



FINAL CORRIDOR CONDITIONS REPORT APPENDIX

US 24 PLANNING & ENVIRONMENTAL LINKAGES STUDY

December 2016





APPENDIX A

TRAFFIC COUNT DATA



Site Code: 1
 Station ID: 1
 US 24 E/O POWERS BLVD

Direction 1

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/16	0	90	5	0	1	0	0	1	1	0	0	1	0	99
01:00	0	43	5	0	2	0	0	0	1	0	0	0	0	51
02:00	1	36	2	0	0	0	0	0	1	0	0	0	0	40
03:00	0	37	11	0	1	1	0	0	6	0	0	0	0	56
04:00	1	85	42	1	6	2	0	1	3	2	0	0	0	143
05:00	6	306	110	2	40	5	2	13	5	4	0	0	0	493
06:00	9	1313	198	8	57	21	2	40	15	6	6	1	4	1680
07:00	12	1666	241	9	56	18	2	45	15	6	3	6	3	2082
08:00	6	1171	174	9	51	23	0	33	18	3	4	1	1	1494
09:00	7	779	145	10	34	29	1	24	19	2	1	0	4	1055
10:00	8	664	157	8	27	18	0	15	19	4	1	1	2	924
11:00	5	760	136	2	40	28	0	22	18	1	0	1	2	1015
12 PM	5	833	164	5	29	19	0	16	25	4	1	1	0	1102
13:00	6	862	141	5	29	30	1	25	24	2	0	0	4	1129
14:00	13	882	163	8	28	24	0	20	18	3	2	2	2	1165
15:00	7	1220	178	6	23	16	2	27	18	3	0	0	4	1504
16:00	13	1449	188	4	21	11	4	19	18	2	2	4	2	1737
17:00	11	1483	177	1	19	7	0	22	10	3	1	1	1	1736
18:00	4	909	124	1	25	5	1	14	4	0	1	0	1	1089
19:00	7	631	89	1	13	2	0	3	3	0	0	1	0	750
20:00	2	467	55	1	14	1	0	3	2	0	1	0	0	546
21:00	0	377	30	0	9	1	0	2	3	0	0	0	0	422
22:00	0	243	28	1	7	1	0	0	1	0	0	0	0	281
23:00	0	148	15	0	4	0	0	2	2	0	0	0	0	171
Total	123	16454	2578	82	536	262	15	347	249	45	23	20	30	20764
Percent	0.6%	79.2%	12.4%	0.4%	2.6%	1.3%	0.1%	1.7%	1.2%	0.2%	0.1%	0.1%	0.1%	
AM Peak	07:00	07:00	07:00	09:00	06:00	09:00	05:00	07:00	09:00	06:00	06:00	07:00	06:00	07:00
Vol.	12	1666	241	10	57	29	2	45	19	6	6	6	4	2082
PM Peak	14:00	17:00	16:00	14:00	12:00	13:00	16:00	15:00	12:00	12:00	14:00	16:00	13:00	16:00
Vol.	13	1483	188	8	29	30	4	27	25	4	2	4	4	1737



Site Code: 1
 Station ID: 1
 US 24 E/O POWERS BLVD

Direction 1

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/11/16	0	113	6	0	2	0	0	0	2	0	0	0	0	123
01:00	0	51	4	0	3	0	0	2	0	0	0	0	0	60
02:00	0	42	8	0	2	0	0	1	3	0	0	0	0	56
03:00	0	43	12	2	2	0	0	2	7	0	0	0	0	68
04:00	2	105	57	0	12	5	0	0	2	0	0	0	0	183
05:00	4	378	146	2	40	11	0	14	9	5	3	0	0	612
06:00	11	1393	256	10	97	17	1	51	16	12	4	0	1	1869
07:00	13	1549	289	13	103	18	2	61	15	5	3	2	4	2077
08:00	13	1212	275	11	100	24	1	47	28	6	2	1	3	1723
09:00	4	791	225	8	61	30	1	31	22	1	3	0	3	1180
10:00	3	483	221	2	40	43	1	19	36	1	1	1	2	853
11:00	13	445	228	6	42	39	1	18	34	3	0	1	3	833
12 PM	11	498	207	7	49	32	3	19	24	1	2	1	3	857
13:00	5	549	251	15	71	26	0	34	23	1	4	1	2	982
14:00	5	633	223	19	83	38	0	34	36	1	1	0	0	1073
15:00	9	930	280	12	86	23	0	53	18	1	4	5	0	1421
16:00	21	1404	262	7	27	44	2	36	26	5	3	3	7	1847
17:00	24	1258	267	1	30	16	0	21	18	3	0	2	1	1641
18:00	7	667	151	2	22	10	0	14	7	0	0	0	0	880
19:00	4	399	131	0	14	1	0	11	5	1	0	0	1	567
20:00	1	351	79	0	7	2	0	4	3	0	0	0	0	447
21:00	1	248	57	0	12	1	0	4	2	0	0	0	0	325
22:00	0	184	30	0	2	3	0	1	1	0	0	0	0	221
23:00	0	90	8	0	1	2	0	0	0	0	1	0	0	102
Total	151	13816	3673	117	908	385	12	477	337	46	31	17	30	20000
Percent	0.8%	69.1%	18.4%	0.6%	4.5%	1.9%	0.1%	2.4%	1.7%	0.2%	0.2%	0.1%	0.2%	
AM Peak	07:00	07:00	07:00	07:00	07:00	10:00	07:00	07:00	10:00	06:00	06:00	07:00	07:00	07:00
Vol.	13	1549	289	13	103	43	2	61	36	12	4	2	4	2077
PM Peak	17:00	16:00	15:00	14:00	15:00	16:00	12:00	15:00	14:00	16:00	13:00	15:00	16:00	16:00
Vol.	24	1404	280	19	86	44	3	53	36	5	4	5	7	1847
Grand Total	274	30270	6251	199	1444	647	27	824	586	91	54	37	60	40764
Percent	0.7%	74.3%	15.3%	0.5%	3.5%	1.6%	0.1%	2.0%	1.4%	0.2%	0.1%	0.1%	0.1%	



Site Code: 1.5
 Station ID: 1.5
 US 24 E/O POWERS BLVD

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/16	0	50	5	0	1	0	0	1	1	0	0	1	0	59
01:00	0	37	6	0	2	0	0	0	1	0	0	0	0	46
02:00	1	30	2	0	0	0	0	0	1	0	0	0	0	34
03:00	0	49	15	0	1	1	0	0	8	0	0	0	0	74
04:00	1	162	53	1	7	2	0	1	3	2	0	0	0	232
05:00	8	531	136	3	49	5	2	17	5	4	0	0	0	760
06:00	12	1142	246	10	72	27	2	51	20	7	7	1	4	1601
07:00	15	1625	301	11	70	23	2	58	19	7	3	6	3	2143
08:00	7	1088	218	11	63	28	0	43	23	4	5	1	1	1492
09:00	8	790	180	12	42	37	1	30	24	2	1	0	4	1131
10:00	10	734	197	9	33	24	0	19	24	4	1	1	2	1058
11:00	5	774	170	2	50	34	0	28	23	1	0	1	2	1090
12 PM	5	771	204	5	37	24	0	20	30	4	1	1	0	1102
13:00	7	772	176	6	36	39	1	31	30	2	0	0	5	1105
14:00	17	869	203	9	35	30	0	25	22	3	2	2	2	1219
15:00	7	1135	223	7	29	20	2	35	23	4	0	0	4	1489
16:00	17	1426	235	4	27	14	5	24	22	2	2	4	2	1784
17:00	14	1279	222	1	24	9	0	27	13	3	1	1	1	1595
18:00	4	759	155	1	32	5	1	18	4	0	1	0	1	981
19:00	8	414	112	1	17	2	0	3	3	0	0	1	0	561
20:00	2	338	68	1	17	1	0	3	2	0	1	0	0	433
21:00	0	211	38	0	11	1	0	2	3	0	0	0	0	266
22:00	0	148	33	1	8	1	0	0	1	0	0	0	0	192
23:00	0	110	19	0	4	0	0	2	2	0	0	0	0	137
Total	148	15244	3217	95	667	327	16	438	307	49	25	20	31	20584
Percent	0.7%	74.1%	15.6%	0.5%	3.2%	1.6%	0.1%	2.1%	1.5%	0.2%	0.1%	0.1%	0.2%	
AM Peak	07:00	07:00	07:00	09:00	06:00	09:00	05:00	07:00	09:00	06:00	06:00	07:00	06:00	07:00
Vol.	15	1625	301	12	72	37	2	58	24	7	7	6	4	2143
PM Peak	14:00	16:00	16:00	14:00	12:00	13:00	16:00	15:00	12:00	12:00	14:00	16:00	13:00	16:00
Vol.	17	1426	235	9	37	39	5	35	30	4	2	4	5	1784



Site Code: 1.5
 Station ID: 1.5
 US 24 E/O POWERS BLVD

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/11/16	0	49	6	0	2	0	0	0	2	0	0	0	0	59
01:00	0	19	4	0	3	0	0	2	0	0	0	0	0	28
02:00	0	30	8	0	2	0	0	1	3	0	0	0	0	44
03:00	0	49	12	2	2	0	0	2	7	0	0	0	0	74
04:00	2	143	55	0	12	5	0	0	2	0	0	0	0	219
05:00	4	540	141	2	40	11	0	14	9	5	3	0	0	769
06:00	11	1115	248	10	95	17	1	49	16	12	4	0	1	1579
07:00	14	1499	311	14	111	21	2	67	16	5	3	2	4	2069
08:00	13	1100	266	11	98	24	1	45	28	6	2	1	3	1598
09:00	4	733	212	8	58	29	1	30	21	1	3	0	3	1103
10:00	3	712	192	2	35	37	1	17	32	1	1	1	2	1036
11:00	11	804	198	6	37	34	1	16	29	3	0	1	3	1143
12 PM	10	754	180	7	43	29	3	17	22	1	2	1	3	1072
13:00	5	738	218	13	61	23	0	30	20	1	4	1	2	1116
14:00	5	765	194	16	72	33	0	30	31	1	1	0	0	1148
15:00	8	1117	243	10	74	21	0	47	16	1	4	5	0	1546
16:00	18	1364	228	7	23	39	2	31	22	5	3	3	7	1752
17:00	20	1288	232	1	26	14	0	17	16	3	0	2	1	1620
18:00	7	757	132	2	19	9	0	13	7	0	0	0	0	946
19:00	4	453	114	0	13	1	0	10	5	1	0	0	1	602
20:00	1	326	68	0	7	2	0	4	3	0	0	0	0	411
21:00	1	215	49	0	10	1	0	4	2	0	0	0	0	282
22:00	0	134	26	0	2	3	0	1	1	0	0	0	0	167
23:00	0	114	8	0	1	2	0	0	0	0	1	0	0	126
Total	141	14818	3345	111	846	355	12	447	310	46	31	17	30	20509
Percent	0.7%	72.3%	16.3%	0.5%	4.1%	1.7%	0.1%	2.2%	1.5%	0.2%	0.2%	0.1%	0.1%	
AM Peak	07:00	07:00	07:00	07:00	07:00	10:00	07:00	07:00	10:00	06:00	06:00	07:00	07:00	07:00
Vol.	14	1499	311	14	111	37	2	67	32	12	4	2	4	2069
PM Peak	17:00	16:00	15:00	14:00	15:00	16:00	12:00	15:00	14:00	16:00	13:00	15:00	16:00	16:00
Vol.	20	1364	243	16	74	39	3	47	31	5	4	5	7	1752
Grand Total	289	30062	6562	206	1513	682	28	885	617	95	56	37	61	41093
Percent	0.7%	73.2%	16.0%	0.5%	3.7%	1.7%	0.1%	2.2%	1.5%	0.2%	0.1%	0.1%	0.1%	



Site Code: 2
 Station ID: 2
 VALLEY ST N/O US 24

Start Time	10-May-16 Tue	NB	SB	Total						
12:00 AM		0	0	0						
01:00		3	0	3						
02:00		0	0	0						
03:00		0	0	0						
04:00		8	2	10						
05:00		14	6	20						
06:00		23	27	50						
07:00		36	48	84						
08:00		34	45	79						
09:00		31	37	68						
10:00		25	31	56						
11:00		26	41	67						
12:00 PM		22	31	53						
01:00		19	39	58						
02:00		36	39	75						
03:00		23	58	81						
04:00		20	65	85						
05:00		11	40	51						
06:00		16	16	32						
07:00		3	21	24						
08:00		0	3	3						
09:00		0	4	4						
10:00		0	1	1						
11:00		0	2	2						
Total		350	556	906						
Percent		38.6%	61.4%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	36	48	-	-	-	-	-	-	84
PM Peak	-	14:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	36	65	-	-	-	-	-	-	85



Site Code: 2
 Station ID: 2
 VALLEY ST N/O US 24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		0	0							0
01:00		0	0							0
02:00		2	0							2
03:00		0	0							0
04:00		11	0							11
05:00		17	6							23
06:00		21	33							54
07:00		27	58							85
08:00		16	32							48
09:00		24	33							57
10:00		14	13							27
11:00		23	42							65
12:00 PM		20	42							62
01:00		14	34							48
02:00		23	36							59
03:00		26	59							85
04:00		19	54							73
05:00		15	44							59
06:00		11	18							29
07:00		2	13							15
08:00		4	12							16
09:00		0	0							0
10:00		1	7							8
11:00		0	3							3
Total		290	539							829
Percent		35.0%	65.0%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	27	58	-	-	-	-	-	-	85
PM Peak	-	15:00	15:00	-	-	-	-	-	-	15:00
Vol.	-	26	59	-	-	-	-	-	-	85
Grand Total		640	1095							1735
Percent		36.9%	63.1%							
ADT		ADT 868		AADT 868						



Site Code: 3
 Station ID: 3
 MOTEL/RV PARKING ACCESS S/O US24
 MOTEL/RV PARKING ACCESS S/O US24

Start Time	10-May-16 Tue	NB	SB	Total
12:00 AM		0	0	0
01:00		0	0	0
02:00		0	0	0
03:00		0	0	0
04:00		0	0	0
05:00		3	2	5
06:00		20	5	25
07:00		31	32	63
08:00		20	26	46
09:00		20	30	50
10:00		19	18	37
11:00		27	16	43
12:00 PM		25	32	57
01:00		34	24	58
02:00		27	22	49
03:00		26	28	54
04:00		24	35	59
05:00		15	23	38
06:00		12	7	19
07:00		11	8	19
08:00		6	4	10
09:00		6	0	6
10:00		3	0	3
11:00		5	1	6
Total		334	313	647
Percent		51.6%	48.4%	
AM Peak	-	07:00	07:00	07:00
Vol.	-	31	32	63
PM Peak	-	13:00	16:00	16:00
Vol.	-	34	35	59



Site Code: 3
 Station ID: 3
 MOTEL/RV PARKING ACCESS S/O US24
 MOTEL/RV PARKING ACCESS S/O US24

Start Time	11-May-16 Wed	NB	SB	Total						
12:00 AM		1	0	1						
01:00		0	0	0						
02:00		0	0	0						
03:00		0	0	0						
04:00		0	0	0						
05:00		6	3	9						
06:00		20	10	30						
07:00		45	25	70						
08:00		24	46	70						
09:00		22	21	43						
10:00		14	25	39						
11:00		27	21	48						
12:00 PM		24	25	49						
01:00		14	26	40						
02:00		20	16	36						
03:00		23	29	52						
04:00		20	37	57						
05:00		15	20	35						
06:00		12	17	29						
07:00		9	0	9						
08:00		6	3	9						
09:00		8	2	10						
10:00		5	2	7						
11:00		2	1	3						
Total		317	329	646						
Percent		49.1%	50.9%							
AM Peak	-	07:00	08:00	-	-	-	-	-	-	07:00
Vol.	-	45	46	-	-	-	-	-	-	70
PM Peak	-	12:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	24	37	-	-	-	-	-	-	57
Grand Total		651	642							1293
Percent		50.3%	49.7%							
ADT		ADT 646		AADT 646						



Site Code: 4
 Station ID: 4
 US24 EB OFF RAMP W-O PETERSON RD

Start Time	11-May-16 Wed	EB										
12:00 AM		15										
01:00		11										
02:00		3										
03:00		14										
04:00		8										
05:00		54										
06:00		418										
07:00		547										
08:00		363										
09:00		258										
10:00		203										
11:00		226										
12:00 PM		286										
01:00		245										
02:00		220										
03:00		246										
04:00		275										
05:00		262										
06:00		150										
07:00		116										
08:00		101										
09:00		75										
10:00		54										
11:00		26										
Total		4176										
AM Peak	-	07:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	547	-	-	-	-	-	-	-	-	-	-
PM Peak	-	12:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	286	-	-	-	-	-	-	-	-	-	-
Grand Total		8416										
ADT		ADT 4,208	AADT 4,208									



Site Code: 5
 Station ID: 5
 US 24 EB ON RAMP E/O PETERSON RD
 US 24 EB ON RAMP E/O PETERSON RD

Start Time	11-May-16 Wed	EB										
12:00 AM		0										
01:00		3										
02:00		1										
03:00		3										
04:00		2										
05:00		24										
06:00		96										
07:00		100										
08:00		89										
09:00		89										
10:00		115										
11:00		128										
12:00 PM		125										
01:00		120										
02:00		178										
03:00		326										
04:00		518										
05:00		286										
06:00		113										
07:00		49										
08:00		33										
09:00		26										
10:00		18										
11:00		5										
Total		2447										
AM Peak	-	11:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	128	-	-	-	-	-	-	-	-	-	-
PM Peak	-	16:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	518	-	-	-	-	-	-	-	-	-	-
Grand Total		4937										
ADT		ADT 2,468	AADT 2,468									



Site Code: 6
 Station ID: 6
 US 24 EB OFF RAMP N/O SPACE VILLAGE RD
 US 24 EB OFF RAMP N/O SPACE VILLAGE RD

Start Time	11-May-16 Wed	SB										
12:00 AM		1										
01:00		3										
02:00		0										
03:00		0										
04:00		2										
05:00		23										
06:00		97										
07:00		181										
08:00		101										
09:00		60										
10:00		66										
11:00		60										
12:00 PM		58										
01:00		67										
02:00		52										
03:00		96										
04:00		121										
05:00		150										
06:00		66										
07:00		31										
08:00		25										
09:00		8										
10:00		8										
11:00		3										
Total		1279										
AM Peak	-	07:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	181	-	-	-	-	-	-	-	-	-	-
PM Peak	-	17:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	150	-	-	-	-	-	-	-	-	-	-
Grand Total		2455										
ADT		ADT 1,228	AADT 1,228									



Site Code: 7
 Station ID: 7
 US 24 WB OFF RAMP E/O PETERSON RD
 US 24 WB OFF RAMP E/O PETERSON RD

Start Time	11-May-16 Wed	WB										
12:00 AM		2										
01:00		1										
02:00		2										
03:00		2										
04:00		6										
05:00		48										
06:00		350										
07:00		373										
08:00		185										
09:00		104										
10:00		100										
11:00		79										
12:00 PM		111										
01:00		86										
02:00		86										
03:00		111										
04:00		126										
05:00		113										
06:00		49										
07:00		26										
08:00		15										
09:00		16										
10:00		9										
11:00		5										
Total		2005										
AM Peak	-	07:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	373	-	-	-	-	-	-	-	-	-	-
PM Peak	-	16:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	126	-	-	-	-	-	-	-	-	-	-
Grand Total		4074										
ADT		ADT 2,037	AADT 2,037									



Site Code: 8
 Station ID: 8
 US24 WB ON RAMP W-O PETERSON RD

Start Time	11-May-16 Wed	WB										
12:00 AM		10										
01:00		4										
02:00		7										
03:00		20										
04:00		32										
05:00		114										
06:00		239										
07:00		391										
08:00		354										
09:00		288										
10:00		312										
11:00		420										
12:00 PM		321										
01:00		346										
02:00		385										
03:00		534										
04:00		652										
05:00		413										
06:00		190										
07:00		103										
08:00		95										
09:00		61										
10:00		40										
11:00		21										
Total		5352										
AM Peak	-	11:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	420	-	-	-	-	-	-	-	-	-	-
PM Peak	-	16:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	652	-	-	-	-	-	-	-	-	-	-
Grand Total		10879										
ADT		ADT 5,440	AADT 5,440									



Site Code: 9
 Station ID: 9
 US24 W-O MEADOWBROOK PKWY

Start Time	11-May-16 Wed	EB										
12:00 AM		73										
01:00		46										
02:00		31										
03:00		45										
04:00		87										
05:00		347										
06:00		1052										
07:00		1102										
08:00		882										
09:00		679										
10:00		741										
11:00		724										
12:00 PM		768										
01:00		835										
02:00		976										
03:00		1420										
04:00		2025										
05:00		1850										
06:00		945										
07:00		617										
08:00		498										
09:00		392										
10:00		286										
11:00		137										
Total		16558										
AM Peak	-	07:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	1102	-	-	-	-	-	-	-	-	-	-
PM Peak	-	16:00	-	-	-	-	-	-	-	-	-	-
Vol.	-	2025	-	-	-	-	-	-	-	-	-	-
Grand Total		33077										
ADT	ADT 16,538	AADT 16,538										



Site Code: 10
 Station ID: 10
 MEADOWBROOK PKWY N-O US24

Start Time	10-May-16 Tue	NB	SB	Total						
12:00 AM		0	1	1						
01:00		0	0	0						
02:00		6	2	8						
03:00		0	2	2						
04:00		1	4	5						
05:00		14	3	17						
06:00		109	40	149						
07:00		78	68	146						
08:00		80	68	148						
09:00		63	49	112						
10:00		40	58	98						
11:00		38	49	87						
12:00 PM		46	44	90						
01:00		48	39	87						
02:00		56	46	102						
03:00		50	83	133						
04:00		77	89	166						
05:00		51	80	131						
06:00		34	47	81						
07:00		29	26	55						
08:00		3	20	23						
09:00		0	7	7						
10:00		1	1	2						
11:00		3	2	5						
Total		827	828	1655						
Percent		50.0%	50.0%							
AM Peak	-	06:00	07:00	-	-	-	-	-	-	06:00
Vol.	-	109	68	-	-	-	-	-	-	149
PM Peak	-	16:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	77	89	-	-	-	-	-	-	166



Site Code: 10
 Station ID: 10
 MEADOWBROOK PKWY N-O US24

Start Time	11-May-16 Wed	NB	SB	Total						
12:00 AM		0	0	0						
01:00		3	0	3						
02:00		0	0	0						
03:00		0	0	0						
04:00		3	1	4						
05:00		15	3	18						
06:00		108	34	142						
07:00		79	87	166						
08:00		76	59	135						
09:00		50	48	98						
10:00		67	52	119						
11:00		39	42	81						
12:00 PM		51	67	118						
01:00		63	46	109						
02:00		72	57	129						
03:00		81	84	165						
04:00		89	89	178						
05:00		64	73	137						
06:00		40	49	89						
07:00		21	30	51						
08:00		11	22	33						
09:00		2	12	14						
10:00		3	1	4						
11:00		4	3	7						
Total		941	859	1800						
Percent		52.3%	47.7%							
AM Peak	-	06:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	108	87	-	-	-	-	-	-	166
PM Peak	-	16:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	89	89	-	-	-	-	-	-	178
Grand Total		1768	1687							3455
Percent		51.2%	48.8%							
ADT		ADT 1,728	AADT 1,728							



Site Code: 11
 Station ID: 11
 MEADOWBROOK PKWY S-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		14	14							28
01:00		8	6							14
02:00		8	5							13
03:00		5	9							14
04:00		41	26							67
05:00		182	121							303
06:00		464	299							763
07:00		443	332							775
08:00		231	203							434
09:00		162	212							374
10:00		162	217							379
11:00		142	212							354
12:00 PM		146	200							346
01:00		168	244							412
02:00		147	267							414
03:00		217	408							625
04:00		250	549							799
05:00		267	351							618
06:00		184	193							377
07:00		109	96							205
08:00		91	53							144
09:00		67	56							123
10:00		45	42							87
11:00		28	16							44
Total		3581	4131							7712
Percent		46.4%	53.6%							
AM Peak	-	06:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	464	332	-	-	-	-	-	-	775
PM Peak	-	17:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	267	549	-	-	-	-	-	-	799



Site Code: 11
 Station ID: 11
 MEADOWBROOK PKWY S-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		14	19							33
01:00		7	7							14
02:00		9	6							15
03:00		14	5							19
04:00		44	24							68
05:00		183	137							320
06:00		475	285							760
07:00		454	327							781
08:00		244	234							478
09:00		146	184							330
10:00		133	202							335
11:00		161	207							368
12:00 PM		147	227							374
01:00		154	226							380
02:00		145	242							387
03:00		188	395							583
04:00		250	487							737
05:00		261	323							584
06:00		142	177							319
07:00		110	93							203
08:00		74	51							125
09:00		76	51							127
10:00		53	34							87
11:00		25	27							52
Total		3509	3970							7479
Percent		46.9%	53.1%							
AM Peak	-	06:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	475	327	-	-	-	-	-	-	781
PM Peak	-	17:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	261	487	-	-	-	-	-	-	737
Grand Total		7090	8101							15191
Percent		46.7%	53.3%							
ADT		ADT 7,596	AADT 7,596							



Site Code: 12
 Station ID: 12
 MARKSHEFFEL RD N-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		17	10							27
01:00		17	13							30
02:00		10	5							15
03:00		13	21							34
04:00		28	103							131
05:00		100	389							489
06:00		363	1043							1406
07:00		380	1282							1662
08:00		304	755							1059
09:00		277	419							696
10:00		300	319							619
11:00		318	326							644
12:00 PM		315	371							686
01:00		330	366							696
02:00		485	354							839
03:00		889	401							1290
04:00		1214	454							1668
05:00		1091	524							1615
06:00		486	348							834
07:00		254	179							433
08:00		216	148							364
09:00		129	85							214
10:00		83	40							123
11:00		51	25							76
Total		7670	7980							15650
Percent		49.0%	51.0%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	380	1282	-	-	-	-	-	-	1662
PM Peak	-	16:00	17:00	-	-	-	-	-	-	16:00
Vol.	-	1214	524	-	-	-	-	-	-	1668



Site Code: 12
 Station ID: 12
 MARKSHEFFEL RD N-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		27	10							37
01:00		16	11							27
02:00		12	13							25
03:00		14	32							46
04:00		16	91							107
05:00		87	408							495
06:00		368	965							1333
07:00		413	1249							1662
08:00		314	794							1108
09:00		272	417							689
10:00		274	399							673
11:00		312	339							651
12:00 PM		338	378							716
01:00		353	372							725
02:00		513	392							905
03:00		917	462							1379
04:00		1196	481							1677
05:00		1104	464							1568
06:00		495	274							769
07:00		288	177							465
08:00		170	115							285
09:00		144	95							239
10:00		99	45							144
11:00		46	32							78
Total		7788	8015							15803
Percent		49.3%	50.7%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	413	1249	-	-	-	-	-	-	1662
PM Peak	-	16:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	1196	481	-	-	-	-	-	-	1677
Grand Total		15458	15995							31453
Percent		49.1%	50.9%							
ADT		ADT 15,726	AADT 15,726							



Site Code: 13
 Station ID: 13
 MARKSHEFFEL RD S-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		13	6							19
01:00		6	2							8
02:00		2	1							3
03:00		6	3							9
04:00		47	6							53
05:00		258	45							303
06:00		699	117							816
07:00		827	165							992
08:00		402	102							504
09:00		200	111							311
10:00		173	133							306
11:00		169	180							349
12:00 PM		206	162							368
01:00		174	193							367
02:00		154	326							480
03:00		167	584							751
04:00		203	903							1106
05:00		196	679							875
06:00		165	206							371
07:00		87	102							189
08:00		72	62							134
09:00		53	17							70
10:00		23	19							42
11:00		9	8							17
Total		4311	4132							8443
Percent		51.1%	48.9%							
AM Peak	-	07:00	11:00	-	-	-	-	-	-	07:00
Vol.	-	827	180	-	-	-	-	-	-	992
PM Peak	-	12:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	206	903	-	-	-	-	-	-	1106



Site Code: 13
 Station ID: 13
 MARKSHEFFEL RD S-O US24

Start Time	11-May-16 Wed	NB	SB	Total						
12:00 AM		7	7	14						
01:00		1	2	3						
02:00		4	3	7						
03:00		12	3	15						
04:00		45	8	53						
05:00		271	40	311						
06:00		656	150	806						
07:00		822	179	1001						
08:00		388	135	523						
09:00		210	157	367						
10:00		179	136	315						
11:00		177	184	361						
12:00 PM		229	179	408						
01:00		164	178	342						
02:00		168	313	481						
03:00		182	668	850						
04:00		179	859	1038						
05:00		162	550	712						
06:00		129	207	336						
07:00		85	109	194						
08:00		61	51	112						
09:00		54	26	80						
10:00		25	12	37						
11:00		12	5	17						
Total		4222	4161	8383						
Percent		50.4%	49.6%							
AM Peak	-	07:00	11:00	-	-	-	-	-	-	07:00
Vol.	-	822	184	-	-	-	-	-	-	1001
PM Peak	-	12:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	229	859	-	-	-	-	-	-	1038
Grand Total		8533	8293							16826
Percent		50.7%	49.3%							
ADT		ADT 8,413	AADT 8,413							



Site Code: 14
 Station ID: 14
 US24 E-O MARKSHEFFEL RD

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/16	0	55	3	0	0	0	0	0	1	0	0	0	0	59
01:00	0	12	1	0	0	0	0	0	0	0	0	0	0	13
02:00	0	12	0	0	1	0	0	0	0	0	0	0	0	13
03:00	0	22	0	0	1	0	0	0	0	1	0	0	0	24
04:00	0	32	2	0	3	1	0	0	0	0	0	0	0	38
05:00	0	83	5	1	0	2	0	2	2	1	0	0	0	96
06:00	2	216	15	0	4	4	0	2	3	0	0	0	0	246
07:00	2	324	22	0	6	4	0	3	2	2	0	0	0	365
08:00	2	336	32	0	8	8	1	4	13	2	0	0	0	406
09:00	2	286	15	0	3	3	0	6	8	1	0	1	0	325
10:00	4	302	18	0	10	6	1	3	3	1	1	0	3	352
11:00	2	357	26	0	2	6	0	7	12	3	0	1	0	416
12 PM	4	373	21	0	2	9	0	3	16	0	0	0	0	428
13:00	5	415	22	2	8	10	0	4	16	1	0	0	2	485
14:00	6	483	21	0	4	10	0	5	15	0	1	1	2	548
15:00	8	728	21	1	2	14	0	5	8	1	0	1	2	791
16:00	12	965	36	2	2	13	3	5	9	1	0	0	1	1049
17:00	11	913	32	1	1	13	1	8	5	0	0	2	3	990
18:00	3	585	27	1	1	6	1	4	4	0	0	0	0	632
19:00	6	332	13	0	0	1	0	2	3	0	0	0	0	357
20:00	2	273	25	0	0	4	0	0	3	0	0	1	0	308
21:00	0	173	6	0	0	1	0	2	4	0	0	0	0	186
22:00	0	139	11	0	0	1	0	0	1	0	0	0	0	152
23:00	0	70	4	0	0	0	0	0	1	0	0	0	0	75
Total	71	7486	378	8	58	116	7	65	129	14	2	7	13	8354
Percent	0.8%	89.6%	4.5%	0.1%	0.7%	1.4%	0.1%	0.8%	1.5%	0.2%	0.0%	0.1%	0.2%	
AM Peak	10:00	11:00	08:00	05:00	10:00	08:00	08:00	11:00	08:00	11:00	10:00	09:00	10:00	11:00
Vol.	4	357	32	1	10	8	1	7	13	3	1	1	3	416
PM Peak	16:00	16:00	16:00	13:00	13:00	15:00	16:00	17:00	12:00	13:00	14:00	17:00	17:00	16:00
Vol.	12	965	36	2	8	14	3	8	16	1	1	2	3	1049



Site Code: 14
 Station ID: 14
 US24 E-O MARKSHEFFEL RD

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/11/16	0	37	1	0	0	0	0	0	1	0	0	0	0	39
01:00	0	22	2	0	0	0	0	0	0	0	0	0	0	24
02:00	0	14	1	0	0	0	0	0	0	0	0	0	0	15
03:00	0	18	0	0	1	0	0	0	2	0	0	0	0	21
04:00	0	35	1	0	2	1	0	0	2	0	0	0	0	41
05:00	0	74	11	0	0	1	0	1	1	0	0	0	0	88
06:00	1	240	25	0	4	8	0	1	3	0	0	0	0	282
07:00	1	340	22	0	6	11	0	3	5	3	0	0	0	391
08:00	1	373	19	1	8	3	1	14	11	2	1	0	1	435
09:00	0	322	28	1	7	7	0	4	16	3	0	0	2	390
10:00	1	360	25	0	2	13	0	4	13	2	0	0	0	420
11:00	2	332	19	0	7	11	0	3	11	1	0	0	0	386
12 PM	2	372	22	1	5	9	0	1	10	3	1	1	1	428
13:00	0	411	31	0	8	9	0	1	12	3	0	0	0	475
14:00	1	474	34	1	5	7	0	4	13	2	0	0	3	544
15:00	5	696	40	0	1	13	1	7	9	1	0	0	3	776
16:00	8	1049	47	0	4	14	1	7	7	2	0	1	1	1141
17:00	7	941	51	0	3	13	0	7	7	1	1	0	1	1032
18:00	3	498	29	0	2	6	1	3	6	0	0	0	0	548
19:00	2	299	24	0	1	4	0	4	1	0	0	0	1	336
20:00	2	261	11	0	0	0	0	1	2	0	0	0	0	277
21:00	2	187	13	0	0	2	1	0	0	0	0	0	0	205
22:00	0	138	11	0	0	0	0	0	2	0	0	0	0	151
23:00	0	66	6	0	0	0	0	1	1	0	0	0	0	74
Total	38	7559	473	4	66	132	5	66	135	23	3	2	13	8519
Percent	0.4%	88.7%	5.6%	0.0%	0.8%	1.5%	0.1%	0.8%	1.6%	0.3%	0.0%	0.0%	0.2%	
AM Peak	11:00	08:00	09:00	08:00	08:00	10:00	08:00	08:00	09:00	07:00	08:00		09:00	08:00
Vol.	2	373	28	1	8	13	1	14	16	3	1		2	435
PM Peak	16:00	16:00	17:00	12:00	13:00	16:00	15:00	15:00	14:00	12:00	12:00	12:00	14:00	16:00
Vol.	8	1049	51	1	8	14	1	7	13	3	1	1	3	1141
Grand Total	109	15045	851	12	124	248	12	131	264	37	5	9	26	16873
Percent	0.6%	89.2%	5.0%	0.1%	0.7%	1.5%	0.1%	0.8%	1.6%	0.2%	0.0%	0.1%	0.2%	



Site Code: 14.5
 Station ID: 14.5
 US24 E-O MARKSHEFFEL

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/16	0	25	3	0	0	0	0	1	2	0	0	0	0	31
01:00	0	15	0	0	1	0	0	0	1	0	0	0	0	17
02:00	1	14	2	0	0	0	0	0	3	0	0	0	0	20
03:00	0	25	6	0	0	0	0	1	4	0	0	0	0	36
04:00	3	111	23	0	0	1	0	0	1	0	0	0	0	139
05:00	5	344	71	0	14	4	0	3	7	3	0	0	0	451
06:00	11	921	161	0	13	6	0	15	6	3	1	1	1	1139
07:00	13	1104	155	2	5	14	0	12	11	4	1	0	1	1322
08:00	6	650	109	1	12	4	0	7	9	0	0	0	0	798
09:00	5	420	84	1	16	8	0	5	8	1	0	0	1	549
10:00	1	293	62	0	9	4	0	8	12	5	0	0	0	394
11:00	2	300	74	1	17	6	0	8	4	2	0	0	0	414
12 PM	4	277	77	0	11	8	0	6	17	0	1	0	0	401
13:00	2	306	77	2	8	8	1	6	15	0	1	1	1	428
14:00	2	272	73	3	14	4	0	8	9	2	1	0	1	389
15:00	5	299	49	3	2	12	0	0	14	0	0	0	0	384
16:00	2	356	69	0	11	1	0	1	10	1	0	0	1	452
17:00	0	348	69	0	5	3	0	6	3	0	2	0	0	436
18:00	0	293	55	1	2	1	0	3	4	0	0	0	0	359
19:00	1	146	23	0	2	1	0	5	5	0	0	0	0	183
20:00	0	146	12	1	2	0	0	0	3	0	0	0	0	164
21:00	0	91	11	0	2	0	0	0	2	0	0	0	0	106
22:00	0	58	7	0	0	0	0	1	3	0	0	0	0	69
23:00	0	53	6	0	0	0	0	0	1	0	0	0	0	60
Total	63	6867	1278	15	146	85	1	96	154	21	7	2	6	8741
Percent	0.7%	78.6%	14.6%	0.2%	1.7%	1.0%	0.0%	1.1%	1.8%	0.2%	0.1%	0.0%	0.1%	
AM Peak	07:00	07:00	06:00	07:00	11:00	07:00		06:00	10:00	10:00	06:00	06:00	06:00	07:00
Vol.	13	1104	161	2	17	14		15	12	5	1	1	1	1322
PM Peak	15:00	16:00	12:00	14:00	14:00	15:00	13:00	14:00	12:00	14:00	17:00	13:00	13:00	16:00
Vol.	5	356	77	3	14	12	1	8	17	2	2	1	1	452



Site Code: 14.5
 Station ID: 14.5
 US24 E-O MARKSHEFFEL

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/11/16	0	12	1	0	0	0	0	0	1	0	0	0	0	14
01:00	0	5	1	0	0	0	0	1	0	0	0	0	0	7
02:00	0	16	3	0	0	0	0	1	2	0	0	0	0	22
03:00	0	27	5	0	0	0	0	0	5	0	0	0	0	37
04:00	2	112	19	0	0	1	0	0	3	0	0	0	0	137
05:00	4	354	64	0	8	4	0	3	11	0	0	0	0	448
06:00	13	912	169	1	7	10	0	10	7	1	0	0	0	1130
07:00	7	1136	143	2	8	16	4	11	3	0	2	1	2	1335
08:00	3	640	85	0	7	7	1	6	14	0	1	1	0	765
09:00	1	386	61	0	10	6	0	5	11	0	0	0	0	480
10:00	3	283	50	0	14	9	0	4	12	0	1	0	0	376
11:00	0	277	62	1	14	4	0	2	13	0	0	0	0	373
12 PM	2	323	53	1	6	10	0	5	11	0	0	0	2	413
13:00	3	346	47	0	5	10	0	3	8	0	0	0	0	422
14:00	1	293	36	0	11	4	0	3	14	0	0	0	1	363
15:00	1	316	46	0	6	2	0	3	7	1	0	0	0	382
16:00	4	405	41	0	5	5	0	0	1	0	0	0	1	462
17:00	2	393	48	0	4	4	0	3	7	1	1	0	0	463
18:00	2	267	39	1	2	5	0	1	3	0	0	0	0	320
19:00	2	172	25	1	1	1	0	0	4	0	0	0	0	206
20:00	2	142	18	0	0	2	0	0	3	0	0	0	0	167
21:00	1	105	17	0	2	1	0	0	3	0	0	0	0	129
22:00	1	57	9	0	2	1	0	1	2	0	0	0	0	73
23:00	0	33	5	0	0	0	0	0	0	0	0	0	0	38
Total	54	7012	1047	7	112	102	5	62	145	3	5	2	6	8562
Percent	0.6%	81.9%	12.2%	0.1%	1.3%	1.2%	0.1%	0.7%	1.7%	0.0%	0.1%	0.0%	0.1%	
AM Peak	06:00	07:00	06:00	07:00	10:00	07:00	07:00	07:00	08:00	06:00	07:00	07:00	07:00	07:00
Vol.	13	1136	169	2	14	16	4	11	14	1	2	1	2	1335
PM Peak	16:00	16:00	12:00	12:00	14:00	12:00		12:00	14:00	15:00	17:00		12:00	17:00
Vol.	4	405	53	1	11	10		5	14	1	1		2	463
Grand Total	117	13879	2325	22	258	187	6	158	299	24	12	4	12	17303
Percent	0.7%	80.2%	13.4%	0.1%	1.5%	1.1%	0.0%	0.9%	1.7%	0.1%	0.1%	0.0%	0.1%	



Site Code: 15
 Station ID: 15
 BROOKINGS DR N-O US24

Start Time	10-May-16 Tue	NB	SB	Total						
12:00 AM		0	1	1						
01:00		0	0	0						
02:00		0	0	0						
03:00		0	1	1						
04:00		0	12	12						
05:00		1	32	33						
06:00		1	87	88						
07:00		1	115	116						
08:00		3	59	62						
09:00		1	26	27						
10:00		4	16	20						
11:00		6	17	23						
12:00 PM		3	25	28						
01:00		5	29	34						
02:00		4	19	23						
03:00		7	25	32						
04:00		8	26	34						
05:00		5	31	36						
06:00		6	21	27						
07:00		5	10	15						
08:00		4	10	14						
09:00		3	6	9						
10:00		0	0	0						
11:00		1	1	2						
Total		68	569	637						
Percent		10.7%	89.3%							
AM Peak	-	11:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	6	115	-	-	-	-	-	-	116
PM Peak	-	16:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	8	31	-	-	-	-	-	-	36



Site Code: 15
 Station ID: 15
 BROOKINGS DR N-O US24

Start Time	11-May-16 Wed	NB	SB	Total						
12:00 AM		0	0	0						
01:00		0	0	0						
02:00		0	1	1						
03:00		0	1	1						
04:00		0	10	10						
05:00		0	39	39						
06:00		4	88	92						
07:00		3	117	120						
08:00		1	54	55						
09:00		2	18	20						
10:00		4	20	24						
11:00		2	21	23						
12:00 PM		7	26	33						
01:00		4	21	25						
02:00		4	21	25						
03:00		7	16	23						
04:00		11	25	36						
05:00		7	34	41						
06:00		2	17	19						
07:00		4	9	13						
08:00		7	12	19						
09:00		1	3	4						
10:00		3	4	7						
11:00		1	0	1						
Total		74	557	631						
Percent		11.7%	88.3%							
AM Peak	-	06:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	4	117	-	-	-	-	-	-	120
PM Peak	-	16:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	11	34	-	-	-	-	-	-	41
Grand Total		142	1126							1268
Percent		11.2%	88.8%							

ADT

ADT 634

AADT 634



Site Code: 16
 Station ID: 16
 CONSTITUTION AVE N-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		15	13							28
01:00		7	12							19
02:00		4	12							16
03:00		8	5							13
04:00		17	15							32
05:00		85	43							128
06:00		203	146							349
07:00		234	257							491
08:00		217	187							404
09:00		224	149							373
10:00		137	132							269
11:00		168	154							322
12:00 PM		157	154							311
01:00		179	157							336
02:00		162	199							361
03:00		248	259							507
04:00		279	303							582
05:00		267	224							491
06:00		179	182							361
07:00		117	150							267
08:00		65	122							187
09:00		43	87							130
10:00		35	44							79
11:00		14	34							48
Total		3064	3040							6104
Percent		50.2%	49.8%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	234	257	-	-	-	-	-	-	491
PM Peak	-	16:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	279	303	-	-	-	-	-	-	582



Site Code: 16
 Station ID: 16
 CONSTITUTION AVE N-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		12	9							21
01:00		7	4							11
02:00		4	9							13
03:00		8	11							19
04:00		21	19							40
05:00		64	41							105
06:00		209	153							362
07:00		262	241							503
08:00		202	152							354
09:00		166	97							263
10:00		179	145							324
11:00		168	127							295
12:00 PM		162	164							326
01:00		171	147							318
02:00		177	194							371
03:00		190	240							430
04:00		250	265							515
05:00		282	271							553
06:00		160	162							322
07:00		87	136							223
08:00		80	120							200
09:00		51	71							122
10:00		27	38							65
11:00		14	11							25
Total		2953	2827							5780
Percent		51.1%	48.9%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	262	241	-	-	-	-	-	-	503
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	282	271	-	-	-	-	-	-	553
Grand Total		6017	5867							11884
Percent		50.6%	49.4%							
ADT		ADT 5,942	AADT 5,942							



Site Code: 17
 Station ID: 17
 GARRETT RD S-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		2	11							13
01:00		2	3							5
02:00		5	2							7
03:00		2	0							2
04:00		17	5							22
05:00		76	11							87
06:00		230	29							259
07:00		280	51							331
08:00		124	62							186
09:00		79	53							132
10:00		96	63							159
11:00		75	76							151
12:00 PM		73	56							129
01:00		72	65							137
02:00		55	80							135
03:00		75	120							195
04:00		72	158							230
05:00		80	180							260
06:00		64	149							213
07:00		35	59							94
08:00		22	71							93
09:00		11	43							54
10:00		10	30							40
11:00		4	10							14
Total		1561	1387							2948
Percent		53.0%	47.0%							
AM Peak	-	07:00	11:00	-	-	-	-	-	-	07:00
Vol.	-	280	76	-	-	-	-	-	-	331
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	80	180	-	-	-	-	-	-	260



Site Code: 17
 Station ID: 17
 GARRETT RD S-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		4	5							9
01:00		0	4							4
02:00		1	2							3
03:00		2	1							3
04:00		20	4							24
05:00		66	6							72
06:00		207	37							244
07:00		256	33							289
08:00		132	56							188
09:00		75	66							141
10:00		82	55							137
11:00		66	67							133
12:00 PM		74	70							144
01:00		85	73							158
02:00		50	94							144
03:00		71	117							188
04:00		69	190							259
05:00		63	185							248
06:00		52	123							175
07:00		30	69							99
08:00		41	83							124
09:00		22	39							61
10:00		6	15							21
11:00		1	9							10
Total		1475	1403							2878
Percent		51.3%	48.7%							
AM Peak	-	07:00	11:00	-	-	-	-	-	-	07:00
Vol.	-	256	67	-	-	-	-	-	-	289
PM Peak	-	13:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	85	190	-	-	-	-	-	-	259
Grand Total		3036	2790							5826
Percent		52.1%	47.9%							
ADT		ADT 2,913	AADT 2,913							



Site Code: 18
 Station ID: 18
 FALCON HWY S-O SH94

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		1	3							4
01:00		1	4							5
02:00		1	1							2
03:00		0	1							1
04:00		12	0							12
05:00		63	7							70
06:00		146	15							161
07:00		114	34							148
08:00		97	28							125
09:00		77	35							112
10:00		42	34							76
11:00		49	44							93
12:00 PM		61	42							103
01:00		48	35							83
02:00		59	52							111
03:00		62	80							142
04:00		79	92							171
05:00		47	100							147
06:00		37	113							150
07:00		21	46							67
08:00		12	38							50
09:00		14	31							45
10:00		13	19							32
11:00		2	4							6
Total		1058	858							1916
Percent		55.2%	44.8%							
AM Peak	-	06:00	11:00	-	-	-	-	-	-	06:00
Vol.	-	146	44	-	-	-	-	-	-	161
PM Peak	-	16:00	18:00	-	-	-	-	-	-	16:00
Vol.	-	79	113	-	-	-	-	-	-	171



Site Code: 19
 Station ID: 19
 OLD MERIDIAN RD N-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		25	21							46
01:00		6	12							18
02:00		6	3							9
03:00		13	12							25
04:00		53	17							70
05:00		182	55							237
06:00		603	170							773
07:00		904	277							1181
08:00		473	281							754
09:00		365	263							628
10:00		333	288							621
11:00		301	342							643
12:00 PM		406	338							744
01:00		353	371							724
02:00		351	401							752
03:00		493	567							1060
04:00		590	704							1294
05:00		565	743							1308
06:00		374	441							815
07:00		224	246							470
08:00		167	200							367
09:00		95	125							220
10:00		49	43							92
11:00		38	33							71
Total		6969	5953							12922
Percent		53.9%	46.1%							
AM Peak	-	07:00	11:00	-	-	-	-	-	-	07:00
Vol.	-	904	342	-	-	-	-	-	-	1181
PM Peak	-	16:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	590	743	-	-	-	-	-	-	1308



Site Code: 19
 Station ID: 19
 OLD MERIDIAN RD N-O US24

Start Time	11-May-16 Wed	NB	SB	Total						
12:00 AM		6	12	18						
01:00		8	10	18						
02:00		5	5	10						
03:00		12	7	19						
04:00		47	12	59						
05:00		196	44	240						
06:00		604	146	750						
07:00		765	251	1016						
08:00		492	292	784						
09:00		355	234	589						
10:00		337	307	644						
11:00		323	322	645						
12:00 PM		362	311	673						
01:00		402	356	758						
02:00		375	353	728						
03:00		446	521	967						
04:00		520	679	1199						
05:00		529	740	1269						
06:00		325	410	735						
07:00		223	248	471						
08:00		168	208	376						
09:00		130	105	235						
10:00		61	87	148						
11:00		19	21	40						
Total		6710	5681	12391						
Percent		54.2%	45.8%							
AM Peak	-	07:00	11:00	-	-	-	-	-	-	07:00
Vol.	-	765	322	-	-	-	-	-	-	1016
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	529	740	-	-	-	-	-	-	1269
Grand Total		13679	11634							25313
Percent		54.0%	46.0%							
ADT		ADT 12,656	AADT 12,656							



Site Code: 20
 Station ID: 20
 MERIDIAN RD S-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		3	16							19
01:00		6	3							9
02:00		1	1							2
03:00		9	5							14
04:00		13	6							19
05:00		73	49							122
06:00		244	173							417
07:00		326	351							677
08:00		300	222							522
09:00		167	117							284
10:00		165	143							308
11:00		196	168							364
12:00 PM		179	221							400
01:00		155	182							337
02:00		204	210							414
03:00		321	311							632
04:00		394	332							726
05:00		386	390							776
06:00		226	332							558
07:00		111	178							289
08:00		123	156							279
09:00		50	82							132
10:00		16	36							52
11:00		7	31							38
Total		3675	3715							7390
Percent		49.7%	50.3%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	326	351	-	-	-	-	-	-	677
PM Peak	-	16:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	394	390	-	-	-	-	-	-	776



Site Code: 20
 Station ID: 20
 MERIDIAN RD S-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		5	6							11
01:00		3	8							11
02:00		2	5							7
03:00		12	5							17
04:00		17	12							29
05:00		73	50							123
06:00		246	167							413
07:00		327	341							668
08:00		260	226							486
09:00		177	128							305
10:00		139	145							284
11:00		178	160							338
12:00 PM		176	177							353
01:00		187	156							343
02:00		159	211							370
03:00		299	328							627
04:00		391	303							694
05:00		298	312							610
06:00		138	238							376
07:00		129	183							312
08:00		105	124							229
09:00		42	89							131
10:00		25	40							65
11:00		7	21							28
Total		3395	3435							6830
Percent		49.7%	50.3%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	327	341	-	-	-	-	-	-	668
PM Peak	-	16:00	15:00	-	-	-	-	-	-	16:00
Vol.	-	391	328	-	-	-	-	-	-	694
Grand Total		7070	7150							14220
Percent		49.7%	50.3%							
ADT		ADT 7,110	AADT 7,110							



Site Code: 21
 Station ID: 21
 WOODMEN RD N-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		25	33							58
01:00		15	18							33
02:00		8	15							23
03:00		24	23							47
04:00		62	65							127
05:00		214	181							395
06:00		584	447							1031
07:00		680	529							1209
08:00		549	395							944
09:00		449	332							781
10:00		433	344							777
11:00		396	395							791
12:00 PM		462	462							924
01:00		463	449							912
02:00		471	466							937
03:00		640	596							1236
04:00		814	704							1518
05:00		679	754							1433
06:00		429	522							951
07:00		282	343							625
08:00		208	293							501
09:00		125	148							273
10:00		92	118							210
11:00		50	46							96
Total		8154	7678							15832
Percent		51.5%	48.5%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	680	529	-	-	-	-	-	-	1209
PM Peak	-	16:00	17:00	-	-	-	-	-	-	16:00
Vol.	-	814	754	-	-	-	-	-	-	1518



Site Code: 21
 Station ID: 21
 WOODMEN RD N-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		18	20							38
01:00		17	15							32
02:00		7	22							29
03:00		29	13							42
04:00		61	54							115
05:00		229	182							411
06:00		568	476							1044
07:00		700	533							1233
08:00		560	417							977
09:00		463	326							789
10:00		452	336							788
11:00		431	384							815
12:00 PM		516	459							975
01:00		483	451							934
02:00		470	455							925
03:00		603	593							1196
04:00		726	664							1390
05:00		669	695							1364
06:00		333	473							806
07:00		293	318							611
08:00		211	271							482
09:00		124	194							318
10:00		84	100							184
11:00		44	51							95
Total		8091	7502							15593
Percent		51.9%	48.1%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	700	533	-	-	-	-	-	-	1233
PM Peak	-	16:00	17:00	-	-	-	-	-	-	16:00
Vol.	-	726	695	-	-	-	-	-	-	1390
Grand Total		16245	15180							31425
Percent		51.7%	48.3%							
ADT		ADT 15,712	AADT 15,712							



Site Code: 22
 Station ID: 22
 US24 E-O WOODMEN RD

Start Time	10-May-16 Tue	EB	WB							Total
12:00 AM		49	37							86
01:00		23	15							38
02:00		11	8							19
03:00		21	31							52
04:00		44	101							145
05:00		80	345							425
06:00		251	742							993
07:00		416	800							1216
08:00		352	609							961
09:00		318	534							852
10:00		384	442							826
11:00		407	439							846
12:00 PM		457	437							894
01:00		444	448							892
02:00		517	425							942
03:00		615	467							1082
04:00		814	560							1374
05:00		965	495							1460
06:00		642	343							985
07:00		455	239							694
08:00		337	168							505
09:00		202	108							310
10:00		152	56							208
11:00		65	49							114
Total		8021	7898							15919
Percent		50.4%	49.6%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	416	800	-	-	-	-	-	-	1216
PM Peak	-	17:00	16:00	-	-	-	-	-	-	17:00
Vol.	-	965	560	-	-	-	-	-	-	1460



Site Code: 22
 Station ID: 22
 US24 E-O WOODMEN RD

Start Time	11-May-16 Wed	EB	WB							Total
12:00 AM		38	19							57
01:00		22	15							37
02:00		21	11							32
03:00		17	38							55
04:00		41	93							134
05:00		94	333							427
06:00		286	724							1010
07:00		419	822							1241
08:00		354	566							920
09:00		329	477							806
10:00		360	430							790
11:00		380	467							847
12:00 PM		440	489							929
01:00		462	463							925
02:00		510	412							922
03:00		657	443							1100
04:00		780	535							1315
05:00		941	493							1434
06:00		574	322							896
07:00		380	244							624
08:00		339	169							508
09:00		243	106							349
10:00		142	59							201
11:00		73	50							123
Total		7902	7780							15682
Percent		50.4%	49.6%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	419	822	-	-	-	-	-	-	1241
PM Peak	-	17:00	16:00	-	-	-	-	-	-	17:00
Vol.	-	941	535	-	-	-	-	-	-	1434
Grand Total		15923	15678							31601
Percent		50.4%	49.6%							
ADT		ADT 15,800	AADT 15,800							



Site Code: 23
 Station ID: 23
 JUDGE ORR RD W-O US24

Start Time	10-May-16 Tue	EB	WB							Total
12:00 AM		4	7							11
01:00		3	3							6
02:00		2	1							3
03:00		6	3							9
04:00		27	1							28
05:00		84	18							102
06:00		215	46							261
07:00		210	99							309
08:00		125	64							189
09:00		79	36							115
10:00		64	40							104
11:00		51	55							106
12:00 PM		72	58							130
01:00		73	54							127
02:00		81	99							180
03:00		100	120							220
04:00		115	182							297
05:00		133	188							321
06:00		110	146							256
07:00		40	64							104
08:00		32	74							106
09:00		20	32							52
10:00		9	24							33
11:00		2	15							17
Total		1657	1429							3086
Percent		53.7%	46.3%							
AM Peak	-	06:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	215	99	-	-	-	-	-	-	309
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	133	188	-	-	-	-	-	-	321



Site Code: 23
 Station ID: 23
 JUDGE ORR RD W-O US24

Start Time	11-May-16 Wed	EB	WB							Total
12:00 AM		2	10							12
01:00		0	4							4
02:00		0	1							1
03:00		6	4							10
04:00		24	4							28
05:00		79	12							91
06:00		212	51							263
07:00		241	98							339
08:00		132	53							185
09:00		67	41							108
10:00		61	47							108
11:00		54	36							90
12:00 PM		73	74							147
01:00		73	60							133
02:00		91	91							182
03:00		87	139							226
04:00		127	209							336
05:00		102	186							288
06:00		71	108							179
07:00		45	62							107
08:00		28	46							74
09:00		15	46							61
10:00		6	18							24
11:00		9	14							23
Total		1605	1414							3019
Percent		53.2%	46.8%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	241	98	-	-	-	-	-	-	339
PM Peak	-	16:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	127	209	-	-	-	-	-	-	336
Grand Total		3262	2843							6105
Percent		53.4%	46.6%							
ADT		ADT 3,052	AADT 3,052							



Site Code: 24
 Station ID: 24
 JUDGE ORR RD E-O US24

Start Time	10-May-16 Tue	EB	WB							Total
12:00 AM		10	7							17
01:00		5	1							6
02:00		3	1							4
03:00		2	7							9
04:00		11	18							29
05:00		28	64							92
06:00		116	153							269
07:00		110	156							266
08:00		80	95							175
09:00		57	97							154
10:00		82	82							164
11:00		76	92							168
12:00 PM		74	89							163
01:00		97	87							184
02:00		90	87							177
03:00		133	110							243
04:00		151	143							294
05:00		193	142							335
06:00		173	118							291
07:00		77	52							129
08:00		66	26							92
09:00		35	17							52
10:00		39	7							46
11:00		10	4							14
Total		1718	1655							3373
Percent		50.9%	49.1%							
AM Peak	-	06:00	07:00	-	-	-	-	-	-	06:00
Vol.	-	116	156	-	-	-	-	-	-	269
PM Peak	-	17:00	16:00	-	-	-	-	-	-	17:00
Vol.	-	193	143	-	-	-	-	-	-	335



Site Code: 24
 Station ID: 24
 JUDGE ORR RD E-O US24

Start Time	11-May-16 Wed	EB	WB							Total
12:00 AM		5	1							6
01:00		4	2							6
02:00		1	1							2
03:00		2	4							6
04:00		4	18							22
05:00		26	58							84
06:00		102	139							241
07:00		124	143							267
08:00		79	99							178
09:00		59	84							143
10:00		75	80							155
11:00		78	85							163
12:00 PM		86	109							195
01:00		100	104							204
02:00		90	86							176
03:00		128	112							240
04:00		154	180							334
05:00		176	105							281
06:00		117	62							179
07:00		76	43							119
08:00		57	28							85
09:00		50	10							60
10:00		22	9							31
11:00		11	4							15
Total		1626	1566							3192
Percent		50.9%	49.1%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	124	143	-	-	-	-	-	-	267
PM Peak	-	17:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	176	180	-	-	-	-	-	-	334
Grand Total		3344	3221							6565
Percent		50.9%	49.1%							
ADT		ADT 3,282	AADT 3,282							



Site Code: 25
 Station ID: 25
 STAPLETON RD N-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		0	3							3
01:00		0	1							1
02:00		0	0							0
03:00		4	1							5
04:00		9	1							10
05:00		46	13							59
06:00		151	64							215
07:00		139	125							264
08:00		98	63							161
09:00		48	38							86
10:00		44	45							89
11:00		36	42							78
12:00 PM		45	40							85
01:00		40	47							87
02:00		64	91							155
03:00		86	98							184
04:00		67	171							238
05:00		60	129							189
06:00		34	89							123
07:00		25	38							63
08:00		18	23							41
09:00		8	10							18
10:00		4	3							7
11:00		3	7							10
Total		1029	1142							2171
Percent		47.4%	52.6%							
AM Peak	-	06:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	151	125	-	-	-	-	-	-	264
PM Peak	-	15:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	86	171	-	-	-	-	-	-	238



Site Code: 25
 Station ID: 25
 STAPLETON RD N-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		2	4							6
01:00		1	3							4
02:00		1	2							3
03:00		1	0							1
04:00		10	1							11
05:00		51	9							60
06:00		133	54							187
07:00		146	139							285
08:00		87	64							151
09:00		40	43							83
10:00		49	57							106
11:00		45	51							96
12:00 PM		35	53							88
01:00		41	45							86
02:00		77	87							164
03:00		89	132							221
04:00		63	140							203
05:00		68	142							210
06:00		43	65							108
07:00		52	43							95
08:00		26	30							56
09:00		13	19							32
10:00		3	11							14
11:00		5	4							9
Total		1081	1198							2279
Percent		47.4%	52.6%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	146	139	-	-	-	-	-	-	285
PM Peak	-	15:00	17:00	-	-	-	-	-	-	15:00
Vol.	-	89	142	-	-	-	-	-	-	221
Grand Total		2110	2340							4450
Percent		47.4%	52.6%							
ADT		ADT 2,225	AADT 2,225							



Site Code: 27
 Station ID: 27
 US24 W-O ELBERT RD

Start Time	10-May-16 Tue	EB	WB							Total
12:00 AM		34	26							60
01:00		11	13							24
02:00		7	2							9
03:00		13	19							32
04:00		33	51							84
05:00		58	207							265
06:00		136	438							574
07:00		252	500							752
08:00		229	367							596
09:00		214	318							532
10:00		228	268							496
11:00		224	275							499
12:00 PM		276	237							513
01:00		257	285							542
02:00		310	269							579
03:00		371	310							681
04:00		483	324							807
05:00		556	292							848
06:00		388	203							591
07:00		252	158							410
08:00		183	89							272
09:00		117	65							182
10:00		81	42							123
11:00		29	43							72
Total		4742	4801							9543
Percent		49.7%	50.3%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	252	500	-	-	-	-	-	-	752
PM Peak	-	17:00	16:00	-	-	-	-	-	-	17:00
Vol.	-	556	324	-	-	-	-	-	-	848



Site Code: 27
 Station ID: 27
 US24 W-O ELBERT RD

Start Time	11-May-16 Wed	EB	WB							Total
12:00 AM		23	12							35
01:00		9	15							24
02:00		12	10							22
03:00		11	24							35
04:00		35	60							95
05:00		68	192							260
06:00		160	435							595
07:00		240	497							737
08:00		234	307							541
09:00		217	307							524
10:00		218	295							513
11:00		241	273							514
12:00 PM		272	300							572
01:00		271	253							524
02:00		326	262							588
03:00		394	276							670
04:00		462	299							761
05:00		560	281							841
06:00		337	196							533
07:00		225	157							382
08:00		173	104							277
09:00		121	82							203
10:00		80	45							125
11:00		37	36							73
Total		4726	4718							9444
Percent		50.0%	50.0%							
AM Peak	-	11:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	241	497	-	-	-	-	-	-	737
PM Peak	-	17:00	12:00	-	-	-	-	-	-	17:00
Vol.	-	560	300	-	-	-	-	-	-	841
Grand Total		9468	9519							18987
Percent		49.9%	50.1%							
ADT		ADT 9,494	AADT 9,494							



Site Code: 28
 Station ID: 28
 ELBERT RD N-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		5	1							6
01:00		1	0							1
02:00		0	0							0
03:00		0	6							6
04:00		8	7							15
05:00		16	40							56
06:00		40	91							131
07:00		54	108							162
08:00		45	71							116
09:00		53	55							108
10:00		37	47							84
11:00		41	57							98
12:00 PM		49	58							107
01:00		44	43							87
02:00		49	38							87
03:00		71	58							129
04:00		101	62							163
05:00		86	72							158
06:00		66	64							130
07:00		53	29							82
08:00		20	31							51
09:00		28	11							39
10:00		17	6							23
11:00		4	4							8
Total		888	959							1847
Percent		48.1%	51.9%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	54	108	-	-	-	-	-	-	162
PM Peak	-	16:00	17:00	-	-	-	-	-	-	16:00
Vol.	-	101	72	-	-	-	-	-	-	163



Site Code: 28
 Station ID: 28
 ELBERT RD N-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		4	1							5
01:00		1	3							4
02:00		2	3							5
03:00		0	4							4
04:00		5	8							13
05:00		17	37							54
06:00		37	83							120
07:00		46	98							144
08:00		54	46							100
09:00		38	56							94
10:00		36	52							88
11:00		42	61							103
12:00 PM		51	48							99
01:00		64	39							103
02:00		56	39							95
03:00		56	44							100
04:00		85	53							138
05:00		95	44							139
06:00		58	46							104
07:00		38	24							62
08:00		23	26							49
09:00		21	12							33
10:00		18	10							28
11:00		6	6							12
Total		853	843							1696
Percent		50.3%	49.7%							
AM Peak	-	08:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	54	98	-	-	-	-	-	-	144
PM Peak	-	17:00	16:00	-	-	-	-	-	-	17:00
Vol.	-	95	53	-	-	-	-	-	-	139
Grand Total		1741	1802							3543
Percent		49.1%	50.9%							
ADT		ADT 1,772	AADT 1,772							



Site Code: 29
 Station ID: 29
 ELBERT RD S-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		1	0							1
01:00		1	0							1
02:00		0	0							0
03:00		0	1							1
04:00		2	1							3
05:00		16	4							20
06:00		30	21							51
07:00		36	19							55
08:00		20	14							34
09:00		15	18							33
10:00		18	11							29
11:00		6	10							16
12:00 PM		8	8							16
01:00		11	16							27
02:00		10	9							19
03:00		22	25							47
04:00		25	27							52
05:00		25	52							77
06:00		26	41							67
07:00		12	27							39
08:00		8	26							34
09:00		5	15							20
10:00		3	6							9
11:00		2	3							5
Total		302	354							656
Percent		46.0%	54.0%							
AM Peak	-	07:00	06:00	-	-	-	-	-	-	07:00
Vol.	-	36	21	-	-	-	-	-	-	55
PM Peak	-	18:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	26	52	-	-	-	-	-	-	77



Site Code: 29
 Station ID: 29
 ELBERT RD S-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		1	1							2
01:00		1	1							2
02:00		1	0							1
03:00		0	1							1
04:00		4	1							5
05:00		16	7							23
06:00		32	15							47
07:00		40	19							59
08:00		23	13							36
09:00		22	8							30
10:00		17	14							31
11:00		13	17							30
12:00 PM		14	17							31
01:00		10	13							23
02:00		17	18							35
03:00		12	33							45
04:00		15	36							51
05:00		19	37							56
06:00		23	37							60
07:00		9	17							26
08:00		4	16							20
09:00		6	13							19
10:00		8	5							13
11:00		1	4							5
Total		308	343							651
Percent		47.3%	52.7%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	40	19	-	-	-	-	-	-	59
PM Peak	-	18:00	17:00	-	-	-	-	-	-	18:00
Vol.	-	23	37	-	-	-	-	-	-	60
Grand Total		610	697							1307
Percent		46.7%	53.3%							
ADT		ADT 654		AADT 654						



Site Code: 30
 Station ID: 30
 US24 W-O BRADSHAW RD

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/16	1	22	1	0	0	0	0	1	0	0	0	0	0	25
01:00	0	12	1	0	0	0	0	0	0	0	0	0	0	13
02:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
03:00	0	10	2	0	1	0	0	0	1	0	0	0	0	14
04:00	1	19	4	0	1	0	0	0	1	0	0	0	0	26
05:00	0	44	6	1	1	0	0	0	1	0	0	0	0	53
06:00	3	97	5	0	2	0	0	1	1	0	0	0	0	109
07:00	8	201	13	0	5	3	0	0	6	0	0	0	0	236
08:00	4	148	12	0	2	3	0	2	9	2	0	0	0	182
09:00	5	137	16	0	3	1	0	5	2	0	0	0	0	169
10:00	3	156	14	0	5	0	0	6	5	3	0	0	0	192
11:00	1	153	9	0	0	1	0	2	13	1	0	0	0	180
12 PM	2	197	20	0	6	0	0	2	9	0	0	0	0	236
13:00	1	180	16	1	2	1	0	1	3	0	0	0	0	205
14:00	1	188	39	0	2	1	0	4	4	1	0	0	0	240
15:00	2	239	29	0	5	1	0	2	6	0	0	0	0	284
16:00	1	315	47	1	3	2	0	3	7	0	0	0	0	379
17:00	4	389	42	0	0	1	0	2	5	0	0	1	0	444
18:00	3	260	38	0	1	1	0	0	4	0	0	0	0	307
19:00	0	157	21	0	0	0	0	0	4	0	0	0	0	182
20:00	2	128	12	0	1	0	0	1	7	0	0	0	0	151
21:00	1	66	3	0	0	1	0	0	4	0	0	0	0	75
22:00	1	50	4	0	0	0	0	0	2	0	0	0	0	57
23:00	0	19	2	0	0	0	0	0	1	0	0	0	0	22
Total	44	3193	356	3	40	16	0	32	95	7	0	1	0	3787
Percent	1.2%	84.3%	9.4%	0.1%	1.1%	0.4%	0.0%	0.8%	2.5%	0.2%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	09:00	05:00	07:00	07:00		10:00	11:00	10:00				07:00
Vol.	8	201	16	1	5	3		6	13	3				236
PM Peak	17:00	17:00	16:00	13:00	12:00	16:00		14:00	12:00	14:00		17:00		17:00
Vol.	4	389	47	1	6	2		4	9	1		1		444



Site Code: 30
 Station ID: 30
 US24 W-O BRADSHAW RD

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/11/16	0	15	2	0	0	0	0	0	1	0	0	0	0	18
01:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	9	0	0	0	0	0	0	1	0	0	0	0	10
03:00	0	12	1	0	0	0	0	0	0	0	0	0	0	13
04:00	0	27	2	0	2	0	0	0	2	0	0	0	0	33
05:00	0	47	8	0	2	0	0	1	1	0	0	0	0	59
06:00	0	124	11	0	1	1	0	0	3	0	0	0	0	140
07:00	4	207	11	1	6	2	0	3	1	0	0	0	0	235
08:00	1	141	15	0	3	1	0	3	4	1	0	0	0	169
09:00	1	149	16	1	5	2	0	3	7	0	0	0	0	184
10:00	1	141	24	0	2	4	0	3	6	0	0	0	0	181
11:00	1	154	28	0	4	3	0	4	9	1	0	0	0	204
12 PM	0	161	22	0	5	1	0	0	7	0	0	0	0	196
13:00	0	174	26	0	0	4	0	1	8	0	0	0	0	213
14:00	1	200	32	0	2	1	0	1	10	0	0	0	0	247
15:00	0	250	49	0	1	1	0	2	6	0	0	0	0	309
16:00	0	291	44	0	5	2	0	4	11	0	0	0	0	357
17:00	1	365	52	0	2	1	0	2	9	0	0	0	0	432
18:00	1	212	42	0	2	1	0	1	5	0	0	0	0	264
19:00	1	145	15	0	2	0	0	0	4	0	0	0	0	167
20:00	0	120	16	0	0	0	0	0	2	0	0	0	0	138
21:00	0	80	15	0	1	0	0	0	0	0	0	0	0	96
22:00	1	55	3	0	0	0	0	0	2	0	0	0	0	61
23:00	0	25	3	0	0	0	0	0	0	0	0	0	0	28
Total	13	3111	437	2	45	24	0	28	99	2	0	0	0	3761
Percent	0.3%	82.7%	11.6%	0.1%	1.2%	0.6%	0.0%	0.7%	2.6%	0.1%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	11:00	07:00	07:00	10:00		11:00	11:00	08:00				07:00
Vol.	4	207	28	1	6	4		4	9	1				235
PM Peak	14:00	17:00	17:00		12:00	13:00		16:00	16:00					17:00
Vol.	1	365	52		5	4		4	11					432
Grand Total	57	6304	793	5	85	40	0	60	194	9	0	1	0	7548
Percent	0.8%	83.5%	10.5%	0.1%	1.1%	0.5%	0.0%	0.8%	2.6%	0.1%	0.0%	0.0%	0.0%	



Site Code: 30
 Station ID: 30
 US24 W-O BRADSHAW RD

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/16	0	20	3	0	0	0	0	3	0	0	0	1	0	27
01:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	9	2	0	0	0	0	1	3	0	0	0	0	15
04:00	0	42	3	0	0	0	0	0	1	0	0	0	0	46
05:00	0	129	23	0	4	0	0	3	4	1	1	0	0	165
06:00	1	281	41	0	4	0	0	2	4	0	1	0	1	335
07:00	0	306	38	0	5	1	0	0	10	0	0	0	0	360
08:00	2	218	34	0	4	1	0	1	8	0	0	0	0	268
09:00	2	219	31	0	5	5	0	0	9	2	0	0	0	273
10:00	3	164	18	0	1	0	0	2	7	3	0	0	0	198
11:00	1	174	27	0	2	1	0	5	6	1	0	0	0	217
12 PM	3	148	18	2	4	3	0	4	2	0	0	0	0	184
13:00	3	185	25	0	4	2	0	3	6	2	0	0	0	230
14:00	1	198	16	0	1	3	0	5	4	1	0	0	0	229
15:00	0	225	36	1	3	2	0	1	3	0	0	0	0	271
16:00	1	218	33	1	2	0	0	1	7	0	0	0	0	263
17:00	0	205	28	0	1	0	0	1	2	0	0	0	0	237
18:00	0	120	16	0	4	1	0	2	4	0	0	0	0	147
19:00	0	105	15	0	2	0	0	3	6	0	0	0	0	131
20:00	0	52	9	1	1	0	0	0	1	0	0	0	0	64
21:00	0	45	4	0	1	0	0	0	4	0	0	0	0	54
22:00	0	33	3	0	0	0	0	2	2	0	0	0	0	40
23:00	0	27	4	0	1	0	0	0	1	0	0	0	0	33
Total	17	3135	428	5	49	19	0	39	94	10	2	1	1	3800
Percent	0.4%	82.5%	11.3%	0.1%	1.3%	0.5%	0.0%	1.0%	2.5%	0.3%	0.1%	0.0%	0.0%	
AM Peak	10:00	07:00	06:00		07:00	09:00		11:00	07:00	10:00	05:00	00:00	06:00	07:00
Vol.	3	306	41		5	5		5	10	3	1	1	1	360
PM Peak	12:00	15:00	15:00	12:00	12:00	12:00		14:00	16:00	13:00				15:00
Vol.	3	225	36	2	4	3		5	7	2				271



Site Code: 30
 Station ID: 30
 US24 W-O BRADSHAW RD

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/11/16	0	9	1	0	0	1	0	0	1	0	0	0	0	12
01:00	0	6	2	0	0	0	0	2	0	0	1	0	0	11
02:00	0	4	1	0	0	0	0	1	2	0	0	0	0	8
03:00	0	11	3	0	0	0	0	1	4	0	0	0	0	19
04:00	0	39	8	0	1	0	0	0	1	0	0	0	0	49
05:00	0	123	29	0	3	1	0	1	4	0	1	0	0	162
06:00	1	254	61	1	5	2	0	2	9	0	0	0	1	336
07:00	2	288	53	1	6	3	0	2	7	0	0	0	0	362
08:00	4	161	35	1	9	3	0	1	4	0	0	0	0	218
09:00	0	193	26	1	5	3	0	4	5	1	0	0	0	238
10:00	1	184	26	0	2	1	0	1	5	1	0	0	0	221
11:00	1	166	32	0	4	1	0	3	8	0	0	0	0	215
12 PM	4	201	26	1	2	1	0	1	5	2	0	0	0	243
13:00	1	167	18	0	3	3	0	5	5	0	0	0	0	202
14:00	2	162	45	0	1	4	0	1	3	0	0	0	0	218
15:00	1	194	33	2	2	1	0	2	7	0	0	0	0	242
16:00	0	210	36	0	5	1	0	3	1	0	0	0	0	256
17:00	1	175	42	0	2	2	0	3	2	0	0	0	0	227
18:00	1	137	17	2	1	0	0	3	3	0	0	0	0	164
19:00	0	119	22	0	0	0	0	0	2	0	0	0	0	143
20:00	1	60	15	0	1	1	0	2	1	0	0	0	0	81
21:00	0	55	8	0	2	0	0	0	5	0	0	0	0	70
22:00	0	32	1	0	0	0	0	1	1	0	0	0	0	35
23:00	0	26	4	0	0	0	0	0	0	0	0	0	0	30
Total	20	2976	544	9	54	28	0	39	85	4	2	0	1	3762
Percent	0.5%	79.1%	14.5%	0.2%	1.4%	0.7%	0.0%	1.0%	2.3%	0.1%	0.1%	0.0%	0.0%	
AM Peak	08:00	07:00	06:00	06:00	08:00	07:00		09:00	06:00	09:00	01:00		06:00	07:00
Vol.	4	288	61	1	9	3		4	9	1	1		1	362
PM Peak	12:00	16:00	14:00	15:00	16:00	14:00		13:00	15:00	12:00				16:00
Vol.	4	210	45	2	5	4		5	7	2				256
Grand Total	37	6111	972	14	103	47	0	78	179	14	4	1	2	7562
Percent	0.5%	80.8%	12.9%	0.2%	1.4%	0.6%	0.0%	1.0%	2.4%	0.2%	0.1%	0.0%	0.0%	



Site Code: 31
 Station ID: 31
 BRADSHAW RD N-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		4	2							6
01:00		1	1							2
02:00		0	0							0
03:00		1	0							1
04:00		5	9							14
05:00		9	31							40
06:00		45	65							110
07:00		147	127							274
08:00		37	54							91
09:00		34	47							81
10:00		33	47							80
11:00		33	28							61
12:00 PM		44	21							65
01:00		40	40							80
02:00		57	27							84
03:00		88	121							209
04:00		82	65							147
05:00		103	64							167
06:00		92	57							149
07:00		40	20							60
08:00		24	17							41
09:00		19	13							32
10:00		9	2							11
11:00		6	0							6
Total		953	858							1811
Percent		52.6%	47.4%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	147	127	-	-	-	-	-	-	274
PM Peak	-	17:00	15:00	-	-	-	-	-	-	15:00
Vol.	-	103	121	-	-	-	-	-	-	209



Site Code: 31
 Station ID: 31
 BRADSHAW RD N-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		3	0							3
01:00		0	0							0
02:00		0	1							1
03:00		0	0							0
04:00		6	8							14
05:00		13	28							41
06:00		37	65							102
07:00		139	133							272
08:00		35	36							71
09:00		25	45							70
10:00		30	47							77
11:00		44	39							83
12:00 PM		47	51							98
01:00		40	28							68
02:00		49	38							87
03:00		99	110							209
04:00		70	71							141
05:00		129	47							176
06:00		60	40							100
07:00		31	77							108
08:00		38	12							50
09:00		21	6							27
10:00		14	7							21
11:00		4	1							5
Total		934	890							1824
Percent		51.2%	48.8%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	139	133	-	-	-	-	-	-	272
PM Peak	-	17:00	15:00	-	-	-	-	-	-	15:00
Vol.	-	129	110	-	-	-	-	-	-	209
Grand Total		1887	1748							3635
Percent		51.9%	48.1%							
ADT		ADT 1,818	AADT 1,818							



Site Code: 32
 Station ID: 32
 PEYTON HWY N-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		6	5							11
01:00		2	2							4
02:00		0	1							1
03:00		1	1							2
04:00		6	8							14
05:00		7	45							52
06:00		55	89							144
07:00		61	88							149
08:00		38	55							93
09:00		33	71							104
10:00		47	58							105
11:00		42	45							87
12:00 PM		59	57							116
01:00		39	43							82
02:00		52	63							115
03:00		67	54							121
04:00		109	72							181
05:00		119	73							192
06:00		79	65							144
07:00		56	44							100
08:00		34	28							62
09:00		20	14							34
10:00		11	3							14
11:00		9	5							14
Total		952	989							1941
Percent		49.0%	51.0%							
AM Peak	-	07:00	06:00	-	-	-	-	-	-	07:00
Vol.	-	61	89	-	-	-	-	-	-	149
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	119	73	-	-	-	-	-	-	192



Site Code: 32
 Station ID: 32
 PEYTON HWY N-O US24

Start Time	11-May-16 Wed	NB	SB	Total						
12:00 AM		4	4	8						
01:00		1	1	2						
02:00		0	0	0						
03:00		3	2	5						
04:00		6	13	19						
05:00		13	42	55						
06:00		49	89	138						
07:00		57	81	138						
08:00		28	56	84						
09:00		27	51	78						
10:00		33	37	70						
11:00		35	43	78						
12:00 PM		46	56	102						
01:00		54	43	97						
02:00		40	42	82						
03:00		63	43	106						
04:00		86	60	146						
05:00		91	74	165						
06:00		66	45	111						
07:00		38	39	77						
08:00		36	23	59						
09:00		20	9	29						
10:00		10	11	21						
11:00		6	2	8						
Total		812	866	1678						
Percent		48.4%	51.6%							
AM Peak	-	07:00	06:00	-	-	-	-	-	-	06:00
Vol.	-	57	89	-	-	-	-	-	-	138
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	91	74	-	-	-	-	-	-	165
Grand Total		1764	1855							3619
Percent		48.7%	51.3%							
ADT		ADT 1,810	AADT 1,810							



Site Code: 33
 Station ID: 33
 PEYTON HWY S-O US24

Start Time	10-May-16 Tue	NB	SB	Total						
12:00 AM		1	0	1						
01:00		0	0	0						
02:00		0	0	0						
03:00		1	1	2						
04:00		4	0	4						
05:00		10	3	13						
06:00		27	11	38						
07:00		63	24	87						
08:00		28	22	50						
09:00		15	18	33						
10:00		20	17	37						
11:00		18	32	50						
12:00 PM		16	17	33						
01:00		12	8	20						
02:00		27	17	44						
03:00		22	35	57						
04:00		37	37	74						
05:00		34	31	65						
06:00		18	37	55						
07:00		12	11	23						
08:00		4	22	26						
09:00		0	10	10						
10:00		2	8	10						
11:00		0	2	2						
Total		371	363	734						
Percent		50.5%	49.5%							
AM Peak	-	07:00	11:00	-	-	-	-	-	-	07:00
Vol.	-	63	32	-	-	-	-	-	-	87
PM Peak	-	16:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	37	37	-	-	-	-	-	-	74



Site Code: 33
 Station ID: 33
 PEYTON HWY S-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		1	2							3
01:00		0	1							1
02:00		0	1							1
03:00		1	0							1
04:00		4	1							5
05:00		10	4							14
06:00		28	10							38
07:00		57	23							80
08:00		21	11							32
09:00		21	14							35
10:00		16	19							35
11:00		20	9							29
12:00 PM		19	16							35
01:00		13	18							31
02:00		17	18							35
03:00		31	38							69
04:00		22	39							61
05:00		34	30							64
06:00		13	26							39
07:00		6	26							32
08:00		7	13							20
09:00		4	11							15
10:00		1	8							9
11:00		0	2							2
Total		346	340							686
Percent		50.4%	49.6%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	57	23	-	-	-	-	-	-	80
PM Peak	-	17:00	16:00	-	-	-	-	-	-	15:00
Vol.	-	34	39	-	-	-	-	-	-	69
Grand Total		717	703							1420
Percent		50.5%	49.5%							
ADT		ADT 710		AADT 710						



Site Code: 34
 Station ID: 34
 US24 E-O PEYTON HWY

Start Time	10-May-16 Tue	EB	WB							Total
12:00 AM		21	23							44
01:00		14	10							24
02:00		5	1							6
03:00		14	18							32
04:00		24	35							59
05:00		50	113							163
06:00		76	238							314
07:00		170	256							426
08:00		151	207							358
09:00		132	194							326
10:00		170	149							319
11:00		140	176							316
12:00 PM		190	137							327
01:00		145	198							343
02:00		150	172							322
03:00		218	254							472
04:00		266	226							492
05:00		273	183							456
06:00		224	137							361
07:00		122	92							214
08:00		66	86							152
09:00		63	60							123
10:00		37	43							80
11:00		15	37							52
Total		2736	3045							5781
Percent		47.3%	52.7%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	170	256	-	-	-	-	-	-	426
PM Peak	-	17:00	15:00	-	-	-	-	-	-	16:00
Vol.	-	273	254	-	-	-	-	-	-	492



Site Code: 34
 Station ID: 34
 US24 E-O PEYTON HWY

Start Time	11-May-16 Wed	EB	WB							Total
12:00 AM		17	16							33
01:00		11	6							17
02:00		9	10							19
03:00		9	27							36
04:00		29	34							63
05:00		52	97							149
06:00		110	220							330
07:00		203	264							467
08:00		186	211							397
09:00		186	199							385
10:00		183	180							363
11:00		171	192							363
12:00 PM		179	181							360
01:00		142	165							307
02:00		177	165							342
03:00		214	174							388
04:00		238	180							418
05:00		265	177							442
06:00		198	138							336
07:00		131	90							221
08:00		96	78							174
09:00		62	68							130
10:00		44	30							74
11:00		24	29							53
Total		2936	2931							5867
Percent		50.0%	50.0%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	203	264	-	-	-	-	-	-	467
PM Peak	-	17:00	12:00	-	-	-	-	-	-	17:00
Vol.	-	265	181	-	-	-	-	-	-	442
Grand Total		5672	5976							11648
Percent		48.7%	51.3%							
ADT		ADT 5,824	AADT 5,824							



Site Code: 35
 Station ID: 35
 US24 E-O ELLICOTT HWY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/16	0	16	0	0	0	0	0	1	1	0	0	0	0	18
01:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
02:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
03:00	0	10	0	0	1	0	0	0	1	0	0	0	0	12
04:00	0	21	3	0	0	0	0	0	0	0	0	0	0	24
05:00	0	40	3	0	1	1	0	0	1	0	0	0	0	46
06:00	2	63	7	0	1	1	0	0	1	0	0	0	0	75
07:00	1	150	22	0	5	2	0	0	4	0	0	0	0	184
08:00	5	126	14	0	1	3	0	2	7	1	0	0	0	159
09:00	0	106	10	1	1	1	0	3	0	1	0	0	0	123
10:00	3	107	17	0	4	7	0	3	3	1	0	0	0	145
11:00	2	90	17	0	1	6	0	3	7	0	0	0	0	126
12 PM	3	137	16	0	1	7	0	1	8	1	0	0	0	174
13:00	0	109	26	0	1	1	0	0	2	0	0	0	0	139
14:00	3	115	25	0	1	1	0	2	5	0	0	0	0	152
15:00	5	146	26	0	1	3	0	0	4	0	0	0	0	185
16:00	3	144	36	0	1	7	0	2	5	0	0	0	0	198
17:00	5	204	26	0	2	2	0	3	3	1	0	0	0	246
18:00	5	164	12	0	2	2	0	0	4	0	0	0	0	189
19:00	8	113	6	0	1	2	0	1	0	0	0	0	0	131
20:00	1	71	7	0	2	1	0	1	3	0	0	0	0	86
21:00	2	43	1	0	0	2	0	0	6	0	0	0	0	54
22:00	0	27	3	0	0	0	0	0	0	0	0	0	0	30
23:00	0	6	5	0	0	0	0	0	1	0	0	0	0	12
Total	48	2021	283	1	27	49	0	22	66	5	0	0	0	2522
Percent	1.9%	80.1%	11.2%	0.0%	1.1%	1.9%	0.0%	0.9%	2.6%	0.2%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00	07:00	09:00	07:00	10:00		09:00	08:00	08:00				07:00
Vol.	5	150	22	1	5	7		3	7	1				184
PM Peak	19:00	17:00	16:00		17:00	12:00		17:00	12:00	12:00				17:00
Vol.	8	204	36		2	7		3	8	1				246



Site Code: 35
 Station ID: 35
 US24 E-O ELLICOTT HWY

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/11/16	1	11	1	0	0	0	0	0	1	0	0	0	0	14
01:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
02:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
03:00	0	7	1	0	0	0	0	0	1	0	0	0	0	9
04:00	0	23	3	0	1	1	0	0	1	0	0	0	0	29
05:00	2	51	3	0	1	0	0	1	1	0	0	0	0	59
06:00	3	93	5	0	1	3	0	1	1	0	0	0	0	107
07:00	0	170	10	0	5	1	0	1	2	0	0	0	0	189
08:00	6	140	5	1	2	2	0	2	2	0	0	0	0	160
09:00	3	134	15	0	4	8	0	2	5	0	0	0	0	171
10:00	1	107	10	0	1	1	0	3	7	0	0	0	0	130
11:00	7	121	18	0	1	1	0	3	6	1	0	0	0	158
12 PM	2	112	20	0	3	5	0	1	2	0	0	0	0	145
13:00	1	115	10	0	1	3	0	0	7	0	0	0	0	137
14:00	3	127	14	0	1	6	0	1	8	0	0	0	0	160
15:00	4	150	12	0	1	2	0	1	5	0	0	0	0	175
16:00	5	181	11	0	2	11	0	1	6	0	0	0	0	217
17:00	10	196	13	0	2	3	0	1	6	0	0	0	0	231
18:00	5	170	7	0	1	2	0	0	7	0	0	0	0	192
19:00	1	95	7	0	3	1	0	0	0	0	0	0	0	107
20:00	6	73	0	0	0	0	0	0	3	0	0	0	0	82
21:00	0	53	3	0	0	0	0	0	1	0	0	0	0	57
22:00	0	30	0	0	0	0	0	0	2	0	0	0	0	32
23:00	0	18	0	0	0	0	0	0	0	0	0	0	0	18
Total	60	2189	170	1	30	50	0	18	74	1	0	0	0	2593
Percent	2.3%	84.4%	6.6%	0.0%	1.2%	1.9%	0.0%	0.7%	2.9%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00	11:00	08:00	07:00	09:00		10:00	10:00	11:00				07:00
Vol.	7	170	18	1	5	8		3	7	1				189
PM Peak	17:00	17:00	12:00		12:00	16:00		12:00	14:00					17:00
Vol.	10	196	20		3	11		1	8					231
Grand Total	108	4210	453	2	57	99	0	40	140	6	0	0	0	5115
Percent	2.1%	82.3%	8.9%	0.0%	1.1%	1.9%	0.0%	0.8%	2.7%	0.1%	0.0%	0.0%	0.0%	



Site Code: 35
 Station ID: 35
 US24 E-O ELLICOTT HWY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/16	1	13	2	0	1	1	0	2	0	0	0	1	0	21
01:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	8	2	0	0	0	0	1	3	0	0	0	0	14
04:00	1	29	4	0	0	1	0	0	1	0	0	0	0	36
05:00	0	57	13	0	1	0	0	1	5	1	1	0	0	79
06:00	0	141	31	0	2	1	0	1	5	0	0	0	0	181
07:00	1	163	27	2	3	4	0	0	7	0	0	0	0	207
08:00	2	140	22	1	2	5	0	1	4	0	0	0	0	177
09:00	4	121	15	0	4	6	0	2	7	0	0	0	0	159
10:00	7	100	13	0	0	5	0	1	4	2	0	0	0	132
11:00	1	118	17	1	3	4	0	3	7	0	0	0	0	154
12 PM	5	113	20	1	3	5	0	1	2	0	0	0	0	150
13:00	1	128	15	1	6	0	0	2	10	2	0	0	0	165
14:00	0	134	14	0	2	1	0	3	5	1	0	0	0	160
15:00	2	142	18	1	1	3	0	0	3	0	0	0	0	170
16:00	2	176	28	0	2	2	0	1	8	0	0	0	0	219
17:00	0	135	25	1	1	0	0	2	4	0	0	0	0	168
18:00	3	82	26	3	6	3	0	1	3	0	0	0	0	127
19:00	3	98	16	1	2	3	0	2	2	0	0	0	0	127
20:00	1	47	8	0	0	1	0	1	1	0	0	0	0	59
21:00	0	25	11	0	2	0	0	0	2	0	0	0	0	40
22:00	0	33	6	0	1	1	0	2	2	0	0	0	0	45
23:00	1	22	5	0	1	1	0	0	0	0	0	0	0	30
Total	35	2035	339	12	43	47	0	27	85	6	1	1	0	2631
Percent	1.3%	77.3%	12.9%	0.5%	1.6%	1.8%	0.0%	1.0%	3.2%	0.2%	0.0%	0.0%	0.0%	
AM Peak	10:00	07:00	06:00	07:00	09:00	09:00		11:00	07:00	10:00	05:00	00:00		07:00
Vol.	7	163	31	2	4	6		3	7	2	1	1		207
PM Peak	12:00	16:00	16:00	18:00	13:00	12:00		14:00	13:00	13:00				16:00
Vol.	5	176	28	3	6	5		3	10	2				219



Site Code: 35
 Station ID: 35
 US24 E-O ELLICOTT HWY

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/11/16	0	6	1	0	0	0	0	0	1	0	0	0	0	8
01:00	0	7	3	0	0	0	0	2	0	0	1	0	0	13
02:00	0	4	1	0	0	0	0	0	2	0	0	0	0	7
03:00	0	8	2	0	0	0	0	0	5	0	0	0	0	15
04:00	2	27	3	0	0	0	0	0	2	0	0	0	0	34
05:00	2	53	16	0	0	1	0	0	5	0	0	0	0	77
06:00	1	128	30	0	1	2	0	0	10	0	0	0	0	172
07:00	3	172	21	0	2	4	0	0	8	0	0	0	0	210
08:00	2	100	23	2	6	3	0	0	3	0	0	0	0	139
09:00	2	103	20	1	4	3	0	2	5	2	0	0	0	142
10:00	1	120	17	0	2	2	0	1	5	0	0	0	0	148
11:00	3	109	13	0	3	4	0	3	6	0	0	0	0	141
12 PM	2	130	22	2	1	1	0	0	7	1	0	0	0	166
13:00	0	113	18	0	6	1	0	4	6	0	0	0	0	148
14:00	2	125	23	0	2	4	0	2	4	0	0	0	0	162
15:00	5	135	16	0	1	4	0	2	3	0	0	0	0	166
16:00	1	155	27	1	5	1	0	1	2	0	0	0	0	193
17:00	0	131	35	0	3	1	0	2	1	0	0	0	0	173
18:00	4	108	13	2	0	3	0	2	3	0	0	0	0	135
19:00	2	84	13	0	0	1	0	1	0	0	0	0	0	101
20:00	1	69	23	0	0	1	0	1	2	0	0	0	0	97
21:00	2	46	7	0	1	2	0	0	3	0	0	0	0	61
22:00	0	25	6	0	0	0	0	1	1	0	0	0	0	33
23:00	0	31	2	0	0	0	0	0	0	0	0	0	0	33
Total	35	1989	355	8	37	38	0	24	84	3	1	0	0	2574
Percent	1.4%	77.3%	13.8%	0.3%	1.4%	1.5%	0.0%	0.9%	3.3%	0.1%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	06:00	08:00	08:00	07:00		11:00	06:00	09:00	01:00			07:00
Vol.	3	172	30	2	6	4		3	10	2	1			210
PM Peak	15:00	16:00	17:00	12:00	13:00	14:00		13:00	12:00	12:00				16:00
Vol.	5	155	35	2	6	4		4	7	1				193
Grand Total	70	4024	694	20	80	85	0	51	169	9	2	1	0	5205
Percent	1.3%	77.3%	13.3%	0.4%	1.5%	1.6%	0.0%	1.0%	3.2%	0.2%	0.0%	0.0%	0.0%	



Site Code: 36
 Station ID: 36
 ELLICOTT HWY N-O US24

Start Time	10-May-16 Tue	NB	SB	Total						
12:00 AM		0	0	0						
01:00		0	0	0						
02:00		0	0	0						
03:00		0	1	1						
04:00		1	2	3						
05:00		2	17	19						
06:00		3	16	19						
07:00		3	15	18						
08:00		6	21	27						
09:00		13	20	33						
10:00		6	13	19						
11:00		12	10	22						
12:00 PM		14	10	24						
01:00		13	8	21						
02:00		7	8	15						
03:00		20	12	32						
04:00		19	16	35						
05:00		23	7	30						
06:00		39	10	49						
07:00		12	4	16						
08:00		8	3	11						
09:00		3	2	5						
10:00		0	1	1						
11:00		1	0	1						
Total		205	196	401						
Percent		51.1%	48.9%							
AM Peak	-	09:00	08:00	-	-	-	-	-	-	09:00
Vol.	-	13	21	-	-	-	-	-	-	33
PM Peak	-	18:00	16:00	-	-	-	-	-	-	18:00
Vol.	-	39	16	-	-	-	-	-	-	49



Site Code: 37
 Station ID: 37
 ELLICOTT HWY S-O US24

Start Time	10-May-16 Tue	NB	SB	Total						
12:00 AM		1	0	1						
01:00		1	3	4						
02:00		0	0	0						
03:00		0	2	2						
04:00		5	1	6						
05:00		21	3	24						
06:00		34	16	50						
07:00		58	23	81						
08:00		26	19	45						
09:00		20	15	35						
10:00		23	18	41						
11:00		19	23	42						
12:00 PM		20	30	50						
01:00		28	29	57						
02:00		22	17	39						
03:00		29	26	55						
04:00		26	60	86						
05:00		27	47	74						
06:00		39	62	101						
07:00		13	45	58						
08:00		13	15	28						
09:00		8	8	16						
10:00		4	5	9						
11:00		0	2	2						
Total		437	469	906						
Percent		48.2%	51.8%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	58	23	-	-	-	-	-	-	81
PM Peak	-	18:00	18:00	-	-	-	-	-	-	18:00
Vol.	-	39	62	-	-	-	-	-	-	101



Site Code: 37
 Station ID: 37
 ELLICOTT HWY S-O US24

Start Time	11-May-16 Wed	NB	SB	Total						
12:00 AM		2	0	2						
01:00		0	1	1						
02:00		0	2	2						
03:00		2	0	2						
04:00		5	2	7						
05:00		23	6	29						
06:00		32	9	41						
07:00		58	30	88						
08:00		24	18	42						
09:00		19	14	33						
10:00		10	14	24						
11:00		26	22	48						
12:00 PM		23	19	42						
01:00		19	18	37						
02:00		16	27	43						
03:00		25	32	57						
04:00		29	44	73						
05:00		29	47	76						
06:00		31	27	58						
07:00		12	25	37						
08:00		13	21	34						
09:00		5	6	11						
10:00		3	12	15						
11:00		1	3	4						
Total		407	399	806						
Percent		50.5%	49.5%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	58	30	-	-	-	-	-	-	88
PM Peak	-	18:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	31	47	-	-	-	-	-	-	76
Grand Total		844	868							1712
Percent		49.3%	50.7%							
ADT		ADT 856		AADT 856						



Site Code: 43
 Station ID: 43
 US24 W-O CALHAN

Start Time	10-May-16 Tue	EB	WB							Total
12:00 AM		14	14							28
01:00		7	8							15
02:00		12	17							29
03:00		10	20							30
04:00		34	27							61
05:00		49	78							127
06:00		113	153							266
07:00		211	197							408
08:00		178	161							339
09:00		201	170							371
10:00		184	185							369
11:00		165	200							365
12:00 PM		204	169							373
01:00		137	163							300
02:00		165	176							341
03:00		182	172							354
04:00		210	208							418
05:00		230	186							416
06:00		190	148							338
07:00		105	108							213
08:00		86	101							187
09:00		58	59							117
10:00		30	39							69
11:00		24	29							53
Total		2799	2788							5587
Percent		50.1%	49.9%							
AM Peak	-	07:00	11:00	-	-	-	-	-	-	07:00
Vol.	-	211	200	-	-	-	-	-	-	408
PM Peak	-	17:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	230	208	-	-	-	-	-	-	418



Site Code: 43
 Station ID: 43
 US24 W-O CALHAN

Start Time	11-May-16 Wed	EB	WB							Total
12:00 AM		12	12							24
01:00		7	7							14
02:00		10	14							24
03:00		9	16							25
04:00		34	27							61
05:00		52	83							135
06:00		121	162							283
07:00		225	210							435
08:00		189	171							360
09:00		191	163							354
10:00		175	176							351
11:00		157	191							348
12:00 PM		195	161							356
01:00		130	155							285
02:00		157	168							325
03:00		174	165							339
04:00		200	199							399
05:00		220	177							397
06:00		182	141							323
07:00		100	102							202
08:00		82	97							179
09:00		55	57							112
10:00		30	38							68
11:00		24	28							52
Total		2731	2720							5451
Percent		50.1%	49.9%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	225	210	-	-	-	-	-	-	435
PM Peak	-	17:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	220	199	-	-	-	-	-	-	399
Grand Total		5530	5508							11038
Percent		50.1%	49.9%							
ADT		ADT 5,519	AADT 5,519							



Site Code: 38
 Station ID: 38
 US24 W-O MANITOU ST

Start Time	10-May-16 Tue	EB	WB							Total
12:00 AM		21	19							40
01:00		9	9							18
02:00		7	4							11
03:00		13	10							23
04:00		27	34							61
05:00		46	68							114
06:00		83	158							241
07:00		193	194							387
08:00		165	164							329
09:00		146	169							315
10:00		157	164							321
11:00		145	143							288
12:00 PM		188	161							349
01:00		147	152							299
02:00		170	182							352
03:00		178	179							357
04:00		182	254							436
05:00		219	186							405
06:00		171	129							300
07:00		130	114							244
08:00		88	82							170
09:00		46	36							82
10:00		30	51							81
11:00		13	26							39
Total		2574	2688							5262
Percent		48.9%	51.1%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	193	194	-	-	-	-	-	-	387
PM Peak	-	17:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	219	254	-	-	-	-	-	-	436



Site Code: 38
 Station ID: 38
 US24 W-O MANITOU ST

Start Time	11-May-16 Wed	EB	WB							Total
12:00 AM		15	8							23
01:00		7	10							17
02:00		7	11							18
03:00		12	6							18
04:00		29	27							56
05:00		56	64							120
06:00		120	145							265
07:00		215	197							412
08:00		154	127							281
09:00		195	153							348
10:00		154	147							301
11:00		171	142							313
12:00 PM		171	198							369
01:00		158	174							332
02:00		174	187							361
03:00		176	174							350
04:00		203	234							437
05:00		213	171							384
06:00		177	171							348
07:00		114	113							227
08:00		92	86							178
09:00		64	62							126
10:00		35	38							73
11:00		19	28							47
Total		2731	2673							5404
Percent		50.5%	49.5%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	215	197	-	-	-	-	-	-	412
PM Peak	-	17:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	213	234	-	-	-	-	-	-	437
Grand Total		5305	5361							10666
Percent		49.7%	50.3%							
ADT		ADT 5,333	AADT 5,333							



Site Code: 39
 Station ID: 39
 CALHAN HWY N-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		0	0							0
01:00		1	1							2
02:00		0	0							0
03:00		0	1							1
04:00		2	0							2
05:00		4	2							6
06:00		7	12							19
07:00		40	37							77
08:00		20	23							43
09:00		28	21							49
10:00		9	22							31
11:00		12	9							21
12:00 PM		23	24							47
01:00		28	22							50
02:00		34	33							67
03:00		30	20							50
04:00		29	43							72
05:00		32	23							55
06:00		20	29							49
07:00		23	6							29
08:00		6	4							10
09:00		4	0							4
10:00		1	1							2
11:00		0	0							0
Total		353	333							686
Percent		51.5%	48.5%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	40	37	-	-	-	-	-	-	77
PM Peak	-	14:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	34	43	-	-	-	-	-	-	72



Site Code: 39
 Station ID: 39
 CALHAN HWY N-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		2	0							2
01:00		0	0							0
02:00		0	0							0
03:00		0	0							0
04:00		0	0							0
05:00		3	2							5
06:00		10	11							21
07:00		34	37							71
08:00		19	18							37
09:00		12	20							32
10:00		11	15							26
11:00		14	13							27
12:00 PM		19	21							40
01:00		23	15							38
02:00		9	11							20
03:00		20	8							28
04:00		28	39							67
05:00		24	31							55
06:00		15	31							46
07:00		4	4							8
08:00		18	4							22
09:00		5	2							7
10:00		0	1							1
11:00		0	1							1
Total		270	284							554
Percent		48.7%	51.3%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	34	37	-	-	-	-	-	-	71
PM Peak	-	16:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	28	39	-	-	-	-	-	-	67
Grand Total		623	617							1240
Percent		50.2%	49.8%							
ADT		ADT 620		AADT 620						



Site Code: 40
 Station ID: 40
 CALHAN HWY S-O US24

Start Time	10-May-16 Tue	NB	SB	Total						
12:00 AM		0	2	2						
01:00		1	0	1						
02:00		1	0	1						
03:00		0	0	0						
04:00		0	5	5						
05:00		7	12	19						
06:00		14	25	39						
07:00		40	52	92						
08:00		33	42	75						
09:00		39	45	84						
10:00		43	38	81						
11:00		33	34	67						
12:00 PM		31	33	64						
01:00		38	40	78						
02:00		46	38	84						
03:00		49	35	84						
04:00		49	35	84						
05:00		36	26	62						
06:00		43	41	84						
07:00		25	29	54						
08:00		14	11	25						
09:00		9	9	18						
10:00		6	2	8						
11:00		2	4	6						
Total		559	558	1117						
Percent		50.0%	50.0%							
AM Peak	-	10:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	43	52	-	-	-	-	-	-	92
PM Peak	-	15:00	18:00	-	-	-	-	-	-	14:00
Vol.	-	49	41	-	-	-	-	-	-	84



Site Code: 40
 Station ID: 40
 CALHAN HWY S-O US24

Start Time	11-May-16 Wed	NB	SB							Total
12:00 AM		3	2							5
01:00		3	0							3
02:00		0	0							0
03:00		2	0							2
04:00		0	5							5
05:00		4	11							15
06:00		18	22							40
07:00		41	42							83
08:00		16	39							55
09:00		35	32							67
10:00		33	30							63
11:00		36	22							58
12:00 PM		26	41							67
01:00		40	34							74
02:00		32	27							59
03:00		40	32							72
04:00		41	39							80
05:00		48	28							76
06:00		43	20							63
07:00		23	22							45
08:00		22	22							44
09:00		14	12							26
10:00		7	3							10
11:00		3	2							5
Total		530	487							1017
Percent		52.1%	47.9%							
AM Peak	-	07:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	41	42	-	-	-	-	-	-	83
PM Peak	-	17:00	12:00	-	-	-	-	-	-	16:00
Vol.	-	48	41	-	-	-	-	-	-	80
Grand Total		1089	1045							2134
Percent		51.0%	49.0%							
ADT		ADT 1,067	AADT 1,067							



Site Code: 41
 Station ID: 41
 HARRISVILLE RD S-O US24

Start Time	10-May-16 Tue	NB	SB							Total
12:00 AM		1	3							4
01:00		0	0							0
02:00		0	0							0
03:00		2	0							2
04:00		3	0							3
05:00		8	1							9
06:00		18	2							20
07:00		29	11							40
08:00		16	9							25
09:00		17	9							26
10:00		10	14							24
11:00		8	10							18
12:00 PM		10	6							16
01:00		10	15							25
02:00		13	15							28
03:00		8	14							22
04:00		12	14							26
05:00		14	14							28
06:00		10	23							33
07:00		2	12							14
08:00		7	12							19
09:00		1	2							3
10:00		1	0							1
11:00		0	1							1
Total		200	187							387
Percent		51.7%	48.3%							
AM Peak	-	07:00	10:00	-	-	-	-	-	-	07:00
Vol.	-	29	14	-	-	-	-	-	-	40
PM Peak	-	17:00	18:00	-	-	-	-	-	-	18:00
Vol.	-	14	23	-	-	-	-	-	-	33



Site Code: 42
 Station ID: 42
 US24 W-O RAMAH

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/16	0	9	1	0	0	0	0	2	0	0	0	0	0	12
01:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
03:00	0	7	0	0	0	0	0	1	0	0	0	0	0	8
04:00	0	26	1	0	1	0	0	0	0	0	0	0	0	28
05:00	0	28	4	0	2	0	0	1	0	0	0	0	0	35
06:00	0	48	5	1	1	0	0	1	0	0	0	0	0	56
07:00	3	69	4	0	4	0	0	4	0	0	0	0	0	84
08:00	1	70	10	0	1	0	0	10	0	0	0	0	0	92
09:00	1	75	6	0	1	0	0	2	0	0	0	0	0	85
10:00	2	83	1	0	3	1	0	12	0	0	0	0	0	102
11:00	3	60	4	0	2	0	0	11	0	0	0	0	0	80
12 PM	1	79	8	0	2	0	0	10	0	0	0	0	0	100
13:00	1	77	4	0	0	0	0	7	2	0	0	0	0	91
14:00	3	65	8	1	1	0	0	9	0	0	0	0	0	87
15:00	0	58	6	0	0	0	0	9	0	0	0	0	0	73
16:00	2	60	7	0	2	0	0	3	0	0	0	0	0	74
17:00	3	91	12	0	1	0	0	9	1	0	1	0	0	118
18:00	1	60	9	0	0	0	0	5	0	0	0	0	0	75
19:00	0	54	7	0	1	0	0	2	2	0	0	0	0	66
20:00	2	41	3	0	0	0	0	4	1	0	0	0	0	51
21:00	0	28	2	0	1	0	0	4	1	0	0	0	0	36
22:00	0	14	3	0	0	0	0	0	0	0	0	0	0	17
23:00	0	5	1	0	0	0	0	1	0	0	0	0	0	7
Total	23	1120	106	2	23	1	0	107	7	0	1	0	0	1390
Percent	1.7%	80.6%	7.6%	0.1%	1.7%	0.1%	0.0%	7.7%	0.5%	0.0%	0.1%	0.0%	0.0%	
AM Peak	07:00	10:00	08:00	06:00	07:00	10:00		10:00						10:00
Vol.	3	83	10	1	4	1		12						102
PM Peak	14:00	17:00	17:00	14:00	12:00			12:00	13:00		17:00			17:00
Vol.	3	91	12	1	2			10	2		1			118



Site Code: 42
 Station ID: 42
 US24 W-O RAMAH

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/11/16	0	5	2	0	0	0	0	0	0	0	0	0	0	7
01:00	0	6	0	0	0	0	0	0	1	0	0	0	0	7
02:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	9	1	0	0	0	0	1	0	0	0	0	0	11
04:00	0	23	0	0	1	0	0	1	0	0	0	0	0	25
05:00	0	37	8	0	1	0	0	2	0	0	0	0	0	48
06:00	1	61	8	0	1	0	0	2	0	0	0	0	0	73
07:00	0	93	11	0	3	0	0	1	0	0	0	0	0	108
08:00	0	101	6	1	2	0	0	4	0	0	0	0	0	114
09:00	0	104	10	0	3	0	0	10	0	0	0	0	0	127
10:00	0	82	5	0	1	0	0	13	0	0	0	0	0	101
11:00	2	80	7	0	2	0	0	8	0	0	0	0	0	99
12 PM	2	61	6	0	2	1	0	9	0	0	0	0	0	81
13:00	4	62	8	0	1	0	0	6	1	0	0	0	0	82
14:00	1	68	7	0	1	1	0	16	0	0	0	0	0	94
15:00	1	65	10	0	0	1	0	7	0	0	0	0	0	84
16:00	2	81	11	0	0	1	0	15	0	0	0	0	0	110
17:00	0	93	10	0	0	0	0	11	0	0	0	0	0	114
18:00	0	71	10	0	1	0	0	9	0	0	0	0	0	91
19:00	1	44	4	0	2	0	0	1	1	0	0	0	0	53
20:00	1	34	6	1	0	0	0	1	1	0	0	0	0	44
21:00	0	37	5	0	1	0	0	0	0	0	0	0	0	43
22:00	0	18	1	0	0	0	0	2	0	0	0	0	0	21
23:00	0	12	1	0	0	0	0	1	0	0	0	0	0	14
Total	15	1251	137	2	22	4	0	120	4	0	0	0	0	1555
Percent	1.0%	80.5%	8.8%	0.1%	1.4%	0.3%	0.0%	7.7%	0.3%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	07:00	08:00	07:00			10:00	01:00					09:00
Vol.	2	104	11	1	3			13	1					127
PM Peak	13:00	17:00	16:00	20:00	12:00	12:00		14:00	13:00					17:00
Vol.	4	93	11	1	2	1		16	1					114
Grand Total	38	2371	243	4	45	5	0	227	11	0	1	0	0	2945
Percent	1.3%	80.5%	8.3%	0.1%	1.5%	0.2%	0.0%	7.7%	0.4%	0.0%	0.0%	0.0%	0.0%	



Site Code: 42
 Station ID: 42
 US24 W-O RAMAH

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/16	0	13	1	0	0	0	0	1	0	0	1	0	0	16
01:00	0	3	0	0	0	0	0	0	1	0	0	0	0	4
02:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
03:00	0	2	0	0	0	0	0	3	0	0	0	0	0	5
04:00	2	18	0	0	0	0	0	3	0	0	0	0	0	23
05:00	0	25	2	0	0	0	0	3	3	0	0	0	0	33
06:00	1	64	4	0	1	0	0	9	0	0	0	0	0	79
07:00	1	69	8	0	2	0	0	6	0	0	0	0	0	86
08:00	1	64	9	0	5	0	0	6	0	0	0	0	0	85
09:00	1	56	10	0	2	0	0	6	1	0	0	0	0	76
10:00	3	58	6	0	0	0	0	5	2	0	0	0	0	74
11:00	2	62	6	0	2	0	0	6	0	0	0	0	0	78
12 PM	0	59	14	0	3	0	0	6	1	0	0	0	0	83
13:00	0	74	6	0	2	0	0	6	1	0	0	0	0	89
14:00	0	98	8	0	0	2	0	6	0	0	0	0	0	114
15:00	0	110	5	0	0	0	0	7	0	0	0	0	0	122
16:00	2	109	15	0	3	0	0	6	0	0	0	0	0	135
17:00	1	80	7	0	1	1	0	8	0	0	0	0	0	98
18:00	0	64	8	0	3	0	0	7	0	0	0	0	0	82
19:00	0	44	3	0	4	0	0	7	0	0	0	0	0	58
20:00	0	38	5	0	2	0	0	0	1	0	0	0	0	46
21:00	0	19	0	0	0	0	0	2	1	0	0	0	0	22
22:00	0	33	5	0	0	0	0	3	0	0	0	0	0	41
23:00	1	14	2	0	0	0	0	1	0	0	0	0	0	18
Total	15	1178	125	0	30	3	0	107	11	0	1	0	0	1470
Percent	1.0%	80.1%	8.5%	0.0%	2.0%	0.2%	0.0%	7.3%	0.7%	0.0%	0.1%	0.0%	0.0%	
AM Peak	10:00	07:00	09:00		08:00			06:00	05:00		00:00			07:00
Vol.	3	69	10		5			9	3		1			86
PM Peak	16:00	15:00	16:00		19:00	14:00		17:00	12:00					16:00
Vol.	2	110	15		4	2		8	1					135



Site Code: 42
 Station ID: 42
 US24 W-O RAMAH

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/11/16	0	1	1	0	0	0	0	1	0	0	0	0	0	3
01:00	0	5	0	0	0	0	0	1	1	0	0	0	0	7
02:00	0	7	1	0	0	0	0	2	0	0	0	0	0	10
03:00	0	1	0	0	0	0	0	3	0	0	0	0	0	4
04:00	0	14	0	0	0	0	0	2	2	0	0	0	0	18
05:00	0	29	1	0	0	0	0	4	1	0	0	0	0	35
06:00	0	61	9	0	0	0	0	8	1	0	0	0	0	79
07:00	0	61	11	0	3	0	0	7	0	0	0	0	0	82
08:00	0	56	8	1	0	0	0	5	1	0	0	0	0	71
09:00	0	57	6	0	4	0	0	9	0	0	0	0	0	76
10:00	1	54	5	0	0	0	0	6	0	0	0	0	0	66
11:00	3	55	6	0	1	0	0	10	0	0	0	0	0	75
12 PM	3	91	9	0	1	2	0	8	0	0	0	0	0	114
13:00	3	86	6	0	4	0	0	5	1	0	0	0	0	105
14:00	2	93	8	0	3	1	0	7	0	0	0	0	0	114
15:00	0	92	7	0	2	0	0	4	0	0	0	0	0	105
16:00	0	110	16	0	3	0	0	3	0	0	0	0	0	132
17:00	0	91	7	0	0	1	0	3	0	0	0	0	0	102
18:00	1	93	1	0	0	0	0	8	0	0	0	0	0	103
19:00	0	50	4	0	0	0	0	2	0	0	0	0	0	56
20:00	0	35	6	0	0	0	0	5	0	0	0	0	0	46
21:00	0	35	2	0	0	0	0	5	0	0	0	0	0	42
22:00	0	27	0	0	0	0	0	1	0	0	0	0	0	28
23:00	0	20	0	0	0	0	0	0	0	0	0	0	0	20
Total	13	1224	114	1	21	4	0	109	7	0	0	0	0	1493
Percent	0.9%	82.0%	7.6%	0.1%	1.4%	0.3%	0.0%	7.3%	0.5%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	06:00	07:00	08:00	09:00			11:00	04:00					07:00
Vol.	3	61	11	1	4			10	2					82
PM Peak	12:00	16:00	16:00		13:00	12:00		12:00	13:00					16:00
Vol.	3	110	16		4	2		8	1					132
Grand Total	28	2402	239	1	51	7	0	216	18	0	1	0	0	2963
Percent	0.9%	81.1%	8.1%	0.0%	1.7%	0.2%	0.0%	7.3%	0.6%	0.0%	0.0%	0.0%	0.0%	



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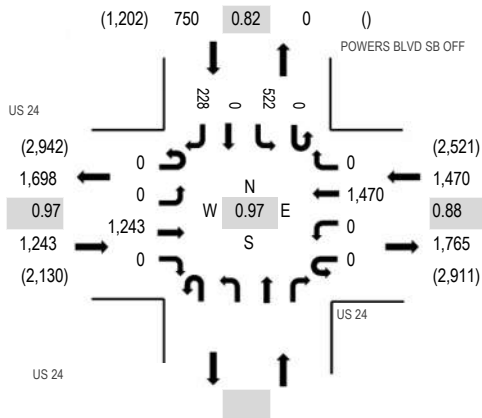
Location: 1 POWERS BLVD SB OFF & US 24 AM

Date and Start Time: Tuesday, May 10, 2016

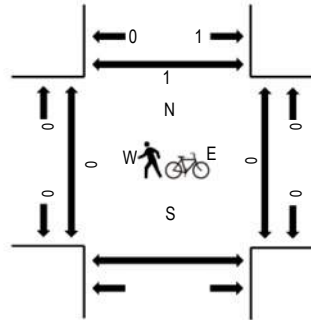
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 24 Eastbound				US 24 Westbound				POWERS BLVD SB OFF				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	290	0	0	0	314	0	0	174	0	54	832	3,463	0	0	0	
7:15 AM	0	0	319	0	0	0	369	0	0	144	0	60	892	3,309	0	0	0	
7:30 AM	0	0	313	0	0	0	417	0	0	98	0	58	886	3,020	0	0	1	
7:45 AM	0	0	321	0	0	0	370	0	0	106	0	56	853	2,678	0	0	0	
8:00 AM	0	0	265	0	0	0	268	0	0	94	0	51	678	2,390	0	0	0	
8:15 AM	0	0	220	0	0	0	281	0	0	54	0	48	603		0	0	0	
8:30 AM	0	0	191	0	0	0	251	0	0	55	0	47	544		0	0	0	
8:45 AM	0	0	211	0	0	0	251	0	0	56	0	47	565		0	0	0	
Count Total	0	0	2,130	0	0	0	2,521	0	0	781	0	421	5,853		0	0	1	
Peak Hour	0	0	1,243	0	0	0	1,470	0	0	522	0	228	3,463		0	0	1	



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Location: 2 POWERS BLVD NB OFF & US 24 AM

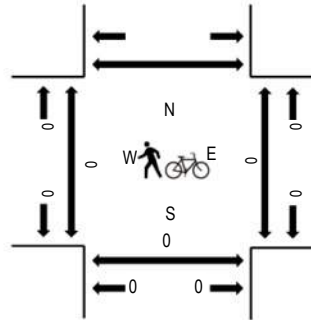
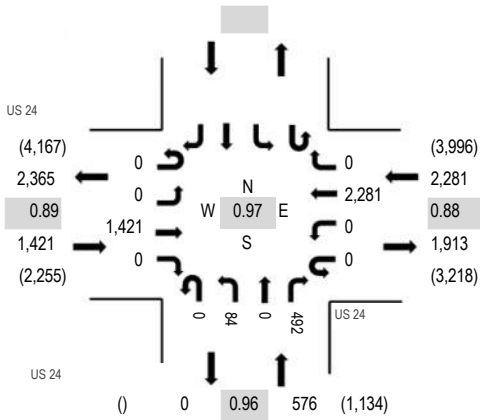
Date and Start Time: Tuesday, May 10, 2016

Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles

Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

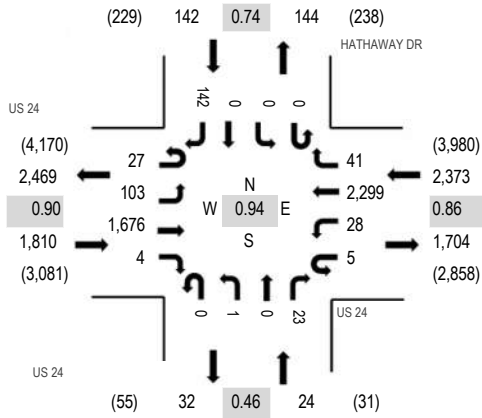
Interval Start Time	US 24 Eastbound				US 24 Westbound				POWERS BLVD NB OFF				Total	Rolling Hour	Pedestrian Crossings					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			U-Turn	Left	Thru	Right	West	East
7:00 AM	0	0	400	0	0	0	527	0	0	17	0	126	1,070	4,278	0	0	0	0	0	0
7:15 AM	0	0	386	0	0	0	564	0	0	24	0	123	1,097	4,079	0	0	0	0	0	0
7:30 AM	0	0	311	0	0	0	650	0	0	19	0	115	1,095	3,792	0	0	0	0	0	0
7:45 AM	0	0	324	0	0	0	540	0	0	24	0	128	1,016	3,438	0	0	0	0	0	0
8:00 AM	0	0	264	0	0	0	453	0	0	18	0	136	871	3,107	0	0	0	0	0	0
8:15 AM	0	0	201	0	0	0	460	0	0	19	0	130	810		0	0	0	0	0	0
8:30 AM	0	0	178	0	0	0	438	0	0	26	0	99	741		0	0	0	0	0	0
8:45 AM	0	0	191	0	0	0	364	0	0	24	0	106	685		0	0	0	0	0	0
Count Total	0	0	2,255	0	0	0	3,996	0	0	171	0	963	7,385		0	0	0	0	0	0
Peak Hour	0	0	1,421	0	0	0	2,281	0	0	84	0	492	4,278		0	0	0	0	0	0



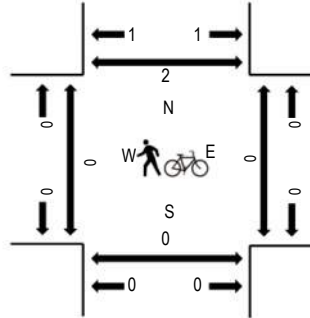
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Location: 3 HATHAWAY DR & US 24 AM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 24 Eastbound				US 24 Westbound				HATHAWAY DR Northbound				HATHAWAY DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	7	20	448	0	3	3	546	6	0	0	0	2	0	0	0	31	1,066	4,349	0	0	0	0
7:15 AM	4	25	474	1	0	7	578	9	0	1	0	4	0	0	0	23	1,126	4,136	0	0	0	0
7:30 AM	6	22	396	3	2	9	666	14	0	0	0	4	0	0	0	40	1,162	3,751	0	0	0	0
7:45 AM	10	36	358	0	0	9	509	12	0	0	0	13	0	0	0	48	995	3,321	0	0	0	2
8:00 AM	12	19	356	3	0	4	428	5	0	0	0	1	0	0	0	25	853	2,972	0	0	0	0
8:15 AM	7	24	282	1	0	3	393	4	0	0	0	2	0	0	0	25	741		0	0	0	0
8:30 AM	9	17	258	1	1	5	421	4	0	0	0	0	0	0	0	16	732		0	0	0	0
8:45 AM	14	17	250	1	0	5	330	4	0	0	0	4	0	0	0	21	646		0	0	0	0
Count Total	69	180	2,822	10	6	45	3,871	58	0	1	0	30	0	0	0	229	7,321		0	0	0	2
Peak Hour	27	103	1,676	4	5	28	2,299	41	0	1	0	23	0	0	0	142	4,349		0	0	0	2



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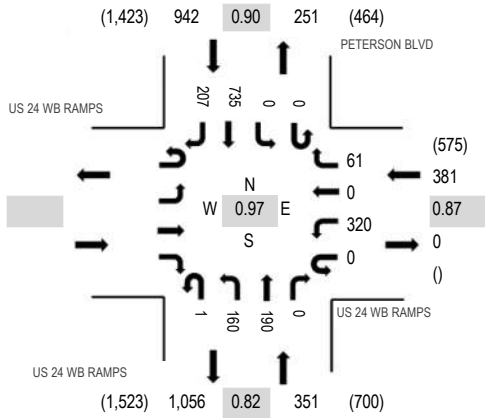
Location: 4 PETERSON BLVD & US 24 WB RAMPS AM

Date and Start Time: Tuesday, May 10, 2016

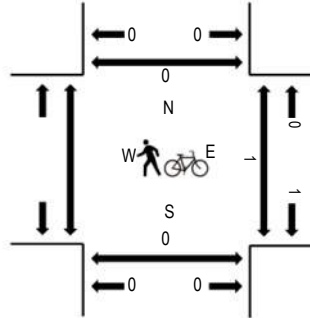
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 24 WB RAMPS Eastbound				US 24 WB RAMPS Westbound				PETERSON BLVD Northbound				PETERSON BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM					0	88	0	21	1	26	32	0	0	0	0	215	47	430	1,674	0	0	0
7:15 AM					0	87	0	12	0	39	37	0	0	0	0	172	43	390	1,560	0	0	0
7:30 AM					0	67	0	10	0	47	49	0	0	0	0	199	61	433	1,411	0	0	0
7:45 AM					0	78	0	18	0	48	72	0	0	0	0	149	56	421	1,220	1	0	0
8:00 AM					0	47	0	13	0	40	51	0	0	0	0	111	54	316	1,024	0	0	0
8:15 AM					0	37	0	10	0	43	39	0	0	0	0	74	38	241		0	0	0
8:30 AM					0	33	0	10	0	55	46	0	0	0	0	57	41	242		0	0	0
8:45 AM					0	29	0	15	1	45	29	0	0	0	0	78	28	225		0	0	0
Count Total					0	466	0	109	2	343	355	0	0	0	0	1,055	368	2,698		1	0	0
Peak Hour					0	320	0	61	1	160	190	0	0	0	0	735	207	1,674		1	0	0



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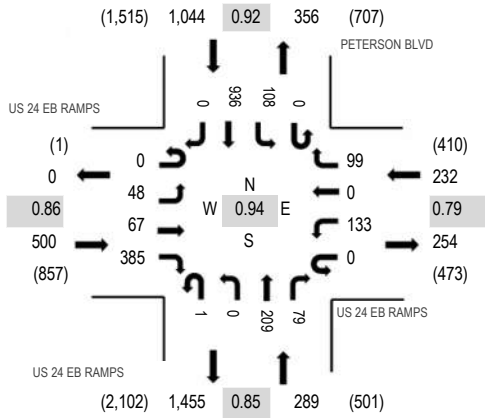
Location: 5 PETERSON BLVD & US 24 EB RAMPS AM

Date and Start Time: Tuesday, May 10, 2016

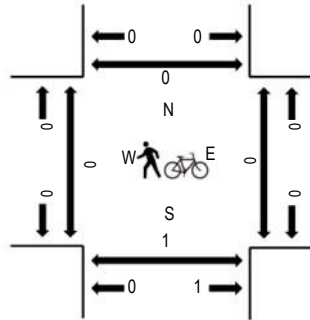
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:00 AM - 07:15 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 24 EB RAMPS Eastbound				US 24 EB RAMPS Westbound				PETERSON BLVD Northbound				PETERSON BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	7	15	122	0	35	0	14	0	0	37	35	0	28	255	0	548	2,065	0	0	0	0
7:15 AM	0	10	17	58	0	48	0	25	0	0	41	13	0	22	234	0	468	1,903	0	0	0	0
7:30 AM	0	10	19	97	0	36	0	30	0	0	62	16	0	29	248	0	547	1,722	0	0	0	0
7:45 AM	0	21	16	108	0	14	0	30	1	0	69	15	0	29	199	0	502	1,446	0	0	1	0
8:00 AM	0	22	19	92	0	11	0	29	0	0	38	12	0	23	140	0	386	1,218	0	0	0	0
8:15 AM	0	10	16	51	0	13	0	33	1	0	41	14	0	29	79	0	287		0	0	0	0
8:30 AM	0	13	15	46	0	9	0	40	0	0	46	11	0	19	72	0	271		0	0	0	0
8:45 AM	0	10	16	47	0	9	0	34	0	0	35	14	0	31	77	1	274		0	0	0	0
Count Total	0	103	133	621	0	175	0	235	2	0	369	130	0	210	1,304	1	3,283		0	0	1	0
Peak Hour	0	48	67	385	0	133	0	99	1	0	209	79	0	108	936	0	2,065		0	0	1	0



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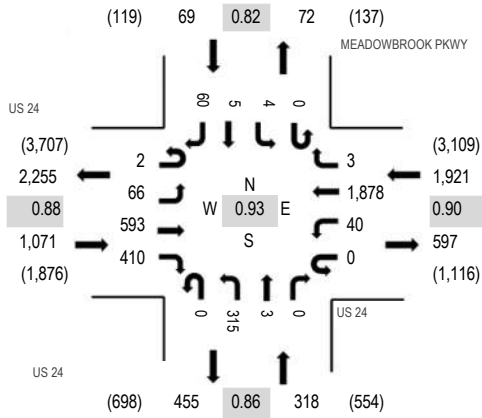
Location: 6 MEADOWBROOK PKWY & US 24 AM

Date and Start Time: Tuesday, May 10, 2016

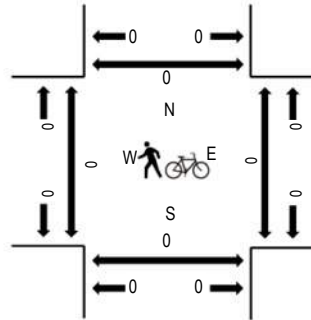
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:00 AM - 07:15 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

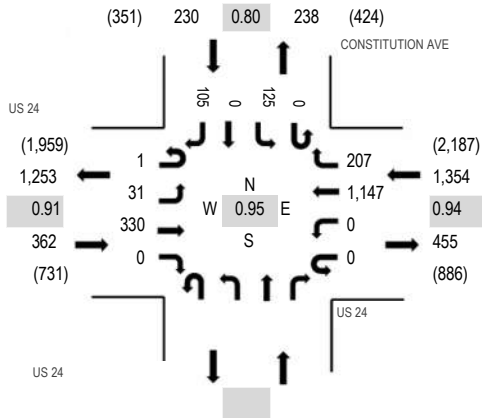
Interval Start Time	US 24 Eastbound				US 24 Westbound				MEADOWBROOK PKWY Northbound			MEADOWBROOK PKWY Southbound			Total	Rolling Hour	Pedestrian Crossings						
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left			Thru	Right	West	East	South	North	
7:00 AM	0	10	147	148	0	17	485	0	0	78	0	0	0	0	3	1	15	904	3,379	0	0	0	0
7:15 AM	0	21	140	108	0	12	452	1	0	90	0	0	0	0	0	0	15	839	3,107	0	0	0	0
7:30 AM	1	11	155	81	0	7	525	1	0	90	2	0	0	1	2	11	887	2,826	0	0	0	0	
7:45 AM	1	24	151	73	0	4	416	1	0	57	1	0	0	0	2	19	749	2,526	0	0	0	0	
8:00 AM	0	20	136	62	0	3	338	0	0	59	1	1	0	0	2	10	632	2,279	0	0	0	0	
8:15 AM	0	12	123	61	0	3	284	1	0	56	0	0	0	0	3	15	558		0	0	0	0	
8:30 AM	0	9	133	51	0	1	333	1	0	52	0	0	0	0	0	7	587		0	0	0	0	
8:45 AM	2	17	124	55	0	2	220	2	0	64	2	1	0	1	0	12	502		0	0	0	0	
Count Total	4	124	1,109	639	0	49	3,053	7	0	546	6	2	0	5	10	104	5,658		0	0	0	0	
Peak Hour	2	66	593	410	0	40	1,878	3	0	315	3	0	0	4	5	60	3,379		0	0	0	0	



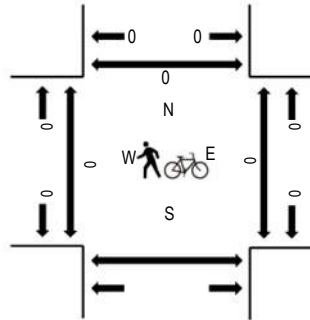
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Location: 8 CONSTITUTION AVE & US 24 AM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 24 Eastbound				US 24 Westbound				Northbound			Southbound			Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left			Thru	Right	West	East
7:00 AM	1	6	86	0	0	0	290	52	0	33	0	25	493	1,946	0	0	0	0	0	0
7:15 AM	0	7	80	0	0	0	305	46	0	36	0	36	510	1,794	0	0	0	0	0	0
7:30 AM	0	10	75	0	0	0	303	57	0	28	0	25	498	1,625	0	0	0	0	0	0
7:45 AM	0	8	89	0	0	0	249	52	0	28	0	19	445	1,485	0	0	0	0	0	0
8:00 AM	0	6	81	0	1	0	184	39	0	22	0	8	341	1,323	0	0	0	0	0	0
8:15 AM	0	7	84	0	0	0	182	38	0	23	0	7	341		0	0	0	0	0	0
8:30 AM	0	13	77	0	0	0	192	40	0	29	0	7	358		0	0	0	0	0	0
8:45 AM	0	4	97	0	0	0	118	39	0	17	0	8	283		0	0	0	0	0	0
Count Total	1	61	669	0	1	0	1,823	363	0	216	0	135	3,269		0	0	0	0	0	0
Peak Hour	1	31	330	0	0	0	1,147	207	0	125	0	105	1,946		0	0	0	0	0	0

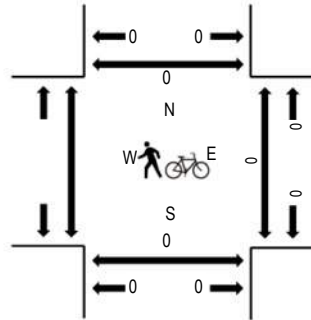
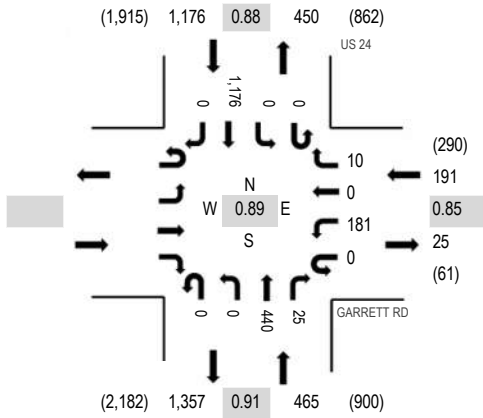


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Location: 9 US 24 & GARRETT RD AM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:00 AM - 07:15 AM

Peak Hour - All Vehicles

Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	GARRETT RD				US 24				US 24				Total	Rolling Hour	Pedestrian Crossings			
	Eastbound		Westbound		Northbound		Southbound		U-Turn	Left	Thru	Right			West	East	South	North
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right					U-Turn	Left				
7:00 AM	0	53	0	3	0	0	124	4	0	0	333	0	517	1,832	0	0	0	
7:15 AM	0	47	0	4	0	0	106	5	0	0	325	0	487	1,664	0	0	0	
7:30 AM	0	53	0	2	0	0	104	7	0	0	284	0	450	1,514	0	0	0	
7:45 AM	0	28	0	1	0	0	106	9	0	0	234	0	378	1,383	0	0	0	
8:00 AM	0	39	0	0	0	0	106	5	0	1	198	0	349	1,273	0	0	0	
8:15 AM	0	16	0	3	0	0	96	6	0	0	216	0	337		0	0	0	
8:30 AM	0	18	0	1	0	0	99	13	0	2	186	0	319		0	0	0	
8:45 AM	0	19	0	3	0	0	104	6	0	3	133	0	268		0	0	0	
Count Total	0	273	0	17	0	0	845	55	0	6	1,909	0	3,105		0	0	0	
Peak Hour	0	181	0	10	0	0	440	25	0	0	1,176	0	1,832		0	0	0	

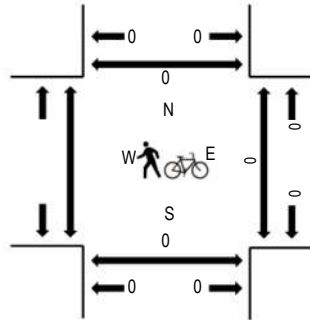
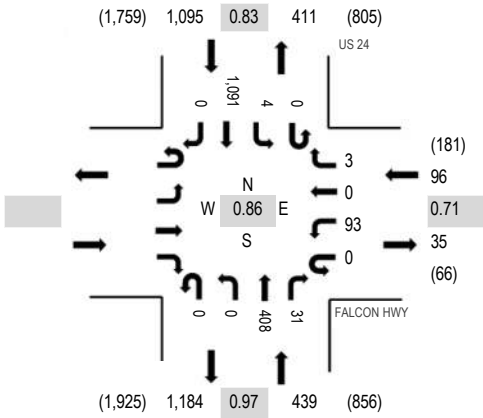


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Location: 10 US 24 & FALCON HWY AM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles

Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

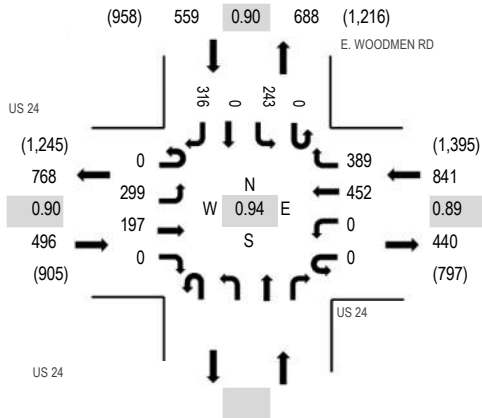
Interval Start Time	FALCON HWY Eastbound			FALCON HWY Westbound			US 24 Northbound			US 24 Southbound			Total	Rolling Hour	Pedestrian Crossings					
	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right			West	East	South	North		
7:00 AM				0	22	0	1	0	0	109	4	0	2	302	0	440	1,630	0	0	0
7:15 AM				0	29	0	2	0	0	105	8	0	1	329	0	474	1,489	0	0	0
7:30 AM				0	14	0	0	0	0	98	6	0	1	251	0	370	1,330	0	0	0
7:45 AM				0	28	0	0	0	0	96	13	0	0	209	0	346	1,266	0	0	0
8:00 AM				0	18	0	0	0	0	99	4	0	1	177	0	299	1,166	0	0	0
8:15 AM				0	34	0	1	0	0	89	8	0	0	183	0	315		0	0	0
8:30 AM				0	18	0	1	0	0	103	8	0	2	174	0	306		0	0	0
8:45 AM				0	11	0	2	0	0	99	7	0	1	126	0	246		0	0	0
Count Total				0	174	0	7	0	0	798	58	0	8	1,751	0	2,796		0	0	0
Peak Hour				0	93	0	3	0	0	408	31	0	4	1,091	0	1,630		0	0	0



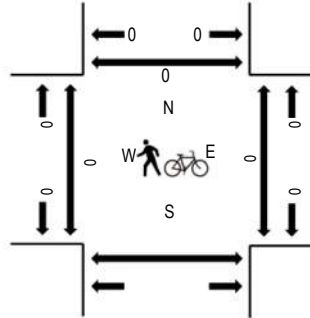
(303) 216-2439
www.alltrafficdata.net

Location: 12 E. WOODMEN RD & US 24 AM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

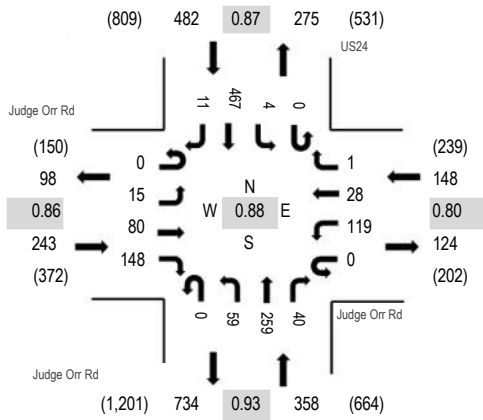
Interval Start Time	US 24 Eastbound				US 24 Westbound				Northbound			E. WOODMEN RD Southbound			Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left			Thru	Right	West	East	South
7:00 AM	0	77	52	0	0	0	124	88					0	69	0	86	496	1,896	0	0	0
7:15 AM	0	73	46	0	0	0	118	119					0	61	0	80	497	1,741	0	0	0
7:30 AM	0	85	53	0	0	0	110	101					0	74	0	79	502	1,632	0	0	0
7:45 AM	0	64	46	0	0	0	100	81					0	39	0	71	401	1,445	0	0	0
8:00 AM	0	50	39	0	0	0	81	75					1	42	0	53	341	1,362	0	0	0
8:15 AM	0	80	36	0	0	0	68	86					0	46	0	72	388		0	0	0
8:30 AM	0	39	53	0	0	0	49	72					0	48	0	54	315		0	0	0
8:45 AM	0	55	57	0	0	0	53	70					0	36	0	47	318		0	0	0
Count Total	0	523	382	0	0	0	703	692					1	415	0	542	3,258		0	0	0
Peak Hour	0	299	197	0	0	0	452	389					0	243	0	316	1,896		0	0	0



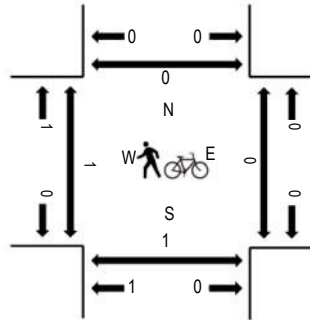
(303) 216-2439
www.alltrafficdata.net

Location: 13 US24 & Judge Orr Rd
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

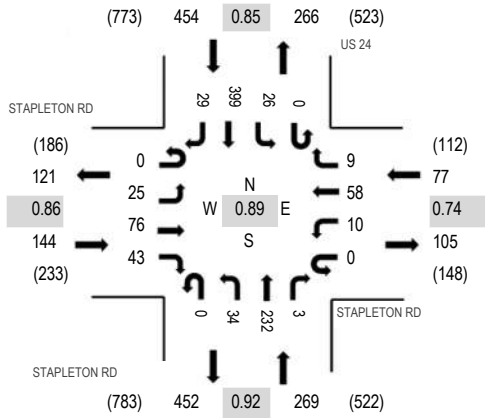
Interval Start Time	Judge Orr Rd Eastbound				Judge Orr Rd Westbound				US24 Northbound			US24 Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
7:00 AM	0	5	28	38	0	39	6	0	0	19	66	10	0	1	112	3	327	1,231	0	0	0	0
7:15 AM	0	5	24	40	0	40	6	0	0	17	68	11	0	2	133	4	350	1,150	1	0	1	0
7:30 AM	0	4	14	43	0	30	9	0	0	14	72	7	0	0	120	1	314	1,013	0	0	0	0
7:45 AM	0	1	14	27	0	10	7	1	0	9	53	12	0	1	102	3	240	899	0	0	0	0
8:00 AM	0	1	7	29	0	19	9	2	0	6	57	7	0	2	103	4	246	853	0	0	0	0
8:15 AM	0	4	16	20	0	19	5	0	0	6	55	6	0	1	80	1	213		0	0	0	0
8:30 AM	0	2	5	19	0	20	3	0	0	5	67	11	0	0	66	2	200		0	0	0	0
8:45 AM	0	3	8	15	0	11	2	1	0	9	64	13	0	2	66	0	194		0	0	0	0
Count Total	0	25	116	231	0	188	47	4	0	85	502	77	0	9	782	18	2,084		1	0	1	0
Peak Hour	0	15	80	148	0	119	28	1	0	59	259	40	0	4	467	11	1,231		1	0	1	0



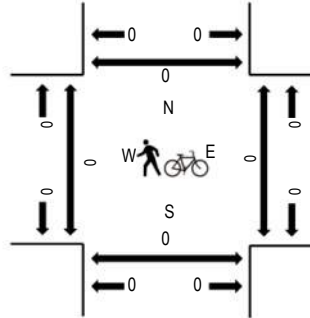
(303) 216-2439
www.alltrafficdata.net

Location: 14 US 24 & STAPLETON RD AM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

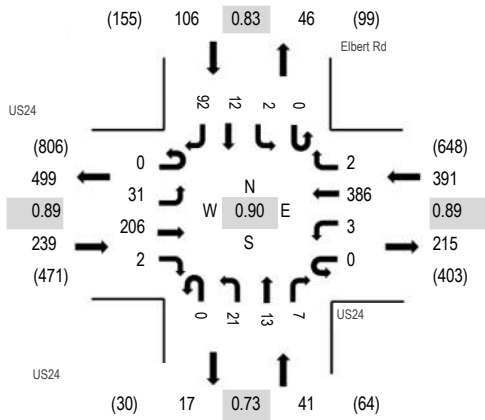
Interval Start Time	STAPLETON RD Eastbound				STAPLETON RD Westbound				US 24 Northbound			US 24 Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
7:00 AM	0	8	25	4	0	1	15	2	0	12	61	0	0	10	87	8	233	944	0	0	0	0
7:15 AM	0	7	18	17	0	3	21	2	0	13	50	1	0	4	126	3	265	887	0	0	0	0
7:30 AM	0	6	14	15	0	3	16	3	0	4	62	1	0	7	103	11	245	804	0	0	0	0
7:45 AM	0	4	19	7	0	3	6	2	0	5	59	1	0	5	83	7	201	729	0	0	0	0
8:00 AM	0	10	10	10	0	1	3	3	0	3	50	1	0	2	79	4	176	696	0	0	0	0
8:15 AM	0	4	15	10	0	3	7	0	0	4	56	1	0	0	77	5	182		0	0	0	0
8:30 AM	0	2	4	6	0	0	7	3	0	10	53	2	0	1	76	6	170		0	0	0	0
8:45 AM	0	9	5	4	0	0	5	3	0	7	64	2	0	0	65	4	168		0	0	0	0
Count Total	0	50	110	73	0	14	80	18	0	58	455	9	0	29	696	48	1,640		0	0	0	0
Peak Hour	0	25	76	43	0	10	58	9	0	34	232	3	0	26	399	29	944		0	0	0	0



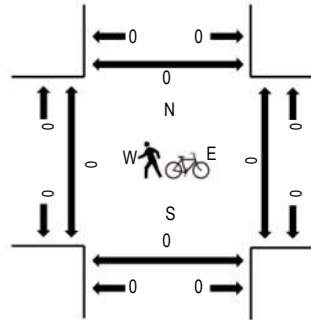
(303) 216-2439
www.alltrafficdata.net

Location: 15 Elbert Rd & US24 AM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:00 AM - 07:15 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

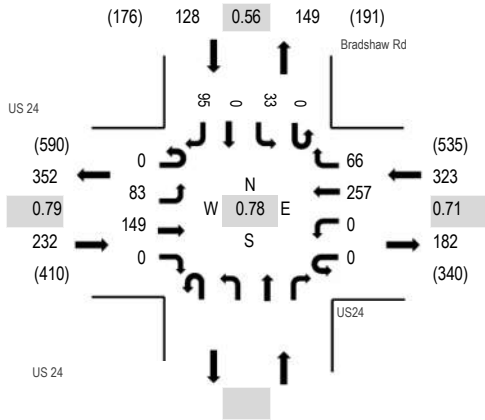
Interval Start Time	US24 Eastbound				US24 Westbound				Elbert Rd Northbound			Elbert Rd Southbound			Total	Rolling Hour	Pedestrian Crossings					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left			Thru	Right	West	East	South	North
7:00 AM	0	7	52	1	0	1	108	1	0	6	5	3	0	0	5	27	216	777	0	0	0	0
7:15 AM	0	7	55	1	0	0	109	1	0	5	4	3	0	0	2	21	208	714	0	0	0	0
7:30 AM	0	8	59	0	0	2	97	0	0	4	3	1	0	0	3	21	198	647	0	0	0	0
7:45 AM	0	9	40	0	0	0	72	0	0	6	1	0	0	2	2	23	155	586	0	0	0	0
8:00 AM	0	7	34	0	1	1	85	2	0	6	2	0	0	0	3	12	153	561	0	0	0	0
8:15 AM	0	13	43	3	0	0	63	0	0	1	4	0	0	1	0	13	141		0	0	0	0
8:30 AM	0	9	54	1	0	1	54	1	0	3	3	1	0	0	1	9	137		0	0	0	0
8:45 AM	0	11	54	3	0	0	49	0	0	2	1	0	0	0	0	10	130		0	0	0	0
Count Total	0	71	391	9	1	5	637	5	0	33	23	8	0	3	16	136	1,338		0	0	0	0
Peak Hour	0	31	206	2	0	3	386	2	0	21	13	7	0	2	12	92	777		0	0	0	0



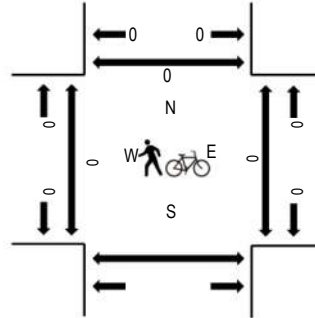
(303) 216-2439
www.alltrafficdata.net

Location: 16 Bradshaw Rd & US24 AM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

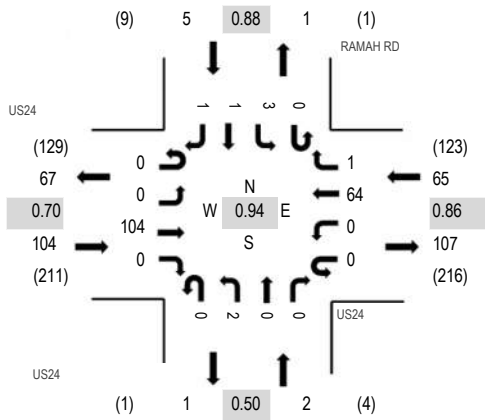
Interval Start Time	US 24 Eastbound				US24 Westbound				Northbound			Bradshaw Rd Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South
7:00 AM	0	17	35	0	0	0	76	8					0	2	0	17	155	683	0	0	0
7:15 AM	0	43	30	0	0	0	74	39					0	6	0	28	220	663	0	0	0
7:30 AM	0	15	40	0	0	0	58	16					0	21	0	36	186	534	0	0	0
7:45 AM	0	8	44	0	0	0	49	3					0	4	0	14	122	452	0	0	0
8:00 AM	0	4	36	0	0	0	70	6					0	2	0	17	135	438	0	0	0
8:15 AM	0	3	30	0	0	0	43	6					0	1	0	8	91		0	0	0
8:30 AM	0	4	38	0	0	0	43	5					0	1	0	13	104		0	0	0
8:45 AM	0	14	49	0	0	0	39	0					0	1	0	5	108		0	0	0
Count Total	0	108	302	0	0	0	452	83					0	38	0	138	1,121		0	0	0
Peak Hour	0	83	149	0	0	0	257	66					0	33	0	95	683		0	0	0



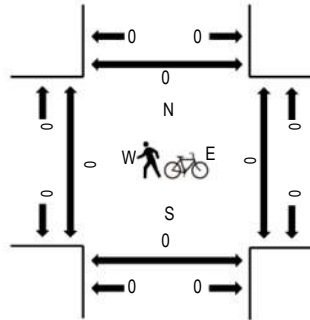
(303) 216-2439
www.alltrafficdata.net

Location: 19 RAMAH RD & US24 AM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

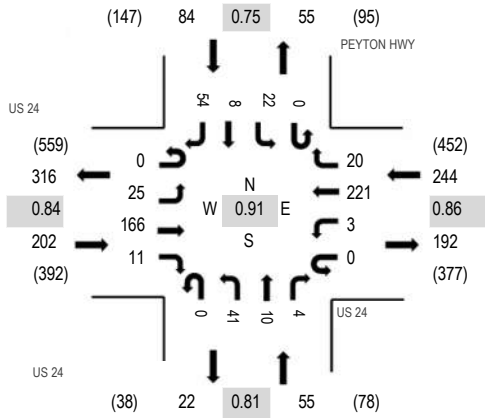
Interval Start Time	US24 Eastbound			US24 Westbound			RAMAH RD Northbound			RAMAH RD Southbound			Total	Rolling Hour	Pedestrian Crossings						
	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right	U-Turn	Left	Thru Right			West	East	South	North			
7:00 AM	0	0	38	0	0	16	0	0	1	0	0	0	0	0	55	171	0	0	0	0	
7:15 AM	0	0	27	0	0	11	0	0	1	0	0	0	1	0	40	162	0	0	0	0	
7:30 AM	0	0	18	0	0	17	0	0	0	0	0	0	0	1	36	168	0	0	0	0	
7:45 AM	0	0	24	0	0	14	0	0	0	0	0	0	1	0	40	169	0	0	0	0	
8:00 AM	0	0	29	0	0	14	0	0	1	0	0	0	2	0	46	176	0	0	0	0	
8:15 AM	0	0	24	0	0	18	1	0	1	0	0	0	1	0	46		0	0	0	0	
8:30 AM	0	0	21	0	0	16	0	0	0	0	0	0	0	0	37		0	0	0	0	
8:45 AM	0	0	30	0	0	16	0	0	0	0	0	0	0	1	47		0	0	0	0	
Count Total	0	0	211	0	0	122	1	0	4	0	0	0	5	1	3	347		0	0	0	0
Peak Hour	0	0	104	0	0	64	1	0	2	0	0	0	3	1	1	176		0	0	0	0



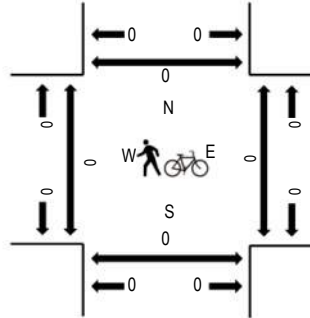
(303) 216-2439
www.alltrafficdata.net

Location: 20 PEYTON HWY & US 24 AM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 24 Eastbound				US 24 Westbound				PEYTON HWY Northbound				PEYTON HWY Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
7:00 AM	0	6	28	0	0	0	57	5	0	15	1	0	0	0	7	1	18	138	585	0	0	0	0
7:15 AM	0	4	40	1	0	0	69	2	0	17	0	0	0	8	4	16	161	576	0	0	0	0	
7:30 AM	0	5	55	6	0	0	54	3	0	5	5	0	0	4	2	12	151	531	0	0	0	0	
7:45 AM	0	10	43	4	0	3	41	10	0	4	4	4	0	3	1	8	135	510	0	0	0	0	
8:00 AM	0	4	45	4	0	1	49	5	0	4	2	1	0	2	2	10	129	484	0	0	0	0	
8:15 AM	0	1	34	3	0	0	50	6	0	2	3	1	0	4	0	12	116		0	0	0	0	
8:30 AM	0	3	50	2	0	0	52	6	0	3	1	0	0	3	4	6	130		0	0	0	0	
8:45 AM	0	4	40	0	0	0	36	3	0	3	2	1	0	4	0	16	109		0	0	0	0	
Count Total	0	37	335	20	0	4	408	40	0	53	18	7	0	35	14	98	1,069		0	0	0	0	
Peak Hour	0	25	166	11	0	3	221	20	0	41	10	4	0	22	8	54	585		0	0	0	0	



(303) 216-2439
www.alltrafficdata.net

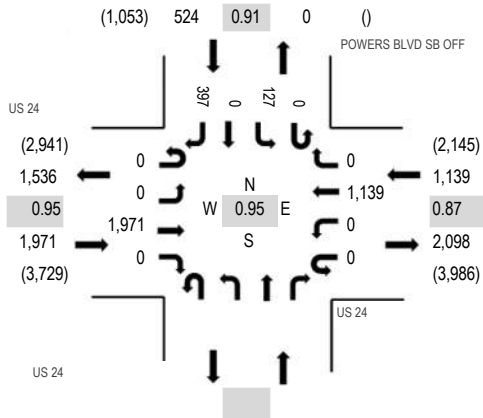
Location: 1 POWERS BLVD SB OFF & US 24 PM

Date and Start Time: Tuesday, May 10, 2016

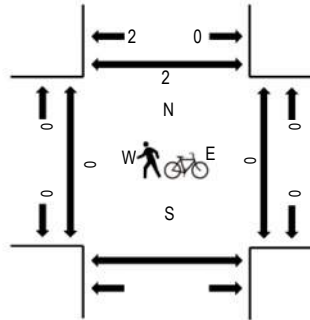
Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 24 Eastbound				US 24 Westbound				POWERS BLVD SB OFF				Total	Rolling Hour	Pedestrian Crossings							
									Northbound		Southbound				West	East	South	North				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right										
4:00 PM	0	0	407	0	0	0	303	0					0	42	0	101	853	3,536	0	0	0	0
4:15 PM	1	0	465	0	0	0	257	0					0	45	0	110	878	3,596	0	0	0	0
4:30 PM	0	0	451	0	0	0	278	0					0	22	0	102	853	3,592	0	0	0	0
4:45 PM	0	0	472	0	0	0	339	0					0	37	0	104	952	3,634	0	0	0	0
5:00 PM	0	0	485	0	0	0	297	0					0	31	0	100	913	3,391	0	0	0	1
5:15 PM	0	0	495	0	0	0	262	0					0	31	0	86	874		0	0	0	1
5:30 PM	0	0	519	0	0	0	241	0					0	28	0	107	895		0	0	0	0
5:45 PM	0	0	434	0	0	0	168	0					0	22	0	85	709		0	0	0	0
Count Total	1	0	3,728	0	0	0	2,145	0					0	258	0	795	6,927		0	0	0	2
Peak Hour	0	0	1,971	0	0	0	1,139	0					0	127	0	397	3,634		0	0	0	2



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Location: 2 POWERS BLVD NB OFF & US 24 PM

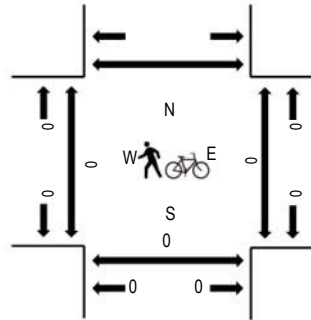
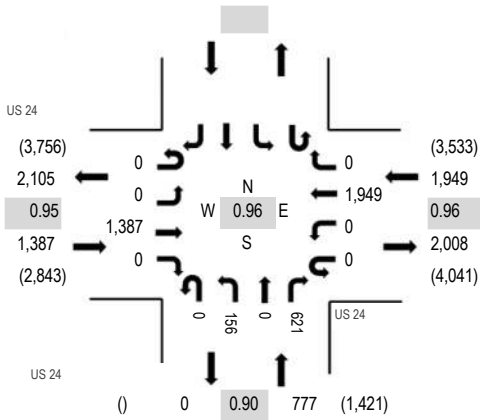
Date and Start Time: Tuesday, May 10, 2016

Peak Hour: 04:15 PM - 05:15 PM

Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles

Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

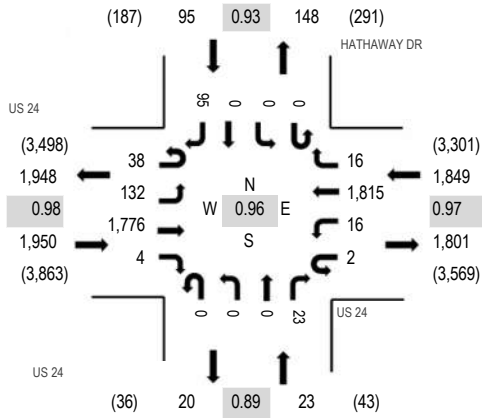
Interval Start Time	US 24 Eastbound				US 24 Westbound				POWERS BLVD NB OFF				Total	Rolling Hour	Pedestrian Crossings					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			U-Turn	Left	Thru	Right	West	East
4:00 PM	0	0	308	0	0	0	447	0	0	28	0	148	931	3,999	0	0	0	0	0	0
4:15 PM	0	0	343	0	0	0	460	0	0	34	0	184	1,021	4,113	0	0	0	0	0	0
4:30 PM	0	0	315	0	0	0	486	0	0	35	0	144	980	4,087	0	0	0	0	0	0
4:45 PM	0	0	346	0	0	0	508	0	0	65	0	148	1,067	4,084	0	0	0	0	0	0
5:00 PM	0	0	383	0	0	0	495	0	0	22	0	145	1,045	3,798	0	0	0	0	0	0
5:15 PM	0	0	403	0	0	0	426	0	0	11	0	155	995		0	0	0	0	0	0
5:30 PM	0	0	404	0	0	0	402	0	0	19	0	152	977		0	0	0	0	0	0
5:45 PM	0	0	341	0	0	0	309	0	0	9	0	122	781		0	0	0	0	0	0
Count Total	0	0	2,843	0	0	0	3,533	0	0	223	0	1,198	7,797		0	0	0	0	0	0
Peak Hour	0	0	1,387	0	0	0	1,949	0	0	156	0	621	4,113		0	0	0	0	0	0



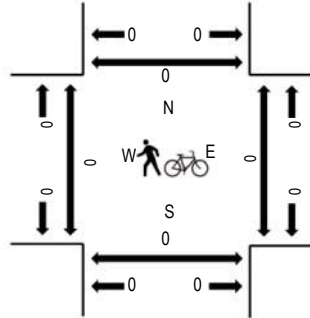
(303) 216-2439
www.alltrafficdata.net

Location: 3 HATHAWAY DR & US 24 PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 24 Eastbound				US 24 Westbound				HATHAWAY DR Northbound				HATHAWAY DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	20	35	387	0	0	7	414	3	0	0	0	6	0	0	0	23	895	3,793	0	0	0	0
4:15 PM	7	24	469	1	2	3	424	4	0	0	0	6	0	0	0	22	962	3,917	0	0	0	0
4:30 PM	7	41	400	1	0	4	459	5	0	0	0	5	0	0	0	24	946	3,879	0	0	0	0
4:45 PM	9	34	443	2	0	6	462	5	0	0	0	7	0	0	0	22	990	3,866	0	0	0	0
5:00 PM	15	33	464	0	0	3	470	2	0	0	0	5	0	0	0	27	1,019	3,601	0	0	0	0
5:15 PM	6	36	476	0	0	4	366	2	0	0	0	7	0	0	0	27	924		0	0	0	0
5:30 PM	8	23	480	0	1	2	390	3	0	0	0	6	0	0	0	20	933		0	0	0	0
5:45 PM	2	36	404	0	0	3	252	5	0	0	0	1	0	0	0	22	725		0	0	0	0
Count Total	74	262	3,523	4	3	32	3,237	29	0	0	0	43	0	0	0	187	7,394		0	0	0	0
Peak Hour	38	132	1,776	4	2	16	1,815	16	0	0	0	23	0	0	0	95	3,917		0	0	0	0



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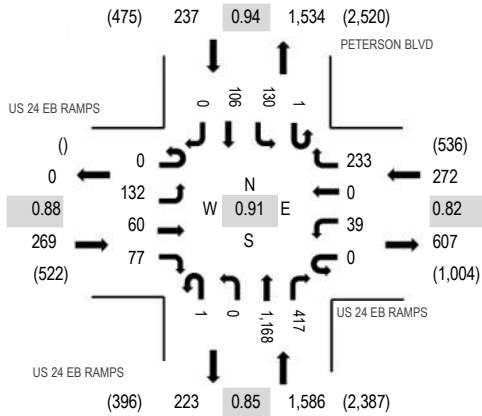
Location: 5 PETERSON BLVD & US 24 EB RAMPS PM

Date and Start Time: Tuesday, May 10, 2016

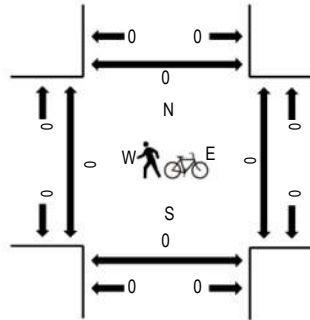
Peak Hour: 04:00 PM - 05:00 PM

Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 24 EB RAMPS Eastbound				US 24 EB RAMPS Westbound				PETERSON BLVD Northbound				PETERSON BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	34	19	23	0	9	0	65	1	0	280	98	0	28	20	0	577	2,364	0	0	0	0
4:15 PM	0	35	12	21	0	14	0	49	0	0	259	85	0	33	26	0	534	2,286	0	0	0	0
4:30 PM	0	28	16	15	0	6	0	56	0	0	338	130	1	29	34	0	653	2,175	0	0	0	0
4:45 PM	0	35	13	18	0	10	0	63	0	0	291	104	0	40	26	0	600	1,868	0	0	0	0
5:00 PM	0	39	19	19	0	5	0	87	0	0	211	58	0	37	24	0	499	1,556	0	0	0	0
5:15 PM	0	41	13	8	0	6	0	67	0	0	162	57	0	39	30	0	423		0	0	0	0
5:30 PM	0	38	16	12	0	8	0	52	0	0	110	46	0	33	31	0	346		0	1	0	0
5:45 PM	0	29	8	11	0	3	0	36	0	0	114	43	0	28	16	0	288		0	0	0	0
Count Total	0	279	116	127	0	61	0	475	1	0	1,765	621	1	267	207	0	3,920		0	1	0	0
Peak Hour	0	132	60	77	0	39	0	233	1	0	1,168	417	1	130	106	0	2,364		0	0	0	0



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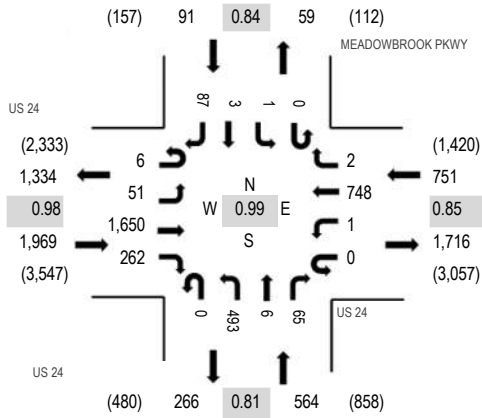
Location: 6 MEADOWBROOK PKWY & US 24 PM

Date and Start Time: Tuesday, May 10, 2016

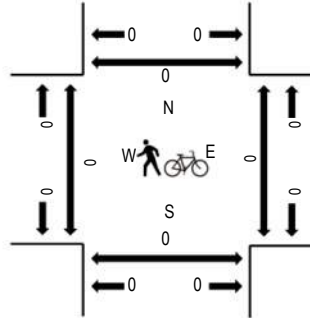
Peak Hour: 04:15 PM - 05:15 PM

Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

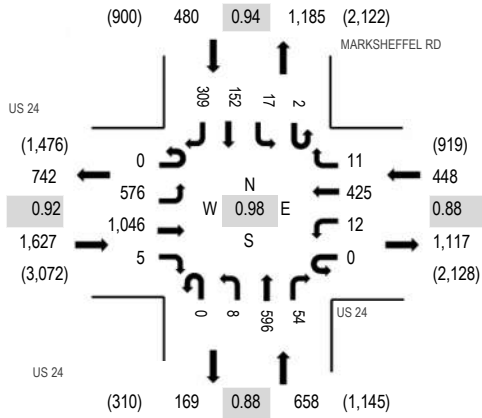
Interval Start Time	US 24 Eastbound				US 24 Westbound				MEADOWBROOK PKWY Northbound				MEADOWBROOK PKWY Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
4:00 PM	1	16	364	54	0	0	187	4	0	88	0	5	0	0	0	1	14	734	3,266	0	0	0	0
4:15 PM	1	14	415	68	0	0	162	1	0	126	2	17	0	0	0	1	26	833	3,375	0	0	0	0
4:30 PM	2	18	423	60	0	0	193	0	0	110	2	15	0	0	0	0	26	849	3,291	0	0	0	0
4:45 PM	1	10	408	65	0	1	172	1	0	152	1	22	0	1	1	15	850	3,302	0	0	0	0	
5:00 PM	2	9	404	69	0	0	221	0	0	105	1	11	0	0	0	1	20	843	2,716	0	0	0	0
5:15 PM	2	11	388	59	0	1	169	1	0	98	0	6	0	0	0	0	14	749		0	0	0	0
5:30 PM	0	12	434	77	0	0	233	1	0	67	3	6	0	1	0	0	26	860		0	0	0	0
5:45 PM	0	5	135	20	0	0	73	0	0	20	0	1	0	1	2	7	264		0	0	0	0	
Count Total	9	95	2,971	472	0	2	1,410	8	0	766	9	83	0	3	6	148	5,982		0	0	0	0	
Peak Hour	6	51	1,650	262	0	1	748	2	0	493	6	65	0	1	3	87	3,375		0	0	0	0	



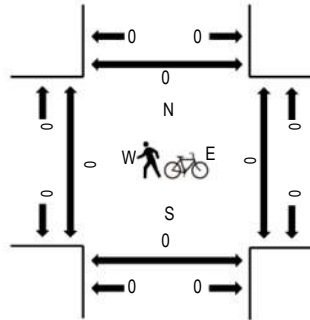
(303) 216-2439
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Location: 7 MARKSHEFFEL RD & US 24 PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

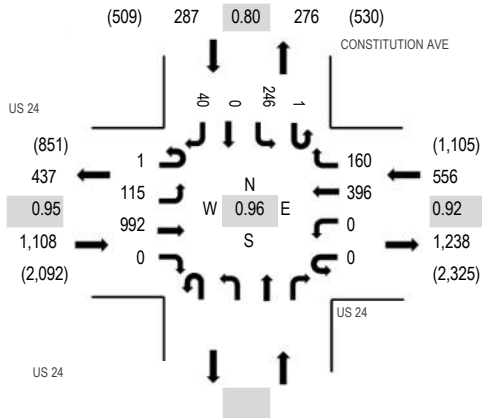
Interval Start Time	US 24 Eastbound				US 24 Westbound				MARKSHEFFEL RD Northbound				MARKSHEFFEL RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	117	240	1	0	5	109	1	0	2	118	13	0	4	38	86	734	3,112	0	0	0	0
4:15 PM	0	131	255	0	1	1	115	5	0	2	130	8	0	1	31	68	748	3,150	0	0	0	0
4:30 PM	0	137	267	0	0	4	96	3	0	1	180	14	0	2	36	71	811	3,213	0	0	0	0
4:45 PM	0	118	293	2	0	0	109	3	0	3	160	16	0	4	37	74	819	3,099	0	0	0	0
5:00 PM	0	138	228	3	0	3	96	1	0	4	153	17	0	7	33	89	772	2,924	0	0	0	0
5:15 PM	0	183	258	0	0	5	124	4	0	0	103	7	2	4	46	75	811		0	0	0	0
5:30 PM	0	125	214	1	0	4	112	7	0	5	109	6	0	5	28	81	697		0	0	0	0
5:45 PM	0	108	253	0	0	5	106	0	0	2	86	6	0	5	27	46	644		0	0	0	0
Count Total	0	1,057	2,008	7	1	27	867	24	0	19	1,039	87	2	32	276	590	6,036		0	0	0	0
Peak Hour	0	576	1,046	5	0	12	425	11	0	8	596	54	2	17	152	309	3,213		0	0	0	0



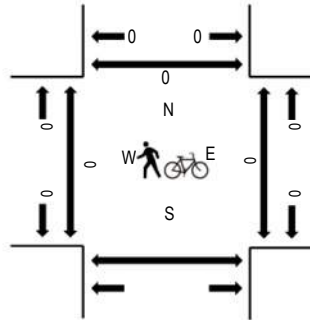
(303) 216-2439
www.alltrafficdata.net

Location: 8 CONSTITUTION AVE & US 24 PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	US 24 Eastbound				US 24 Westbound				CONSTITUTION AVE Northbound				CONSTITUTION AVE Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	2	17	196	0	0	0	106	44	0	51	0	12	428	1,878	0	0	0	0	0	0		
4:15 PM	0	29	262	0	0	0	91	33	1	57	0	8	481	1,951	0	0	0	0	0	0		
4:30 PM	0	32	231	0	0	0	108	37	0	39	0	15	462	1,937	0	0	0	0	0	0		
4:45 PM	1	28	261	0	0	0	92	48	0	72	0	5	507	1,942	0	0	0	0	0	0		
5:00 PM	0	26	238	0	0	0	105	42	0	78	0	12	501	1,828	0	0	0	0	0	0		
5:15 PM	2	27	242	0	0	0	93	47	0	52	0	4	467		0	0	0	0	0	0		
5:30 PM	2	23	236	0	0	0	115	44	0	43	0	4	467		0	0	0	0	0	0		
5:45 PM	1	18	218	0	0	0	66	34	0	49	0	7	393		0	0	0	0	0	0		
Count Total	8	200	1,884	0	0	0	776	329	1	441	0	67	3,706		0	0	0	0	0	0		
Peak Hour	1	115	992	0	0	0	396	160	1	246	0	40	1,951		0	0	0	0	0	0		

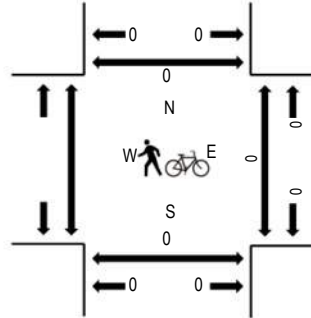
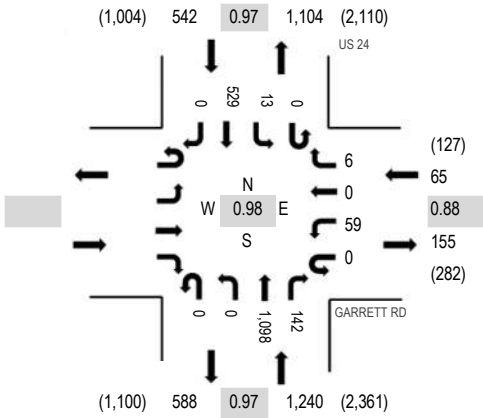


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Location: 9 US 24 & GARRETT RD PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles

Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	GARRETT RD				US 24				US 24				Total	Rolling Hour	Pedestrian Crossings						
	Eastbound		Westbound		Northbound		Southbound		U-Turn	Left	Thru	Right			West	East	South	North			
4:00 PM					0	10	0	0					0	0					233	37	1
4:15 PM					0	13	0	0	0	0	289	23	0	3	118	0	446	1,836	0	0	0
4:30 PM					0	15	0	4	0	0	263	34	0	4	133	0	453	1,847	0	0	0
4:45 PM					0	14	0	1	0	0	290	33	0	3	129	0	470	1,820	0	0	0
5:00 PM					0	14	0	1	0	0	287	32	0	1	132	0	467	1,718	0	0	0
5:15 PM					0	16	0	0	0	0	258	43	0	5	135	0	457		0	0	0
5:30 PM					0	16	0	3	0	0	249	36	0	0	122	0	426		0	0	0
5:45 PM					0	16	0	4	0	0	227	27	0	0	94	0	368		0	0	0
Count Total					0	114	0	13	0	0	2,096	265	1	17	986	0	3,492		0	0	0
Peak Hour					0	59	0	6	0	0	1,098	142	0	13	529	0	1,847		0	0	0

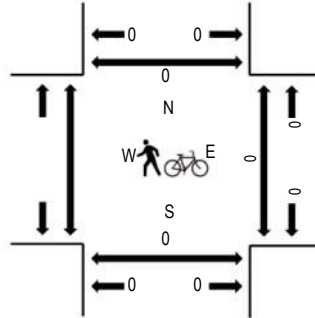
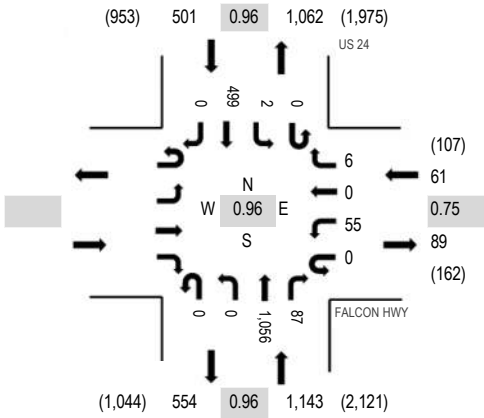


(303) 216-2439
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Location: 10 US 24 & FALCON HWY PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles

Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

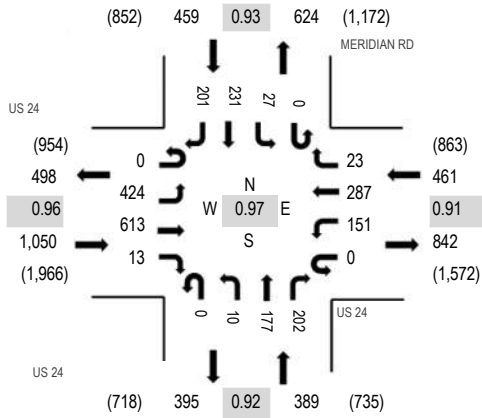
Interval Start Time	FALCON HWY				US 24				US 24				Total	Rolling Hour	Pedestrian Crossings						
	Eastbound		Westbound		Northbound		Southbound		U-Turn	Left	Thru	Right			West	East	South	North			
4:00 PM					0	16	0	1	0	0	211	18	0	1	116	0	363	1,618	0	0	0
4:15 PM					0	9	0	3	0	0	235	17	0	0	121	0	385	1,682	0	0	0
4:30 PM					0	14	0	1	0	0	272	27	0	0	131	0	445	1,705	0	0	0
4:45 PM					0	17	0	5	0	0	269	16	0	2	116	0	425	1,646	0	0	0
5:00 PM					0	15	0	0	0	0	263	27	0	0	122	0	427	1,563	0	0	0
5:15 PM					0	9	0	0	0	0	252	17	0	0	130	0	408		0	0	0
5:30 PM					0	4	0	1	0	0	237	19	0	0	125	0	386		0	0	0
5:45 PM					0	12	0	0	0	0	225	16	0	2	87	0	342		0	0	0
Count Total					0	96	0	11	0	0	1,964	157	0	5	948	0	3,181		0	0	0
Peak Hour					0	55	0	6	0	0	1,056	87	0	2	499	0	1,705		0	0	0



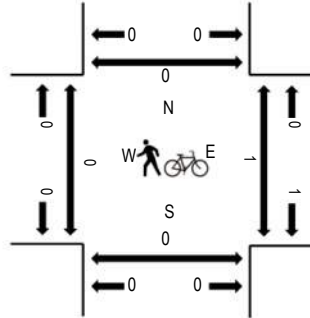
(303) 216-2439
www.alltrafficdata.net

Location: 11 MERIDIAN RD & US 24 PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

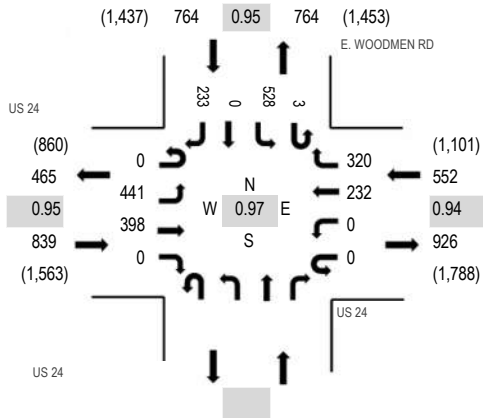
Interval Start Time	US 24 Eastbound			US 24 Westbound			MERIDIAN RD Northbound			MERIDIAN RD Southbound			Total	Rolling Hour	Pedestrian Crossings							
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North				
4:00 PM	0	87	120	1	0	25	74	5	0	3	39	37	0	6	52	43	492	2,179	0	0	0	0
4:15 PM	0	94	136	2	0	25	76	3	0	6	36	54	0	3	47	41	523	2,295	0	0	0	0
4:30 PM	0	107	155	3	0	26	66	4	0	4	45	53	0	8	56	60	587	2,359	0	1	0	0
4:45 PM	0	107	148	2	0	41	63	5	0	1	37	50	0	5	65	53	577	2,315	0	0	0	0
5:00 PM	0	107	161	6	0	41	78	6	0	3	48	56	0	8	53	41	608	2,237	0	0	0	0
5:15 PM	0	103	149	2	0	43	80	8	0	2	47	43	0	6	57	47	587		0	0	0	0
5:30 PM	0	105	139	3	0	33	72	6	0	3	32	42	0	7	51	50	543		0	0	0	0
5:45 PM	0	92	134	3	0	26	53	4	0	3	45	46	0	6	55	32	499		0	0	0	0
Count Total	0	802	1,142	22	0	260	562	41	0	25	329	381	0	49	436	367	4,416		0	1	0	0
Peak Hour	0	424	613	13	0	151	287	23	0	10	177	202	0	27	231	201	2,359		0	1	0	0



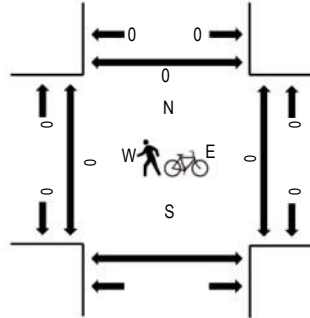
(303) 216-2439
www.alltrafficdata.net

Location: 12 E. WOODMEN RD & US 24 PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

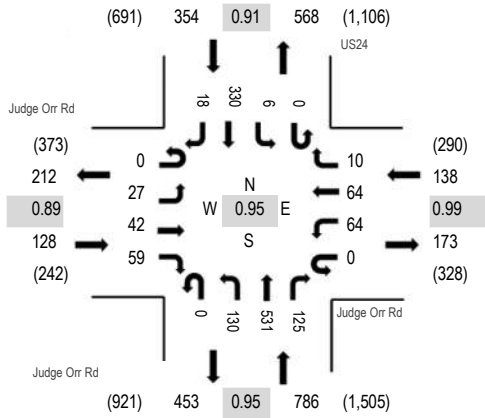
Interval Start Time	US 24 Eastbound				US 24 Westbound				Northbound				E. WOODMEN RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	83	75	0	0	0	59	80					0	114	0	39	450	2,023	0	0	0	
4:15 PM	0	113	85	0	0	0	60	93					0	113	0	38	502	2,126	0	0	0	
4:30 PM	0	117	103	0	0	0	52	90					0	139	0	57	558	2,155	0	0	0	
4:45 PM	0	111	93	0	0	0	51	91					1	114	0	52	513	2,109	0	0	0	
5:00 PM	0	116	106	0	0	0	61	71					0	142	0	57	553	2,078	0	0	0	
5:15 PM	0	97	96	0	0	0	68	68					2	133	0	67	531		0	0	0	
5:30 PM	0	84	97	0	0	0	62	77					0	146	0	46	512		0	0	0	
5:45 PM	0	91	96	0	0	0	51	67					1	136	0	40	482		0	0	0	
Count Total	0	812	751	0	0	0	464	637					4	1,037	0	396	4,101		0	0	0	
Peak Hour	0	441	398	0	0	0	232	320					3	528	0	233	2,155		0	0	0	



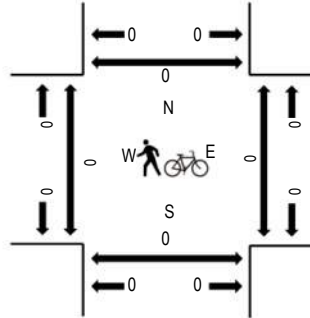
(303) 216-2439
www.alltrafficdata.net

Location: 13 US24 & Judge Orr Rd PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

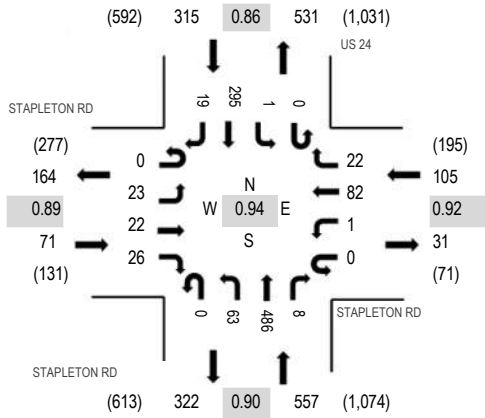
Interval Start Time	Judge Orr Rd Eastbound				Judge Orr Rd Westbound				US24 Northbound			US24 Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
4:00 PM	0	4	4	16	0	20	16	0	0	16	113	35	0	0	98	3	325	1,348	0	0	0	0
4:15 PM	0	11	7	12	0	18	16	4	0	22	117	23	0	0	80	0	310	1,373	0	0	0	0
4:30 PM	0	9	11	16	0	13	22	3	0	31	131	31	0	1	95	7	370	1,406	0	0	0	0
4:45 PM	0	7	8	9	0	21	14	3	0	33	132	27	0	2	84	3	343	1,398	0	0	0	0
5:00 PM	0	5	9	19	0	15	12	1	0	36	136	39	0	2	73	3	350	1,380	0	0	0	0
5:15 PM	0	6	14	15	0	15	16	3	0	30	132	28	0	1	78	5	343		0	0	0	0
5:30 PM	0	8	8	12	0	28	12	3	0	26	154	31	0	3	76	1	362		0	0	0	0
5:45 PM	0	6	10	16	0	19	15	1	0	32	117	33	0	1	73	2	325		0	0	0	0
Count Total	0	56	71	115	0	149	123	18	0	226	1,032	247	0	10	657	24	2,728		0	0	0	0
Peak Hour	0	27	42	59	0	64	64	10	0	130	531	125	0	6	330	18	1,406		0	0	0	0



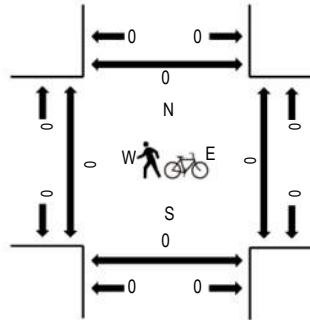
(303) 216-2439
www.alltrafficdata.net

Location: 14 US 24 & STAPLETON RD PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

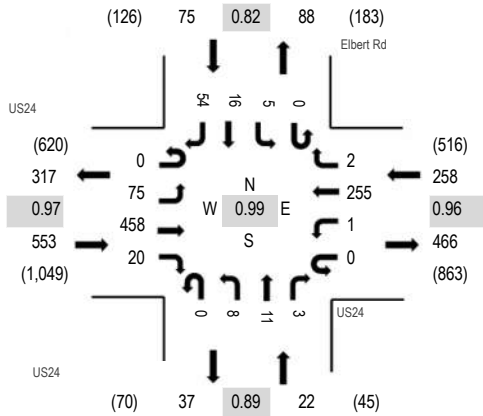
Interval Start Time	STAPLETON RD Eastbound				STAPLETON RD Westbound				US 24 Northbound			US 24 Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
4:00 PM	0	2	6	7	0	3	15	6	0	9	92	4	0	0	71	4	219	950	0	0	0	0
4:15 PM	0	3	4	6	0	1	14	7	0	11	94	4	0	2	64	2	212	997	0	0	0	0
4:30 PM	0	4	8	6	0	0	18	11	0	16	129	2	0	1	81	4	280	1,048	0	0	0	0
4:45 PM	0	6	3	8	0	1	22	5	0	16	112	3	0	0	58	5	239	1,027	0	0	0	0
5:00 PM	0	8	6	6	0	0	26	2	0	17	127	0	0	0	71	3	266	1,042	0	0	0	0
5:15 PM	0	5	5	6	0	0	16	4	0	14	118	3	0	0	85	7	263		0	0	0	0
5:30 PM	0	4	8	6	0	1	16	6	0	16	143	3	0	0	53	3	259		0	0	0	0
5:45 PM	0	6	6	2	0	2	14	5	0	7	132	2	0	1	75	2	254		0	0	0	0
Count Total	0	38	46	47	0	8	141	46	0	106	947	21	0	4	558	30	1,992		0	0	0	0
Peak Hour	0	23	22	26	0	1	82	22	0	63	486	8	0	1	295	19	1,048		0	0	0	0



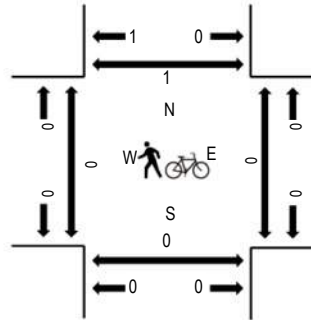
(303) 216-2439
www.alltrafficdata.net

Location: 15 Elbert Rd & US24 PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

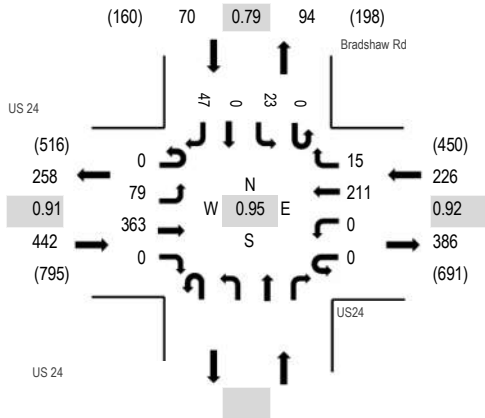
Interval Start Time	US24 Eastbound				US24 Westbound				Elbert Rd Northbound				Elbert Rd Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	19	96	4	0	1	65	1	0	5	0	2	0	0	3	7	203	842	0	0	0	0
4:15 PM	0	24	78	3	0	2	67	1	0	2	4	0	0	1	0	13	195	868	0	0	0	0
4:30 PM	0	25	96	5	0	1	70	0	0	1	3	1	0	1	2	11	216	900	0	0	0	0
4:45 PM	0	17	116	2	0	0	63	0	0	2	4	1	0	1	2	20	228	908	0	0	0	0
5:00 PM	0	20	106	8	0	0	69	0	0	3	3	1	0	2	5	12	229	894	0	0	0	0
5:15 PM	0	13	126	4	0	1	65	1	0	0	3	1	0	0	3	10	227		0	0	0	0
5:30 PM	0	25	110	6	0	0	58	1	0	3	1	0	0	2	6	12	224		0	0	0	1
5:45 PM	0	18	120	8	0	1	49	0	0	4	0	1	0	1	3	9	214		0	0	0	0
Count Total	0	161	848	40	0	6	506	4	0	20	18	7	0	8	24	94	1,736		0	0	0	1
Peak Hour	0	75	458	20	0	1	255	2	0	8	11	3	0	5	16	54	908		0	0	0	1



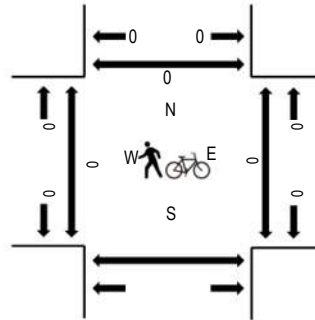
(303) 216-2439
www.alltrafficdata.net

Location: 16 Bradshaw Rd & US24 PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

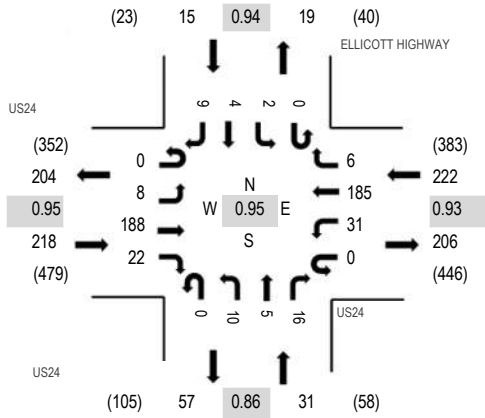
Interval Start Time	US 24 Eastbound				US24 Westbound				Northbound			Bradshaw Rd Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South
4:00 PM	0	22	60	0	0	0	44	3					0	8	0	16	153	685	0	0	0
4:15 PM	0	14	63	0	0	0	54	6					0	10	0	18	165	698	0	0	0
4:30 PM	0	20	69	0	0	0	63	5					0	9	0	10	176	727	0	0	0
4:45 PM	0	21	91	0	0	0	57	5					0	9	0	8	191	738	0	0	0
5:00 PM	0	20	75	0	0	0	53	1					0	6	0	11	166	720	0	0	0
5:15 PM	0	19	95	0	0	0	59	8					0	3	0	10	194		0	0	0
5:30 PM	0	19	102	0	0	0	42	1					0	5	0	18	187		0	0	0
5:45 PM	0	24	81	0	0	0	39	10					0	5	0	14	173		0	0	0
Count Total	0	159	636	0	0	0	411	39					0	55	0	105	1,405		0	0	0
Peak Hour	0	79	363	0	0	0	211	15					0	23	0	47	738		0	0	0



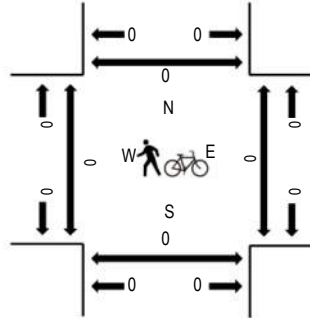
(303) 216-2439
www.alltrafficdata.net

Location: 17 ELLICOTT HIGHWAY & US24 PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

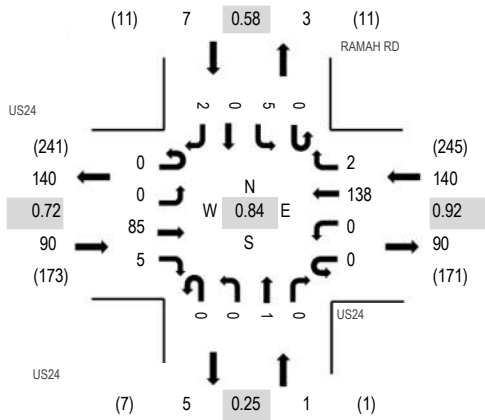
Interval Start Time	US24 Eastbound				US24 Westbound				ELLICOTT HIGHWAY Northbound			ELLICOTT HIGHWAY Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
4:00 PM	0	3	45	9	0	11	45	2	0	3	1	3	0	1	1	2	126	486	0	0	0	0
4:15 PM	0	3	39	6	0	4	54	2	0	3	2	3	0	0	1	3	120	476	0	0	0	0
4:30 PM	0	1	37	5	0	10	48	1	0	1	1	5	0	0	1	2	112	478	0	0	0	0
4:45 PM	0	1	67	2	0	6	38	1	0	3	1	5	0	1	1	2	128	485	0	0	0	0
5:00 PM	0	5	45	8	0	12	41	0	0	0	0	5	0	0	0	0	116	457	0	0	0	0
5:15 PM	1	7	60	3	0	2	39	0	0	2	0	6	0	0	0	2	122		0	0	0	0
5:30 PM	0	5	59	7	0	6	34	0	0	1	0	4	0	0	1	2	119		0	0	0	0
5:45 PM	0	3	51	7	0	2	24	1	0	1	0	8	0	2	0	1	100		0	0	0	0
Count Total	1	28	403	47	0	53	323	7	0	14	5	39	0	4	5	14	943		0	0	0	0
Peak Hour	0	8	188	22	0	31	185	6	0	10	5	16	0	2	4	9	486		0	0	0	0



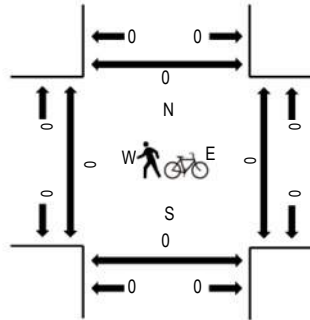
(303) 216-2439
www.alltrafficdata.net

Location: 19 RAMAH RD & US24 PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

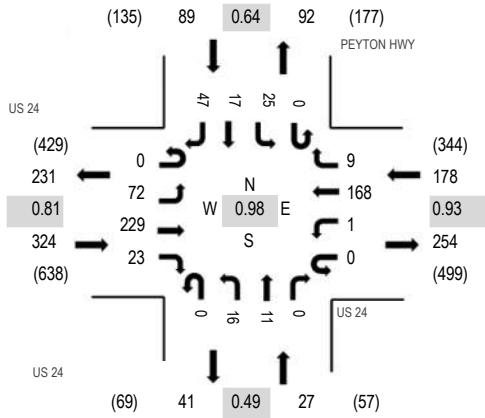
Interval Start Time	US24 Eastbound				US24 Westbound				RAMAH RD Northbound				RAMAH RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	1	16	0	0	0	32	1	0	0	0	0	0	0	0	0	50	217	0	0	0	0
4:15 PM	0	0	20	1	0	0	35	1	0	0	0	0	0	1	0	1	59	238	0	0	0	0
4:30 PM	0	0	12	1	0	0	38	0	0	0	0	0	0	1	0	0	52	231	0	0	0	0
4:45 PM	0	0	18	3	0	0	31	0	0	0	1	0	0	2	0	1	56	222	0	0	0	0
5:00 PM	0	0	35	0	0	0	34	1	0	0	0	0	0	1	0	0	71	213	0	0	0	0
5:15 PM	0	1	21	1	0	0	28	1	0	0	0	0	0	0	0	0	52		0	0	0	0
5:30 PM	0	2	20	0	0	0	18	0	0	0	0	0	0	3	0	0	43		0	0	0	0
5:45 PM	0	0	20	1	0	0	23	2	0	0	0	0	0	1	0	0	47		0	0	0	0
Count Total	0	4	162	7	0	0	239	6	0	0	1	0	0	9	0	2	430		0	0	0	0
Peak Hour	0	0	85	5	0	0	138	2	0	0	1	0	0	5	0	2	238		0	0	0	0



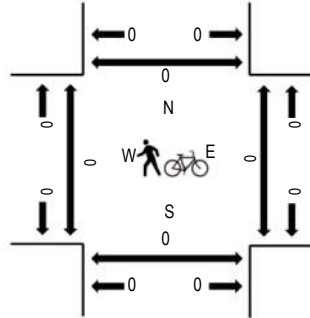
(303) 216-2439
www.alltrafficdata.net

Location: 20 PEYTON HWY & US 24 PM
Date and Start Time: Tuesday, May 10, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

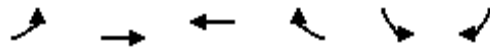
Interval Start Time	US 24 Eastbound				US 24 Westbound				PEYTON HWY Northbound				PEYTON HWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	13	48	5	0	0	37	2	0	3	1	1	0	6	3	5	124	569	0	0	0	0
4:15 PM	0	13	58	6	0	0	39	4	0	4	3	0	0	1	2	9	139	599	0	0	0	0
4:30 PM	0	17	51	7	0	0	46	3	0	2	2	0	0	7	5	11	151	618	0	0	0	0
4:45 PM	0	19	63	7	0	1	43	3	0	3	1	0	0	5	3	7	155	605	0	0	0	0
5:00 PM	0	14	59	3	0	0	40	3	0	0	0	0	0	6	5	24	154	605	0	0	0	0
5:15 PM	0	22	56	6	0	0	39	0	0	11	8	0	0	7	4	5	158	618	0	0	0	0
5:30 PM	0	15	48	6	0	1	47	3	0	8	2	1	0	2	0	5	138	605	0	0	0	0
5:45 PM	0	25	74	3	0	0	30	3	0	6	1	0	0	6	2	5	155	605	0	0	0	0
Count Total	0	138	457	43	0	2	321	21	0	37	18	2	0	40	24	71	1,174	618	0	0	0	0
Peak Hour	0	72	229	23	0	1	168	9	0	16	11	0	0	25	17	47	618	618	0	0	0	0



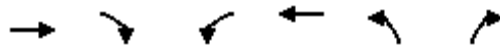
APPENDIX B

TRAFFIC OPERATION REPORTS

HCM 2010 Signalized Intersection Summary
 1: US 24 & SB Powers Blvd off-ramp





















Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		↑↑↑	↑↑		↑↑↑			
Traffic Volume (veh/h)	0	1245	1470	0	520	55		
Future Volume (veh/h)	0	1245	1470	0	520	55		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1900		
Adj Flow Rate, veh/h	0	1284	1670	0	690	0		
Adj No. of Lanes	0	3	2	0	2	1		
Peak Hour Factor	0.70	0.97	0.88	0.92	0.82	0.92		
Percent Heavy Veh, %	0	2	2	0	2	0		
Cap, veh/h	0	2712	1888	0	1064	484		
Arrive On Green	0.00	0.53	1.00	0.00	0.30	0.00		
Sat Flow, veh/h	0	5421	3725	0	3548	1615		
Grp Volume(v), veh/h	0	1284	1670	0	690	0		
Grp Sat Flow(s),veh/h/ln	0	1695	1770	0	1774	1615		
Q Serve(g_s), s	0.0	9.5	0.0	0.0	10.1	0.0		
Cycle Q Clear(g_c), s	0.0	9.5	0.0	0.0	10.1	0.0		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	2712	1888	0	1064	484		
V/C Ratio(X)	0.00	0.47	0.88	0.00	0.65	0.00		
Avail Cap(c_a), veh/h	0	2712	1888	0	1064	484		
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	0.0	8.7	0.0	0.0	18.2	0.0		
Incr Delay (d2), s/veh	0.0	0.6	6.5	0.0	3.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	4.5	1.7	0.0	5.3	0.0		
LnGrp Delay(d),s/veh	0.0	9.3	6.5	0.0	21.3	0.0		
LnGrp LOS		A	A		C			
Approach Vol, veh/h		1284	1670		690			
Approach Delay, s/veh		9.3	6.5		21.3			
Approach LOS		A	A		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		37.0		23.0		37.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		32.0		18.0		32.0		
Max Q Clear Time (g_c+I1), s		11.5		12.1		2.0		
Green Ext Time (p_c), s		18.6		1.5		26.1		
Intersection Summary								
HCM 2010 Ctrl Delay			10.3					
HCM 2010 LOS			B					
Notes								















































Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑			↑↑↑	↑↑↑			
Traffic Volume (veh/h)	1420	0	0	2280	85	50		
Future Volume (veh/h)	1420	0	0	2280	85	50		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1900		
Adj Flow Rate, veh/h	1596	0	0	2591	72	73		
Adj No. of Lanes	2	0	0	3	1	1		
Peak Hour Factor	0.89	0.92	0.92	0.88	0.96	0.92		
Percent Heavy Veh, %	2	0	0	2	2	0		
Cap, veh/h	1888	0	0	2712	532	484		
Arrive On Green	1.00	0.00	0.00	0.53	0.30	0.30		
Sat Flow, veh/h	3725	0	0	5421	1774	1615		
Grp Volume(v), veh/h	1596	0	0	2591	72	73		
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1774	1615		
Q Serve(g_s), s	0.0	0.0	0.0	29.1	1.8	2.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	29.1	1.8	2.0		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1888	0	0	2712	532	484		
V/C Ratio(X)	0.85	0.00	0.00	0.96	0.14	0.15		
Avail Cap(c_a), veh/h	1888	0	0	2712	532	484		
HCM Platoon Ratio	2.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	13.3	15.3	15.4		
Incr Delay (d2), s/veh	4.9	0.0	0.0	9.6	0.5	0.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	15.8	0.9	1.0		
LnGrp Delay(d),s/veh	4.9	0.0	0.0	22.9	15.9	16.1		
LnGrp LOS	A			C	B	B		
Approach Vol, veh/h	1596			2591	145			
Approach Delay, s/veh	4.9			22.9	16.0			
Approach LOS	A			C	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		37.0				37.0		23.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		32.0				32.0		18.0
Max Q Clear Time (g_c+I1), s		2.0				31.1		4.0
Green Ext Time (p_c), s		29.4				0.9		0.3
Intersection Summary								
HCM 2010 Ctrl Delay			16.0					
HCM 2010 LOS			B					
Notes								

HCM 2010 Signalized Intersection Summary
3: Peterson Blvd & US 24 WB ramp

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	230	0	5	160	190	0	0	735	205
Future Volume (veh/h)	0	0	0	230	0	5	160	190	0	0	735	205
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				264	0	5	195	232	0	0	817	228
Adj No. of Lanes				1	1	0	1	2	0	0	2	1
Peak Hour Factor				0.87	0.87	0.92	0.82	0.82	0.92	0.92	0.90	0.90
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				323	0	289	445	2304	0	0	1716	768
Arrive On Green				0.18	0.00	0.18	0.17	1.00	0.00	0.00	0.48	0.48
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	3632	1583
Grp Volume(v), veh/h				264	0	5	195	232	0	0	817	228
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1770	1583
Q Serve(g_s), s				8.6	0.0	0.2	3.1	0.0	0.0	0.0	9.3	5.2
Cycle Q Clear(g_c), s				8.6	0.0	0.2	3.1	0.0	0.0	0.0	9.3	5.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				323	0	289	445	2304	0	0	1716	768
V/C Ratio(X)				0.82	0.00	0.02	0.44	0.10	0.00	0.00	0.48	0.30
Avail Cap(c_a), veh/h				532	0	475	505	2304	0	0	1716	768
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.98	0.98	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				23.6	0.0	20.1	6.3	0.0	0.0	0.0	10.3	9.3
Incr Delay (d2), s/veh				5.1	0.0	0.0	0.7	0.1	0.0	0.0	0.9	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.6	0.0	0.1	1.4	0.0	0.0	0.0	4.8	2.5
LnGrp Delay(d),s/veh				28.6	0.0	20.2	7.0	0.1	0.0	0.0	11.3	10.3
LnGrp LOS				C		C	A	A			B	B
Approach Vol, veh/h					269			427			1045	
Approach Delay, s/veh					28.5			3.2			11.1	
Approach LOS					C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		44.1			10.0	34.1		15.9				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		32.0			7.0	20.0		18.0				
Max Q Clear Time (g_c+I1), s		2.0			5.1	11.3		10.6				
Green Ext Time (p_c), s		9.7			0.1	5.0		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay				11.8								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary
4: Peterson Blvd & US 24 EB ramp

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	65	385	135	0	100	0	210	80	110	935	0
Future Volume (veh/h)	50	65	385	135	0	100	0	210	80	110	935	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	58	76	0	171	0	127	0	247	94	120	1016	0
Adj No. of Lanes	0	1	1	1	1	0	0	2	0	1	2	0
Peak Hour Factor	0.86	0.86	0.86	0.79	0.79	0.79	0.85	0.85	0.85	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	161	176	291	362	0	291	0	1250	463	701	2298	0
Arrive On Green	0.18	0.18	0.00	0.18	0.00	0.18	0.00	0.49	0.49	0.14	1.00	0.00
Sat Flow, veh/h	409	959	1583	1318	0	1583	0	2623	937	1774	3632	0
Grp Volume(v), veh/h	134	0	0	171	0	127	0	171	170	120	1016	0
Grp Sat Flow(s),veh/h/ln	1369	0	1583	1318	0	1583	0	1770	1697	1774	1770	0
Q Serve(g_s), s	1.8	0.0	0.0	1.3	0.0	4.3	0.0	3.2	3.4	1.7	0.0	0.0
Cycle Q Clear(g_c), s	6.0	0.0	0.0	7.3	0.0	4.3	0.0	3.2	3.4	1.7	0.0	0.0
Prop In Lane	0.43		1.00	1.00		1.00	0.00		0.55	1.00		0.00
Lane Grp Cap(c), veh/h	338	0	291	362	0	291	0	874	839	701	2298	0
V/C Ratio(X)	0.40	0.00	0.00	0.47	0.00	0.44	0.00	0.20	0.20	0.17	0.44	0.00
Avail Cap(c_a), veh/h	620	0	581	603	0	581	0	874	839	721	2298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.77	0.77	0.00
Uniform Delay (d), s/veh	22.1	0.0	0.0	23.0	0.0	21.7	0.0	8.5	8.5	5.0	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	1.0	0.0	1.0	0.0	0.5	0.5	0.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	2.8	0.0	2.0	0.0	1.7	1.7	0.8	0.2	0.0
LnGrp Delay(d),s/veh	22.9	0.0	0.0	23.9	0.0	22.8	0.0	9.0	9.1	5.1	0.5	0.0
LnGrp LOS	C			C		C		A	A	A	A	
Approach Vol, veh/h		134			298			341			1136	
Approach Delay, s/veh		22.9			23.4			9.0			1.0	
Approach LOS		C			C			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.3	34.6		16.0		44.0		16.0				
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s	5.0	18.0		22.0		28.0		22.0				
Max Q Clear Time (g_c+I1), s	3.7	5.4		8.0		2.0		9.3				
Green Ext Time (p_c), s	0.0	7.2		1.8		11.0		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			7.5									
HCM 2010 LOS			A									

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	5	5	60	315	5	0	65	595	410	40	1880	5
Future Volume (veh/h)	5	5	60	315	5	0	65	595	410	40	1880	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	6	6	0	350	6	0	76	692	0	49	2293	0
Adj No. of Lanes	1	1	1	2	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.90	0.90	0.90	0.86	0.86	0.86	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	31	26	405	417	187	142	2243	1004	539	2223	994
Arrive On Green	0.02	0.02	0.00	0.12	0.12	0.00	0.05	0.63	0.00	0.04	0.63	0.00
Sat Flow, veh/h	1774	1863	1583	3442	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	6	6	0	350	6	0	76	692	0	49	2293	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.4	0.4	0.0	12.0	0.2	0.0	1.8	10.7	0.0	1.1	75.4	0.0
Cycle Q Clear(g_c), s	0.4	0.4	0.0	12.0	0.2	0.0	1.8	10.7	0.0	1.1	75.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	29	31	26	405	417	187	142	2243	1004	539	2223	994
V/C Ratio(X)	0.21	0.20	0.00	0.86	0.01	0.00	0.54	0.31	0.00	0.09	1.03	0.00
Avail Cap(c_a), veh/h	251	264	224	430	442	198	178	2243	1004	586	2223	994
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.2	58.2	0.0	52.0	46.8	0.0	30.3	10.0	0.0	7.2	22.3	0.0
Incr Delay (d2), s/veh	3.4	3.1	0.0	15.8	0.0	0.0	3.1	0.4	0.0	0.1	27.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.0	6.6	0.1	0.0	1.7	5.3	0.0	0.6	45.0	0.0
LnGrp Delay(d),s/veh	61.6	61.3	0.0	67.8	46.8	0.0	33.5	10.4	0.0	7.3	50.1	0.0
LnGrp LOS	E	E		E	D		C	B		A	F	
Approach Vol, veh/h		12			356			768			2342	
Approach Delay, s/veh		61.5			67.4			12.6			49.2	
Approach LOS		E			E			B			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	83.1		7.0	10.5	82.4		20.1				
Change Period (Y+Rc), s	5.0	7.0		5.0	5.0	7.0		6.0				
Max Green Setting (Gmax), s	8.0	57.0		17.0	8.0	57.0		15.0				
Max Q Clear Time (g_c+I1), s	3.1	12.7		2.4	3.8	77.4		14.0				
Green Ext Time (p_c), s	0.0	38.6		0.0	0.0	0.0		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			43.0									
HCM 2010 LOS			D									













HCM 2010 Signalized Intersection Summary
6: US 24 & Marksheffel Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	5	800	655	10	220	50	225	335	0	300	1275	10
Future Volume (veh/h)	5	800	655	10	220	50	225	335	0	300	1275	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	5	842	0	11	242	0	292	435	0	353	1500	0
Adj No. of Lanes	1	2	1	1	1	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.77	0.77	0.77	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	767	343	87	418	355	444	1745	781	609	1813	811
Arrive On Green	0.01	0.22	0.00	0.02	0.22	0.00	0.06	0.49	0.00	0.08	0.51	0.00
Sat Flow, veh/h	1774	3539	1583	1774	1863	1583	3442	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	5	842	0	11	242	0	292	435	0	353	1500	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1863	1583	1721	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.3	26.0	0.0	0.6	13.9	0.0	4.9	8.5	0.0	10.0	43.1	0.0
Cycle Q Clear(g_c), s	0.3	26.0	0.0	0.6	13.9	0.0	4.9	8.5	0.0	10.0	43.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	767	343	87	418	355	444	1745	781	609	1813	811
V/C Ratio(X)	0.03	1.10	0.00	0.13	0.58	0.00	0.66	0.25	0.00	0.58	0.83	0.00
Avail Cap(c_a), veh/h	420	767	343	297	418	355	797	1745	781	609	1813	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.9	47.0	0.0	38.4	41.5	0.0	24.2	17.6	0.0	15.3	24.8	0.0
Incr Delay (d2), s/veh	0.1	62.6	0.0	0.6	5.8	0.0	1.7	0.3	0.0	1.4	4.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	19.3	0.0	0.3	7.8	0.0	2.5	4.3	0.0	3.1	22.0	0.0
LnGrp Delay(d),s/veh	37.0	109.6	0.0	39.1	47.2	0.0	25.8	17.9	0.0	16.7	29.3	0.0
LnGrp LOS	D	F		D	D		C	B		B	C	
Approach Vol, veh/h		847			253			727			1853	
Approach Delay, s/veh		109.2			46.9			21.1			26.9	
Approach LOS		F			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	66.2	6.8	32.0	12.7	68.5	5.9	32.9				
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0				
Max Green Setting (Gmax), s	10.0	45.0	16.0	26.0	20.0	35.0	16.0	26.0				
Max Q Clear Time (g_c+I1), s	12.0	10.5	2.6	28.0	6.9	45.1	2.3	15.9				
Green Ext Time (p_c), s	0.0	17.1	0.0	0.0	0.8	0.0	0.0	5.1				
Intersection Summary												
HCM 2010 Ctrl Delay			46.1									
HCM 2010 LOS			D									

























Movement	SEL	SER	NEL	NET	SWT	SWR		
Lane Configurations								
Traffic Volume (veh/h)	125	105	30	330	1145	205		
Future Volume (veh/h)	125	105	30	330	1145	205		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	137	0	33	363	1431	0		
Adj No. of Lanes	2	1	1	2	2	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.80	0.80		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	746	343	257	2477	2212	990		
Arrive On Green	0.22	0.00	0.03	0.70	0.62	0.00		
Sat Flow, veh/h	3442	1583	1774	3632	3632	1583		
Grp Volume(v), veh/h	137	0	33	363	1431	0		
Grp Sat Flow(s),veh/h/ln	1721	1583	1774	1770	1770	1583		
Q Serve(g_s), s	3.9	0.0	0.7	4.1	30.5	0.0		
Cycle Q Clear(g_c), s	3.9	0.0	0.7	4.1	30.5	0.0		
Prop In Lane	1.00	1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	746	343	257	2477	2212	990		
V/C Ratio(X)	0.18	0.00	0.13	0.15	0.65	0.00		
Avail Cap(c_a), veh/h	746	343	361	2477	2212	990		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	38.3	0.0	11.3	6.0	14.2	0.0		
Incr Delay (d2), s/veh	0.5	0.0	0.2	0.1	1.5	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.4	2.1	15.4	0.0		
LnGrp Delay(d),s/veh	38.9	0.0	11.5	6.1	15.6	0.0		
LnGrp LOS	D		B	A	B			
Approach Vol, veh/h	137			396	1431			
Approach Delay, s/veh	38.9			6.6	15.6			
Approach LOS	D			A	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		89.0		31.0	9.0	80.0		
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		
Max Green Setting (Gmax), s		84.0		26.0	11.0	68.0		
Max Q Clear Time (g_c+I1), s		6.1		5.9	2.7	32.5		
Green Ext Time (p_c), s		25.3		0.6	0.0	18.9		
Intersection Summary								
HCM 2010 Ctrl Delay			15.4					
HCM 2010 LOS			B					

	↑	↖	↘	↓	↙	↗		
Movement	NBT	NBR	SBL	SBT	NWL	NWR		
Lane Configurations	↑↑		↖	↑	↘			
Traffic Volume (veh/h)	440	25	0	1170	180	10		
Future Volume (veh/h)	440	25	0	1170	180	10		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	518	29	0	1286	205	11		
Adj No. of Lanes	2	0	1	1	0	0		
Peak Hour Factor	0.85	0.85	0.91	0.91	0.88	0.88		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	2325	130	65	1271	348	19		
Arrive On Green	0.68	0.68	0.00	0.68	0.21	0.21		
Sat Flow, veh/h	3501	190	856	1863	1666	89		
Grp Volume(v), veh/h	269	278	0	1286	217	0		
Grp Sat Flow(s),veh/h/ln	1770	1829	856	1863	1764	0		
Q Serve(g_s), s	6.3	6.3	0.0	75.0	12.2	0.0		
Cycle Q Clear(g_c), s	6.3	6.3	0.0	75.0	12.2	0.0		
Prop In Lane		0.10	1.00		0.94	0.05		
Lane Grp Cap(c), veh/h	1207	1248	65	1271	368	0		
V/C Ratio(X)	0.22	0.22	0.00	1.01	0.59	0.00		
Avail Cap(c_a), veh/h	1207	1248	65	1271	369	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.6	6.6	0.0	17.5	39.3	0.0		
Incr Delay (d2), s/veh	0.4	0.4	0.0	28.3	2.5	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.2	3.3	0.0	47.7	6.2	0.0		
LnGrp Delay(d),s/veh	7.0	7.0	0.0	45.8	41.7	0.0		
LnGrp LOS	A	A		F	D			
Approach Vol, veh/h	547			1286	217			
Approach Delay, s/veh	7.0			45.8	41.7			
Approach LOS	A			D	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		82.0				82.0		28.0
Change Period (Y+Rc), s		7.0				7.0		5.0
Max Green Setting (Gmax), s		75.0				75.0		23.0
Max Q Clear Time (g_c+I1), s		8.3				77.0		14.2
Green Ext Time (p_c), s		32.4				0.0		0.4
Intersection Summary								
HCM 2010 Ctrl Delay			35.0					
HCM 2010 LOS			C					
Notes								

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	95	5	410	30	5	1090		
Future Volume (veh/h)	95	5	410	30	5	1090		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	134	0	423	0	6	1313		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.71	0.71	0.97	0.97	0.83	0.83		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	163	145	1489	1265	776	1489		
Arrive On Green	0.09	0.00	0.80	0.00	0.80	0.80		
Sat Flow, veh/h	1774	1583	1863	1583	960	1863		
Grp Volume(v), veh/h	134	0	423	0	6	1313		
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	960	1863		
Q Serve(g_s), s	8.2	0.0	6.5	0.0	0.2	52.8		
Cycle Q Clear(g_c), s	8.2	0.0	6.5	0.0	6.7	52.8		
Prop In Lane	1.00	1.00		1.00	1.00			
Lane Grp Cap(c), veh/h	163	145	1489	1265	776	1489		
V/C Ratio(X)	0.82	0.00	0.28	0.00	0.01	0.88		
Avail Cap(c_a), veh/h	226	202	1489	1265	776	1489		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	49.1	0.0	2.9	0.0	3.7	7.5		
Incr Delay (d2), s/veh	15.6	0.0	0.5	0.0	0.0	7.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.7	0.0	3.5	0.0	0.1	29.5		
LnGrp Delay(d),s/veh	64.6	0.0	3.4	0.0	3.8	15.4		
LnGrp LOS	E		A		A	B		
Approach Vol, veh/h	134		423			1319		
Approach Delay, s/veh	64.6		3.4			15.3		
Approach LOS	E		A			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		94.9				94.9		15.1
Change Period (Y+Rc), s		7.0				7.0		5.0
Max Green Setting (Gmax), s		84.0				84.0		14.0
Max Q Clear Time (g_c+I1), s		8.5				54.8		10.2
Green Ext Time (p_c), s		33.8				20.0		0.1
Intersection Summary								
HCM 2010 Ctrl Delay			16.2					
HCM 2010 LOS			B					

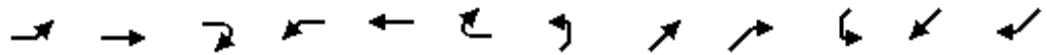
HCM 2010 Signalized Intersection Summary
 10: Meridian Rd/Rolling Thunder Way

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	15	100	195	5	150	480	100	300	10	185	600	10
Future Volume (veh/h)	15	100	195	5	150	480	100	300	10	185	600	10
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	16	108	0	6	181	0	108	323	11	201	652	11
Adj No. of Lanes	0	1	1	0	1	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.83	0.83	0.83	0.93	0.93	0.93	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	205	202	7	218	191	314	859	730	557	896	762
Arrive On Green	0.13	0.13	0.00	0.12	0.12	0.00	0.05	0.46	0.46	0.07	0.48	0.48
Sat Flow, veh/h	239	1612	1583	60	1800	1583	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	124	0	0	187	0	0	108	323	11	201	652	11
Grp Sat Flow(s),veh/h/ln	1851	0	1583	1860	0	1583	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	6.9	0.0	0.0	10.8	0.0	0.0	3.5	12.4	0.4	6.6	30.7	0.4
Cycle Q Clear(g_c), s	6.9	0.0	0.0	10.8	0.0	0.0	3.5	12.4	0.4	6.6	30.7	0.4
Prop In Lane	0.13		1.00	0.03		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	0	202	225	0	191	314	859	730	557	896	762
V/C Ratio(X)	0.53	0.00	0.00	0.83	0.00	0.00	0.34	0.38	0.02	0.36	0.73	0.01
Avail Cap(c_a), veh/h	236	0	202	304	0	259	350	859	730	557	896	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.9	0.0	0.0	47.3	0.0	0.0	18.2	19.3	16.1	14.4	22.8	14.9
Incr Delay (d2), s/veh	8.2	0.0	0.0	15.3	0.0	0.0	0.6	1.3	0.0	0.4	3.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	0.0	6.5	0.0	0.0	1.7	6.7	0.2	3.2	16.5	0.2
LnGrp Delay(d),s/veh	53.1	0.0	0.0	62.6	0.0	0.0	18.8	20.6	16.1	14.8	25.8	14.9
LnGrp LOS	D			E			B	C	B	B	C	B
Approach Vol, veh/h		124			187			442			864	
Approach Delay, s/veh		53.1			62.6			20.1			23.1	
Approach LOS		D			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	57.7		19.3	10.8	59.9		20.0				
Change Period (Y+Rc), s	5.0	7.0		6.0	5.0	7.0		6.0				
Max Green Setting (Gmax), s	8.0	46.0		18.0	8.0	46.0		14.0				
Max Q Clear Time (g_c+I1), s	8.6	14.4		12.8	5.5	32.7		8.9				
Green Ext Time (p_c), s	0.0	7.7		0.5	0.1	5.4		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			29.1									
HCM 2010 LOS			C									
Notes												



























Movement	SEL	SER	NEL	NET	SWT	SWR		
Lane Configurations								
Traffic Volume (veh/h)	245	315	300	195	450	390		
Future Volume (veh/h)	245	315	300	195	450	390		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	272	0	333	217	506	0		
Adj No. of Lanes	1	1	2	1	1	1		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.89	0.89		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	339	302	1084	1304	1085	922		
Arrive On Green	0.19	0.00	0.06	0.70	0.58	0.00		
Sat Flow, veh/h	1774	1583	3442	1863	1863	1583		
Grp Volume(v), veh/h	272	0	333	217	506	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	1721	1863	1863	1583		
Q Serve(g_s), s	16.1	0.0	4.0	4.4	17.1	0.0		
Cycle Q Clear(g_c), s	16.1	0.0	4.0	4.4	17.1	0.0		
Prop In Lane	1.00	1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	339	302	1084	1304	1085	922		
V/C Ratio(X)	0.80	0.00	0.31	0.17	0.47	0.00		
Avail Cap(c_a), veh/h	339	302	1492	1304	1085	922		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	42.5	0.0	9.0	5.6	13.2	0.0		
Incr Delay (d2), s/veh	18.0	0.0	0.2	0.3	1.4	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.6	0.0	1.8	2.3	9.1	0.0		
LnGrp Delay(d),s/veh	60.5	0.0	9.1	5.9	14.6	0.0		
LnGrp LOS	E		A	A	B			
Approach Vol, veh/h	272			550	506			
Approach Delay, s/veh	60.5			7.8	14.6			
Approach LOS	E			A	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		84.0		26.0	13.0	71.0		
Change Period (Y+Rc), s		7.0		5.0	6.0	7.0		
Max Green Setting (Gmax), s		77.0		21.0	20.0	51.0		
Max Q Clear Time (g_c+I1), s		6.4		18.1	6.0	19.1		
Green Ext Time (p_c), s		5.4		0.2	1.0	5.1		
Intersection Summary								
HCM 2010 Ctrl Delay			21.2					
HCM 2010 LOS			C					
Notes								

HCM 2010 Signalized Intersection Summary
 12: Meridian Ranch/Judge Orr Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	15	80	150	120	30	0	60	250	40	5	465	10
Future Volume (veh/h)	15	80	150	120	30	0	60	250	40	5	465	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	17	93	174	150	38	0	65	269	43	6	534	11
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.80	0.80	0.80	0.93	0.93	0.93	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	144	248	208	46	0	460	1003	160	646	982	20
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.00	0.05	0.64	0.64	0.54	0.54	0.54
Sat Flow, veh/h	55	626	1077	625	199	0	1774	1568	251	1063	1819	37
Grp Volume(v), veh/h	284	0	0	188	0	0	65	0	312	6	0	545
Grp Sat Flow(s),veh/h/ln	1758	0	0	824	0	0	1774	0	1819	1063	0	1856
Q Serve(g_s), s	0.0	0.0	0.0	7.6	0.0	0.0	1.5	0.0	7.5	0.3	0.0	19.1
Cycle Q Clear(g_c), s	15.2	0.0	0.0	22.9	0.0	0.0	1.5	0.0	7.5	0.3	0.0	19.1
Prop In Lane	0.06		0.61	0.80		0.00	1.00		0.14	1.00		0.02
Lane Grp Cap(c), veh/h	442	0	0	254	0	0	460	0	1164	646	0	1002
V/C Ratio(X)	0.64	0.00	0.00	0.74	0.00	0.00	0.14	0.00	0.27	0.01	0.00	0.54
Avail Cap(c_a), veh/h	442	0	0	254	0	0	478	0	1164	646	0	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.6	0.0	0.0	40.0	0.0	0.0	10.3	0.0	7.8	10.6	0.0	15.0
Incr Delay (d2), s/veh	3.6	0.0	0.0	11.7	0.0	0.0	0.1	0.0	0.6	0.0	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	0.0	0.0	6.0	0.0	0.0	0.7	0.0	3.9	0.1	0.0	10.3
LnGrp Delay(d),s/veh	39.2	0.0	0.0	51.7	0.0	0.0	10.4	0.0	8.4	10.7	0.0	17.1
LnGrp LOS	D			D			B		A	B		B
Approach Vol, veh/h		284			188			377				551
Approach Delay, s/veh		39.2			51.7			8.7				17.0
Approach LOS		D			D			A				B
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		71.0		29.0	10.0	61.0		29.0				
Change Period (Y+Rc), s		7.0		6.0	5.0	7.0		6.0				
Max Green Setting (Gmax), s		64.0		23.0	6.0	53.0		23.0				
Max Q Clear Time (g_c+I1), s		9.5		17.2	3.5	21.1		24.9				
Green Ext Time (p_c), s		0.9		1.9	0.0	0.9		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				24.0								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary
 13: US 24 & Stapleton Rd

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	25	75	45	10	60	10	35	230	5	25	400	30
Future Volume (veh/h)	25	75	45	10	60	10	35	230	5	25	400	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	29	87	52	14	81	14	38	250	5	29	471	35
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.74	0.74	0.74	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	466	587	499	449	587	499	345	944	803	540	734	624
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.51	0.51	0.39	0.39	0.39
Sat Flow, veh/h	1295	1863	1583	1245	1863	1583	1774	1863	1583	1120	1863	1583
Grp Volume(v), veh/h	29	87	52	14	81	14	38	250	5	29	471	35
Grp Sat Flow(s),veh/h/ln	1295	1863	1583	1245	1863	1583	1774	1863	1583	1120	1863	1583
Q Serve(g_s), s	1.2	2.4	1.7	0.6	2.3	0.4	0.9	5.6	0.1	1.2	15.0	1.0
Cycle Q Clear(g_c), s	3.5	2.4	1.7	3.0	2.3	0.4	0.9	5.6	0.1	1.2	15.0	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	466	587	499	449	587	499	345	944	803	540	734	624
V/C Ratio(X)	0.06	0.15	0.10	0.03	0.14	0.03	0.11	0.26	0.01	0.05	0.64	0.06
Avail Cap(c_a), veh/h	466	587	499	449	587	499	413	1633	1388	912	1352	1150
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	18.0	17.7	19.1	17.9	17.3	12.7	10.3	8.9	13.8	17.9	13.7
Incr Delay (d2), s/veh	0.3	0.5	0.4	0.1	0.5	0.1	0.1	0.1	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.3	0.8	0.2	1.2	0.2	0.4	2.9	0.1	0.4	7.7	0.4
LnGrp Delay(d),s/veh	19.4	18.5	18.1	19.2	18.4	17.4	12.8	10.3	8.9	13.8	18.3	13.7
LnGrp LOS	B	B	B	B	B	B	B	B	A	B	B	B
Approach Vol, veh/h		168			109			293			535	
Approach Delay, s/veh		18.5			18.4			10.6			17.7	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		44.0		29.0	8.2	35.8		29.0				
Change Period (Y+Rc), s		7.0		6.0	5.0	7.0		6.0				
Max Green Setting (Gmax), s		64.0		23.0	6.0	53.0		23.0				
Max Q Clear Time (g_c+I1), s		7.6		5.5	2.9	17.0		5.0				
Green Ext Time (p_c), s		0.7		1.6	0.0	0.7		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			16.0									
HCM 2010 LOS			B									

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Stapleton Rd				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	35	230	5	25	400	30		
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.85	0.85	0.85		
Hourly Flow Rate, HFR (veh/h)	38	249	5	29	470	35		
Percent Heavy Vehicles	6	--	--	5	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	10	60	10	25	75	45		
Peak-Hour Factor, PHF	0.74	0.74	0.74	0.86	0.86	0.86		
Hourly Flow Rate, HFR (veh/h)	13	81	13	29	87	52		
Percent Heavy Vehicles	0	0	0	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	L	T	R	L	T	R
v (veh/h)	38	29	13	81	13	29	87	52
C (m) (veh/h)	1039	1294	163	268	795	187	277	594
v/c	0.04	0.02	0.08	0.30	0.02	0.16	0.31	0.09
95% queue length	0.11	0.07	0.26	1.28	0.05	0.55	1.35	0.29
Control Delay (s/veh)	8.6	7.8	29.0	24.2	9.6	27.8	23.9	11.6
LOS	A	A	D	C	A	D	C	B
Approach Delay (s/veh)	--	--	23.0			20.8		
Approach LOS	--	--	C			C		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Elbert Road				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	30	205	0	5	385	0		
Peak-Hour Factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89		
Hourly Flow Rate, HFR (veh/h)	33	230	0	5	432	0		
Percent Heavy Vehicles	6	--	--	5	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	20	15	5	0	10	90		
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.83	0.83	0.83		
Hourly Flow Rate, HFR (veh/h)	27	20	6	0	12	108		
Percent Heavy Vehicles	0	0	0	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			1			1		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	L	T	R	L	T	R
v (veh/h)	33	5	27	20	6	0	12	108
C (m) (veh/h)	1107	1320	261	336	814	304	334	624
v/c	0.03	0.00	0.10	0.06	0.01	0.00	0.04	0.17
95% queue length	0.09	0.01	0.35	0.19	0.02	0.00	0.11	0.63
Control Delay (s/veh)	8.4	7.7	20.4	16.4	9.5	16.8	16.2	12.0
LOS	A	A	C	C	A	C	C	B
Approach Delay (s/veh)	--	--	17.6			12.4		
Approach LOS	--	--	C			B		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Bradshaw Road				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	85	150			255	65		
Peak-Hour Factor, PHF	0.79	0.79	0.92	0.92	0.71	0.71		
Hourly Flow Rate, HFR (veh/h)	107	189	0	0	359	91		
Percent Heavy Vehicles	5	--	--	4	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	0	0	1	1		
Configuration	L	T			T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				35		95		
Peak-Hour Factor, PHF	1.00	1.00	0.92	0.56	1.00	0.56		
Hourly Flow Rate, HFR (veh/h)	0	0	0	62	0	169		
Percent Heavy Vehicles	0	0	4	5	0	5		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			1			1		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
v (veh/h)	107					62		169
C (m) (veh/h)	1095					333		679
v/c	0.10					0.19		0.25
95% queue length	0.32					0.68		0.99
Control Delay (s/veh)	8.6					18.3		12.1
LOS	A					C		B
Approach Delay (s/veh)	--	--				13.7		
Approach LOS	--	--				B		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Ellicott Highway				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	5	155	5	20	180	0		
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.89	0.89	0.89		
Hourly Flow Rate, HFR (veh/h)	6	212	6	22	202	0		
Percent Heavy Vehicles	7	--	--	9	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	1	1	1	0		
Configuration	L	T	R	L		TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	25	0	30	5	5	15		
Peak-Hour Factor, PHF	0.61	0.61	0.61	0.72	0.72	0.72		
Hourly Flow Rate, HFR (veh/h)	40	0	49	6	6	20		
Percent Heavy Vehicles	2	0	2	4	4	4		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	1	0	1	0		
Configuration	LT		R		LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R		LTR	
v (veh/h)	6	22	40		49		32	
C (m) (veh/h)	1341	1311	470		828		638	
v/c	0.00	0.02	0.09		0.06		0.05	
95% queue length	0.01	0.05	0.28		0.19		0.16	
Control Delay (s/veh)	7.7	7.8	13.4		9.6		10.9	
LOS	A	A	B		A		B	
Approach Delay (s/veh)	--	--	11.3			10.9		
Approach LOS	--	--	B			B		

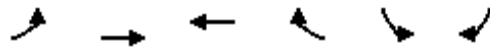
TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Calhan Highway				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	15	110	20	15	105	5		
Peak-Hour Factor, PHF	0.72	0.72	0.72	0.81	0.81	0.81		
Hourly Flow Rate, HFR (veh/h)	20	152	27	18	129	6		
Percent Heavy Vehicles	6	--	--	9	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	1	0	1	0		
Configuration	LT		R	LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	25	15	5	0	15	20		
Peak-Hour Factor, PHF	0.72	0.72	0.72	0.51	0.51	0.51		
Hourly Flow Rate, HFR (veh/h)	34	20	6	0	29	39		
Percent Heavy Vehicles	12	12	12	8	8	8		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LTR	LTR			LTR		
v (veh/h)	20	18	60			68		
C (m) (veh/h)	1425	1355	528			688		
v/c	0.01	0.01	0.11			0.10		
95% queue length	0.04	0.04	0.38			0.33		
Control Delay (s/veh)	7.6	7.7	12.7			10.8		
LOS	A	A	B			B		
Approach Delay (s/veh)	--	--	12.7			10.8		
Approach LOS	--	--	B			B		

TWO-WAY STOP CONTROL SUMMARY								
General Information					Site Information			
Analyst	AMER				Intersection			
Agency/Co.	DEA				Jurisdiction			
Date Performed	7/6/2016				Analysis Year	2016		
Analysis Time Period	Existing AM Peak							
Project Description US 24 PEL								
East/West Street: US 24					North/South Street: Peyton Highway			
Intersection Orientation: East-West					Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments								
Major Street		Eastbound			Westbound			
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	25	165	10	5	220	20		
Peak-Hour Factor, PHF	0.84	0.84	0.84	0.86	0.86	0.86		
Hourly Flow Rate, HFR (veh/h)	29	196	11	5	255	23		
Percent Heavy Vehicles	6	--	--	11	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street		Northbound			Southbound			
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	40	10	5	20	10	55		
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.75	0.75	0.75		
Hourly Flow Rate, HFR (veh/h)	49	12	6	26	13	73		
Percent Heavy Vehicles	7	7	7	5	5	5		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	1	0	1	1		
Configuration	LT		R	LT		R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	29	5	61		6	39		73
C (m) (veh/h)	1262	1312	377		833	433		776
v/c	0.02	0.00	0.16		0.01	0.09		0.09
95% queue length	0.07	0.01	0.58		0.02	0.30		0.31
Control Delay (s/veh)	7.9	7.8	16.4		9.4	14.1		10.1
LOS	A	A	C		A	B		B
Approach Delay (s/veh)	--	--	15.8			11.5		
Approach LOS	--	--	C			B		

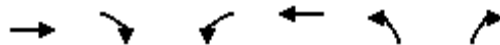
TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2040			
Analysis Time Period	No Build 2040 AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Ramah Rd				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	5	215	5	5	120	5		
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.86	0.86	0.86		
Hourly Flow Rate, HFR (veh/h)	7	307	7	5	139	5		
Percent Heavy Vehicles	9	--	--	12	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	5	0	5	10	0	5		
Peak-Hour Factor, PHF	0.50	0.50	0.50	0.88	0.88	0.88		
Hourly Flow Rate, HFR (veh/h)	10	0	10	11	0	5		
Percent Heavy Vehicles	0	0	0	20	20	20		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR	LTR			LTR		
v (veh/h)	7	5	20			16		
C (m) (veh/h)	1397	1192	591			534		
v/c	0.01	0.00	0.03			0.03		
95% queue length	0.02	0.01	0.11			0.09		
Control Delay (s/veh)	7.6	8.0	11.3			11.9		
LOS	A	A	B			B		
Approach Delay (s/veh)	--	--	11.3			11.9		
Approach LOS	--	--	B			B		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Hathaway Dr				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	105	1675	5	30	2300	40		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86		
Hourly Flow Rate, HFR (veh/h)	116	1861	5	34	2674	46		
Percent Heavy Vehicles	6	--	--	6	--	--		
Median Type	Raised curb							
RT Channelized			0			0		
Lanes	1	2	1	1	2	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)			25			140		
Peak-Hour Factor, PHF	1.00	1.00	0.46	1.00	1.00	0.74		
Hourly Flow Rate, HFR (veh/h)	0	0	54	0	0	189		
Percent Heavy Vehicles	0	0	6	0	0	6		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	1	0	0	1		
Configuration			R			R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L			R			R
v (veh/h)	116	34			54			189
C (m) (veh/h)	137	303			313			179
v/c	0.85	0.11			0.17			1.06
95% queue length	8.95	0.38			0.62			19.52
Control Delay (s/veh)	136.4	18.4			18.9			277.3
LOS	F	C			C			F
Approach Delay (s/veh)	--	--	18.9			277.3		
Approach LOS	--	--	C			F		



















HCM 2010 Signalized Intersection Summary
 1: US 24 & SB Powers Blvd off-ramp























Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		↑↑↑	↑↑		↑↑↑			
Traffic Volume (veh/h)	0	1875	1170	0	135	40		
Future Volume (veh/h)	0	1875	1170	0	135	40		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1900		
Adj Flow Rate, veh/h	0	1974	1345	0	96	100		
Adj No. of Lanes	0	3	2	0	1	1		
Peak Hour Factor	0.95	0.95	0.87	0.87	0.91	0.91		
Percent Heavy Veh, %	0	2	2	0	2	0		
Cap, veh/h	0	2627	1829	0	562	511		
Arrive On Green	0.00	0.52	1.00	0.00	0.32	0.32		
Sat Flow, veh/h	0	5421	3725	0	1774	1615		
Grp Volume(v), veh/h	0	1974	1345	0	96	100		
Grp Sat Flow(s),veh/h/ln	0	1695	1770	0	1774	1615		
Q Serve(g_s), s	0.0	18.4	0.0	0.0	2.3	2.7		
Cycle Q Clear(g_c), s	0.0	18.4	0.0	0.0	2.3	2.7		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	2627	1829	0	562	511		
V/C Ratio(X)	0.00	0.75	0.74	0.00	0.17	0.20		
Avail Cap(c_a), veh/h	0	2627	1829	0	562	511		
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	11.5	0.0	0.0	14.8	14.9		
Incr Delay (d2), s/veh	0.0	2.0	2.7	0.0	0.7	0.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	8.9	0.7	0.0	1.2	1.3		
LnGrp Delay(d),s/veh	0.0	13.5	2.7	0.0	15.5	15.8		
LnGrp LOS		B	A		B	B		
Approach Vol, veh/h		1974	1345		196			
Approach Delay, s/veh		13.5	2.7		15.6			
Approach LOS		B	A		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		36.0		24.0		36.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		31.0		19.0		31.0		
Max Q Clear Time (g_c+I1), s		20.4		4.7		2.0		
Green Ext Time (p_c), s		10.2		0.5		26.7		
Intersection Summary								
HCM 2010 Ctrl Delay			9.5					
HCM 2010 LOS			A					
Notes								

































Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑			↑↑↑	↑↑↑			
Traffic Volume (veh/h)	1385	0	0	1950	155	60		
Future Volume (veh/h)	1385	0	0	1950	155	60		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1900		
Adj Flow Rate, veh/h	1458	0	0	2031	120	123		
Adj No. of Lanes	2	0	0	3	1	1		
Peak Hour Factor	0.95	0.95	0.96	0.96	0.90	0.90		
Percent Heavy Veh, %	2	0	0	2	2	0		
Cap, veh/h	1888	0	0	2712	532	484		
Arrive On Green	1.00	0.00	0.00	0.53	0.30	0.30		
Sat Flow, veh/h	3725	0	0	5421	1774	1615		
Grp Volume(v), veh/h	1458	0	0	2031	120	123		
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1774	1615		
Q Serve(g_s), s	0.0	0.0	0.0	18.6	3.0	3.5		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	18.6	3.0	3.5		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1888	0	0	2712	532	484		
V/C Ratio(X)	0.77	0.00	0.00	0.75	0.23	0.25		
Avail Cap(c_a), veh/h	1888	0	0	2712	532	484		
HCM Platoon Ratio	2.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	10.9	15.8	15.9		
Incr Delay (d2), s/veh	3.1	0.0	0.0	1.9	1.0	1.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	9.0	1.6	1.7		
LnGrp Delay(d),s/veh	3.1	0.0	0.0	12.8	16.7	17.2		
LnGrp LOS	A			B	B	B		
Approach Vol, veh/h	1458			2031	243			
Approach Delay, s/veh	3.1			12.8	17.0			
Approach LOS	A			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		37.0				37.0		23.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		32.0				32.0		18.0
Max Q Clear Time (g_c+I1), s		2.0				20.6		5.5
Green Ext Time (p_c), s		28.1				11.1		0.6
Intersection Summary								
HCM 2010 Ctrl Delay			9.3					
HCM 2010 LOS			A					
Notes								

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	40	0	90	530	980	0	0	210	115
Future Volume (veh/h)	0	0	0	40	0	90	530	980	0	0	210	115
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				44	0	100	602	1114	0	0	228	125
Adj No. of Lanes				1	1	0	1	2	0	0	2	1
Peak Hour Factor				0.90	0.90	0.90	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				153	0	136	976	2841	0	0	1869	836
Arrive On Green				0.09	0.00	0.09	0.44	1.00	0.00	0.00	0.53	0.53
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	3632	1583
Grp Volume(v), veh/h				44	0	100	602	1114	0	0	228	125
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1770	1583
Q Serve(g_s), s				2.1	0.0	5.5	15.8	0.0	0.0	0.0	2.9	3.6
Cycle Q Clear(g_c), s				2.1	0.0	5.5	15.8	0.0	0.0	0.0	2.9	3.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				153	0	136	976	2841	0	0	1869	836
V/C Ratio(X)				0.29	0.00	0.73	0.62	0.39	0.00	0.00	0.12	0.15
Avail Cap(c_a), veh/h				355	0	317	1277	2841	0	0	1869	836
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				38.5	0.0	40.1	3.2	0.0	0.0	0.0	10.7	10.9
Incr Delay (d2), s/veh				1.0	0.0	7.4	0.1	0.0	0.0	0.0	0.1	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	2.7	6.7	0.0	0.0	0.0	1.5	1.7
LnGrp Delay(d),s/veh				39.6	0.0	47.5	3.3	0.0	0.0	0.0	10.8	11.3
LnGrp LOS				D		D	A	A			B	B
Approach Vol, veh/h					144			1716			353	
Approach Delay, s/veh					45.1			1.2			11.0	
Approach LOS					D			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		77.2			24.7	52.5		12.8				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		62.0			35.0	22.0		18.0				
Max Q Clear Time (g_c+I1), s		2.0			17.8	5.6		7.5				
Green Ext Time (p_c), s		15.2			2.0	9.1		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay				5.6								
HCM 2010 LOS				A								

HCM 2010 Signalized Intersection Summary
4: Peterson Blvd & US 24 EB ramp

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	60	75	35	0	255	0	1100	375	140	110	0
Future Volume (veh/h)	135	60	75	35	0	255	0	1100	375	140	110	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	153	68	0	43	0	311	0	1294	441	149	117	0
Adj No. of Lanes	0	1	1	1	1	0	0	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82	0.85	0.85	0.85	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	165	56	457	453	0	457	0	1280	421	179	2124	0
Arrive On Green	0.29	0.29	0.00	0.29	0.00	0.29	0.00	0.49	0.49	0.06	0.60	0.00
Sat Flow, veh/h	338	192	1583	1328	0	1583	0	2711	862	1774	3632	0
Grp Volume(v), veh/h	221	0	0	43	0	311	0	860	875	149	117	0
Grp Sat Flow(s),veh/h/ln	530	0	1583	1328	0	1583	0	1770	1711	1774	1770	0
Q Serve(g_s), s	10.4	0.0	0.0	0.0	0.0	15.6	0.0	43.5	44.0	3.6	1.2	0.0
Cycle Q Clear(g_c), s	26.0	0.0	0.0	2.2	0.0	15.6	0.0	43.5	44.0	3.6	1.2	0.0
Prop In Lane	0.69		1.00	1.00		1.00	0.00		0.50	1.00		0.00
Lane Grp Cap(c), veh/h	221	0	457	453	0	457	0	865	836	179	2124	0
V/C Ratio(X)	1.00	0.00	0.00	0.10	0.00	0.68	0.00	0.99	1.05	0.83	0.06	0.00
Avail Cap(c_a), veh/h	221	0	457	453	0	457	0	865	836	179	2124	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.3	0.0	0.0	23.5	0.0	28.3	0.0	22.9	23.0	21.0	7.4	0.0
Incr Delay (d2), s/veh	60.7	0.0	0.0	0.1	0.0	4.1	0.0	29.2	43.9	27.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	0.0	0.0	0.8	0.0	7.3	0.0	28.0	30.9	3.3	0.6	0.0
LnGrp Delay(d),s/veh	101.0	0.0	0.0	23.6	0.0	32.4	0.0	52.0	66.9	48.4	7.5	0.0
LnGrp LOS	F			C		C		D	F	D	A	
Approach Vol, veh/h		221			354			1735			266	
Approach Delay, s/veh		101.0			31.3			59.6			30.4	
Approach LOS		F			C			E			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.0	49.0		31.0		59.0		31.0				
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s	5.0	44.0		26.0		54.0		26.0				
Max Q Clear Time (g_c+I1), s	5.6	46.0		28.0		3.2		17.6				
Green Ext Time (p_c), s	0.0	0.0		0.0		24.7		2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			56.2									
HCM 2010 LOS			E									













													
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations				 	 			 		 	 		
Traffic Volume (veh/h)	0	5	85	495	5	65	50	1650	260	0	750	100	
Future Volume (veh/h)	0	5	85	495	5	65	50	1650	260	0	750	100	
Number	7	4	14	3	8	18	5	2	12	1	6	16	
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	
Adj Flow Rate, veh/h	0	6	0	589	6	0	51	1684	0	0	882	0	
Adj No. of Lanes	1	1	1	2	2	1	1	2	1	1	2	1	
Peak Hour Factor	0.81	0.81	0.81	0.84	0.84	0.84	0.98	0.98	0.98	0.85	0.85	0.85	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	16	17	14	602	619	277	412	2357	1054	167	2065	924	
Arrive On Green	0.00	0.01	0.00	0.17	0.17	0.00	0.04	0.67	0.00	0.00	0.58	0.00	
Sat Flow, veh/h	1774	1863	1583	3442	3539	1583	1774	3539	1583	1774	3539	1583	
Grp Volume(v), veh/h	0	6	0	589	6	0	51	1684	0	0	882	0	
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1770	1583	1774	1770	1583	1774	1770	1583	
Q Serve(g_s), s	0.0	0.4	0.0	20.4	0.2	0.0	1.3	36.4	0.0	0.0	16.6	0.0	
Cycle Q Clear(g_c), s	0.0	0.4	0.0	20.4	0.2	0.0	1.3	36.4	0.0	0.0	16.6	0.0	
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Lane Grp Cap(c), veh/h	16	17	14	602	619	277	412	2357	1054	167	2065	924	
V/C Ratio(X)	0.00	0.36	0.00	0.98	0.01	0.00	0.12	0.71	0.00	0.00	0.43	0.00	
Avail Cap(c_a), veh/h	251	264	224	602	619	277	457	2357	1054	284	2065	924	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	
Uniform Delay (d), s/veh	0.0	59.1	0.0	49.3	40.9	0.0	9.5	12.8	0.0	0.0	13.9	0.0	
Incr Delay (d2), s/veh	0.0	12.2	0.0	31.0	0.0	0.0	0.1	1.9	0.0	0.0	0.6	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.0	12.3	0.1	0.0	0.6	18.2	0.0	0.0	8.3	0.0	
LnGrp Delay(d),s/veh	0.0	71.3	0.0	80.3	40.9	0.0	9.7	14.7	0.0	0.0	14.5	0.0	
LnGrp LOS		E		F	D		A	B			B		
Approach Vol, veh/h		6			595			1735			882		
Approach Delay, s/veh		71.3			79.9			14.5			14.5		
Approach LOS		E			E			B			B		
Timer	1	2	3	4	5	6	7	8					
Assigned Phs	1	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	0.0	86.9		6.1	9.9	77.0		27.0					
Change Period (Y+Rc), s	5.0	7.0		5.0	5.0	7.0		6.0					
Max Green Setting (Gmax), s	8.0	51.0		17.0	8.0	51.0		21.0					
Max Q Clear Time (g_c+I1), s	0.0	38.4		2.4	3.3	18.6		22.4					
Green Ext Time (p_c), s	0.0	11.3		0.0	0.0	25.6		0.0					
Intersection Summary													
HCM 2010 Ctrl Delay			26.7										
HCM 2010 LOS			C										

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	15	220	300	10	625	120	620	1045	10	50	415	10
Future Volume (veh/h)	15	220	300	10	625	120	620	1045	10	50	415	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	16	234	0	11	710	0	674	1136	11	57	472	0
Adj No. of Lanes	1	2	1	1	1	1	2	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.92	0.92	0.92	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	1081	483	380	559	475	1062	1575	705	225	1179	527
Arrive On Green	0.02	0.31	0.00	0.02	0.30	0.00	0.15	0.45	0.45	0.04	0.33	0.00
Sat Flow, veh/h	1774	3539	1583	1774	1863	1583	3442	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	16	234	0	11	710	0	674	1136	11	57	472	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1863	1583	1721	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.7	5.9	0.0	0.5	36.0	0.0	14.5	31.5	0.5	2.5	12.3	0.0
Cycle Q Clear(g_c), s	0.7	5.9	0.0	0.5	36.0	0.0	14.5	31.5	0.5	2.5	12.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	97	1081	483	380	559	475	1062	1575	705	225	1179	527
V/C Ratio(X)	0.17	0.22	0.00	0.03	1.27	0.00	0.63	0.72	0.02	0.25	0.40	0.00
Avail Cap(c_a), veh/h	267	1081	483	559	559	475	1391	1575	705	268	1179	527
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.3	31.0	0.0	28.4	42.0	0.0	19.7	27.2	18.6	25.7	30.8	0.0
Incr Delay (d2), s/veh	0.8	0.5	0.0	0.0	135.3	0.0	0.6	2.9	0.0	0.6	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.0	0.0	0.3	39.5	0.0	6.8	15.9	0.2	1.2	6.2	0.0
LnGrp Delay(d),s/veh	34.1	31.5	0.0	28.4	177.3	0.0	20.3	30.1	18.6	26.3	31.8	0.0
LnGrp LOS	C	C		C	F		C	C	B	C	C	
Approach Vol, veh/h		250			721			1821			529	
Approach Delay, s/veh		31.6			175.1			26.4			31.2	
Approach LOS		C			F			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.1	60.4	6.8	42.6	23.6	47.0	7.5	42.0				
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0				
Max Green Setting (Gmax), s	8.0	39.0	14.0	36.0	30.0	17.0	14.0	36.0				
Max Q Clear Time (g_c+I1), s	4.5	33.5	2.5	7.9	16.5	14.3	2.7	38.0				
Green Ext Time (p_c), s	0.0	4.0	0.0	7.5	2.1	2.1	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			59.8									
HCM 2010 LOS			E									

























Movement	SEL	SER	NEL	NET	SWT	SWR		
Lane Configurations								
Traffic Volume (veh/h)	245	40	115	990	395	160		
Future Volume (veh/h)	245	40	115	990	395	160		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	306	0	121	1042	429	0		
Adj No. of Lanes	2	1	1	2	2	1		
Peak Hour Factor	0.80	0.80	0.95	0.95	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1119	515	560	2094	1773	793		
Arrive On Green	0.32	0.00	0.05	0.59	0.50	0.00		
Sat Flow, veh/h	3442	1583	1774	3632	3632	1583		
Grp Volume(v), veh/h	306	0	121	1042	429	0		
Grp Sat Flow(s),veh/h/ln	1721	1583	1774	1770	1770	1583		
Q Serve(g_s), s	7.9	0.0	3.8	20.4	8.3	0.0		
Cycle Q Clear(g_c), s	7.9	0.0	3.8	20.4	8.3	0.0		
Prop In Lane	1.00	1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	1119	515	560	2094	1773	793		
V/C Ratio(X)	0.27	0.00	0.22	0.50	0.24	0.00		
Avail Cap(c_a), veh/h	1119	515	694	2094	1773	793		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	30.0	0.0	12.6	14.2	17.0	0.0		
Incr Delay (d2), s/veh	0.6	0.0	0.2	0.8	0.3	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.8	0.0	1.8	10.2	4.1	0.0		
LnGrp Delay(d),s/veh	30.6	0.0	12.8	15.0	17.3	0.0		
LnGrp LOS	C		B	B	B			
Approach Vol, veh/h	306			1163	429			
Approach Delay, s/veh	30.6			14.8	17.3			
Approach LOS	C			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		76.0		44.0	10.9	65.1		
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		
Max Green Setting (Gmax), s		71.0		39.0	15.0	51.0		
Max Q Clear Time (g_c+I1), s		22.4		9.9	5.8	10.3		
Green Ext Time (p_c), s		15.4		1.7	0.2	14.7		
Intersection Summary								
HCM 2010 Ctrl Delay			17.9					
HCM 2010 LOS			B					

	↑	↖	↙	↓	↘	↗		
Movement	NBT	NBR	SBL	SBT	NWL	NWR		
Lane Configurations	↑↑		↖	↑	↘↗			
Traffic Volume (veh/h)	1130	120	10	510	55	5		
Future Volume (veh/h)	1130	120	10	510	55	5		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	1165	124	10	526	62	6		
Adj No. of Lanes	2	0	1	1	0	0		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.88	0.88		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	2067	220	297	1192	277	27		
Arrive On Green	0.64	0.64	0.64	0.64	0.18	0.18		
Sat Flow, veh/h	3322	343	427	1863	1579	153		
Grp Volume(v), veh/h	638	651	10	526	69	0		
Grp Sat Flow(s),veh/h/ln	1770	1802	427	1863	1757	0		
Q Serve(g_s), s	13.2	13.2	0.9	9.2	2.2	0.0		
Cycle Q Clear(g_c), s	13.2	13.2	14.1	9.2	2.2	0.0		
Prop In Lane		0.19	1.00		0.90	0.09		
Lane Grp Cap(c), veh/h	1133	1154	297	1192	308	0		
V/C Ratio(X)	0.56	0.56	0.03	0.44	0.22	0.00		
Avail Cap(c_a), veh/h	1133	1154	297	1192	432	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.6	6.6	10.6	5.9	23.0	0.0		
Incr Delay (d2), s/veh	2.0	2.0	0.2	1.2	0.4	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.0	7.2	0.1	5.1	1.1	0.0		
LnGrp Delay(d),s/veh	8.6	8.6	10.8	7.1	23.4	0.0		
LnGrp LOS	A	A	B	A	C			
Approach Vol, veh/h	1289			536	69			
Approach Delay, s/veh	8.6			7.1	23.4			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		48.6				48.6		16.4
Change Period (Y+Rc), s		7.0				7.0		5.0
Max Green Setting (Gmax), s		37.0				37.0		16.0
Max Q Clear Time (g_c+I1), s		15.2				16.1		4.2
Green Ext Time (p_c), s		13.5				13.1		0.1
Intersection Summary								
HCM 2010 Ctrl Delay			8.7					
HCM 2010 LOS			A					
Notes								

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	55	10	1040	85	0	490		
Future Volume (veh/h)	55	10	1040	85	0	490		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	73	0	1083	0	0	510		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.75	0.75	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	120	107	1393	1184	111	1393		
Arrive On Green	0.07	0.00	0.75	0.00	0.00	0.75		
Sat Flow, veh/h	1774	1583	1863	1583	519	1863		
Grp Volume(v), veh/h	73	0	1083	0	0	510		
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	519	1863		
Q Serve(g_s), s	2.6	0.0	22.8	0.0	0.0	6.2		
Cycle Q Clear(g_c), s	2.6	0.0	22.8	0.0	0.0	6.2		
Prop In Lane	1.00	1.00		1.00	1.00			
Lane Grp Cap(c), veh/h	120	107	1393	1184	111	1393		
V/C Ratio(X)	0.61	0.00	0.78	0.00	0.00	0.37		
Avail Cap(c_a), veh/h	273	244	1393	1184	111	1393		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	29.5	0.0	4.9	0.0	0.0	2.8		
Incr Delay (d2), s/veh	4.9	0.0	4.3	0.0	0.0	0.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.4	0.0	12.8	0.0	0.0	3.4		
LnGrp Delay(d),s/veh	34.4	0.0	9.3	0.0	0.0	3.6		
LnGrp LOS	C		A			A		
Approach Vol, veh/h	73		1083			510		
Approach Delay, s/veh	34.4		9.3			3.6		
Approach LOS	C		A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		55.6				55.6		9.4
Change Period (Y+Rc), s		7.0				7.0		5.0
Max Green Setting (Gmax), s		43.0				43.0		10.0
Max Q Clear Time (g_c+I1), s		24.8				8.2		4.6
Green Ext Time (p_c), s		11.9				17.6		0.1
Intersection Summary								
HCM 2010 Ctrl Delay			8.6					
HCM 2010 LOS			A					

HCM 2010 Signalized Intersection Summary
 10: Meridian Rd/Rolling Thunder Way

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	15	165	215	25	220	195	415	615	15	135	285	20
Future Volume (veh/h)	15	165	215	25	220	195	415	615	15	135	285	20
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	16	179	0	27	237	0	432	641	16	148	313	22
Adj No. of Lanes	0	1	1	0	1	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	21	236	219	31	272	259	580	842	716	292	627	533
Arrive On Green	0.14	0.14	0.00	0.16	0.16	0.00	0.18	0.45	0.45	0.06	0.34	0.34
Sat Flow, veh/h	152	1703	1583	190	1664	1583	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	195	0	0	264	0	0	432	641	16	148	313	22
Grp Sat Flow(s),veh/h/ln	1855	0	1583	1853	0	1583	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	13.2	0.0	0.0	18.1	0.0	0.0	19.7	37.4	0.7	7.1	17.4	1.2
Cycle Q Clear(g_c), s	13.2	0.0	0.0	18.1	0.0	0.0	19.7	37.4	0.7	7.1	17.4	1.2
Prop In Lane	0.08		1.00	0.10		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	257	0	219	303	0	259	580	842	716	292	627	533
V/C Ratio(X)	0.76	0.00	0.00	0.87	0.00	0.00	0.74	0.76	0.02	0.51	0.50	0.04
Avail Cap(c_a), veh/h	257	0	219	399	0	341	785	842	716	292	627	533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	0.0	0.0	53.0	0.0	0.0	21.5	29.8	19.7	28.1	34.4	29.0
Incr Delay (d2), s/veh	18.8	0.0	0.0	16.6	0.0	0.0	2.6	6.4	0.1	1.4	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.0	0.0	10.6	0.0	0.0	10.0	20.7	0.3	3.6	9.1	0.5
LnGrp Delay(d),s/veh	72.7	0.0	0.0	69.7	0.0	0.0	24.2	36.2	19.8	29.5	35.0	29.0
LnGrp LOS	E			E			C	D	B	C	C	C
Approach Vol, veh/h		195			264			1089			483	
Approach Delay, s/veh		72.7			69.7			31.2			33.0	
Approach LOS		E			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	65.8		27.2	28.0	50.8		24.0				
Change Period (Y+Rc), s	5.0	7.0		6.0	5.0	7.0		6.0				
Max Green Setting (Gmax), s	8.0	52.0		28.0	38.0	22.0		18.0				
Max Q Clear Time (g_c+I1), s	9.1	39.4		20.1	21.7	19.4		15.2				
Green Ext Time (p_c), s	0.0	5.2		1.2	1.3	1.5		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			40.6									
HCM 2010 LOS			D									
Notes												



























Movement	SEL	SER	NEL	NET	SWT	SWR		
Lane Configurations								
Traffic Volume (veh/h)	510	205	455	385	225	345		
Future Volume (veh/h)	510	205	455	385	225	345		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	537	0	479	405	239	0		
Adj No. of Lanes	1	1	2	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.94	0.94		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	682	609	1091	974	687	584		
Arrive On Green	0.38	0.00	0.11	0.52	0.37	0.00		
Sat Flow, veh/h	1774	1583	3442	1863	1863	1583		
Grp Volume(v), veh/h	537	0	479	405	239	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	1721	1863	1863	1583		
Q Serve(g_s), s	34.7	0.0	10.7	17.2	12.1	0.0		
Cycle Q Clear(g_c), s	34.7	0.0	10.7	17.2	12.1	0.0		
Prop In Lane	1.00	1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	682	609	1091	974	687	584		
V/C Ratio(X)	0.79	0.00	0.44	0.42	0.35	0.00		
Avail Cap(c_a), veh/h	682	609	1354	974	687	584		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	35.3	0.0	20.4	18.9	29.7	0.0		
Incr Delay (d2), s/veh	8.9	0.0	0.3	1.3	1.4	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	18.7	0.0	5.0	9.1	6.5	0.0		
LnGrp Delay(d),s/veh	44.2	0.0	20.7	20.2	31.1	0.0		
LnGrp LOS	D		C	C	C			
Approach Vol, veh/h	537			884	239			
Approach Delay, s/veh	44.2			20.5	31.1			
Approach LOS	D			C	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		75.0		55.0	20.1	54.9		
Change Period (Y+Rc), s		7.0		5.0	6.0	7.0		
Max Green Setting (Gmax), s		68.0		50.0	24.0	38.0		
Max Q Clear Time (g_c+1), s		19.2		36.7	12.7	14.1		
Green Ext Time (p_c), s		4.6		1.6	1.4	4.1		
Intersection Summary								
HCM 2010 Ctrl Delay			29.7					
HCM 2010 LOS			C					
Notes								

HCM 2010 Signalized Intersection Summary
 12: Meridian Ranch/Judge Orr Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	35	55	65	65	10	120	515	125	5	330	20
Future Volume (veh/h)	30	35	55	65	65	10	120	515	125	5	330	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	34	39	62	66	66	10	126	542	132	5	363	22
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.89	0.89	0.89	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	77	98	140	108	14	696	1053	257	512	1053	64
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.07	0.73	0.73	0.61	0.61	0.61
Sat Flow, veh/h	307	616	784	640	863	114	1774	1448	353	761	1739	105
Grp Volume(v), veh/h	135	0	0	142	0	0	126	0	674	5	0	385
Grp Sat Flow(s),veh/h/ln	1707	0	0	1617	0	0	1774	0	1801	761	0	1844
Q Serve(g_s), s	0.0	0.0	0.0	0.8	0.0	0.0	2.1	0.0	14.3	0.3	0.0	9.2
Cycle Q Clear(g_c), s	6.3	0.0	0.0	7.2	0.0	0.0	2.1	0.0	14.3	3.9	0.0	9.2
Prop In Lane	0.25		0.46	0.46		0.07	1.00		0.20	1.00		0.06
Lane Grp Cap(c), veh/h	264	0	0	262	0	0	696	0	1310	512	0	1117
V/C Ratio(X)	0.51	0.00	0.00	0.54	0.00	0.00	0.18	0.00	0.51	0.01	0.00	0.34
Avail Cap(c_a), veh/h	479	0	0	470	0	0	701	0	1310	512	0	1117
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.5	0.0	0.0	36.7	0.0	0.0	5.3	0.0	5.2	8.4	0.0	8.6
Incr Delay (d2), s/veh	2.2	0.0	0.0	2.5	0.0	0.0	0.1	0.0	1.4	0.0	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.0	3.5	0.0	0.0	1.0	0.0	7.5	0.1	0.0	4.9
LnGrp Delay(d),s/veh	38.7	0.0	0.0	39.2	0.0	0.0	5.4	0.0	6.7	8.4	0.0	9.5
LnGrp LOS	D			D			A		A	A		A
Approach Vol, veh/h		135			142			800				390
Approach Delay, s/veh		38.7			39.2			6.5				9.5
Approach LOS		D			D			A				A
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		71.0		17.0	10.7	60.3		17.0				
Change Period (Y+Rc), s		7.0		6.0	5.0	7.0		6.0				
Max Green Setting (Gmax), s		64.0		23.0	6.0	53.0		23.0				
Max Q Clear Time (g_c+I1), s		16.3		8.3	4.1	11.2		9.2				
Green Ext Time (p_c), s		1.3		1.9	0.1	1.3		1.8				
Intersection Summary												
HCM 2010 Ctrl Delay			13.4									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
 13: US 24 & Stapleton Rd

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	20	20	25	5	80	25	60	460	10	5	275	15
Future Volume (veh/h)	20	20	25	5	80	25	60	460	10	5	275	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	22	22	28	5	87	27	67	511	11	6	320	17
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.90	0.90	0.90	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	457	587	499	513	587	499	465	944	803	379	703	597
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.06	0.51	0.51	0.38	0.38	0.38
Sat Flow, veh/h	1273	1863	1583	1349	1863	1583	1774	1863	1583	876	1863	1583
Grp Volume(v), veh/h	22	22	28	5	87	27	67	511	11	6	320	17
Grp Sat Flow(s),veh/h/ln	1273	1863	1583	1349	1863	1583	1774	1863	1583	876	1863	1583
Q Serve(g_s), s	0.9	0.6	0.9	0.2	2.4	0.9	1.5	13.6	0.3	0.3	9.4	0.5
Cycle Q Clear(g_c), s	3.4	0.6	0.9	0.8	2.4	0.9	1.5	13.6	0.3	4.5	9.4	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	457	587	499	513	587	499	465	944	803	379	703	597
V/C Ratio(X)	0.05	0.04	0.06	0.01	0.15	0.05	0.14	0.54	0.01	0.02	0.46	0.03
Avail Cap(c_a), veh/h	457	587	499	513	587	499	502	1633	1388	685	1352	1150
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	17.3	17.4	17.6	18.0	17.4	11.8	12.2	8.9	17.0	17.1	14.3
Incr Delay (d2), s/veh	0.2	0.1	0.2	0.0	0.5	0.2	0.1	0.2	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.3	0.4	0.1	1.3	0.4	0.8	7.0	0.1	0.1	4.8	0.2
LnGrp Delay(d),s/veh	19.4	17.4	17.6	17.6	18.5	17.6	11.9	12.4	8.9	17.0	17.3	14.3
LnGrp LOS	B	B	B	B	B	B	B	B	A	B	B	B
Approach Vol, veh/h		72			119			589			343	
Approach Delay, s/veh		18.1			18.3			12.3			17.1	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		44.0		29.0	9.5	34.5		29.0				
Change Period (Y+Rc), s		7.0		6.0	5.0	7.0		6.0				
Max Green Setting (Gmax), s		64.0		23.0	6.0	53.0		23.0				
Max Q Clear Time (g_c+I1), s		15.6		5.4	3.5	11.4		4.4				
Green Ext Time (p_c), s		0.9		1.0	0.0	0.9		1.1				
Intersection Summary												
HCM 2010 Ctrl Delay			14.8									
HCM 2010 LOS			B									

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Stapleton Rd				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	60	460	10	5	275	15		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86		
Hourly Flow Rate, HFR (veh/h)	66	511	11	5	319	17		
Percent Heavy Vehicles	6	--	--	5	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	5	80	25	20	20	25		
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89		
Hourly Flow Rate, HFR (veh/h)	5	86	27	22	22	28		
Percent Heavy Vehicles	0	0	0	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	L	T	R	L	T	R
v (veh/h)	66	5	5	86	27	22	22	28
C (m) (veh/h)	1201	1029	189	234	567	137	234	722
v/c	0.05	0.00	0.03	0.37	0.05	0.16	0.09	0.04
95% queue length	0.17	0.01	0.08	1.70	0.15	0.57	0.31	0.12
Control Delay (s/veh)	8.2	8.5	24.6	29.3	11.7	36.3	22.0	10.2
LOS	A	A	C	D	B	E	C	B
Approach Delay (s/veh)	--	--	25.0			21.8		
Approach LOS	--	--	D			C		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Elbert Road				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	85	460	20	5	270	0		
Peak-Hour Factor, PHF	0.97	0.97	0.97	0.96	0.96	0.96		
Hourly Flow Rate, HFR (veh/h)	87	474	20	5	281	0		
Percent Heavy Vehicles	2	--	--	5	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	10	15	5	5	10	55		
Peak-Hour Factor, PHF	0.89	0.89	0.89	0.82	0.82	0.82		
Hourly Flow Rate, HFR (veh/h)	11	16	5	6	12	67		
Percent Heavy Vehicles	0	0	0	8	8	8		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			1			1		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	L	T	R	L	T	R
v (veh/h)	87	5	11	16	5	6	12	67
C (m) (veh/h)	1282	1054	202	247	595	206	233	744
v/c	0.07	0.00	0.05	0.06	0.01	0.03	0.05	0.09
95% queue length	0.22	0.01	0.17	0.21	0.03	0.09	0.16	0.30
Control Delay (s/veh)	8.0	8.4	23.8	20.6	11.1	23.0	21.3	10.3
LOS	A	A	C	C	B	C	C	B
Approach Delay (s/veh)	--	--	20.2			12.8		
Approach LOS	--	--	C			B		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year		2016		
Analysis Time Period	Existing PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Bradshaw Road				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	75	300			225	15		
Peak-Hour Factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	82	329	0	0	244	16		
Percent Heavy Vehicles	3	--	--	4	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	0	0	1	1		
Configuration	L	T			T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				35		45		
Peak-Hour Factor, PHF	1.00	1.00	0.92	0.79	1.00	0.79		
Hourly Flow Rate, HFR (veh/h)	0	0	0	44	0	56		
Percent Heavy Vehicles	0	0	4	1	0	1		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			1			1		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
v (veh/h)	82					44		56
C (m) (veh/h)	1299					363		797
v/c	0.06					0.12		0.07
95% queue length	0.20					0.41		0.23
Control Delay (s/veh)	8.0					16.3		9.9
LOS	A					C		A
Approach Delay (s/veh)	--	--				12.7		
Approach LOS	--	--				B		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year		2016		
Analysis Time Period	Existing PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Ellicott Highway				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	10	190	20	30	185	5		
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	10	200	21	32	198	5		
Percent Heavy Vehicles	9	--	--	9	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	1	1	1	0		
Configuration	L	T	R	L		TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	10	5	15	0	5	10		
Peak-Hour Factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94		
Hourly Flow Rate, HFR (veh/h)	11	5	17	0	5	10		
Percent Heavy Vehicles	3	3	3	7	7	7		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	1	0	1	0		
Configuration	LT		R		LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R		LTR	
v (veh/h)	10	32	16		17		15	
C (m) (veh/h)	1328	1308	464		838		645	
v/c	0.01	0.02	0.03		0.02		0.02	
95% queue length	0.02	0.08	0.11		0.06		0.07	
Control Delay (s/veh)	7.7	7.8	13.0		9.4		10.7	
LOS	A	A	B		A		B	
Approach Delay (s/veh)	--	--	11.2			10.7		
Approach LOS	--	--	B			B		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Calhan Highway				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	15	115	25	10	150	0		
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.91	0.91	0.91		
Hourly Flow Rate, HFR (veh/h)	18	141	30	10	164	0		
Percent Heavy Vehicles	9	--	--	10	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	1	0	1	0		
Configuration	LT		R	LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	20	15	5	5	10	15		
Peak-Hour Factor, PHF	0.56	0.56	0.56	0.55	0.55	0.55		
Hourly Flow Rate, HFR (veh/h)	35	26	8	9	18	27		
Percent Heavy Vehicles	3	3	3	21	21	21		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LTR	LTR			LTR		
v (veh/h)	18	10	69			54		
C (m) (veh/h)	1373	1359	566			628		
v/c	0.01	0.01	0.12			0.09		
95% queue length	0.04	0.02	0.42			0.28		
Control Delay (s/veh)	7.7	7.7	12.2			11.3		
LOS	A	A	B			B		
Approach Delay (s/veh)	--	--	12.2			11.3		
Approach LOS	--	--	B			B		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Peyton Highway				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	70	230	25	0	170	10		
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	86	283	30	0	182	10		
Percent Heavy Vehicles	4	--	--	3	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	15	10	0	25	15	45		
Peak-Hour Factor, PHF	0.49	0.49	0.49	0.64	0.64	0.64		
Hourly Flow Rate, HFR (veh/h)	30	20	0	39	23	70		
Percent Heavy Vehicles	7	7	7	4	4	4		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	1	0	1	1		
Configuration	LT		R	LT		R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	86	0	50		0	62		70
C (m) (veh/h)	1370	1242	316		744	345		855
v/c	0.06	0.00	0.16		0.00	0.18		0.08
95% queue length	0.20	0.00	0.56		0.00	0.65		0.27
Control Delay (s/veh)	7.8	7.9	18.5		9.8	17.7		9.6
LOS	A	A	C		A	C		A
Approach Delay (s/veh)	--	--	18.5			13.4		
Approach LOS	--	--	C			B		

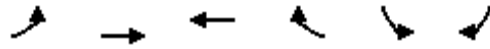
TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Ramah Rd				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	85	5	0	140	0		
Peak-Hour Factor, PHF	0.72	0.72	0.72	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	0	118	6	0	152	0		
Percent Heavy Vehicles	11	--	--	10	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	0	5	0	5	0	5		
Peak-Hour Factor, PHF	0.25	0.25	0.25	0.58	0.58	0.58		
Hourly Flow Rate, HFR (veh/h)	0	20	0	8	0	8		
Percent Heavy Vehicles	0	0	0	29	29	29		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR	LTR			LTR		
v (veh/h)	0	0	20			16		
C (m) (veh/h)	1376	1415	637			698		
v/c	0.00	0.00	0.03			0.02		
95% queue length	0.00	0.00	0.10			0.07		
Control Delay (s/veh)	7.6	7.5	10.8			10.3		
LOS	A	A	B			B		
Approach Delay (s/veh)	--	--	10.8			10.3		
Approach LOS	--	--	B			B		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Frontage Road				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	130	1775	5	15	1815	15		
Peak-Hour Factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97		
Hourly Flow Rate, HFR (veh/h)	132	1811	5	15	1871	15		
Percent Heavy Vehicles	3	--	--	4	--	--		
Median Type	Raised curb							
RT Channelized			0				0	
Lanes	1	2	1	1	2	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)			25			95		
Peak-Hour Factor, PHF	1.00	1.00	0.89	1.00	1.00	0.93		
Hourly Flow Rate, HFR (veh/h)	0	0	28	0	0	102		
Percent Heavy Vehicles	0	0	4	0	0	3		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	1	0	0	1		
Configuration			R			R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L			R			R
v (veh/h)	132	15			28			102
C (m) (veh/h)	310	326			328			317
v/c	0.43	0.05			0.09			0.32
95% queue length	2.17	0.14			0.28			1.40
Control Delay (s/veh)	25.2	16.6			17.0			21.7
LOS	D	C			C			C
Approach Delay (s/veh)	--	--	17.0			21.7		
Approach LOS	--	--	C			C		

HCM 2010 Signalized Intersection Summary

1: US 24 & SB Powers Blvd off-ramp

10/10/2016









Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		↑↑↑	↑↑		↑↑↑			
Traffic Volume (veh/h)	0	2320	2620	0	560	60		
Future Volume (veh/h)	0	2320	2620	0	560	60		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1900		
Adj Flow Rate, veh/h	0	2392	2977	0	744	0		
Adj No. of Lanes	0	3	2	0	2	1		
Peak Hour Factor	0.70	0.97	0.88	0.92	0.82	0.92		
Percent Heavy Veh, %	0	2	2	0	2	0		
Cap, veh/h	0	3794	2641	0	628	286		
Arrive On Green	0.00	0.75	1.00	0.00	0.18	0.00		
Sat Flow, veh/h	0	5421	3725	0	3548	1615		
Grp Volume(v), veh/h	0	2392	2977	0	744	0		
Grp Sat Flow(s),veh/h/ln	0	1695	1770	0	1774	1615		
Q Serve(g_s), s	0.0	29.3	0.0	0.0	23.0	0.0		
Cycle Q Clear(g_c), s	0.0	29.3	0.0	0.0	23.0	0.0		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	3794	2641	0	628	286		
V/C Ratio(X)	0.00	0.63	1.13	0.00	1.19	0.00		
Avail Cap(c_a), veh/h	0	3794	2641	0	628	286		
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	0.0	7.9	0.0	0.0	53.5	0.0		
Incr Delay (d2), s/veh	0.0	0.8	62.8	0.0	98.8	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	13.8	23.0	0.0	19.9	0.0		
LnGrp Delay(d),s/veh	0.0	8.7	62.8	0.0	152.3	0.0		
LnGrp LOS		A	F		F			
Approach Vol, veh/h		2392	2977		744			
Approach Delay, s/veh		8.7	62.8		152.3			
Approach LOS		A	E		F			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		102.0		28.0		102.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		97.0		23.0		97.0		
Max Q Clear Time (g_c+I1), s		31.3		25.0		2.0		
Green Ext Time (p_c), s		65.1		0.0		93.7		
Intersection Summary								
HCM 2010 Ctrl Delay			52.5					
HCM 2010 LOS			D					
Notes								

HCM 2010 Signalized Intersection Summary



















2: NB Powers Blvd off-ramp & US 24

10/10/2016

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑			↑↑↑	↑↑↑			
Traffic Volume (veh/h)	2535	0	0	4240	170	70		
Future Volume (veh/h)	2535	0	0	4240	170	70		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1900		
Adj Flow Rate, veh/h	2848	0	0	4818	126	130		
Adj No. of Lanes	2	0	0	3	1	1		
Peak Hour Factor	0.89	0.92	0.92	0.88	0.96	0.92		
Percent Heavy Veh, %	2	0	0	2	2	0		
Cap, veh/h	2777	0	0	3990	246	224		
Arrive On Green	1.00	0.00	0.00	0.78	0.14	0.14		
Sat Flow, veh/h	3725	0	0	5421	1774	1615		
Grp Volume(v), veh/h	2848	0	0	4818	126	130		
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1774	1615		
Q Serve(g_s), s	102.0	0.0	0.0	102.0	8.6	9.8		
Cycle Q Clear(g_c), s	102.0	0.0	0.0	102.0	8.6	9.8		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2777	0	0	3990	246	224		
V/C Ratio(X)	1.03	0.00	0.00	1.21	0.51	0.58		
Avail Cap(c_a), veh/h	2777	0	0	3990	246	224		
HCM Platoon Ratio	2.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	14.0	51.9	52.5		
Incr Delay (d2), s/veh	24.0	0.0	0.0	95.9	7.5	10.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.3	0.0	0.0	82.0	4.7	5.0		
LnGrp Delay(d),s/veh	24.0	0.0	0.0	109.9	59.4	63.1		
LnGrp LOS	F			F	E	E		
Approach Vol, veh/h	2848			4818	256			
Approach Delay, s/veh	24.0			109.9	61.3			
Approach LOS	C			F	E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		107.0				107.0		23.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		102.0				102.0		18.0
Max Q Clear Time (g_c+I1), s		104.0				104.0		11.8
Green Ext Time (p_c), s		0.0				0.0		0.4
Intersection Summary								
HCM 2010 Ctrl Delay			77.5					
HCM 2010 LOS			E					
Notes								





















HCM 2010 Signalized Intersection Summary
 3: Peterson Blvd & US 24 WB ramp

10/10/2016

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	495	0	30	250	290	0	0	1280	360
Future Volume (veh/h)	0	0	0	495	0	30	250	290	0	0	1280	360
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				569	0	33	305	354	0	0	1422	400
Adj No. of Lanes				1	1	0	1	2	0	0	2	1
Peak Hour Factor				0.87	0.87	0.92	0.82	0.82	0.92	0.92	0.90	0.90
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				554	0	495	267	1991	0	0	1416	633
Arrive On Green				0.31	0.00	0.31	0.20	1.00	0.00	0.00	0.40	0.40
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	3632	1583
Grp Volume(v), veh/h				569	0	33	305	354	0	0	1422	400
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1770	1583
Q Serve(g_s), s				25.0	0.0	1.2	8.0	0.0	0.0	0.0	32.0	16.2
Cycle Q Clear(g_c), s				25.0	0.0	1.2	8.0	0.0	0.0	0.0	32.0	16.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				554	0	495	267	1991	0	0	1416	633
V/C Ratio(X)				1.03	0.00	0.07	1.14	0.18	0.00	0.00	1.00	0.63
Avail Cap(c_a), veh/h				554	0	495	267	1991	0	0	1416	633
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.95	0.95	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				27.5	0.0	19.3	30.7	0.0	0.0	0.0	24.0	19.3
Incr Delay (d2), s/veh				45.1	0.0	0.1	97.0	0.2	0.0	0.0	25.0	4.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				19.1	0.0	0.5	13.0	0.1	0.0	0.0	20.4	7.8
LnGrp Delay(d),s/veh				72.6	0.0	19.4	127.7	0.2	0.0	0.0	49.0	24.0
LnGrp LOS				F		B	F	A			F	C
Approach Vol, veh/h					602			659			1822	
Approach Delay, s/veh					69.7			59.2			43.5	
Approach LOS					E			E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.0			13.0	37.0		30.0				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		45.0			8.0	32.0		25.0				
Max Q Clear Time (g_c+I1), s		2.0			10.0	34.0		27.0				
Green Ext Time (p_c), s		3.5			0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				52.0								
HCM 2010 LOS				D								

HCM 2010 Signalized Intersection Summary
 4: Peterson Blvd & US 24 EB ramp

























10/10/2016

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	130	400	250	0	190	0	255	100	185	1590	0
Future Volume (veh/h)	140	130	400	250	0	190	0	255	100	185	1590	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	163	151	0	316	0	241	0	300	118	201	1728	0
Adj No. of Lanes	0	1	1	1	1	0	0	2	0	1	2	0
Peak Hour Factor	0.86	0.86	0.86	0.79	0.79	0.79	0.85	0.85	0.85	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	239	183	557	441	0	557	0	920	354	524	1852	0
Arrive On Green	0.35	0.35	0.00	0.35	0.00	0.35	0.00	0.37	0.37	0.19	1.00	0.00
Sat Flow, veh/h	485	519	1583	1231	0	1583	0	2593	963	1774	3632	0
Grp Volume(v), veh/h	314	0	0	316	0	241	0	210	208	201	1728	0
Grp Sat Flow(s),veh/h/ln	1005	0	1583	1231	0	1583	0	1770	1693	1774	1770	0
Q Serve(g_s), s	15.9	0.0	0.0	0.0	0.0	9.3	0.0	6.8	7.1	5.4	0.0	0.0
Cycle Q Clear(g_c), s	25.2	0.0	0.0	25.0	0.0	9.3	0.0	6.8	7.1	5.4	0.0	0.0
Prop In Lane	0.52		1.00	1.00		1.00	0.00		0.57	1.00		0.00
Lane Grp Cap(c), veh/h	422	0	557	441	0	557	0	652	623	524	1852	0
V/C Ratio(X)	0.74	0.00	0.00	0.72	0.00	0.43	0.00	0.32	0.33	0.38	0.93	0.00
Avail Cap(c_a), veh/h	437	0	574	455	0	574	0	652	623	560	1852	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	28.2	0.0	0.0	24.9	0.0	19.8	0.0	18.1	18.2	11.3	0.0	0.0
Incr Delay (d2), s/veh	6.6	0.0	0.0	5.2	0.0	0.5	0.0	1.3	1.4	0.0	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	0.0	7.3	0.0	4.2	0.0	3.6	3.5	2.5	0.3	0.0
LnGrp Delay(d),s/veh	34.8	0.0	0.0	30.1	0.0	20.4	0.0	19.4	19.6	11.4	1.2	0.0
LnGrp LOS	C			C		C		B	B	B	A	
Approach Vol, veh/h		314			557			418			1929	
Approach Delay, s/veh		34.8			25.9			19.5			2.2	
Approach LOS		C			C			B			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	12.4	34.5		33.1		46.9		33.1				
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s	9.0	27.0		29.0		41.0		29.0				
Max Q Clear Time (g_c+I1), s	7.4	9.1		27.2		2.0		27.0				
Green Ext Time (p_c), s	0.1	14.1		0.9		25.0		1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			11.7									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary

5: US 24 & SH 94

10/10/2016

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	80	50	160	630	80	90	170	1100	950	85	3195	90
Future Volume (veh/h)	80	50	160	630	80	90	170	1100	950	85	3195	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	91	57	0	700	89	0	198	1279	0	104	3896	0
Adj No. of Lanes	1	1	1	2	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.90	0.90	0.90	0.86	0.86	0.86	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	86	73	397	408	183	1015	3988	1784	364	2178	974
Arrive On Green	0.05	0.05	0.00	0.12	0.12	0.00	0.54	1.00	0.00	0.05	0.62	0.00
Sat Flow, veh/h	1774	1863	1583	3442	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	91	57	0	700	89	0	198	1279	0	104	3896	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	6.0	3.9	0.0	15.0	3.0	0.0	2.9	0.0	0.0	3.3	80.0	0.0
Cycle Q Clear(g_c), s	6.0	3.9	0.0	15.0	3.0	0.0	2.9	0.0	0.0	3.3	80.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	82	86	73	397	408	183	1015	3988	1784	364	2178	974
V/C Ratio(X)	1.11	0.66	0.00	1.76	0.22	0.00	0.20	0.32	0.00	0.29	1.79	0.00
Avail Cap(c_a), veh/h	82	86	73	397	408	183	1015	3988	1784	366	2178	974
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	62.0	61.0	0.0	57.5	52.2	0.0	15.7	0.0	0.0	11.5	25.0	0.0
Incr Delay (d2), s/veh	132.9	17.4	0.0	353.4	0.3	0.0	0.1	0.2	0.0	0.4	356.8	0.0
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	2.4	0.0	26.6	1.5	0.0	3.0	0.1	0.0	1.6	146.7	0.0
LnGrp Delay(d),s/veh	194.9	78.4	0.0	410.9	52.4	0.0	15.8	0.2	0.0	11.9	381.8	0.0
LnGrp LOS	F	E		F	D		B	A		B	F	
Approach Vol, veh/h		148			789			1477			4000	
Approach Delay, s/veh		150.1			370.5			2.3			372.2	
Approach LOS		F			F			A			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	154.8		11.0	78.6	87.0		21.0				
Change Period (Y+Rc), s	5.0	7.0		5.0	7.0	* 7		6.0				
Max Green Setting (Gmax), s	6.0	80.0		6.0	6.0	* 80		15.0				
Max Q Clear Time (g_c+I1), s	5.3	2.0		8.0	4.9	82.0		17.0				
Green Ext Time (p_c), s	0.0	12.2		0.0	0.1	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			281.7									
HCM 2010 LOS			F									
Notes												

HCM 2010 Signalized Intersection Summary

6: US 24 & Marksheffel Rd

10/10/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	1100	950	20	650	50	300	950	25	470	2400	25
Future Volume (veh/h)	10	1100	950	20	650	50	300	950	25	470	2400	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	11	1158	0	22	714	0	390	1234	0	553	2824	0
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91	0.77	0.77	0.77	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	871	390	100	907	406	270	1462	654	346	1789	800
Arrive On Green	0.02	0.25	0.00	0.03	0.26	0.00	0.05	0.41	0.00	0.14	0.51	0.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	11	1158	0	22	714	0	390	1234	0	553	2824	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.6	32.0	0.0	1.2	24.4	0.0	6.0	40.8	0.0	18.0	65.7	0.0
Cycle Q Clear(g_c), s	0.6	32.0	0.0	1.2	24.4	0.0	6.0	40.8	0.0	18.0	65.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	132	871	390	100	907	406	270	1462	654	346	1789	800
V/C Ratio(X)	0.08	1.33	0.00	0.22	0.79	0.00	1.45	0.84	0.00	1.60	1.58	0.00
Avail Cap(c_a), veh/h	187	871	390	137	907	406	270	1462	654	346	1789	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.8	49.0	0.0	38.9	45.0	0.0	31.9	34.4	0.0	36.3	32.1	0.0
Incr Delay (d2), s/veh	0.3	156.1	0.0	1.1	6.8	0.0	220.6	6.1	0.0	283.4	263.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	34.5	0.0	0.6	12.8	0.0	11.1	21.1	0.0	39.6	97.4	0.0
LnGrp Delay(d),s/veh	38.0	205.1	0.0	40.0	51.9	0.0	252.5	40.5	0.0	319.7	295.2	0.0
LnGrp LOS	D	F		D	D		F	D		F	F	
Approach Vol, veh/h		1169			736			1624			3377	
Approach Delay, s/veh		203.5			51.5			91.4			299.2	
Approach LOS		F			D			F			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	23.0	60.7	8.3	38.0	11.0	72.7	7.0	39.3				
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0				
Max Green Setting (Gmax), s	18.0	51.0	6.0	32.0	6.0	63.0	6.0	32.0				
Max Q Clear Time (g_c+I1), s	20.0	42.8	3.2	34.0	8.0	67.7	2.6	26.4				
Green Ext Time (p_c), s	0.0	8.1	0.0	0.0	0.0	0.0	0.0	4.6				
Intersection Summary												
HCM 2010 Ctrl Delay			207.8									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

7: US 24 & Constitution Avenue

8/10/2016



Movement	SEL	SER	NEL	NET	SWT	SWR		
Lane Configurations								
Traffic Volume (veh/h)	250	445	165	860	2150	480		
Future Volume (veh/h)	250	445	165	860	2150	480		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	275	0	181	945	2688	0		
Adj No. of Lanes	2	1	1	2	2	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.80	0.80		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	715	329	137	2532	2232	999		
Arrive On Green	0.21	0.00	0.05	0.72	0.63	0.00		
Sat Flow, veh/h	3442	1583	1774	3632	3632	1583		
Grp Volume(v), veh/h	275	0	181	945	2688	0		
Grp Sat Flow(s),veh/h/ln	1721	1583	1774	1770	1770	1583		
Q Serve(g_s), s	8.9	0.0	6.0	13.5	82.0	0.0		
Cycle Q Clear(g_c), s	8.9	0.0	6.0	13.5	82.0	0.0		
Prop In Lane	1.00	1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	715	329	137	2532	2232	999		
V/C Ratio(X)	0.38	0.00	1.32	0.37	1.20	0.00		
Avail Cap(c_a), veh/h	715	329	137	2532	2232	999		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	44.3	0.0	60.8	7.2	24.0	0.0		
Incr Delay (d2), s/veh	1.6	0.0	185.4	0.4	96.4	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.4	0.0	12.0	6.7	69.6	0.0		
LnGrp Delay(d),s/veh	45.9	0.0	246.2	7.6	120.4	0.0		
LnGrp LOS	D		F	A	F			
Approach Vol, veh/h	275			1126	2688			
Approach Delay, s/veh	45.9			46.0	120.4			
Approach LOS	D			D	F			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		98.0		32.0	11.0	87.0		
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		
Max Green Setting (Gmax), s		93.0		27.0	6.0	82.0		
Max Q Clear Time (g_c+I1), s		15.5		10.9	8.0	84.0		
Green Ext Time (p_c), s		7.6		1.3	0.0	0.0		
Intersection Summary								
HCM 2010 Ctrl Delay			94.9					
HCM 2010 LOS			F					

HCM 2010 Signalized Intersection Summary

8: US 24 & Garrett Rd













8/10/2016

	↑	↖	↙	↓	↘	↗		
Movement	NBT	NBR	SBL	SBT	NWL	NWR		
Lane Configurations	↑↑		↖	↑	↘↗			
Traffic Volume (veh/h)	900	150	70	2100	500	250		
Future Volume (veh/h)	900	150	70	2100	500	250		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	1059	176	77	2308	568	284		
Adj No. of Lanes	2	0	1	1	0	0		
Peak Hour Factor	0.85	0.85	0.91	0.91	0.88	0.88		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	1824	302	228	1118	349	175		
Arrive On Green	0.60	0.60	0.60	0.60	0.31	0.31		
Sat Flow, veh/h	3132	504	449	1863	1136	568		
Grp Volume(v), veh/h	616	619	77	2308	853	0		
Grp Sat Flow(s),veh/h/ln	1770	1774	449	1863	1706	0		
Q Serve(g_s), s	27.7	27.9	16.5	78.0	40.0	0.0		
Cycle Q Clear(g_c), s	27.7	27.9	44.4	78.0	40.0	0.0		
Prop In Lane		0.28	1.00		0.67	0.33		
Lane Grp Cap(c), veh/h	1062	1064	228	1118	525	0		
V/C Ratio(X)	0.58	0.58	0.34	2.07	1.63	0.00		
Avail Cap(c_a), veh/h	1062	1064	228	1118	525	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	15.9	16.0	29.6	26.0	45.0	0.0		
Incr Delay (d2), s/veh	2.3	2.3	4.0	482.4	290.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	14.2	14.3	2.3	189.5	61.1	0.0		
LnGrp Delay(d),s/veh	18.3	18.3	33.6	508.4	335.0	0.0		
LnGrp LOS	B	B	C	F	F			
Approach Vol, veh/h	1235			2385	853			
Approach Delay, s/veh	18.3			493.0	335.0			
Approach LOS	B			F	F			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		85.0				85.0		45.0
Change Period (Y+Rc), s		7.0				7.0		5.0
Max Green Setting (Gmax), s		78.0				78.0		40.0
Max Q Clear Time (g_c+I1), s		29.9				80.0		42.0
Green Ext Time (p_c), s		48.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			331.8					
HCM 2010 LOS			F					
Notes								

HCM 2010 Signalized Intersection Summary























9: US 24 & Falcon Hwy

8/10/2016

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	550	140	950	150	120	1620		
Future Volume (veh/h)	550	140	950	150	120	1620		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	775	0	979	0	145	1952		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.71	0.71	0.97	0.97	0.83	0.83		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	450	402	1218	1035	210	1218		
Arrive On Green	0.25	0.00	0.65	0.00	0.65	0.65		
Sat Flow, veh/h	1774	1583	1863	1583	572	1863		
Grp Volume(v), veh/h	775	0	979	0	145	1952		
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	572	1863		
Q Serve(g_s), s	33.0	0.0	49.9	0.0	32.2	85.0		
Cycle Q Clear(g_c), s	33.0	0.0	49.9	0.0	82.0	85.0		
Prop In Lane	1.00	1.00		1.00	1.00			
Lane Grp Cap(c), veh/h	450	402	1218	1035	210	1218		
V/C Ratio(X)	1.72	0.00	0.80	0.00	0.69	1.60		
Avail Cap(c_a), veh/h	450	402	1218	1035	210	1218		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	48.5	0.0	16.4	0.0	46.3	22.5		
Incr Delay (d2), s/veh	333.7	0.0	5.7	0.0	17.0	275.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	57.9	0.0	27.2	0.0	6.1	136.4		
LnGrp Delay(d),s/veh	382.2	0.0	22.1	0.0	63.3	297.6		
LnGrp LOS	F		C		E	F		
Approach Vol, veh/h	775		979			2097		
Approach Delay, s/veh	382.2		22.1			281.4		
Approach LOS	F		C			F		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		92.0				92.0		38.0
Change Period (Y+Rc), s		7.0				7.0		5.0
Max Green Setting (Gmax), s		85.0				85.0		33.0
Max Q Clear Time (g_c+I1), s		51.9				87.0		35.0
Green Ext Time (p_c), s		33.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			235.8					
HCM 2010 LOS			F					

HCM 2010 Signalized Intersection Summary
 10: US 24 & Meridian Rd/Rolling Thunder Way

8/10/2016

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	40	150	245	30	300	640	140	920	30	215	1060	40
Future Volume (veh/h)	40	150	245	30	300	640	140	920	30	215	1060	40
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	43	161	0	36	361	0	151	989	32	234	1152	43
Adj No. of Lanes	0	1	1	0	1	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.83	0.83	0.83	0.93	0.93	0.93	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	302	329	28	285	268	137	716	609	151	731	621
Arrive On Green	0.21	0.21	0.00	0.17	0.17	0.00	0.05	0.38	0.38	0.05	0.39	0.39
Sat Flow, veh/h	389	1455	1583	168	1686	1583	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	204	0	0	397	0	0	151	989	32	234	1152	43
Grp Sat Flow(s),veh/h/ln	1843	0	1583	1854	0	1583	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	12.8	0.0	0.0	22.0	0.0	0.0	6.0	50.0	1.7	7.0	51.0	2.2
Cycle Q Clear(g_c), s	12.8	0.0	0.0	22.0	0.0	0.0	6.0	50.0	1.7	7.0	51.0	2.2
Prop In Lane	0.21		1.00	0.09		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	383	0	329	314	0	268	137	716	609	151	731	621
V/C Ratio(X)	0.53	0.00	0.00	1.27	0.00	0.00	1.10	1.38	0.05	1.55	1.58	0.07
Avail Cap(c_a), veh/h	383	0	329	314	0	268	137	716	609	151	731	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	0.0	0.0	54.0	0.0	0.0	33.4	40.0	25.1	33.4	39.5	24.7
Incr Delay (d2), s/veh	5.2	0.0	0.0	142.2	0.0	0.0	106.2	179.9	0.2	277.7	266.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	0.0	0.0	23.6	0.0	0.0	4.0	61.5	0.7	17.0	80.2	1.0
LnGrp Delay(d),s/veh	51.1	0.0	0.0	196.2	0.0	0.0	139.6	219.9	25.3	311.2	305.5	24.7
LnGrp LOS	D			F			F	F	C	F	F	C
Approach Vol, veh/h		204			397			1172			1429	
Approach Delay, s/veh		51.1			196.2			204.2			297.9	
Approach LOS		D			F			F			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	57.0		28.0	11.0	58.0		33.0				
Change Period (Y+Rc), s	5.0	7.0		6.0	5.0	7.0		6.0				
Max Green Setting (Gmax), s	7.0	50.0		22.0	6.0	51.0		27.0				
Max Q Clear Time (g_c+I1), s	9.0	52.0		24.0	8.0	53.0		14.8				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		1.1				
Intersection Summary												
HCM 2010 Ctrl Delay			235.3									
HCM 2010 LOS			F									
Notes												

HCM 2010 Signalized Intersection Summary
 11: US 24 & E Woodmen Rd



















8/10/2016



Movement	SEL	SER	NEL	NET	SWT	SWR		
Lane Configurations								
Traffic Volume (veh/h)	330	550	510	685	765	525		
Future Volume (veh/h)	330	550	510	685	765	525		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	367	0	567	761	860	0		
Adj No. of Lanes	1	1	2	1	1	1		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.89	0.89		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	464	414	1182	1569	917	779		
Arrive On Green	0.26	0.00	0.30	0.84	0.49	0.00		
Sat Flow, veh/h	1774	1583	3442	1863	1863	1583		
Grp Volume(v), veh/h	367	0	567	761	860	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	1721	1863	1863	1583		
Q Serve(g_s), s	25.0	0.0	10.7	14.1	56.6	0.0		
Cycle Q Clear(g_c), s	25.0	0.0	10.7	14.1	56.6	0.0		
Prop In Lane	1.00	1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	464	414	1182	1569	917	779		
V/C Ratio(X)	0.79	0.00	0.48	0.48	0.94	0.00		
Avail Cap(c_a), veh/h	464	414	1182	1569	917	779		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	44.7	0.0	34.2	2.7	31.1	0.0		
Incr Delay (d2), s/veh	12.9	0.0	0.3	1.1	18.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	13.9	0.0	8.1	7.4	33.5	0.0		
LnGrp Delay(d),s/veh	57.6	0.0	34.5	3.8	49.1	0.0		
LnGrp LOS	E		C	A	D			
Approach Vol, veh/h	367			1328	860			
Approach Delay, s/veh	57.6			16.9	49.1			
Approach LOS	E			B	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		116.8		39.0	45.8	71.0		
Change Period (Y+Rc), s		7.0		5.0	7.0	* 7		
Max Green Setting (Gmax), s		84.0		34.0	14.0	* 64		
Max Q Clear Time (g_c+I1), s		16.1		27.0	12.7	58.6		
Green Ext Time (p_c), s		8.2		0.7	0.5	2.5		
Intersection Summary								
HCM 2010 Ctrl Delay			33.6					
HCM 2010 LOS			C					
Notes								

























HCM 2010 Signalized Intersection Summary
 12: US 24 & Meridian Ranch/Judge Orr Rd

8/10/2016

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	20	100	280	205	80	20	130	675	110	50	800	80
Future Volume (veh/h)	20	100	280	205	80	20	130	675	110	50	800	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	23	116	326	256	100	25	140	726	118	57	920	92
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.80	0.80	0.80	0.93	0.93	0.93	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	178	463	212	65	16	137	818	133	127	731	73
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.05	0.52	0.52	0.44	0.44	0.44
Sat Flow, veh/h	52	471	1227	440	172	43	1774	1564	254	650	1667	167
Grp Volume(v), veh/h	465	0	0	381	0	0	140	0	844	57	0	1012
Grp Sat Flow(s),veh/h/ln	1750	0	0	655	0	0	1774	0	1818	650	0	1833
Q Serve(g_s), s	0.0	0.0	0.0	18.7	0.0	0.0	6.0	0.0	53.7	11.1	0.0	57.0
Cycle Q Clear(g_c), s	30.3	0.0	0.0	49.0	0.0	0.0	6.0	0.0	53.7	53.9	0.0	57.0
Prop In Lane	0.05		0.70	0.67		0.07	1.00		0.14	1.00		0.09
Lane Grp Cap(c), veh/h	689	0	0	293	0	0	137	0	951	127	0	804
V/C Ratio(X)	0.68	0.00	0.00	1.30	0.00	0.00	1.02	0.00	0.89	0.45	0.00	1.26
Avail Cap(c_a), veh/h	689	0	0	293	0	0	137	0	951	127	0	804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.9	0.0	0.0	49.9	0.0	0.0	34.6	0.0	27.6	56.5	0.0	36.5
Incr Delay (d2), s/veh	2.9	0.0	0.0	157.7	0.0	0.0	82.2	0.0	12.1	11.1	0.0	126.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.8	0.0	0.0	23.3	0.0	0.0	8.1	0.0	29.9	2.4	0.0	57.1
LnGrp Delay(d),s/veh	37.9	0.0	0.0	207.6	0.0	0.0	117.0	0.0	39.7	67.6	0.0	163.1
LnGrp LOS	D			F			F		D	E		F
Approach Vol, veh/h		465			381			984			1069	
Approach Delay, s/veh		37.9			207.6			50.7			158.0	
Approach LOS		D			F			D			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		75.0		55.0	11.0	64.0		55.0				
Change Period (Y+Rc), s		7.0		6.0	5.0	7.0		6.0				
Max Green Setting (Gmax), s		68.0		49.0	6.0	57.0		49.0				
Max Q Clear Time (g_c+I1), s		55.7		32.3	8.0	59.0		51.0				
Green Ext Time (p_c), s		1.3		7.6	0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			108.8									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary
 13: US 24 & Stapleton Rd

8/10/2016

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	115	175	170	80	140	30	125	560	30	70	680	135
Future Volume (veh/h)	115	175	170	80	140	30	125	560	30	70	680	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	134	203	198	108	189	41	136	609	33	82	800	159
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.74	0.74	0.74	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	436	371	234	436	371	241	1101	936	405	858	730
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.06	0.59	0.59	0.46	0.46	0.46
Sat Flow, veh/h	1146	1863	1583	980	1863	1583	1774	1863	1583	784	1863	1583
Grp Volume(v), veh/h	134	203	198	108	189	41	136	609	33	82	800	159
Grp Sat Flow(s),veh/h/ln	1146	1863	1583	980	1863	1583	1774	1863	1583	784	1863	1583
Q Serve(g_s), s	8.4	7.0	8.1	7.9	6.4	1.5	2.8	14.8	0.6	5.3	30.2	4.5
Cycle Q Clear(g_c), s	14.8	7.0	8.1	14.9	6.4	1.5	2.8	14.8	0.6	10.4	30.2	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	436	371	234	436	371	241	1101	936	405	858	730
V/C Ratio(X)	0.50	0.47	0.53	0.46	0.43	0.11	0.56	0.55	0.04	0.20	0.93	0.22
Avail Cap(c_a), veh/h	275	450	383	242	450	383	248	1101	936	405	858	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	24.5	24.9	30.9	24.3	22.4	16.5	9.2	6.4	15.3	19.0	12.0
Incr Delay (d2), s/veh	1.5	0.8	1.3	1.4	0.7	0.1	2.8	2.0	0.1	1.1	18.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	3.6	3.7	2.2	3.4	0.7	1.5	8.1	0.3	1.3	19.6	2.1
LnGrp Delay(d),s/veh	32.1	25.3	26.3	32.3	25.0	22.5	19.3	11.2	6.4	16.5	37.0	12.7
LnGrp LOS	C	C	C	C	C	C	B	B	A	B	D	B
Approach Vol, veh/h		535			338			778			1041	
Approach Delay, s/veh		27.4			27.0			12.4			31.7	
Approach LOS		C			C			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		51.0		23.4	9.7	41.3		23.4				
Change Period (Y+Rc), s		7.0		6.0	5.0	7.0		6.0				
Max Green Setting (Gmax), s		44.0		18.0	5.0	34.0		18.0				
Max Q Clear Time (g_c+I1), s		16.8		16.8	4.8	32.2		16.9				
Green Ext Time (p_c), s		11.4		0.6	0.0	1.4		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			24.7									
HCM 2010 LOS			C									

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year				
Analysis Time Period	No Build 2040 AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Elbert Road				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	60	575	20	20	685	10		
Peak-Hour Factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89		
Hourly Flow Rate, HFR (veh/h)	67	646	22	22	769	11		
Percent Heavy Vehicles	6	--	--	5	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	45	50	30	20	40	0		
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.83	0.83	0.83		
Hourly Flow Rate, HFR (veh/h)	61	68	41	24	48	0		
Percent Heavy Vehicles	0	0	0	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			1			1		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	L	T	R	L	T	R
v (veh/h)	67	22	61	68	41	24	48	0
C (m) (veh/h)	820	908	46	96	475	29	93	401
v/c	0.08	0.02	1.33	0.71	0.09	0.83	0.52	0.00
95% queue length	0.27	0.07	14.02	5.29	0.28	4.88	2.84	0.00
Control Delay (s/veh)	9.8	9.1	899.2	121.6	13.3	431.1	83.2	14.0
LOS	A	A	F	F	B	F	F	B
Approach Delay (s/veh)	--	--	374.5			199.2		
Approach LOS	--	--	F			F		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2040			
Analysis Time Period	Existing AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Bradshaw Road				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	130	440			560	120		
Peak-Hour Factor, PHF	0.79	0.79	0.92	0.92	0.71	0.71		
Hourly Flow Rate, HFR (veh/h)	164	556	0	0	788	169		
Percent Heavy Vehicles	5	--	--	4	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	0	0	1	1		
Configuration	L	T			T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				60		130		
Peak-Hour Factor, PHF	1.00	1.00	0.92	0.56	1.00	0.56		
Hourly Flow Rate, HFR (veh/h)	0	0	0	107	0	232		
Percent Heavy Vehicles	0	0	4	5	0	5		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			1			1		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
v (veh/h)	164					107		232
C (m) (veh/h)	707					80		386
v/c	0.23					1.34		0.60
95% queue length	0.90					21.10		4.28
Control Delay (s/veh)	11.6					801.6		28.1
LOS	B					F		D
Approach Delay (s/veh)	--	--				272.3		
Approach LOS	--	--				F		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year				
Analysis Time Period	No Build 2040 AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Ellicott Highway				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	5	335	10	30	390	5		
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.89	0.89	0.89		
Hourly Flow Rate, HFR (veh/h)	6	458	13	33	438	5		
Percent Heavy Vehicles	7	--	--	9	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	1	1	1	0		
Configuration	L	T	R	L		TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	45	5	40	10	10	20		
Peak-Hour Factor, PHF	0.61	0.61	0.61	0.72	0.72	0.72		
Hourly Flow Rate, HFR (veh/h)	73	8	65	13	13	27		
Percent Heavy Vehicles	2	0	2	4	4	4		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	1	0	1	0		
Configuration	LT		R		LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R		LTR	
v (veh/h)	6	33	81		65		53	
C (m) (veh/h)	1091	1055	203		603		310	
v/c	0.01	0.03	0.40		0.11		0.17	
95% queue length	0.02	0.10	1.93		0.36		0.62	
Control Delay (s/veh)	8.3	8.5	34.4		11.7		19.0	
LOS	A	A	D		B		C	
Approach Delay (s/veh)	--	--	24.3			19.0		
Approach LOS	--	--	C			C		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2040			
Analysis Time Period								
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Calhan Highway				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	20	265	30	30	215	20		
Peak-Hour Factor, PHF	0.72	0.72	0.72	0.81	0.81	0.81		
Hourly Flow Rate, HFR (veh/h)	27	368	41	37	265	24		
Percent Heavy Vehicles	6	--	--	9	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	1	0	1	0		
Configuration	LT		R	LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	40	10	20	10	20	30		
Peak-Hour Factor, PHF	0.72	0.72	0.72	0.51	0.51	0.51		
Hourly Flow Rate, HFR (veh/h)	55	13	27	19	39	58		
Percent Heavy Vehicles	12	12	12	8	8	8		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LTR		LTR			LTR	
v (veh/h)	27	37		95			116	
C (m) (veh/h)	1250	1113		284			402	
v/c	0.02	0.03		0.33			0.29	
95% queue length	0.07	0.10		1.48			1.21	
Control Delay (s/veh)	7.9	8.3		24.0			17.6	
LOS	A	A		C			C	
Approach Delay (s/veh)	--	--		24.0			17.6	
Approach LOS	--	--		C			C	

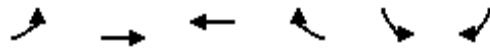
TWO-WAY STOP CONTROL SUMMARY								
General Information					Site Information			
Analyst	AMER				Intersection			
Agency/Co.	DEA				Jurisdiction			
Date Performed	7/6/2016				Analysis Year	2040		
Analysis Time Period	No Build 2040 AM Peak							
Project Description US 24 PEL								
East/West Street: US 24					North/South Street: Peyton Highway			
Intersection Orientation: East-West					Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments								
Major Street		Eastbound			Westbound			
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	50	390	50	10	520	20		
Peak-Hour Factor, PHF	0.84	0.84	0.84	0.86	0.86	0.86		
Hourly Flow Rate, HFR (veh/h)	59	464	59	11	604	23		
Percent Heavy Vehicles	6	--	--	11	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street		Northbound			Southbound			
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	120	20	20	25	15	70		
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.75	0.75	0.75		
Hourly Flow Rate, HFR (veh/h)	148	24	24	33	20	93		
Percent Heavy Vehicles	7	7	7	5	5	5		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	1	0	1	1		
Configuration	LT		R	LT		R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	59	11	172		24	53		93
C (m) (veh/h)	936	999	103		588	128		493
v/c	0.06	0.01	1.67		0.04	0.41		0.19
95% queue length	0.20	0.03	40.82		0.13	2.01		0.70
Control Delay (s/veh)	9.1	8.6	1327		11.4	52.6		14.0
LOS	A	A	F		B	F		B
Approach Delay (s/veh)	--	--	1166			28.0		
Approach LOS	--	--	F			D		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year		2040		
Analysis Time Period	No Build 2040 PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Ramah Rd				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	5	175	10	5	255	5		
Peak-Hour Factor, PHF	0.72	0.72	0.72	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	6	243	13	5	277	5		
Percent Heavy Vehicles	11	--	--	10	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	5	0	5	15	0	5		
Peak-Hour Factor, PHF	0.25	0.25	0.25	0.58	0.58	0.58		
Hourly Flow Rate, HFR (veh/h)	20	0	20	25	0	8		
Percent Heavy Vehicles	0	0	0	29	29	29		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR	LTR			LTR		
v (veh/h)	6	5	40			33		
C (m) (veh/h)	1230	1264	563			433		
v/c	0.00	0.00	0.07			0.08		
95% queue length	0.01	0.01	0.23			0.25		
Control Delay (s/veh)	7.9	7.9	11.9			14.0		
LOS	A	A	B			B		
Approach Delay (s/veh)	--	--	11.9			14.0		
Approach LOS	--	--	B			B		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2040			
Analysis Time Period	No Build 2040 AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Hathaway Dr				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	200	2960	30	60	3820	265		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86		
Hourly Flow Rate, HFR (veh/h)	222	3288	33	69	4441	308		
Percent Heavy Vehicles	6	--	--	6	--	--		
Median Type	Raised curb							
RT Channelized			0			0		
Lanes	1	2	1	1	2	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)			50			425		
Peak-Hour Factor, PHF	1.00	1.00	0.46	1.00	1.00	0.74		
Hourly Flow Rate, HFR (veh/h)	0	0	108	0	0	574		
Percent Heavy Vehicles	0	0	6	0	0	6		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	1	0	0	1		
Configuration			R			R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L			R			R
v (veh/h)	222	69			108			574
C (m) (veh/h)	19	77			117			52
v/c	11.68	0.90			0.92			11.04
95% queue length	104.68	8.37			10.68			264.26
Control Delay (s/veh)	19631	248.3			203.0			18219
LOS	F	F			F			F
Approach Delay (s/veh)	--	--	203.0			18219		
Approach LOS	--	--	F			F		

HCM 2010 Signalized Intersection Summary
 1: US 24 & SB Powers Blvd off-ramp

10/10/2016









Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		↑↑↑	↑↑		↑↑↑			
Traffic Volume (veh/h)	0	3255	2020	0	150	45		
Future Volume (veh/h)	0	3255	2020	0	150	45		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1900		
Adj Flow Rate, veh/h	0	3426	2322	0	107	111		
Adj No. of Lanes	0	3	2	0	1	1		
Peak Hour Factor	0.95	0.95	0.87	0.87	0.91	0.91		
Percent Heavy Veh, %	0	2	2	0	2	0		
Cap, veh/h	0	3661	2548	0	319	291		
Arrive On Green	0.00	0.72	1.00	0.00	0.18	0.18		
Sat Flow, veh/h	0	5421	3725	0	1774	1615		
Grp Volume(v), veh/h	0	3426	2322	0	107	111		
Grp Sat Flow(s),veh/h/ln	0	1695	1770	0	1774	1615		
Q Serve(g_s), s	0.0	57.8	0.0	0.0	5.3	6.1		
Cycle Q Clear(g_c), s	0.0	57.8	0.0	0.0	5.3	6.1		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	3661	2548	0	319	291		
V/C Ratio(X)	0.00	0.94	0.91	0.00	0.34	0.38		
Avail Cap(c_a), veh/h	0	3661	2548	0	319	291		
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	12.0	0.0	0.0	35.8	36.1		
Incr Delay (d2), s/veh	0.0	5.9	6.3	0.0	2.8	3.8		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	28.3	2.2	0.0	2.8	3.0		
LnGrp Delay(d),s/veh	0.0	18.0	6.3	0.0	38.6	39.9		
LnGrp LOS		B	A		D	D		
Approach Vol, veh/h		3426	2322		218			
Approach Delay, s/veh		18.0	6.3		39.2			
Approach LOS		B	A		D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		77.0		23.0		77.0		
Change Period (Y+Rc), s		5.0		5.0		5.0		
Max Green Setting (Gmax), s		72.0		18.0		72.0		
Max Q Clear Time (g_c+I1), s		59.8		8.1		2.0		
Green Ext Time (p_c), s		12.2		0.4		69.6		
Intersection Summary								
HCM 2010 Ctrl Delay			14.2					
HCM 2010 LOS			B					
Notes								

HCM 2010 Signalized Intersection Summary

2: NB Powers Blvd off-ramp & US 24



















10/10/2016

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑			↑↑↑	↑↑↑			
Traffic Volume (veh/h)	2700	0	0	3480	310	120		
Future Volume (veh/h)	2700	0	0	3480	310	120		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1900		
Adj Flow Rate, veh/h	2842	0	0	3625	238	246		
Adj No. of Lanes	2	0	0	3	1	1		
Peak Hour Factor	0.95	0.95	0.96	0.96	0.90	0.90		
Percent Heavy Veh, %	2	0	0	2	2	0		
Cap, veh/h	2548	0	0	3661	319	291		
Arrive On Green	1.00	0.00	0.00	0.72	0.18	0.18		
Sat Flow, veh/h	3725	0	0	5421	1774	1615		
Grp Volume(v), veh/h	2842	0	0	3625	238	246		
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1774	1615		
Q Serve(g_s), s	0.0	0.0	0.0	69.5	12.7	14.7		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	69.5	12.7	14.7		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2548	0	0	3661	319	291		
V/C Ratio(X)	1.12	0.00	0.00	0.99	0.75	0.85		
Avail Cap(c_a), veh/h	2548	0	0	3661	319	291		
HCM Platoon Ratio	2.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	13.7	38.8	39.7		
Incr Delay (d2), s/veh	58.0	0.0	0.0	12.7	14.6	25.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	20.5	0.0	0.0	36.2	7.5	8.6		
LnGrp Delay(d),s/veh	58.0	0.0	0.0	26.4	53.5	64.7		
LnGrp LOS	F			C	D	E		
Approach Vol, veh/h	2842			3625	484			
Approach Delay, s/veh	58.0			26.4	59.2			
Approach LOS	E			C	E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		77.0				77.0		23.0
Change Period (Y+Rc), s		5.0				5.0		5.0
Max Green Setting (Gmax), s		72.0				72.0		18.0
Max Q Clear Time (g_c+I1), s		2.0				71.5		16.7
Green Ext Time (p_c), s		69.6				0.5		0.3
Intersection Summary								
HCM 2010 Ctrl Delay			41.6					
HCM 2010 LOS			D					
Notes								

HCM 2010 Signalized Intersection Summary





















3: Peterson Blvd & US 24 WB ramp

10/10/2016

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	95	0	130	670	1285	0	0	370	200
Future Volume (veh/h)	0	0	0	95	0	130	670	1285	0	0	370	200
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				106	0	144	761	1460	0	0	402	217
Adj No. of Lanes				1	1	0	1	2	0	0	2	1
Peak Hour Factor				0.90	0.90	0.90	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				195	0	174	952	2855	0	0	1476	660
Arrive On Green				0.11	0.00	0.11	0.70	1.00	0.00	0.00	0.42	0.42
Sat Flow, veh/h				1774	0	1583	1774	3632	0	0	3632	1583
Grp Volume(v), veh/h				106	0	144	761	1460	0	0	402	217
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	0	0	1770	1583
Q Serve(g_s), s				6.8	0.0	10.7	36.9	0.0	0.0	0.0	9.0	11.1
Cycle Q Clear(g_c), s				6.8	0.0	10.7	36.9	0.0	0.0	0.0	9.0	11.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				195	0	174	952	2855	0	0	1476	660
V/C Ratio(X)				0.54	0.00	0.83	0.80	0.51	0.00	0.00	0.27	0.33
Avail Cap(c_a), veh/h				266	0	237	1236	2855	0	0	1476	660
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.6	0.0	52.3	3.6	0.0	0.0	0.0	23.0	23.6
Incr Delay (d2), s/veh				2.3	0.0	15.8	0.3	0.1	0.0	0.0	0.5	1.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.5	0.0	5.4	15.5	0.0	0.0	0.0	4.4	5.1
LnGrp Delay(d),s/veh				52.9	0.0	68.0	3.9	0.1	0.0	0.0	23.5	24.9
LnGrp LOS				D		E	A	A			C	C
Approach Vol, veh/h					250			2221			619	
Approach Delay, s/veh					61.6			1.4			24.0	
Approach LOS					E			A			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		101.8			46.8	55.1		18.2				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		92.0			61.0	26.0		18.0				
Max Q Clear Time (g_c+I1), s		2.0			38.9	13.1		12.7				
Green Ext Time (p_c), s		31.0			2.9	10.1		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay				10.8								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary
 4: Peterson Blvd & US 24 EB ramp

























10/10/2016

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	100	90	35	0	255	0	1200	375	255	210	0
Future Volume (veh/h)	320	100	90	35	0	255	0	1200	375	255	210	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	364	114	0	43	0	311	0	1412	441	271	223	0
Adj No. of Lanes	0	1	1	1	1	0	0	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82	0.85	0.85	0.85	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	272	69	620	616	0	620	0	1097	328	193	1858	0
Arrive On Green	0.39	0.39	0.00	0.39	0.00	0.39	0.00	0.41	0.41	0.13	0.88	0.00
Sat Flow, veh/h	560	175	1583	1273	0	1583	0	2779	804	1774	3632	0
Grp Volume(v), veh/h	478	0	0	43	0	311	0	910	943	271	223	0
Grp Sat Flow(s),veh/h/ln	735	0	1583	1273	0	1583	0	1770	1721	1774	1770	0
Q Serve(g_s), s	29.2	0.0	0.0	0.0	0.0	17.8	0.0	49.0	49.0	9.0	1.0	0.0
Cycle Q Clear(g_c), s	47.0	0.0	0.0	2.3	0.0	17.8	0.0	49.0	49.0	9.0	1.0	0.0
Prop In Lane	0.76		1.00	1.00		1.00	0.00		0.47	1.00		0.00
Lane Grp Cap(c), veh/h	341	0	620	616	0	620	0	723	703	193	1858	0
V/C Ratio(X)	1.40	0.00	0.00	0.07	0.00	0.50	0.00	1.26	1.34	1.40	0.12	0.00
Avail Cap(c_a), veh/h	341	0	620	616	0	620	0	723	703	193	1858	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.96	0.96	0.00
Uniform Delay (d), s/veh	47.7	0.0	0.0	22.9	0.0	27.6	0.0	35.5	35.5	32.4	3.6	0.0
Incr Delay (d2), s/veh	197.9	0.0	0.0	0.0	0.0	0.6	0.0	127.6	163.6	208.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	30.0	0.0	0.0	0.9	0.0	7.9	0.0	49.5	55.2	17.5	0.5	0.0
LnGrp Delay(d),s/veh	245.6	0.0	0.0	22.9	0.0	28.3	0.0	163.1	199.1	241.2	3.7	0.0
LnGrp LOS	F			C		C		F	F	F	A	
Approach Vol, veh/h		478			354			1853			494	
Approach Delay, s/veh		245.6			27.6			181.4			134.0	
Approach LOS		F			C			F			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	14.0	54.0		52.0		68.0		52.0				
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s	9.0	49.0		47.0		63.0		47.0				
Max Q Clear Time (g_c+I1), s	11.0	51.0		49.0		3.0		19.8				
Green Ext Time (p_c), s	0.0	0.0		0.0		32.1		6.8				
Intersection Summary												
HCM 2010 Ctrl Delay			166.6									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

5: US 24 & SH 94

10/10/2016

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	120	50	225	1135	60	135	140	3900	590	60	1335	260
Future Volume (veh/h)	120	50	225	1135	60	135	140	3900	590	60	1335	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	148	62	0	1351	71	0	143	3980	0	71	1571	0
Adj No. of Lanes	1	1	1	2	2	1	1	2	1	1	2	1
Peak Hour Factor	0.81	0.81	0.81	0.84	0.84	0.84	0.98	0.98	0.98	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	112	95	551	566	253	204	1764	789	164	1738	778
Arrive On Green	0.06	0.06	0.00	0.16	0.16	0.00	0.06	0.50	0.00	0.05	0.49	0.00
Sat Flow, veh/h	1774	1863	1583	3442	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	148	62	0	1351	71	0	143	3980	0	71	1571	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	6.0	3.2	0.0	16.0	1.7	0.0	3.9	49.8	0.0	1.9	40.6	0.0
Cycle Q Clear(g_c), s	6.0	3.2	0.0	16.0	1.7	0.0	3.9	49.8	0.0	1.9	40.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	106	112	95	551	566	253	204	1764	789	164	1738	778
V/C Ratio(X)	1.39	0.55	0.00	2.45	0.13	0.00	0.70	2.26	0.00	0.43	0.90	0.00
Avail Cap(c_a), veh/h	106	112	95	551	566	253	206	1764	789	178	1738	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.0	45.7	0.0	42.0	36.0	0.0	22.3	25.1	0.0	22.9	23.3	0.0
Incr Delay (d2), s/veh	223.1	5.9	0.0	659.5	0.1	0.0	10.0	567.3	0.0	1.8	8.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	1.9	0.0	58.0	0.8	0.0	2.5	163.2	0.0	1.0	21.6	0.0
LnGrp Delay(d),s/veh	270.1	51.6	0.0	701.5	36.1	0.0	32.2	592.4	0.0	24.8	31.5	0.0
LnGrp LOS	F	D		F	D		C	F		C	C	
Approach Vol, veh/h		210			1422			4123			1642	
Approach Delay, s/veh		205.6			668.3			572.9			31.2	
Approach LOS		F			F			F			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	56.8		11.0	10.9	56.1		22.0				
Change Period (Y+Rc), s	5.0	7.0		5.0	5.0	7.0		6.0				
Max Green Setting (Gmax), s	6.0	49.0		6.0	6.0	49.0		16.0				
Max Q Clear Time (g_c+I1), s	3.9	51.8		8.0	5.9	42.6		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.4		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			460.6									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

6: US 24 & Marksheffel Rd

10/10/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	25	520	360	20	1100	250	1200	2900	50	140	1275	70
Future Volume (veh/h)	25	520	360	20	1100	250	1200	2900	50	140	1275	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	27	553	0	23	1250	0	1304	3152	0	159	1449	0
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.92	0.92	0.92	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	578	259	129	566	253	620	1835	821	178	1486	665
Arrive On Green	0.03	0.16	0.00	0.03	0.16	0.00	0.14	0.52	0.00	0.06	0.42	0.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	27	553	0	23	1250	0	1304	3152	0	159	1449	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	1770	1583	1774	1770	1583
Q Serve(g_s), s	1.2	15.5	0.0	1.1	16.0	0.0	13.8	51.8	0.0	6.0	40.2	0.0
Cycle Q Clear(g_c), s	1.2	15.5	0.0	1.1	16.0	0.0	13.8	51.8	0.0	6.0	40.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	128	578	259	129	566	253	620	1835	821	178	1486	665
V/C Ratio(X)	0.21	0.96	0.00	0.18	2.21	0.00	2.10	1.72	0.00	0.89	0.97	0.00
Avail Cap(c_a), veh/h	178	578	259	186	566	253	620	1835	821	178	1486	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.5	41.5	0.0	34.6	42.0	0.0	41.5	24.1	0.0	25.9	28.5	0.0
Incr Delay (d2), s/veh	0.8	28.1	0.0	0.6	549.1	0.0	501.7	325.5	0.0	38.4	18.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	9.9	0.0	0.5	51.0	0.0	51.7	107.9	0.0	4.8	23.3	0.0
LnGrp Delay(d),s/veh	35.3	69.6	0.0	35.2	591.1	0.0	543.2	349.6	0.0	64.3	46.5	0.0
LnGrp LOS	D	E		D	F		F	F		E	D	
Approach Vol, veh/h		580			1273			4456			1608	
Approach Delay, s/veh		68.0			581.0			406.2			48.3	
Approach LOS		E			F			F			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	58.8	7.8	22.3	20.8	49.0	8.2	22.0				
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	7.0	* 7	5.0	6.0				
Max Green Setting (Gmax), s	6.0	49.0	6.0	16.0	13.0	* 42	6.0	16.0				
Max Q Clear Time (g_c+I1), s	8.0	53.8	3.1	17.5	15.8	42.2	3.2	18.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			336.9									
HCM 2010 LOS			F									
Notes												

HCM 2010 Signalized Intersection Summary

7: US 24 & Constitution Avenue

8/10/2016



Movement	SEL	SER	NEL	NET	SWT	SWR		
Lane Configurations								
Traffic Volume (veh/h)	600	200	465	2810	1320	295		
Future Volume (veh/h)	600	200	465	2810	1320	295		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	750	0	489	2958	1435	0		
Adj No. of Lanes	2	1	1	2	2	1		
Peak Hour Factor	0.80	0.80	0.95	0.95	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	619	285	490	2548	1593	712		
Arrive On Green	0.18	0.00	0.22	0.72	0.45	0.00		
Sat Flow, veh/h	3442	1583	1774	3632	3632	1583		
Grp Volume(v), veh/h	750	0	489	2958	1435	0		
Grp Sat Flow(s),veh/h/ln	1721	1583	1774	1770	1770	1583		
Q Serve(g_s), s	18.0	0.0	21.9	72.0	37.5	0.0		
Cycle Q Clear(g_c), s	18.0	0.0	21.9	72.0	37.5	0.0		
Prop In Lane	1.00	1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	619	285	490	2548	1593	712		
V/C Ratio(X)	1.21	0.00	1.00	1.16	0.90	0.00		
Avail Cap(c_a), veh/h	619	285	490	2548	1593	712		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	41.0	0.0	30.2	14.0	25.4	0.0		
Incr Delay (d2), s/veh	109.3	0.0	40.0	77.1	8.6	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	17.9	0.0	18.9	61.6	20.0	0.0		
LnGrp Delay(d),s/veh	150.3	0.0	70.2	91.1	34.1	0.0		
LnGrp LOS	F		E	F	C			
Approach Vol, veh/h	750			3447	1435			
Approach Delay, s/veh	150.3			88.2	34.1			
Approach LOS	F			F	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		77.0		23.0	27.0	50.0		
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		
Max Green Setting (Gmax), s		72.0		18.0	22.0	45.0		
Max Q Clear Time (g_c+I1), s		74.0		20.0	23.9	39.5		
Green Ext Time (p_c), s		0.0		0.0	0.0	5.5		
Intersection Summary								
HCM 2010 Ctrl Delay			82.7					
HCM 2010 LOS			F					

HCM 2010 Signalized Intersection Summary

8: US 24 & Garrett Rd













8/10/2016

	↑	↖	↙	↓	↘	↗		
Movement	NBT	NBR	SBL	SBT	NWL	NWR		
Lane Configurations	↑↑		↖	↑	↘			
Traffic Volume (veh/h)	2900	510	220	1350	210	130		
Future Volume (veh/h)	2900	510	220	1350	210	130		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	2990	526	227	1392	239	148		
Adj No. of Lanes	2	0	1	1	0	0		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.88	0.88		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	2218	379	60	1366	174	108		
Arrive On Green	0.73	0.73	0.73	0.73	0.17	0.17		
Sat Flow, veh/h	3117	517	47	1863	1045	647		
Grp Volume(v), veh/h	1713	1803	227	1392	388	0		
Grp Sat Flow(s),veh/h/ln	1770	1772	47	1863	1696	0		
Q Serve(g_s), s	88.0	88.0	0.0	88.0	20.0	0.0		
Cycle Q Clear(g_c), s	88.0	88.0	88.0	88.0	20.0	0.0		
Prop In Lane		0.29	1.00		0.62	0.38		
Lane Grp Cap(c), veh/h	1298	1299	60	1366	283	0		
V/C Ratio(X)	1.32	1.39	3.78	1.02	1.37	0.00		
Avail Cap(c_a), veh/h	1298	1299	60	1366	283	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	16.0	16.0	60.0	16.0	50.0	0.0		
Incr Delay (d2), s/veh	149.5	179.4	1292.0	29.2	188.4	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	96.1	107.0	23.5	55.5	24.1	0.0		
LnGrp Delay(d),s/veh	165.5	195.4	1352.0	45.2	238.4	0.0		
LnGrp LOS	F	F	F	F	F			
Approach Vol, veh/h	3516			1619	388			
Approach Delay, s/veh	180.8			228.5	238.4			
Approach LOS	F			F	F			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		95.0				95.0		25.0
Change Period (Y+Rc), s		7.0				7.0		5.0
Max Green Setting (Gmax), s		88.0				88.0		20.0
Max Q Clear Time (g_c+I1), s		90.0				90.0		22.0
Green Ext Time (p_c), s		0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			198.8					
HCM 2010 LOS			F					
Notes								

HCM 2010 Signalized Intersection Summary























9: US 24 & Falcon Hwy

8/10/2016

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	200	300	2400	645	150	1310		
Future Volume (veh/h)	200	300	2400	645	150	1310		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	267	0	2500	0	156	1365		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.75	0.75	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	281	251	1382	1174	60	1382		
Arrive On Green	0.16	0.00	0.74	0.00	0.74	0.74		
Sat Flow, veh/h	1774	1583	1863	1583	131	1863		
Grp Volume(v), veh/h	267	0	2500	0	156	1365		
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1583	131	1863		
Q Serve(g_s), s	17.9	0.0	89.0	0.0	0.0	85.0		
Cycle Q Clear(g_c), s	17.9	0.0	89.0	0.0	89.0	85.0		
Prop In Lane	1.00	1.00		1.00	1.00			
Lane Grp Cap(c), veh/h	281	251	1382	1174	60	1382		
V/C Ratio(X)	0.95	0.00	1.81	0.00	2.60	0.99		
Avail Cap(c_a), veh/h	281	251	1382	1174	60	1382		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	50.0	0.0	15.5	0.0	60.0	15.0		
Incr Delay (d2), s/veh	40.4	0.0	367.2	0.0	765.8	21.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	11.9	0.0	185.8	0.0	14.7	51.1		
LnGrp Delay(d),s/veh	90.4	0.0	382.7	0.0	825.8	36.5		
LnGrp LOS	F		F		F	D		
Approach Vol, veh/h	267		2500			1521		
Approach Delay, s/veh	90.4		382.7			117.5		
Approach LOS	F		F			F		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		96.0				96.0		24.0
Change Period (Y+Rc), s		7.0				7.0		5.0
Max Green Setting (Gmax), s		89.0				89.0		19.0
Max Q Clear Time (g_c+I1), s		91.0				91.0		19.9
Green Ext Time (p_c), s		0.0				0.0		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			270.4					
HCM 2010 LOS			F					

HCM 2010 Signalized Intersection Summary
 10: US 24 & Meridian Rd/Rolling Thunder Way

8/10/2016

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	60	250	235	80	600	280	510	2110	80	170	1120	60
Future Volume (veh/h)	60	250	235	80	600	280	510	2110	80	170	1120	60
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	65	272	0	86	645	0	531	2198	83	187	1231	66
Adj No. of Lanes	0	1	1	0	1	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.96	0.96	0.96	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	223	237	36	272	264	1213	1863	1583	149	714	607
Arrive On Green	0.15	0.15	0.00	0.17	0.17	0.00	0.65	1.00	1.00	0.05	0.38	0.38
Sat Flow, veh/h	356	1489	1583	218	1634	1583	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	337	0	0	731	0	0	531	2198	83	187	1231	66
Grp Sat Flow(s),veh/h/ln	1845	0	1583	1852	0	1583	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	18.0	0.0	0.0	20.0	0.0	0.0	12.1	120.0	0.0	6.0	46.0	3.2
Cycle Q Clear(g_c), s	18.0	0.0	0.0	20.0	0.0	0.0	12.1	120.0	0.0	6.0	46.0	3.2
Prop In Lane	0.19		1.00	0.12		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	0	237	309	0	264	1213	1863	1583	149	714	607
V/C Ratio(X)	1.22	0.00	0.00	2.37	0.00	0.00	0.44	1.18	0.05	1.26	1.72	0.11
Avail Cap(c_a), veh/h	277	0	237	309	0	264	1213	1863	1583	149	714	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	0.0	0.0	50.0	0.0	0.0	8.8	0.0	0.0	36.1	37.0	23.8
Incr Delay (d2), s/veh	126.2	0.0	0.0	625.7	0.0	0.0	0.2	86.9	0.1	159.0	331.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.9	0.0	0.0	63.8	0.0	0.0	7.9	45.0	0.0	8.6	89.4	1.4
LnGrp Delay(d),s/veh	177.2	0.0	0.0	675.7	0.0	0.0	9.0	86.9	0.1	195.1	368.7	23.9
LnGrp LOS	F			F			A	F	A	F	F	C
Approach Vol, veh/h		337			731			2812			1484	
Approach Delay, s/veh		177.2			675.7			69.6			331.5	
Approach LOS		F			F			E			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	129.0		26.0	87.0	53.0		24.0				
Change Period (Y+Rc), s	5.0	7.0		6.0	7.0	* 7		6.0				
Max Green Setting (Gmax), s	6.0	52.0		20.0	12.0	* 46		18.0				
Max Q Clear Time (g_c+I1), s	8.0	122.0		22.0	14.1	48.0		20.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			231.4									
HCM 2010 LOS			F									
Notes												

HCM 2010 Signalized Intersection Summary
 11: US 24 & E Woodmen Rd

8/10/2016



Movement	SEL	SER	NEL	NET	SWT	SWR		
Lane Configurations								
Traffic Volume (veh/h)	760	360	780	1645	990	490		
Future Volume (veh/h)	760	360	780	1645	990	490		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	800	0	821	1732	1053	0		
Adj No. of Lanes	1	1	2	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.94	0.94		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	606	541	579	1040	699	594		
Arrive On Green	0.34	0.00	0.13	0.56	0.38	0.00		
Sat Flow, veh/h	1774	1583	3442	1863	1863	1583		
Grp Volume(v), veh/h	800	0	821	1732	1053	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	1721	1863	1863	1583		
Q Serve(g_s), s	41.0	0.0	16.0	67.0	45.0	0.0		
Cycle Q Clear(g_c), s	41.0	0.0	16.0	67.0	45.0	0.0		
Prop In Lane	1.00	1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	606	541	579	1040	699	594		
V/C Ratio(X)	1.32	0.00	1.42	1.67	1.51	0.00		
Avail Cap(c_a), veh/h	606	541	579	1040	699	594		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	39.5	0.0	38.5	26.5	37.5	0.0		
Incr Delay (d2), s/veh	155.3	0.0	198.2	303.7	235.8	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	46.2	0.0	25.5	121.8	68.8	0.0		
LnGrp Delay(d),s/veh	194.8	0.0	236.7	330.2	273.3	0.0		
LnGrp LOS	F		F	F	F			
Approach Vol, veh/h	800			2553	1053			
Approach Delay, s/veh	194.8			300.1	273.3			
Approach LOS	F			F	F			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		74.0		46.0	22.0	52.0		
Change Period (Y+Rc), s		7.0		5.0	6.0	7.0		
Max Green Setting (Gmax), s		67.0		41.0	16.0	45.0		
Max Q Clear Time (g_c+I1), s		69.0		43.0	18.0	47.0		
Green Ext Time (p_c), s		0.0		0.0	0.0	0.0		
Intersection Summary								
HCM 2010 Ctrl Delay			274.6					
HCM 2010 LOS			F					
Notes								

























HCM 2010 Signalized Intersection Summary
 12: US 24 & Meridian Ranch/Judge Orr Rd

8/10/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	45	90	190	320	120	50	340	1560	300	40	1210	60
Future Volume (veh/h)	45	90	190	320	120	50	340	1560	300	40	1210	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	51	101	213	323	121	51	358	1642	316	44	1330	66
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.89	0.89	0.89	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	183	343	251	75	32	252	873	168	60	748	37
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.11	0.57	0.57	0.43	0.43	0.43
Sat Flow, veh/h	181	536	1005	589	220	93	1774	1519	292	223	1760	87
Grp Volume(v), veh/h	365	0	0	495	0	0	358	0	1958	44	0	1396
Grp Sat Flow(s),veh/h/ln	1722	0	0	902	0	0	1774	0	1811	223	0	1847
Q Serve(g_s), s	0.0	0.0	0.0	19.6	0.0	0.0	13.0	0.0	69.0	0.0	0.0	51.0
Cycle Q Clear(g_c), s	21.4	0.0	0.0	41.0	0.0	0.0	13.0	0.0	69.0	51.0	0.0	51.0
Prop In Lane	0.14		0.58	0.65		0.10	1.00		0.16	1.00		0.05
Lane Grp Cap(c), veh/h	623	0	0	358	0	0	252	0	1041	60	0	785
V/C Ratio(X)	0.59	0.00	0.00	1.38	0.00	0.00	1.42	0.00	1.88	0.73	0.00	1.78
Avail Cap(c_a), veh/h	623	0	0	358	0	0	252	0	1041	60	0	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.1	0.0	0.0	45.4	0.0	0.0	52.0	0.0	25.5	60.0	0.0	34.5
Incr Delay (d2), s/veh	1.4	0.0	0.0	189.2	0.0	0.0	210.5	0.0	399.7	56.2	0.0	355.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	0.0	0.0	30.6	0.0	0.0	23.1	0.0	149.8	2.4	0.0	103.4
LnGrp Delay(d),s/veh	34.5	0.0	0.0	234.7	0.0	0.0	262.4	0.0	425.2	116.2	0.0	389.8
LnGrp LOS	C			F			F		F	F		F
Approach Vol, veh/h		365			495			2316				1440
Approach Delay, s/veh		34.5			234.7			400.1				381.4
Approach LOS		C			F			F				F
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		74.0		46.0	18.0	56.0		46.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		69.0		41.0	13.0	51.0		41.0				
Max Q Clear Time (g_c+I1), s		71.0		23.4	15.0	53.0		43.0				
Green Ext Time (p_c), s		0.0		6.1	0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			347.6									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary
 13: US 24 & Stapleton Rd

8/10/2016

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	80	45	200	100	190	70	235	1290	130	15	1010	70
Future Volume (veh/h)	80	45	200	100	190	70	235	1290	130	15	1010	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	90	51	225	109	207	76	261	1433	144	17	1174	81
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.90	0.90	0.90	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	279	237	199	279	237	759	1960	1666	254	1118	950
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.39	1.00	1.00	0.60	0.60	0.60
Sat Flow, veh/h	1092	1863	1583	1099	1863	1583	1774	1863	1583	324	1863	1583
Grp Volume(v), veh/h	90	51	225	109	207	76	261	1433	144	17	1174	81
Grp Sat Flow(s),veh/h/ln	1092	1863	1583	1099	1863	1583	1774	1863	1583	324	1863	1583
Q Serve(g_s), s	5.2	2.9	16.9	11.5	12.8	5.1	7.8	0.0	0.0	2.7	72.0	2.6
Cycle Q Clear(g_c), s	18.0	2.9	16.9	14.4	12.8	5.1	7.8	0.0	0.0	2.7	72.0	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	279	237	199	279	237	759	1960	1666	254	1118	950
V/C Ratio(X)	0.84	0.18	0.95	0.55	0.74	0.32	0.34	0.73	0.09	0.07	1.05	0.09
Avail Cap(c_a), veh/h	108	279	237	199	279	237	759	1960	1666	254	1118	950
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.6	44.6	50.5	50.9	48.8	45.5	23.5	0.0	0.0	10.1	24.0	10.1
Incr Delay (d2), s/veh	40.6	0.3	43.9	3.2	10.1	0.8	0.3	2.4	0.1	0.5	41.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	1.5	10.3	3.7	7.3	2.3	5.9	1.3	0.0	0.3	49.4	1.2
LnGrp Delay(d),s/veh	99.2	44.9	94.4	54.1	58.8	46.3	23.8	2.4	0.1	10.6	65.2	10.3
LnGrp LOS	F	D	F	D	E	D	C	A	A	B	F	B
Approach Vol, veh/h		366			392			1838			1272	
Approach Delay, s/veh		88.7			55.1			5.3			61.0	
Approach LOS		F			E			A			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		133.4		24.0	54.4	79.0		24.0				
Change Period (Y+Rc), s		7.0		6.0	7.0	* 7		6.0				
Max Green Setting (Gmax), s		89.0		18.0	12.0	* 72		18.0				
Max Q Clear Time (g_c+I1), s		2.0		20.0	9.8	74.0		16.4				
Green Ext Time (p_c), s		30.5		0.0	0.4	0.0		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			36.5									
HCM 2010 LOS			D									
Notes												

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2040			
Analysis Time Period	No Build 2040 PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Elbert Road				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	140	1140	60	50	860	30		
Peak-Hour Factor, PHF	0.97	0.97	0.97	0.96	0.96	0.96		
Hourly Flow Rate, HFR (veh/h)	144	1175	61	52	895	31		
Percent Heavy Vehicles	2	--	--	5	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	30	70	20	10	50	0		
Peak-Hour Factor, PHF	0.89	0.89	0.89	0.82	0.82	0.82		
Hourly Flow Rate, HFR (veh/h)	33	78	22	12	60	0		
Percent Heavy Vehicles	0	0	0	8	8	8		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			1			1		
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	L	T	R	L	T	R
v (veh/h)	144	52	33	78	22	12	60	0
C (m) (veh/h)	738	553	0	22	236	0	20	331
v/c	0.20	0.09		3.55	0.09		3.00	0.00
95% queue length	0.73	0.31		31.69	0.31		23.78	0.00
Control Delay (s/veh)	11.1	12.2		4968	21.8		4037	15.9
LOS	B	B	F	F	C	F	F	C
Approach Delay (s/veh)	--	--						
Approach LOS	--	--						

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year		2040		
Analysis Time Period	No Build 2040 PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Bradshaw Road				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	120	910			50	610		
Peak-Hour Factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	131	999	0	0	54	663		
Percent Heavy Vehicles	3	--	--	4	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	1	1	0	0	1	1		
Configuration	L	T			T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				80		100		
Peak-Hour Factor, PHF	1.00	1.00	0.92	0.79	1.00	0.79		
Hourly Flow Rate, HFR (veh/h)	0	0	0	101	0	126		
Percent Heavy Vehicles	0	0	4	1	0	1		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			1			1		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
v (veh/h)	131					101		126
C (m) (veh/h)	879					149		1016
v/c	0.15					0.68		0.12
95% queue length	0.52					5.19		0.42
Control Delay (s/veh)	9.8					76.2		9.0
LOS	A					F		A
Approach Delay (s/veh)	--	--				38.9		
Approach LOS	--	--				E		

TWO-WAY STOP CONTROL SUMMARY								
General Information					Site Information			
Analyst	AMER				Intersection			
Agency/Co.	DEA				Jurisdiction			
Date Performed	7/6/2016				Analysis Year	2040		
Analysis Time Period	No Build 2040 PM Peak							
Project Description US 24 PEL								
East/West Street: US 24					North/South Street: Ellicott Highway			
Intersection Orientation: East-West					Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments								
Major Street		Eastbound			Westbound			
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	10	390	40	40	390	10		
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	10	410	42	43	419	10		
Percent Heavy Vehicles	9	--	--	9	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	1	1	1	1	1	0		
Configuration	L	T	R	L		TR		
Upstream Signal		0			0			
Minor Street		Northbound			Southbound			
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	20	10	20	5	10	10		
Peak-Hour Factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94		
Hourly Flow Rate, HFR (veh/h)	23	11	23	5	10	10		
Percent Heavy Vehicles	3	3	3	7	7	7		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	1	0	1	0		
Configuration	LT		R		LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R		LTR	
v (veh/h)	10	43	34		23		25	
C (m) (veh/h)	1094	1073	228		639		298	
v/c	0.01	0.04	0.15		0.04		0.08	
95% queue length	0.03	0.13	0.52		0.11		0.27	
Control Delay (s/veh)	8.3	8.5	23.6		10.8		18.2	
LOS	A	A	C		B		C	
Approach Delay (s/veh)	--	--	18.4			18.2		
Approach LOS	--	--	C			C		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2040			
Analysis Time Period	No Build 2040 PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Calhan Highway				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	20	265	40	20	305	5		
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.91	0.91	0.91		
Hourly Flow Rate, HFR (veh/h)	24	327	49	21	335	5		
Percent Heavy Vehicles	9	--	--	10	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	1	0	1	0		
Configuration	LT		R	LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	30	30	20	30	20	20		
Peak-Hour Factor, PHF	0.56	0.56	0.56	0.55	0.55	0.55		
Hourly Flow Rate, HFR (veh/h)	53	53	35	54	36	36		
Percent Heavy Vehicles	3	3	3	21	21	21		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LTR		LTR			LTR	
v (veh/h)	24	21		141			126	
C (m) (veh/h)	1181	1140		332			292	
v/c	0.02	0.02		0.42			0.43	
95% queue length	0.06	0.06		2.17			2.22	
Control Delay (s/veh)	8.1	8.2		23.8			26.6	
LOS	A	A		C			D	
Approach Delay (s/veh)	--	--		23.8			26.6	
Approach LOS	--	--		C			D	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2040			
Analysis Time Period	No Build 2040 PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Peyton Highway				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	85	740	100	10	500	40		
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.93	0.93	0.93		
Hourly Flow Rate, HFR (veh/h)	104	913	123	10	537	43		
Percent Heavy Vehicles	4	--	--	3	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	1	1	1	1	1	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	50	30	20	35	30	60		
Peak-Hour Factor, PHF	0.49	0.49	0.49	0.64	0.64	0.64		
Hourly Flow Rate, HFR (veh/h)	102	61	40	54	46	93		
Percent Heavy Vehicles	7	7	7	4	4	4		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	1	0	1	1		
Configuration	LT		R	LT		R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L	LT		R	LT		R
v (veh/h)	104	10	163		40	100		93
C (m) (veh/h)	984	667	31		324	26		540
v/c	0.11	0.01	5.26		0.12	3.85		0.17
95% queue length	0.35	0.05	69.52		0.42	40.69		0.62
Control Delay (s/veh)	9.1	10.5	7926		17.7	5447		13.1
LOS	A	B	F		C	F		B
Approach Delay (s/veh)	--	--	6368			2829		
Approach LOS	--	--	F			F		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2016			
Analysis Time Period	Existing AM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Ramah Rd				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	105	0	0	65	0		
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.86	0.86	0.86		
Hourly Flow Rate, HFR (veh/h)	0	150	0	0	75	0		
Percent Heavy Vehicles	9	--	--	12	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	0	0	0	5	0	0		
Peak-Hour Factor, PHF	0.50	0.50	0.50	0.88	0.88	0.88		
Hourly Flow Rate, HFR (veh/h)	0	0	0	5	0	0		
Percent Heavy Vehicles	0	0	0	20	20	20		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR	LTR			LTR		
v (veh/h)	0	0	0			5		
C (m) (veh/h)	1481	1372				694		
v/c	0.00	0.00				0.01		
95% queue length	0.00	0.00				0.02		
Control Delay (s/veh)	7.4	7.6				10.2		
LOS	A	A				B		
Approach Delay (s/veh)	--	--				10.2		
Approach LOS	--	--				B		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	AMER			Intersection				
Agency/Co.	DEA			Jurisdiction				
Date Performed	7/6/2016			Analysis Year	2040			
Analysis Time Period	No Build 2040 PM Peak							
Project Description US 24 PEL								
East/West Street: US 24				North/South Street: Frontage Road				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	320	3530	40	35	3110	145		
Peak-Hour Factor, PHF	0.98	0.98	0.98	0.97	0.97	0.97		
Hourly Flow Rate, HFR (veh/h)	326	3602	40	36	3206	149		
Percent Heavy Vehicles	3	--	--	4	--	--		
Median Type	Raised curb							
RT Channelized			0			0		
Lanes	1	2	1	1	2	1		
Configuration	L	T	R	L	T	R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)			50			290		
Peak-Hour Factor, PHF	1.00	1.00	0.89	1.00	1.00	0.93		
Hourly Flow Rate, HFR (veh/h)	0	0	56	0	0	311		
Percent Heavy Vehicles	0	0	4	0	0	3		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	1	0	0	1		
Configuration			R			R		
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L	L			R			R
v (veh/h)	326	36			56			311
C (m) (veh/h)	79	59			96			128
v/c	4.13	0.61			0.58			2.43
95% queue length	127.34	3.58			3.56			96.34
Control Delay (s/veh)	5738	151.2			91.8			2654
LOS	F	F			F			F
Approach Delay (s/veh)	--	--	91.8			2654		
Approach LOS	--	--	F			F		

Arterial Level of Service
Existing Conditions

7/12/2016

Arterial Level of Service: NE US 24

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	44	2.1	6.4	0.1	38
SB Powers Blvd off-r	1	7.7	11.7	0.1	20
	31	8.0	20.0	0.2	33
NB Powers Blvd off-r	2	11.4	15.5	0.1	15
	58	4.3	7.3	0.0	23
	21	3.9	11.4	0.1	35
	61	6.8	66.2	0.9	50
	19	1.8	18.5	0.3	49
SH 94	5	4.5	15.2	0.2	54
	20	2.8	15.7	0.2	44
	28	1.2	25.5	0.4	52
Marksheffel Rd	6	17.7	30.3	0.2	28
	62	6.7	19.6	0.2	42
	29	2.5	48.6	0.8	61
Constitution Avenue	7	1.3	13.9	0.2	59
	30	1.2	20.4	0.3	62
	33	9.0	183.7	3.3	64
Garrett Rd	8	7.4	19.9	0.2	35
	24	3.3	12.2	0.1	39
	56	4.3	57.4	0.8	51
Falcon Hwy	9	3.7	16.0	0.2	43
	55	1.8	12.1	0.2	46
	38	2.4	28.4	0.4	50
Meridian Rd	10	20.8	29.8	0.1	17
	34	5.0	11.4	0.1	31
	36	1.5	20.7	0.3	50
E Woodmen Rd	11	3.6	13.0	0.1	40
	47	7.0	93.4	1.4	53
Judge Orr Rd	12	8.2	26.2	0.3	44
	43	7.1	69.0	0.9	50
	13	10.7	28.8	0.3	35
Total		179.5	968.2	13.1	49

Arterial Level of Service
Existing Conditions

7/12/2016

Arterial Level of Service: SW US 24

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Stapleton Rd	13	14.8	37.2	0.3	33
	43	4.9	23.5	0.3	43
Meridian Ranch	12	16.7	76.9	0.9	44
	47	5.5	26.5	0.3	44
E Woodmen Rd	11	23.8	106.0	1.4	46
	36	7.2	16.9	0.1	31
	34	5.0	24.1	0.3	43
Rolling Thunder Way	10	30.4	37.0	0.1	10
	38	10.6	19.7	0.1	25
	55	3.0	29.1	0.4	49
Falcon Hwy	9	4.6	14.8	0.2	38
	56	3.6	16.0	0.2	43
	24	9.6	63.0	0.8	47
Garrett Rd	8	17.6	26.4	0.1	18
	33	4.5	15.7	0.2	45
	30	15.3	190.2	3.3	62
Constitution Avenue	7	10.5	29.8	0.3	42
	29	5.3	18.3	0.2	45
	62	7.4	52.8	0.8	56
Marksheffel Rd	6	124.3	179.8	0.2	6
	28	18.5	31.7	0.2	27
	20	3.6	27.9	0.4	48
	5	23.0	35.2	0.2	20
	19	8.5	23.7	0.2	35
	61	2.4	19.1	0.3	48
NB Powers Blvd off-r	21	11.4	70.8	0.9	46
	58	6.1	13.6	0.1	30
	2	11.3	14.2	0.0	12
SB Powers Blvd off-r	31	3.8	8.1	0.1	29
	1	8.9	21.0	0.2	31
Total	44	3.2	7.1	0.1	32
		425.1	1276.0	13.4	39

Queuing and Blocking Report
Existing Conditions

7/12/2016

Intersection: 1: US 24 & SB Powers Blvd off-ramp

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	T	T	L	LR
Maximum Queue (ft)	161	139	107	78	80	182	211
Average Queue (ft)	102	67	48	34	36	115	107
95th Queue (ft)	147	122	94	57	62	169	169
Link Distance (ft)	263	263	263	904	904	240	240
Upstream Blk Time (%)							0
Queuing Penalty (veh)							0
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 2: NB Powers Blvd off-ramp & US 24

Movement	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	L	LR
Maximum Queue (ft)	215	232	184	206	237	64	82
Average Queue (ft)	118	125	109	134	190	27	37
95th Queue (ft)	182	196	162	193	227	57	71
Link Distance (ft)	266	266	183	183	183	222	222
Upstream Blk Time (%)		0	0	1	11		
Queuing Penalty (veh)		0	1	7	83		
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Peterson Blvd & US 24 WB ramp

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	T	T	T	R
Maximum Queue (ft)	124	210	130	64	59	499	516	60
Average Queue (ft)	92	31	63	20	21	311	374	46
95th Queue (ft)	137	139	106	53	52	595	580	58
Link Distance (ft)		573	317	317	317	472	472	
Upstream Blk Time (%)						17	30	
Queuing Penalty (veh)						0	0	
Storage Bay Dist (ft)	100							25
Storage Blk Time (%)	9						47	7
Queuing Penalty (veh)	0						96	25

Queuing and Blocking Report
Existing Conditions

7/12/2016

Intersection: 4: Peterson Blvd & US 24 EB ramp

Movement	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	LT	L	TR	T	TR	L	T	T
Maximum Queue (ft)	134	141	70	66	105	82	119	138
Average Queue (ft)	62	67	33	22	47	36	55	70
95th Queue (ft)	111	120	59	53	88	70	98	115
Link Distance (ft)	658	595	595	444	444	317	317	317
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 5: US 24 & SH 94

Movement	SE	SE	NW	NW	NW	NW	NE	NE	NE	SW	SW	SW
Directions Served	L	T	L	L	T	T	L	T	T	L	T	T
Maximum Queue (ft)	44	31	200	237	28	23	109	137	151	64	453	455
Average Queue (ft)	8	5	127	175	4	2	47	66	63	15	274	279
95th Queue (ft)	30	21	211	228	21	13	90	124	123	45	425	434
Link Distance (ft)		559			730	730		1140	1140		935	935
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	400		475	475			930			800		
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 5: US 24 & SH 94

Movement	B28	B28	B28
Directions Served	T	T	
Maximum Queue (ft)	943	951	236
Average Queue (ft)	129	107	8
95th Queue (ft)	724	655	167
Link Distance (ft)	1157	1157	1157
Upstream Blk Time (%)	0	0	0
Queuing Penalty (veh)	1	1	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
Existing Conditions

7/12/2016

Intersection: 6: US 24 & Marksheffel Rd

Movement	EB	EB	EB	WB	WB	NE	NE	NE	NE	SW	SW	SW
Directions Served	L	T	T	L	T	L	L	T	T	L	T	T
Maximum Queue (ft)	25	252	258	43	142	94	122	142	172	627	919	918
Average Queue (ft)	3	152	142	8	58	48	70	71	88	188	615	613
95th Queue (ft)	18	223	222	33	111	89	108	121	140	523	986	992
Link Distance (ft)		1517	1517		872			1157	1157		1126	1126
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	375			175		1000	1000			1000		
Storage Blk Time (%)						0					0	22
Queuing Penalty (veh)						0					0	1

Intersection: 6: US 24 & Marksheffel Rd

Movement	SW
Directions Served	R
Maximum Queue (ft)	526
Average Queue (ft)	33
95th Queue (ft)	263
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	700
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 7: US 24 & Constitution Avenue

Movement	SE	SE	NE	NE	NE	SW	SW
Directions Served	L	L	L	T	T	T	T
Maximum Queue (ft)	114	80	43	38	52	176	172
Average Queue (ft)	63	29	14	4	5	89	98
95th Queue (ft)	107	66	39	22	29	161	165
Link Distance (ft)	1414	1414		1156	1156	1778	1778
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			1000				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Queuing and Blocking Report
Existing Conditions

7/12/2016

Intersection: 8: US 24 & Garrett Rd

Movement	NB	NB	SB	NW
Directions Served	T	TR	T	LR
Maximum Queue (ft)	161	114	583	235
Average Queue (ft)	67	18	280	119
95th Queue (ft)	138	69	520	198
Link Distance (ft)	959	959	660	1427
Upstream Blk Time (%)			0	
Queuing Penalty (veh)			1	
Storage Bay Dist (ft)				
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 9: US 24 & Falcon Hwy

Movement	WB	WB	NB	SB	SB	B38
Directions Served	L	R	T	L	T	T
Maximum Queue (ft)	166	51	142	20	183	580
Average Queue (ft)	75	5	34	1	70	70
95th Queue (ft)	137	30	101	12	144	419
Link Distance (ft)	2141		944		764	669
Upstream Blk Time (%)						1
Queuing Penalty (veh)						3
Storage Bay Dist (ft)		40		600		
Storage Blk Time (%)	36	0				
Queuing Penalty (veh)	2	0				

Intersection: 10: US 24 & Meridian Rd/Rolling Thunder Way

Movement	NB	NB	SB	SB	NE	NE	NE	SW	SW	SW	B34
Directions Served	LT	R	LT	R	L	T	R	L	T	R	T
Maximum Queue (ft)	188	123	534	85	95	273	26	307	466	27	37
Average Queue (ft)	70	15	286	69	41	106	3	76	223	3	2
95th Queue (ft)	143	80	598	121	81	216	17	212	418	17	25
Link Distance (ft)	602		535			669			446		1479
Upstream Blk Time (%)			8						1		
Queuing Penalty (veh)			0						9		
Storage Bay Dist (ft)		100		60	400		400	400		400	
Storage Blk Time (%)	5	0	43	1					2		
Queuing Penalty (veh)	9	0	208	1					4		

Queuing and Blocking Report
Existing Conditions

7/12/2016

Intersection: 11: US 24 & E Woodmen Rd

Movement	SE	NE	NE	NE	SW	SW
Directions Served	L	L	L	T	T	R
Maximum Queue (ft)	287	129	104	65	266	109
Average Queue (ft)	160	59	44	18	129	5
95th Queue (ft)	261	102	83	52	237	54
Link Distance (ft)	1139		712		7130	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	580		580		450	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 12: US 24 & Meridian Ranch/Judge Orr Rd

Movement	EB	WB	NE	NE	SW	SW
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	332	198	61	194	13	241
Average Queue (ft)	139	97	9	37	1	88
95th Queue (ft)	272	171	35	120	8	206
Link Distance (ft)	1090	1557	1596		4916	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			850		675	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 13: US 24 & Stapleton Rd

Movement	SE	SE	SE	NW	NW	NW	NE	NE	NE	SW	SW	SW		
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R		
Maximum Queue (ft)	64	88	60	32	78	31	55	183	7	44	197	30		
Average Queue (ft)	16	35	19	5	28	6	17	53	1	9	93	5		
95th Queue (ft)	46	72	45	24	66	22	46	131	4	29	166	17		
Link Distance (ft)	827				816		1412				1753			
Upstream Blk Time (%)														
Queuing Penalty (veh)														
Storage Bay Dist (ft)	190			330	215			215	985			530	800	800
Storage Blk Time (%)														
Queuing Penalty (veh)														

Queuing and Blocking Report
Existing Conditions

7/12/2016

Intersection: 31: US 24

Movement	EB	WB
Directions Served	T	T
Maximum Queue (ft)	8	11
Average Queue (ft)	0	0
95th Queue (ft)	4	7
Link Distance (ft)	904	266
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 44: US 24

Movement	SW
Directions Served	R
Maximum Queue (ft)	122
Average Queue (ft)	54
95th Queue (ft)	98
Link Distance (ft)	352
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 48: SB Powers Blvd off-ramp

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Queuing and Blocking Report

Existing Conditions

7/12/2016

Intersection: 58: US 24

Movement	EB	WB	WB	NE
Directions Served	T	T	T	R
Maximum Queue (ft)	8	202	303	270
Average Queue (ft)	0	20	77	136
95th Queue (ft)	5	114	216	239
Link Distance (ft)	183	545	545	281
Upstream Blk Time (%)				1
Queuing Penalty (veh)				2
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 60: NB Powers Blvd off-ramp

Movement	NB
Directions Served	TR
Maximum Queue (ft)	90
Average Queue (ft)	5
95th Queue (ft)	40
Link Distance (ft)	187
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 454

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period Existing AM
Highway US 24
From/To Woodmen Road to Peyton Hwy
Jurisdiction CDOT Region 2
Analysis Year 2016
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.89	
Shoulder width	8.0	ft	% Trucks and buses	6	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	6.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	60	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 235 veh/h
Opposing direction volume, Vo 390 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.4	1.3
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.977	0.982
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	270 pc/h	446 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFSd 59.3 mi/h

Adjustment for no-passing zones, fnp 2.3 mi/h
Average travel speed, ATSD 51.4 mi/h
Percent Free Flow Speed, PFFS 86.8 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.994	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	266	438	pc/h
Base percent time-spent-following,(note-4) BPTSFd	32.5	%	
Adjustment for no-passing zones, fnp	43.1		
Percent time-spent-following, PTSFd	48.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	403	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1433	veh-mi
Peak 15-min total travel time, TT15	7.8	veh-h
Capacity from ATS, CdATS	1669	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1669	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	6.1	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	51.4	mi/h
Percent time-spent-following, PTSFd (from above)	48.8	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	264.0
Effective width of outside lane, We	28.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	2.27
Bicycle LOS	B

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

----- Directional Two-Lane Highway Segment Analysis -----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period Existing AM
Highway US 24
From/To Woodmen Road to Peyton Hwy
Jurisdiction CDOT Region 2
Analysis Year 2016
Description US 24 PEL

----- Input Data -----

Highway class	Class 1		Peak hour factor, PHF	0.89	
Shoulder width	8.0	ft	% Trucks and buses	6	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	6.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	53	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 390 veh/h
Opposing direction volume, Vo 235 veh/h

----- Average Travel Speed -----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.3	1.4
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.982	0.977
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	446 pc/h	270 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFSd 59.3 mi/h

Adjustment for no-passing zones, fnp 3.0 mi/h
Average travel speed, ATSD 50.7 mi/h
Percent Free Flow Speed, PFFS 85.6 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	0.994	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	438 pc/h	266 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	43.4	%	
Adjustment for no-passing zones, fnp	41.0		
Percent time-spent-following, PTSFD	68.9	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.26	
Peak 15-min vehicle-miles of travel, VMT15	668	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2379	veh-mi
Peak 15-min total travel time, TT15	13.2	veh-h
Capacity from ATS, CdATS	1661	veh/h
Capacity from PTSF, CdPTSF	1690	veh/h
Directional Capacity	1661	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	6.1	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	50.7	mi/h
Percent time-spent-following, PTSFD (from above)	68.9	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	438.2
Effective width of outside lane, We	28.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	2.53
Bicycle LOS	C

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
 Agency/Co. DEA
 Date Performed 8/8/2016
 Analysis Time Period Existing AM
 Highway US 24 (Eastbound)
 From/To Peyton Hwy to Calhan Hwy
 Jurisdiction CDOT Region 2
 Analysis Year 2016
 Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.73	
Shoulder width	10.0	ft	% Trucks and buses	7	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	65	%
Up/down	-	%	Access point density	6	/mi

Analysis direction volume, Vd 165 veh/h
 Opposing direction volume, Vo 220 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.5	1.4
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.966	0.973
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	234 pc/h	310 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
 Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
 Adj. for access point density,(note-3) fA 1.5 mi/h

Free-flow speed, FFSd 58.5 mi/h

Adjustment for no-passing zones, fnp 3.1 mi/h
 Average travel speed, ATSD 51.2 mi/h
 Percent Free Flow Speed, PFFS 87.5 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	228 pc/h	303 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	26.5	%	
Adjustment for no-passing zones, fnp	53.5		
Percent time-spent-following, PTSFD	49.5	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.14	
Peak 15-min vehicle-miles of travel, VMT15	571	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1667	veh-mi
Peak 15-min total travel time, TT15	11.1	veh-h
Capacity from ATS, CdATS	1654	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1654	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.1	mi
Length of two-lane highway upstream of the passing lane, Lu	2.0	mi
Length of passing lane including tapers, Lpl	0.6	mi
Average travel speed, ATSD (from above)	51.2	mi/h
Percent time-spent-following, PTSFD (from above)	49.5	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	1.70	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	5.80	mi
Adj. factor for the effect of passing lane on average speed, fpl	1.09	
Average travel speed including passing lane, ATSp1	51.8	
Percent free flow speed including passing lane, PFFSp1	88.6	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	12.61	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-5.11	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	0.59	
Percent time-spent-following including passing lane, PTSFpl	37.7	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	B	
Peak 15-min total travel time, TT15	11.0	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	226.0
Effective width of outside lane, We	32.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	1.33
Bicycle LOS	A

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period Existing AM
Highway
From/To Peyton Hwy to Calhan Hwy
Jurisdiction CDOT Region 2
Analysis Year 2016
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.89	
Shoulder width	10.0	ft	% Trucks and buses	7	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	53	%
Up/down	-	%	Access point density	6	/mi

Analysis direction volume, Vd 220 veh/h
Opposing direction volume, Vo 165 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.5	1.6
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.966	0.960
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	256 pc/h	193 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 1.5 mi/h

Free-flow speed, FFSd 58.5 mi/h

Adjustment for no-passing zones, fnp 3.2 mi/h
Average travel speed, ATSD 51.8 mi/h
Percent Free Flow Speed, PFFS 88.5 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	249 pc/h	187 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	25.9	%	
Adjustment for no-passing zones, fnp	52.2		
Percent time-spent-following, PTSFD	55.7	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.15	
Peak 15-min vehicle-miles of travel, VMT15	624	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2222	veh-mi
Peak 15-min total travel time, TT15	12.1	veh-h
Capacity from ATS, CdATS	1632	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1632	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.1	mi
Length of two-lane highway upstream of the passing lane, Lu	1.0	mi
Length of passing lane including tapers, Lpl	1.3	mi
Average travel speed, ATSD (from above)	51.8	mi/h
Percent time-spent-following, PTSFD (from above)	55.7	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	1.70	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	6.10	mi
Adj. factor for the effect of passing lane on average speed, fpl	1.09	
Average travel speed including passing lane, ATSp1	52.7	
Percent free flow speed including passing lane, PFFSp1	90.1	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	12.31	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-4.51	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	0.59	
Percent time-spent-following including passing lane, PTSFpl	40.7	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	B	
Peak 15-min total travel time, TT15	11.8	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	247.2
Effective width of outside lane, We	32.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	1.37
Bicycle LOS	A

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period Existing AM
Highway US 24 (Eastbound)
From/To Calhan Hwy to Ramah Rd
Jurisdiction CDOT Region 2
Analysis Year 2016
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.70	
Shoulder width	8.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.5	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	42	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 105 veh/h
Opposing direction volume, Vo 65 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.7	1.9
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.935	0.917
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	160 pc/h	101 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFfSd 59.3 mi/h

Adjustment for no-passing zones, fnp 1.7 mi/h
Average travel speed, ATfSd 55.5 mi/h
Percent Free Flow Speed, PFFfS 93.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	152 pc/h	94 pc/h	
Base percent time-spent-following,(note-4) BPTSFd	17.0	%	
Adjustment for no-passing zones, fnp	42.2		
Percent time-spent-following, PTSFd	43.1	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	394	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1103	veh-mi
Peak 15-min total travel time, TT15	7.1	veh-h
Capacity from ATS, CdATS	1559	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1559	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	55.5	mi/h
Percent time-spent-following, PTSFd (from above)	43.1	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	150.0
Effective width of outside lane, We	37.50
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	0.33
Bicycle LOS	A

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period Existing AM
Highway
From/To Calhan Hwy to Ramah Rd
Jurisdiction CDOT Region 2
Analysis Year 2016
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.86	
Shoulder width	8.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.5	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	39	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 65 veh/h
Opposing direction volume, Vo 105 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.9	1.8
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.917	0.926
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	82 pc/h	132 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFSd 59.3 mi/h

Adjustment for no-passing zones, fnp 2.0 mi/h
Average travel speed, ATSD 55.6 mi/h
Percent Free Flow Speed, PFFS 93.9 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	76	123	pc/h
Base percent time-spent-following,(note-4) BPTSFD	9.0	%	
Adjustment for no-passing zones, fnp	40.0		
Percent time-spent-following, PTSFD	24.3	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	198	veh-mi
Peak-hour vehicle-miles of travel, VMT60	683	veh-mi
Peak 15-min total travel time, TT15	3.6	veh-h
Capacity from ATS, CdATS	1574	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1574	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	55.6	mi/h
Percent time-spent-following, PTSFD (from above)	24.3	
Level of service, LOSd (from above)	A	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	75.6
Effective width of outside lane, We	41.50
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	-1.59
Bicycle LOS	A

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Arterial Level of Service
Existing Conditions

7/14/2016

Arterial Level of Service: NE US 24

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	44	4.0	9.6	0.1	32
SB Powers Blvd off-r	1	9.4	12.2	0.0	13
	31	8.6	20.7	0.2	32
NB Powers Blvd off-r	2	6.2	10.4	0.1	22
	60	3.9	6.9	0.0	25
	21	4.2	8.3	0.1	26
	61	8.5	70.4	1.0	49
	19	2.3	19.6	0.3	48
SH 94	5	18.6	33.3	0.2	25
	20	8.2	21.0	0.2	33
	28	3.4	27.4	0.4	48
Marksheffel Rd	6	26.7	39.2	0.2	21
	62	8.9	22.6	0.2	39
	29	4.1	41.6	0.7	58
Constitution Avenue	7	5.0	25.3	0.4	52
	30	2.3	21.6	0.3	58
	33	19.2	193.0	3.3	61
Garrett Rd	8	13.9	26.5	0.2	27
	24	8.7	17.6	0.1	27
	56	7.2	60.3	0.8	49
Falcon Hwy	9	5.0	17.4	0.2	39
	55	3.0	13.3	0.2	42
	38	8.6	34.5	0.4	41
Meridian Rd	10	51.5	60.5	0.1	8
	34	9.1	15.5	0.1	22
	36	3.1	22.2	0.3	47
E Woodmen Rd	11	6.8	16.2	0.1	32
	47	8.9	94.4	1.4	52
Judge Orr Rd	12	11.4	30.2	0.3	38
	43	9.1	71.1	0.9	48
	13	12.3	30.3	0.3	34
Total		302.3	1093.2	13.1	43

Arterial Level of Service
Existing Conditions

7/14/2016

Arterial Level of Service: SW US 24

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Stapleton Rd	13	15.1	37.1	0.3	33
	43	4.6	23.1	0.3	44
Meridian Ranch	12	14.5	71.9	0.9	48
	47	4.6	25.4	0.3	45
E Woodmen Rd	11	36.3	115.5	1.4	43
	36	6.5	16.2	0.1	32
	34	2.7	21.9	0.3	48
Rolling Thunder Way	10	49.9	56.2	0.1	6
	38	7.2	16.4	0.1	31
	55	1.8	27.9	0.4	51
Falcon Hwy	9	2.8	12.9	0.2	43
	56	2.1	14.5	0.2	47
	24	5.0	58.3	0.8	50
Garrett Rd	8	7.0	15.8	0.1	30
	33	3.0	14.3	0.2	49
	30	10.9	185.7	3.3	64
Constitution Avenue	7	14.1	33.1	0.3	38
	29	5.2	25.5	0.4	51
	62	2.3	38.9	0.7	62
Marksheffel Rd	6	44.1	57.4	0.2	15
	28	8.9	22.0	0.2	38
	20	1.4	25.6	0.4	52
	5	7.3	18.7	0.2	37
	19	2.9	18.2	0.2	45
	61	1.2	18.5	0.3	51
	21	10.0	71.5	1.0	48
NB Powers Blvd off-r	2	13.7	16.6	0.0	10
	31	3.6	7.8	0.1	30
SB Powers Blvd off-r	1	8.5	20.6	0.2	32
	44	2.7	5.6	0.0	29
Total		309.4	1107.1	13.4	44

Queuing and Blocking Report
Existing Conditions

7/14/2016

Intersection: 1: US 24 & SB Powers Blvd off-ramp

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	T	T	L	LR
Maximum Queue (ft)	184	191	178	71	69	85	96
Average Queue (ft)	143	123	109	38	36	36	40
95th Queue (ft)	189	179	172	60	59	73	81
Link Distance (ft)	175	175	175	904	904	203	203
Upstream Blk Time (%)	1	0	0				
Queuing Penalty (veh)	9	3	3				
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 2: NB Powers Blvd off-ramp & US 24

Movement	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	L	LR
Maximum Queue (ft)	97	113	191	204	226	87	116
Average Queue (ft)	42	48	108	115	191	37	53
95th Queue (ft)	75	84	170	183	224	75	95
Link Distance (ft)	266	266	185	185	185	214	214
Upstream Blk Time (%)			0	1	21		
Queuing Penalty (veh)			2	6	139		
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Peterson Blvd & US 24 WB ramp

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	T	T	T	R
Maximum Queue (ft)	91	76	217	95	103	97	102	54
Average Queue (ft)	35	38	93	29	37	27	26	33
95th Queue (ft)	74	68	171	72	89	72	76	60
Link Distance (ft)		573	317	317	317	472	472	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100							25
Storage Blk Time (%)	0	0					9	6
Queuing Penalty (veh)	0	0					10	6

Queuing and Blocking Report
Existing Conditions

7/14/2016

Intersection: 4: Peterson Blvd & US 24 EB ramp

Movement	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	LT	L	TR	T	TR	L	T	T
Maximum Queue (ft)	197	83	182	498	495	173	47	42
Average Queue (ft)	110	25	86	462	462	80	16	5
95th Queue (ft)	177	59	152	479	478	140	42	24
Link Distance (ft)	658	595	595	444	444	317	317	317
Upstream Blk Time (%)				57	72			
Queuing Penalty (veh)				0	0			
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 5: US 24 & SH 94

Movement	SE	NW	NW	NW	NW	NE	NE	NE	B21	B21	B21	SW
Directions Served	T	L	L	T	T	L	T	T	T	T		T
Maximum Queue (ft)	35	322	352	30	17	80	403	391	106	252	78	137
Average Queue (ft)	6	194	243	2	1	23	210	207	5	16	3	60
95th Queue (ft)	26	276	323	14	9	59	349	342	66	131	50	115
Link Distance (ft)	559			730	730		1140	1140	270	270	270	935
Upstream Blk Time (%)									0	0	0	
Queuing Penalty (veh)									0	2	0	
Storage Bay Dist (ft)		475	475			930						
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 5: US 24 & SH 94

Movement	SW	SW
Directions Served	T	R
Maximum Queue (ft)	122	11
Average Queue (ft)	51	0
95th Queue (ft)	107	8
Link Distance (ft)	935	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		800
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report
Existing Conditions

7/14/2016

Intersection: 6: US 24 & Marksheffel Rd

Movement	EB	EB	EB	WB	WB	WB	NE	NE	NE	NE	NE	SW
Directions Served	L	T	T	L	T	R	L	L	T	T	R	L
Maximum Queue (ft)	52	103	64	165	639	200	202	214	309	332	20	25
Average Queue (ft)	11	42	21	11	334	52	112	136	163	176	2	5
95th Queue (ft)	36	82	53	70	551	195	182	202	283	297	12	20
Link Distance (ft)		1517	1517		872				1157	1157		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	375			175		175	1000	1000			630	1000
Storage Blk Time (%)					31	0						
Queuing Penalty (veh)					20	0						

Intersection: 6: US 24 & Marksheffel Rd

Movement	SW	SW
Directions Served	T	T
Maximum Queue (ft)	186	194
Average Queue (ft)	89	96
95th Queue (ft)	171	172
Link Distance (ft)	1220	1220
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: US 24 & Constitution Avenue

Movement	SE	SE	NE	NE	NE	SW	SW
Directions Served	L	L	L	T	T	T	T
Maximum Queue (ft)	145	138	102	149	175	126	137
Average Queue (ft)	95	64	32	26	39	51	61
95th Queue (ft)	140	122	72	90	110	108	121
Link Distance (ft)	1414	1414		1872	1872	1778	1778
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			1000				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Queuing and Blocking Report
Existing Conditions

7/14/2016

Intersection: 8: US 24 & Garrett Rd

Movement	NB	NB	SB	SB	NW
Directions Served	T	TR	L	T	LR
Maximum Queue (ft)	386	374	56	216	93
Average Queue (ft)	164	99	7	79	40
95th Queue (ft)	326	269	30	184	79
Link Distance (ft)	959	959		660	1427
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			590		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: US 24 & Falcon Hwy

Movement	WB	WB	NB	B24	SB
Directions Served	L	R	T	T	T
Maximum Queue (ft)	80	45	196	397	91
Average Queue (ft)	34	12	58	18	22
95th Queue (ft)	71	39	153	195	66
Link Distance (ft)	2141		944	660	764
Upstream Blk Time (%)				0	
Queuing Penalty (veh)				1	
Storage Bay Dist (ft)		25			
Storage Blk Time (%)	29	0			
Queuing Penalty (veh)	3	0			

Intersection: 10: US 24 & Meridian Rd/Rolling Thunder Way

Movement	NB	NB	SB	SB	NE	NE	NE	B38	SW	SW	SW	B36
Directions Served	LT	R	LT	R	L	T	R	T	L	T	R	T
Maximum Queue (ft)	386	125	548	85	423	663	112	201	177	377	50	144
Average Queue (ft)	165	65	299	66	269	381	14	27	78	206	12	5
95th Queue (ft)	328	166	524	122	472	699	94	162	147	329	38	102
Link Distance (ft)	602		535			669		2035		446		712
Upstream Blk Time (%)			2			4						0
Queuing Penalty (veh)			0			41						0
Storage Bay Dist (ft)		100		60	400		400		400		400	
Storage Blk Time (%)	25	0	58	0	1	10	0			0		
Queuing Penalty (veh)	54	0	114	1	5	44	0			0		

Queuing and Blocking Report
Existing Conditions

7/14/2016

Intersection: 11: US 24 & E Woodmen Rd

Movement	SE	SE	NE	NE	NE	B34	B34	SW	SW
Directions Served	L	R	L	L	T	T		T	R
Maximum Queue (ft)	442	8	141	120	143	96	91	229	70
Average Queue (ft)	282	0	69	56	52	3	3	119	7
95th Queue (ft)	414	6	117	98	107	68	64	205	59
Link Distance (ft)	1139	1139			712	446	446	7130	
Upstream Blk Time (%)						0	0		
Queuing Penalty (veh)						0	0		
Storage Bay Dist (ft)			580	580					450
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 12: US 24 & Meridian Ranch/Judge Orr Rd

Movement	EB	WB	NE	NE	SW	SW
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	156	184	74	254	3	180
Average Queue (ft)	65	79	21	81	0	49
95th Queue (ft)	124	146	56	194	2	131
Link Distance (ft)	1090	1557		1596		4916
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			850		675	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 13: US 24 & Stapleton Rd

Movement	SE	SE	SE	NW	NW	NW	NE	NE	NE	SW	SW	SW
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	52	47	36	28	90	48	70	239	13	15	179	18
Average Queue (ft)	15	9	10	2	36	12	20	96	1	2	70	3
95th Queue (ft)	42	31	31	15	73	33	51	190	7	10	141	12
Link Distance (ft)		827			816			1412			1753	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	190		330	215		215	985		530	800		800
Storage Blk Time (%)												
Queuing Penalty (veh)												

Queuing and Blocking Report
Existing Conditions

7/14/2016

Intersection: 31: US 24

Movement

Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 44: US 24

Movement	EB	EB	EB	WB	SW
Directions Served	T	T	T	T	R
Maximum Queue (ft)	92	50	46	11	218
Average Queue (ft)	13	2	3	0	98
95th Queue (ft)	56	26	23	8	174
Link Distance (ft)	422	422	422	175	265
Upstream Blk Time (%)					0
Queuing Penalty (veh)					0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 48: SB Powers Blvd off-ramp

Movement	SB
Directions Served	TR
Maximum Queue (ft)	15
Average Queue (ft)	1
95th Queue (ft)	11
Link Distance (ft)	382
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
Existing Conditions

7/14/2016

Intersection: 58: NB Powers Blvd off-ramp

Movement	NB	NB
Directions Served	T	TR
Maximum Queue (ft)	11	51
Average Queue (ft)	0	3
95th Queue (ft)	7	31
Link Distance (ft)	197	197
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 60: US 24

Movement	EB	EB	WB	WB	WB	B21	B21	NE
Directions Served	T	T	T	T	T	T	T	R
Maximum Queue (ft)	7	6	165	256	332	101	187	21
Average Queue (ft)	0	0	19	92	177	9	25	1
95th Queue (ft)	6	4	110	274	362	102	161	11
Link Distance (ft)	185	185	270	270	270	4965	4965	277
Upstream Blk Time (%)				0	10			
Queuing Penalty (veh)				2	46			
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 511

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period Existing AM
Highway US 24
From/To Woodmen Road to Peyton Hwy
Jurisdiction CDOT Region 2
Analysis Year 2016
Description US 24 PEL

-----Input Data-----

Highway class	Class 1	Peak hour factor, PHF	0.97	
Shoulder width	8.0 ft	% Trucks and buses	6	%
Lane width	12.0 ft	% Trucks crawling	0.0	%
Segment length	6.1 mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level	% Recreational vehicles	1	%
Grade: Length	- mi	% No-passing zones	60	%
Up/down	- %	Access point density	3	/mi

Analysis direction volume, Vd 565 veh/h
Opposing direction volume, Vo 335 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.4
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.994	0.977
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	586 pc/h	353 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFfSd 59.3 mi/h

Adjustment for no-passing zones, fnp 2.8 mi/h
Average travel speed, ATfSd 49.2 mi/h
Percent Free Flow Speed, PFfS 83.0 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	0.994	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	582 pc/h	347 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	53.9	%	
Adjustment for no-passing zones, fnp	34.3		
Percent time-spent-following, PTSFD	75.4	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.34	
Peak 15-min vehicle-miles of travel, VMT15	888	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3446	veh-mi
Peak 15-min total travel time, TT15	18.0	veh-h
Capacity from ATS, CdATS	1661	veh/h
Capacity from PTSF, CdPTSF	1690	veh/h
Directional Capacity	1661	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	6.1	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	49.2	mi/h
Percent time-spent-following, PTSFD (from above)	75.4	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	582.5
Effective width of outside lane, We	28.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	2.67
Bicycle LOS	C

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
 Agency/Co. DEA
 Date Performed 8/8/2016
 Analysis Time Period Existing AM
 Highway US 24
 From/To Woodmen Road to Peyton Hwy
 Jurisdiction CDOT Region 2
 Analysis Year 2016
 Description US 24 PEL

-----Input Data-----

Highway class	Class 1	Peak hour factor, PHF	0.96	
Shoulder width	8.0 ft	% Trucks and buses	6	%
Lane width	12.0 ft	% Trucks crawling	0.0	%
Segment length	6.1 mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level	% Recreational vehicles	1	%
Grade: Length	- mi	% No-passing zones	53	%
Up/down	- %	Access point density	3	/mi

Analysis direction volume, Vd 335 veh/h
 Opposing direction volume, Vo 565 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.4	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.977	0.994
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	357 pc/h	592 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
 Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
 Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFSd 59.3 mi/h

Adjustment for no-passing zones, fnp 1.5 mi/h
 Average travel speed, ATSD 50.4 mi/h
 Percent Free Flow Speed, PFFS 85.0 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.994	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	351	589	pc/h
Base percent time-spent-following,(note-4) BPTSFd	41.4	%	
Adjustment for no-passing zones, fnp	32.5		
Percent time-spent-following, PTSFd	53.5	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.21	
Peak 15-min vehicle-miles of travel, VMT15	532	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2043	veh-mi
Peak 15-min total travel time, TT15	10.6	veh-h
Capacity from ATS, CdATS	1690	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1690	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	6.1	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	50.4	mi/h
Percent time-spent-following, PTSFd (from above)	53.5	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	349.0
Effective width of outside lane, We	28.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	2.41
Bicycle LOS	B

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period Existing PM
Highway US 24 (Eastbound)
From/To Peyton Hwy to Calhan Hwy
Jurisdiction CDOT Region 2
Analysis Year 2016
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.95	
Shoulder width	10.0	ft	% Trucks and buses	7	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	65	%
Up/down	-	%	Access point density	6	/mi

Analysis direction volume, Vd 220 veh/h
Opposing direction volume, Vo 205 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.5	1.5
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.966	0.966
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	240 pc/h	223 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 1.5 mi/h

Free-flow speed, FFSd 58.5 mi/h

Adjustment for no-passing zones, fnp 3.6 mi/h
Average travel speed, ATSD 51.3 mi/h
Percent Free Flow Speed, PFFS 87.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	233	217	pc/h
Base percent time-spent-following,(note-4) BPTSFD	25.6	%	
Adjustment for no-passing zones, fnp	58.8		
Percent time-spent-following, PTSFD	56.0	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.14	
Peak 15-min vehicle-miles of travel, VMT15	585	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2222	veh-mi
Peak 15-min total travel time, TT15	11.4	veh-h
Capacity from ATS, CdATS	1642	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1642	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.1	mi
Length of two-lane highway upstream of the passing lane, Lu	2.0	mi
Length of passing lane including tapers, Lpl	0.6	mi
Average travel speed, ATSD (from above)	51.3	mi/h
Percent time-spent-following, PTSFD (from above)	56.0	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	1.70	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	5.80	mi
Adj. factor for the effect of passing lane on average speed, fpl	1.09	
Average travel speed including passing lane, ATSp1	52.0	
Percent free flow speed including passing lane, PFFSp1	88.8	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	12.54	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-5.04	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	0.59	
Percent time-spent-following including passing lane, PTSFpl	42.7	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	B	
Peak 15-min total travel time, TT15	11.3	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	231.6
Effective width of outside lane, We	32.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	1.34
Bicycle LOS	A

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period Existing PM
Highway US 24 (Westbound)
From/To Peyton Hwy to Calhan Hwy
Jurisdiction CDOT Region 2
Analysis Year 2016
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.93	
Shoulder width	10.0	ft	% Trucks and buses	7	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	53	%
Up/down	-	%	Access point density	6	/mi

Analysis direction volume, Vd 205 veh/h
Opposing direction volume, Vo 220 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.5	1.5
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.966	0.966
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	228 pc/h	245 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfs 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 1.5 mi/h

Free-flow speed, FFsd 58.5 mi/h

Adjustment for no-passing zones, fnp 3.1 mi/h
Average travel speed, ATsd 51.7 mi/h
Percent Free Flow Speed, PFFS 88.4 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	222 pc/h	238 pc/h	
Base percent time-spent-following,(note-4) BPTSFd	25.2	%	
Adjustment for no-passing zones, fnp	55.5		
Percent time-spent-following, PTSFd	52.0	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.13	
Peak 15-min vehicle-miles of travel, VMT15	557	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2071	veh-mi
Peak 15-min total travel time, TT15	10.8	veh-h
Capacity from ATS, CdATS	1642	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1642	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.1	mi
Length of two-lane highway upstream of the passing lane, Lu	1.0	mi
Length of passing lane including tapers, Lpl	1.3	mi
Average travel speed, ATSD (from above)	51.7	mi/h
Percent time-spent-following, PTSFd (from above)	52.0	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	1.70	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	6.10	mi
Adj. factor for the effect of passing lane on average speed, fpl	1.09	
Average travel speed including passing lane, ATSp1	52.7	
Percent free flow speed including passing lane, PFFSp1	90.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	12.69	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-4.89	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	0.59	
Percent time-spent-following including passing lane, PTSFpl	37.9	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	B	
Peak 15-min total travel time, TT15	10.6	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	220.4
Effective width of outside lane, We	32.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	1.31
Bicycle LOS	A

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period Existing PM
Highway US 24 (Eastbound)
From/To Calhan Hwy to Ramah Rd
Jurisdiction CDOT Region 2
Analysis Year 2016
Description US 24 PEL

-----Input Data-----

Highway class	Class 1	Peak hour factor, PHF	0.72
Shoulder width	8.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	10.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	1 %
Grade: Length	- mi	% No-passing zones	42 %
Up/down	- %	Access point density	3 /mi

Analysis direction volume, Vd 90 veh/h
Opposing direction volume, Vo 140 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.8	1.5
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.926	0.952
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	135 pc/h	204 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfs 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFsd 59.3 mi/h

Adjustment for no-passing zones, fnp 2.9 mi/h
Average travel speed, ATsd 53.7 mi/h
Percent Free Flow Speed, PFFS 90.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	126	196	pc/h
Base percent time-spent-following,(note-4) BPTSFd	14.3	%	
Adjustment for no-passing zones, fnp	43.8		
Percent time-spent-following, PTSFd	31.4	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	328	veh-mi
Peak-hour vehicle-miles of travel, VMT60	945	veh-mi
Peak 15-min total travel time, TT15	6.1	veh-h
Capacity from ATS, CdATS	1618	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1618	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	53.7	mi/h
Percent time-spent-following, PTSFd (from above)	31.4	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	125.0
Effective width of outside lane, We	39.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	-0.34
Bicycle LOS	A

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period Existing PM
Highway US 24 (Westbound)
From/To Calhan Hwy to Ramah Rd
Jurisdiction CDOT Region 2
Analysis Year 2016
Description US 24 PEL

-----Input Data-----

Highway class	Class 1	Peak hour factor, PHF	0.92
Shoulder width	8.0 ft	% Trucks and buses	10 %
Lane width	12.0 ft	% Trucks crawling	0.0 %
Segment length	10.5 mi	Truck crawl speed	0.0 mi/hr
Terrain type	Level	% Recreational vehicles	1 %
Grade: Length	- mi	% No-passing zones	39 %
Up/down	- %	Access point density	3 /mi

Analysis direction volume, Vd 140 veh/h
Opposing direction volume, Vo 90 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.7	1.9
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.935	0.917
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	163 pc/h	107 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFSd 59.3 mi/h

Adjustment for no-passing zones, fnp 1.7 mi/h
Average travel speed, ATSD 55.5 mi/h
Percent Free Flow Speed, PFFS 93.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	154 pc/h	99 pc/h	
Base percent time-spent-following,(note-4) BPTSFd	17.2	%	
Adjustment for no-passing zones, fnp	41.2		
Percent time-spent-following, PTSFd	42.3	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	399	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1470	veh-mi
Peak 15-min total travel time, TT15	7.2	veh-h
Capacity from ATS, CdATS	1559	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1559	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	55.5	mi/h
Percent time-spent-following, PTSFd (from above)	42.3	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	152.2
Effective width of outside lane, We	34.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	1.59
Bicycle LOS	B

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Arterial Level of Service
 No Build (2040) Conditions

10/10/2016

Arterial Level of Service: NE US 24

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	44	91.2	113.0	0.3	11
SB Powers Blvd off-r	1	34.8	38.8	0.1	6
	31	79.6	91.3	0.2	7
NB Powers Blvd off-r	2	23.4	27.5	0.1	8
	58	11.4	14.4	0.0	12
	21	10.4	14.0	0.1	14
	61	92.2	153.9	1.0	23
	19	9.2	25.8	0.3	35
SH 94	5	8.3	19.8	0.2	42
	20	4.3	17.0	0.2	41
	28	2.0	26.2	0.4	51
Marksheffel Rd	6	25.9	40.9	0.2	21
	62	10.1	23.2	0.2	35
	29	5.5	50.4	0.8	59
Constitution Avenue	7	5.8	20.7	0.2	40
	30	2.7	22.8	0.3	55
	33	15.7	189.6	3.3	62
Garrett Rd	8	18.2	30.4	0.2	23
	24	10.7	19.7	0.1	24
	56	18.7	71.5	0.8	41
Falcon Hwy	9	40.6	52.5	0.2	13
	55	45.5	55.7	0.2	10
	38	216.4	241.1	0.4	6
Meridian Rd	10	122.3	131.2	0.1	4
	34	10.1	16.6	0.1	21
	36	3.0	22.2	0.3	47
E Woodmen Rd	11	12.7	22.3	0.1	23
	47	10.3	96.7	1.4	51
Judge Orr Rd	12	29.0	48.6	0.3	24
	43	11.9	74.4	0.9	46
	13	12.6	30.7	0.3	33
Total		994.3	1803.3	13.4	27

Arterial Level of Service
No Build (2040) Conditions

10/10/2016

Arterial Level of Service: SW US 24

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Stapleton Rd	13	32.0	56.0	0.3	23
	43	31.1	49.0	0.3	21
Meridian Ranch	12	471.5	523.9	0.9	7
	47	56.6	76.0	0.3	15
E Woodmen Rd	11	674.1	749.0	1.4	7
	36	83.4	92.4	0.1	6
	34	194.3	212.6	0.3	5
Rolling Thunder Way	10	81.8	88.0	0.1	4
	38	10.6	19.6	0.1	26
	55	46.7	71.9	0.4	20
Falcon Hwy	9	52.0	62.0	0.2	9
	56	44.3	56.5	0.2	12
	24	298.7	348.7	0.8	8
Garrett Rd	8	67.0	75.8	0.1	6
	33	6.2	17.4	0.2	40
	30	15.5	189.5	3.3	62
Constitution Avenue	7	16.6	39.1	0.3	32
	29	8.9	22.1	0.2	37
	62	13.5	59.1	0.8	50
Marksheffel Rd	6	143.9	310.9	0.2	5
	28	25.7	39.0	0.2	22
	20	53.3	77.0	0.4	17
	5	91.5	104.2	0.2	7
	19	16.2	31.4	0.2	26
	61	3.8	20.5	0.3	45
NB Powers Blvd off-r	21	24.9	87.8	1.0	40
	58	5.0	8.6	0.1	23
	2	7.3	10.2	0.0	17
SB Powers Blvd off-r	31	2.4	6.7	0.1	35
	1	5.6	17.7	0.2	37
Total	44	1.8	5.7	0.1	40
		2586.3	3528.4	13.4	14

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 1: US 24 & SB Powers Blvd off-ramp

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	T	T	L	LR
Maximum Queue (ft)	326	317	321	102	121	269	275
Average Queue (ft)	263	267	251	55	57	247	247
95th Queue (ft)	344	352	364	90	104	263	277
Link Distance (ft)	263	263	263	904	904	240	240
Upstream Blk Time (%)	23	32	19			66	65
Queuing Penalty (veh)	179	247	144			204	202
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 2: NB Powers Blvd off-ramp & US 24

Movement	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	L	LR
Maximum Queue (ft)	305	301	189	191	219	160	199
Average Queue (ft)	283	275	108	123	180	80	113
95th Queue (ft)	297	288	173	181	227	135	185
Link Distance (ft)	266	266	183	183	183	222	222
Upstream Blk Time (%)	19	18	0	0	9		1
Queuing Penalty (veh)	240	225	3	6	131		1
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Peterson Blvd & US 24 WB ramp

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	T	T	T	R
Maximum Queue (ft)	125	591	348	341	261	506	526	55
Average Queue (ft)	123	384	300	90	56	489	492	45
95th Queue (ft)	129	625	410	285	145	498	508	60
Link Distance (ft)		573	317	317	317	472	472	
Upstream Blk Time (%)		10	34	2	0	61	90	
Queuing Penalty (veh)		0	67	4	0	0	0	
Storage Bay Dist (ft)	100							25
Storage Blk Time (%)	60	0					57	10
Queuing Penalty (veh)	18	0					204	66

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 4: Peterson Blvd & US 24 EB ramp

Movement	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	LT	L	TR	T	TR	L	T	T
Maximum Queue (ft)	305	248	154	342	347	88	111	141
Average Queue (ft)	138	137	58	177	174	39	63	94
95th Queue (ft)	245	225	107	415	420	76	106	141
Link Distance (ft)	658	595	595	444	444	317	317	317
Upstream Blk Time (%)				9	11			
Queuing Penalty (veh)				0	0			
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 5: US 24 & SH 94

Movement	SE	SE	NW	NW	NW	NW	NE	NE	NE	B61	B61	B21
Directions Served	L	T	L	L	T	T	L	T	T	T	T	T
Maximum Queue (ft)	240	137	487	500	779	745	510	224	222	848	1982	308
Average Queue (ft)	111	57	485	499	747	288	252	122	131	28	85	196
95th Queue (ft)	213	114	491	501	783	813	462	190	200	387	1011	388
Link Distance (ft)		1032			730	730		1141	1141	5066	5066	241
Upstream Blk Time (%)					84	6						2
Queuing Penalty (veh)					0	0						22
Storage Bay Dist (ft)	400		475	475			930					
Storage Blk Time (%)			9	77	1							
Queuing Penalty (veh)			4	31	5							

Intersection: 5: US 24 & SH 94

Movement	B21	B21	SW	SW	SW	SW	B20	B20	B28	B28	B28
Directions Served	T		L	T	T	R	T	T	T	T	
Maximum Queue (ft)	328	303	824	1035	1039	825	1308	1352	1207	1194	1224
Average Queue (ft)	270	135	243	897	902	282	422	442	716	734	168
95th Queue (ft)	427	361	822	1220	1217	926	1347	1374	1626	1638	853
Link Distance (ft)	241	241		934	934		1889	1889	1159	1159	1159
Upstream Blk Time (%)	19	2		30	35		3	5	1	1	1
Queuing Penalty (veh)	209	25		504	595		58	88	9	15	7
Storage Bay Dist (ft)			800			800					
Storage Blk Time (%)			0	33	38	0					
Queuing Penalty (veh)			0	28	34	1					

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 6: US 24 & Marksheffel Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NE	NE	NE	NE
Directions Served	L	T	T	R	L	T	T	R	L	L	T	T
Maximum Queue (ft)	399	1543	1562	525	199	332	283	200	278	294	294	316
Average Queue (ft)	30	1192	1217	441	28	230	191	10	147	166	192	207
95th Queue (ft)	183	1888	1922	757	117	317	279	81	311	324	275	290
Link Distance (ft)		1517	1517			698	698				1159	1159
Upstream Blk Time (%)		8	31									
Queuing Penalty (veh)		0	0									
Storage Bay Dist (ft)	375			500	175			175	1000	1000		
Storage Blk Time (%)		60	36	1		22	8	0				
Queuing Penalty (veh)		6	339	5		4	4	0				

Intersection: 6: US 24 & Marksheffel Rd

Movement	SW	SW	SW	SW	B62	B62
Directions Served	L	T	T	R	T	T
Maximum Queue (ft)	1024	1172	1184	725	212	214
Average Queue (ft)	354	816	826	103	22	21
95th Queue (ft)	954	1266	1277	520	161	155
Link Distance (ft)		1112	1112		4293	4293
Upstream Blk Time (%)		5	7			
Queuing Penalty (veh)		64	90			
Storage Bay Dist (ft)	1000			700		
Storage Blk Time (%)	0	8	50	0		
Queuing Penalty (veh)	0	37	12	0		

Intersection: 7: US 24 & Constitution Avenue

Movement	SE	SE	SE	NE	NE	NE	SW	SW
Directions Served	L	L	R	L	T	T	T	T
Maximum Queue (ft)	172	162	30	159	170	176	258	266
Average Queue (ft)	103	81	1	78	56	64	171	175
95th Queue (ft)	156	139	14	139	129	144	253	256
Link Distance (ft)	1414	1414			1156	1156	1778	1778
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			275	1000				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 8: US 24 & Garrett Rd

Movement	NB	NB	SB	SB	B24	B56	NW
Directions Served	T	TR	L	T	T	T	LR
Maximum Queue (ft)	333	304	614	767	4368	926	1482
Average Queue (ft)	190	133	139	733	3182	425	1449
95th Queue (ft)	309	277	522	766	5613	1148	1470
Link Distance (ft)	959	959		660	4254	944	1427
Upstream Blk Time (%)				42	46	0	96
Queuing Penalty (veh)				916	1002	0	0
Storage Bay Dist (ft)			590				
Storage Blk Time (%)				42			
Queuing Penalty (veh)				30			

Intersection: 9: US 24 & Falcon Hwy

Movement	WB	WB	NB	NB	B56	B24	SB	SB	B55	B38
Directions Served	L	R	T	R	T	T	L	T	T	T
Maximum Queue (ft)	2198	68	902	482	768	514	624	866	2102	473
Average Queue (ft)	2009	52	331	92	105	17	169	450	370	33
95th Queue (ft)	2599	78	911	449	585	194	566	920	1480	266
Link Distance (ft)	2141		944		4254	660		764	2035	669
Upstream Blk Time (%)	78		11			0		23	4	0
Queuing Penalty (veh)	0		122			1		393	74	2
Storage Bay Dist (ft)		40		600			600			
Storage Blk Time (%)	74	3	14	0				26		
Queuing Penalty (veh)	104	19	20	0				31		

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 10: US 24 & Meridian Rd/Rolling Thunder Way

Movement	NB	NB	SB	SB	NE	NE	NE	B38	B55	B55	SW	SW
Directions Served	LT	R	LT	R	L	T	R	T	T		L	T
Maximum Queue (ft)	360	125	582	85	425	775	425	2142	771	186	425	554
Average Queue (ft)	140	57	554	76	237	703	88	1379	301	6	300	520
95th Queue (ft)	292	159	569	118	541	900	358	2796	879	118	582	536
Link Distance (ft)	602		535			669		2035	764	764		446
Upstream Blk Time (%)			77			54		44	3			55
Queuing Penalty (veh)			0			583		479	14			724
Storage Bay Dist (ft)		100		60	400		400				400	
Storage Blk Time (%)	16	0	71	1	0	55	0				0	56
Queuing Penalty (veh)	39	0	456	2	0	93	0				0	143

Intersection: 10: US 24 & Meridian Rd/Rolling Thunder Way

Movement	SW	B34	B36	B36
Directions Served	R	T	T	
Maximum Queue (ft)	425	1589	749	797
Average Queue (ft)	82	1460	649	626
95th Queue (ft)	336	1934	1018	1117
Link Distance (ft)		1479	712	712
Upstream Blk Time (%)		67	23	50
Queuing Penalty (veh)		886	151	326
Storage Bay Dist (ft)	400			
Storage Blk Time (%)	0			
Queuing Penalty (veh)	0			

Intersection: 11: US 24 & E Woodmen Rd

Movement	SE	SE	NE	NE	NE	B34	SW	SW	B47
Directions Served	L	R	L	L	T	T	T	R	T
Maximum Queue (ft)	431	389	126	130	265	240	7212	475	1612
Average Queue (ft)	234	118	73	77	137	8	4070	377	412
95th Queue (ft)	385	330	117	122	230	110	8709	692	1522
Link Distance (ft)	1139	1139			712	446	7130		1596
Upstream Blk Time (%)						0	29		8
Queuing Penalty (veh)						0	377		101
Storage Bay Dist (ft)			580	580				450	
Storage Blk Time (%)							68	1	
Queuing Penalty (veh)							356	5	

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 12: US 24 & Meridian Ranch/Judge Orr Rd

Movement	EB	WB	NE	NE	SW	SW	B43
Directions Served	LTR	LTR	L	TR	L	TR	T
Maximum Queue (ft)	1120	1047	161	480	700	5003	1076
Average Queue (ft)	799	328	59	237	280	2980	154
95th Queue (ft)	1305	821	133	417	818	5325	830
Link Distance (ft)	1090	1557		1596		4916	1412
Upstream Blk Time (%)	32	0				15	4
Queuing Penalty (veh)	0	0				141	37
Storage Bay Dist (ft)			850		675		
Storage Blk Time (%)					0	67	
Queuing Penalty (veh)					0	34	

Intersection: 13: US 24 & Stapleton Rd

Movement	SE	SE	SE	NW	NW	NW	NE	NE	NE	SW	SW	SW
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	148	318	179	134	121	52	104	249	19	266	886	247
Average Queue (ft)	72	87	63	59	62	15	42	103	3	37	227	29
95th Queue (ft)	128	233	150	110	105	40	86	205	13	162	691	202
Link Distance (ft)		827			816			1412			1753	
Upstream Blk Time (%)		0									2	
Queuing Penalty (veh)		0									0	
Storage Bay Dist (ft)	190		330	215		215	985		530	800		800
Storage Blk Time (%)			1								3	0
Queuing Penalty (veh)			4								7	0

Intersection: 31: US 24

Movement	EB	EB	EB
Directions Served	T	T	R
Maximum Queue (ft)	965	960	954
Average Queue (ft)	883	884	811
95th Queue (ft)	1144	1140	1269
Link Distance (ft)	904	904	904
Upstream Blk Time (%)	11	20	6
Queuing Penalty (veh)	105	193	56
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 44: US 24

Movement	EB	EB	EB	SW
Directions Served	T	T	T	R
Maximum Queue (ft)	1210	1161	1101	225
Average Queue (ft)	604	590	545	115
95th Queue (ft)	1420	1383	1312	215
Link Distance (ft)	1769	1769	1769	352
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 48: SB Powers Blvd off-ramp

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	421	417
Average Queue (ft)	314	319
95th Queue (ft)	515	527
Link Distance (ft)	373	373
Upstream Blk Time (%)	42	54
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 58: US 24

Movement	EB	EB	WB	WB	WB	B21	B21	B19	B19	NE
Directions Served	T	T	T	T	T	T	T	T	T	R
Maximum Queue (ft)	247	250	187	244	303	9	135	579	846	112
Average Queue (ft)	169	165	17	48	129	0	12	38	28	32
95th Queue (ft)	278	248	97	182	297	6	95	374	319	92
Link Distance (ft)	183	183	241	241	241	5066	5066	1141	1141	277
Upstream Blk Time (%)	3	3	0	0	3			0	0	
Queuing Penalty (veh)	40	42	0	1	38			1	0	
Storage Bay Dist (ft)										
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 60: NB Powers Blvd off-ramp

Movement	NB	NB
Directions Served	T	TR
Maximum Queue (ft)	50	161
Average Queue (ft)	2	15
95th Queue (ft)	32	93
Link Distance (ft)	187	187
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 12290

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period No Build AM
Highway US 24
From/To Woodmen Road to Peyton Hwy
Jurisdiction CDOT Region 2
Analysis Year 2040
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.89	
Shoulder width	8.0	ft	% Trucks and buses	6	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	6.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	60	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 715 veh/h
Opposing direction volume, Vo 930 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.1	1.0
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.994	1.000
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	808 pc/h	1045 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFfSd 59.3 mi/h

Adjustment for no-passing zones, fnp 0.9 mi/h
Average travel speed, ATfSd 44.0 mi/h
Percent Free Flow Speed, PFfS 74.2 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	803	1045	pc/h
Base percent time-spent-following,(note-4) BPTSFd	71.9	%	
Adjustment for no-passing zones, fnp	18.8		
Percent time-spent-following, PTSFd	80.1	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.48	
Peak 15-min vehicle-miles of travel, VMT15	1225	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4361	veh-mi
Peak 15-min total travel time, TT15	27.8	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	6.1	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	44.0	mi/h
Percent time-spent-following, PTSFd (from above)	80.1	
Level of service, LOSd (from above)	E	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	803.4
Effective width of outside lane, We	28.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	2.84
Bicycle LOS	C

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
 Agency/Co. DEA
 Date Performed 8/8/2016
 Analysis Time Period No Build AM
 Highway US 24
 From/To Woodmen Road to Peyton Hwy
 Jurisdiction CDOT Region 2
 Analysis Year 2040
 Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.89	
Shoulder width	8.0	ft	% Trucks and buses	6	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	6.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	53	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 930 veh/h
 Opposing direction volume, Vo 715 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.0	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	1.000	0.994
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	1045 pc/h	808 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 60.0 mi/h
 Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
 Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFfSd 59.3 mi/h

Adjustment for no-passing zones, fnp 1.0 mi/h
 Average travel speed, ATfSd 43.9 mi/h
 Percent Free Flow Speed, PFFS 74.0 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	1045 pc/h	803 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	77.1	%	
Adjustment for no-passing zones, fnp	18.3		
Percent time-spent-following, PTSFD	87.4	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	E	
Volume to capacity ratio, v/c	0.61	
Peak 15-min vehicle-miles of travel, VMT15	1594	veh-mi
Peak-hour vehicle-miles of travel, VMT60	5673	veh-mi
Peak 15-min total travel time, TT15	36.3	veh-h
Capacity from ATS, CdATS	1690	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1690	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	6.1	mi
Length of two-lane highway upstream of the passing lane, Lu	1.0	mi
Length of passing lane including tapers, Lpl	3.0	mi
Average travel speed, ATSD (from above)	43.9	mi/h
Percent time-spent-following, PTSFD (from above)	87.4	
Level of service, LOSd (from above)	E	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	1.70	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	0.40	mi
Adj. factor for the effect of passing lane on average speed, fpl	1.11	
Average travel speed including passing lane, ATSp1	46.8	
Percent free flow speed including passing lane, PFFSp1	79.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	3.60	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-1.50	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	0.62	
Percent time-spent-following including passing lane, PTSFpl	63.0	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	C	
Peak 15-min total travel time, TT15	34.0	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1044.9
Effective width of outside lane, We	28.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	2.97
Bicycle LOS	C

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period No Build AM
Highway US 24 (Eastbound)
From/To Peyton Hwy to Calhan Hwy
Jurisdiction CDOT Region 2
Analysis Year 2040
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.73	
Shoulder width	10.0	ft	% Trucks and buses	7	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	65	%
Up/down	-	%	Access point density	6	/mi

Analysis direction volume, Vd 350 veh/h
Opposing direction volume, Vo 455 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.1
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.986	0.993
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	486 pc/h	628 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 1.5 mi/h

Free-flow speed, FFSd 58.5 mi/h

Adjustment for no-passing zones, fnp 1.6 mi/h
Average travel speed, ATSD 48.3 mi/h
Percent Free Flow Speed, PFFS 82.5 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	479	623	pc/h
Base percent time-spent-following,(note-4) BPTSFD	50.9	%	
Adjustment for no-passing zones, fnp	33.3		
Percent time-spent-following, PTSFD	65.4	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.29	
Peak 15-min vehicle-miles of travel, VMT15	1211	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3535	veh-mi
Peak 15-min total travel time, TT15	25.1	veh-h
Capacity from ATS, CdATS	1688	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1688	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.1	mi
Length of two-lane highway upstream of the passing lane, Lu	2.0	mi
Length of passing lane including tapers, Lpl	0.6	mi
Average travel speed, ATSD (from above)	48.3	mi/h
Percent time-spent-following, PTSFD (from above)	65.4	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	1.70	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	5.80	mi
Adj. factor for the effect of passing lane on average speed, fpl	1.10	
Average travel speed including passing lane, ATSp1	48.9	
Percent free flow speed including passing lane, PFFSp1	83.6	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	7.47	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	0.03	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	0.61	
Percent time-spent-following including passing lane, PTSFpl	54.5	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	C	
Peak 15-min total travel time, TT15	24.8	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	479.5
Effective width of outside lane, We	32.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	1.71
Bicycle LOS	B

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period No Build AM
Highway US 24 (Westbound)
From/To Peyton Hwy to Calhan Hwy
Jurisdiction CDOT Region 2
Analysis Year 2040
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.89	
Shoulder width	10.0	ft	% Trucks and buses	7	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	53	%
Up/down	-	%	Access point density	6	/mi

Analysis direction volume, Vd 455 veh/h
Opposing direction volume, Vo 350 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.3
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.986	0.979
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	518 pc/h	402 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 1.5 mi/h

Free-flow speed, FFSd 58.5 mi/h

Adjustment for no-passing zones, fnp 2.3 mi/h
Average travel speed, ATSD 49.1 mi/h
Percent Free Flow Speed, PFFS 83.9 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	0.993	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	511 pc/h	396 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	50.3	%	
Adjustment for no-passing zones, fnp	36.3		
Percent time-spent-following, PTSFD	70.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.30	
Peak 15-min vehicle-miles of travel, VMT15	1291	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4596	veh-mi
Peak 15-min total travel time, TT15	26.3	veh-h
Capacity from ATS, CdATS	1664	veh/h
Capacity from PTSF, CdPTSF	1688	veh/h
Directional Capacity	1664	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.1	mi
Length of two-lane highway upstream of the passing lane, Lu	1.0	mi
Length of passing lane including tapers, Lpl	1.3	mi
Average travel speed, ATSD (from above)	49.1	mi/h
Percent time-spent-following, PTSFD (from above)	70.8	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	1.70	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	6.10	mi
Adj. factor for the effect of passing lane on average speed, fpl	1.10	
Average travel speed including passing lane, ATSp1	50.1	
Percent free flow speed including passing lane, PFFSp1	85.6	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	7.21	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	0.59	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	0.61	
Percent time-spent-following including passing lane, PTSFpl	57.4	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	C	
Peak 15-min total travel time, TT15	25.8	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	511.2
Effective width of outside lane, We	32.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	1.74
Bicycle LOS	B

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period No Build AM
Highway
From/To Calhan Hwy to Ramah Rd
Jurisdiction CDOT Region 2
Analysis Year 2040
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.70	
Shoulder width	8.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.5	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	42	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 225 veh/h
Opposing direction volume, Vo 135 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.4	1.5
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.962	0.952
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	334 pc/h	203 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFSd 59.3 mi/h

Adjustment for no-passing zones, fnp 2.9 mi/h
Average travel speed, ATSD 52.2 mi/h
Percent Free Flow Speed, PFFS 88.1 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	325 pc/h	195 pc/h	
Base percent time-spent-following,(note-4) BPTSFd	32.2	%	
Adjustment for no-passing zones, fnp	43.5		
Percent time-spent-following, PTSFd	59.4	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	844	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2363	veh-mi
Peak 15-min total travel time, TT15	16.2	veh-h
Capacity from ATS, CdATS	1618	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1618	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	52.2	mi/h
Percent time-spent-following, PTSFd (from above)	59.4	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	321.4
Effective width of outside lane, We	28.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.83
Bicycle LOS	D

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period No Build AM
Highway
From/To Calhan Hwy to Ramah Rd
Jurisdiction CDOT Region 2
Analysis Year 2040
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.86	
Shoulder width	8.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.5	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	39	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 135 veh/h
Opposing direction volume, Vo 225 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.7	1.4
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.935	0.962
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	168 pc/h	272 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFSd 59.3 mi/h

Adjustment for no-passing zones, fnp 2.5 mi/h
Average travel speed, ATSD 53.4 mi/h
Percent Free Flow Speed, PFFS 90.1 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	159 pc/h	264 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	19.5	%	
Adjustment for no-passing zones, fnp	42.7		
Percent time-spent-following, PTSFD	35.6	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.10	
Peak 15-min vehicle-miles of travel, VMT15	412	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1418	veh-mi
Peak 15-min total travel time, TT15	7.7	veh-h
Capacity from ATS, CdATS	1635	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1635	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	53.4	mi/h
Percent time-spent-following, PTSFD (from above)	35.6	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	157.0
Effective width of outside lane, We	34.50
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	1.43
Bicycle LOS	A

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Arterial Level of Service
 No Build (2040) Conditions

10/10/2016

Arterial Level of Service: NE US 24

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	44	102.0	1826.9	0.1	3
SB Powers Blvd off-r	1	42.4	45.2	0.0	4
	31	175.6	186.9	0.2	4
NB Powers Blvd off-r	2	52.7	56.8	0.1	4
	60	28.6	31.6	0.0	5
	21	28.2	32.2	0.1	7
	61	508.0	563.9	1.0	6
	19	185.9	202.4	0.3	5
SH 94	5	136.0	401.0	0.2	6
	20	12.5	25.3	0.2	27
	28	3.8	27.9	0.4	48
Marksheffel Rd	6	23.2	38.3	0.2	22
	62	12.2	26.3	0.2	34
	29	5.6	42.9	0.7	56
Constitution Avenue	7	4.6	27.8	0.4	47
	30	4.4	24.4	0.3	52
	33	402.0	563.2	3.3	21
Garrett Rd	8	153.2	165.5	0.2	4
	24	35.7	44.5	0.1	11
	56	223.5	273.3	0.8	11
Falcon Hwy	9	92.8	110.0	0.2	6
	55	67.9	78.0	0.2	7
	38	215.6	240.5	0.4	6
Meridian Rd	10	101.8	110.8	0.1	5
	34	9.5	15.9	0.1	22
	36	3.3	22.4	0.3	47
E Woodmen Rd	11	5.3	14.9	0.1	35
	47	16.2	101.5	1.4	48
Judge Orr Rd	12	88.1	107.2	0.3	11
	43	13.6	75.2	0.9	45
Stapleton Rd	13	16.0	34.2	0.3	30
Total		2769.9	5516.9	13.1	13

Arterial Level of Service
 No Build (2040) Conditions

10/10/2016

Arterial Level of Service: SW US 24

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Stapleton Rd	13	281.6	947.1	0.3	4
	43	151.9	169.5	0.3	6
Meridian Ranch	12	697.7	748.7	0.9	5
	47	10.0	31.0	0.3	37
E Woodmen Rd	11	56.4	135.1	1.4	36
	36	17.7	27.3	0.1	19
	34	84.1	103.0	0.3	10
Rolling Thunder Way	10	77.0	83.4	0.1	4
	38	8.3	17.5	0.1	29
	55	2.6	28.4	0.4	50
Falcon Hwy	9	2.7	12.9	0.2	44
	56	2.3	14.8	0.2	46
	24	117.6	171.0	0.8	17
Garrett Rd	8	26.3	104.6	0.1	14
	33	4.4	15.6	0.2	45
	30	13.9	186.8	3.3	63
Constitution Avenue	7	14.1	36.3	0.3	35
	29	7.7	28.3	0.4	46
	62	3.8	41.2	0.7	59
Marksheffel Rd	6	17.8	33.5	0.2	26
	28	10.7	24.1	0.2	35
	20	1.9	26.2	0.4	51
	5	12.5	24.8	0.2	28
	19	5.1	20.2	0.2	41
	61	1.6	19.0	0.3	50
NB Powers Blvd off-r	21	53.8	115.1	1.0	30
	60	15.3	21.3	0.1	11
	2	10.5	13.5	0.0	13
SB Powers Blvd off-r	31	2.4	6.7	0.1	35
	1	7.3	19.5	0.2	34
	44	2.0	4.9	0.0	34
Total		1720.8	3231.1	13.4	19

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 1: US 24 & SB Powers Blvd off-ramp

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	T	T	T	L	LR
Maximum Queue (ft)	215	230	241	199	196	146	151
Average Queue (ft)	193	199	204	106	100	69	65
95th Queue (ft)	208	220	235	172	171	128	127
Link Distance (ft)	175	175	175	904	904	203	203
Upstream Blk Time (%)	50	64	45				
Queuing Penalty (veh)	545	691	487				
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 2: NB Powers Blvd off-ramp & US 24

Movement	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	L	LR
Maximum Queue (ft)	310	311	184	188	226	206	230
Average Queue (ft)	288	283	118	102	191	73	131
95th Queue (ft)	303	300	187	183	215	154	234
Link Distance (ft)	266	266	185	185	185	214	214
Upstream Blk Time (%)	42	43	0	0	21	0	3
Queuing Penalty (veh)	567	586	5	2	243	0	7
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Peterson Blvd & US 24 WB ramp

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	T	T	T	T	R
Maximum Queue (ft)	120	179	269	133	145	162	220	65
Average Queue (ft)	69	50	147	53	61	62	74	45
95th Queue (ft)	118	108	244	108	122	128	164	62
Link Distance (ft)		573	317	317	317	472	472	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100							25
Storage Blk Time (%)	7	1					18	12
Queuing Penalty (veh)	9	0					36	23

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 4: Peterson Blvd & US 24 EB ramp

Movement	EB	WB	WB	NB	NB	SB	SB	SB
Directions Served	LT	L	TR	T	TR	L	T	T
Maximum Queue (ft)	482	73	159	478	488	300	102	90
Average Queue (ft)	271	21	73	459	462	176	45	22
95th Queue (ft)	432	54	128	470	475	307	88	68
Link Distance (ft)	658	595	595	444	444	317	317	317
Upstream Blk Time (%)				50	80	1		
Queuing Penalty (veh)				0	0	2		
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 5: US 24 & SH 94

Movement	SE	SE	SE	NW	NW	NW	NW	NE	NE	NE	NE	B19
Directions Served	L	T	R	L	L	T	T	L	T	T	R	T
Maximum Queue (ft)	379	386	237	487	500	785	744	955	1248	1247	625	1447
Average Queue (ft)	226	91	35	485	499	750	218	739	1220	1218	614	1405
95th Queue (ft)	420	312	240	491	501	768	734	1327	1241	1236	746	1507
Link Distance (ft)		559				730	730		1140	1140		1333
Upstream Blk Time (%)		2				81	3		77	79		89
Queuing Penalty (veh)		0				0	0		1495	1538		1744
Storage Bay Dist (ft)	400		450	475	475			930				600
Storage Blk Time (%)	8	0	0	7	69	3		0	72	57		3
Queuing Penalty (veh)	22	0	0	2	21	32		1	101	337		62

Intersection: 5: US 24 & SH 94

Movement	B19	B61	B61	B21	B21	B21	SW	SW	SW	SW
Directions Served	T	T	T	T	T		L	T	T	R
Maximum Queue (ft)	1444	5079	5076	338	355	350	83	225	234	55
Average Queue (ft)	1405	4293	4297	280	324	327	30	101	108	4
95th Queue (ft)	1499	6798	6792	400	353	398	67	192	195	26
Link Distance (ft)	1333	4965	4965	270	270	270		935	935	
Upstream Blk Time (%)	91	73	73	12	68	49				
Queuing Penalty (veh)	1776	1418	1429	150	878	641				
Storage Bay Dist (ft)							800			800
Storage Blk Time (%)										
Queuing Penalty (veh)										

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 6: US 24 & Marksheffel Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NE	NE	NE	NE	B20
Directions Served	L	T	T	L	T	T	R	L	L	T	T	T
Maximum Queue (ft)	68	237	231	199	758	766	200	244	232	307	311	934
Average Queue (ft)	19	151	145	36	719	720	164	137	151	174	184	76
95th Queue (ft)	50	214	218	146	820	826	289	216	223	276	286	491
Link Distance (ft)		1517	1517		714	714				1159	1159	935
Upstream Blk Time (%)					67	80						0
Queuing Penalty (veh)					0	0						0
Storage Bay Dist (ft)	375			175			175	1000	1000			
Storage Blk Time (%)					75	74	0					
Queuing Penalty (veh)					15	184	1					

Intersection: 6: US 24 & Marksheffel Rd

Movement	B20	SW	SW	SW
Directions Served	T	L	T	T
Maximum Queue (ft)	915	126	215	234
Average Queue (ft)	68	49	95	104
95th Queue (ft)	460	108	179	194
Link Distance (ft)	935		1208	1208
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)		1000		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: US 24 & Constitution Avenue

Movement	SE	SE	SE	NE	NE	NE	SW	SW
Directions Served	L	L	R	L	T	T	T	T
Maximum Queue (ft)	492	478	300	212	143	144	213	236
Average Queue (ft)	320	316	144	83	56	50	100	103
95th Queue (ft)	530	537	390	160	120	111	185	200
Link Distance (ft)	1414	1414			1872	1872	1778	1778
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			275	1000				
Storage Blk Time (%)		23	0					
Queuing Penalty (veh)		46	1					

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 8: US 24 & Garrett Rd

Movement	NB	NB	B33	B33	SB	SB	B24	B56	NW
Directions Served	T	TR	T	T	L	T	T	T	LR
Maximum Queue (ft)	1070	1073	8159	8188	615	755	3154	34	1382
Average Queue (ft)	965	958	2951	2944	491	534	794	1	991
95th Queue (ft)	1316	1321	7155	7171	744	934	2706	21	1623
Link Distance (ft)	959	959	17245	17245		660	4254	944	1427
Upstream Blk Time (%)	80	69				25	1		24
Queuing Penalty (veh)	1363	1177				371	8		0
Storage Bay Dist (ft)					590				
Storage Blk Time (%)					32	6			
Queuing Penalty (veh)					433	13			

Intersection: 9: US 24 & Falcon Hwy

Movement	WB	WB	NB	NB	B56	B24	B24	SB	SB
Directions Served	L	R	T	R	T	T		L	T
Maximum Queue (ft)	2186	58	1045	625	4359	706	686	177	102
Average Queue (ft)	2013	49	751	416	2242	405	196	49	38
95th Queue (ft)	2531	54	1386	895	5522	946	684	116	87
Link Distance (ft)	2141		944		4254	660	660		764
Upstream Blk Time (%)	73		43		38	7	1		
Queuing Penalty (veh)	0		1306		1142	106	17		
Storage Bay Dist (ft)		25		600				600	
Storage Blk Time (%)	79	24	44	0					
Queuing Penalty (veh)	236	48	284	9					

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 10: US 24 & Meridian Rd/Rolling Thunder Way

Movement	NB	NB	SB	SB	NE	NE	NE	B38	B55	B55	SW	SW
Directions Served	LT	R	LT	R	L	T	R	T	T		L	T
Maximum Queue (ft)	650	125	593	85	425	785	425	2149	795	805	425	546
Average Queue (ft)	614	101	554	56	301	723	114	1775	553	162	276	501
95th Queue (ft)	675	180	571	121	576	871	409	2896	1102	674	564	602
Link Distance (ft)	602		535			669		2035	764	764		446
Upstream Blk Time (%)	80		89			51		66	6	1		45
Queuing Penalty (veh)	0		0			1378		1795	80	14		602
Storage Bay Dist (ft)		100		60	400		400				400	
Storage Blk Time (%)	77	0	80	0	0	50	0				0	47
Queuing Penalty (veh)	181	1	224	1	1	296	1				0	108

Intersection: 10: US 24 & Meridian Rd/Rolling Thunder Way

Movement	SW	B34	B36	B36
Directions Served	R	T	T	
Maximum Queue (ft)	425	1239	730	353
Average Queue (ft)	90	670	150	17
95th Queue (ft)	345	1549	614	196
Link Distance (ft)		1479	712	712
Upstream Blk Time (%)		8	1	0
Queuing Penalty (veh)		103	4	0
Storage Bay Dist (ft)	400			
Storage Blk Time (%)	0			
Queuing Penalty (veh)	0			

Intersection: 11: US 24 & E Woodmen Rd

Movement	SE	SE	NE	NE	NE	B34	SW	SW
Directions Served	L	R	L	L	T	T	T	R
Maximum Queue (ft)	1190	1185	149	130	138	242	910	356
Average Queue (ft)	1157	1142	76	68	52	20	414	91
95th Queue (ft)	1185	1345	130	113	109	178	784	399
Link Distance (ft)	1139	1139			712	446	7130	
Upstream Blk Time (%)	86	69				0		
Queuing Penalty (veh)	0	0				3		
Storage Bay Dist (ft)			580	580				450
Storage Blk Time (%)							9	0
Queuing Penalty (veh)							42	1

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 12: US 24 & Meridian Ranch/Judge Orr Rd

Movement	EB	WB	NE	NE	B47	SW	SW	B43
Directions Served	LTR	LTR	L	TR	T	L	TR	T
Maximum Queue (ft)	1089	1608	875	1506	255	700	5026	1418
Average Queue (ft)	775	1458	347	823	25	392	4664	1075
95th Queue (ft)	1242	1844	921	1450	234	806	5938	2031
Link Distance (ft)	1090	1557		1596	7130		4916	1412
Upstream Blk Time (%)	19	74		3			79	5
Queuing Penalty (veh)	0	0		73			1029	65
Storage Bay Dist (ft)			850			675		
Storage Blk Time (%)			0	15		3	69	
Queuing Penalty (veh)			0	51		38	28	

Intersection: 13: US 24 & Stapleton Rd

Movement	SE	SE	SE	NW	NW	NW	NE	NE	NE	SW	SW	SW
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	168	145	282	222	384	118	153	310	38	824	1809	825
Average Queue (ft)	72	34	102	111	139	28	56	179	10	119	1405	380
95th Queue (ft)	141	107	201	214	315	71	120	295	24	592	2345	1055
Link Distance (ft)		827			816			1412			1753	
Upstream Blk Time (%)											63	
Queuing Penalty (veh)											0	
Storage Bay Dist (ft)	190		330	215		215	985		530	800		800
Storage Blk Time (%)	2		0	6	1	0					69	0
Queuing Penalty (veh)	4		0	17	1	0					59	1

Intersection: 31: US 24

Movement	EB	EB	EB
Directions Served	T	T	R
Maximum Queue (ft)	950	960	959
Average Queue (ft)	924	928	926
95th Queue (ft)	942	950	968
Link Distance (ft)	904	904	904
Upstream Blk Time (%)	27	42	22
Queuing Penalty (veh)	309	472	246
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 44: US 24

Movement	EB	EB	EB	SW
Directions Served	T	T	T	R
Maximum Queue (ft)	472	471	474	278
Average Queue (ft)	442	441	442	141
95th Queue (ft)	457	457	458	238
Link Distance (ft)	422	422	422	265
Upstream Blk Time (%)	74	92	81	1
Queuing Penalty (veh)	0	0	0	3
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 48: SB Powers Blvd off-ramp

Movement	SB
Directions Served	TR
Maximum Queue (ft)	103
Average Queue (ft)	5
95th Queue (ft)	40
Link Distance (ft)	382
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 58: NB Powers Blvd off-ramp

Movement	NB	NB
Directions Served	T	TR
Maximum Queue (ft)	227	250
Average Queue (ft)	182	208
95th Queue (ft)	299	287
Link Distance (ft)	197	197
Upstream Blk Time (%)	26	74
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report
 No Build (2040) Conditions

10/10/2016

Intersection: 60: US 24

Movement	EB	EB	WB	WB	WB	B21	B21	NE
Directions Served	T	T	T	T	T	T	T	R
Maximum Queue (ft)	246	235	181	271	377	1087	1173	299
Average Queue (ft)	211	199	42	211	295	442	566	253
95th Queue (ft)	240	220	150	380	456	1215	1360	373
Link Distance (ft)	185	185	270	270	270	4965	4965	277
Upstream Blk Time (%)	19	22		1	49			20
Queuing Penalty (veh)	265	317		13	438			215
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 30093

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period No Build PM
Highway US 24
From/To Woodmen Road to Peyton Hwy
Jurisdiction CDOT Region 2
Analysis Year 2040
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.97	
Shoulder width	8.0	ft	% Trucks and buses	6	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	6.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	60	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 1655 veh/h
Opposing direction volume, Vo 1310 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.0	1.0
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	1.000	1.000
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	1706 pc/h	1351 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFSd 59.3 mi/h

Adjustment for no-passing zones, fnp 0.8 mi/h
Average travel speed, ATSD 34.7 mi/h
Percent Free Flow Speed, PFFS 58.6 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	1706 pc/h	1351 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	92.5	%	
Adjustment for no-passing zones, fnp	8.3		
Percent time-spent-following, PTSFD	97.1	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	F	
Volume to capacity ratio, v/c	1.00	
Peak 15-min vehicle-miles of travel, VMT15	2602	veh-mi
Peak-hour vehicle-miles of travel, VMT60	10095	veh-mi
Peak 15-min total travel time, TT15	74.9	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	6.1	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	34.7	mi/h
Percent time-spent-following, PTSFD (from above)	97.1	
Level of service, LOSd (from above)	F	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1706.2
Effective width of outside lane, We	28.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.22
Bicycle LOS	C

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period No Build PM
Highway US 24
From/To Woodmen Road to Peyton Hwy
Jurisdiction CDOT Region 2
Analysis Year 2040
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.96	
Shoulder width	8.0	ft	% Trucks and buses	6	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	6.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	53	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 1310 veh/h
Opposing direction volume, Vo 1655 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.0	1.0
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	1.000	1.000
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	1365 pc/h	1724 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFSd 59.3 mi/h

Adjustment for no-passing zones, fnp 0.7 mi/h
Average travel speed, ATSD 34.6 mi/h
Percent Free Flow Speed, PFFS 58.4 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	1365 pc/h	1724 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	89.5	%	
Adjustment for no-passing zones, fnp	7.9		
Percent time-spent-following, PTSFD	93.0	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	F	
Volume to capacity ratio, v/c	0.80	
Peak 15-min vehicle-miles of travel, VMT15	2081	veh-mi
Peak-hour vehicle-miles of travel, VMT60	7991	veh-mi
Peak 15-min total travel time, TT15	60.1	veh-h
Capacity from ATS, CdATS	1700	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1700	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	6.1	mi
Length of two-lane highway upstream of the passing lane, Lu	2.0	mi
Length of passing lane including tapers, Lpl	3.0	mi
Average travel speed, ATSD (from above)	34.6	mi/h
Percent time-spent-following, PTSFD (from above)	93.0	
Level of service, LOSd (from above)	F	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	1.70	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-0.60	mi
Adj. factor for the effect of passing lane on average speed, fpl	1.11	
Average travel speed including passing lane, ATSp1	36.9	
Percent free flow speed including passing lane, PFFSp1	62.2	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	3.60	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-2.50	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	0.62	
Percent time-spent-following including passing lane, PTSFpl	70.2	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	56.4	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1364.6
Effective width of outside lane, We	28.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.10
Bicycle LOS	C

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period No Build PM
Highway US 24 (Eastbound)
From/To Peyton Hwy to Calhan Hwy
Jurisdiction CDOT Region 2
Analysis Year 2040
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.95	
Shoulder width	10.0	ft	% Trucks and buses	7	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	65	%
Up/down	-	%	Access point density	6	/mi

Analysis direction volume, Vd 440 veh/h
Opposing direction volume, Vo 420 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.3
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.986	0.979
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	470 pc/h	452 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 1.5 mi/h

Free-flow speed, FFfSd 58.5 mi/h

Adjustment for no-passing zones, fnp 2.3 mi/h
Average travel speed, ATfSd 49.0 mi/h
Percent Free Flow Speed, PFfS 83.8 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	463	442	pc/h
Base percent time-spent-following,(note-4) BPTSFD	47.7	%	
Adjustment for no-passing zones, fnp	40.6		
Percent time-spent-following, PTSFD	68.5	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.28	
Peak 15-min vehicle-miles of travel, VMT15	1169	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4444	veh-mi
Peak 15-min total travel time, TT15	23.8	veh-h
Capacity from ATS, CdATS	1664	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1664	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.1	mi
Length of two-lane highway upstream of the passing lane, Lu	2.0	mi
Length of passing lane including tapers, Lpl	0.6	mi
Average travel speed, ATSD (from above)	49.0	mi/h
Percent time-spent-following, PTSFD (from above)	68.5	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	1.70	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	5.80	mi
Adj. factor for the effect of passing lane on average speed, fpl	1.10	
Average travel speed including passing lane, ATSp1	49.7	
Percent free flow speed including passing lane, PFFSp1	85.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	7.60	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-0.10	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	0.61	
Percent time-spent-following including passing lane, PTSFpl	56.9	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	C	
Peak 15-min total travel time, TT15	23.5	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	463.2
Effective width of outside lane, We	32.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	1.69
Bicycle LOS	B

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
 E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
 Agency/Co. DEA
 Date Performed 8/8/2016
 Analysis Time Period No Build PM
 Highway US 24 (Westbound)
 From/To Peyton Hwy to Calhan Hwy
 Jurisdiction CDOT Region 2
 Analysis Year 2040
 Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.93	
Shoulder width	10.0	ft	% Trucks and buses	7	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.1	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	53	%
Up/down	-	%	Access point density	6	/mi

Analysis direction volume, Vd 420 veh/h
 Opposing direction volume, Vo 440 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.2	1.2
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.986	0.986
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	458 pc/h	480 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
 Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
 Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
 Adj. for access point density,(note-3) fA 1.5 mi/h

Free-flow speed, FFSd 58.5 mi/h

Adjustment for no-passing zones, fnp 2.0 mi/h
 Average travel speed, ATSD 49.3 mi/h
 Percent Free Flow Speed, PFFS 84.2 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.0	1.0	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	1.000	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	452 pc/h	473 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	48.0	%	
Adjustment for no-passing zones, fnp	38.5		
Percent time-spent-following, PTSFD	66.8	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.27	
Peak 15-min vehicle-miles of travel, VMT15	1140	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4242	veh-mi
Peak 15-min total travel time, TT15	23.1	veh-h
Capacity from ATS, CdATS	1676	veh/h
Capacity from PTSF, CdPTSF	1700	veh/h
Directional Capacity	1676	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.1	mi
Length of two-lane highway upstream of the passing lane, Lu	1.0	mi
Length of passing lane including tapers, Lpl	1.3	mi
Average travel speed, ATSD (from above)	49.3	mi/h
Percent time-spent-following, PTSFD (from above)	66.8	
Level of service, LOSd (from above)	D	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	1.70	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	6.10	mi
Adj. factor for the effect of passing lane on average speed, fpl	1.10	
Average travel speed including passing lane, ATSp1	50.2	
Percent free flow speed including passing lane, PFFSp1	85.9	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	7.68	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	0.12	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	0.61	
Percent time-spent-following including passing lane, PTSFpl	53.5	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	C	
Peak 15-min total travel time, TT15	22.7	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	451.6
Effective width of outside lane, We	32.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	1.68
Bicycle LOS	B

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period No Build PM
Highway
From/To Calhan Hwy to Ramah Rd
Jurisdiction CDOT Region 2
Analysis Year 2040
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.72	
Shoulder width	8.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.5	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	42	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 190 veh/h
Opposing direction volume, Vo 265 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.4	1.3
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.962	0.971
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	274 pc/h	379 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFfS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFfSd 59.3 mi/h

Adjustment for no-passing zones, fnp 2.1 mi/h
Average travel speed, ATfSd 52.1 mi/h
Percent Free Flow Speed, PFFS 87.9 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	267	372	pc/h
Base percent time-spent-following,(note-4) BPTSFd	31.6	%	
Adjustment for no-passing zones, fnp	43.4		
Percent time-spent-following, PTSFd	49.7	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	693	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1995	veh-mi
Peak 15-min total travel time, TT15	13.3	veh-h
Capacity from ATS, CdATS	1651	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1651	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	52.1	mi/h
Percent time-spent-following, PTSFd (from above)	49.7	
Level of service, LOSd (from above)	B	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	263.9
Effective width of outside lane, We	28.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.73
Bicycle LOS	D

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax:
E-Mail:

-----Directional Two-Lane Highway Segment Analysis-----

Analyst AMER
Agency/Co. DEA
Date Performed 8/8/2016
Analysis Time Period No Build PM
Highway
From/To Calhan Hwy to Ramah Rd
Jurisdiction CDOT Region 2
Analysis Year 2040
Description US 24 PEL

-----Input Data-----

Highway class	Class 1		Peak hour factor, PHF	0.92	
Shoulder width	8.0	ft	% Trucks and buses	10	%
Lane width	12.0	ft	% Trucks crawling	0.0	%
Segment length	10.5	mi	Truck crawl speed	0.0	mi/hr
Terrain type	Level		% Recreational vehicles	1	%
Grade: Length	-	mi	% No-passing zones	39	%
Up/down	-	%	Access point density	3	/mi

Analysis direction volume, Vd 265 veh/h
Opposing direction volume, Vo 190 veh/h

-----Average Travel Speed-----

Direction	Analysis(d)	Opposing (o)
PCE for trucks, ET	1.4	1.5
PCE for RVs, ER	1.0	1.0
Heavy-vehicle adj. factor,(note-5) fHV	0.962	0.952
Grade adj. factor,(note-1) fg	1.00	1.00
Directional flow rate,(note-2) vi	299 pc/h	217 pc/h

Free-Flow Speed from Field Measurement:

Field measured speed,(note-3) S FM - mi/h
Observed total demand,(note-3) V - veh/h

Estimated Free-Flow Speed:

Base free-flow speed,(note-3) BFFS 60.0 mi/h
Adj. for lane and shoulder width,(note-3) fLS 0.0 mi/h
Adj. for access point density,(note-3) fA 0.8 mi/h

Free-flow speed, FFSd 59.3 mi/h

Adjustment for no-passing zones, fnp 2.7 mi/h
Average travel speed, ATSD 52.5 mi/h
Percent Free Flow Speed, PFFS 88.7 %

-----Percent Time-Spent-Following-----

Direction	Analysis(d)	Opposing (o)	
PCE for trucks, ET	1.1	1.1	
PCE for RVs, ER	1.0	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	0.990	
Grade adjustment factor,(note-1) fg	1.00	1.00	
Directional flow rate,(note-2) vi	291 pc/h	209 pc/h	
Base percent time-spent-following,(note-4) BPTSFD	29.2	%	
Adjustment for no-passing zones, fnp	45.1		
Percent time-spent-following, PTSFD	55.4	%	

-----Level of Service and Other Performance Measures-----

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.18	
Peak 15-min vehicle-miles of travel, VMT15	756	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2783	veh-mi
Peak 15-min total travel time, TT15	14.4	veh-h
Capacity from ATS, CdATS	1618	veh/h
Capacity from PTSF, CdPTSF	1683	veh/h
Directional Capacity	1618	veh/h

-----Passing Lane Analysis-----

Total length of analysis segment, Lt	10.5	mi
Length of two-lane highway upstream of the passing lane, Lu	-	mi
Length of passing lane including tapers, Lpl	-	mi
Average travel speed, ATSD (from above)	52.5	mi/h
Percent time-spent-following, PTSFD (from above)	55.4	
Level of service, LOSd (from above)	C	

-----Average Travel Speed with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for average travel speed, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for average travel speed, Ld	-	mi
Adj. factor for the effect of passing lane on average speed, fpl	-	
Average travel speed including passing lane, ATSp1	-	
Percent free flow speed including passing lane, PFFSp1	0.0	%

-----Percent Time-Spent-Following with Passing Lane-----

Downstream length of two-lane highway within effective length of passing lane for percent time-spent-following, Lde	-	mi
Length of two-lane highway downstream of effective length of the passing lane for percent time-spent-following, Ld	-	mi
Adj. factor for the effect of passing lane on percent time-spent-following, fpl	-	
Percent time-spent-following including passing lane, PTSFpl	-	%

-----Level of Service and Other Performance Measures with Passing Lane-----

Level of service including passing lane, LOSpl	E	
Peak 15-min total travel time, TT15	-	veh-h

-----Bicycle Level of Service-----

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	288.0
Effective width of outside lane, We	28.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.77
Bicycle LOS	D

Notes:

1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i (v_d or v_o) $\geq 1,700$ pc/h, terminate analysis-the LOS is F.
3. For the analysis direction only and for $v > 200$ veh/h.
4. For the analysis direction only.
5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.



APPENDIX C

ENVIRONMENTAL RESOURCE REFERENCES



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US 24 Planning and Environmental Linkages Study



GEOL_DESC	AGE	SOURCE	SCALE	AUTHOR	YEAR	MILES
af: Artificial fill - Sand, silt, clay, and rock debris emplaced for roadbeds, railroads, parking lots, dikes, embankments, earthen dams, and construction sites for residential and commercial buildings (late Holocene).	late Holocene	Geologic Map if the Elsmere Quadrangle, El Paso County, Colorado	1:24,000	Richard F. Madole and Jon P. Thorson	2003	1.271511
af: Artificial fill (late Holocene).	Late Holocene	Geologic Map of the Falcon NW Quadrangle, El Paso County, Colorado	1:24,000	Richard F. Madole	2003	0.34362
ags: Alluvial sand, silt, clay and gravel. Louviers and Slocum Alluviums, undivided (late middle Pleistocene).	Late middle Pleistocene	Generalized Surficial Map of the Denver 1°x2° Quadrangle, Colorado	1:250,000	Moore, David W. et al	2001	2.336318
asa: Alluvial sand, silt, clay, and gravel. Post-Piney Creek alluvium, Piney Creek alluvium, and pre-Piney Creek alluvium (Holocene and Late Pleistocene).	Holocene and Late Pleistocene	Generalized Surficial Map of the Denver 1°x2° Quadrangle, Colorado	1:250,000	Moore, David W. et al	2001	9.483515
cac: Arkosic loamy colluvium and sheetwash alluvium (Holocene).	Holocene	Generalized Surficial Map of the Denver 1°x2° Quadrangle, Colorado	1:250,000	Moore, David W. et al	2001	11.92141
Old alluvium two - Sediment is similar to that of Qao1 and is distinguished from it solely on the basis of position in the landscape and height above stream level (middle and early? Pleistocene).	Middle and early Pleistocene	Geologic Map if the Elsmere Quadrangle, El Paso County, Colorado	1:24,000	Richard F. Madole and Jon P. Thorson	2003	0.033425
Qam: Middle alluvium -Lightbrownish-gray, pale-brown, lightyellowish-brown, and grayish-brown, poorly sorted sand, silty and clayey sand and, in most places, subordinate amounts of fine gravel (late Pleistocene).	Late Pleistocene	Geologic Map if the Elsmere Quadrangle, El Paso County, Colorado	1:24,000	Richard F. Madole and Jon P. Thorson	2003	0.105047
Qes: Eolian sand (Holocene and Pleistocene?).	Holocene and Pleistocene	Geologic Map of the Falcon NW Quadrangle, El Paso County, Colorado	1:24,000	Richard F. Madole	2003	2.824626
Qp: Piney Creek Alluvium - Sandy to gravelly humus-rich alluvium along all valleys (Holocene).	Holocene	Geologic Map of the Pueblo 1°x2° Quadrangle, South-Central Colorado	1:250,000	Scott, Glenn R.	1978	2.924955
TKc: Poison Canyon Formation - Medium-grained sandstone, and in lower part conglomerate. Partly volcaniclastic (Paleocene).	Paleocene	Geologic Map of the Pueblo 1°x2° Quadrangle, South-Central Colorado	1:250,000	Scott, Glenn R.	1978	0.285601



GEOL_DESC	AGE	SOURCE	SCALE	AUTHOR	YEAR	MILES
TKd: Dawson Formation - Arkosic and andesitic coarse-grained sandstone, siltstone, and claystone about 1,800 feet thick (Paleocene and upper Cretaceous).	Paleocene and upper Cretaceous	Geologic Map of the Pueblo 1°x2° Quadrangle, South-Central Colorado	1:250,000	Scott, Glenn R.	1978	4.889953
Young alluvium two -Sediment is similar to that of Qay1, except that it includes several thin beds and lenses of dark-grayish-brown to very dark-grayish-brown sediment, some of which are silty and clayey (late and middle? Holocene).	Late and middle Holocene	Geologic Map if the Elsmere Quadrangle, El Paso County, Colorado	1:24,000	Richard F. Madole and Jon P. Thorson	2003	3.273566

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