s)	10.7	32.8		2.9	25.0			8.3			8.3	
Actuated g/C Ratio	0.21	0.66		0.06	0.50			0.17			0.17	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	346	2243		94	1675			241			441	
v/s Ratio Prot	c0.10	0.15		0.00	c0.18							
v/s Ratio Perm								0.00			c0.05	
v/c Ratio	0.48	0.22		0.01	0.37			0.01			0.27	
Uniform Delay, d1	17.2	3.5		22.2	7.7			17.4			18.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	0.1		0.0	0.1			0.0			0.3	
Delay (s)	18.2	3.5		22.2	7.8			17.4			18.6	
Level of Service	B	A		C	A			B			B	
Approach Delay (s)		7.2			7.8			17.4			18.6	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	50.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	44.4%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1615	3413		1615	3409			1620			1686	
Flt Permitted	0.41	1.00		0.44	1.00			0.96			0.90	
Satd. Flow (perm)	693	3413		748	3409			1563			1565	
Volume (vph)	8	514	7	20	575	12	8	8	37	10	4	6
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	9	553	8	22	618	13	9	9	40	11	4	6
RTOR Reduction (vph)	0	1	0	0	1	0	0	35	0	0	5	0
Lane Group Flow (vph)	9	560	0	22	630	0	0	23	0	0	16	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	48.5	48.5		48.5	48.5			5.3			5.3	
Effective Green, g (s)	50.5	50.5		50.5	50.5			7.3			7.3	
Actuated g/C Ratio	0.82	0.82		0.82	0.82			0.12			0.12	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	566	2789		611	2786			185			185	
v/s Ratio Prot		0.16			c0.18							
v/s Ratio Perm	0.01			0.03				c0.01			0.01	
v/c Ratio	0.02	0.20		0.04	0.23			0.12			0.08	
Uniform Delay, d1	1.0	1.2		1.1	1.3			24.4			24.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.0			0.3			0.2	
Delay (s)	1.1	1.3		1.1	1.3			24.7			24.5	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		1.3			1.3			24.7			24.5	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	2.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	4.0
Intersection Capacity Utilization	28.6%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.96		1.00	0.97		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)	1615	3300		1615	3323		1615	3377		1615	3347	
Flt Permitted	0.95	1.00		0.95	1.00		0.40	1.00		0.38	1.00	
Satd. Flow (perm)	1615	3300		1615	3323		688	3377		648	3347	
Volume (vph)	78	368	112	72	434	102	125	453	42	77	397	66
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	82	387	118	76	457	107	132	477	44	81	418	69
RTOR Reduction (vph)	0	36	0	0	26	0	0	10	0	0	20	0
Lane Group Flow (vph)	82	469	0	76	538	0	132	511	0	81	467	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	4.3	13.6		4.2	13.5		15.7	15.7		15.7	15.7	
Effective Green, g (s)	6.3	15.6		6.2	15.5		17.7	17.7		17.7	17.7	
Actuated g/C Ratio	0.14	0.34		0.14	0.34		0.39	0.39		0.39	0.39	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	224	1131		220	1132		268	1314		252	1302	
v/s Ratio Prot	c0.05	0.14		0.05	c0.16			0.15			0.14	
v/s Ratio Perm							c0.19			0.12		
v/c Ratio	0.37	0.41		0.35	0.48		0.49	0.39		0.32	0.36	
Uniform Delay, d1	17.8	11.5		17.8	11.8		10.5	10.0		9.7	9.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	0.2		0.9	0.3		1.4	0.2		0.7	0.2	
Delay (s)	18.8	11.7		18.8	12.1		11.9	10.2		10.4	10.0	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		12.7			12.9			10.5			10.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	45.5	Sum of lost time (s)	6.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.98			0.95			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.96	
Satd. Flow (prot)	1615	3415		1615	3364			1675			1689	
Flt Permitted	0.39	1.00		0.44	1.00			0.93			0.80	
Satd. Flow (perm)	655	3415		743	3364			1582			1405	
Volume (vph)	15	513	5	10	555	67	5	4	6	73	4	18
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	16	540	5	11	584	71	5	4	6	77	4	19
RTOR Reduction (vph)	0	1	0	0	7	0	0	5	0	0	15	0
Lane Group Flow (vph)	16	544	0	11	648	0	0	10	0	0	85	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	37.0	37.0		37.0	37.0			9.7			9.7	
Effective Green, g (s)	39.0	39.0		39.0	39.0			11.7			11.7	
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.21			0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	467	2435		530	2398			338			301	
v/s Ratio Prot		0.16			c0.19							
v/s Ratio Perm	0.02			0.01				0.01			c0.06	
v/c Ratio	0.03	0.22		0.02	0.27			0.03			0.28	
Uniform Delay, d1	2.3	2.7		2.3	2.8			17.0			18.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.1			0.0			0.5	
Delay (s)	2.3	2.7		2.3	2.9			17.0			18.5	
Level of Service	A	A		A	A			B			B	
Approach Delay (s)		2.7			2.8			17.0			18.5	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	4.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	54.7	Sum of lost time (s)	4.0
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1700	1800	1700	1800
Total Lost time (s)	2.0		2.0	2.0	2.0	2.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3358		1615	3420	1615	1530
Flt Permitted	1.00		0.36	1.00	0.95	1.00
Satd. Flow (perm)	3358		606	3420	1615	1530
Volume (vph)	625	85	7	671	70	14
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	651	89	7	699	73	15
RTOR Reduction (vph)	9	0	0	0	0	13
Lane Group Flow (vph)	731	0	7	699	73	2
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Perm			Perm
Protected Phases	2			6	8	
Permitted Phases			6			8
Actuated Green, G (s)	46.4		46.4	46.4	8.0	8.0
Effective Green, g (s)	48.4		48.4	48.4	10.0	10.0
Actuated g/C Ratio	0.78		0.78	0.78	0.16	0.16
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2605		470	2653	259	245
v/s Ratio Prot	c0.22			0.20	c0.05	
v/s Ratio Perm			0.01			0.00
v/c Ratio	0.28		0.01	0.26	0.28	0.01
Uniform Delay, d1	2.0		1.6	2.0	23.0	22.0
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.0	0.1	0.6	0.0
Delay (s)	2.1		1.6	2.0	23.6	22.1
Level of Service	A		A	A	C	C
Approach Delay (s)	2.1			2.0	23.4	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	3.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	62.4	Sum of lost time (s)	4.0
Intersection Capacity Utilization	32.1%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1615	3420	1530	1615	3371		1615	3364		1615	3420	1530
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.40	1.00		0.64	1.00	1.00
Satd. Flow (perm)	1615	3420	1530	1615	3371		674	3364		1082	3420	1530
Volume (vph)	53	323	329	184	503	53	138	145	18	27	244	214
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	60	363	370	207	565	60	155	163	20	30	274	240
RTOR Reduction (vph)	0	0	241	0	8	0	0	10	0	0	0	195
Lane Group Flow (vph)	60	363	129	207	617	0	155	173	0	30	274	45
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot		Perm	Prot			pm+pt			pm+pt		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2				8			4		4
Actuated Green, G (s)	4.3	19.9	19.9	10.2	25.8		20.5	14.3		12.0	9.8	9.8
Effective Green, g (s)	6.3	21.9	21.9	12.2	27.8		22.5	16.3		16.0	11.8	11.8
Actuated g/C Ratio	0.10	0.35	0.35	0.19	0.44		0.36	0.26		0.26	0.19	0.19
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	163	1196	535	315	1497		373	876		312	645	288
v/s Ratio Prot	0.04	0.11		c0.13	c0.18		c0.06	0.05		0.01	c0.08	
v/s Ratio Perm			0.08				0.09			0.02		0.03
v/c Ratio	0.37	0.30	0.24	0.66	0.41		0.42	0.20		0.10	0.42	0.16
Uniform Delay, d1	26.3	14.8	14.5	23.3	11.8		14.4	18.0		17.7	22.4	21.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.4	0.1	0.2	4.9	0.2		0.8	0.1		0.1	0.5	0.3
Delay (s)	27.7	14.9	14.7	28.2	12.0		15.1	18.2		17.8	22.9	21.5
Level of Service	C	B	B	C	B		B	B		B	C	C
Approach Delay (s)		15.8			16.0			16.8			22.0	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	62.6	Sum of lost time (s)	6.0
Intersection Capacity Utilization	50.0%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1800	1800	1800
Total Lost time (s)					2.0		2.0	2.0			2.0	
Lane Util. Factor					0.91		1.00	0.95			0.95	
Frt					1.00		1.00	1.00			0.89	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					4894		1615	3420			3039	
Flt Permitted					1.00		0.27	1.00			1.00	
Satd. Flow (perm)					4894		455	3420			3039	
Volume (vph)	0	0	0	7	708	17	132	270	0	0	188	542
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	8	814	20	152	310	0	0	216	623
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	14	0
Lane Group Flow (vph)	0	0	0	0	839	0	152	310	0	0	825	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				Perm			Perm					
Protected Phases					8			2			6	
Permitted Phases				8			2					
Actuated Green, G (s)					13.8		19.7	19.7			19.7	
Effective Green, g (s)					15.8		21.7	21.7			21.7	
Actuated g/C Ratio					0.38		0.52	0.52			0.52	
Clearance Time (s)					4.0		4.0	4.0			4.0	
Vehicle Extension (s)					3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)					1863		238	1788			1589	
v/s Ratio Prot								0.09			0.27	
v/s Ratio Perm					0.17		c0.33					
v/c Ratio					0.45		0.64	0.17			0.52	
Uniform Delay, d1					9.6		7.1	5.2			6.5	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					0.2		5.5	0.0			0.3	
Delay (s)					9.8		12.6	5.2			6.8	
Level of Service					A		B	A			A	
Approach Delay (s)		0.0			9.8			7.7			6.8	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	8.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	41.5	Sum of lost time (s)	4.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)		2.0			2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor		0.95			0.95		1.00	1.00		1.00	0.95	
Frt		0.97			1.00		1.00	0.86		1.00	0.97	
Flt Protected		1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3325			3345		1615	1543		1615	3319	
Flt Permitted		1.00			0.81		0.53	1.00		0.73	1.00	
Satd. Flow (perm)		3325			2775		902	1543		1240	3319	
Volume (vph)	0	87	20	44	54	0	8	2	34	65	257	63
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	101	23	51	63	0	9	2	40	76	299	73
RTOR Reduction (vph)	0	19	0	0	0	0	0	11	0	0	16	0
Lane Group Flow (vph)	0	105	0	0	114	0	9	31	0	76	356	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		4.4			4.4		24.6	24.6		24.6	24.6	
Effective Green, g (s)		6.4			6.4		26.6	26.6		26.6	26.6	
Actuated g/C Ratio		0.17			0.17		0.72	0.72		0.72	0.72	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		575			480		648	1109		891	2386	
v/s Ratio Prot		0.03						0.02			c0.11	
v/s Ratio Perm					c0.04		0.01			0.06		
v/c Ratio		0.18			0.24		0.01	0.03		0.09	0.15	
Uniform Delay, d1		13.1			13.2		1.5	1.5		1.6	1.6	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			0.3		0.0	0.0		0.0	0.0	
Delay (s)		13.2			13.5		1.5	1.5		1.6	1.7	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		13.2			13.5			1.5			1.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	5.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.16		
Actuated Cycle Length (s)	37.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	26.6%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.95		1.00	0.97		1.00	0.97		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)	1615	3236		1615	3331		1615	3333		1615	3358	
Flt Permitted	0.95	1.00		0.95	1.00		0.64	1.00		0.48	1.00	
Satd. Flow (perm)	1615	3236		1615	3331		1084	3333		809	3358	
Volume (vph)	69	81	45	77	64	13	14	307	62	11	153	21
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	72	84	47	80	67	14	15	320	65	11	159	22
RTOR Reduction (vph)	0	29	0	0	9	0	0	25	0	0	16	0
Lane Group Flow (vph)	72	102	0	80	72	0	15	360	0	11	165	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	2.5	9.8		2.6	9.9		7.2	7.2		7.2	7.2	
Effective Green, g (s)	4.5	11.8		4.6	11.9		9.2	9.2		9.2	9.2	
Actuated g/C Ratio	0.14	0.37		0.15	0.38		0.29	0.29		0.29	0.29	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	230	1208		235	1254		316	970		236	978	
v/s Ratio Prot	0.04	c0.03		c0.05	0.02			c0.11			0.05	
v/s Ratio Perm							0.01			0.01		
v/c Ratio	0.31	0.08		0.34	0.06		0.05	0.37		0.05	0.17	
Uniform Delay, d1	12.2	6.4		12.1	6.3		8.1	8.9		8.0	8.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.0		0.9	0.0		0.1	0.2		0.1	0.1	
Delay (s)	12.9	6.4		13.0	6.3		8.1	9.1		8.1	8.4	
Level of Service	B	A		B	A		A	A		A	A	
Approach Delay (s)		8.7			9.6			9.1			8.4	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	31.6	Sum of lost time (s)	6.0
Intersection Capacity Utilization	31.7%	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												
Ideal Flow (vphpl)	1800	1800	1800	1600	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor		1.00		0.95	0.95			0.95			0.95	
Frt		0.97		1.00	0.87			0.96			1.00	
Flt Protected		0.98		0.95	0.99			1.00			0.99	
Satd. Flow (prot)		1708		1444	1480			3283			3375	
Flt Permitted		0.98		0.95	0.99			1.00			0.99	
Satd. Flow (perm)		1708		1444	1480			3283			3375	
Volume (vph)	11	8	6	187	5	211	6	445	161	127	458	10
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	12	9	6	201	5	227	6	478	173	137	492	11
RTOR Reduction (vph)	0	6	0	0	182	0	0	41	0	0	1	0
Lane Group Flow (vph)	0	21	0	170	81	0	0	616	0	0	639	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split			Split			Split			Split		
Protected Phases	4	4		8	8		2	2		6	6	
Permitted Phases												
Actuated Green, G (s)		2.3		9.1	9.1			14.4			14.5	
Effective Green, g (s)		4.3		11.1	11.1			16.4			16.5	
Actuated g/C Ratio		0.08		0.20	0.20			0.29			0.29	
Clearance Time (s)		4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		130		285	292			956			989	
v/s Ratio Prot		c0.01		c0.12	0.05			c0.19			c0.19	
v/s Ratio Perm												
v/c Ratio		0.17		0.60	0.28			0.64			0.65	
Uniform Delay, d1		24.3		20.6	19.2			17.4			17.4	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		0.6		3.3	0.5			1.5			1.5	
Delay (s)		24.9		23.9	19.7			18.9			18.8	
Level of Service		C		C	B			B			B	
Approach Delay (s)		24.9			21.4			18.9			18.8	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	19.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	56.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

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

Intersection #12 K Street and 2nd Street [2009 Analysis]

Cycle (sec):	100	Critical Vol./Cap.(X):	0.236
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	9.3
Optimal Cycle:	0	Level Of Service:	A

Street Name:	K Street						2nd 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 1!	0 0		1 0 1	1 0		1 0 1	1 0	
Volume Module: >> Count Date: 21 Oct 2009 << PM Peak period												
Base Vol:	36	5	17	22	23	24	7	272	24	26	280	7
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:	36	5	17	22	23	24	7	272	24	26	280	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	39	5	19	24	25	26	8	297	26	28	306	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	5	19	24	25	26	8	297	26	28	306	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	5	19	24	25	26	8	297	26	28	306	8
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:	0.62	0.09	0.29	0.32	0.33	0.35	1.00	1.84	0.16	1.00	1.95	0.05
Final Sat.:	381	53	180	200	209	218	617	1256	112	619	1328	33
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.10	0.12	0.12	0.12	0.01	0.24	0.23	0.05	0.23	0.23
Crit Moves:			****		****			****			****	
Delay/Veh:	9.0	9.0	9.0	9.0	9.0	9.0	8.5	9.4	9.3	8.7	9.4	9.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.0	9.0	9.0	9.0	9.0	9.0	8.5	9.4	9.3	8.7	9.4	9.3
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	9.0			9.0			9.4			9.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.0			9.0			9.4			9.3		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.3	0.3	0.0	0.3	0.3

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	1.00		1.00	0.99			0.88			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1615	3408		1615	3403			2997			3312	
Flt Permitted	0.59	1.00		0.54	1.00			0.94			0.82	
Satd. Flow (perm)	1000	3408		925	3403			2810			2770	
Volume (vph)	6	328	8	38	248	9	11	36	202	88	176	34
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	6	338	8	39	256	9	11	37	208	91	181	35
RTOR Reduction (vph)	0	2	0	0	3	0	0	137	0	0	16	0
Lane Group Flow (vph)	6	344	0	39	262	0	0	119	0	0	291	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	10.2	10.2		10.2	10.2			6.4			6.4	
Effective Green, g (s)	12.2	12.2		12.2	12.2			8.4			8.4	
Actuated g/C Ratio	0.50	0.50		0.50	0.50			0.34			0.34	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	496	1690		459	1688			960			946	
v/s Ratio Prot		c0.10			0.08							
v/s Ratio Perm	0.01			0.04				0.04			c0.10	
v/c Ratio	0.01	0.20		0.08	0.16			0.12			0.31	
Uniform Delay, d1	3.1	3.5		3.3	3.4			5.6			6.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.1		0.1	0.0			0.1			0.2	
Delay (s)	3.2	3.5		3.3	3.4			5.6			6.1	
Level of Service	A	A		A	A			A			A	
Approach Delay (s)		3.5			3.4			5.6			6.1	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	4.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	24.6	Sum of lost time (s)	4.0
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1600	1800	1800	1800
Total Lost time (s)	2.0		2.0	2.0		
Lane Util. Factor	0.95		0.97	1.00		
Frt	0.96		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3290		2949	1800		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3290		2949	1800		
Volume (vph)	483	164	671	324	0	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	519	176	722	348	0	0
RTOR Reduction (vph)	45	0	0	0	0	0
Lane Group Flow (vph)	650	0	722	348	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Prot			
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	13.0		14.5	35.5		
Effective Green, g (s)	15.0		16.5	35.5		
Actuated g/C Ratio	0.42		0.46	1.00		
Clearance Time (s)	4.0		4.0	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1390		1371	1800		
v/s Ratio Prot	c0.20		c0.24	0.19		
v/s Ratio Perm						
v/c Ratio	0.47		0.53	0.19		
Uniform Delay, d1	7.4		6.7	0.0		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.2		0.4	0.1		
Delay (s)	7.6		7.1	0.1		
Level of Service	A		A	A		
Approach Delay (s)	7.6			4.8	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	5.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	35.5	Sum of lost time (s)	4.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800	1800	1800	1800	1900	1900	1900
Total Lost time (s)	2.0	2.0			2.0	2.0		2.0	2.0			
Lane Util. Factor	1.00	0.95			0.91	1.00		1.00	0.88			
Frt	1.00	1.00			1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1615	3420			4914	1530		1715	2693			
Flt Permitted	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (perm)	1615	3420			4914	1530		1715	2693			
Volume (vph)	262	199	0	0	913	517	129	1	266	0	0	0
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	273	207	0	0	951	539	134	1	277	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	317	0	0	214	0	0	0
Lane Group Flow (vph)	273	207	0	0	951	222	0	135	63	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot					Perm	Perm		Prot			
Protected Phases	5	2			6			8	8			
Permitted Phases						6	8					
Actuated Green, G (s)	12.2	37.4			21.2	21.2		10.9	10.9			
Effective Green, g (s)	14.2	39.4			23.2	23.2		12.9	12.9			
Actuated g/C Ratio	0.25	0.70			0.41	0.41		0.23	0.23			
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	407	2393			2025	630		393	617			
v/s Ratio Prot	c0.17	0.06			c0.19				0.02			
v/s Ratio Perm						0.15		0.08				
v/c Ratio	0.67	0.09			0.47	0.35		0.34	0.10			
Uniform Delay, d1	18.9	2.7			12.1	11.4		18.2	17.1			
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00			
Incremental Delay, d2	4.3	0.0			0.2	0.3		0.5	0.1			
Delay (s)	23.3	2.7			12.2	11.7		18.7	17.2			
Level of Service	C	A			B	B		B	B			
Approach Delay (s)		14.4			12.1			17.7			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	56.3	Sum of lost time (s)	6.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	4855		1615	4858		1615	3315		1615	3224	
Flt Permitted	0.95	1.00		0.95	1.00		0.36	1.00		0.59	1.00	
Satd. Flow (perm)	1615	4855		1615	4858		609	3315		1002	3224	
Volume (vph)	78	320	28	85	990	81	270	194	50	56	146	90
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	84	344	30	91	1065	87	290	209	54	60	157	97
RTOR Reduction (vph)	0	9	0	0	9	0	0	29	0	0	83	0
Lane Group Flow (vph)	84	365	0	91	1143	0	290	234	0	60	171	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases							8			4		
Actuated Green, G (s)	6.2	26.2		6.6	26.6		22.3	14.6		11.3	7.6	
Effective Green, g (s)	8.2	28.2		8.6	28.6		24.3	16.6		15.3	9.6	
Actuated g/C Ratio	0.12	0.42		0.13	0.43		0.36	0.25		0.23	0.14	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	197	2040		207	2071		411	820		281	461	
v/s Ratio Prot	0.05	0.08		c0.06	c0.24		c0.13	0.07		0.02	c0.05	
v/s Ratio Perm							0.12			0.03		
v/c Ratio	0.43	0.18		0.44	0.55		0.71	0.28		0.21	0.37	
Uniform Delay, d1	27.3	12.2		27.0	14.4		16.9	20.4		20.8	26.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	0.0		1.5	0.3		5.4	0.2		0.4	0.5	
Delay (s)	28.8	12.2		28.5	14.8		22.3	20.6		21.1	26.5	
Level of Service	C	B		C	B		C	C		C	C	
Approach Delay (s)		15.3			15.8			21.5			25.5	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	67.1	Sum of lost time (s)	6.0
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1615	3275		1615	3360		1615	1800	1530	1615	1774	
Flt Permitted	0.47	1.00		0.56	1.00		0.60	1.00	1.00	0.58	1.00	
Satd. Flow (perm)	804	3275		954	3360		1024	1800	1530	989	1774	
Volume (vph)	29	216	85	127	390	52	144	195	93	47	163	17
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	30	225	89	132	406	54	150	203	97	49	170	18
RTOR Reduction (vph)	0	41	0	0	12	0	0	0	63	0	7	0
Lane Group Flow (vph)	30	273	0	132	448	0	150	203	34	49	182	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	17.4	17.4		17.4	17.4		10.6	10.6	10.6	10.6	10.6	
Effective Green, g (s)	19.4	19.4		19.4	19.4		12.6	12.6	12.6	12.6	12.6	
Actuated g/C Ratio	0.54	0.54		0.54	0.54		0.35	0.35	0.35	0.35	0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	433	1765		514	1811		358	630	536	346	621	
v/s Ratio Prot		0.08			0.13			0.11			0.10	
v/s Ratio Perm	0.04			c0.14			c0.15		0.02	0.05		
v/c Ratio	0.07	0.15		0.26	0.25		0.42	0.32	0.06	0.14	0.29	
Uniform Delay, d1	4.0	4.2		4.4	4.4		8.9	8.6	7.8	8.0	8.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	0.0		0.3	0.1		0.8	0.3	0.0	0.2	0.3	
Delay (s)	4.0	4.2		4.7	4.5		9.7	8.9	7.8	8.2	8.7	
Level of Service	A	A		A	A		A	A	A	A	A	
Approach Delay (s)		4.2			4.5			8.9			8.6	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	36.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.92	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1615	3420	3420	1530	1623	
Flt Permitted	0.42	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	720	3420	3420	1530	1623	
Volume (vph)	14	349	552	14	16	23
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	15	375	594	15	17	25
RTOR Reduction (vph)	0	0	0	2	22	0
Lane Group Flow (vph)	15	375	594	13	20	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm		
Protected Phases		2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)	66.0	66.0	66.0	66.0	6.5	
Effective Green, g (s)	68.0	68.0	68.0	68.0	8.5	
Actuated g/C Ratio	0.84	0.84	0.84	0.84	0.11	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	608	2889	2889	1292	171	
v/s Ratio Prot		0.11	c0.17		c0.01	
v/s Ratio Perm	0.02			0.01		
v/c Ratio	0.02	0.13	0.21	0.01	0.11	
Uniform Delay, d1	1.0	1.1	1.2	1.0	32.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	0.0	0.0	0.0	0.3	
Delay (s)	1.0	1.1	1.2	1.0	32.9	
Level of Service	A	A	A	A	C	
Approach Delay (s)		1.1	1.2		32.9	
Approach LOS		A	A		C	

Intersection Summary			
HCM Average Control Delay	2.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	80.5	Sum of lost time (s)	4.0
Intersection Capacity Utilization	26.1%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.98		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	3327		1615	3366		1615	3349		1615	3322	
Flt Permitted	0.44	1.00		0.54	1.00		0.36	1.00		0.39	1.00	
Satd. Flow (perm)	756	3327		918	3366		607	3349		669	3322	
Volume (vph)	94	277	61	110	413	49	61	475	76	24	494	116
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	98	289	64	115	430	51	64	495	79	25	515	121
RTOR Reduction (vph)	0	29	0	0	14	0	0	17	0	0	28	0
Lane Group Flow (vph)	98	324	0	115	467	0	64	557	0	25	608	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	10.4	10.4		10.4	10.4		11.4	11.4		11.4	11.4	
Effective Green, g (s)	12.4	12.4		12.4	12.4		13.4	13.4		13.4	13.4	
Actuated g/C Ratio	0.42	0.42		0.42	0.42		0.45	0.45		0.45	0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	315	1384		382	1401		273	1506		301	1494	
v/s Ratio Prot		0.10			c0.14			0.17			c0.18	
v/s Ratio Perm	0.13			0.13			0.11			0.04		
v/c Ratio	0.31	0.23		0.30	0.33		0.23	0.37		0.08	0.41	
Uniform Delay, d1	5.8	5.6		5.8	5.9		5.0	5.4		4.7	5.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		0.4	0.1		0.4	0.2		0.1	0.2	
Delay (s)	6.4	5.7		6.3	6.0		5.5	5.6		4.8	5.7	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		5.9			6.1			5.6			5.7	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	29.8	Sum of lost time (s)	4.0
Intersection Capacity Utilization	55.0%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			1.00			0.91			0.96	
Flt Protected		1.00			0.99			0.99			1.00	
Satd. Flow (prot)		3372			3381			1625			1714	
Flt Permitted		0.95			0.82			0.99			1.00	
Satd. Flow (perm)		3193			2807			1625			1714	
Volume (vph)	6	353	35	109	522	13	32	34	131	5	42	23
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)	7	384	38	118	567	14	35	37	142	5	46	25
RTOR Reduction (vph)	0	8	0	0	1	0	0	101	0	0	22	0
Lane Group Flow (vph)	0	421	0	0	698	0	0	113	0	0	54	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Split			Split		
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Actuated Green, G (s)		24.3			24.3			8.9			4.6	
Effective Green, g (s)		26.3			26.3			10.9			6.6	
Actuated g/C Ratio		0.53			0.53			0.22			0.13	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1686			1482			356			227	
v/s Ratio Prot								c0.07			c0.03	
v/s Ratio Perm		0.13			c0.25							
v/c Ratio		0.25			0.47			0.32			0.24	
Uniform Delay, d1		6.4			7.4			16.3			19.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.2			0.5			0.5	
Delay (s)		6.5			7.6			16.8			19.9	
Level of Service		A			A			B			B	
Approach Delay (s)		6.5			7.6			16.8			19.9	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	49.8	Sum of lost time (s)	6.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.99			0.95			0.93	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		3370			3378			3250			3168	
Flt Permitted		0.81			0.91			0.93			0.88	
Satd. Flow (perm)		2750			3082			3024			2801	
Volume (vph)	86	366	17	46	558	38	14	136	67	44	91	104
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	91	385	18	48	587	40	15	143	71	46	96	109
RTOR Reduction (vph)	0	3	0	0	5	0	0	52	0	0	79	0
Lane Group Flow (vph)	0	491	0	0	670	0	0	177	0	0	172	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		15.2			15.2			6.0			6.0	
Effective Green, g (s)		17.2			17.2			8.0			8.0	
Actuated g/C Ratio		0.59			0.59			0.27			0.27	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1620			1815			828			767	
v/s Ratio Prot												
v/s Ratio Perm		0.18			c0.22			0.06			c0.06	
v/c Ratio		0.30			0.37			0.21			0.22	
Uniform Delay, d1		3.0			3.2			8.2			8.2	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.1			0.1			0.1	
Delay (s)		3.1			3.3			8.3			8.3	
Level of Service		A			A			A			A	
Approach Delay (s)		3.1			3.3			8.3			8.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	4.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	29.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.96		1.00	0.99		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	3384		1615	3300		1615	3384		1615	3202	
Flt Permitted	0.34	1.00		0.51	1.00		0.63	1.00		0.62	1.00	
Satd. Flow (perm)	571	3384		862	3300		1077	3384		1049	3202	
Volume (vph)	56	339	25	23	500	152	55	174	13	40	94	70
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	64	390	29	26	575	175	63	200	15	46	108	80
RTOR Reduction (vph)	0	6	0	0	31	0	0	9	0	0	58	0
Lane Group Flow (vph)	64	413	0	26	719	0	63	206	0	46	130	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	18.0	18.0		18.0	18.0		7.2	7.2		7.2	7.2	
Effective Green, g (s)	20.0	20.0		20.0	20.0		9.2	9.2		9.2	9.2	
Actuated g/C Ratio	0.60	0.60		0.60	0.60		0.28	0.28		0.28	0.28	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	344	2039		519	1988		298	938		291	887	
v/s Ratio Prot		0.12			c0.22			c0.06			0.04	
v/s Ratio Perm	0.11			0.03			0.06			0.04		
v/c Ratio	0.19	0.20		0.05	0.36		0.21	0.22		0.16	0.15	
Uniform Delay, d1	3.0	3.0		2.7	3.4		9.2	9.2		9.1	9.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.0		0.0	0.1		0.4	0.1		0.3	0.1	
Delay (s)	3.2	3.0		2.7	3.5		9.6	9.4		9.3	9.1	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		3.1			3.4			9.4			9.2	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	33.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX F

2012 WITHOUT DETOUR LOS CALCULATION SHEETS

AM PEAK HOUR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	648	97	125	404	54	163
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	745	111	144	464	62	187
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					TWLTL	
Median storage veh)					0	
Upstream signal (ft)				832		
pX, platoon unblocked						
vC, conflicting volume			856		1320	428
vC1, stage 1 conf vol					801	
vC2, stage 2 conf vol					520	
vCu, unblocked vol			856		1320	428
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			82		67	68
cM capacity (veh/h)			793		189	581

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	497	360	144	232	232	62	187
Volume Left	0	0	144	0	0	62	0
Volume Right	0	111	0	0	0	0	187
cSH	1700	1700	793	1700	1700	189	581
Volume to Capacity	0.29	0.21	0.18	0.14	0.14	0.33	0.32
Queue Length 95th (ft)	0	0	16	0	0	34	35
Control Delay (s)	0.0	0.0	10.5	0.0	0.0	33.0	14.1
Lane LOS			B			D	B
Approach Delay (s)	0.0		2.5			18.8	
Approach LOS						C	

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			0.95	
Frt	1.00	1.00		1.00	0.97			0.93			0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1615	3419		1615	3302			1638			3077	
Flt Permitted	0.95	1.00		0.95	1.00			0.86			0.84	
Satd. Flow (perm)	1615	3419		1615	3302			1449			2631	
Volume (vph)	105	558	1	1	300	90	1	0	1	100	0	110
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	118	627	1	1	337	101	1	0	1	112	0	124
RTOR Reduction (vph)	0	0	0	0	28	0	0	1	0	0	99	0
Lane Group Flow (vph)	118	628	0	1	410	0	0	1	0	0	137	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	5.8	25.3		1.0	20.5			7.0			7.0	
Effective Green, g (s)	7.8	27.3		3.0	22.5			9.0			9.0	
Actuated g/C Ratio	0.17	0.60		0.07	0.50			0.20			0.20	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	278	2060		107	1640			288			523	
v/s Ratio Prot	c0.07	c0.18		0.00	0.12							
v/s Ratio Perm								0.00			c0.05	
v/c Ratio	0.42	0.30		0.01	0.25			0.00			0.26	
Uniform Delay, d1	16.7	4.4		19.8	6.6			14.6			15.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	0.1		0.0	0.1			0.0			0.3	
Delay (s)	17.8	4.5		19.8	6.6			14.6			15.6	
Level of Service	B	A		B	A			B			B	
Approach Delay (s)		6.6			6.7			14.6			15.6	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	45.3	Sum of lost time (s)	4.0
Intersection Capacity Utilization	41.1%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.93			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1615	3415		1615	3415			1655			1706	
Flt Permitted	0.51	1.00		0.36	1.00			0.94			0.93	
Satd. Flow (perm)	864	3415		612	3415			1569			1611	
Volume (vph)	5	664	6	15	367	4	7	7	15	2	3	2
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	6	746	7	17	412	4	8	8	17	2	3	2
RTOR Reduction (vph)	0	0	0	0	0	0	0	16	0	0	2	0
Lane Group Flow (vph)	6	753	0	17	416	0	0	17	0	0	5	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	69.2	69.2		69.2	69.2			5.2			5.2	
Effective Green, g (s)	71.2	71.2		71.2	71.2			7.2			7.2	
Actuated g/C Ratio	0.86	0.86		0.86	0.86			0.09			0.09	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	747	2951		529	2951			137			141	
v/s Ratio Prot		c0.22			0.12							
v/s Ratio Perm	0.01			0.03				c0.01			0.00	
v/c Ratio	0.01	0.26		0.03	0.14			0.13			0.04	
Uniform Delay, d1	0.8	1.0		0.8	0.9			34.7			34.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.0			0.4			0.1	
Delay (s)	0.8	1.0		0.8	0.9			35.1			34.5	
Level of Service	A	A		A	A			D			C	
Approach Delay (s)		1.0			0.9			35.1			34.5	
Approach LOS		A			A			D			C	

Intersection Summary			
HCM Average Control Delay	2.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	82.4	Sum of lost time (s)	4.0
Intersection Capacity Utilization	29.6%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.97		1.00	0.98		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)	1615	3342		1615	3318		1615	3355		1615	3344	
Flt Permitted	0.95	1.00		0.95	1.00		0.40	1.00		0.54	1.00	
Satd. Flow (perm)	1615	3342		1615	3318		683	3355		917	3344	
Volume (vph)	41	538	96	33	291	72	27	219	32	147	338	59
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	50	656	117	40	355	88	33	267	39	179	412	72
RTOR Reduction (vph)	0	18	0	0	28	0	0	16	0	0	20	0
Lane Group Flow (vph)	50	755	0	40	415	0	33	290	0	179	464	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	2.2	16.3		2.2	16.3		15.3	15.3		15.3	15.3	
Effective Green, g (s)	4.2	18.3		4.2	18.3		17.3	17.3		17.3	17.3	
Actuated g/C Ratio	0.09	0.40		0.09	0.40		0.38	0.38		0.38	0.38	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	148	1335		148	1326		258	1267		346	1263	
v/s Ratio Prot	c0.03	c0.23		0.02	0.13			0.09			0.14	
v/s Ratio Perm							0.05			c0.20		
v/c Ratio	0.34	0.57		0.27	0.31		0.13	0.23		0.52	0.37	
Uniform Delay, d1	19.5	10.7		19.4	9.4		9.3	9.7		11.0	10.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.4	0.6		1.0	0.1		0.2	0.1		1.3	0.2	
Delay (s)	20.9	11.2		20.4	9.6		9.5	9.8		12.3	10.5	
Level of Service	C	B		C	A		A	A		B	B	
Approach Delay (s)		11.8			10.5			9.8			11.0	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	45.8	Sum of lost time (s)	6.0
Intersection Capacity Utilization	52.2%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			1.00			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.95			0.97	
Satd. Flow (prot)	1615	3416		1615	3398			1710			1667	
Flt Permitted	0.49	1.00		0.33	1.00			0.75			0.82	
Satd. Flow (perm)	835	3416		562	3398			1357			1420	
Volume (vph)	10	712	6	2	380	17	1	0	0	39	0	18
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	11	809	7	2	432	19	1	0	0	44	0	20
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	17	0
Lane Group Flow (vph)	11	816	0	2	449	0	0	1	0	0	47	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	54.4	54.4		54.4	54.4			7.2			7.2	
Effective Green, g (s)	56.4	56.4		56.4	56.4			9.2			9.2	
Actuated g/C Ratio	0.81	0.81		0.81	0.81			0.13			0.13	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	677	2768		455	2754			179			188	
v/s Ratio Prot		c0.24			0.13							
v/s Ratio Perm	0.01			0.00				0.00			c0.03	
v/c Ratio	0.02	0.29		0.00	0.16			0.01			0.25	
Uniform Delay, d1	1.3	1.6		1.3	1.4			26.2			27.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.1		0.0	0.0			0.0			0.7	
Delay (s)	1.3	1.7		1.3	1.5			26.2			27.8	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		1.7			1.5			26.2			27.8	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	2.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	69.6	Sum of lost time (s)	4.0
Intersection Capacity Utilization	31.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1700	1800	1700	1800
Total Lost time (s)	2.0		2.0	2.0	2.0	2.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3352		1615	3420	1615	1530
Flt Permitted	1.00		0.28	1.00	0.95	1.00
Satd. Flow (perm)	3352		474	3420	1615	1530
Volume (vph)	723	110	7	427	73	11
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	831	126	8	491	84	13
RTOR Reduction (vph)	10	0	0	0	0	11
Lane Group Flow (vph)	947	0	8	491	84	2
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Perm			Perm
Protected Phases	2			6	8	
Permitted Phases			6			8
Actuated Green, G (s)	47.6		47.6	47.6	7.8	7.8
Effective Green, g (s)	49.6		49.6	49.6	9.8	9.8
Actuated g/C Ratio	0.78		0.78	0.78	0.15	0.15
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2622		371	2676	250	236
v/s Ratio Prot	c0.28			0.14	c0.05	
v/s Ratio Perm			0.02			0.00
v/c Ratio	0.36		0.02	0.18	0.34	0.01
Uniform Delay, d1	2.1		1.5	1.8	23.9	22.7
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.0	0.0	0.8	0.0
Delay (s)	2.2		1.6	1.8	24.7	22.7
Level of Service	A		A	A	C	C
Approach Delay (s)	2.2			1.8	24.4	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	3.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	63.4	Sum of lost time (s)	4.0
Intersection Capacity Utilization	36.0%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1615	3420	1530	1615	3333		1615	3317		1615	3420	1530
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.54	1.00		0.61	1.00	1.00
Satd. Flow (perm)	1615	3420	1530	1615	3333		914	3317		1043	3420	1530
Volume (vph)	25	395	309	69	223	45	26	59	15	59	296	222
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	29	454	355	79	256	52	30	68	17	68	340	255
RTOR Reduction (vph)	0	0	230	0	17	0	0	13	0	0	0	182
Lane Group Flow (vph)	29	454	125	79	291	0	30	72	0	68	340	73
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot		Perm	Prot			pm+pt			pm+pt		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2				8			4		4
Actuated Green, G (s)	2.2	16.0	16.0	4.5	18.3		12.9	10.9		16.5	12.7	12.7
Effective Green, g (s)	4.2	18.0	18.0	6.5	20.3		16.9	12.9		20.5	14.7	14.7
Actuated g/C Ratio	0.08	0.35	0.35	0.13	0.40		0.33	0.25		0.40	0.29	0.29
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	132	1202	538	205	1321		356	836		482	982	439
v/s Ratio Prot	0.02	c0.13		c0.05	0.09		0.01	0.02		c0.02	c0.10	
v/s Ratio Perm			0.08				0.02			0.04		0.05
v/c Ratio	0.22	0.38	0.23	0.39	0.22		0.08	0.09		0.14	0.35	0.17
Uniform Delay, d1	22.0	12.4	11.7	20.5	10.2		11.7	14.6		9.6	14.4	13.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.8	0.2	0.2	1.2	0.1		0.1	0.0		0.1	0.2	0.2
Delay (s)	22.8	12.6	11.9	21.7	10.3		11.8	14.7		9.8	14.7	13.8
Level of Service	C	B	B	C	B		B	B		A	B	B
Approach Delay (s)		12.7			12.6			13.9			13.8	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	51.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.1%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1800	1800	1800
Total Lost time (s)				2.0		2.0		2.0			2.0	
Lane Util. Factor				0.97		1.00		0.95			0.95	
Frt				1.00		0.85		1.00			1.00	
Flt Protected				0.95		1.00		1.00			1.00	
Satd. Flow (prot)				3317		1530		3420			3420	
Flt Permitted				0.95		1.00		1.00			1.00	
Satd. Flow (perm)				3317		1530		3420			3420	
Volume (vph)	0	0	0	93	0	3	0	92	0	0	585	0
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	106	0	3	0	105	0	0	665	0
RTOR Reduction (vph)	0	0	0	0	0	2	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	106	0	1	0	105	0	0	665	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				custom		custom						
Protected Phases								2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				8.2		8.2		37.1			37.1	
Effective Green, g (s)				10.2		10.2		39.1			39.1	
Actuated g/C Ratio				0.19		0.19		0.73			0.73	
Clearance Time (s)				4.0		4.0		4.0			4.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				635		293		2509			2509	
v/s Ratio Prot								0.03			c0.19	
v/s Ratio Perm				c0.03		0.00						
v/c Ratio				0.17		0.00		0.04			0.27	
Uniform Delay, d1				18.0		17.4		2.0			2.3	
Progression Factor				1.00		1.00		1.00			1.00	
Incremental Delay, d2				0.1		0.0		0.0			0.1	
Delay (s)				18.1		17.4		2.0			2.4	
Level of Service				B		B		A			A	
Approach Delay (s)		0.0			18.1			2.0			2.4	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	4.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	53.3	Sum of lost time (s)	4.0
Intersection Capacity Utilization	27.1%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)		2.0			2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor		0.95			0.95		1.00	1.00		1.00	0.95	
Frt		0.99			1.00		1.00	0.86		1.00	0.98	
Flt Protected		1.00			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3383			3298		1615	1552		1615	3354	
Flt Permitted		1.00			0.77		0.46	1.00		0.73	1.00	
Satd. Flow (perm)		3383			2637		786	1552		1246	3354	
Volume (vph)	0	50	4	128	45	0	11	3	33	169	417	61
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	52	4	133	47	0	11	3	34	176	434	64
RTOR Reduction (vph)	0	3	0	0	0	0	0	13	0	0	12	0
Lane Group Flow (vph)	0	53	0	0	180	0	11	24	0	176	486	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.8			7.8		20.8	20.8		20.8	20.8	
Effective Green, g (s)		9.8			9.8		22.8	22.8		22.8	22.8	
Actuated g/C Ratio		0.27			0.27		0.62	0.62		0.62	0.62	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		906			706		490	967		776	2089	
v/s Ratio Prot		0.02						0.02			c0.14	
v/s Ratio Perm					c0.07		0.01			0.14		
v/c Ratio		0.06			0.25		0.02	0.03		0.23	0.23	
Uniform Delay, d1		10.0			10.5		2.6	2.6		3.0	3.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.2		0.0	0.0		0.1	0.1	
Delay (s)		10.0			10.7		2.7	2.7		3.2	3.1	
Level of Service		A			B		A	A		A	A	
Approach Delay (s)		10.0			10.7			2.7			3.1	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	4.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	36.6	Sum of lost time (s)	4.0
Intersection Capacity Utilization	37.9%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95		1.00	0.95	
Frt	1.00	0.94		1.00	0.97			0.93		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1615	3221		1615	3328			3178		1615	3319	
Flt Permitted	0.95	1.00		0.95	1.00			1.00		0.63	1.00	
Satd. Flow (perm)	1615	3221		1615	3328			3178		1076	3319	
Volume (vph)	31	117	74	40	37	8	0	81	72	10	543	134
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	38	144	91	49	46	10	0	100	89	12	670	165
RTOR Reduction (vph)	0	67	0	0	7	0	0	48	0	0	27	0
Lane Group Flow (vph)	38	168	0	49	49	0	0	141	0	12	808	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	2.2	7.9		2.3	8.0			15.2		15.2	15.2	
Effective Green, g (s)	4.2	9.9		4.3	10.0			17.2		17.2	17.2	
Actuated g/C Ratio	0.11	0.26		0.11	0.27			0.46		0.46	0.46	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	181	853		186	890			1462		495	1526	
v/s Ratio Prot	0.02	c0.05		c0.03	0.01			0.04			c0.24	
v/s Ratio Perm										0.01		
v/c Ratio	0.21	0.20		0.26	0.05			0.10		0.02	0.53	
Uniform Delay, d1	15.1	10.7		15.1	10.2			5.7		5.5	7.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		0.8	0.0			0.0		0.0	0.3	
Delay (s)	15.7	10.8		15.9	10.2			5.7		5.5	7.5	
Level of Service	B	B		B	B			A		A	A	
Approach Delay (s)		11.5			12.8			5.7			7.5	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	8.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	37.4	Sum of lost time (s)	6.0
Intersection Capacity Utilization	39.6%	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												
Ideal Flow (vphpl)	1800	1800	1800	1600	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor		1.00		0.95	0.95			0.95			0.95	
Frt		0.96		1.00	0.87			0.94			1.00	
Flt Protected		0.98		0.95	1.00			1.00			0.99	
Satd. Flow (prot)		1699		1444	1479			3226			3369	
Flt Permitted		0.98		0.95	1.00			1.00			0.99	
Satd. Flow (perm)		1699		1444	1479			3226			3369	
Volume (vph)	3	4	3	92	5	96	5	247	151	140	349	3
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	4	5	4	118	6	123	6	317	194	179	447	4
RTOR Reduction (vph)	0	4	0	0	100	0	0	105	0	0	1	0
Lane Group Flow (vph)	0	9	0	107	40	0	0	412	0	0	629	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split			Split			Split			Split		
Protected Phases	4	4		8	8		2	2		6	6	
Permitted Phases												
Actuated Green, G (s)		0.9		7.1	7.1			11.2			13.8	
Effective Green, g (s)		2.9		9.1	9.1			13.2			15.8	
Actuated g/C Ratio		0.06		0.19	0.19			0.27			0.32	
Clearance Time (s)		4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		101		268	275			869			1086	
v/s Ratio Prot		c0.01		c0.07	0.03			c0.13			c0.19	
v/s Ratio Perm												
v/c Ratio		0.09		0.40	0.14			0.47			0.58	
Uniform Delay, d1		21.8		17.5	16.7			15.0			13.8	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		0.4		1.0	0.2			0.4			0.8	
Delay (s)		22.2		18.5	16.9			15.4			14.6	
Level of Service		C		B	B			B			B	
Approach Delay (s)		22.2			17.6			15.4			14.6	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	49.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

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

Intersection #12 K Street and 2nd Street [2009 Analysis]

Cycle (sec):	100	Critical Vol./Cap.(X):	0.208
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.6
Optimal Cycle:	0	Level Of Service:	A

Street Name:	K Street						2nd 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 1!	0 0		1 0 1	1 0		1 0 1	1 0	
Volume Module:AM PEAK HOUR												
Base Vol:	17	3	42	8	25	12	8	266	13	40	132	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	3	42	8	25	12	8	266	13	40	132	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	18	3	45	9	27	13	9	284	14	43	141	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	3	45	9	27	13	9	284	14	43	141	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	3	45	9	27	13	9	284	14	43	141	24
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.27	0.05	0.68	0.18	0.55	0.27	1.00	1.91	0.09	1.00	1.71	0.29
Final Sat.:	194	34	479	119	373	179	648	1366	67	635	1215	207
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.07	0.07	0.07	0.01	0.21	0.21	0.07	0.12	0.11
Crit Moves:	****			****			****			****		
Delay/Veh:	8.2	8.2	8.2	8.3	8.3	8.3	8.2	8.9	8.8	8.6	8.3	8.1
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:	8.2	8.2	8.2	8.3	8.3	8.3	8.2	8.9	8.8	8.6	8.3	8.1
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	8.2			8.3			8.9			8.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.2			8.3			8.9			8.4		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.3	0.2	0.1	0.1	0.1

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	1.00		1.00	0.99			0.87			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.98	
Satd. Flow (prot)	1615	3414		1615	3384			2973			3335	
Flt Permitted	0.63	1.00		0.53	1.00			0.94			0.79	
Satd. Flow (perm)	1064	3414		901	3384			2809			2695	
Volume (vph)	6	338	4	40	175	13	4	18	138	213	301	19
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	6	360	4	43	186	14	4	19	147	227	320	20
RTOR Reduction (vph)	0	1	0	0	8	0	0	76	0	0	4	0
Lane Group Flow (vph)	6	363	0	43	192	0	0	94	0	0	563	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	8.6	8.6		8.6	8.6			11.6			11.6	
Effective Green, g (s)	10.6	10.6		10.6	10.6			13.6			13.6	
Actuated g/C Ratio	0.38	0.38		0.38	0.38			0.48			0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	400	1283		339	1272			1355			1300	
v/s Ratio Prot		c0.11			0.06							
v/s Ratio Perm	0.01			0.05				0.03			c0.21	
v/c Ratio	0.01	0.28		0.13	0.15			0.07			0.43	
Uniform Delay, d1	5.5	6.1		5.8	5.8			3.9			4.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.1		0.2	0.1			0.0			0.2	
Delay (s)	5.5	6.3		5.9	5.9			3.9			5.0	
Level of Service	A	A		A	A			A			A	
Approach Delay (s)		6.3			5.9			3.9			5.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	28.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1600	1800	1800	1800
Total Lost time (s)	2.0		2.0	2.0		
Lane Util. Factor	0.95		0.97	1.00		
Frt	0.95		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3232		2949	1800		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3232		2949	1800		
Volume (vph)	463	267	431	241	0	0
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	487	281	454	254	0	0
RTOR Reduction (vph)	116	0	0	0	0	0
Lane Group Flow (vph)	652	0	454	254	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Prot			
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	12.8		10.1	30.9		
Effective Green, g (s)	14.8		12.1	30.9		
Actuated g/C Ratio	0.48		0.39	1.00		
Clearance Time (s)	4.0		4.0	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1548		1155	1800		
v/s Ratio Prot	c0.20		c0.15	0.14		
v/s Ratio Perm						
v/c Ratio	0.42		0.39	0.14		
Uniform Delay, d1	5.3		6.8	0.0		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.2		0.2	0.0		
Delay (s)	5.4		7.0	0.0		
Level of Service	A		A	A		
Approach Delay (s)	5.4			4.5	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	5.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	30.9	Sum of lost time (s)	4.0
Intersection Capacity Utilization	99.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800	1800	1800	1800	1900	1900	1900
Total Lost time (s)	2.0	2.0			2.0	2.0		2.0	2.0			
Lane Util. Factor	1.00	0.95			0.91	1.00		1.00	0.88			
Frt	1.00	1.00			1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1615	3420			4914	1530		1710	2693			
Flt Permitted	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (perm)	1615	3420			4914	1530		1710	2693			
Volume (vph)	254	216	0	0	525	346	199	0	1190	0	0	0
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)	276	235	0	0	571	376	216	0	1293	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	270	0	0	692	0	0	0
Lane Group Flow (vph)	276	235	0	0	571	106	0	216	601	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot					Perm	Perm		Prot			
Protected Phases	5	2			6			8	8			
Permitted Phases						6	8					
Actuated Green, G (s)	12.0	30.3			14.3	14.3		19.7	19.7			
Effective Green, g (s)	14.0	32.3			16.3	16.3		21.7	21.7			
Actuated g/C Ratio	0.24	0.56			0.28	0.28		0.37	0.37			
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	390	1905			1381	430		640	1008			
v/s Ratio Prot	c0.17	0.07			c0.12				c0.22			
v/s Ratio Perm						0.07		0.13				
v/c Ratio	0.71	0.12			0.41	0.25		0.34	0.60			
Uniform Delay, d1	20.1	6.1			17.0	16.1		13.0	14.6			
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00			
Incremental Delay, d2	5.8	0.0			0.2	0.3		0.3	1.0			
Delay (s)	25.9	6.1			17.2	16.4		13.3	15.6			
Level of Service	C	A			B	B		B	B			
Approach Delay (s)		16.8			16.9			15.3			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	58.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	99.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.96		1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	4842		1615	4838		1615	3280		1615	3035	
Flt Permitted	0.95	1.00		0.95	1.00		0.31	1.00		0.68	1.00	
Satd. Flow (perm)	1615	4842		1615	4838		535	3280		1148	3035	
Volume (vph)	113	1055	114	28	286	33	98	83	31	92	141	426
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	120	1122	121	30	304	35	104	88	33	98	150	453
RTOR Reduction (vph)	0	13	0	0	14	0	0	25	0	0	350	0
Lane Group Flow (vph)	120	1230	0	30	325	0	104	96	0	98	253	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases							8			4		
Actuated Green, G (s)	5.5	21.8		2.2	18.5		15.1	10.7		14.5	10.4	
Effective Green, g (s)	7.5	23.8		4.2	20.5		19.1	12.7		18.5	12.4	
Actuated g/C Ratio	0.14	0.43		0.08	0.37		0.35	0.23		0.34	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	221	2103		124	1810		313	760		440	687	
v/s Ratio Prot	c0.07	c0.25		0.02	0.07		c0.04	0.03		0.02	c0.08	
v/s Ratio Perm							0.08			0.05		
v/c Ratio	0.54	0.58		0.24	0.18		0.33	0.13		0.22	0.37	
Uniform Delay, d1	22.1	11.8		23.8	11.5		13.0	16.7		12.8	17.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.7	0.4		1.0	0.0		0.6	0.1		0.3	0.3	
Delay (s)	24.8	12.2		24.8	11.6		13.6	16.7		13.1	18.2	
Level of Service	C	B		C	B		B	B		B	B	
Approach Delay (s)		13.3			12.6			15.3			17.5	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	54.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1615	3291		1615	3299		1615	1800	1530	1615	1778	
Flt Permitted	0.62	1.00		0.47	1.00		0.61	1.00	1.00	0.62	1.00	
Satd. Flow (perm)	1057	3291		792	3299		1037	1800	1530	1057	1778	
Volume (vph)	33	318	107	56	141	44	82	157	144	70	150	13
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	37	357	120	63	158	49	92	176	162	79	169	15
RTOR Reduction (vph)	0	37	0	0	22	0	0	0	107	0	5	0
Lane Group Flow (vph)	37	440	0	63	185	0	92	176	55	79	179	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	16.5	16.5		16.5	16.5		9.5	9.5	9.5	9.5	9.5	
Effective Green, g (s)	18.5	18.5		18.5	18.5		11.5	11.5	11.5	11.5	11.5	
Actuated g/C Ratio	0.54	0.54		0.54	0.54		0.34	0.34	0.34	0.34	0.34	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	575	1791		431	1795		351	609	518	358	601	
v/s Ratio Prot		c0.13			0.06			0.10			c0.10	
v/s Ratio Perm	0.03			0.08			0.09		0.04	0.07		
v/c Ratio	0.06	0.25		0.15	0.10		0.26	0.29	0.11	0.22	0.30	
Uniform Delay, d1	3.7	4.1		3.8	3.7		8.2	8.3	7.7	8.0	8.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	0.1		0.2	0.0		0.4	0.3	0.1	0.3	0.3	
Delay (s)	3.7	4.1		4.0	3.8		8.6	8.5	7.8	8.4	8.6	
Level of Service	A	A		A	A		A	A	A	A	A	
Approach Delay (s)		4.1			3.8			8.3			8.5	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	34.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.91	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1615	3420	3420	1530	1613	
Flt Permitted	0.59	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	1009	3420	3420	1530	1613	
Volume (vph)	16	551	210	25	15	28
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	20	672	256	30	18	34
RTOR Reduction (vph)	0	0	0	5	30	0
Lane Group Flow (vph)	20	672	256	25	22	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm		
Protected Phases		2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)	60.5	60.5	60.5	60.5	6.7	
Effective Green, g (s)	62.5	62.5	62.5	62.5	8.7	
Actuated g/C Ratio	0.83	0.83	0.83	0.83	0.12	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	839	2842	2842	1272	187	
v/s Ratio Prot		c0.20	0.07		c0.01	
v/s Ratio Perm	0.02			0.02		
v/c Ratio	0.02	0.24	0.09	0.02	0.12	
Uniform Delay, d1	1.1	1.3	1.2	1.1	29.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	0.0	0.0	0.0	0.3	
Delay (s)	1.1	1.4	1.2	1.1	30.1	
Level of Service	A	A	A	A	C	
Approach Delay (s)		1.4	1.2		30.1	
Approach LOS		A	A		C	

Intersection Summary			
HCM Average Control Delay	2.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	75.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	26.1%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.98		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	3351		1615	3357		1615	3344		1615	3329	
Flt Permitted	0.61	1.00		0.37	1.00		0.34	1.00		0.47	1.00	
Satd. Flow (perm)	1035	3351		625	3357		586	3344		797	3329	
Volume (vph)	106	405	63	45	157	22	31	299	52	48	415	90
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	136	519	81	58	201	28	40	383	67	62	532	115
RTOR Reduction (vph)	0	18	0	0	16	0	0	19	0	0	26	0
Lane Group Flow (vph)	136	582	0	58	213	0	40	431	0	62	621	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	11.6	11.6		11.6	11.6		12.0	12.0		12.0	12.0	
Effective Green, g (s)	13.6	13.6		13.6	13.6		14.0	14.0		14.0	14.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43		0.44	0.44		0.44	0.44	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	445	1442		269	1445		260	1482		353	1475	
v/s Ratio Prot		c0.17			0.06			0.13			c0.19	
v/s Ratio Perm	0.13			0.09			0.07			0.08		
v/c Ratio	0.31	0.40		0.22	0.15		0.15	0.29		0.18	0.42	
Uniform Delay, d1	5.9	6.2		5.7	5.5		5.3	5.6		5.3	6.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.2		0.4	0.0		0.3	0.1		0.2	0.2	
Delay (s)	6.3	6.4		6.1	5.5		5.5	5.7		5.6	6.2	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		6.4			5.6			5.7			6.2	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	31.6	Sum of lost time (s)	4.0
Intersection Capacity Utilization	49.1%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			1.00			0.91			0.94	
Flt Protected		1.00			0.98			0.99			1.00	
Satd. Flow (prot)		3377			3355			1618			1695	
Flt Permitted		0.95			0.71			0.99			1.00	
Satd. Flow (perm)		3197			2427			1618			1695	
Volume (vph)	12	438	37	120	197	1	38	22	128	3	31	24
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	14	509	43	140	229	1	44	26	149	3	36	28
RTOR Reduction (vph)	0	6	0	0	0	0	0	112	0	0	25	0
Lane Group Flow (vph)	0	560	0	0	370	0	0	107	0	0	42	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Split			Split		
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Actuated Green, G (s)		20.4			20.4			7.8			2.8	
Effective Green, g (s)		22.4			22.4			9.8			4.8	
Actuated g/C Ratio		0.52			0.52			0.23			0.11	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1665			1264			369			189	
v/s Ratio Prot								c0.07			c0.02	
v/s Ratio Perm		c0.18			0.15							
v/c Ratio		0.34			0.29			0.29			0.22	
Uniform Delay, d1		6.0			5.8			13.7			17.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.1			0.4			0.6	
Delay (s)		6.1			6.0			14.2			18.0	
Level of Service		A			A			B			B	
Approach Delay (s)		6.1			6.0			14.2			18.0	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	43.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	52.3%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.99			0.93			0.96	
Flt Protected		0.99			0.99			1.00			0.98	
Satd. Flow (prot)		3375			3364			3166			3217	
Flt Permitted		0.87			0.85			0.93			0.82	
Satd. Flow (perm)		2951			2897			2946			2673	
Volume (vph)	89	449	20	42	222	17	9	68	69	129	130	102
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	100	504	22	47	249	19	10	76	78	145	146	115
RTOR Reduction (vph)	0	3	0	0	6	0	0	49	0	0	63	0
Lane Group Flow (vph)	0	623	0	0	309	0	0	115	0	0	343	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		13.3			13.3			9.2			9.2	
Effective Green, g (s)		15.3			15.3			11.2			11.2	
Actuated g/C Ratio		0.50			0.50			0.37			0.37	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1480			1453			1082			982	
v/s Ratio Prot												
v/s Ratio Perm		c0.21			0.11			0.04			c0.13	
v/c Ratio		0.42			0.21			0.11			0.35	
Uniform Delay, d1		4.8			4.2			6.4			7.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.2			0.1			0.0			0.2	
Delay (s)		5.0			4.3			6.4			7.2	
Level of Service		A			A			A			A	
Approach Delay (s)		5.0			4.3			6.4			7.2	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	30.5	Sum of lost time (s)	4.0
Intersection Capacity Utilization	54.0%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	3389		1615	3315		1615	3263		1615	3230	
Flt Permitted	0.51	1.00		0.37	1.00		0.65	1.00		0.69	1.00	
Satd. Flow (perm)	863	3389		624	3315		1099	3263		1177	3230	
Volume (vph)	54	496	32	37	257	66	14	52	23	84	83	49
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	68	628	41	47	325	84	18	66	29	106	105	62
RTOR Reduction (vph)	0	5	0	0	23	0	0	21	0	0	44	0
Lane Group Flow (vph)	68	664	0	47	386	0	18	74	0	106	123	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	24.3	24.3		24.3	24.3		10.4	10.4		10.4	10.4	
Effective Green, g (s)	26.3	26.3		26.3	26.3		12.4	12.4		12.4	12.4	
Actuated g/C Ratio	0.62	0.62		0.62	0.62		0.29	0.29		0.29	0.29	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	532	2087		384	2042		319	948		342	938	
v/s Ratio Prot		c0.20			0.12			0.02			0.04	
v/s Ratio Perm	0.08			0.08			0.02			c0.09		
v/c Ratio	0.13	0.32		0.12	0.19		0.06	0.08		0.31	0.13	
Uniform Delay, d1	3.4	3.9		3.4	3.6		10.9	11.0		11.8	11.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		0.1	0.0		0.1	0.0		0.5	0.1	
Delay (s)	3.5	4.0		3.5	3.6		11.0	11.0		12.3	11.2	
Level of Service	A	A		A	A		B	B		B	B	
Approach Delay (s)		4.0			3.6			11.0			11.7	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	5.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	42.7	Sum of lost time (s)	4.0
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

PM PEAK HOUR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	556	80	125	625	83	183
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	585	84	132	658	87	193
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					TWLTL	
Median storage veh)					0	
Upstream signal (ft)				832		
pX, platoon unblocked						
vC, conflicting volume			669		1219	335
vC1, stage 1 conf vol					627	
vC2, stage 2 conf vol					592	
vCu, unblocked vol			669		1219	335
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			86		59	71
cM capacity (veh/h)			930		212	667

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	390	279	132	329	329	87	193
Volume Left	0	0	132	0	0	87	0
Volume Right	0	84	0	0	0	0	193
cSH	1700	1700	930	1700	1700	212	667
Volume to Capacity	0.23	0.16	0.14	0.19	0.19	0.41	0.29
Queue Length 95th (ft)	0	0	12	0	0	47	30
Control Delay (s)	0.0	0.0	9.5	0.0	0.0	33.5	12.6
Lane LOS			A			D	B
Approach Delay (s)	0.0		1.6			19.1	
Approach LOS						C	

Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			0.95	
Frt	1.00	1.00		1.00	0.98			1.00			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1615	3419		1615	3349			1742			3045	
Flt Permitted	0.95	1.00		0.95	1.00			0.80			0.86	
Satd. Flow (perm)	1615	3419		1615	3349			1449			2652	
Volume (vph)	156	469	1	1	513	82	2	1	0	88	2	148
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)	170	510	1	1	558	89	2	1	0	96	2	161
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	134	0
Lane Group Flow (vph)	170	511	0	1	635	0	0	3	0	0	125	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	8.7	30.9		0.9	23.1			6.3			6.3	
Effective Green, g (s)	10.7	32.9		2.9	25.1			8.3			8.3	
Actuated g/C Ratio	0.21	0.66		0.06	0.50			0.17			0.17	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	345	2245		93	1678			240			439	
v/s Ratio Prot	c0.11	0.15		0.00	c0.19							
v/s Ratio Perm								0.00			c0.05	
v/c Ratio	0.49	0.23		0.01	0.38			0.01			0.28	
Uniform Delay, d1	17.3	3.5		22.2	7.7			17.5			18.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.1	0.1		0.0	0.1			0.0			0.4	
Delay (s)	18.4	3.5		22.3	7.8			17.5			18.7	
Level of Service	B	A		C	A			B			B	
Approach Delay (s)		7.2			7.9			17.5			18.7	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	50.1	Sum of lost time (s)	6.0
Intersection Capacity Utilization	45.3%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1615	3413		1615	3409			1619			1688	
Flt Permitted	0.40	1.00		0.43	1.00			0.96			0.91	
Satd. Flow (perm)	679	3413		735	3409			1562			1581	
Volume (vph)	8	529	7	21	592	13	8	8	38	11	4	6
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	9	569	8	23	637	14	9	9	41	12	4	6
RTOR Reduction (vph)	0	0	0	0	1	0	0	36	0	0	5	0
Lane Group Flow (vph)	9	577	0	23	650	0	0	23	0	0	17	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	48.1	48.1		48.1	48.1			5.2			5.2	
Effective Green, g (s)	50.1	50.1		50.1	50.1			7.2			7.2	
Actuated g/C Ratio	0.82	0.82		0.82	0.82			0.12			0.12	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	555	2789		601	2786			183			186	
v/s Ratio Prot		0.17			c0.19							
v/s Ratio Perm	0.01			0.03				c0.01			0.01	
v/c Ratio	0.02	0.21		0.04	0.23			0.12			0.09	
Uniform Delay, d1	1.0	1.2		1.1	1.3			24.2			24.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.0			0.3			0.2	
Delay (s)	1.0	1.3		1.1	1.3			24.5			24.3	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		1.3			1.3			24.5			24.3	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	2.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	61.3	Sum of lost time (s)	4.0
Intersection Capacity Utilization	29.6%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.97		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)	1615	3301		1615	3322		1615	3377		1615	3347	
Flt Permitted	0.95	1.00		0.95	1.00		0.39	1.00		0.37	1.00	
Satd. Flow (perm)	1615	3301		1615	3322		669	3377		632	3347	
Volume (vph)	80	379	115	74	447	105	128	466	43	79	409	68
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	399	121	78	471	111	135	491	45	83	431	72
RTOR Reduction (vph)	0	36	0	0	26	0	0	10	0	0	20	0
Lane Group Flow (vph)	84	484	0	78	556	0	135	526	0	83	483	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	4.3	13.8		4.3	13.8		16.1	16.1		16.1	16.1	
Effective Green, g (s)	6.3	15.8		6.3	15.8		18.1	18.1		18.1	18.1	
Actuated g/C Ratio	0.14	0.34		0.14	0.34		0.39	0.39		0.39	0.39	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	220	1129		220	1136		262	1323		248	1311	
v/s Ratio Prot	c0.05	0.15		0.05	c0.17			0.16			0.14	
v/s Ratio Perm							c0.20			0.13		
v/c Ratio	0.38	0.43		0.35	0.49		0.52	0.40		0.33	0.37	
Uniform Delay, d1	18.2	11.7		18.1	12.0		10.7	10.1		9.8	10.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.3		1.0	0.3		1.7	0.2		0.8	0.2	
Delay (s)	19.3	12.0		19.1	12.3		12.4	10.3		10.6	10.2	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		13.0			13.1			10.7			10.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	11.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	46.2	Sum of lost time (s)	6.0
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.98			0.95			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.96	
Satd. Flow (prot)	1615	3415		1615	3364			1675			1688	
Flt Permitted	0.38	1.00		0.43	1.00			0.93			0.80	
Satd. Flow (perm)	640	3415		730	3364			1581			1401	
Volume (vph)	16	528	5	11	571	69	5	4	6	76	4	19
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	17	556	5	12	601	73	5	4	6	80	4	20
RTOR Reduction (vph)	0	1	0	0	7	0	0	5	0	0	16	0
Lane Group Flow (vph)	17	560	0	12	667	0	0	10	0	0	88	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	37.2	37.2		37.2	37.2			9.7			9.7	
Effective Green, g (s)	39.2	39.2		39.2	39.2			11.7			11.7	
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.21			0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	457	2438		521	2402			337			299	
v/s Ratio Prot		0.16			c0.20							
v/s Ratio Perm	0.03			0.02				0.01			c0.06	
v/c Ratio	0.04	0.23		0.02	0.28			0.03			0.30	
Uniform Delay, d1	2.3	2.7		2.3	2.8			17.1			18.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.1			0.0			0.6	
Delay (s)	2.3	2.7		2.3	2.9			17.1			18.7	
Level of Service	A	A		A	A			B			B	
Approach Delay (s)		2.7			2.9			17.1			18.7	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	4.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	54.9	Sum of lost time (s)	4.0
Intersection Capacity Utilization	37.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1700	1800	1700	1800
Total Lost time (s)	2.0		2.0	2.0	2.0	2.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3359		1615	3420	1615	1530
Flt Permitted	1.00		0.35	1.00	0.95	1.00
Satd. Flow (perm)	3359		591	3420	1615	1530
Volume (vph)	644	87	7	691	72	15
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	671	91	7	720	75	16
RTOR Reduction (vph)	9	0	0	0	0	13
Lane Group Flow (vph)	753	0	7	720	75	3
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Perm			Perm
Protected Phases	2			6	8	
Permitted Phases			6			8
Actuated Green, G (s)	45.8		45.8	45.8	7.9	7.9
Effective Green, g (s)	47.8		47.8	47.8	9.9	9.9
Actuated g/C Ratio	0.77		0.77	0.77	0.16	0.16
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2602		458	2650	259	245
v/s Ratio Prot	c0.22			0.21	c0.05	
v/s Ratio Perm			0.01			0.00
v/c Ratio	0.29		0.02	0.27	0.29	0.01
Uniform Delay, d1	2.0		1.6	2.0	22.8	21.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.0	0.1	0.6	0.0
Delay (s)	2.1		1.6	2.0	23.4	21.8
Level of Service	A		A	A	C	C
Approach Delay (s)	2.1			2.0	23.1	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	3.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	61.7	Sum of lost time (s)	4.0
Intersection Capacity Utilization	32.8%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1615	3420	1530	1615	3371		1615	3365		1615	3420	1530
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.39	1.00		0.63	1.00	1.00
Satd. Flow (perm)	1615	3420	1530	1615	3371		657	3365		1078	3420	1530
Volume (vph)	54	332	339	189	518	54	142	149	18	28	251	221
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	61	373	381	212	582	61	160	167	20	31	282	248
RTOR Reduction (vph)	0	0	248	0	8	0	0	10	0	0	0	201
Lane Group Flow (vph)	61	373	133	212	635	0	160	177	0	31	282	47
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot		Perm	Prot			pm+pt			pm+pt		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2				8			4		4
Actuated Green, G (s)	4.3	20.1	20.1	10.3	26.1		20.9	14.7		12.1	9.9	9.9
Effective Green, g (s)	6.3	22.1	22.1	12.3	28.1		22.9	16.7		16.1	11.9	11.9
Actuated g/C Ratio	0.10	0.35	0.35	0.19	0.44		0.36	0.26		0.25	0.19	0.19
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	161	1194	534	314	1496		374	888		310	643	288
v/s Ratio Prot	0.04	0.11		c0.13	c0.19		c0.06	0.05		0.01	c0.08	
v/s Ratio Perm			0.09				0.09			0.02		0.03
v/c Ratio	0.38	0.31	0.25	0.68	0.42		0.43	0.20		0.10	0.44	0.16
Uniform Delay, d1	26.7	15.0	14.7	23.6	12.1		14.5	18.1		17.9	22.7	21.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.5	0.2	0.2	5.6	0.2		0.8	0.1		0.1	0.5	0.3
Delay (s)	28.2	15.2	14.9	29.3	12.3		15.3	18.2		18.1	23.2	21.8
Level of Service	C	B	B	C	B		B	B		B	C	C
Approach Delay (s)		16.0			16.5			16.9			22.3	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	17.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	63.3	Sum of lost time (s)	6.0
Intersection Capacity Utilization	51.2%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1800	1800	1800
Total Lost time (s)				2.0		2.0		2.0			2.0	
Lane Util. Factor				0.97		1.00		0.95			0.95	
Frt				1.00		0.85		1.00			1.00	
Flt Protected				0.95		1.00		1.00			1.00	
Satd. Flow (prot)				3317		1530		3420			3420	
Flt Permitted				0.95		1.00		1.00			1.00	
Satd. Flow (perm)				3317		1530		3420			3420	
Volume (vph)	0	0	0	391	0	17	0	278	0	0	487	0
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	449	0	20	0	320	0	0	560	0
RTOR Reduction (vph)	0	0	0	0	0	12	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	449	0	8	0	320	0	0	560	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				custom		custom						
Protected Phases								2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				9.2		9.2		10.9			10.9	
Effective Green, g (s)				11.2		11.2		12.9			12.9	
Actuated g/C Ratio				0.40		0.40		0.46			0.46	
Clearance Time (s)				4.0		4.0		4.0			4.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				1322		610		1570			1570	
v/s Ratio Prot								0.09			c0.16	
v/s Ratio Perm				c0.14		0.01						
v/c Ratio				0.34		0.01		0.20			0.36	
Uniform Delay, d1				5.9		5.1		4.5			4.9	
Progression Factor				1.00		1.00		1.00			1.00	
Incremental Delay, d2				0.2		0.0		0.1			0.1	
Delay (s)				6.0		5.1		4.6			5.1	
Level of Service				A		A		A			A	
Approach Delay (s)		0.0			6.0			4.6			5.1	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	28.1	Sum of lost time (s)	4.0
Intersection Capacity Utilization	32.7%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)		2.0			2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor		0.95			0.95		1.00	1.00		1.00	0.95	
Frt		0.97			1.00		1.00	0.86		1.00	0.97	
Flt Protected		1.00			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3325			3285		1615	1543		1615	3318	
Flt Permitted		1.00			0.71		0.52	1.00		0.73	1.00	
Satd. Flow (perm)		3325			2425		892	1543		1239	3318	
Volume (vph)	0	90	21	257	55	0	9	2	35	67	265	65
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	105	24	299	64	0	10	2	41	78	308	76
RTOR Reduction (vph)	0	14	0	0	0	0	0	23	0	0	28	0
Lane Group Flow (vph)	0	115	0	0	363	0	10	20	0	78	356	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		9.3			9.3		9.9	9.9		9.9	9.9	
Effective Green, g (s)		11.3			11.3		11.9	11.9		11.9	11.9	
Actuated g/C Ratio		0.42			0.42		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		1381			1007		390	675		542	1452	
v/s Ratio Prot		0.03						0.01			c0.11	
v/s Ratio Perm					c0.15		0.01			0.06		
v/c Ratio		0.08			0.36		0.03	0.03		0.14	0.25	
Uniform Delay, d1		4.8			5.5		4.4	4.4		4.6	4.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.2		0.0	0.0		0.1	0.1	
Delay (s)		4.8			5.7		4.4	4.4		4.7	4.9	
Level of Service		A			A		A	A		A	A	
Approach Delay (s)		4.8			5.7			4.4			4.9	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	27.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	39.2%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.95		1.00	0.97		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	3236		1615	3333		1615	3333		1615	3291	
Flt Permitted	0.95	1.00		0.95	1.00		0.20	1.00		0.50	1.00	
Satd. Flow (perm)	1615	3236		1615	3333		342	3333		842	3291	
Volume (vph)	71	83	46	79	66	13	14	317	64	11	692	233
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	74	86	48	82	69	14	15	330	67	11	721	243
RTOR Reduction (vph)	0	37	0	0	11	0	0	21	0	0	42	0
Lane Group Flow (vph)	74	97	0	82	72	0	15	376	0	11	922	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	4.2	7.5		4.3	7.6		17.9	17.9		17.9	17.9	
Effective Green, g (s)	6.2	9.5		6.3	9.6		19.9	19.9		19.9	19.9	
Actuated g/C Ratio	0.15	0.23		0.15	0.23		0.48	0.48		0.48	0.48	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	240	737		244	767		163	1591		402	1571	
v/s Ratio Prot	0.05	c0.03		c0.05	0.02			0.11			c0.28	
v/s Ratio Perm							0.04			0.01		
v/c Ratio	0.31	0.13		0.34	0.09		0.09	0.24		0.03	0.59	
Uniform Delay, d1	15.8	12.8		15.8	12.6		6.0	6.4		5.8	7.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.1		0.8	0.1		0.2	0.1		0.0	0.6	
Delay (s)	16.6	12.9		16.6	12.7		6.2	6.5		5.8	8.5	
Level of Service	B	B		B	B		A	A		A	A	
Approach Delay (s)		14.2			14.7			6.5			8.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	41.7	Sum of lost time (s)	6.0
Intersection Capacity Utilization	46.9%	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												
Ideal Flow (vphpl)	1800	1800	1800	1600	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor		1.00		0.95	0.95			0.95			0.95	
Frt		0.97		1.00	0.87			0.96			1.00	
Flt Protected		0.98		0.95	0.99			1.00			0.99	
Satd. Flow (prot)		1708		1444	1481			3284			3375	
Flt Permitted		0.98		0.95	0.99			1.00			0.99	
Satd. Flow (perm)		1708		1444	1481			3284			3375	
Volume (vph)	11	8	6	193	5	217	6	459	166	131	471	10
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	12	9	6	208	5	233	6	494	178	141	506	11
RTOR Reduction (vph)	0	6	0	0	180	0	0	42	0	0	1	0
Lane Group Flow (vph)	0	21	0	174	92	0	0	636	0	0	657	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split			Split			Split			Split		
Protected Phases	4	4		8	8		2	2		6	6	
Permitted Phases												
Actuated Green, G (s)		2.4		11.4	11.4			14.4			14.6	
Effective Green, g (s)		4.4		13.4	13.4			16.4			16.6	
Actuated g/C Ratio		0.07		0.23	0.23			0.28			0.28	
Clearance Time (s)		4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		128		329	338			916			953	
v/s Ratio Prot		c0.01		c0.12	0.06			c0.19			c0.19	
v/s Ratio Perm												
v/c Ratio		0.17		0.53	0.27			0.69			0.69	
Uniform Delay, d1		25.5		19.9	18.7			19.0			18.8	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		0.6		1.5	0.4			2.3			2.1	
Delay (s)		26.1		21.5	19.1			21.3			20.9	
Level of Service		C		C	B			C			C	
Approach Delay (s)		26.1			20.0			21.3			20.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	20.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	58.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

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

Intersection #12 K Street and 2nd Street [2009 Analysis]

Cycle (sec):	100	Critical Vol./Cap.(X):	0.244
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	9.4
Optimal Cycle:	0	Level Of Service:	A

Street Name:	K Street						2nd 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 1!	0 0		1 0 1	1 0		1 0 1	1 0	
Volume Module:PM PEAK HOUR												
Base Vol:	37	5	17	24	23	22	7	280	24	27	288	7
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:	37	5	17	24	23	22	7	280	24	27	288	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	40	5	19	26	25	24	8	306	26	29	314	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	5	19	26	25	24	8	306	26	29	314	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	5	19	26	25	24	8	306	26	29	314	8
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:	0.63	0.08	0.29	0.35	0.33	0.32	1.00	1.84	0.16	1.00	1.95	0.05
Final Sat.:	382	52	176	216	207	198	615	1253	109	617	1325	32
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.12	0.12	0.12	0.01	0.24	0.24	0.05	0.24	0.24
Crit Moves:		****		****				****			****	
Delay/Veh:	9.0	9.0	9.0	9.0	9.0	9.0	8.5	9.5	9.4	8.7	9.4	9.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.0	9.0	9.0	9.0	9.0	9.0	8.5	9.5	9.4	8.7	9.4	9.4
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	9.0			9.0			9.4			9.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.0			9.0			9.4			9.4		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.3	0.3	0.0	0.3	0.3

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	1.00		1.00	0.99			0.88			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.97	
Satd. Flow (prot)	1615	3407		1615	3401			2997			3290	
Flt Permitted	0.58	1.00		0.53	1.00			0.93			0.70	
Satd. Flow (perm)	992	3407		908	3401			2798			2376	
Volume (vph)	6	338	9	39	255	10	12	37	208	302	181	35
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	6	348	9	40	263	10	12	38	214	311	187	36
RTOR Reduction (vph)	0	3	0	0	4	0	0	109	0	0	8	0
Lane Group Flow (vph)	6	354	0	40	269	0	0	155	0	0	526	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	8.5	8.5		8.5	8.5			11.9			11.9	
Effective Green, g (s)	10.5	10.5		10.5	10.5			13.9			13.9	
Actuated g/C Ratio	0.37	0.37		0.37	0.37			0.49			0.49	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	367	1260		336	1257			1369			1163	
v/s Ratio Prot		c0.10			0.08							
v/s Ratio Perm	0.01			0.04				0.06			c0.22	
v/c Ratio	0.02	0.28		0.12	0.21			0.11			0.45	
Uniform Delay, d1	5.7	6.3		5.9	6.1			3.9			4.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.1		0.2	0.1			0.0			0.3	
Delay (s)	5.7	6.4		6.1	6.2			4.0			5.0	
Level of Service	A	A		A	A			A			A	
Approach Delay (s)		6.4			6.2			4.0			5.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	28.4	Sum of lost time (s)	4.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1600	1800	1800	1800
Total Lost time (s)	2.0		2.0	2.0		
Lane Util. Factor	0.95		0.97	1.00		
Frt	0.93		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3197		2949	1800		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3197		2949	1800		
Volume (vph)	498	381	977	334	0	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	535	410	1051	359	0	0
RTOR Reduction (vph)	42	0	0	0	0	0
Lane Group Flow (vph)	903	0	1051	359	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Prot			
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	21.4		25.5	54.9		
Effective Green, g (s)	23.4		27.5	54.9		
Actuated g/C Ratio	0.43		0.50	1.00		
Clearance Time (s)	4.0		4.0	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1363		1477	1800		
v/s Ratio Prot	c0.28		c0.36	0.20		
v/s Ratio Perm						
v/c Ratio	0.66		0.71	0.20		
Uniform Delay, d1	12.6		10.6	0.0		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	1.2		1.6	0.1		
Delay (s)	13.8		12.3	0.1		
Level of Service	B		B	A		
Approach Delay (s)	13.8			9.2	0.0	
Approach LOS	B			A	A	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	54.9	Sum of lost time (s)	4.0
Intersection Capacity Utilization	87.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800	1800	1800	1800	1900	1900	1900
Total Lost time (s)	2.0	2.0			2.0	2.0		2.0	2.0			
Lane Util. Factor	1.00	0.95			0.91	1.00		1.00	0.88			
Frt	1.00	1.00			1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1615	3420			4914	1530		1715	2693			
Flt Permitted	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (perm)	1615	3420			4914	1530		1715	2693			
Volume (vph)	270	205	0	0	1273	806	133	1	274	0	0	0
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	281	214	0	0	1326	840	139	1	285	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	315	0	0	234	0	0	0
Lane Group Flow (vph)	281	214	0	0	1326	525	0	140	51	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot					Perm	Perm		Prot			
Protected Phases	5	2			6			8	8			
Permitted Phases						6	8					
Actuated Green, G (s)	15.7	53.1			33.4	33.4		11.0	11.0			
Effective Green, g (s)	17.7	55.1			35.4	35.4		13.0	13.0			
Actuated g/C Ratio	0.25	0.76			0.49	0.49		0.18	0.18			
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	396	2614			2413	751		309	486			
v/s Ratio Prot	c0.17	0.06			0.27				0.02			
v/s Ratio Perm						c0.34		0.08				
v/c Ratio	0.71	0.08			0.55	0.70		0.45	0.11			
Uniform Delay, d1	24.9	2.1			12.8	14.2		26.4	24.7			
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00			
Incremental Delay, d2	5.7	0.0			0.3	2.9		1.1	0.1			
Delay (s)	30.6	2.2			13.0	17.1		27.4	24.8			
Level of Service	C	A			B	B		C	C			
Approach Delay (s)		18.3			14.6			25.7			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	16.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	72.1	Sum of lost time (s)	6.0
Intersection Capacity Utilization	87.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.88	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	4855		1615	4859		1615	3314		1615	2997	
Flt Permitted	0.95	1.00		0.95	1.00		0.14	1.00		0.58	1.00	
Satd. Flow (perm)	1615	4855		1615	4859		245	3314		994	2997	
Volume (vph)	80	330	29	88	1019	83	278	200	52	57	150	699
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	86	355	31	95	1096	89	299	215	56	61	161	752
RTOR Reduction (vph)	0	11	0	0	10	0	0	25	0	0	157	0
Lane Group Flow (vph)	86	375	0	95	1175	0	299	246	0	61	756	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases							8			4		
Actuated Green, G (s)	4.3	21.3		6.4	23.4		41.6	33.3		28.1	23.8	
Effective Green, g (s)	6.3	23.3		8.4	25.4		43.6	35.3		32.1	25.8	
Actuated g/C Ratio	0.08	0.29		0.10	0.31		0.54	0.43		0.39	0.32	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	125	1391		167	1518		398	1439		441	951	
v/s Ratio Prot	c0.05	0.08		c0.06	c0.24		c0.15	0.07		0.01	c0.25	
v/s Ratio Perm							0.26			0.04		
v/c Ratio	0.69	0.27		0.57	0.77		0.75	0.17		0.14	1.19dr	
Uniform Delay, d1	36.5	22.4		34.7	25.3		17.3	14.1		15.5	25.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.6	0.1		4.4	2.5		7.8	0.1		0.1	4.7	
Delay (s)	51.2	22.5		39.1	27.9		25.1	14.1		15.6	30.0	
Level of Service	D	C		D	C		C	B		B	C	
Approach Delay (s)		27.7			28.7			19.9			29.1	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM Average Control Delay	27.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	81.3	Sum of lost time (s)	6.0
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1615	3274		1615	3360		1615	1800	1530	1615	1774	
Flt Permitted	0.46	1.00		0.56	1.00		0.59	1.00	1.00	0.57	1.00	
Satd. Flow (perm)	789	3274		945	3360		1010	1800	1530	975	1774	
Volume (vph)	30	223	88	131	402	54	148	201	96	49	168	18
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	31	232	92	136	419	56	154	209	100	51	175	19
RTOR Reduction (vph)	0	42	0	0	12	0	0	0	65	0	7	0
Lane Group Flow (vph)	31	282	0	136	463	0	154	209	35	51	187	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	17.3	17.3		17.3	17.3		10.4	10.4	10.4	10.4	10.4	
Effective Green, g (s)	19.3	19.3		19.3	19.3		12.4	12.4	12.4	12.4	12.4	
Actuated g/C Ratio	0.54	0.54		0.54	0.54		0.35	0.35	0.35	0.35	0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	427	1770		511	1816		351	625	531	339	616	
v/s Ratio Prot		0.09			0.14			0.12			0.11	
v/s Ratio Perm	0.04			c0.14			c0.15		0.02	0.05		
v/c Ratio	0.07	0.16		0.27	0.25		0.44	0.33	0.07	0.15	0.30	
Uniform Delay, d1	3.9	4.1		4.4	4.4		9.0	8.6	7.8	8.0	8.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	0.0		0.3	0.1		0.9	0.3	0.1	0.2	0.3	
Delay (s)	4.0	4.2		4.7	4.4		9.8	8.9	7.8	8.2	8.8	
Level of Service	A	A		A	A		A	A	A	A	A	
Approach Delay (s)		4.1			4.5			9.0			8.7	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	35.7	Sum of lost time (s)	4.0
Intersection Capacity Utilization	50.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.92	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1615	3420	3420	1530	1625	
Flt Permitted	0.42	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	707	3420	3420	1530	1625	
Volume (vph)	15	359	568	15	17	23
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	16	386	611	16	18	25
RTOR Reduction (vph)	0	0	0	3	22	0
Lane Group Flow (vph)	16	386	611	13	21	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm		
Protected Phases		2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)	65.6	65.6	65.6	65.6	6.6	
Effective Green, g (s)	67.6	67.6	67.6	67.6	8.6	
Actuated g/C Ratio	0.84	0.84	0.84	0.84	0.11	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	596	2883	2883	1290	174	
v/s Ratio Prot		0.11	c0.18		c0.01	
v/s Ratio Perm	0.02			0.01		
v/c Ratio	0.03	0.13	0.21	0.01	0.12	
Uniform Delay, d1	1.0	1.1	1.2	1.0	32.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	0.0	0.0	0.0	0.3	
Delay (s)	1.0	1.1	1.2	1.0	32.7	
Level of Service	A	A	A	A	C	
Approach Delay (s)		1.1	1.2		32.7	
Approach LOS		A	A		C	

Intersection Summary			
HCM Average Control Delay	2.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.20		
Actuated Cycle Length (s)	80.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	26.6%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.98		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	3327		1615	3366		1615	3350		1615	3322	
Flt Permitted	0.43	1.00		0.53	1.00		0.34	1.00		0.38	1.00	
Satd. Flow (perm)	737	3327		899	3366		585	3350		648	3322	
Volume (vph)	96	286	63	114	425	50	63	489	78	25	508	120
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	100	298	66	119	443	52	66	509	81	26	529	125
RTOR Reduction (vph)	0	29	0	0	14	0	0	17	0	0	27	0
Lane Group Flow (vph)	100	335	0	119	481	0	66	573	0	26	627	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	11.1	11.1		11.1	11.1		12.0	12.0		12.0	12.0	
Effective Green, g (s)	13.1	13.1		13.1	13.1		14.0	14.0		14.0	14.0	
Actuated g/C Ratio	0.42	0.42		0.42	0.42		0.45	0.45		0.45	0.45	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	310	1401		379	1418		263	1508		292	1495	
v/s Ratio Prot		0.10			c0.14			0.17			c0.19	
v/s Ratio Perm	0.14			0.13			0.11			0.04		
v/c Ratio	0.32	0.24		0.31	0.34		0.25	0.38		0.09	0.42	
Uniform Delay, d1	6.0	5.8		6.0	6.1		5.3	5.7		4.9	5.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		0.5	0.1		0.5	0.2		0.1	0.2	
Delay (s)	6.6	5.9		6.5	6.2		5.8	5.8		5.0	6.0	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		6.0			6.3			5.8			5.9	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	31.1	Sum of lost time (s)	4.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			1.00			0.91			0.96	
Flt Protected		1.00			0.99			0.99			1.00	
Satd. Flow (prot)		3372			3381			1625			1716	
Flt Permitted		0.95			0.82			0.99			1.00	
Satd. Flow (perm)		3193			2790			1625			1716	
Volume (vph)	6	363	36	112	538	14	33	35	135	5	43	23
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)	7	395	39	122	585	15	36	38	147	5	47	25
RTOR Reduction (vph)	0	8	0	0	1	0	0	100	0	0	22	0
Lane Group Flow (vph)	0	433	0	0	721	0	0	121	0	0	55	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Split			Split		
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Actuated Green, G (s)		24.9			24.9			9.2			4.6	
Effective Green, g (s)		26.9			26.9			11.2			6.6	
Actuated g/C Ratio		0.53			0.53			0.22			0.13	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1694			1480			359			223	
v/s Ratio Prot								c0.07			c0.03	
v/s Ratio Perm		0.14			c0.26							
v/c Ratio		0.26			0.49			0.34			0.25	
Uniform Delay, d1		6.5			7.5			16.6			19.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.3			0.6			0.6	
Delay (s)		6.5			7.8			17.2			20.4	
Level of Service		A			A			B			C	
Approach Delay (s)		6.5			7.8			17.2			20.4	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM Average Control Delay	9.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	50.7	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		0.99			0.99			0.95			0.93	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		3370			3377			3251			3167	
Flt Permitted		0.80			0.91			0.93			0.88	
Satd. Flow (perm)		2732			3071			3020			2797	
Volume (vph)	89	377	18	48	575	39	15	141	69	45	94	107
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	94	397	19	51	605	41	16	148	73	47	99	113
RTOR Reduction (vph)	0	3	0	0	5	0	0	53	0	0	82	0
Lane Group Flow (vph)	0	507	0	0	692	0	0	184	0	0	177	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		15.2			15.2			6.0			6.0	
Effective Green, g (s)		17.2			17.2			8.0			8.0	
Actuated g/C Ratio		0.59			0.59			0.27			0.27	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1609			1809			827			766	
v/s Ratio Prot												
v/s Ratio Perm		0.19			c0.23			0.06			c0.06	
v/c Ratio		0.31			0.38			0.22			0.23	
Uniform Delay, d1		3.0			3.2			8.2			8.2	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.1			0.1			0.2	
Delay (s)		3.1			3.3			8.3			8.4	
Level of Service		A			A			A			A	
Approach Delay (s)		3.1			3.3			8.3			8.4	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	4.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	29.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.97		1.00	0.99		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	3384		1615	3300		1615	3385		1615	3198	
Flt Permitted	0.33	1.00		0.50	1.00		0.63	1.00		0.61	1.00	
Satd. Flow (perm)	556	3384		851	3300		1071	3385		1042	3198	
Volume (vph)	57	350	26	24	515	157	56	180	13	41	96	73
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	66	402	30	28	592	180	64	207	15	47	110	84
RTOR Reduction (vph)	0	6	0	0	30	0	0	9	0	0	61	0
Lane Group Flow (vph)	66	426	0	28	742	0	64	213	0	47	133	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	17.9	17.9		17.9	17.9		7.0	7.0		7.0	7.0	
Effective Green, g (s)	19.9	19.9		19.9	19.9		9.0	9.0		9.0	9.0	
Actuated g/C Ratio	0.60	0.60		0.60	0.60		0.27	0.27		0.27	0.27	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	336	2047		515	1996		293	926		285	875	
v/s Ratio Prot		0.13			c0.22			c0.06			0.04	
v/s Ratio Perm	0.12			0.03			0.06			0.05		
v/c Ratio	0.20	0.21		0.05	0.37		0.22	0.23		0.16	0.15	
Uniform Delay, d1	2.9	2.9		2.7	3.3		9.2	9.3		9.1	9.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.1		0.0	0.1		0.4	0.1		0.3	0.1	
Delay (s)	3.2	3.0		2.7	3.4		9.6	9.4		9.4	9.1	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		3.0			3.4			9.4			9.2	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	32.9	Sum of lost time (s)	4.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX G

2012 WITH DETOUR LOS CALCULATION SHEETS

AM PEAK HOUR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	648	97	134	404	57	163
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	745	111	154	464	66	187
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					TWLTL	
Median storage veh)					0	
Upstream signal (ft)				832		
pX, platoon unblocked						
vC, conflicting volume			856		1341	428
vC1, stage 1 conf vol					801	
vC2, stage 2 conf vol					540	
vCu, unblocked vol			856		1341	428
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			81		65	68
cM capacity (veh/h)			793		185	581

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	497	360	154	232	232	66	187
Volume Left	0	0	154	0	0	66	0
Volume Right	0	111	0	0	0	0	187
cSH	1700	1700	793	1700	1700	185	581
Volume to Capacity	0.29	0.21	0.19	0.14	0.14	0.35	0.32
Queue Length 95th (ft)	0	0	18	0	0	37	35
Control Delay (s)	0.0	0.0	10.6	0.0	0.0	34.8	14.1
Lane LOS			B			D	B
Approach Delay (s)	0.0		2.6			19.5	
Approach LOS						C	

Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			0.95	
Frt	1.00	1.00		1.00	0.97			0.93			0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1615	3419		1615	3304			1638			3077	
Flt Permitted	0.95	1.00		0.95	1.00			0.86			0.84	
Satd. Flow (perm)	1615	3419		1615	3304			1451			2631	
Volume (vph)	105	558	1	1	309	90	1	0	1	100	0	110
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	118	627	1	1	347	101	1	0	1	112	0	124
RTOR Reduction (vph)	0	0	0	0	27	0	0	1	0	0	99	0
Lane Group Flow (vph)	118	628	0	1	421	0	0	1	0	0	137	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	5.8	25.4		1.0	20.6			7.1			7.1	
Effective Green, g (s)	7.8	27.4		3.0	22.6			9.1			9.1	
Actuated g/C Ratio	0.17	0.60		0.07	0.50			0.20			0.20	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	277	2059		106	1641			290			526	
v/s Ratio Prot	c0.07	c0.18		0.00	0.13							
v/s Ratio Perm								0.00			c0.05	
v/c Ratio	0.43	0.31		0.01	0.26			0.00			0.26	
Uniform Delay, d1	16.8	4.4		19.9	6.6			14.6			15.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.1	0.1		0.0	0.1			0.0			0.3	
Delay (s)	17.9	4.5		19.9	6.7			14.6			15.6	
Level of Service	B	A		B	A			B			B	
Approach Delay (s)		6.6			6.7			14.6			15.6	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	45.5	Sum of lost time (s)	4.0
Intersection Capacity Utilization	41.1%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.93			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1615	3415		1615	3415			1655			1706	
Flt Permitted	0.50	1.00		0.36	1.00			0.94			0.93	
Satd. Flow (perm)	856	3415		612	3415			1569			1611	
Volume (vph)	5	664	6	15	376	4	7	7	15	2	3	2
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	6	746	7	17	422	4	8	8	17	2	3	2
RTOR Reduction (vph)	0	0	0	0	0	0	0	16	0	0	2	0
Lane Group Flow (vph)	6	753	0	17	426	0	0	17	0	0	5	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	69.2	69.2		69.2	69.2			5.2			5.2	
Effective Green, g (s)	71.2	71.2		71.2	71.2			7.2			7.2	
Actuated g/C Ratio	0.86	0.86		0.86	0.86			0.09			0.09	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	740	2951		529	2951			137			141	
v/s Ratio Prot		c0.22			0.12							
v/s Ratio Perm	0.01			0.03				c0.01			0.00	
v/c Ratio	0.01	0.26		0.03	0.14			0.13			0.04	
Uniform Delay, d1	0.8	1.0		0.8	0.9			34.7			34.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.0			0.4			0.1	
Delay (s)	0.8	1.0		0.8	0.9			35.1			34.5	
Level of Service	A	A		A	A			D			C	
Approach Delay (s)		1.0			0.9			35.1			34.5	
Approach LOS		A			A			D			C	

Intersection Summary			
HCM Average Control Delay	2.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	82.4	Sum of lost time (s)	4.0
Intersection Capacity Utilization	29.6%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0			2.0					2.0	2.0	
Lane Util. Factor	1.00	0.95			0.95					1.00	0.95	
Frt	1.00	1.00			0.92					1.00	0.85	
Flt Protected	0.95	1.00			1.00					0.95	1.00	
Satd. Flow (prot)	1615	3420			3148					1615	2907	
Flt Permitted	0.95	1.00			1.00					0.76	1.00	
Satd. Flow (perm)	1615	3420			3148					1287	2907	
Volume (vph)	41	633	0	0	329	372	0	0	0	478	0	66
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	50	772	0	0	401	454	0	0	0	583	0	80
RTOR Reduction (vph)	0	0	0	0	263	0	0	0	0	0	39	0
Lane Group Flow (vph)	50	772	0	0	592	0	0	0	0	583	41	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	2.9	23.6			16.7					29.8	29.8	
Effective Green, g (s)	4.9	25.6			18.7					31.8	31.8	
Actuated g/C Ratio	0.08	0.42			0.30					0.52	0.52	
Clearance Time (s)	4.0	4.0			4.0					4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0					3.0	3.0	
Lane Grp Cap (vph)	129	1426			959					667	1506	
v/s Ratio Prot	0.03	c0.23			c0.19						0.01	
v/s Ratio Perm										c0.45		
v/c Ratio	0.39	0.54			0.62					0.87	0.03	
Uniform Delay, d1	26.8	13.5			18.3					13.0	7.2	
Progression Factor	1.00	1.00			1.00					1.00	1.00	
Incremental Delay, d2	1.9	0.4			1.2					12.2	0.0	
Delay (s)	28.8	13.9			19.5					25.2	7.2	
Level of Service	C	B			B					C	A	
Approach Delay (s)		14.8			19.5			0.0			23.1	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM Average Control Delay	18.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	61.4	Sum of lost time (s)	6.0
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			1.00			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.95			0.97	
Satd. Flow (prot)	1615	3417		1615	3409			1710			1667	
Flt Permitted	0.32	1.00		0.19	1.00			0.74			0.81	
Satd. Flow (perm)	536	3417		317	3409			1328			1402	
Volume (vph)	10	1170	6	2	749	17	1	0	0	39	0	18
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	11	1330	7	2	851	19	1	0	0	44	0	20
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	0	0	18	0
Lane Group Flow (vph)	11	1337	0	2	869	0	0	1	0	0	46	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	68.6	68.6		68.6	68.6			6.7			6.7	
Effective Green, g (s)	70.6	70.6		70.6	70.6			8.7			8.7	
Actuated g/C Ratio	0.85	0.85		0.85	0.85			0.10			0.10	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	454	2896		269	2889			139			146	
v/s Ratio Prot		c0.39			0.25							
v/s Ratio Perm	0.02			0.01				0.00			c0.03	
v/c Ratio	0.02	0.46		0.01	0.30			0.01			0.32	
Uniform Delay, d1	1.0	1.6		1.0	1.3			33.4			34.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.1		0.0	0.1			0.0			1.2	
Delay (s)	1.0	1.7		1.0	1.4			33.5			35.8	
Level of Service	A	A		A	A			C			D	
Approach Delay (s)		1.7			1.4			33.5			35.8	
Approach LOS		A			A			C			D	

Intersection Summary			
HCM Average Control Delay	2.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	83.3	Sum of lost time (s)	4.0
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1700	1800	1700	1800
Total Lost time (s)	2.0		2.0	2.0	2.0	2.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3352		1615	3420	1615	1530
Flt Permitted	1.00		0.28	1.00	0.95	1.00
Satd. Flow (perm)	3352		474	3420	1615	1530
Volume (vph)	723	110	7	436	73	11
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	831	126	8	501	84	13
RTOR Reduction (vph)	10	0	0	0	0	11
Lane Group Flow (vph)	947	0	8	501	84	2
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Perm			Perm
Protected Phases	2			6	8	
Permitted Phases			6			8
Actuated Green, G (s)	47.6		47.6	47.6	7.8	7.8
Effective Green, g (s)	49.6		49.6	49.6	9.8	9.8
Actuated g/C Ratio	0.78		0.78	0.78	0.15	0.15
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2622		371	2676	250	236
v/s Ratio Prot	c0.28			0.15	c0.05	
v/s Ratio Perm			0.02			0.00
v/c Ratio	0.36		0.02	0.19	0.34	0.01
Uniform Delay, d1	2.1		1.5	1.8	23.9	22.7
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.0	0.0	0.8	0.0
Delay (s)	2.2		1.6	1.8	24.7	22.7
Level of Service	A		A	A	C	C
Approach Delay (s)	2.2			1.8	24.4	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	3.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	63.4	Sum of lost time (s)	4.0
Intersection Capacity Utilization	36.0%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1615	3420	1530	1615	3334		1615	3315		1615	3420	1530
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.41	1.00		0.70	1.00	1.00
Satd. Flow (perm)	1615	3420	1530	1615	3334		689	3315		1196	3420	1530
Volume (vph)	25	395	767	69	223	45	395	59	15	59	296	222
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	416	807	73	235	47	416	62	16	62	312	234
RTOR Reduction (vph)	0	0	418	0	21	0	0	10	0	0	0	177
Lane Group Flow (vph)	26	416	389	73	261	0	416	68	0	62	312	57
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot		Perm	Prot			pm+pt			pm+pt		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2				8			4		4
Actuated Green, G (s)	2.0	18.6	18.6	3.0	19.6		31.0	23.1		17.5	13.6	13.6
Effective Green, g (s)	4.0	20.6	20.6	5.0	21.6		33.0	25.1		21.5	15.6	15.6
Actuated g/C Ratio	0.06	0.32	0.32	0.08	0.33		0.51	0.39		0.33	0.24	0.24
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	100	1091	488	125	1115		573	1288		436	826	369
v/s Ratio Prot	0.02	0.12		c0.05	0.08		c0.17	0.02		0.01	c0.09	
v/s Ratio Perm			c0.25				0.20			0.03		0.04
v/c Ratio	0.26	0.38	0.80	0.58	0.23		0.73	0.05		0.14	0.38	0.15
Uniform Delay, d1	28.9	17.1	20.1	28.8	15.5		10.7	12.3		15.0	20.4	19.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.4	0.2	8.8	6.8	0.1		4.6	0.0		0.2	0.3	0.2
Delay (s)	30.3	17.3	28.9	35.6	15.6		15.3	12.3		15.1	20.7	19.5
Level of Service	C	B	C	D	B		B	B		B	C	B
Approach Delay (s)		25.0			19.7			14.8			19.7	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	21.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	64.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1800	1800	1800
Total Lost time (s)				2.0		2.0		2.0			2.0	
Lane Util. Factor				0.97		1.00		0.95			0.95	
Frt				1.00		0.85		1.00			1.00	
Flt Protected				0.95		1.00		1.00			1.00	
Satd. Flow (prot)				3317		1530		3420			3420	
Flt Permitted				0.95		1.00		1.00			1.00	
Satd. Flow (perm)				3317		1530		3420			3420	
Volume (vph)	0	0	0	93	0	3	0	461	0	0	1043	0
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	106	0	3	0	524	0	0	1185	0
RTOR Reduction (vph)	0	0	0	0	0	3	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	106	0	0	0	524	0	0	1185	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				custom		custom						
Protected Phases								2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				7.7		7.7		47.0			47.0	
Effective Green, g (s)				9.7		9.7		49.0			49.0	
Actuated g/C Ratio				0.15		0.15		0.78			0.78	
Clearance Time (s)				4.0		4.0		4.0			4.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				513		237		2673			2673	
v/s Ratio Prot								0.15			c0.35	
v/s Ratio Perm				c0.03		0.00						
v/c Ratio				0.21		0.00		0.20			0.44	
Uniform Delay, d1				23.1		22.4		1.8			2.3	
Progression Factor				1.00		1.00		1.00			1.00	
Incremental Delay, d2				0.2		0.0		0.0			0.1	
Delay (s)				23.3		22.4		1.8			2.4	
Level of Service				C		C		A			A	
Approach Delay (s)		0.0			23.3			1.8			2.4	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	3.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	62.7	Sum of lost time (s)	4.0
Intersection Capacity Utilization	40.4%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)		2.0			2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor		0.95			0.95		1.00	1.00		1.00	0.95	
Frt		0.99			1.00		1.00	0.86		1.00	0.98	
Flt Protected		1.00			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3383			3298		1615	1552		1615	3354	
Flt Permitted		1.00			0.77		0.46	1.00		0.73	1.00	
Satd. Flow (perm)		3383			2637		786	1552		1246	3354	
Volume (vph)	0	50	4	128	45	0	11	3	33	169	417	61
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	52	4	133	47	0	11	3	34	176	434	64
RTOR Reduction (vph)	0	3	0	0	0	0	0	13	0	0	12	0
Lane Group Flow (vph)	0	53	0	0	180	0	11	24	0	176	486	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		7.8			7.8		20.8	20.8		20.8	20.8	
Effective Green, g (s)		9.8			9.8		22.8	22.8		22.8	22.8	
Actuated g/C Ratio		0.27			0.27		0.62	0.62		0.62	0.62	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		906			706		490	967		776	2089	
v/s Ratio Prot		0.02						0.02			c0.14	
v/s Ratio Perm					c0.07		0.01			0.14		
v/c Ratio		0.06			0.25		0.02	0.03		0.23	0.23	
Uniform Delay, d1		10.0			10.5		2.6	2.6		3.0	3.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.2		0.0	0.0		0.1	0.1	
Delay (s)		10.0			10.7		2.7	2.7		3.2	3.1	
Level of Service		A			B		A	A		A	A	
Approach Delay (s)		10.0			10.7			2.7			3.1	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	4.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	36.6	Sum of lost time (s)	4.0
Intersection Capacity Utilization	37.9%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95		1.00	0.95	
Frt	1.00	0.94		1.00	0.97			0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1615	3221		1615	3328			3349		1615	3360	
Flt Permitted	0.95	1.00		0.95	1.00			1.00		0.36	1.00	
Satd. Flow (perm)	1615	3221		1615	3328			3349		619	3360	
Volume (vph)	31	117	74	40	37	8	0	450	72	10	1001	134
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	38	144	91	49	46	10	0	556	89	12	1236	165
RTOR Reduction (vph)	0	71	0	0	8	0	0	16	0	0	13	0
Lane Group Flow (vph)	38	164	0	49	48	0	0	629	0	12	1388	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	1.8	9.1		2.9	10.2			27.6		27.6	27.6	
Effective Green, g (s)	3.8	11.1		4.9	12.2			29.6		29.6	29.6	
Actuated g/C Ratio	0.07	0.22		0.09	0.24			0.57		0.57	0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	119	693		153	787			1921		355	1927	
v/s Ratio Prot	c0.02	c0.05		0.03	0.01			0.19			c0.41	
v/s Ratio Perm										0.02		
v/c Ratio	0.32	0.24		0.32	0.06			0.33		0.03	0.72	
Uniform Delay, d1	22.7	16.7		21.8	15.3			5.8		4.8	8.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	1.6	0.2		1.2	0.0			0.1		0.0	1.4	
Delay (s)	24.2	16.9		23.0	15.3			5.9		4.8	9.3	
Level of Service	C	B		C	B			A		A	A	
Approach Delay (s)		17.9			18.9			5.9			9.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	51.6	Sum of lost time (s)	6.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

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

Intersection #12 K Street and 2nd Street [2009 Analysis]

Cycle (sec):	100	Critical Vol./Cap.(X):	0.293
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	9.5
Optimal Cycle:	0	Level Of Service:	A

Street Name:	K Street						2nd 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 1!	0 0		1 0 1	1 0		1 0 1	1 0	
Volume Module:AM PEAK HOUR												
Base Vol:	33	3	42	8	25	12	8	362	13	137	146	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	3	42	8	25	12	8	362	13	137	146	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	35	3	45	9	27	13	9	387	14	147	156	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	3	45	9	27	13	9	387	14	147	156	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	3	45	9	27	13	9	387	14	147	156	24
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:	0.42	0.04	0.54	0.18	0.55	0.27	1.00	1.93	0.07	1.00	1.74	0.26
Final Sat.:	266	24	339	107	336	161	622	1322	48	613	1181	181
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.13	0.08	0.08	0.08	0.01	0.29	0.29	0.24	0.13	0.13
Crit Moves:	****				****			****		****		
Delay/Veh:	9.0	9.0	9.0	8.9	8.9	8.9	8.5	9.9	9.9	10.2	8.6	8.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.0	9.0	9.0	8.9	8.9	8.9	8.5	9.9	9.9	10.2	8.6	8.5
LOS by Move:	A	A	A	A	A	A	A	A	A	B	A	A
ApproachDel:	9.0			8.9			9.9			9.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.0			8.9			9.9			9.3		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.4	0.4	0.3	0.1	0.1

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	1.00		1.00	0.99			0.87			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.98	
Satd. Flow (prot)	1615	3416		1615	3387			2973			3335	
Flt Permitted	0.62	1.00		0.45	1.00			0.94			0.79	
Satd. Flow (perm)	1049	3416		764	3387			2809			2691	
Volume (vph)	6	434	4	40	189	13	4	18	138	213	301	19
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	6	462	4	43	201	14	4	19	147	227	320	20
RTOR Reduction (vph)	0	1	0	0	7	0	0	78	0	0	4	0
Lane Group Flow (vph)	6	465	0	43	208	0	0	93	0	0	563	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	9.5	9.5		9.5	9.5			11.9			11.9	
Effective Green, g (s)	11.5	11.5		11.5	11.5			13.9			13.9	
Actuated g/C Ratio	0.39	0.39		0.39	0.39			0.47			0.47	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	410	1336		299	1325			1328			1272	
v/s Ratio Prot		c0.14			0.06							
v/s Ratio Perm	0.01			0.06				0.03			c0.21	
v/c Ratio	0.01	0.35		0.14	0.16			0.07			0.44	
Uniform Delay, d1	5.5	6.3		5.8	5.8			4.2			5.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.2		0.2	0.1			0.0			0.2	
Delay (s)	5.5	6.5		6.0	5.9			4.2			5.4	
Level of Service	A	A		A	A			A			A	
Approach Delay (s)		6.5			5.9			4.2			5.4	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	29.4	Sum of lost time (s)	4.0
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1600	1800	1800	1800
Total Lost time (s)	2.0		2.0	2.0		
Lane Util. Factor	0.95		0.97	1.00		
Frt	0.95		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3254		2949	1800		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3254		2949	1800		
Volume (vph)	559	267	518	255	0	0
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	588	281	545	268	0	0
RTOR Reduction (vph)	80	0	0	0	0	0
Lane Group Flow (vph)	789	0	545	268	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Prot			
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	14.9		12.0	34.9		
Effective Green, g (s)	16.9		14.0	34.9		
Actuated g/C Ratio	0.48		0.40	1.00		
Clearance Time (s)	4.0		4.0	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1576		1183	1800		
v/s Ratio Prot	c0.24		c0.18	0.15		
v/s Ratio Perm						
v/c Ratio	0.50		0.46	0.15		
Uniform Delay, d1	6.1		7.7	0.0		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.3		0.3	0.0		
Delay (s)	6.4		8.0	0.0		
Level of Service	A		A	A		
Approach Delay (s)	6.4			5.4	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	5.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	34.9	Sum of lost time (s)	4.0
Intersection Capacity Utilization	107.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800	1800	1800	1800	1900	1900	1900
Total Lost time (s)	2.0	2.0			2.0	2.0		2.0	2.0			
Lane Util. Factor	1.00	0.95			0.91	1.00		1.00	0.88			
Frt	1.00	1.00			1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1615	3420			4914	1530		1710	2693			
Flt Permitted	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (perm)	1615	3420			4914	1530		1710	2693			
Volume (vph)	254	312	0	0	626	433	199	0	1190	0	0	0
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)	276	339	0	0	680	471	216	0	1293	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	339	0	0	529	0	0	0
Lane Group Flow (vph)	276	339	0	0	680	132	0	216	764	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot					Perm	Perm		Prot			
Protected Phases	5	2			6			8	8			
Permitted Phases						6	8					
Actuated Green, G (s)	15.4	36.5			17.1	17.1		23.6	23.6			
Effective Green, g (s)	17.4	38.5			19.1	19.1		25.6	25.6			
Actuated g/C Ratio	0.26	0.57			0.28	0.28		0.38	0.38			
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	413	1933			1378	429		643	1012			
v/s Ratio Prot	c0.17	0.10			c0.14				c0.28			
v/s Ratio Perm						0.09		0.13				
v/c Ratio	0.67	0.18			0.49	0.31		0.34	0.76			
Uniform Delay, d1	22.8	7.1			20.5	19.3		15.2	18.5			
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00			
Incremental Delay, d2	4.1	0.0			0.3	0.4		0.3	3.3			
Delay (s)	26.8	7.2			20.7	19.7		15.5	21.8			
Level of Service	C	A			C	B		B	C			
Approach Delay (s)		16.0			20.3			20.9			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM Average Control Delay	19.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	68.1	Sum of lost time (s)	6.0
Intersection Capacity Utilization	107.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	4842		1615	4838		1615	3330		1615	3147	
Flt Permitted	0.95	1.00		0.95	1.00		0.24	1.00		0.37	1.00	
Satd. Flow (perm)	1615	4842		1615	4838		412	3330		631	3147	
Volume (vph)	209	1055	114	28	286	33	188	356	76	134	459	524
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	222	1122	121	30	304	35	200	379	81	143	488	557
RTOR Reduction (vph)	0	20	0	0	24	0	0	30	0	0	325	0
Lane Group Flow (vph)	222	1223	0	30	315	0	200	430	0	143	720	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases							8			4		
Actuated Green, G (s)	6.3	17.6		2.1	13.4		18.9	14.5		18.9	14.5	
Effective Green, g (s)	8.3	19.6		4.1	15.4		22.9	16.5		22.9	16.5	
Actuated g/C Ratio	0.15	0.36		0.08	0.28		0.42	0.30		0.42	0.30	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	246	1738		121	1365		314	1006		380	951	
v/s Ratio Prot	c0.14	c0.25		0.02	0.07		c0.07	0.13		0.04	c0.23	
v/s Ratio Perm							0.19			0.11		
v/c Ratio	0.90	0.70		0.25	0.23		0.64	0.43		0.38	0.76	
Uniform Delay, d1	22.8	15.0		23.8	15.1		12.6	15.3		10.3	17.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	32.6	1.3		1.1	0.1		4.2	0.3		0.6	3.5	
Delay (s)	55.4	16.3		24.9	15.1		16.8	15.6		10.9	20.7	
Level of Service	E	B		C	B		B	B		B	C	
Approach Delay (s)		22.2			15.9			15.9			19.5	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	19.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	54.6	Sum of lost time (s)	6.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.96		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1615	3291		1615	3291		1615	1800	1530	1615	1765	
Flt Permitted	0.62	1.00		0.47	1.00		0.60	1.00	1.00	0.63	1.00	
Satd. Flow (perm)	1053	3291		793	3291		1019	1800	1530	1063	1765	
Volume (vph)	33	318	107	56	141	47	82	157	144	70	150	22
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	37	357	120	63	158	53	92	176	162	79	169	25
RTOR Reduction (vph)	0	38	0	0	24	0	0	0	107	0	9	0
Lane Group Flow (vph)	37	439	0	63	187	0	92	176	55	79	185	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	15.8	15.8		15.8	15.8		9.2	9.2	9.2	9.2	9.2	
Effective Green, g (s)	17.8	17.8		17.8	17.8		11.2	11.2	11.2	11.2	11.2	
Actuated g/C Ratio	0.54	0.54		0.54	0.54		0.34	0.34	0.34	0.34	0.34	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	568	1775		428	1775		346	611	519	361	599	
v/s Ratio Prot		c0.13			0.06			0.10			c0.10	
v/s Ratio Perm	0.04			0.08			0.09		0.04	0.07		
v/c Ratio	0.07	0.25		0.15	0.11		0.27	0.29	0.11	0.22	0.31	
Uniform Delay, d1	3.6	4.0		3.8	3.7		7.9	8.0	7.5	7.8	8.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	0.1		0.2	0.0		0.4	0.3	0.1	0.3	0.3	
Delay (s)	3.7	4.1		4.0	3.7		8.3	8.2	7.6	8.1	8.3	
Level of Service	A	A		A	A		A	A	A	A	A	
Approach Delay (s)		4.1			3.8			8.0			8.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	33.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.91	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1615	3420	3420	1530	1613	
Flt Permitted	0.59	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	1005	3420	3420	1530	1613	
Volume (vph)	16	551	213	25	15	28
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	20	672	260	30	18	34
RTOR Reduction (vph)	0	0	0	5	30	0
Lane Group Flow (vph)	20	672	260	25	22	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm		
Protected Phases		2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)	60.5	60.5	60.5	60.5	6.7	
Effective Green, g (s)	62.5	62.5	62.5	62.5	8.7	
Actuated g/C Ratio	0.83	0.83	0.83	0.83	0.12	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	835	2842	2842	1272	187	
v/s Ratio Prot		c0.20	0.08		c0.01	
v/s Ratio Perm	0.02			0.02		
v/c Ratio	0.02	0.24	0.09	0.02	0.12	
Uniform Delay, d1	1.1	1.3	1.2	1.1	29.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	0.0	0.0	0.0	0.3	
Delay (s)	1.1	1.4	1.2	1.1	30.1	
Level of Service	A	A	A	A	C	
Approach Delay (s)		1.4	1.2		30.1	
Approach LOS		A	A		C	

Intersection Summary			
HCM Average Control Delay	2.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	75.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	26.1%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00		1.00	0.85		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)	1615	3363		1615	3418		1615	2914		1615	3373	
Flt Permitted	0.56	1.00		0.36	1.00		0.75	1.00		0.36	1.00	
Satd. Flow (perm)	945	3363		607	3418		1275	2914		618	3373	
Volume (vph)	2	510	63	317	252	1	33	5	349	1	8	1
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	3	654	81	406	323	1	42	6	447	1	10	1
RTOR Reduction (vph)	0	10	0	0	0	0	0	275	0	0	1	0
Lane Group Flow (vph)	3	725	0	406	324	0	42	178	0	1	10	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	49.6	49.6		49.6	49.6		9.0	9.0		9.0	9.0	
Effective Green, g (s)	51.6	51.6		51.6	51.6		11.0	11.0		11.0	11.0	
Actuated g/C Ratio	0.77	0.77		0.77	0.77		0.17	0.17		0.17	0.17	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	732	2606		470	2648		211	481		102	557	
v/s Ratio Prot		0.22			0.09			c0.06			0.00	
v/s Ratio Perm	0.00			c0.67			0.03			0.00		
v/c Ratio	0.00	0.28		0.86	0.12		0.20	0.37		0.01	0.02	
Uniform Delay, d1	1.7	2.2		5.1	1.9		24.0	24.7		23.2	23.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.1		15.1	0.0		0.5	0.5		0.0	0.0	
Delay (s)	1.7	2.2		20.2	1.9		24.5	25.2		23.3	23.3	
Level of Service	A	A		C	A		C	C		C	C	
Approach Delay (s)		2.2			12.1			25.1			23.3	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	66.6	Sum of lost time (s)	4.0
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			1.00			0.91			0.89	
Flt Protected		1.00			0.99			0.99			1.00	
Satd. Flow (prot)		3394			3387			1618			1608	
Flt Permitted		0.92			0.65			0.99			1.00	
Satd. Flow (perm)		3135			2214			1618			1608	
Volume (vph)	28	846	37	120	515	1	38	22	128	3	31	121
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	33	984	43	140	599	1	44	26	149	3	36	141
RTOR Reduction (vph)	0	3	0	0	0	0	0	112	0	0	120	0
Lane Group Flow (vph)	0	1057	0	0	740	0	0	107	0	0	60	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Split			Split		
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Actuated Green, G (s)		31.3			31.3			7.6			6.4	
Effective Green, g (s)		33.3			33.3			9.6			8.4	
Actuated g/C Ratio		0.58			0.58			0.17			0.15	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1822			1287			271			236	
v/s Ratio Prot								c0.07			c0.04	
v/s Ratio Perm		c0.34			0.33							
v/c Ratio		0.58			0.97dl			0.40			0.25	
Uniform Delay, d1		7.6			7.5			21.3			21.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.5			0.6			1.0			0.6	
Delay (s)		8.1			8.2			22.2			22.2	
Level of Service		A			A			C			C	
Approach Delay (s)		8.1			8.2			22.2			22.2	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	10.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	57.3	Sum of lost time (s)	6.0
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		1.00			1.00			0.93			0.96	
Flt Protected		1.00			1.00			1.00			0.98	
Satd. Flow (prot)		3394			3394			3166			3217	
Flt Permitted		0.85			0.86			0.93			0.81	
Satd. Flow (perm)		2889			2917			2947			2639	
Volume (vph)	89	857	20	42	540	17	9	68	69	129	130	102
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	100	963	22	47	607	19	10	76	78	145	146	115
RTOR Reduction (vph)	0	2	0	0	3	0	0	55	0	0	60	0
Lane Group Flow (vph)	0	1083	0	0	670	0	0	109	0	0	346	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		24.2			24.2			10.9			10.9	
Effective Green, g (s)		26.2			26.2			12.9			12.9	
Actuated g/C Ratio		0.61			0.61			0.30			0.30	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1756			1773			882			790	
v/s Ratio Prot												
v/s Ratio Perm		c0.37			0.23			0.04			c0.13	
v/c Ratio		0.62			0.38			0.12			0.44	
Uniform Delay, d1		5.3			4.3			11.0			12.2	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.7			0.1			0.1			0.4	
Delay (s)		6.0			4.4			11.1			12.6	
Level of Service		A			A			B			B	
Approach Delay (s)		6.0			4.4			11.1			12.6	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	7.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	43.1	Sum of lost time (s)	4.0
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.88	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	3389		1615	3315		1615	3263		1615	3002	
Flt Permitted	0.51	1.00		0.38	1.00		0.29	1.00		0.69	1.00	
Satd. Flow (perm)	864	3389		647	3315		493	3263		1177	3002	
Volume (vph)	462	496	32	37	257	66	14	52	23	84	83	367
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	585	628	41	47	325	84	18	66	29	106	105	465
RTOR Reduction (vph)	0	5	0	0	21	0	0	23	0	0	376	0
Lane Group Flow (vph)	585	664	0	47	388	0	18	72	0	106	194	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	52.6	52.6		52.6	52.6		11.8	11.8		11.8	11.8	
Effective Green, g (s)	54.6	54.6		54.6	54.6		13.8	13.8		13.8	13.8	
Actuated g/C Ratio	0.75	0.75		0.75	0.75		0.19	0.19		0.19	0.19	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	652	2556		488	2500		94	622		224	572	
v/s Ratio Prot		0.20			0.12			0.02			0.06	
v/s Ratio Perm	c0.68			0.07			0.04			c0.09		
v/c Ratio	0.90	0.26		0.10	0.16		0.19	0.11		0.47	0.34	
Uniform Delay, d1	6.8	2.7		2.4	2.5		24.6	24.2		26.1	25.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	15.0	0.1		0.1	0.0		1.0	0.1		1.6	0.4	
Delay (s)	21.8	2.8		2.4	2.5		25.6	24.3		27.6	25.7	
Level of Service	C	A		A	A		C	C		C	C	
Approach Delay (s)		11.6			2.5			24.5			26.0	
Approach LOS		B			A			C			C	

Intersection Summary			
HCM Average Control Delay	14.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	72.4	Sum of lost time (s)	4.0
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

PM PEAK HOUR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	556	80	137	625	96	183
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	585	84	144	658	101	193
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					TWLTL	
Median storage veh)					0	
Upstream signal (ft)				832		
pX, platoon unblocked						
vC, conflicting volume			669		1245	335
vC1, stage 1 conf vol					627	
vC2, stage 2 conf vol					617	
vCu, unblocked vol			669		1245	335
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			84		51	71
cM capacity (veh/h)			930		205	667

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	390	279	144	329	329	101	193
Volume Left	0	0	144	0	0	101	0
Volume Right	0	84	0	0	0	0	193
cSH	1700	1700	930	1700	1700	205	667
Volume to Capacity	0.23	0.16	0.16	0.19	0.19	0.49	0.29
Queue Length 95th (ft)	0	0	14	0	0	61	30
Control Delay (s)	0.0	0.0	9.6	0.0	0.0	38.6	12.6
Lane LOS			A			E	B
Approach Delay (s)	0.0		1.7			21.5	
Approach LOS						C	

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			0.95	
Frt	1.00	1.00		1.00	0.98			1.00			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1615	3419		1615	3351			1742			3045	
Flt Permitted	0.95	1.00		0.95	1.00			0.80			0.86	
Satd. Flow (perm)	1615	3419		1615	3351			1449			2652	
Volume (vph)	156	469	1	1	525	82	2	1	0	88	2	148
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)	170	510	1	1	571	89	2	1	0	96	2	161
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	134	0
Lane Group Flow (vph)	170	511	0	1	648	0	0	3	0	0	125	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	8.8	31.1		0.9	23.2			6.3			6.3	
Effective Green, g (s)	10.8	33.1		2.9	25.2			8.3			8.3	
Actuated g/C Ratio	0.21	0.66		0.06	0.50			0.17			0.17	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	347	2250		93	1679			239			438	
v/s Ratio Prot	c0.11	0.15		0.00	c0.19							
v/s Ratio Perm								0.00			c0.05	
v/c Ratio	0.49	0.23		0.01	0.39			0.01			0.28	
Uniform Delay, d1	17.3	3.5		22.3	7.8			17.6			18.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.1	0.1		0.0	0.1			0.0			0.4	
Delay (s)	18.4	3.5		22.4	7.9			17.6			18.8	
Level of Service	B	A		C	A			B			B	
Approach Delay (s)		7.2			7.9			17.6			18.8	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	50.3	Sum of lost time (s)	6.0
Intersection Capacity Utilization	45.6%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.91			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1615	3413		1615	3409			1619			1688	
Flt Permitted	0.39	1.00		0.43	1.00			0.96			0.92	
Satd. Flow (perm)	670	3413		735	3409			1561			1589	
Volume (vph)	8	529	7	21	604	13	8	8	38	11	4	6
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	9	569	8	23	649	14	9	9	41	12	4	6
RTOR Reduction (vph)	0	0	0	0	1	0	0	36	0	0	5	0
Lane Group Flow (vph)	9	577	0	23	662	0	0	23	0	0	17	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	48.5	48.5		48.5	48.5			5.1			5.1	
Effective Green, g (s)	50.5	50.5		50.5	50.5			7.1			7.1	
Actuated g/C Ratio	0.82	0.82		0.82	0.82			0.12			0.12	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	549	2798		603	2795			180			183	
v/s Ratio Prot		0.17			c0.19							
v/s Ratio Perm	0.01			0.03				c0.01			0.01	
v/c Ratio	0.02	0.21		0.04	0.24			0.13			0.09	
Uniform Delay, d1	1.0	1.2		1.0	1.2			24.5			24.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.0			0.3			0.2	
Delay (s)	1.0	1.2		1.1	1.3			24.8			24.6	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		1.2			1.3			24.8			24.6	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	2.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	61.6	Sum of lost time (s)	4.0
Intersection Capacity Utilization	29.6%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0			2.0					2.0	2.0	
Lane Util. Factor	1.00	0.95			0.95					1.00	0.95	
Frt	1.00	1.00			0.92					1.00	0.85	
Flt Protected	0.95	1.00			1.00					0.95	1.00	
Satd. Flow (prot)	1615	3420			3160					1615	2907	
Flt Permitted	0.95	1.00			1.00					0.76	1.00	
Satd. Flow (perm)	1615	3420			3160					1287	2907	
Volume (vph)	80	492	0	0	583	600	0	0	0	479	0	77
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	518	0	0	614	632	0	0	0	504	0	81
RTOR Reduction (vph)	0	0	0	0	246	0	0	0	0	0	46	0
Lane Group Flow (vph)	84	518	0	0	1000	0	0	0	0	504	35	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	4.3	32.0			23.7					27.6	27.6	
Effective Green, g (s)	6.3	34.0			25.7					29.6	29.6	
Actuated g/C Ratio	0.09	0.50			0.38					0.44	0.44	
Clearance Time (s)	4.0	4.0			4.0					4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0					3.0	3.0	
Lane Grp Cap (vph)	151	1720			1201					564	1273	
v/s Ratio Prot	c0.05	0.15			c0.32						0.01	
v/s Ratio Perm										c0.39		
v/c Ratio	0.56	0.30			0.83					0.89	0.03	
Uniform Delay, d1	29.3	9.8			19.0					17.5	10.8	
Progression Factor	1.00	1.00			1.00					1.00	1.00	
Incremental Delay, d2	4.4	0.1			5.1					16.4	0.0	
Delay (s)	33.7	9.9			24.1					34.0	10.8	
Level of Service	C	A			C					C	B	
Approach Delay (s)		13.3			24.1			0.0			30.8	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM Average Control Delay	23.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	67.6	Sum of lost time (s)	6.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.95			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.96	
Satd. Flow (prot)	1615	3418		1615	3393			1675			1688	
Flt Permitted	0.16	1.00		0.21	1.00			0.93			0.79	
Satd. Flow (perm)	280	3418		361	3393			1575			1381	
Volume (vph)	16	1114	5	11	1244	69	5	4	6	76	4	19
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	17	1173	5	12	1309	73	5	4	6	80	4	20
RTOR Reduction (vph)	0	0	0	0	3	0	0	5	0	0	14	0
Lane Group Flow (vph)	17	1178	0	12	1379	0	0	10	0	0	90	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	52.4	52.4		52.4	52.4			9.6			9.6	
Effective Green, g (s)	54.4	54.4		54.4	54.4			11.6			11.6	
Actuated g/C Ratio	0.78	0.78		0.78	0.78			0.17			0.17	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	218	2656		281	2637			261			229	
v/s Ratio Prot		0.34			c0.41							
v/s Ratio Perm	0.06			0.03				0.01			c0.07	
v/c Ratio	0.08	0.44		0.04	0.52			0.04			0.39	
Uniform Delay, d1	1.9	2.7		1.8	2.9			24.5			26.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.2	0.1		0.1	0.2			0.1			1.1	
Delay (s)	2.0	2.8		1.9	3.1			24.6			27.2	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		2.8			3.1			24.6			27.2	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	4.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1700	1800	1700	1800
Total Lost time (s)	2.0		2.0	2.0	2.0	2.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3359		1615	3420	1615	1530
Flt Permitted	1.00		0.35	1.00	0.95	1.00
Satd. Flow (perm)	3359		591	3420	1615	1530
Volume (vph)	644	87	7	703	72	15
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	671	91	7	732	75	16
RTOR Reduction (vph)	9	0	0	0	0	13
Lane Group Flow (vph)	753	0	7	732	75	3
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Perm			Perm
Protected Phases	2			6	8	
Permitted Phases			6			8
Actuated Green, G (s)	45.8		45.8	45.8	7.9	7.9
Effective Green, g (s)	47.8		47.8	47.8	9.9	9.9
Actuated g/C Ratio	0.77		0.77	0.77	0.16	0.16
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2602		458	2650	259	245
v/s Ratio Prot	c0.22			0.21	c0.05	
v/s Ratio Perm			0.01			0.00
v/c Ratio	0.29		0.02	0.28	0.29	0.01
Uniform Delay, d1	2.0		1.6	2.0	22.8	21.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1		0.0	0.1	0.6	0.0
Delay (s)	2.1		1.6	2.0	23.4	21.8
Level of Service	A		A	A	C	C
Approach Delay (s)	2.1			2.0	23.1	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	3.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	61.7	Sum of lost time (s)	4.0
Intersection Capacity Utilization	32.8%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1615	3420	1530	1615	3371		1615	3365		1615	3420	1530
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.31	1.00		0.64	1.00	1.00
Satd. Flow (perm)	1615	3420	1530	1615	3371		526	3365		1089	3420	1530
Volume (vph)	54	332	925	189	518	54	815	149	18	28	251	221
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	57	349	974	199	545	57	858	157	19	29	264	233
RTOR Reduction (vph)	0	0	562	0	6	0	0	6	0	0	0	161
Lane Group Flow (vph)	57	349	412	199	596	0	858	170	0	29	264	72
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot		Perm	Prot			pm+pt			pm+pt		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2				8			4		4
Actuated Green, G (s)	6.4	31.9	31.9	13.0	38.5		73.9	65.7		20.1	15.9	15.9
Effective Green, g (s)	8.4	33.9	33.9	15.0	40.5		75.9	67.7		24.1	17.9	17.9
Actuated g/C Ratio	0.06	0.26	0.26	0.11	0.31		0.58	0.52		0.18	0.14	0.14
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	104	886	397	185	1044		771	1742		226	468	209
v/s Ratio Prot	0.04	0.10		c0.12	0.18		c0.48	0.05		0.01	c0.08	
v/s Ratio Perm			c0.27				0.17			0.02		0.05
v/c Ratio	0.55	0.39	1.04	1.08	0.57		1.11	0.10		0.13	0.56	0.34
Uniform Delay, d1	59.4	40.0	48.5	57.9	37.9		28.2	16.0		44.3	52.8	51.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.8	0.3	55.1	87.7	0.8		68.0	0.0		0.3	1.6	1.0
Delay (s)	65.2	40.3	103.5	145.6	38.6		96.2	16.1		44.6	54.4	52.1
Level of Service	E	D	F	F	D		F	B		D	D	D
Approach Delay (s)		86.0			65.2			82.6			52.8	
Approach LOS		F			E			F			D	

Intersection Summary			
HCM Average Control Delay	75.9	HCM Level of Service	E
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	130.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1800	1800	1800
Total Lost time (s)				2.0		2.0		2.0			2.0	
Lane Util. Factor				0.97		1.00		0.95			0.95	
Frt				1.00		0.85		1.00			1.00	
Flt Protected				0.95		1.00		1.00			1.00	
Satd. Flow (prot)				3317		1530		3420			3420	
Flt Permitted				0.95		1.00		1.00			1.00	
Satd. Flow (perm)				3317		1530		3420			3420	
Volume (vph)	0	0	0	391	0	17	0	951	0	0	1073	0
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	449	0	20	0	1093	0	0	1233	0
RTOR Reduction (vph)	0	0	0	0	0	14	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	449	0	6	0	1093	0	0	1233	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type				custom		custom						
Protected Phases								2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				11.3		11.3		23.3			23.3	
Effective Green, g (s)				13.3		13.3		25.3			25.3	
Actuated g/C Ratio				0.31		0.31		0.59			0.59	
Clearance Time (s)				4.0		4.0		4.0			4.0	
Vehicle Extension (s)				3.0		3.0		3.0			3.0	
Lane Grp Cap (vph)				1036		478		2031			2031	
v/s Ratio Prot								0.32			c0.36	
v/s Ratio Perm				c0.14		0.00						
v/c Ratio				0.43		0.01		0.54			0.61	
Uniform Delay, d1				11.7		10.1		5.2			5.5	
Progression Factor				1.00		1.00		1.00			1.00	
Incremental Delay, d2				0.3		0.0		0.3			0.5	
Delay (s)				11.9		10.1		5.4			6.0	
Level of Service				B		B		A			A	
Approach Delay (s)		0.0			11.9			5.4			6.0	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	42.6	Sum of lost time (s)	4.0
Intersection Capacity Utilization	49.7%	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												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)		2.0			2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor		0.95			0.95		1.00	1.00		1.00	0.95	
Frt		0.97			1.00		1.00	0.86		1.00	0.97	
Flt Protected		1.00			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3325			3285		1615	1543		1615	3318	
Flt Permitted		1.00			0.71		0.52	1.00		0.73	1.00	
Satd. Flow (perm)		3325			2425		892	1543		1239	3318	
Volume (vph)	0	90	21	257	55	0	9	2	35	67	265	65
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	105	24	299	64	0	10	2	41	78	308	76
RTOR Reduction (vph)	0	14	0	0	0	0	0	23	0	0	28	0
Lane Group Flow (vph)	0	115	0	0	363	0	10	20	0	78	356	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		9.3			9.3		9.9	9.9		9.9	9.9	
Effective Green, g (s)		11.3			11.3		11.9	11.9		11.9	11.9	
Actuated g/C Ratio		0.42			0.42		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		1381			1007		390	675		542	1452	
v/s Ratio Prot		0.03						0.01			c0.11	
v/s Ratio Perm					c0.15		0.01			0.06		
v/c Ratio		0.08			0.36		0.03	0.03		0.14	0.25	
Uniform Delay, d1		4.8			5.5		4.4	4.4		4.6	4.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.2		0.0	0.0		0.1	0.1	
Delay (s)		4.8			5.7		4.4	4.4		4.7	4.9	
Level of Service		A			A		A	A		A	A	
Approach Delay (s)		4.8			5.7			4.4			4.9	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	27.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	39.2%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.95		1.00	0.97		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)	1615	3236		1615	3333		1615	3389		1615	3341	
Flt Permitted	0.95	1.00		0.95	1.00		0.12	1.00		0.20	1.00	
Satd. Flow (perm)	1615	3236		1615	3333		207	3389		339	3341	
Volume (vph)	71	83	46	79	66	13	14	990	64	11	1278	233
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	74	86	48	82	69	14	15	1031	67	11	1331	243
RTOR Reduction (vph)	0	39	0	0	12	0	0	5	0	0	17	0
Lane Group Flow (vph)	74	95	0	82	72	0	15	1093	0	11	1557	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	2.9	7.5		2.9	7.5		30.8	30.8		30.8	30.8	
Effective Green, g (s)	4.9	9.5		4.9	9.5		32.8	32.8		32.8	32.8	
Actuated g/C Ratio	0.09	0.18		0.09	0.18		0.62	0.62		0.62	0.62	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	149	578		149	595		128	2089		209	2060	
v/s Ratio Prot	0.05	c0.03		c0.05	0.02			0.32			c0.47	
v/s Ratio Perm							0.07			0.03		
v/c Ratio	0.50	0.16		0.55	0.12		0.12	0.52		0.05	0.76	
Uniform Delay, d1	23.0	18.5		23.1	18.3		4.2	5.8		4.0	7.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.6	0.1		4.3	0.1		0.4	0.2		0.1	1.6	
Delay (s)	25.6	18.6		27.4	18.4		4.6	6.0		4.1	8.9	
Level of Service	C	B		C	B		A	A		A	A	
Approach Delay (s)		21.1			22.9			6.0			8.9	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	53.2	Sum of lost time (s)	6.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

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

Intersection #12 K Street and 2nd Street [2009 Analysis]

Cycle (sec):	100	Critical Vol./Cap.(X):	0.453
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	11.9
Optimal Cycle:	0	Level Of Service:	B

Street Name:	K Street						2nd 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 1!	0 0		1 0 1	1 0		1 0 1	1 0	
Volume Module:PM PEAK HOUR												
Base Vol:	54	5	17	24	23	22	7	497	24	225	302	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	5	17	24	23	22	7	497	24	225	302	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	59	5	19	26	25	24	8	543	26	246	330	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	5	19	26	25	24	8	543	26	246	330	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	5	19	26	25	24	8	543	26	246	330	8
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:	0.71	0.07	0.22	0.35	0.33	0.32	1.00	1.91	0.09	1.00	1.95	0.05
Final Sat.:	377	35	119	187	179	171	570	1197	58	575	1223	28
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.16	0.14	0.14	0.14	0.01	0.45	0.45	0.43	0.27	0.27
Crit Moves:		****		****				****		****		
Delay/Veh:	10.4	10.4	10.4	10.1	10.1	10.1	9.0	12.8	12.7	13.2	10.3	10.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.4	10.4	10.4	10.1	10.1	10.1	9.0	12.8	12.7	13.2	10.3	10.3
LOS by Move:	B	B	B	B	B	B	A	B	B	B	B	B
ApproachDel:	10.4			10.1			12.7			11.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.4			10.1			12.7			11.5		
LOS by Appr:	B			B			B			B		
AllWayAvgQ:	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.8	0.8	0.7	0.3	0.3

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95			0.95	
Frt	1.00	1.00		1.00	0.99			0.88			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.97	
Satd. Flow (prot)	1615	3412		1615	3402			2997			3290	
Flt Permitted	0.58	1.00		0.37	1.00			0.93			0.70	
Satd. Flow (perm)	979	3412		632	3402			2799			2359	
Volume (vph)	6	555	9	39	269	10	12	37	208	302	181	35
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	6	572	9	40	277	10	12	38	214	311	187	36
RTOR Reduction (vph)	0	1	0	0	4	0	0	95	0	0	8	0
Lane Group Flow (vph)	6	580	0	40	283	0	0	169	0	0	526	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	11.2	11.2		11.2	11.2			12.9			12.9	
Effective Green, g (s)	13.2	13.2		13.2	13.2			14.9			14.9	
Actuated g/C Ratio	0.41	0.41		0.41	0.41			0.46			0.46	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	403	1403		260	1399			1299			1095	
v/s Ratio Prot		c0.17			0.08							
v/s Ratio Perm	0.01			0.06				0.06			c0.22	
v/c Ratio	0.01	0.41		0.15	0.20			0.13			0.48	
Uniform Delay, d1	5.6	6.7		5.9	6.1			4.9			5.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.2		0.3	0.1			0.0			0.3	
Delay (s)	5.6	6.9		6.2	6.1			4.9			6.3	
Level of Service	A	A		A	A			A			A	
Approach Delay (s)		6.9			6.2			4.9			6.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	32.1	Sum of lost time (s)	4.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1600	1800	1800	1800
Total Lost time (s)	2.0		2.0	2.0		
Lane Util. Factor	0.95		0.97	1.00		
Frt	0.95		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3242		2949	1800		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3242		2949	1800		
Volume (vph)	715	381	1066	348	0	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	769	410	1146	374	0	0
RTOR Reduction (vph)	24	0	0	0	0	0
Lane Group Flow (vph)	1155	0	1146	374	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type			Prot			
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	27.6		28.4	64.0		
Effective Green, g (s)	29.6		30.4	64.0		
Actuated g/C Ratio	0.46		0.47	1.00		
Clearance Time (s)	4.0		4.0	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1499		1401	1800		
v/s Ratio Prot	c0.36		c0.39	0.21		
v/s Ratio Perm						
v/c Ratio	0.77		0.82	0.21		
Uniform Delay, d1	14.4		14.4	0.0		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	2.5		3.8	0.1		
Delay (s)	16.9		18.3	0.1		
Level of Service	B		B	A		
Approach Delay (s)	16.9			13.8	0.0	
Approach LOS	B			B	A	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	64.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800	1800	1800	1800	1900	1900	1900
Total Lost time (s)	2.0	2.0			2.0	2.0		2.0	2.0			
Lane Util. Factor	1.00	0.95			0.91	1.00		1.00	0.88			
Frt	1.00	1.00			1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (prot)	1615	3420			4914	1530		1715	2693			
Flt Permitted	0.95	1.00			1.00	1.00		0.95	1.00			
Satd. Flow (perm)	1615	3420			4914	1530		1715	2693			
Volume (vph)	270	422	0	0	1376	895	133	1	274	0	0	0
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	281	440	0	0	1433	932	139	1	285	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	301	0	0	235	0	0	0
Lane Group Flow (vph)	281	440	0	0	1433	631	0	140	50	0	0	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot					Perm	Perm		Prot			
Protected Phases	5	2			6			8	8			
Permitted Phases						6	8					
Actuated Green, G (s)	15.5	56.5			37.0	37.0		11.2	11.2			
Effective Green, g (s)	17.5	58.5			39.0	39.0		13.2	13.2			
Actuated g/C Ratio	0.23	0.77			0.52	0.52		0.17	0.17			
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	373	2643			2532	788		299	470			
v/s Ratio Prot	c0.17	0.13			0.29				0.02			
v/s Ratio Perm						c0.41		0.08				
v/c Ratio	0.75	0.17			0.57	0.80		0.47	0.11			
Uniform Delay, d1	27.1	2.2			12.6	15.1		28.1	26.3			
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00			
Incremental Delay, d2	8.4	0.0			0.3	5.9		1.2	0.1			
Delay (s)	35.5	2.3			12.9	21.0		29.3	26.4			
Level of Service	D	A			B	C		C	C			
Approach Delay (s)		15.2			16.1			27.3			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM Average Control Delay	17.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	75.7	Sum of lost time (s)	6.0
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	4855		1615	4859		1615	3351		1615	3129	
Flt Permitted	0.95	1.00		0.95	1.00		0.14	1.00		0.23	1.00	
Satd. Flow (perm)	1615	4855		1615	4859		245	3351		396	3129	
Volume (vph)	297	330	29	88	1019	83	378	656	101	96	605	791
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	319	355	31	95	1096	89	406	705	109	103	651	851
RTOR Reduction (vph)	0	13	0	0	13	0	0	16	0	0	198	0
Lane Group Flow (vph)	319	373	0	95	1172	0	406	798	0	103	1304	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases							8			4		
Actuated Green, G (s)	10.0	21.4		6.4	17.8		36.8	28.0		28.6	23.8	
Effective Green, g (s)	12.0	23.4		8.4	19.8		38.8	30.0		32.6	25.8	
Actuated g/C Ratio	0.16	0.31		0.11	0.26		0.51	0.39		0.43	0.34	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	253	1483		177	1256		321	1312		277	1054	
v/s Ratio Prot	c0.20	0.08		0.06	c0.24		c0.18	0.24		0.03	c0.42	
v/s Ratio Perm							0.46			0.13		
v/c Ratio	1.26	0.25		0.54	0.93		1.26	0.61		0.37	1.24	
Uniform Delay, d1	32.3	20.0		32.3	27.8		20.8	18.6		14.1	25.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	145.2	0.1		3.1	12.6		141.7	0.8		0.8	115.2	
Delay (s)	177.5	20.1		35.4	40.3		162.5	19.4		14.9	140.6	
Level of Service	F	C		D	D		F	B		B	F	
Approach Delay (s)		91.3			40.0			67.0			132.5	
Approach LOS		F			D			E			F	

Intersection Summary			
HCM Average Control Delay	85.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	76.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	122.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.96		1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1615	3274		1615	3347		1615	1800	1530	1615	1759	
Flt Permitted	0.46	1.00		0.56	1.00		0.58	1.00	1.00	0.57	1.00	
Satd. Flow (perm)	775	3274		945	3347		984	1800	1530	977	1759	
Volume (vph)	30	223	88	131	402	67	148	201	96	49	168	30
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	31	232	92	136	419	70	154	209	100	51	175	31
RTOR Reduction (vph)	0	42	0	0	16	0	0	0	65	0	10	0
Lane Group Flow (vph)	31	282	0	136	473	0	154	209	35	51	196	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	17.0	17.0		17.0	17.0		10.3	10.3	10.3	10.3	10.3	
Effective Green, g (s)	19.0	19.0		19.0	19.0		12.3	12.3	12.3	12.3	12.3	
Actuated g/C Ratio	0.54	0.54		0.54	0.54		0.35	0.35	0.35	0.35	0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	417	1762		509	1802		343	627	533	340	613	
v/s Ratio Prot		0.09			0.14			0.12			0.11	
v/s Ratio Perm	0.04			c0.14			c0.16		0.02	0.05		
v/c Ratio	0.07	0.16		0.27	0.26		0.45	0.33	0.07	0.15	0.32	
Uniform Delay, d1	3.9	4.1		4.4	4.4		8.9	8.5	7.7	7.9	8.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	0.0		0.3	0.1		0.9	0.3	0.1	0.2	0.3	
Delay (s)	4.0	4.2		4.7	4.5		9.8	8.8	7.7	8.1	8.7	
Level of Service	A	A		A	A		A	A	A	A	A	
Approach Delay (s)		4.1			4.5			8.9			8.6	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	35.3	Sum of lost time (s)	4.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1800	1800	1800	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.92	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1615	3420	3420	1530	1625	
Flt Permitted	0.41	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	697	3420	3420	1530	1625	
Volume (vph)	15	359	581	15	17	23
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	16	386	625	16	18	25
RTOR Reduction (vph)	0	0	0	3	22	0
Lane Group Flow (vph)	16	386	625	13	21	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm		
Protected Phases		2	6		4	
Permitted Phases	2			6		
Actuated Green, G (s)	65.6	65.6	65.6	65.6	6.6	
Effective Green, g (s)	67.6	67.6	67.6	67.6	8.6	
Actuated g/C Ratio	0.84	0.84	0.84	0.84	0.11	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	587	2883	2883	1290	174	
v/s Ratio Prot		0.11	c0.18		c0.01	
v/s Ratio Perm	0.02			0.01		
v/c Ratio	0.03	0.13	0.22	0.01	0.12	
Uniform Delay, d1	1.0	1.1	1.2	1.0	32.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	0.0	0.0	0.0	0.3	
Delay (s)	1.0	1.1	1.2	1.0	32.7	
Level of Service	A	A	A	A	C	
Approach Delay (s)		1.1	1.2		32.7	
Approach LOS		A	A		C	

Intersection Summary			
HCM Average Control Delay	2.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.20		
Actuated Cycle Length (s)	80.2	Sum of lost time (s)	4.0
Intersection Capacity Utilization	27.0%	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												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00		1.00	0.85		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)	1615	3347		1615	3419		1615	2916		1615	3338	
Flt Permitted	0.43	1.00		0.48	1.00		0.74	1.00		0.33	1.00	
Satd. Flow (perm)	728	3347		818	3419		1258	2916		557	3338	
Volume (vph)	5	380	63	622	545	1	73	10	557	1	20	4
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	5	396	66	648	568	1	76	10	580	1	21	4
RTOR Reduction (vph)	0	14	0	0	0	0	0	438	0	0	3	0
Lane Group Flow (vph)	5	448	0	648	569	0	76	152	0	1	22	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	51.1	51.1		51.1	51.1		10.2	10.2		10.2	10.2	
Effective Green, g (s)	53.1	53.1		53.1	53.1		12.2	12.2		12.2	12.2	
Actuated g/C Ratio	0.77	0.77		0.77	0.77		0.18	0.18		0.18	0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	558	2565		627	2620		221	513		98	588	
v/s Ratio Prot		0.13			0.17			0.05			0.01	
v/s Ratio Perm	0.01			c0.79			c0.06			0.00		
v/c Ratio	0.01	0.17		1.03	0.22		0.34	0.30		0.01	0.04	
Uniform Delay, d1	1.9	2.2		8.1	2.3		25.0	24.8		23.6	23.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		44.8	0.0		0.9	0.3		0.0	0.0	
Delay (s)	1.9	2.2		52.9	2.3		26.0	25.1		23.6	23.7	
Level of Service	A	A		D	A		C	C		C	C	
Approach Delay (s)		2.2			29.3			25.2			23.7	
Approach LOS		A			C			C			C	

Intersection Summary			
HCM Average Control Delay	22.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	69.3	Sum of lost time (s)	4.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		0.99			1.00			0.91			0.89	
Flt Protected		1.00			1.00			0.99			1.00	
Satd. Flow (prot)		3398			3397			1625			1599	
Flt Permitted		0.91			0.68			0.99			1.00	
Satd. Flow (perm)		3112			2327			1625			1599	
Volume (vph)	23	968	36	112	993	14	33	35	135	5	43	221
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)	25	1052	39	122	1079	15	36	38	147	5	47	240
RTOR Reduction (vph)	0	3	0	0	1	0	0	102	0	0	198	0
Lane Group Flow (vph)	0	1113	0	0	1215	0	0	119	0	0	94	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Split			Split		
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Actuated Green, G (s)		31.5			31.5			9.5			8.8	
Effective Green, g (s)		33.5			33.5			11.5			10.8	
Actuated g/C Ratio		0.54			0.54			0.19			0.17	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1687			1261			302			279	
v/s Ratio Prot								c0.07			c0.06	
v/s Ratio Perm		0.36			c0.52							
v/c Ratio		0.66			0.96			0.39			0.34	
Uniform Delay, d1		10.1			13.6			22.1			22.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.9			17.2			0.9			0.7	
Delay (s)		11.0			30.8			22.9			23.1	
Level of Service		B			C			C			C	
Approach Delay (s)		11.0			30.8			22.9			23.1	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM Average Control Delay	21.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	6.0
Intersection Capacity Utilization	105.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		2.0			2.0			2.0			2.0	
Lane Util. Factor		0.95			0.95			0.95			0.95	
Frt		1.00			0.99			0.95			0.93	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		3398			3395			3251			3167	
Flt Permitted		0.80			0.88			0.92			0.87	
Satd. Flow (perm)		2718			2990			3017			2780	
Volume (vph)	89	982	18	48	1030	39	15	141	69	45	94	107
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	94	1034	19	51	1084	41	16	148	73	47	99	113
RTOR Reduction (vph)	0	1	0	0	3	0	0	58	0	0	90	0
Lane Group Flow (vph)	0	1146	0	0	1173	0	0	179	0	0	169	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		27.9			27.9			6.5			6.5	
Effective Green, g (s)		29.9			29.9			8.5			8.5	
Actuated g/C Ratio		0.71			0.71			0.20			0.20	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1917			2109			605			557	
v/s Ratio Prot												
v/s Ratio Perm		c0.42			0.39			0.06			c0.06	
v/c Ratio		0.60			0.56			0.30			0.30	
Uniform Delay, d1		3.2			3.0			14.4			14.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.5			0.3			0.3			0.3	
Delay (s)		3.7			3.4			14.7			14.7	
Level of Service		A			A			B			B	
Approach Delay (s)		3.7			3.4			14.7			14.7	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	5.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	42.4	Sum of lost time (s)	4.0
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.97		1.00	0.99		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1615	3384		1615	3300		1615	3385		1615	2986	
Flt Permitted	0.34	1.00		0.49	1.00		0.22	1.00		0.46	1.00	
Satd. Flow (perm)	580	3384		840	3300		378	3385		788	2986	
Volume (vph)	662	350	26	24	515	157	56	180	13	41	96	528
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	761	402	30	28	592	180	64	207	15	47	110	607
RTOR Reduction (vph)	0	5	0	0	26	0	0	5	0	0	351	0
Lane Group Flow (vph)	761	427	0	28	746	0	64	217	0	47	366	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	86.0	86.0		86.0	86.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)	88.0	88.0		88.0	88.0		18.0	18.0		18.0	18.0	
Actuated g/C Ratio	0.80	0.80		0.80	0.80		0.16	0.16		0.16	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	464	2707		672	2640		62	554		129	489	
v/s Ratio Prot		0.13			0.23			0.06			0.12	
v/s Ratio Perm	c1.31			0.03			c0.17			0.06		
v/c Ratio	1.64	0.16		0.04	0.28		1.03	0.39		0.36	1.01dr	
Uniform Delay, d1	11.0	2.5		2.3	2.8		46.0	41.1		40.9	43.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	297.7	0.0		0.0	0.1		123.6	0.5		1.7	6.2	
Delay (s)	308.7	2.5		2.3	2.9		169.6	41.6		42.7	50.0	
Level of Service	F	A		A	A		F	D		D	D	
Approach Delay (s)		197.8			2.9			70.2			49.6	
Approach LOS		F			A			E			D	

Intersection Summary			
HCM Average Control Delay	97.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.52		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	99.0%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

APPENDIX H

2012 DETOUR WITH TEMPORARY IMPROVEMENTS LOS CALCULATION SHEETS

AM PEAK HOUR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.91	0.91		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96		0.95	1.00	1.00
Satd. Flow (prot)	1615	3420	1530	1615	3334		1470	3135		1615	3420	1530
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96		0.95	1.00	1.00
Satd. Flow (perm)	1615	3420	1530	1615	3334		1470	3135		1615	3420	1530
Volume (vph)	25	395	767	69	223	45	395	59	15	59	296	222
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	416	807	73	235	47	416	62	16	62	312	234
RTOR Reduction (vph)	0	0	390	0	20	0	0	5	0	0	0	184
Lane Group Flow (vph)	26	416	417	73	262	0	208	281	0	62	312	50
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot		Perm	Prot			Split			Split		Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases			2									4
Actuated Green, G (s)	1.9	20.3	20.3	2.9	21.3		12.6	12.6		11.6	11.6	11.6
Effective Green, g (s)	3.9	22.3	22.3	4.9	23.3		14.6	14.6		13.6	13.6	13.6
Actuated g/C Ratio	0.06	0.35	0.35	0.08	0.37		0.23	0.23		0.21	0.21	0.21
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	99	1203	538	125	1225		339	722		346	734	328
v/s Ratio Prot	0.02	0.12		c0.05	0.08		c0.14	0.09		0.04	c0.09	
v/s Ratio Perm			c0.27									0.03
v/c Ratio	0.26	0.35	0.78	0.58	0.21		0.61	0.39		0.18	0.43	0.15
Uniform Delay, d1	28.4	15.2	18.3	28.3	13.8		21.9	20.6		20.3	21.5	20.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.4	0.2	6.9	6.8	0.1		3.3	0.3		0.2	0.4	0.2
Delay (s)	29.8	15.3	25.2	35.1	13.9		25.1	21.0		20.6	21.9	20.4
Level of Service	C	B	C	D	B		C	C		C	C	C
Approach Delay (s)		22.0			18.2			22.7			21.2	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM Average Control Delay	21.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	63.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1615	4842		1615	4838		3133	3330		1615	1800	1530
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.38	1.00	1.00
Satd. Flow (perm)	1615	4842		1615	4838		3133	3330		639	1800	1530
Volume (vph)	209	1055	114	28	286	33	188	356	76	134	459	524
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	222	1122	121	30	304	35	200	379	81	143	488	557
RTOR Reduction (vph)	0	19	0	0	23	0	0	27	0	0	0	123
Lane Group Flow (vph)	222	1224	0	30	316	0	200	433	0	143	488	434
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Prot			pm+pt		pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases										4		4
Actuated Green, G (s)	8.3	20.1		2.1	13.9		4.5	16.9		21.4	16.9	25.2
Effective Green, g (s)	10.3	22.1		4.1	15.9		6.5	18.9		25.4	18.9	29.2
Actuated g/C Ratio	0.17	0.37		0.07	0.27		0.11	0.32		0.43	0.32	0.49
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	279	1795		111	1291		342	1056		379	571	801
v/s Ratio Prot	c0.14	c0.25		0.02	0.07		c0.06	0.13		0.04	c0.27	c0.09
v/s Ratio Perm										0.12		0.19
v/c Ratio	0.80	0.68		0.27	0.24		0.58	0.41		0.38	0.85	0.54
Uniform Delay, d1	23.6	15.8		26.3	17.1		25.3	16.0		11.0	19.1	10.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	14.5	1.1		1.3	0.1		2.5	0.3		0.6	11.9	0.8
Delay (s)	38.1	16.9		27.6	17.2		27.8	16.2		11.6	31.0	11.3
Level of Service	D	B		C	B		C	B		B	C	B
Approach Delay (s)		20.1			18.1			19.7			19.4	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	19.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	59.6	Sum of lost time (s)	4.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	0.91	0.91		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.88	
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1470	3216		1615	3315		1615	3263		1615	3002	
Flt Permitted	0.95	0.99		0.95	1.00		0.33	1.00		0.69	1.00	
Satd. Flow (perm)	1470	3216		1615	3315		562	3263		1177	3002	
Volume (vph)	462	496	32	37	257	66	14	52	23	84	83	367
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	585	628	41	47	325	84	18	66	29	106	105	465
RTOR Reduction (vph)	0	5	0	0	41	0	0	22	0	0	349	0
Lane Group Flow (vph)	389	860	0	47	368	0	18	73	0	106	221	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split			Split			Perm			Perm		
Protected Phases	2	2		6	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	15.6	15.6		10.6	10.6		10.1	10.1		10.1	10.1	
Effective Green, g (s)	17.6	17.6		12.6	12.6		12.1	12.1		12.1	12.1	
Actuated g/C Ratio	0.36	0.36		0.26	0.26		0.25	0.25		0.25	0.25	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	536	1172		421	865		141	817		295	752	
v/s Ratio Prot	0.26	c0.27		0.03	c0.11			0.02			0.07	
v/s Ratio Perm							0.03			c0.09		
v/c Ratio	0.73	0.73		0.11	0.43		0.13	0.09		0.36	0.29	
Uniform Delay, d1	13.3	13.3		13.6	14.8		14.0	13.9		14.9	14.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.9	2.4		0.1	0.3		0.4	0.0		0.8	0.2	
Delay (s)	18.1	15.7		13.7	15.2		14.4	13.9		15.7	14.9	
Level of Service	B	B		B	B		B	B		B	B	
Approach Delay (s)		16.5			15.0			14.0			15.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	48.3	Sum of lost time (s)	6.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

PM PEAK HOUR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.91	0.91		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97		0.95	1.00	1.00
Satd. Flow (prot)	1615	3420	1530	1615	3371		1470	3149		1615	3420	1530
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.97		0.95	1.00	1.00
Satd. Flow (perm)	1615	3420	1530	1615	3371		1470	3149		1615	3420	1530
Volume (vph)	54	332	925	189	518	54	815	149	18	28	251	221
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	57	349	974	199	545	57	858	157	19	29	264	233
RTOR Reduction (vph)	0	0	424	0	7	0	0	2	0	0	0	171
Lane Group Flow (vph)	57	349	550	199	595	0	429	603	0	29	264	62
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot		Perm	Prot			Split			Split		Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases			2									4
Actuated Green, G (s)	5.6	37.9	37.9	11.0	43.3		30.0	30.0		13.4	13.4	13.4
Effective Green, g (s)	7.6	39.9	39.9	13.0	45.3		32.0	32.0		15.4	15.4	15.4
Actuated g/C Ratio	0.07	0.37	0.37	0.12	0.42		0.30	0.30		0.14	0.14	0.14
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	113	1260	564	194	1410		434	930		230	486	218
v/s Ratio Prot	0.04	0.10		c0.12	0.18		c0.29	0.19		0.02	c0.08	
v/s Ratio Perm			c0.36									0.04
v/c Ratio	0.50	0.28	0.97	1.03	0.42		0.99	0.88dl		0.13	0.54	0.29
Uniform Delay, d1	48.5	24.1	33.7	47.6	22.3		38.0	33.2		40.6	43.2	41.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	3.5	0.1	31.2	71.5	0.2		39.7	1.6		0.2	1.2	0.7
Delay (s)	52.0	24.2	64.9	119.1	22.5		77.7	34.8		40.8	44.4	42.3
Level of Service	D	C	E	F	C		E	C		D	D	D
Approach Delay (s)		54.1			46.5			52.6			43.3	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	50.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	108.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1615	4855		1615	4859		3133	3351		1615	1800	1530
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.21	1.00	1.00
Satd. Flow (perm)	1615	4855		1615	4859		3133	3351		362	1800	1530
Volume (vph)	297	330	29	88	1019	83	378	656	101	96	605	791
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	319	355	31	95	1096	89	406	705	109	103	651	851
RTOR Reduction (vph)	0	12	0	0	11	0	0	15	0	0	0	2
Lane Group Flow (vph)	319	374	0	95	1174	0	406	799	0	103	651	849
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot			Prot			Prot			pm+pt		pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases										4		4
Actuated Green, G (s)	13.0	25.4		6.4	18.8		8.0	29.0		30.6	25.8	38.8
Effective Green, g (s)	15.0	27.4		8.4	20.8		10.0	31.0		34.6	27.8	42.8
Actuated g/C Ratio	0.18	0.34		0.10	0.25		0.12	0.38		0.42	0.34	0.52
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	297	1630		166	1239		384	1273		258	613	840
v/s Ratio Prot	c0.20	0.08		0.06	c0.24		c0.13	0.24		0.03	c0.36	c0.19
v/s Ratio Perm										0.14		0.37
v/c Ratio	1.07	0.23		0.57	0.95		1.06	0.63		0.40	1.06	1.01
Uniform Delay, d1	33.3	19.5		34.9	29.9		35.8	20.6		15.3	26.9	19.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	73.3	0.1		4.7	14.6		61.8	1.0		1.0	53.9	33.6
Delay (s)	106.6	19.6		39.6	44.5		97.6	21.6		16.3	80.8	53.0
Level of Service	F	B		D	D		F	C		B	F	D
Approach Delay (s)		59.0			44.1			46.9			61.9	
Approach LOS		E			D			D			E	

Intersection Summary			
HCM Average Control Delay	52.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	81.6	Sum of lost time (s)	6.0
Intersection Capacity Utilization	100.1%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Total Lost time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Util. Factor	0.91	0.91		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.97		1.00	0.99		1.00	0.87	
Flt Protected	0.95	0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1470	3183		1615	3300		1615	3385		1615	2986	
Flt Permitted	0.95	0.98		0.95	1.00		0.27	1.00		0.58	1.00	
Satd. Flow (perm)	1470	3183		1615	3300		459	3385		987	2986	
Volume (vph)	662	350	26	24	515	157	56	180	13	41	96	528
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	761	402	30	28	592	180	64	207	15	47	110	607
RTOR Reduction (vph)	0	4	0	0	47	0	0	9	0	0	427	0
Lane Group Flow (vph)	381	808	0	28	725	0	64	213	0	47	290	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split			Split			Perm			Perm		
Protected Phases	2	2		6	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	15.4	15.4		14.7	14.7		12.8	12.8		12.8	12.8	
Effective Green, g (s)	17.4	17.4		16.7	16.7		14.8	14.8		14.8	14.8	
Actuated g/C Ratio	0.32	0.32		0.30	0.30		0.27	0.27		0.27	0.27	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	466	1009		491	1004		124	913		266	805	
v/s Ratio Prot	c0.26	0.25		0.02	c0.22			0.06			0.10	
v/s Ratio Perm							c0.14			0.05		
v/c Ratio	0.82	0.80		0.06	0.72		0.52	0.23		0.18	0.36	
Uniform Delay, d1	17.3	17.2		13.5	17.0		17.0	15.6		15.4	16.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	10.7	4.6		0.0	2.6		3.6	0.1		0.3	0.3	
Delay (s)	28.0	21.8		13.6	19.6		20.6	15.8		15.7	16.5	
Level of Service	C	C		B	B		C	B		B	B	
Approach Delay (s)		23.8			19.4			16.8			16.4	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	20.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	54.9	Sum of lost time (s)	6.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group