



Pillsbury
Winthrop
Shaw
Pittman_{LLP}

2300 N Street, N.W.
Washington, D.C. 20037-1128

Tel 202.663.8000
Fax 202.663.8007
www.pillsburylaw.com

September 13, 2005

VIA HAND DELIVERY

Mr. Geoffrey Griffis, Chairman
D.C. Board of Zoning Adjustment
Suite 210
441 4th Street, N.W.
Washington, D.C. 20001

PHIL FEOLA
202-663-8789
phil.feola@pillsburylaw.com

**Re: Application No. 17429, 1801 Foxhall Road
Friends of St. Patrick's Episcopal Day School LLC**

Dear Chairman Griffis:

Enclosed please find 20 copies of the Appendices to the Transportation Impact Study, prepared by Wells & Associates, LLC, that was submitted as part of the application filed on September 9, 2005 in the above-captioned case.

Kindly enter these Appendices into the record.

Sincerely,

Phil T. Feola

Samantha L. Mazo

Enclosures

cc: Advisory Neighborhood Commission 3D
Office of Planning
James S. Rosebush (2 copies)
Andrea Ferster, Esquire
Katherine Bradley
John Delaney
Ed Murphy
Anthony Barnes

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BZA

Case No. 17429

Exhibit No. 29

Board of Zoning Adjustment
District of Columbia
CASE NO.17429
EXHIBIT NO.29A1

Appendix A

Existing Peak Hour Traffic Counts

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT: Friends of St Patrick		DATE: 11/16/2004		SOUTHBOUND ROAD: Foxhall Road																	
W & A JOB NO.: 2608		DAY: Tuesday		NORTHBOUND ROAD: Foxhall Road																	
INTERSECTION: Foxhall Rd & Garfield St.		WEATHER: Clear		WESTBOUND ROAD: Garfield Street																	
LOCATION: Washington,DC		COUNTED BY:Roberto		EASTBOUND ROAD: Garfield Street																	
		INPUTED BY:gagan																			
Time Period	Turning Movements																Total	PHF	Time Period		
	Southbound Foxhall Road				Westbound Garfield Street				Northbound Foxhall Road				Eastbound Garfield Street								
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total				North & South	East & West
6:00-6:15	2	23	0	25	0	0	4	4	5	61	2	68	0	0	0	0	93	4	97	6:00-6:15	
6:15-6:30	1	41	0	42	0	0	5	5	2	80	0	82	1	1	0	2	124	7	131	6:15-6:30	
6:30-6:45	3	39	0	42	1	1	4	6	3	114	0	117	0	0	1	1	159	7	166	6:30-6:45	
6:45-7:00	2	67	1	70	1	4	9	14	10	122	1	133	1	3	4	8	203	22	225	6:45-7:00	
7:00-7:15	2	100	5	107	1	5	7	13	10	131	0	141	1	1	3	5	248	18	266	7:00-7:15	
7:15-7:30	4	125	8	137	3	4	19	26	11	159	0	170	1	4	5	10	307	36	343	7:15-7:30	
7:30-7:45	0	167	11	178	4	1	37	42	19	191	0	210	0	23	6	29	388	71	459	7:30-7:45	
7:45-8:00	8	228	4	240	3	5	58	66	27	186	1	214	1	17	9	27	454	93	547	7:45-8:00	
8:00-8:15	4	189	6	199	3	11	48	62	30	211	3	244	1	11	12	24	443	86	529	8:00-8:15	
8:15-8:30	7	166	13	186	8	10	31	49	21	226	1	248	0	15	9	24	434	73	507	8:15-8:30	
8:30-8:45	1	143	14	158	3	11	26	40	19	174	1	194	0	15	8	23	352	63	415	8:30-8:45	
8:45-9:00	5	135	12	152	1	4	33	38	28	180	0	208	2	10	4	16	360	54	414	8:45-9:00	
2:00-2:15	3	111	1	115	6	4	7	17	10	106	2	118	1	6	4	11	233	28	261	2:00-2:15	
2:15-2:30	2	88	2	92	4	4	10	18	10	87	0	97	0	3	5	8	189	26	215	2:15-2:30	
2:30-2:45	6	143	11	160	2	5	34	41	14	111	0	125	0	3	10	13	285	54	339	2:30-2:45	
2:45-3:00	12	145	0	157	3	14	22	39	16	138	0	154	1	9	3	13	311	52	363	2:45-3:00	
3:00-3:15	7	171	2	180	4	8	32	44	20	172	1	193	0	15	8	23	373	67	440	3:00-3:15	
3:15-3:30	9	131	2	142	9	10	30	49	21	179	0	200	0	4	2	6	342	55	397	3:15-3:30	
3:30-3:45	5	140	0	145	8	14	22	44	31	147	1	179	1	17	7	25	324	69	393	3:30-3:45	
3:45-4:00	3	135	3	141	4	9	28	41	21	122	0	143	0	8	12	20	284	61	345	3:45-4:00	
4:00-4:15	1	146	1	148	2	13	26	41	19	139	0	158	3	17	3	23	306	64	370	4:00-4:15	
4:15-4:30	7	138	3	148	3	8	21	32	18	135	1	154	1	9	4	14	302	46	348	4:15-4:30	
4:30-4:45	4	133	3	140	4	11	25	40	13	140	0	153	0	7	7	14	293	54	347	4:30-4:45	
4:45-5:00	4	136	4	144	5	6	32	43	16	186	0	202	0	3	7	10	346	53	399	4:45-5:00	
5:00-5:15	4	150	4	158	8	10	23	41	11	168	1	180	0	6	5	11	338	62	390	5:00-5:15	
5:15-5:30	8	121	3	132	8	10	28	46	21	200	0	221	0	9	11	20	353	66	419	5:15-5:30	
5:30-5:45	4	154	2	160	8	11	18	37	19	159	0	178	1	6	6	13	338	50	388	5:30-5:45	
5:45-6:00	6	131	1	138	3	15	18	36	19	149	0	168	2	7	4	13	306	49	355	5:45-6:00	
6:00-6:15	4	121	4	129	4	13	17	34	12	138	0	150	1	4	5	10	279	44	323	6:00-6:15	
6:15-6:30	5	164	1	170	3	3	22	28	8	165	0	173	6	7	1	14	343	42	385	6:15-6:30	
6:30-6:45	6	126	2	134	3	10	22	35	20	147	0	167	1	9	2	12	301	47	348	6:30-6:45	
6:45-7:00	6	117	18	141	3	5	14	22	15	142	2	159	1	8	3	12	300	34	334	6:45-7:00	
7 Hour Totals	145	4,124	141	4,410	122	239	732	1,093	519	4,765	17	5,301	27	257	170	454	9,711	1,547	11,258		
1 Hour Totals	8	170	1	179	2	5	22	29	20	377	3	400	2	4	5	11	579	40	619	6:00-7:00	
6:15-7:15	8	247	6	261	3	10	25	38	25	447	1	473	3	5	8	16	734	54	788	6:15-7:15	
6:30-7:30	11	331	14	356	6	14	39	59	34	526	1	561	3	8	13	24	917	83	1,000	6:30-7:30	
6:45-7:45	8	459	25	492	9	14	72	95	50	603	1	654	3	31	18	52	1,146	147	1,293	6:45-7:45	
7:00-8:00	14	620	28	662	11	15	121	147	67	667	1	735	3	45	23	71	1,397	218	1,615	7:00-8:00	
7:15-8:15	16	709	29	754	13	21	162	196	87	747	4	838	3	55	32	90	1,592	286	1,878	7:15-8:15	
7:30-8:30	19	750	34	803	18	27	174	219	97	814	5	916	2	66	36	104	1,719	323	2,042	7:30-8:30	
7:45-8:45	20	726	37	783	17	37	163	217	97	797	6	900	2	58	38	98	1,683	315	1,998	7:45-8:45	
8:00-9:00	17	633	45	695	15	36	138	189	98	791	5	894	3	51	33	87	1,589	276	1,865	8:00-9:00	
2:00-3:00	23	487	14	524	15	27	73	115	50	442	2	494	2	21	22	45	1,018	160	1,178	2:00-3:00	
2:15-3:15	27	547	15	589	13	31	98	142	60	508	1	569	1	30	26	57	1,158	199	1,357	2:15-3:15	
2:30-3:30	34	590	15	639	18	37	118	173	71	600	1	672	1	31	23	55	1,311	228	1,539	2:30-3:30	
2:45-3:45	33	587	4	624	24	46	106	176	88	636	2	726	2	45	20	67	1,350	243	1,593	2:45-3:45	
3:00-4:00	24	577	7	608	25	41	112	178	93	620	2	715	1	44	29	74	1,323	252	1,575	3:00-4:00	
3:15-4:15	18	552	6	576	23	46	106	175	92	587	1	680	4	46	24	74	1,256	249	1,505	3:15-4:15	
3:30-4:30	16	559	7	582	17	44	97	158	89	543	2	634	5	51	26	82	1,216	240	1,456	3:30-4:30	
3:45-4:45	15	552	10	577	13	41	100	154	71	536	1	608	4	41	26	71	1,185	225	1,410	3:45-4:45	
4:00-5:00	16	553	11	580	14	38	104	156	66	600	1	667	4	36	21	61	1,247	217	1,464	4:00-5:00	
4:15-5:15	19	557	14	590	20	35	101	156	58	629	2	689	1	25	23	49	1,279	205	1,484	4:15-5:15	
4:30-5:30	20	540	14	574	25	37	108	170	61	694	1	756	0	25	30	55	1,330	225	1,555	4:30-5:30	
4:45-5:45	20	561	13	594	29	37	101	167	67	713	1	781	1	24	29	54	1,375	221	1,596	4:45-5:45	
5:00-6:00	22	556	10	588	27	46	87	160	70	676	1	747	3	28	26	57	1,335	217	1,552	5:00-6:00	
5:15-6:15	22	527	10	559	23	49	81	153	71	646	0	717	4	26	26	56	1,276	209	1,485	5:15-6:15	
5:30-6:30	19	570	8	597	18	42	75	135	58	611	0	669	10	24	16	50	1,266	185	1,451	5:30-6:30	
5:45-6:45	21	542	8	571	13	41	79	133	59	599	0	658	10	27	12	49	1,229	182	1,411	5:45-6:45	
6:00-7:00	21	528	25	574	13	31	75	119	55	592	2	649	9	28	11	48	1,223	167	1,390	6:00-7:00	
AM Peak 7:30-8:30	19	750	34	803	18	27	174	219	97	814	5	916	2	66	36	104	1,719	323	2,042	0.93	AM Peak 7:30-8:30
PM Peak 4:45-5:45	20	561	13	594	29	37	101	167	67	713	1	781	1	24	29	54	1,375	221	1,596	0.95	PM Peak 4:45-5:45

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT: Friends of St Patrick		DATE: 11/16/2004		SOUTHBOUND ROAD: Foxhall Road																
W & A JOB NO.: 2608		DAY: Tuesday		NORTHBOUND ROAD: Foxhall Road																
INTERSECTION: Foxhall Rd. & School Driveway		WEATHER: Clear		WESTBOUND ROAD: School Driveway																
LOCATION: Washington,DC		COUNTED BY: Matt		EASTBOUND ROAD: 0																
		INPUTED BY: Yagan																		
Time Period	Turning Movements																Total	PHF	Time Period	
	Southbound Foxhall Road				Westbound School Driveway				Northbound Foxhall Road				Eastbound 0							
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total				North & South
6:00-6:15	0	26	1	27	0	0	0	0	4	63	0	67	0	0	0	0	94	0	94	6:00-6:15
6:15-6:30	0	27	4	31	0	0	1	1	0	70	0	70	0	0	0	0	101	1	102	6:15-6:30
6:30-6:45	0	40	1	41	0	0	0	0	0	95	0	95	0	0	0	0	136	0	136	6:30-6:45
6:45-7:00	0	50	0	50	0	0	0	0	4	122	0	126	0	0	0	0	176	0	176	6:45-7:00
7:00-7:15	0	100	5	105	0	0	1	1	3	142	0	145	0	0	0	0	250	1	251	7:00-7:15
7:15-7:30	0	129	6	135	2	0	1	3	6	168	0	174	0	0	0	0	309	3	312	7:15-7:30
7:30-7:45	0	184	14	198	3	0	4	7	6	228	0	234	0	0	0	0	432	7	439	7:30-7:45
7:45-8:00	0	267	21	288	5	0	9	14	11	204	0	215	0	0	0	0	503	14	517	7:45-8:00
8:00-8:15	0	230	15	245	9	0	12	21	10	264	0	274	0	0	0	0	519	21	540	8:00-8:15
8:15-8:30	0	194	18	212	3	0	1	4	7	260	0	267	0	0	0	0	479	4	483	8:15-8:30
8:30-8:45	0	165	23	188	6	0	10	16	9	217	0	226	0	0	0	0	414	16	430	8:30-8:45
8:45-9:00	0	147	11	158	12	0	9	21	10	212	0	222	0	0	0	0	380	21	401	8:45-9:00
9:00-9:15	0	84	9	93	0	0	0	0	0	92	0	92	0	0	0	0	185	0	185	9:00-9:15
9:15-9:30	0	98	3	101	2	0	2	4	4	75	0	79	0	0	0	0	180	4	184	9:15-9:30
9:30-9:45	0	169	3	172	3	0	3	6	3	125	0	128	0	0	0	0	300	6	306	9:30-9:45
9:45-10:00	0	161	10	171	17	0	15	32	5	142	0	147	0	0	0	0	318	32	350	9:45-10:00
10:00-10:15	0	104	5	109	11	0	2	13	1	83	0	84	0	0	0	0	193	13	206	10:00-10:15
10:15-10:30	0	189	7	196	6	0	5	11	4	181	0	185	0	0	0	0	381	11	392	10:15-10:30
10:30-10:45	0	145	9	154	15	0	4	19	3	171	0	174	0	0	0	0	328	19	347	10:30-10:45
10:45-11:00	0	122	3	125	4	0	1	5	6	111	0	117	0	0	0	0	242	5	247	10:45-11:00
11:00-11:15	0	124	11	135	1	0	2	3	2	116	0	118	0	0	0	0	253	3	256	11:00-11:15
11:15-11:30	0	149	4	153	5	0	2	7	2	141	0	143	0	0	0	0	296	7	303	11:15-11:30
11:30-11:45	0	149	3	152	4	0	5	9	4	141	0	145	0	0	0	0	297	9	306	11:30-11:45
11:45-12:00	0	158	8	166	7	0	5	12	2	199	0	201	0	0	0	0	367	12	379	11:45-12:00
12:00-12:15	0	151	7	158	11	0	5	16	1	164	0	165	0	0	0	0	323	16	339	12:00-12:15
12:15-12:30	0	149	11	160	8	0	6	14	6	197	0	203	0	0	0	0	363	14	377	12:15-12:30
12:30-12:45	0	161	3	164	3	0	7	10	5	175	0	180	0	0	0	0	344	10	354	12:30-12:45
12:45-1:00	0	149	11	160	5	0	8	13	5	160	0	165	0	0	0	0	325	13	338	12:45-1:00
6:00-6:15	0	132	2	134	1	0	3	4	1	149	0	150	0	0	0	0	284	4	288	6:00-6:15
6:15-6:30	0	173	2	175	5	0	3	8	2	159	0	161	0	0	0	0	336	8	344	6:15-6:30
6:30-6:45	0	159	1	160	9	0	8	17	2	153	0	155	0	0	0	0	315	17	332	6:30-6:45
6:45-7:00	0	152	0	152	13	0	13	26	0	145	0	145	0	0	0	0	297	26	323	6:45-7:00
7 Hour Totals	0	4,437	231	4,668	170	0	147	317	128	4,924	0	5,052	0	0	0	0	9,720	317	10,037	
1 Hour Totals	0	143	6	149	0	0	1	1	8	350	0	358	0	0	0	0	507	1	508	6:00-7:00
6:00-7:00	0	217	10	227	0	0	2	2	7	429	0	436	0	0	0	0	663	2	665	6:15-7:15
6:15-7:15	0	319	12	331	2	0	2	4	13	527	0	540	0	0	0	0	871	4	875	6:30-7:30
6:30-7:30	0	463	25	488	5	0	6	11	19	660	0	679	0	0	0	0	1,167	11	1,178	6:45-7:45
6:45-7:45	0	680	46	726	10	0	15	25	26	742	0	768	0	0	0	0	1,494	25	1,519	7:00-8:00
7:00-8:00	0	810	56	866	19	0	26	45	33	864	0	897	0	0	0	0	1,763	45	1,808	7:15-8:15
7:15-8:15	0	875	68	943	20	0	26	46	34	956	0	990	0	0	0	0	1,933	46	1,979	7:30-8:30
7:30-8:30	0	856	77	933	23	0	32	55	37	945	0	982	0	0	0	0	1,915	55	1,970	7:45-8:45
7:45-8:45	0	736	67	803	30	0	32	62	36	953	0	989	0	0	0	0	1,792	62	1,854	8:00-9:00
8:00-9:00	0	512	25	537	22	0	20	42	12	434	0	446	0	0	0	0	983	42	1,025	8:15-9:15
8:15-9:15	0	532	21	553	33	0	22	55	13	425	0	438	0	0	0	0	991	55	1,046	8:30-9:30
8:30-9:30	0	623	25	648	37	0	25	62	13	531	0	544	0	0	0	0	1,192	62	1,254	8:45-9:45
8:45-9:45	0	599	31	630	49	0	26	75	13	577	0	590	0	0	0	0	1,220	75	1,295	9:00-10:00
9:00-10:00	0	560	24	584	36	0	12	48	14	546	0	560	0	0	0	0	1,144	48	1,192	9:15-10:15
9:15-10:15	0	580	30	610	26	0	12	38	15	579	0	594	0	0	0	0	1,204	38	1,242	9:30-10:30
9:30-10:30	0	540	27	567	25	0	9	34	13	539	0	552	0	0	0	0	1,119	34	1,153	9:45-10:45
9:45-10:45	0	544	21	565	14	0	10	24	14	509	0	523	0	0	0	0	1,088	24	1,112	10:00-11:00
10:00-11:00	0	580	26	606	17	0	14	31	10	597	0	607	0	0	0	0	1,213	31	1,244	10:15-11:15
10:15-11:15	0	607	22	629	27	0	17	44	9	645	0	654	0	0	0	0	1,283	44	1,327	10:30-11:30
10:30-11:30	0	607	29	636	30	0	21	51	13	701	0	714	0	0	0	0	1,350	51	1,401	10:45-11:45
10:45-11:45	0	619	29	648	29	0	23	52	14	735	0	749	0	0	0	0	1,397	52	1,449	11:00-12:00
11:00-12:00	0	610	32	642	27	0	26	53	17	696	0	713	0	0	0	0	1,355	53	1,408	11:15-12:15
11:15-12:15	0	591	27	618	17	0	24	41	17	681	0	698	0	0	0	0	1,316	41	1,357	11:30-12:30
11:30-12:30	0	615	18	633	14	0	21	35	13	643	0	656	0	0	0	0	1,289	35	1,324	11:45-12:45
11:45-12:45	0	613	16	629	20	0	22	42	10	621	0	631	0	0	0	0	1,260	42	1,302	12:00-1:00
12:00-1:00	0	616	5	621	28	0	27	55	5	606	0	611	0	0	0	0	1,232	55	1,287	12:15-1:15
AM Peak 7:30-8:30	0	875	68	943	20	0	26	46	34	956	0	990	0	0	0	0	1,933	46	1,979	AM Peak 7:30-8:30
PM Peak 4:45-5:45	0	619	29	648	29	0	23	52	14	735	0	749	0	0	0	0	1,397	52	1,449	PM Peak 4:45-5:45

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT: Friends of St Patrick		DATE: 11/16/2004		SOUTHBOUND ROAD: Foxhall Road																	
W & A JOB NO.: 2608		DAY: Tuesday		NORTHBOUND ROAD: Foxhall Road																	
INTERSECTION: Foxhall Rd. & W Street		WEATHER: Clear		WESTBOUND ROAD: W Street																	
LOCATION: Washington,DC		COUNTED BY:Chris		EASTBOUND ROAD: W Street																	
		INPUTED BY:agan																			
Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound Foxhall Road				Westbound W Street				Northbound Foxhall Road				Eastbound W Street				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
6:00-6:15	0	27	0	27	2	0	0	2	0	65	0	65	2	1	0	3	92	5	97	6:00-6:15	
6:15-6:30	2	49	0	51	0	0	0	0	0	81	1	82	0	0	1	1	133	1	134	6:15-6:30	
6:30-6:45	0	41	0	41	0	0	1	1	0	117	6	123	5	0	0	5	164	6	170	6:30-6:45	
6:45-7:00	4	70	0	74	1	0	1	2	0	142	4	146	4	0	3	7	220	9	229	6:45-7:00	
7:00-7:15	5	88	0	93	1	0	0	1	1	140	2	143	5	0	5	10	236	11	247	7:00-7:15	
7:15-7:30	6	123	0	129	0	0	1	1	0	182	5	187	2	0	2	4	316	5	321	7:15-7:30	
7:30-7:45	11	184	1	196	0	0	0	0	0	204	1	205	17	0	7	24	401	24	425	7:30-7:45	
7:45-8:00	21	246	0	267	0	0	1	1	1	221	8	230	38	0	6	44	497	45	542	7:45-8:00	
8:00-8:15	19	204	1	224	0	1	1	2	0	228	6	234	28	0	8	36	458	38	496	8:00-8:15	
8:15-8:30	14	156	1	171	1	0	0	1	0	228	3	231	36	1	9	46	402	47	449	8:15-8:30	
8:30-8:45	9	153	0	162	1	0	0	0	0	180	7	187	17	0	9	26	349	26	375	8:30-8:45	
8:45-9:00	10	124	0	134	1	0	1	2	0	185	5	190	12	0	10	22	324	24	348	8:45-9:00	
2:00-2:15	4	89	0	93	0	0	0	0	0	90	4	94	1	0	5	6	187	6	193	2:00-2:15	
2:15-2:30	5	83	0	88	0	0	0	0	0	94	8	103	2	0	3	5	191	5	196	2:15-2:30	
2:30-2:45	11	139	0	150	0	0	0	0	0	111	4	115	6	1	6	13	265	13	278	2:30-2:45	
2:45-3:00	21	122	0	143	0	0	0	0	0	126	5	131	14	0	4	18	274	18	292	2:45-3:00	
3:00-3:15	16	175	0	191	0	0	0	1	1	169	11	180	20	1	17	38	371	39	410	3:00-3:15	
3:15-3:30	13	138	0	151	0	0	0	0	0	159	8	167	13	0	3	16	318	16	334	3:15-3:30	
3:30-3:45	6	142	1	149	1	1	1	3	1	155	5	161	8	0	8	16	310	19	329	3:30-3:45	
3:45-4:00	12	140	0	152	1	0	0	1	0	124	10	134	3	1	3	7	286	8	294	3:45-4:00	
4:00-4:15	8	149	0	157	1	0	0	1	1	141	6	148	3	0	6	9	305	10	315	4:00-4:15	
4:15-4:30	5	138	1	144	1	0	0	1	2	128	5	135	3	0	6	9	279	10	289	4:15-4:30	
4:30-4:45	12	96	0	108	0	0	0	0	0	117	2	119	6	0	7	13	227	13	240	4:30-4:45	
4:45-5:00	1	107	0	108	3	0	1	4	2	80	0	82	7	0	7	14	190	18	208	4:45-5:00	
5:00-5:15	7	144	0	151	1	0	0	1	0	174	5	179	3	0	10	13	330	14	344	5:00-5:15	
5:15-5:30	8	138	0	146	0	0	2	2	2	182	2	186	4	0	9	13	332	15	347	5:15-5:30	
5:30-5:45	8	159	0	167	0	0	0	0	0	137	15	152	13	0	11	24	319	24	343	5:30-5:45	
5:45-6:00	10	135	1	146	0	0	0	0	1	158	14	173	4	0	4	8	319	8	327	5:45-6:00	
6:00-6:15	11	113	0	124	0	0	1	1	1	149	12	161	3	0	4	7	285	8	293	6:00-6:15	
6:15-6:30	5	153	1	159	0	0	0	0	0	128	9	138	7	0	11	18	297	18	315	6:15-6:30	
6:30-6:45	7	149	0	156	0	0	1	1	1	154	6	161	8	0	6	14	317	15	332	6:30-6:45	
6:45-7:00	8	139	0	147	0	0	0	0	1	128	16	145	4	1	6	11	292	11	303	6:45-7:00	
7 Hour Totals	279	4,113	7	4,399	14	2	13	29	15	4,677	195	4,887	298	6	196	500	9,286	529	9,815		
1 Hour Totals	6	187	0	193	3	0	2	5	0	405	11	416	11	1	4	16	609	21	630	6:00-7:00	
6:00-7:00	6	187	0	193	3	0	2	5	0	405	11	416	11	1	4	16	609	21	630	6:00-7:00	
6:15-7:15	11	248	0	259	2	0	2	4	1	480	13	494	14	0	9	23	753	27	780	6:15-7:15	
6:30-7:30	15	322	0	337	2	0	3	5	1	581	17	598	16	0	10	26	936	31	967	6:30-7:30	
6:45-7:45	26	465	1	492	2	0	2	4	1	668	12	681	28	0	17	45	1,173	49	1,222	6:45-7:45	
7:00-8:00	43	641	1	685	1	0	2	3	2	747	16	765	62	0	20	82	1,450	85	1,535	7:00-8:00	
7:15-8:15	57	757	2	816	0	1	3	4	1	835	20	856	85	0	23	108	1,672	112	1,784	7:15-8:15	
7:30-8:30	85	790	3	858	1	1	2	4	1	881	18	900	119	1	30	150	1,758	154	1,912	7:30-8:30	
7:45-8:45	63	759	2	824	1	1	2	4	1	857	24	882	119	1	32	152	1,706	156	1,862	7:45-8:45	
8:00-9:00	52	637	2	691	2	1	2	5	0	821	21	842	93	1	36	130	1,533	135	1,668	8:00-9:00	
2:00-3:00	41	433	0	474	0	0	0	0	1	421	21	443	23	1	18	42	917	42	959	2:00-3:00	
2:15-3:15	53	519	0	572	0	0	1	1	1	500	28	529	42	2	30	74	1,101	75	1,176	2:15-3:15	
2:30-3:30	61	574	0	635	0	0	1	1	0	565	28	593	53	2	30	85	1,228	86	1,314	2:30-3:30	
2:45-3:45	56	577	1	634	1	1	2	4	1	609	29	639	55	1	32	88	1,273	92	1,365	2:45-3:45	
3:00-4:00	47	595	1	643	2	1	2	5	1	607	34	642	44	2	31	77	1,285	82	1,367	3:00-4:00	
3:15-4:15	39	569	1	609	3	1	1	5	2	579	29	610	27	1	20	48	1,219	53	1,272	3:15-4:15	
3:30-4:30	31	569	2	602	4	1	1	6	4	548	26	578	17	1	23	41	1,180	47	1,227	3:30-4:30	
3:45-4:45	37	523	1	561	3	0	0	3	3	510	23	536	15	1	22	38	1,097	41	1,138	3:45-4:45	
4:00-5:00	26	490	1	517	5	0	1	6	5	466	13	484	19	0	26	45	1,001	51	1,052	4:00-5:00	
4:15-5:15	25	485	1	511	5	0	1	6	4	499	12	515	19	0	30	49	1,026	55	1,081	4:15-5:15	
4:30-5:30	28	485	0	513	4	0	3	7	4	553	9	566	20	0	33	53	1,079	60	1,139	4:30-5:30	
4:45-5:45	24	548	0	572	4	0	3	7	4	573	22	599	27	0	37	64	1,171	71	1,242	4:45-5:45	
5:00-6:00	33	576	1	610	1	0	2	3	3	651	36	690	24	0	34	58	1,300	61	1,361	5:00-6:00	
5:15-6:15	37	545	1	583	0	0	3	3	3	626	43	672	24	0	28	52	1,255	55	1,310	5:15-6:15	
5:30-6:30	34	560	2	596	0	0	1	1	2	572	50	624	27	0	30	57	1,220	58	1,278	5:30-6:30	
5:45-6:45	33	550	2	585	0	0	2	2	3	589	41	633	22	0	25	47	1,218	49	1,267	5:45-6:45	
6:00-7:00	31	554	1	586	0	0	2	2	3	559	43	605	22	1	27	50	1,191	52	1,243	6:00-7:00	
AM Peak 7:30-8:30	65	790	3	858	1	1	2	4	1	881	18	900	119	1	30	150	1,758	154	1,912	0.88	AM Peak 7:30-8:30
PM Peak 5:00-6:00	33	576	1	610	1	0	2	3	3	651	36	690	24	0	34	58	1,300	61	1,361	0.98	PM Peak 5:00-6:00

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT: Friends of St.Patrick		DATE: 11/16/2004		SOUTHBOUND ROAD: Foxhall Road																	
W & A JOB NO.: 2608		DAY: Tuesday		NORTHBOUND ROAD: Foxhall Road																	
INTERSECTION: Foxhall Rd. & Whitehaven Pkwy.		WEATHER: Clear		WESTBOUND ROAD: 0																	
LOCATION: Washington,DC		COUNTED By Gary & Majda		EASTBOUND ROAD: Whitehaven Parkway																	
		INPUTED By gan																			
Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound Foxhall Road				Westbound 0				Northbound Foxhall Road				Eastbound Whitehaven Parkway				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
6:00-6:15	1	19	0	20	0	0	0	0	0	50	2	52	1	0	3	4	72	4	76	6:00-6:15	
6:15-6:30	2	48	0	50	0	0	0	0	0	81	4	85	0	0	2	2	135	2	137	6:15-6:30	
6:30-6:45	2	43	0	45	0	0	0	0	0	118	3	121	5	0	3	8	166	8	174	6:30-6:45	
6:45-7:00	5	65	0	70	0	0	0	0	0	143	7	150	2	0	5	7	220	7	227	6:45-7:00	
7:00-7:15	7	92	0	99	0	0	0	0	0	143	9	152	4	0	2	6	251	6	257	7:00-7:15	
7:15-7:30	17	109	0	126	0	0	0	0	0	186	11	197	9	0	11	20	323	20	343	7:15-7:30	
7:30-7:45	29	170	0	199	0	0	0	0	0	169	14	183	12	0	27	39	382	39	421	7:30-7:45	
7:45-8:00	97	174	0	271	0	0	0	0	0	205	30	235	22	0	27	49	506	49	555	7:45-8:00	
8:00-8:15	81	155	0	236	0	0	0	0	0	183	21	204	30	0	44	74	440	74	514	8:00-8:15	
8:15-8:30	17	186	0	203	0	0	0	0	0	206	12	218	33	0	21	54	421	54	475	8:15-8:30	
8:30-8:45	8	165	0	173	0	0	0	0	0	177	4	181	27	0	19	46	354	46	400	8:30-8:45	
8:45-9:00	17	145	0	162	0	0	0	0	0	187	8	195	21	0	18	39	357	39	396	8:45-9:00	
2:00-2:15	8	98	0	106	0	0	0	0	0	82	3	85	5	0	8	13	191	13	204	2:00-2:15	
2:15-2:30	4	91	0	95	0	0	0	0	0	91	8	99	6	0	6	12	194	12	206	2:15-2:30	
2:30-2:45	22	137	0	159	0	0	0	0	0	106	8	114	7	0	11	18	273	18	291	2:30-2:45	
2:45-3:00	45	115	0	160	0	0	0	0	0	130	15	145	8	0	15	23	305	23	328	2:45-3:00	
3:00-3:15	54	140	0	194	0	0	0	0	0	136	24	160	13	0	33	46	354	46	400	3:00-3:15	
3:15-3:30	39	134	0	173	0	0	0	0	0	130	14	144	15	0	40	55	317	55	372	3:15-3:30	
3:30-3:45	14	124	0	138	0	0	0	0	0	139	15	154	10	0	13	23	292	23	315	3:30-3:45	
3:45-4:00	26	125	0	151	0	0	0	0	0	132	19	151	7	0	9	16	302	16	318	3:45-4:00	
4:00-4:15	22	139	0	161	0	0	0	0	0	115	12	127	9	0	23	32	288	32	320	4:00-4:15	
4:15-4:30	8	124	0	132	0	0	0	0	0	130	11	141	11	0	16	27	273	27	300	4:15-4:30	
4:30-4:45	9	135	0	144	0	0	0	0	0	125	6	131	5	0	10	15	275	15	290	4:30-4:45	
4:45-5:00	19	130	0	149	0	0	0	0	0	179	9	188	9	0	6	15	337	15	352	4:45-5:00	
5:00-5:15	11	131	0	142	0	0	0	0	0	150	16	166	7	0	16	23	308	23	331	5:00-5:15	
5:15-5:30	17	138	0	155	0	0	0	0	0	150	16	166	11	0	19	30	321	30	351	5:15-5:30	
5:30-5:45	24	148	0	172	0	0	0	0	0	143	8	151	7	0	15	22	323	22	345	5:30-5:45	
5:45-6:00	18	130	0	148	0	0	0	0	0	156	20	176	10	0	14	24	324	24	348	5:45-6:00	
6:00-6:15	12	117	0	129	0	0	0	0	0	140	18	158	8	0	11	19	287	19	306	6:00-6:15	
6:15-6:30	17	143	0	160	0	0	0	0	0	122	10	132	6	0	4	10	292	10	302	6:15-6:30	
6:30-6:45	15	148	0	163	0	0	0	0	0	152	10	162	8	0	5	13	325	13	338	6:30-6:45	
6:45-7:00	10	143	0	153	0	0	0	0	0	133	9	142	5	0	8	13	295	13	308	6:45-7:00	
7 Hour Totals	677	3,961	0	4,638	0	0	0	0	0	4,489	376	4,865	333	0	464	797	9,503	797	10,300		
1 Hour Totals	10	175	0	185	0	0	0	0	0	392	16	408	8	0	13	21	593	21	614	6:00-7:00	
6:00-7:00	16	248	0	264	0	0	0	0	0	485	23	508	11	0	12	23	772	23	795	6:15-7:15	
6:15-7:15	31	309	0	340	0	0	0	0	0	590	30	620	20	0	21	41	960	41	1,001	6:30-7:30	
6:30-7:30	58	436	0	494	0	0	0	0	0	641	41	682	27	0	45	72	1,176	72	1,248	6:45-7:45	
6:45-7:45	150	545	0	695	0	0	0	0	0	703	64	767	47	0	67	114	1,462	114	1,576	7:00-8:00	
7:00-8:00	224	608	0	832	0	0	0	0	0	743	76	819	73	0	109	182	1,651	182	1,833	7:15-8:15	
7:15-8:15	224	685	0	909	0	0	0	0	0	763	77	840	97	0	119	216	1,749	216	1,965	7:30-8:30	
7:30-8:30	203	680	0	883	0	0	0	0	0	771	67	838	112	0	111	223	1,721	223	1,944	7:45-8:45	
7:45-8:45	123	651	0	774	0	0	0	0	0	753	45	798	111	0	102	213	1,572	213	1,785	8:00-9:00	
8:00-9:00	79	441	0	520	0	0	0	0	0	409	34	443	26	0	40	66	963	66	1,029	8:15-9:15	
8:15-9:15	125	483	0	608	0	0	0	0	0	463	55	518	34	0	65	99	1,126	99	1,225	8:30-9:30	
8:30-9:30	160	526	0	686	0	0	0	0	0	502	61	563	43	0	99	142	1,249	142	1,391	8:45-9:45	
8:45-9:45	152	513	0	665	0	0	0	0	0	535	68	603	46	0	101	147	1,268	147	1,415	9:00-10:00	
9:00-10:00	133	523	0	656	0	0	0	0	0	537	72	609	45	0	95	140	1,265	140	1,405	9:15-10:15	
9:15-10:15	101	522	0	623	0	0	0	0	0	516	60	576	41	0	85	126	1,199	126	1,325	9:30-10:30	
9:30-10:30	70	512	0	582	0	0	0	0	0	516	57	573	37	0	61	98	1,155	98	1,253	9:45-10:45	
9:45-10:45	65	523	0	588	0	0	0	0	0	502	48	550	32	0	58	90	1,138	90	1,228	10:00-11:00	
10:00-11:00	58	528	0	586	0	0	0	0	0	549	38	587	34	0	55	89	1,173	89	1,262	10:15-11:15	
10:15-11:15	47	520	0	567	0	0	0	0	0	584	42	626	32	0	48	80	1,193	80	1,273	10:30-11:30	
10:30-11:30	56	534	0	590	0	0	0	0	0	604	47	651	32	0	51	83	1,241	83	1,324	10:45-11:45	
10:45-11:45	71	547	0	618	0	0	0	0	0	622	49	671	34	0	56	90	1,289	90	1,379	11:00-12:00	
11:00-12:00	70	547	0	617	0	0	0	0	0	599	60	659	35	0	64	99	1,276	99	1,375	11:15-12:15	
11:15-12:15	71	533	0	604	0	0	0	0	0	589	62	651	36	0	59	95	1,255	95	1,350	11:30-12:30	
11:30-12:30	71	538	0	609	0	0	0	0	0	561	56	617	31	0	44	75	1,226	75	1,301	11:45-12:45	
11:45-12:45	62	538	0	600	0	0	0	0	0	570	58	628	32	0	34	66	1,228	66	1,294	12:00-1:00	
12:00-1:00	54	551	0	605	0	0	0	0	0	547	47	594	27	0	28	55	1,199	55	1,254	12:15-1:15	
AM Peak 7:30-8:30	224	685	0	909	0	0	0	0	0	763	77	840	97	0	119	216	1,749	216	1,965	0.89	AM Peak 7:30-8:30
PM Peak 4:45-5:45	71	547	0	618	0	0	0	0	0	622	49	671	34	0	56	90	1,289	90	1,379	0.98	PM Peak 4:45-5:45

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT: Friends of St Patrick		DATE: 11/16/2004		SOUTHBOUND ROAD: MacArthur Boulevard																	
W & A JOB NO.: 2608		DAY: Tuesday		NORTHBOUND ROAD: MacArthur Boulevard																	
INTERSECTION: MacArthur Blvd. & Reservoir Rd.		WEATHER: Clear		WESTBOUND ROAD: x																	
LOCATION: Washington,DC		COUNTED BY:Runions		EASTBOUND ROAD: Reservoir Road																	
		INPUTED BY:agan																			
Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound MacArthur Boulevard				Westbound x				Northbound MacArthur Boulevard				Eastbound Reservoir Road				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
6:00-6:15	1	29	0	30	0	0	0	0	0	72	1	73	32	0	1	33	103	33	156		6:00-6:15
6:15-6:30	2	35	0	37	0	0	0	0	0	84	1	85	39	0	2	41	122	41	163		6:15-6:30
6:30-6:45	0	60	0	60	0	0	0	0	0	73	5	78	67	0	3	70	138	70	208		6:30-6:45
6:45-7:00	1	85	0	86	0	0	0	0	0	119	2	121	74	0	4	78	207	78	285		6:45-7:00
7:00-7:15	4	136	0	140	0	0	0	0	0	137	3	140	75	0	6	81	280	81	361		7:00-7:15
7:15-7:30	2	200	0	202	0	0	0	0	0	148	5	153	84	0	7	91	355	91	446		7:15-7:30
7:30-7:45	1	261	0	262	0	0	0	0	0	154	3	157	133	0	8	141	419	141	560		7:30-7:45
7:45-8:00	4	301	0	305	0	0	0	0	0	195	5	200	131	0	9	140	505	140	645		7:45-8:00
8:00-8:15	1	295	0	296	0	0	0	0	0	247	6	253	112	0	18	130	549	130	679		8:00-8:15
8:15-8:30	1	361	0	362	0	0	0	0	0	237	9	246	151	0	13	164	608	164	772		8:15-8:30
8:30-8:45	4	350	0	354	0	0	0	0	0	229	2	231	145	0	25	170	585	170	755		8:30-8:45
8:45-9:00	9	299	0	308	0	0	0	0	0	179	3	182	148	0	10	158	490	158	648		8:45-9:00
2:00-2:15	4	102	0	106	0	0	0	0	0	128	36	164	26	0	7	33	270	33	303		2:00-2:15
2:15-2:30	6	106	0	112	0	0	0	0	0	106	30	136	23	0	6	29	248	29	277		2:15-2:30
2:30-2:45	12	154	0	166	0	0	0	0	0	116	35	151	20	0	5	25	317	25	342		2:30-2:45
2:45-3:00	22	216	0	238	0	0	0	0	0	154	54	208	8	0	18	26	446	26	472		2:45-3:00
3:00-3:15	10	236	0	246	0	0	0	0	0	199	55	254	4	0	13	17	500	17	517		3:00-3:15
3:15-3:30	10	250	0	260	0	0	0	0	0	209	75	284	5	0	5	10	544	10	554		3:15-3:30
3:30-3:45	9	211	0	220	0	0	0	0	0	172	74	246	2	0	5	7	466	7	473		3:30-3:45
3:45-4:00	8	182	0	190	0	0	0	0	0	150	59	209	7	0	1	8	399	8	407		3:45-4:00
4:00-4:15	12	197	0	209	0	0	0	0	0	154	50	204	6	0	5	11	413	11	424		4:00-4:15
4:15-4:30	6	169	0	175	0	0	0	0	0	149	69	218	6	0	1	7	393	7	400		4:15-4:30
4:30-4:45	12	172	0	184	0	0	0	0	0	143	80	223	5	0	4	9	407	9	416		4:30-4:45
4:45-5:00	7	235	0	242	0	0	0	0	0	157	70	227	5	0	4	9	469	9	478		4:45-5:00
5:00-5:15	4	237	0	241	0	0	0	0	0	170	92	262	3	0	3	6	503	6	509		5:00-5:15
5:15-5:30	10	208	0	218	0	0	0	0	0	200	80	280	2	0	6	8	498	8	506		5:15-5:30
5:30-5:45	5	171	0	176	0	0	0	0	0	175	92	267	2	0	8	10	443	10	453		5:30-5:45
5:45-6:00	12	186	0	198	0	0	0	0	0	202	67	269	3	0	4	7	467	7	474		5:45-6:00
6:00-6:15	12	201	0	213	0	0	0	0	0	215	77	292	2	0	1	3	505	3	508		6:00-6:15
6:15-6:30	8	241	0	249	0	0	0	0	0	214	82	296	3	0	2	5	545	5	550		6:15-6:30
6:30-6:45	6	249	0	255	0	0	0	0	0	179	68	247	2	0	0	2	502	2	504		6:30-6:45
6:45-7:00	11	165	0	176	0	0	0	0	0	183	51	234	3	0	5	8	410	8	418		6:45-7:00
7 Hour Totals	216	6,300	0	6,516	0	0	0	0	0	5,249	1,341	6,590	1,328	0	209	1,537	13,106	1,537	14,643		
1 Hour Totals																					
6:00-7:00	4	209	0	213	0	0	0	0	0	348	9	357	212	0	10	222	570	222	792	0.69	6:00-7:00
6:15-7:15	7	316	0	323	0	0	0	0	0	413	11	424	255	0	15	270	747	270	1,017	0.70	6:15-7:15
6:30-7:30	7	481	0	488	0	0	0	0	0	477	15	492	300	0	20	320	980	320	1,300	0.73	6:30-7:30
6:45-7:45	8	682	0	690	0	0	0	0	0	558	13	571	366	0	25	391	1,261	391	1,652	0.74	6:45-7:45
7:00-8:00	11	898	0	909	0	0	0	0	0	634	16	650	423	0	30	453	1,559	453	2,012	0.78	7:00-8:00
7:15-8:15	8	1,057	0	1,065	0	0	0	0	0	744	19	763	460	0	42	502	1,828	502	2,330	0.86	7:15-8:15
7:30-8:30	7	1,218	0	1,225	0	0	0	0	0	833	23	856	527	0	48	575	2,081	575	2,656	0.86	7:30-8:30
7:45-8:45	10	1,307	0	1,317	0	0	0	0	0	908	22	930	539	0	65	604	2,247	604	2,851	0.92	7:45-8:45
8:00-9:00	15	1,305	0	1,320	0	0	0	0	0	892	20	912	556	0	66	622	2,232	622	2,854	0.92	8:00-9:00
2:00-3:00	44	578	0	622	0	0	0	0	0	504	155	659	77	0	36	113	1,281	113	1,394	0.74	2:00-3:00
2:15-3:15	50	712	0	762	0	0	0	0	0	575	174	749	55	0	42	97	1,511	97	1,608	0.78	2:15-3:15
2:30-3:30	54	856	0	910	0	0	0	0	0	678	219	897	37	0	41	78	1,807	78	1,885	0.85	2:30-3:30
2:45-3:45	51	913	0	964	0	0	0	0	0	734	258	992	19	0	41	60	1,956	60	2,016	0.91	2:45-3:45
3:00-4:00	37	879	0	916	0	0	0	0	0	730	263	993	18	0	24	42	1,909	42	1,951	0.88	3:00-4:00
3:15-4:15	39	840	0	879	0	0	0	0	0	685	258	943	20	0	16	36	1,822	36	1,858	0.84	3:15-4:15
3:30-4:30	35	759	0	794	0	0	0	0	0	625	252	877	21	0	12	33	1,671	33	1,704	0.90	3:30-4:30
3:45-4:45	38	720	0	758	0	0	0	0	0	596	258	854	24	0	11	35	1,612	35	1,647	0.97	3:45-4:45
4:00-5:00	37	773	0	810	0	0	0	0	0	603	269	872	22	0	14	36	1,682	36	1,718	0.90	4:00-5:00
4:15-5:15	29	813	0	842	0	0	0	0	0	619	311	930	19	0	12	31	1,772	31	1,803	0.89	4:15-5:15
4:30-5:30	33	852	0	885	0	0	0	0	0	670	322	992	15	0	17	32	1,877	32	1,909	0.94	4:30-5:30
4:45-5:45	26	851	0	877	0	0	0	0	0	702	334	1,036	12	0	21	33	1,913	33	1,946	0.96	4:45-5:45
5:00-6:00	31	802	0	833	0	0	0	0	0	747	331	1,078	10	0	21	31	1,911	31	1,942	0.95	5:00-6:00
5:15-6:15	39	766	0	805	0	0	0	0	0	792	316	1,108	9	0	19	28	1,913	28	1,941	0.96	5:15-6:15
5:30-6:30	37	799	0	836	0	0	0	0	0	806	318	1,124	10	0	15	25	1,960	25	1,985	0.90	5:30-6:30
5:45-6:45	38	877	0	915	0	0	0	0	0	810	294	1,104	10	0	7	17	2,019	17	2,036	0.93	5:45-6:45
6:00-7:00	37	856	0	893	0	0	0	0	0	791	278	1,069	10	0	8	18	1,962	18	1,980	0.90	6:00-7:00
AM Peak 8:00-9:00	15	1,305	0	1,320	0	0	0	0	0	892	20	912	556	0	66	622	2,232	622	2,854	0.92	AM Peak 8:00-9:00
PM Peak 5:45-6:45	38	877	0	915	0	0	0	0	0	810	294	1,104	10	0	7	17	2,019	17	2,036	0.93	PM Peak 5:45-6:45

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT:		Friends of St. Patrick								DATE:		11/16/2004								SOUTHBOUND ROAD:								School Driveway							
W & A JOB NO.:		2608								DAY:		Tuesday								NORTHBOUND ROAD:								MacArthur Boulevard							
INTERSECTION:		MacArthur Blvd. & Reservoir Rd.								WEATHER:		Clear								WESTBOUND ROAD:								Reservoir Road							
LOCATION:		Washington,DC								COUNTED BY:		Ronaldo & Lucia								EASTBOUND ROAD:								MacArthur Boulevard							
										INPUTED BY:		agan																							
Time Period	Turning Movements																Total	PHF	Time Period																
	Southbound School Driveway				Westbound Reservoir Road				Northbound MacArthur Boulevard				Eastbound MacArthur Boulevard							North & South	East & West														
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total																			
6:00-6:15	0	0	0	0	0	32	0	32	1	0	38	39	30	25	2	57	39	89	128	6:00-6:15															
6:15-6:30	0	0	0	0	0	27	0	27	0	1	47	48	29	38	0	67	48	94	142	6:15-6:30															
6:30-6:45	0	1	0	1	0	21	0	21	0	1	54	55	48	89	1	138	56	159	215	6:30-6:45															
6:45-7:00	2	0	0	2	0	22	0	22	1	1	94	96	70	90	1	161	98	183	281	6:45-7:00															
7:00-7:15	6	1	2	9	4	41	0	45	2	2	96	100	127	98	7	232	109	277	386	7:00-7:15															
7:15-7:30	4	2	1	7	3	48	0	51	1	0	109	110	161	130	7	298	117	349	466	7:15-7:30															
7:30-7:45	3	1	1	5	0	45	0	45	2	3	99	104	206	143	8	357	109	402	511	7:30-7:45															
7:45-8:00	10	2	4	16	6	51	0	57	1	2	120	123	240	183	22	445	139	502	641	7:45-8:00															
8:00-8:15	29	6	7	42	12	75	0	87	1	2	134	137	237	173	30	440	179	527	706	8:00-8:15															
8:15-8:30	21	10	8	39	16	72	0	88	2	8	117	127	298	199	37	534	166	622	788	8:15-8:30															
8:30-8:45	19	9	4	32	3	92	0	95	1	1	121	123	280	207	13	500	155	595	750	8:30-8:45															
8:45-9:00	6	0	1	7	4	40	0	44	2	0	115	117	252	196	4	452	124	496	620	8:45-9:00															
2:00-2:15	4	1	1	6	2	83	0	85	3	1	78	82	81	74	3	158	88	243	331	2:00-2:15															
2:15-2:30	5	1	1	7	6	81	0	87	1	0	67	68	70	62	1	133	75	220	295	2:15-2:30															
2:30-2:45	5	2	0	7	1	79	0	80	2	1	49	52	99	62	1	162	59	242	301	2:30-2:45															
2:45-3:00	2	2	0	4	3	106	0	109	1	1	77	79	120	77	5	202	83	311	394	2:45-3:00															
3:00-3:15	7	2	4	13	5	101	0	106	5	9	98	112	144	82	12	238	125	344	469	3:00-3:15															
3:15-3:30	38	7	7	52	13	96	0	109	7	6	101	114	180	91	15	286	166	395	581	3:15-3:30															
3:30-3:45	19	0	2	21	2	118	0	120	1	1	114	116	142	77	12	231	137	351	486	3:30-3:45															
3:45-4:00	11	1	0	12	3	105	0	108	1	1	68	70	121	72	3	196	82	304	386	3:45-4:00															
4:00-4:15	9	1	1	11	1	99	0	100	4	2	88	94	130	72	2	204	105	304	409	4:00-4:15															
4:15-4:30	11	1	0	12	4	97	0	101	1	1	85	87	133	71	10	214	99	315	414	4:15-4:30															
4:30-4:45	10	2	0	12	3	125	0	128	1	0	68	69	105	59	7	171	81	299	380	4:30-4:45															
4:45-5:00	10	2	2	14	7	108	0	115	4	1	87	92	143	64	17	224	106	339	445	4:45-5:00															
5:00-5:15	19	4	5	28	7	120	0	127	7	1	84	92	143	87	22	252	120	379	499	5:00-5:15															
5:15-5:30	11	3	3	17	4	139	0	143	1	2	98	101	148	57	14	219	118	362	480	5:15-5:30															
5:30-5:45	20	2	2	24	6	132	0	138	2	3	85	90	119	60	9	188	114	326	440	5:30-5:45															
5:45-6:00	4	2	3	9	2	143	0	145	0	2	112	114	98	51	4	153	123	298	421	5:45-6:00															
6:00-6:15	8	1	3	12	3	144	0	147	2	1	117	120	122	72	4	198	132	345	477	6:00-6:15															
6:15-6:30	7	0	4	11	5	136	0	141	1	3	119	123	148	75	5	228	134	369	503	6:15-6:30															
6:30-6:45	18	1	3	22	2	118	0	120	0	2	88	90	139	107	3	249	112	369	481	6:30-6:45															
6:45-7:00	4	3	1	8	2	122	0	124	2	1	111	114	120	64	1	185	122	309	431	6:45-7:00															
7 Hour Totals	322	70	70	462	129	2,818	0	2,947	60	60	2,938	3,058	4,483	3,007	282	7,772	3,520	10,719	14,239																
1 Hour Totals																																			
6:00-7:00	2	1	0	3	0	102	0	102	2	3	233	238	177	242	4	423	241	525	766	0.68 6:00-7:00															
6:15-7:15	8	2	2	12	4	111	0	115	3	5	291	299	274	315	9	598	311	713	1,024	0.66 6:15-7:15															
6:30-7:30	12	4	3	19	7	132	0	139	4	4	353	361	406	407	16	829	380	968	1,348	0.72 6:30-7:30															
6:45-7:45	15	4	4	23	7	156	0	163	6	6	398	410	564	461	23	1,048	433	1,211	1,644	0.80 6:45-7:45															
7:00-8:00	23	6	8	37	13	185	0	198	6	7	424	437	734	554	44	1,332	474	1,530	2,004	0.78 7:00-8:00															
7:15-8:15	46	11	13	70	21	219	0	240	5	7	462	474	844	629	67	1,540	544	1,780	2,324	0.82 7:15-8:15															
7:30-8:30	63	19	20	102	34	243	0	277	6	15	470	491	981	698	97	1,776	593	2,053	2,646	0.84 7:30-8:30															
7:45-8:45	79	27	23	129	37	290	0	327	5	13	492	510	1,055	762	102	1,919	639	2,246	2,885	0.92 7:45-8:45															
8:00-9:00	75	25	20	120	35	279	0	314	6	11	487	504	1,067	775	84	1,926	624	2,240	2,864	0.91 8:00-9:00															
2:00-3:00	16	6	2	24	12	349	0	361	7	3	271	281	370	275	10	655	305	1,016	1,321	0.84 2:00-3:00															
2:15-3:15	19	7	5	31	15	367	0	382	9	11	291	311	433	283	19	735	342	1,117	1,459	0.78 2:15-3:15															
2:30-3:30	52	13	11	76	22	382	0	404	15	17	325	357	543	312	33	888	433	1,292	1,725	0.77 2:30-3:30															
2:45-3:45	66	11	13	90	23	421	0	444	14	17	390	421	586	327	44	957	511	1,401	1,912	0.85 2:45-3:45															
3:00-4:00	75	10	13	98	23	420	0	443	14	17	381	412	587	322	42	951	510	1,394	1,904	0.85 3:00-4:00															
3:15-4:15	77	9	10	96	19	418	0	437	13	10	371	394	573	312	32	917	490	1,354	1,844	0.82 3:15-4:15															
3:30-4:30	50	3	3	56	10	419	0	429	7	5	355	367	526	292	27	845	423	1,274	1,697	0.87 3:30-4:30															
3:45-4:45	41	5	1	47	11	426	0	437	7	4	309	320	489	274	22	785	367	1,222	1,589	0.96 3:45-4:45															
4:00-5:00	40	6	3	49	15	429	0	444	10	4	328	342	511	266	36	813	391	1,257	1,648	0.93 4:00-5:00															
4:15-5:15	50	9	7	66	21	450	0	471	13	3	324	340	524	281	56	861	406	1,332	1,738	0.87 4:15-5:15															
4:30-5:30	50	11	10	71	21	492	0	513	13	4	337	354	539	267	60	866	425	1,379	1,804	0.90 4:30-5:30															
4:45-5:45	60	11	12	83	24	499	0	523	14	7	354	375	553	268	62	883	458	1,406	1,864	0.93 4:45-5:45															
5:00-6:00	54	11	13	78	19	534	0	553	10	8	379	397	508	255	49	812	475	1,365	1,840	0.92 5:00-6:00															
5:15-6:15	43	8	11	62	15	558	0	573	5	8	412	425	487	240	31	758	487	1,331	1,818	0.95 5:15-6:15															
5:30-6:30	39	5	12	56	16	555	0	571	5	9	433	447	487	258	22	767	503	1,338	1,841	0.92 5:30-6:30															
5:45-6:45	37	4	13	54	12	541	0	553	3	8	436	447	507	305	16	828	501	1,381	1,882	0.94 5:45-6:45															
6:00-7:00	37	5	11	53	12	520	0	532	5	7	435	447	529	318	13	860	500	1,392	1,892	0.94 6:00-7:00															
AM Peak 7:45-8:45	79	27	23	129	37	290	0	327	5	13	492	510	1,055	762	102	1,919	639	2,246	2,885	0.92 7:45-8:45															
PM Peak 6:00-7:00	37	5	11	53	12	520	0	532	5	7	435	447	529	318	13	860	500	1,392	1,892	0.94 6:00-7:00															

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT:		Friends of St. Patrick				DATE:		11/16/2004				SOUTHBOUND ROAD:				MacArthur Boulevard				
W & A JOB NO.:		2608				DAY:		Tuesday				NORTHBOUND ROAD:				MacArthur Boulevard				
INTERSECTION:		MacArthur Blvd. & Whitehaven Pkwy.				WEATHER:		Clear				WESTBOUND ROAD:				Whitehaven Parkway				
LOCATION:		Washington,DC				COUNTED BY:		B.Bob				EASTBOUND ROAD:				0				
						INPUTED BY:		B.Bob												
Time Period	Turning Movements																Total	PHF	Time Period	
	Southbound MacArthur Boulevard				Westbound Whitehaven Parkway				Northbound MacArthur Boulevard				Eastbound 0							North & East
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total				South
6:00-6:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15-6:30	0	61	2	63	1	0	0	1	0	81	0	81	0	0	0	0	144	1	145	
6:30-6:45	0	136	5	141	0	0	0	0	1	78	0	79	0	0	0	0	220	0	220	
6:45-7:00	0	157	9	166	4	0	0	4	5	103	0	108	0	0	0	0	274	4	278	
7:00-7:15	0	217	10	227	1	0	1	2	4	138	0	142	0	0	0	0	369	2	371	
7:15-7:30	0	255	19	274	5	0	2	7	11	135	0	146	0	0	0	0	420	7	427	
7:30-7:45	0	361	35	396	10	0	4	14	16	128	0	144	0	0	0	0	540	14	554	
7:45-8:00	0	430	38	468	24	0	11	35	14	158	0	172	0	0	0	0	640	35	575	
8:00-8:15	0	394	30	424	26	0	22	48	19	205	0	224	0	0	0	0	648	48	396	
8:15-8:30	0	496	56	552	15	0	8	23	9	182	0	191	0	0	0	0	743	23	766	
8:30-8:45	0	465	42	507	7	0	6	13	10	201	0	211	0	0	0	0	718	13	731	
8:45-9:00	0	412	43	455	8	0	0	8	10	161	0	171	0	0	0	0	626	8	334	
2:00-2:15	0	121	6	127	7	0	2	9	4	123	0	127	0	0	0	0	254	9	263	
2:15-2:30	0	128	7	135	4	0	1	5	3	125	0	128	0	0	0	0	263	5	268	
2:30-2:45	0	146	16	162	11	0	3	14	1	131	0	132	0	0	0	0	294	14	308	
2:45-3:00	0	166	18	184	19	0	15	34	5	154	0	159	0	0	0	0	343	34	377	
3:00-3:15	0	232	18	250	41	0	9	50	7	192	0	199	0	0	0	0	449	50	499	
3:15-3:30	0	253	13	266	45	0	13	58	11	207	0	218	0	0	0	0	484	58	342	
3:30-3:45	0	224	14	238	24	0	11	35	11	230	0	241	0	0	0	0	479	35	514	
3:45-4:00	0	187	13	200	22	0	10	32	4	184	0	188	0	0	0	0	388	32	420	
4:00-4:15	0	187	13	200	30	0	10	40	3	184	0	187	0	0	0	0	387	40	427	
4:15-4:30	0	196	7	203	24	0	18	42	7	183	0	190	0	0	0	0	395	42	437	
4:30-4:45	0	161	10	171	9	0	15	24	1	205	0	206	0	0	0	0	377	24	401	
4:45-5:00	0	224	7	231	11	0	13	24	7	189	0	196	0	0	0	0	427	24	451	
5:00-5:15	0	253	5	258	21	0	11	32	7	229	0	236	0	0	0	0	494	32	526	
5:15-5:30	0	212	14	226	19	0	11	30	6	266	0	272	0	0	0	0	498	30	528	
5:30-5:45	0	189	5	194	30	0	8	38	4	226	0	230	0	0	0	0	424	38	462	
5:45-6:00	0	156	12	168	16	0	12	28	3	236	0	239	0	0	0	0	407	28	435	
6:00-6:15	0	208	6	214	16	0	11	27	3	279	0	282	0	0	0	0	496	27	523	
6:15-6:30	0	220	9	229	16	0	8	24	3	255	0	258	0	0	0	0	487	24	511	
6:30-6:45	0	253	9	262	14	0	14	28	4	239	0	243	0	0	0	0	505	28	533	
6:45-7:00	0	186	10	196	14	0	5	19	4	200	0	204	0	0	0	0	400	19	419	
7 Hour Totals	0	7,288	501	7,789	494	0	254	748	197	5,607	0	5,804	0	0	0	0	13,593	748	14,341	
1 Hour Totals	0	354	16	370	5	0	0	5	6	262	0	268	0	0	0	0	638	5	643	
6:00-7:00	0	571	26	597	6	0	1	7	10	400	0	410	0	0	0	0	1,007	7	1,014	
6:15-7:15	0	765	43	808	10	0	3	13	21	454	0	475	0	0	0	0	1,283	13	1,296	
6:30-7:30	0	990	73	1,063	20	0	7	27	36	504	0	540	0	0	0	0	1,603	27	1,630	
6:45-7:45	0	1,263	102	1,365	40	0	18	58	45	599	0	604	0	0	0	0	1,969	58	2,027	
7:00-8:00	0	1,440	122	1,562	65	0	39	104	60	626	0	686	0	0	0	0	2,248	104	2,352	
7:15-8:15	0	1,681	159	1,840	75	0	45	120	58	673	0	731	0	0	0	0	2,571	120	2,691	
7:30-8:30	0	1,785	166	1,951	72	0	47	119	52	746	0	798	0	0	0	0	2,749	119	2,868	
7:45-8:45	0	1,767	171	1,938	56	0	36	92	48	749	0	797	0	0	0	0	2,735	92	2,827	
8:00-9:00	0	561	47	608	41	0	21	62	13	533	0	546	0	0	0	0	1,154	62	1,216	
2:00-3:00	0	672	59	731	75	0	28	103	16	602	0	618	0	0	0	0	1,349	103	1,452	
2:15-3:15	0	797	65	862	116	0	40	156	24	684	0	708	0	0	0	0	1,570	156	1,726	
2:30-3:30	0	875	63	938	129	0	48	177	34	783	0	817	0	0	0	0	1,755	177	1,932	
2:45-3:45	0	896	58	954	132	0	43	175	33	813	0	846	0	0	0	0	1,800	175	1,975	
3:00-4:00	0	851	53	904	121	0	44	165	29	805	0	834	0	0	0	0	1,738	165	1,903	
3:15-4:15	0	796	47	843	100	0	49	149	25	781	0	806	0	0	0	0	1,649	149	1,798	
3:30-4:30	0	733	43	776	85	0	53	138	15	756	0	771	0	0	0	0	1,547	138	1,685	
3:45-4:45	0	770	37	807	74	0	56	130	18	761	0	779	0	0	0	0	1,586	130	1,716	
4:00-5:00	0	836	29	865	65	0	57	122	22	806	0	828	0	0	0	0	1,693	122	1,815	
4:15-5:15	0	850	36	886	60	0	50	110	21	889	0	910	0	0	0	0	1,796	110	1,906	
4:30-5:30	0	878	31	909	81	0	43	124	24	910	0	934	0	0	0	0	1,843	124	1,967	
4:45-5:45	0	810	36	846	86	0	42	128	20	957	0	977	0	0	0	0	1,823	128	1,951	
5:00-6:00	0	765	37	802	81	0	42	123	16	1,007	0	1,023	0	0	0	0	1,825	123	1,948	
5:15-6:15	0	773	32	805	78	0	39	117	13	996	0	1,009	0	0	0	0	1,814	117	1,931	
5:30-6:30	0	837	36	873	62	0	45	107	13	1,009	0	1,022	0	0	0	0	1,895	107	2,002	
5:45-6:45	0	867	34	901	60	0	38	98	14	973	0	987	0	0	0	0	1,888	98	1,986	
6:00-7:00	0	867	34	901	60	0	38	98	14	973	0	987	0	0	0	0	1,888	98	1,986	
AM Peak 7:45-8:45	0	1,785	166	1,951	72	0	47	119	52	746	0	798	0	0	0	0	2,749	119	2,868	
PM Peak 5:45-6:45	0	837	36	873	62	0	45	107	13	1,009	0	1,022	0	0	0	0	1,895	107	2,002	
5:45-6:45	0	837	36	873	62	0	45	107	13	1,009	0	1,022	0	0	0	0	1,895	107	2,002	

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT:	Friends of St Patrick				DATE:	11/16/2004				SOUTHBOUND ROAD:				Foxhall Road							
W & A JOB NO.:	2608				DAY:	Tuesday				NORTHBOUND ROAD:				Foxhall Road							
INTERSECTION:	Foxhall Rd. & Reservoir Rd.				WEATHER:	Clear				WESTBOUND ROAD:				Reservoir Road							
LOCATION:	Washington,DC				COUNTED BY:	Rolando & Lucia				EASTBOUND ROAD:				Reservoir Road							
					INPUTED BY:	agan															
Time Period	Turning Movements																Total	PHF	Time Period		
	Southbound Foxhall Road				Westbound Reservoir Road				Northbound Foxhall Road				Eastbound Reservoir Road							North & South	East & West
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
6:00-6:15	0	22	4	26	2	9	12	23	34	75	26	135	0	26	0	26	161	49	210	6:00-6:15	
6:15-6:30	0	34	15	49	8	6	9	23	39	69	24	132	3	22	0	25	181	48	229	6:15-6:30	
6:30-6:45	0	22	20	42	3	10	15	28	65	125	14	204	6	82	0	88	246	116	362	6:30-6:45	
6:45-7:00	2	46	16	64	9	12	17	38	85	128	9	222	3	74	1	78	286	116	402	6:45-7:00	
7:00-7:15	4	65	22	91	13	33	26	72	67	147	13	227	3	89	1	93	318	165	483	7:00-7:15	
7:15-7:30	9	80	35	124	18	32	21	71	66	157	11	234	8	90	1	99	358	170	528	7:15-7:30	
7:30-7:45	3	118	52	173	16	41	38	95	77	190	9	276	10	119	3	132	449	227	676	7:30-7:45	
7:45-8:00	6	116	78	200	35	46	33	114	74	187	9	270	20	126	5	151	470	265	735	7:45-8:00	
8:00-8:15	12	119	90	221	28	67	33	128	76	185	21	282	32	146	6	184	503	312	815	8:00-8:15	
8:15-8:30	11	98	101	210	14	46	35	95	81	196	14	291	15	142	4	161	501	256	757	8:15-8:30	
8:30-8:45	4	89	89	182	24	51	17	92	53	172	22	247	10	163	6	179	429	271	700	8:30-8:45	
8:45-9:00	4	77	96	177	20	33	23	76	70	160	6	236	7	168	6	181	413	257	670	8:45-9:00	
2:00-2:15	7	89	18	114	20	61	55	136	41	90	18	149	10	62	2	74	263	210	473	2:00-2:15	
2:15-2:30	7	81	16	104	14	45	40	99	39	85	10	134	11	40	1	52	238	151	389	2:15-2:30	
2:30-2:45	7	89	23	119	20	59	52	131	65	100	16	181	4	63	3	70	300	201	501	2:30-2:45	
2:45-3:00	3	99	22	124	38	90	55	183	58	101	11	170	10	43	5	58	294	241	535	2:45-3:00	
3:00-3:15	7	103	35	145	54	76	61	191	49	114	19	182	18	51	9	78	327	269	596	3:00-3:15	
3:15-3:30	13	101	41	155	26	93	63	182	60	123	13	196	21	67	10	98	351	280	631	3:15-3:30	
3:30-3:45	5	108	25	138	32	84	59	175	57	126	15	198	21	69	6	96	336	271	607	3:30-3:45	
3:45-4:00	2	104	30	136	41	92	68	201	51	108	14	173	10	47	6	63	309	264	573	3:45-4:00	
4:00-4:15	4	109	22	135	28	80	59	167	51	106	15	172	17	57	4	78	307	245	552	4:00-4:15	
4:15-4:30	7	109	24	140	23	85	47	155	43	123	13	179	6	60	4	70	319	225	544	4:15-4:30	
4:30-4:45	6	107	26	139	28	80	47	155	41	116	20	177	13	49	4	66	316	221	537	4:30-4:45	
4:45-5:00	7	112	30	149	31	83	54	168	30	155	27	212	18	52	5	75	361	243	604	4:45-5:00	
5:00-5:15	6	100	27	133	46	113	53	212	51	130	16	197	17	63	5	85	330	297	627	5:00-5:15	
5:15-5:30	3	109	27	139	44	115	56	215	40	137	23	200	15	59	6	80	339	295	634	5:15-5:30	
5:30-5:45	2	110	31	143	45	109	54	208	44	118	21	183	10	40	3	53	326	261	587	5:30-5:45	
5:45-6:00	4	109	31	144	51	127	48	226	41	139	19	199	8	54	4	66	343	292	635	5:45-6:00	
6:00-6:15	10	102	30	142	58	115	50	223	37	112	24	173	12	65	5	82	315	305	620	6:00-6:15	
6:15-6:30	6	110	28	144	44	103	43	190	43	115	31	189	8	57	6	71	333	261	594	6:15-6:30	
6:30-6:45	2	108	47	157	43	98	51	192	62	127	19	208	15	70	4	89	365	281	646	6:30-6:45	
6:45-7:00	3	109	41	153	47	91	41	179	70	112	24	206	13	81	3	97	359	276	635	6:45-7:00	
7 Hour Totals	166	2,954	1,192	4,312	923	2,185	1,335	4,443	1,760	4,128	546	6,434	374	2,396	128	2,898	####	7,341	18,087		
1 Hour Totals																					
6:00-7:00	2	124	55	181	22	37	53	112	223	397	73	693	12	204	1	217	874	329	1,203	0.75	6:00-7:00
6:15-7:15	6	167	73	246	33	61	67	161	256	469	60	785	15	267	2	284	1,031	445	1,476	0.76	6:15-7:15
6:30-7:30	15	213	93	321	43	87	79	209	283	557	47	887	20	335	3	358	1,208	567	1,775	0.84	6:30-7:30
6:45-7:45	18	309	125	452	56	118	102	276	295	622	42	959	24	372	6	402	1,411	678	2,089	0.77	6:45-7:45
7:00-8:00	22	379	187	588	82	152	118	352	284	681	42	1,007	41	424	10	475	1,595	827	2,422	0.82	7:00-8:00
7:15-8:15	30	433	255	718	97	186	125	408	293	719	50	1,062	70	481	15	566	1,780	974	2,754	0.84	7:15-8:15
7:30-8:30	32	451	321	804	93	200	139	432	308	758	53	1,119	77	533	18	628	1,923	1,060	2,983	0.92	7:30-8:30
7:45-8:45	33	422	358	813	101	210	118	429	284	740	66	1,090	77	577	21	675	1,903	1,104	3,007	0.92	7:45-8:45
8:00-9:00	31	383	376	790	86	197	108	391	280	713	63	1,056	64	619	22	705	1,846	1,096	2,942	0.90	8:00-9:00
2:00-3:00	24	358	79	461	92	255	202	549	203	376	55	634	35	208	11	254	1,095	803	1,899	0.89	2:00-3:00
2:15-3:15	24	372	96	492	126	270	208	604	211	400	56	667	43	197	18	258	1,159	862	2,021	0.85	2:15-3:15
2:30-3:30	30	392	121	543	138	318	231	687	232	438	59	729	53	224	27	304	1,272	991	2,263	0.90	2:30-3:30
2:45-3:45	28	411	123	562	150	343	238	731	224	464	58	746	70	230	30	330	1,308	1,061	2,369	0.94	2:45-3:45
3:00-4:00	27	416	131	574	153	345	251	749	217	471	61	749	70	234	31	335	1,323	1,084	2,407	0.95	3:00-4:00
3:15-4:15	24	422	118	564	127	349	249	725	219	463	57	739	69	240	26	335	1,303	1,060	2,363	0.94	3:15-4:15
3:30-4:30	18	430	101	549	124	341	233	698	202	463	57	722	54	233	20	307	1,271	1,005	2,276	0.94	3:30-4:30
3:45-4:45	19	429	102	550	120	337	221	678	186	453	62	701	46	213	18	277	1,251	955	2,206	0.96	3:45-4:45
4:00-5:00	24	437	102	563	110	328	207	645	165	500	75	740	54	218	17	289	1,303	934	2,237	0.93	4:00-5:00
4:15-5:15	26	428	107	561	128	361	201	690	165	524	76	765	54	224	18	296	1,326	986	2,312	0.92	4:15-5:15
4:30-5:30	22	428	110	560	149	391	210	750	162	538	86	786	63	223	20	306	1,346	1,056	2,402	0.95	4:30-5:30
4:45-5:45	18	431	115	564	166	420	217	803	165	540	87	792	60	214	19	293	1,356	1,096	2,452	0.97	4:45-5:45
5:00-6:00	15	428	116	559	186	464	211	861	176	524	79	779	50	216	18	284	1,338	1,145	2,483	0.98	5:00-6:00
5:15-6:15	19	430	119	568	198	466	208	872	162	506	87	755	45	218	18	281	1,323	1,153	2,476	0.97	5:15-6:15
5:30-6:30	22	431	120	573	198	454	195	847	165	484	95	744	38	216	18	272	1,317	1,119	2,436	0.96	5:30-6:30
5:45-6:45	22	429	136	587	196	443	192	831	183	493	93	769	43	246	19	308	1,356	1,139	2,495	0.97	5:45-6:45
6:00-7:00	21	429	146	596	192	407	185	784	212	466	98	776	48	273	18	339	1,372	1,123	2,495	0.97	6:00-7:00
AM Peak 7:45-8:45	33	422	358	813	101	210	118	429	284	740	66	1,090	77	577	21	675	1,903	1,104	3,007	0.92	AM Peak 7:45-8:

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT: Friends of St Patrick		DATE: 4/27/2005		SOUTHBOUND ROAD: Hoban Road																
W & A JOB NO.: 2608		DAY: Wednesday		NORTHBOUND ROAD: 0																
INTERSECTION: Reservoir Rd & Hoban Rd.		WEATHER: Clear		WESTBOUND ROAD: Reservoir Road																
LOCATION: Washington,DC		COUNTED BY:Alba		EASTBOUND ROAD: Reservoir Road																
		INPUTED BY:agan																		
Time Period	Turning Movements																Total	PHF	Time Period	
	Southbound Hoban Road				Westbound Reservoir Road				Northbound 0				Eastbound Reservoir Road							North & East
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total				South
6:00-6:15	0	0	0	0	0	18	0	18	0	0	0	0	0	65	0	65	0	83	83	6:00-6:15
6:15-6:30	0	0	0	0	0	18	0	18	0	0	0	0	0	86	0	86	0	104	104	6:15-6:30
6:30-6:45	1	0	0	1	0	31	0	31	0	0	0	0	0	159	0	159	1	190	191	6:30-6:45
6:45-7:00	0	0	1	1	0	37	0	37	0	0	0	0	0	181	0	181	1	218	219	6:45-7:00
7:00-7:15	2	0	2	4	0	63	0	63	0	0	0	0	0	160	0	160	4	223	227	7:00-7:15
7:15-7:30	3	0	2	5	0	60	0	60	0	0	0	0	0	188	0	188	5	248	253	7:15-7:30
7:30-7:45	1	0	0	1	0	93	0	93	0	0	0	0	0	232	0	232	1	325	326	7:30-7:45
7:45-8:00	3	0	4	7	0	113	0	113	0	0	0	0	0	269	0	269	7	362	369	7:45-8:00
8:00-8:15	0	0	2	2	0	126	0	126	0	0	0	0	0	303	0	303	2	429	431	8:00-8:15
8:15-8:30	1	0	3	4	1	112	0	113	0	0	0	0	0	320	0	320	4	433	437	8:15-8:30
8:30-8:45	3	0	6	9	0	112	0	112	0	0	0	0	0	340	0	340	9	452	461	8:30-8:45
8:45-9:00	2	0	2	4	0	80	0	80	0	0	0	0	0	339	0	339	4	419	423	8:45-9:00
2:00-2:15	1	0	1	2	0	123	0	123	0	0	0	0	0	137	0	137	2	260	262	2:00-2:15
2:15-2:30	2	0	2	4	0	154	0	154	0	0	0	0	0	121	0	121	4	275	279	2:15-2:30
2:30-2:45	1	0	3	4	0	126	0	126	0	0	0	0	0	184	0	184	4	310	314	2:30-2:45
2:45-3:00	2	0	2	4	4	172	0	176	0	0	0	0	0	133	0	133	4	309	313	2:45-3:00
3:00-3:15	2	0	2	4	5	215	0	220	0	0	0	0	0	146	0	146	4	366	370	3:00-3:15
3:15-3:30	2	0	2	4	1	177	0	178	0	0	0	0	0	172	0	172	4	350	354	3:15-3:30
3:30-3:45	3	0	5	8	0	159	0	159	0	0	0	0	0	133	0	133	8	292	300	3:30-3:45
3:45-4:00	3	0	1	4	0	137	0	137	0	0	0	0	0	143	0	143	4	280	284	3:45-4:00
4:00-4:15	2	0	3	5	0	178	0	178	0	0	0	0	0	105	0	105	5	283	288	4:00-4:15
4:15-4:30	4	0	0	4	0	165	0	165	0	0	0	0	0	120	0	120	4	285	289	4:15-4:30
4:30-4:45	2	0	4	6	0	181	0	181	0	0	0	0	0	110	0	110	6	291	297	4:30-4:45
4:45-5:00	1	0	1	2	0	192	0	192	0	0	0	0	0	128	0	128	2	320	322	4:45-5:00
5:00-5:15	3	0	2	5	0	270	0	270	0	0	0	0	0	111	0	111	5	381	386	5:00-5:15
5:15-5:30	11	0	1	12	0	264	0	264	0	0	0	0	0	110	0	110	12	374	386	5:15-5:30
5:30-5:45	2	0	1	3	0	264	0	264	0	0	0	0	0	100	0	100	3	364	367	5:30-5:45
5:45-6:00	3	0	0	3	0	210	0	210	0	0	0	0	0	100	0	100	3	310	313	5:45-6:00
6:00-6:15	1	0	1	2	0	245	0	245	0	0	0	0	0	117	0	117	2	362	364	6:00-6:15
6:15-6:30	0	0	0	0	0	190	0	190	0	0	0	0	0	118	0	118	0	308	308	6:15-6:30
6:30-6:45	3	0	3	6	0	186	0	186	0	0	0	0	0	110	0	110	6	296	302	6:30-6:45
6:45-7:00	1	0	2	3	0	160	0	160	0	0	0	0	0	133	0	133	3	293	296	6:45-7:00
7 Hour Totals	65	0	58	123	11	4,631	0	4,642	0	0	0	0	0	5,173	0	5,173	123	9,815	9,938	
1 Hour Totals																				
6:00-7:00	1	0	1	2	0	104	0	104	0	0	0	0	0	491	0	491	2	595	597	0.68 6:00-7:00
6:15-7:15	3	0	3	6	0	149	0	149	0	0	0	0	0	586	0	586	6	735	741	0.82 6:15-7:15
6:30-7:30	6	0	5	11	0	191	0	191	0	0	0	0	0	688	0	688	11	879	890	0.88 6:30-7:30
6:45-7:45	6	0	5	11	0	253	0	253	0	0	0	0	0	761	0	761	11	1,014	1,025	0.79 6:45-7:45
7:00-8:00	9	0	8	17	0	329	0	329	0	0	0	0	0	849	0	849	17	1,178	1,195	0.77 7:00-8:00
7:15-8:15	7	0	8	15	0	392	0	392	0	0	0	0	0	992	0	992	15	1,384	1,399	0.81 7:15-8:15
7:30-8:30	5	0	9	14	1	444	0	445	0	0	0	0	0	1,124	0	1,124	14	1,569	1,583	0.91 7:30-8:30
7:45-8:45	7	0	15	22	1	463	0	464	0	0	0	0	0	1,232	0	1,232	22	1,696	1,718	0.93 7:45-8:45
8:00-9:00	6	0	13	19	1	430	0	431	0	0	0	0	0	1,302	0	1,302	19	1,733	1,752	0.95 8:00-9:00
2:00-3:00	6	0	8	14	4	575	0	579	0	0	0	0	0	575	0	575	14	1,154	1,168	0.93 2:00-3:00
2:15-3:15	7	0	9	16	9	667	0	676	0	0	0	0	0	584	0	584	16	1,260	1,276	0.86 2:15-3:15
2:30-3:30	7	0	9	16	10	690	0	700	0	0	0	0	0	635	0	635	16	1,335	1,351	0.91 2:30-3:30
2:45-3:45	9	0	11	20	10	723	0	733	0	0	0	0	0	584	0	584	20	1,317	1,337	0.90 2:45-3:45
3:00-4:00	10	0	10	20	6	688	0	694	0	0	0	0	0	594	0	594	20	1,288	1,308	0.88 3:00-4:00
3:15-4:15	10	0	11	21	1	651	0	652	0	0	0	0	0	553	0	553	21	1,205	1,226	0.87 3:15-4:15
3:30-4:30	12	0	9	21	0	639	0	639	0	0	0	0	0	501	0	501	21	1,140	1,161	0.97 3:30-4:30
3:45-4:45	11	0	8	19	0	661	0	661	0	0	0	0	0	478	0	478	19	1,139	1,158	0.97 3:45-4:45
4:00-5:00	9	0	8	17	0	716	0	716	0	0	0	0	0	463	0	463	17	1,179	1,196	0.93 4:00-5:00
4:15-5:15	10	0	7	17	0	808	0	808	0	0	0	0	0	469	0	469	17	1,277	1,294	0.84 4:15-5:15
4:30-5:30	17	0	8	25	0	907	0	907	0	0	0	0	0	459	0	459	25	1,366	1,391	0.90 4:30-5:30
4:45-5:45	17	0	5	22	0	990	0	990	0	0	0	0	0	449	0	449	22	1,439	1,461	0.95 4:45-5:45
5:00-6:00	19	0	4	23	0	1,008	0	1,008	0	0	0	0	0	421	0	421	23	1,429	1,452	0.94 5:00-6:00
5:15-6:15	17	0	3	20	0	983	0	983	0	0	0	0	0	427	0	427	20	1,410	1,430	0.93 5:15-6:15
5:30-6:30	6	0	2	8	0	909	0	909	0	0	0	0	0	435	0	435	8	1,344	1,352	0.92 5:30-6:30
5:45-6:45	7	0	4	11	0	831	0	831	0	0	0	0	0	445	0	445	11	1,276	1,287	0.88 5:45-6:45
6:00-7:00	5	0	6	11	0	781	0	781	0	0	0	0	0	478	0	478	11	1,259	1,270	0.87 6:00-7:00
AM Peak 8:00-9:00	6	0	13	19	1	430	0	431	0	0	0	0	0	1,302	0	1,302	19	1,733	1,752	0.95 AM Peak 8:00-9:00
PM Peak 4:45-5:45	17	0	5	22	0	990	0	990	0	0	0	0	0	449	0	449	22	1,439	1,461	0.95 PM Peak 4:45-5:45

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT: Friends of St Patrick		DATE: 4/27/2005		SOUTHBOUND ROAD: Foxhall Road																	
W & A JOB NO.: 2608		DAY: Wednesday		NORTHBOUND ROAD: Foxhall Road																	
INTERSECTION: Foxhall Rd. & 45th Street		WEATHER: Clear		WESTBOUND ROAD: 45th Street																	
LOCATION: Washington,DC		COUNTED BY:Alba		EASTBOUND ROAD: 0																	
		INPUTED BY:gagan																			
Time Period	Turning Movements																Total	PHF	Time Period		
	Southbound Foxhall Road				Westbound 45th Street				Northbound Foxhall Road				Eastbound 0							North & South	East & West
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
6:00-6:15	0	23	0	23	0	0	0	0	0	80	0	80	0	0	0	0	103	0	103	6:00-6:15	
6:15-6:30	0	32	0	32	0	0	0	0	0	80	0	80	0	0	0	0	112	0	112	6:15-6:30	
6:30-6:45	0	52	0	52	1	0	0	1	0	108	0	108	0	0	0	0	160	1	161	6:30-6:45	
6:45-7:00	0	67	2	69	0	0	0	0	0	122	0	122	0	0	0	0	191	0	191	6:45-7:00	
7:00-7:15	0	77	0	77	1	0	1	2	1	156	0	157	0	0	0	0	234	2	236	7:00-7:15	
7:15-7:30	0	114	0	114	1	0	0	1	2	142	0	144	0	0	0	0	258	1	259	7:15-7:30	
7:30-7:45	0	152	1	153	6	0	0	6	1	202	0	203	0	0	0	0	356	6	362	7:30-7:45	
7:45-8:00	0	197	0	197	1	0	0	1	0	204	0	204	0	0	0	0	401	1	402	7:45-8:00	
8:00-8:15	0	220	1	221	1	0	0	1	0	211	0	211	0	0	0	0	432	1	433	8:00-8:15	
8:15-8:30	0	199	0	199	4	0	0	4	0	197	0	197	0	0	0	0	396	4	400	8:15-8:30	
8:30-8:45	0	186	1	187	3	0	1	4	2	172	0	174	0	0	0	0	361	4	365	8:30-8:45	
8:45-9:00	0	154	1	155	1	0	0	1	1	170	0	171	0	0	0	0	326	1	327	8:45-9:00	
2:00-2:15	0	123	0	123	1	0	0	1	0	119	0	119	0	0	0	0	242	1	243	2:00-2:15	
2:15-2:30	0	127	1	128	2	0	1	3	1	142	0	143	0	0	0	0	271	3	274	2:15-2:30	
2:30-2:45	0	120	0	120	0	0	0	0	0	141	0	141	0	0	0	0	261	0	261	2:30-2:45	
2:45-3:00	0	113	4	117	1	0	0	1	1	163	0	164	0	0	0	0	281	1	282	2:45-3:00	
3:00-3:15	0	121	0	121	1	0	0	1	0	154	0	154	0	0	0	0	275	1	276	3:00-3:15	
3:15-3:30	0	132	3	135	3	0	1	4	0	164	0	164	0	0	0	0	299	4	303	3:15-3:30	
3:30-3:45	0	128	2	130	1	0	0	1	1	129	0	130	0	0	0	0	260	1	261	3:30-3:45	
3:45-4:00	0	128	1	129	1	0	0	1	0	118	0	118	0	0	0	0	247	1	248	3:45-4:00	
4:00-4:15	0	124	2	126	2	0	1	3	2	136	0	138	0	0	0	0	264	3	267	4:00-4:15	
4:15-4:30	0	121	0	121	1	0	0	1	0	134	0	134	0	0	0	0	255	1	256	4:15-4:30	
4:30-4:45	0	131	1	132	3	0	1	4	1	129	0	130	0	0	0	0	262	4	266	4:30-4:45	
4:45-5:00	0	128	2	130	2	0	0	2	5	140	0	145	0	0	0	0	275	2	277	4:45-5:00	
5:00-5:15	0	128	2	130	0	0	0	0	1	184	0	185	0	0	0	0	315	0	315	5:00-5:15	
5:15-5:30	0	150	4	154	4	0	0	4	1	174	0	175	0	0	0	0	329	4	333	5:15-5:30	
5:30-5:45	0	130	1	131	2	0	0	2	2	180	0	182	0	0	0	0	313	2	315	5:30-5:45	
5:45-6:00	0	134	0	134	2	0	1	3	2	161	0	163	0	0	0	0	297	3	300	5:45-6:00	
6:00-6:15	0	120	1	121	4	0	0	4	3	183	0	186	0	0	0	0	307	4	311	6:00-6:15	
6:15-6:30	0	135	0	135	0	0	0	0	2	159	0	161	0	0	0	0	296	0	296	6:15-6:30	
6:30-6:45	0	125	1	126	4	0	3	7	3	190	0	193	0	0	0	0	319	7	326	6:30-6:45	
6:45-7:00	0	134	0	134	1	0	1	2	4	158	0	162	0	0	0	0	296	2	298	6:45-7:00	
7 Hour Totals	0	4,025	31	4,056	54	0	11	65	36	4,902	0	4,938	0	0	0	0	8,994	65	9,059		
1 Hour Totals	0	174	2	176	1	0	0	1	0	390	0	390	0	0	0	0	566	1	567	6:00-7:00	
6:00-7:00	0	174	2	176	1	0	0	1	0	390	0	390	0	0	0	0	566	1	567	6:00-7:00	
6:15-7:15	0	228	2	230	2	0	1	3	1	466	0	467	0	0	0	0	697	3	700	6:15-7:15	
6:30-7:30	0	310	2	312	3	0	1	4	3	528	0	531	0	0	0	0	843	4	847	6:30-7:30	
6:45-7:45	0	410	3	413	8	0	1	9	4	622	0	626	0	0	0	0	1,039	9	1,048	6:45-7:45	
7:00-8:00	0	540	1	541	9	0	1	10	4	704	0	708	0	0	0	0	1,249	10	1,259	7:00-8:00	
7:15-8:15	0	683	2	685	9	0	0	9	3	759	0	762	0	0	0	0	1,447	9	1,456	7:15-8:15	
7:30-8:30	0	768	2	770	12	0	0	12	1	814	0	815	0	0	0	0	1,585	12	1,597	7:30-8:30	
7:45-8:45	0	802	2	804	9	0	1	10	2	784	0	786	0	0	0	0	1,590	10	1,600	7:45-8:45	
8:00-9:00	0	759	3	762	9	0	1	10	3	750	0	753	0	0	0	0	1,515	10	1,525	8:00-9:00	
2:00-3:00	0	483	5	488	4	0	1	5	2	565	0	567	0	0	0	0	1,055	5	1,060	2:00-3:00	
2:15-3:15	0	481	5	486	4	0	1	5	2	600	0	602	0	0	0	0	1,088	5	1,093	2:15-3:15	
2:30-3:30	0	486	7	493	5	0	1	6	1	622	0	623	0	0	0	0	1,116	6	1,122	2:30-3:30	
2:45-3:45	0	494	9	503	6	0	1	7	2	610	0	612	0	0	0	0	1,115	7	1,122	2:45-3:45	
3:00-4:00	0	509	6	515	6	0	1	7	1	565	0	566	0	0	0	0	1,081	7	1,088	3:00-4:00	
3:15-4:15	0	512	8	520	7	0	2	9	3	547	0	550	0	0	0	0	1,070	9	1,079	3:15-4:15	
3:30-4:30	0	501	5	506	5	0	1	6	3	517	0	520	0	0	0	0	1,026	6	1,032	3:30-4:30	
3:45-4:45	0	504	4	508	7	0	2	9	3	517	0	520	0	0	0	0	1,028	9	1,037	3:45-4:45	
4:00-5:00	0	504	5	509	8	0	2	10	8	539	0	547	0	0	0	0	1,056	10	1,066	4:00-5:00	
4:15-5:15	0	508	5	513	6	0	1	7	7	587	0	594	0	0	0	0	1,107	7	1,114	4:15-5:15	
4:30-5:30	0	537	9	546	9	0	1	10	8	627	0	635	0	0	0	0	1,181	10	1,191	4:30-5:30	
4:45-5:45	0	536	9	545	8	0	0	8	9	678	0	687	0	0	0	0	1,232	8	1,240	4:45-5:45	
5:00-6:00	0	542	7	549	8	0	1	9	6	699	0	705	0	0	0	0	1,254	9	1,263	5:00-6:00	
5:15-6:15	0	534	6	540	12	0	1	13	8	698	0	706	0	0	0	0	1,246	13	1,259	5:15-6:15	
5:30-6:30	0	519	2	521	8	0	1	9	9	683	0	692	0	0	0	0	1,213	9	1,222	5:30-6:30	
5:45-6:45	0	514	2	516	10	0	4	14	10	693	0	703	0	0	0	0	1,219	14	1,233	5:45-6:45	
6:00-7:00	0	514	2	516	9	0	4	13	12	690	0	702	0	0	0	0	1,218	13	1,231	6:00-7:00	
AM Peak 7:45-8:45	0	802	2	804	9	0	1	10	2	784	0	786	0	0	0	0	1,590	10	1,600	AM Peak 7:45-8:45	
PM Peak 5:00-6:00	0	542	7	549	8	0	1	9	6	699	0	705	0	0	0	0	1,254	9	1,263	PM Peak 5:00-6:00	

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT: Friends of St Patrick		DATE: 4/27/2005		SOUTHBOUND ROAD: Foxhall Road																
W & A JOB NO.: 2608		DAY: Wednesday		NORTHBOUND ROAD: Foxhall Road																
INTERSECTION: Foxhall Rd. & Hoban Rd.		WEATHER: Clear		WESTBOUND ROAD: Hoban Road																
LOCATION: Washington,DC		COUNTED BY: Shirley		EASTBOUND ROAD: 0																
		INPUTED BY:agan																		
Time Period	Turning Movements																Total	PHF	Time Period	
	Southbound Foxhall Road				Westbound Hoban Road				Northbound Foxhall Road				Eastbound 0							North & East
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total				South
6:00-6:15	0	23	0	23	0	0	0	0	0	77	0	77	0	0	0	0	100	0	103	6:00-6:15
6:15-6:30	0	31	0	31	0	0	0	0	2	82	0	84	0	0	0	0	115	0	115	6:15-6:30
6:30-6:45	0	53	0	53	0	0	0	0	0	106	0	106	0	0	0	0	159	0	159	6:30-6:45
6:45-7:00	0	70	3	73	0	0	0	0	0	131	0	131	0	0	0	0	204	0	204	6:45-7:00
7:00-7:15	0	72	3	75	0	0	0	0	2	151	0	153	0	0	0	0	228	0	228	7:00-7:15
7:15-7:30	0	115	1	116	0	0	0	0	0	157	0	157	0	0	0	0	273	0	273	7:15-7:30
7:30-7:45	0	154	1	155	0	0	0	0	0	198	0	198	0	0	0	0	353	0	353	7:30-7:45
7:45-8:00	0	200	5	205	0	0	0	0	0	210	0	210	0	0	0	0	415	0	415	7:45-8:00
8:00-8:15	0	229	1	230	0	0	0	0	1	201	0	202	0	0	0	0	432	0	432	8:00-8:15
8:15-8:30	0	201	6	207	0	0	0	0	0	213	0	213	0	0	0	0	420	0	420	8:15-8:30
8:30-8:45	0	181	6	187	0	0	0	0	0	171	0	171	0	0	0	0	358	0	358	8:30-8:45
8:45-9:00	0	165	7	172	0	0	0	0	0	182	0	182	0	0	0	0	354	0	354	8:45-9:00
2:00-2:15	0	129	0	129	0	0	0	0	0	120	0	120	0	0	0	0	249	0	249	2:00-2:15
2:15-2:30	0	138	1	139	0	0	0	0	1	148	0	149	0	0	0	0	288	0	288	2:15-2:30
2:30-2:45	0	146	1	147	0	0	0	0	1	138	0	139	0	0	0	0	286	0	286	2:30-2:45
2:45-3:00	0	131	3	134	0	0	0	0	1	169	0	170	0	0	0	0	304	0	304	2:45-3:00
3:00-3:15	0	144	2	146	0	0	0	0	1	158	0	159	0	0	0	0	305	0	305	3:00-3:15
3:15-3:30	0	151	0	151	0	0	0	0	2	162	0	164	0	0	0	0	315	0	315	3:15-3:30
3:30-3:45	0	144	5	149	0	0	0	0	0	134	0	134	0	0	0	0	283	0	283	3:30-3:45
3:45-4:00	0	110	6	116	0	0	0	0	0	114	0	114	0	0	0	0	230	0	230	3:45-4:00
4:00-4:15	0	133	4	137	0	0	0	0	1	138	0	139	0	0	0	0	276	0	276	4:00-4:15
4:15-4:30	0	122	3	125	0	0	0	0	1	130	0	131	0	0	0	0	256	0	256	4:15-4:30
4:30-4:45	0	143	3	146	0	0	0	0	1	125	0	126	0	0	0	0	272	0	272	4:30-4:45
4:45-5:00	0	129	2	131	0	0	0	0	1	145	0	146	0	0	0	0	277	0	277	4:45-5:00
5:00-5:15	0	147	1	148	0	0	0	0	0	187	0	187	0	0	0	0	335	0	335	5:00-5:15
5:15-5:30	0	159	5	164	0	0	0	0	0	176	0	176	0	0	0	0	340	0	340	5:15-5:30
5:30-5:45	0	133	3	136	0	0	0	0	3	175	0	178	0	0	0	0	314	0	314	5:30-5:45
5:45-6:00	0	130	1	131	0	0	0	0	0	164	0	164	0	0	0	0	295	0	295	5:45-6:00
6:00-6:15	0	109	6	115	0	0	0	0	1	190	0	191	0	0	0	0	306	0	306	6:00-6:15
6:15-6:30	0	137	2	139	0	0	0	0	1	155	0	156	0	0	0	0	295	0	295	6:15-6:30
6:30-6:45	0	126	0	126	0	0	0	0	1	197	0	198	0	0	0	0	324	0	324	6:30-6:45
6:45-7:00	0	139	11	150	0	0	0	0	2	161	0	163	0	0	0	0	313	0	313	6:45-7:00
7 Hour Totals	0	4,194	92	4,286	0	0	0	0	23	4,965	0	4,988	0	0	0	0	9,274	0	9,274	
1 Hour Totals	0	177	3	180	0	0	0	0	2	396	0	398	0	0	0	0	578	0	578	0.71 6:00-7:00
6:15-7:15	0	226	6	232	0	0	0	0	4	470	0	474	0	0	0	0	706	0.77	706	6:15-7:15
6:30-7:30	0	310	7	317	0	0	0	0	2	545	0	547	0	0	0	0	864	0.79	864	6:30-7:30
6:45-7:45	0	411	8	419	0	0	0	0	2	637	0	639	0	0	0	0	1,058	0.75	1,058	6:45-7:45
7:00-8:00	0	541	10	551	0	0	0	0	2	716	0	718	0	0	0	0	1,269	0.76	1,269	7:00-8:00
7:15-8:15	0	698	8	706	0	0	0	0	1	766	0	767	0	0	0	0	1,473	0.85	1,473	7:15-8:15
7:30-8:30	0	784	13	797	0	0	0	0	1	822	0	823	0	0	0	0	1,620	0.94	1,620	7:30-8:30
7:45-8:45	0	811	18	829	0	0	0	0	1	795	0	796	0	0	0	0	1,625	0.94	1,625	7:45-8:45
8:00-9:00	0	776	20	796	0	0	0	0	1	767	0	768	0	0	0	0	1,564	0.91	1,564	8:00-9:00
2:00-3:00	0	544	5	549	0	0	0	0	3	575	0	578	0	0	0	0	1,127	0.93	1,127	2:00-3:00
2:15-3:15	0	559	7	566	0	0	0	0	4	613	0	617	0	0	0	0	1,183	0.97	1,183	2:15-3:15
2:30-3:30	0	572	6	578	0	0	0	0	5	627	0	632	0	0	0	0	1,210	0.96	1,210	2:30-3:30
2:45-3:45	0	570	10	580	0	0	0	0	4	623	0	627	0	0	0	0	1,207	0.96	1,207	2:45-3:45
3:00-4:00	0	549	13	562	0	0	0	0	3	568	0	571	0	0	0	0	1,133	0.90	1,133	3:00-4:00
3:15-4:15	0	538	15	553	0	0	0	0	3	548	0	551	0	0	0	0	1,104	0.88	1,104	3:15-4:15
3:30-4:30	0	509	18	527	0	0	0	0	2	516	0	518	0	0	0	0	1,045	0.92	1,045	3:30-4:30
3:45-4:45	0	508	16	524	0	0	0	0	3	507	0	510	0	0	0	0	1,034	0.94	1,034	3:45-4:45
4:00-5:00	0	527	12	539	0	0	0	0	4	538	0	542	0	0	0	0	1,081	0.98	1,081	4:00-5:00
4:15-5:15	0	541	9	550	0	0	0	0	3	587	0	590	0	0	0	0	1,140	0.85	1,140	4:15-5:15
4:30-5:30	0	578	11	589	0	0	0	0	2	633	0	635	0	0	0	0	1,224	0.90	1,224	4:30-5:30
4:45-5:45	0	568	11	579	0	0	0	0	4	683	0	687	0	0	0	0	1,266	0.93	1,266	4:45-5:45
5:00-6:00	0	569	10	579	0	0	0	0	3	702	0	705	0	0	0	0	1,284	0.94	1,284	5:00-6:00
5:15-6:15	0	531	15	546	0	0	0	0	4	705	0	709	0	0	0	0	1,255	0.92	1,255	5:15-6:15
5:30-6:30	0	509	12	521	0	0	0	0	5	684	0	689	0	0	0	0	1,210	0.96	1,210	5:30-6:30
5:45-6:45	0	502	9	511	0	0	0	0	3	706	0	709	0	0	0	0	1,220	0.94	1,220	5:45-6:45
6:00-7:00	0	511	19	530	0	0	0	0	5	703	0	708	0	0	0	0	1,238	0.96	1,238	6:00-7:00
AM Peak 7:45-8:45	0	811	18	829	0	0	0	0	1	795	0	796	0	0	0	0	1,625	0.94	1,625	AM Peak 7:45-8:45
PM Peak 5:00-6:00	0	569	10	579	0	0	0	0	3	702	0	705	0	0	0	0	1,284	0.94	1,284	PM Peak 5:00-6:00

Appendix B

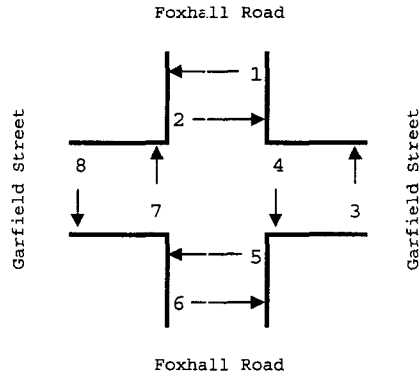
Existing Pedestrian Counts:

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Pedestrian Volume Survey



Project Name: Friends of St. Patrick
Project Number: 2608
Location: Washington, DC
Intersection: Foxhall Rd. & Garfield St.
Weather: Clear
Date: 11/16/2004
Surveyor: Roberto
Hours: Time Mileage: ##



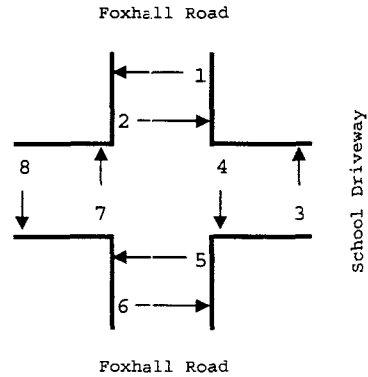
TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15								
6:15-6:30								
6:30-6:45	2	2						
6:45-7:00				2				
7:00-7:15				1				
7:15-7:30		1		3				
7:30-7:45	1			1				
7:45-8:00			1	1				
8:00-8:15								
8:15-8:30	2					1		
8:30-8:45	1			1		1		
8:45-9:00								
PM								
2:00-2:15								
2:15-2:30								
2:30-2:45								
2:45-3:00			2			1		
3:00-3:15								
3:15-3:30				1	1			
3:30-3:45								
3:45-4:00			2					
4:00-4:15	2							
4:15-4:30	1					1		
4:30-4:45	1							
4:45-5:00								
5:00-5:15			1			1		
5:15-5:30								
5:30-5:45								
5:45-6:00								
6:00-6:15								
6:15-6:30					1	1		
6:30-6:45								
6:45-7:00								

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Friends of St. Patrick
Project Number: 2608
Location: Washington, DC
Intersection: Foxhall Rd. & School Driveway
Weather: Clear
Date: 11/16/2004
Surveyor: Matt
Hours: Time Mileage: ##



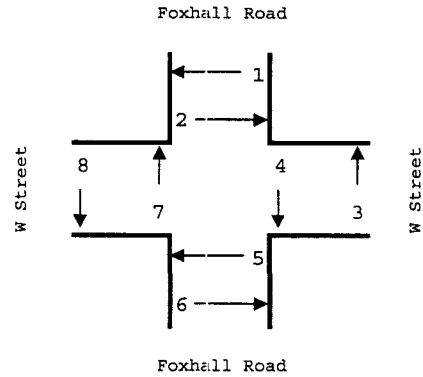
TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15								
6:15-6:30								
6:30-6:45								
6:45-7:00								
7:00-7:15								
7:15-7:30								
7:30-7:45							1	
7:45-8:00								
8:00-8:15								
8:15-8:30								
8:30-8:45								1
8:45-9:00			1					
PM								
2:00-2:15								
2:15-2:30								
2:30-2:45								
2:45-3:00								
3:00-3:15								
3:15-3:30								
3:30-3:45				1				
3:45-4:00								
4:00-4:15								
4:15-4:30								
4:30-4:45								
4:45-5:00			1					
5:00-5:15								
5:15-5:30								
5:30-5:45				1				
5:45-6:00								
6:00-6:15			1					
6:15-6:30								
6:30-6:45								
6:45-7:00								

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Pedestrian Volume Survey



Project Name: Friends of St. Patrick
Project Number: 2608
Location: Washington, DC
Intersection: Foxhall Rd. & W Street
Weather: Clear
Date: 11/16/2004
Surveyor: Chris
Hours: Time Mileage: ##



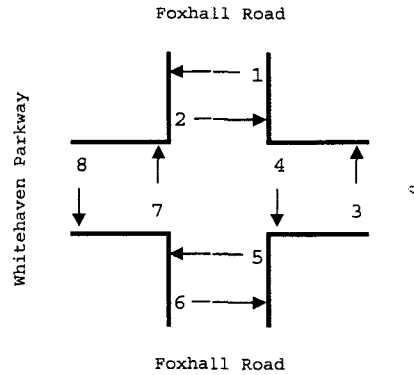
TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15								
6:15-6:30								
6:30-6:45								
6:45-7:00		1						
7:00-7:15								
7:15-7:30								
7:30-7:45								
7:45-8:00								
8:00-8:15			1					
8:15-8:30								
8:30-8:45								
8:45-9:00								
PM								
2:00-2:15								
2:15-2:30				1				
2:30-2:45								
2:45-3:00			1					
3:00-3:15								
3:15-3:30								
3:30-3:45				1	1			
3:45-4:00								
4:00-4:15	1							1
4:15-4:30	1							1
4:30-4:45								
4:45-5:00								
5:00-5:15						2		
5:15-5:30								
5:30-5:45								
5:45-6:00								
6:00-6:15			1					
6:15-6:30								
6:30-6:45								
6:45-7:00								

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Friends of St. Patrick
Project Number: 2608
Location: Washington, DC
Intersection: Foxhall Rd. & Whitehaven Pkwy
Weather: Clear
Date: 11/16/2004
Surveyor: Gary & Majda
Hours: Time Mileage: ##



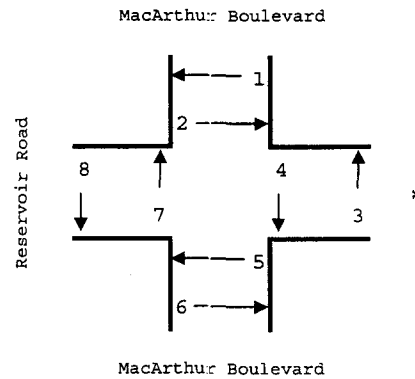
TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15								
6:15-6:30								
6:30-6:45								
6:45-7:00								
7:00-7:15								
7:15-7:30								
7:30-7:45							1	
7:45-8:00							1	
8:00-8:15							1	
8:15-8:30		1					1	1
8:30-8:45								
8:45-9:00								
PM								
2:00-2:15								
2:15-2:30								
2:30-2:45								
2:45-3:00								
3:00-3:15								
3:15-3:30								
3:30-3:45								1
3:45-4:00								
4:00-4:15								
4:15-4:30							1	1
4:30-4:45								
4:45-5:00				1				
5:00-5:15								
5:15-5:30								
5:30-5:45							2	
5:45-6:00								
6:00-6:15		1					1	
6:15-6:30							1	
6:30-6:45								
6:45-7:00								

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Friends of St. Patrick
Project Number: 2608
Location: Washington, DC
Intersection: MacArthur Blvd. & Reservoir R
Weather: Clear
Date: 11/16/2004
Surveyor: Runions
Hours: Time Mileage: ##



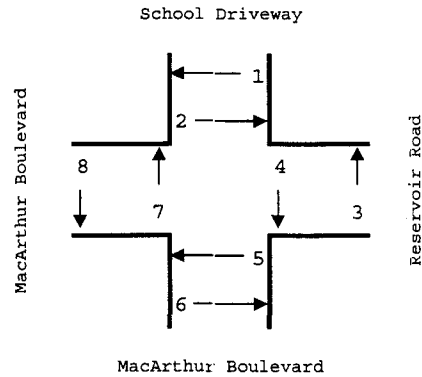
TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15								
6:15-6:30			2		1	3		3
6:30-6:45	2	1		1				
6:45-7:00			3	1				
7:00-7:15	1	1	1	5				
7:15-7:30		1	1					2
7:30-7:45			1	6				
7:45-8:00	2	1		16				3
8:00-8:15	5	1	3	7				
8:15-8:30	1	3	2	17			1	
8:30-8:45	2	2	2	6			1	3
8:45-9:00	1	3		4				2
PM								
2:00-2:15	1		4	6		1		1
2:15-2:30	1		7	14				
2:30-2:45		3	5	8				
2:45-3:00	1		7	6				5
3:00-3:15	1	1	26	6	1			3
3:15-3:30	2		36	8				
3:30-3:45			6	10			1	1
3:45-4:00	1		15	10				
4:00-4:15			5	7				1
4:15-4:30			13	4			1	
4:30-4:45		4	8	15	1			
4:45-5:00			7	8	1			
5:00-5:15	2		7	4	2			
5:15-5:30	1		2	4			2	
5:30-5:45	5		5				1	2
5:45-6:00			2	3			1	2
6:00-6:15			5	7				
6:15-6:30	1		7	2		1	1	
6:30-6:45			4	5		1	2	
6:45-7:00			1	3			6	3

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Pedestrian Volume Survey



Project Name: Friends of St.Patrick
Project Number: 2608
Location: Washington, DC
Intersection: MacArthur Blvd. & Reservoir R.
Weather: Clear
Date: 11/16/2004
Surveyor: Rolando & Lilian
Hours: Time Mileage: ##



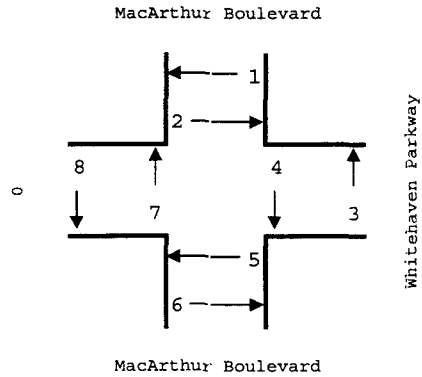
TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15								
6:15-6:30	1				3	4		2
6:30-6:45		1			1	1	1	
6:45-7:00		1	1			1		
7:00-7:15	1	2	1	1				
7:15-7:30	1	2		2			1	
7:30-7:45			2		1	2		
7:45-8:00	1	1			2	1		
8:00-8:15		1	6			1	1	
8:15-8:30	3		8			3		
8:30-8:45			2			3		
8:45-9:00	1		4		2			1
PM								
2:00-2:15	2	2	1		2			
2:15-2:30	4	3	1	4				
2:30-2:45	1	3	1	2				
2:45-3:00	2	1	2					
3:00-3:15	2	4	1	5	1	3	1	
3:15-3:30	2	4	4	7	1	1		
3:30-3:45	2	2	3	2	1	4		
3:45-4:00	4	5	1	4		2		
4:00-4:15	3	2	2	6	1		1	
4:15-4:30	6	2	7	2	1			
4:30-4:45	2	9	6	11	1			
4:45-5:00	3	3	2	1				
5:00-5:15	1	1		2	1			
5:15-5:30	1	3	1	3	5	1		
5:30-5:45	4		8	3		4		
5:45-6:00	2		6	4	1			
6:00-6:15	3	2	8	2	1	2		
6:15-6:30	2	3	4	3	3			
6:30-6:45	2	2	1	2				
6:45-7:00	1				5			

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Pedestrian Volume Survey



Project Name: Friends of St. Patrick
Project Number: 2608
Location: Washington, DC
Intersection: MacArthur Blvd. & Whitehaven
Weather: Clear
Date: 11/16/2004
Surveyor: Bob
Hours: Time Mileage: ##



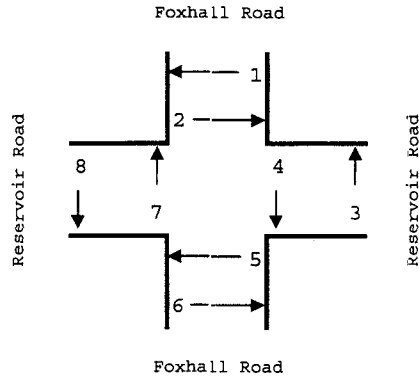
TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15								
6:15-6:30	2					2		
6:30-6:45		1			3	1		
6:45-7:00	1	2				1		
7:00-7:15					2			
7:15-7:30	1	1						
7:30-7:45		2				1		
7:45-8:00	2	8			1			
8:00-8:15	8	3			3	1		
8:15-8:30	4	6			1			
8:30-8:45	3	6			1	2		
8:45-9:00	2	2			2			
PM								
2:00-2:15	1	4						
2:15-2:30	2	5			1			
2:30-2:45	4	6						
2:45-3:00	3	3				1		
3:00-3:15	5	4						
3:15-3:30	6	2			2			
3:30-3:45	3	1						
3:45-4:00	3	5						
4:00-4:15	4	4						
4:15-4:30	2	3			1			
4:30-4:45	4	9				1	1	
4:45-5:00	5	8				2		
5:00-5:15	3	3				1		
5:15-5:30	3	1			4	1		
5:30-5:45	2	3						
5:45-6:00	2	2				1		
6:00-6:15	3	1						
6:15-6:30	2	4			2			
6:30-6:45	6	3			4			
6:45-7:00	1	4				2		

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Friends of St. Patrick
Project Number: 2608
Location: Washington, DC
Intersection: Foxhall Rd. & Reservoir Rd.
Weather: Clear
Date: 11/16/2004
Surveyor: Rolando & Lucia
Hours: Time Mileage: ##



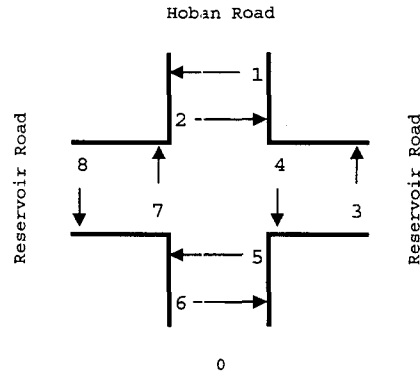
TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15								
6:15-6:30					2	3		
6:30-6:45						3		1
6:45-7:00						1	1	
7:00-7:15	1				3	4	6	
7:15-7:30				1	1	4	1	2
7:30-7:45						1	1	
7:45-8:00					4	4	1	
8:00-8:15					2		3	
8:15-8:30				1	1	4	1	
8:30-8:45			1		1	5	1	1
8:45-9:00	1		1		1	1		
PM								
2:00-2:15	1		1		1	2		
2:15-2:30					1			
2:30-2:45	1		1		1	1		
2:45-3:00		2		2	1	3		
3:00-3:15		1		2	3			
3:15-3:30					1	1		
3:30-3:45		1		1	3	4		1
3:45-4:00					1	2		
4:00-4:15					6	1		2
4:15-4:30	2		2		5	2		
4:30-4:45	1	1		1	2	1		2
4:45-5:00	1	1	1	1	1	2		
5:00-5:15	1	1	1	1	4	1		
5:15-5:30	1		1		8	5		2
5:30-5:45					11	3		
5:45-6:00								1
6:00-6:15	1		3		2	2		
6:15-6:30	1	1	1	1	4	1		
6:30-6:45					1	2		
6:45-7:00					8	1		

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McLean, Virginia

Pedestrian Volume Survey



Project Name: Friends of St. Patrick
Project Number: 2608
Location: Washington, DC
Intersection: Reservoir Rd. & Hoban Rd.
Weather: Clear
Date: 4/27/2005
Surveyor: Milton
Hours: Time Mileage: ##



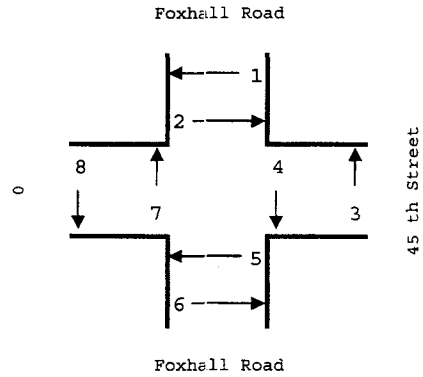
TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15	2	1						
6:15-6:30	1	1						
6:30-6:45	3	1						
6:45-7:00	2							
7:00-7:15	1	2					1	
7:15-7:30		1					1	1
7:30-7:45	2	5					1	
7:45-8:00	2	6						
8:00-8:15		4						
8:15-8:30	5	2	1				2	
8:30-8:45	2	1		1	1			
8:45-9:00	2	7					1	2
PM								
2:00-2:15	3	2					1	1
2:15-2:30	2	2					1	
2:30-2:45		7					1	1
2:45-3:00	4	4						
3:00-3:15	1	3						
3:15-3:30								1
3:30-3:45	1	7					2	
3:45-4:00	7	6					3	
4:00-4:15	8	7		1				2
4:15-4:30	1	3					2	
4:30-4:45	2	4		1				1
4:45-5:00	1	7					2	1
5:00-5:15		2					2	
5:15-5:30	3	9						3
5:30-5:45	1			1			2	
5:45-6:00	7	11					2	1
6:00-6:15	3	4					2	2
6:15-6:30	2	6					1	1
6:30-6:45	1	4		2			1	3
6:45-7:00	2	2				1		1

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Friends of St. Patrick
Project Number: 2608
Location: Washington, DC
Intersection: Foxhall Rd. & 45th Street
Weather: Clear
Date: 4/27/2005
Surveyor: Alba
Hours: Time Mileage: ##



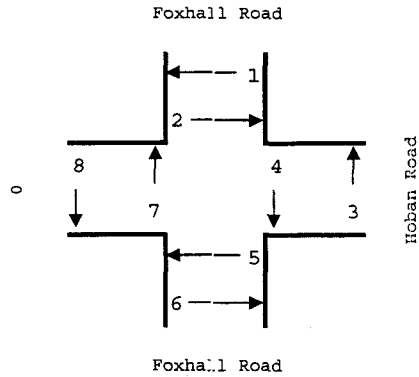
TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15							1	
6:15-6:30							1	
6:30-6:45								
6:45-7:00								1
7:00-7:15								
7:15-7:30								
7:30-7:45				1				
7:45-8:00								
8:00-8:15								
8:15-8:30						1	1	
8:30-8:45								
8:45-9:00								
PM								
2:00-2:15								1
2:15-2:30								
2:30-2:45							1	
2:45-3:00		1						
3:00-3:15								
3:15-3:30			1					
3:30-3:45								
3:45-4:00				1				
4:00-4:15								
4:15-4:30				3	1			
4:30-4:45								
4:45-5:00								
5:00-5:15								
5:15-5:30								
5:30-5:45								1
5:45-6:00			3					1
6:00-6:15								
6:15-6:30				1			1	
6:30-6:45								
6:45-7:00			1					

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Friends of St. Patrick
Project Number: 2608
Location: Washington, DC
Intersection: Foxhall Rd. & Hoban Rd.
Weather: Clear
Date: 4/27/2005
Surveyor: Shirley
Hours: Time Mileage: ##



TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15								
6:15-6:30								
6:30-6:45								
6:45-7:00								
7:00-7:15								
7:15-7:30								
7:30-7:45	1							
7:45-8:00								
8:00-8:15								
8:15-8:30				1				
8:30-8:45								
8:45-9:00								
PM								
2:00-2:15								
2:15-2:30								
2:30-2:45								
2:45-3:00			1					
3:00-3:15								
3:15-3:30								
3:30-3:45				1				
3:45-4:00								
4:00-4:15								
4:15-4:30								
4:30-4:45								
4:45-5:00								
5:00-5:15								
5:15-5:30								
5:30-5:45								
5:45-6:00								
6:00-6:15								
6:15-6:30			1	1				
6:30-6:45								
6:45-7:00	4		4		2			

Appendix C

Existing Levels of Service

	↖	→	↗	↖	←	↖	↖	↑	↗	↘	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.99			0.99			1.00	
Flt Protected		0.98			0.96			1.00			1.00	
Satd. Flow (prot)		1823			1764			1830			1853	
Flt Permitted		0.88			0.72			1.00			0.94	
Satd. Flow (perm)		1634			1312			1824			1750	
Volume (vph)	36	66	2	174	27	18	5	774	97	34	750	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	72	2	189	29	20	5	841	105	37	815	21
RTOR Reduction (vph)	0	1	0	0	5	0	0	6	0	0	1	0
Lane Group Flow (vph)	0	112	0	0	233	0	0	945	0	0	872	0
Confl. Peds. (#/hr)	3		1	1		3			3	3		
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		14.8			14.8			46.0			46.0	
Effective Green, g (s)		14.8			14.8			46.0			46.0	
Actuated g/C Ratio		0.22			0.22			0.67			0.67	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		352			282			1220			1170	
v/s Ratio Prot												
v/s Ratio Perm		0.07			c0.18			c0.52			0.50	
v/c Ratio		0.32			0.83			0.77			0.75	
Uniform Delay, d1		22.8			25.8			7.8			7.5	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.5			17.7			4.8			4.3	
Delay (s)		23.3			43.5			12.7			11.9	
Level of Service		C			D			B			B	
Approach Delay (s)		23.3			43.5			12.7			11.9	
Approach LOS		C			D			B			B	
Intersection Summary												
HCM Average Control Delay		16.3					HCM Level of Service				B	
HCM Volume to Capacity ratio		0.79										
Actuated Cycle Length (s)		68.8					Sum of lost time (s)			8.0		
Intersection Capacity Utilization		89.9%					ICU Level of Service			E		
Analysis Period (min)		15										

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1852		1770	1863
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	1852		1770	1863
Volume (vph)	26	20	856	34	68	875
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	22	930	37	74	951
RTOR Reduction (vph)	0	21	1	0	0	0
Lane Group Flow (vph)	28	1	966	0	74	951
Confl. Peds. (#/hr)				1	1	
Turn Type	Perm				Prot	
Protected Phases	8		6		5	2
Permitted Phases		8				
Actuated Green, G (s)	3.0	3.0	35.8		7.2	47.0
Effective Green, g (s)	4.0	4.0	36.8		7.2	48.0
Actuated g/C Ratio	0.07	0.07	0.61		0.12	0.80
Clearance Time (s)	5.0	5.0	5.0		4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	118	106	1136		212	1490
v/s Ratio Prot	c0.02		c0.52		0.04	c0.51
v/s Ratio Perm		0.00				
v/c Ratio	0.24	0.01	0.85		0.35	0.64
Uniform Delay, d1	26.6	26.2	9.4		24.2	2.5
Progression Factor	1.00	1.00	1.15		1.00	1.00
Incremental Delay, d2	1.0	0.1	6.5		1.0	2.1
Delay (s)	27.6	26.2	17.3		25.2	4.6
Level of Service	C	C	B		C	A
Approach Delay (s)	27.0		17.3			6.0
Approach LOS	C		B			A
Intersection Summary						
HCM Average Control Delay			11.9		HCM Level of Service	B
HCM Volume to Capacity ratio			0.74			
Actuated Cycle Length (s)			60.0		Sum of lost time (s)	8.0
Intersection Capacity Utilization			68.8%		ICU Level of Service	C
Analysis Period (min)			15			

c Critical Lane Group

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	⇌			⇌			⇌			⇌		
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Volume (veh/h)	33	1	119	2	1	1	18	856	1	3	830	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	36	1	129	2	1	1	20	930	1	3	902	74
Pedestrians	1											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	4.0											
Percent Blockage	0											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)							996			604		
pX, platoon unblocked	0.79	0.79	0.61	0.79	0.79	0.64	0.61				0.64	
vC, conflicting volume	1917	1917	939	2047	1954	932	976				933	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1467	1467	901	1630	1513	893	961				894	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	55	99	37	91	99	99	96				99	
cM capacity (veh/h)	80	96	206	23	90	216	438				482	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	166	4	951	979								
Volume Left	36	2	20	3								
Volume Right	129	1	1	74								
cSH	153	39	438	482								
Volume to Capacity	1.09	0.11	0.04	0.01								
Queue Length 95th (ft)	220	9	3	1								
Control Delay (s)	158.0	108.9	1.6	0.2								
Lane LOS	F	F	A	A								
Approach Delay (s)	158.0	108.9	1.6	0.2								
Approach LOS	F	F										
Intersection Summary												
Average Delay				13.6								
Intersection Capacity Utilization				74.6%	ICU Level of Service			D				
Analysis Period (min)				15								

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.97	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1703		1770	1863	1788	
Flt Permitted	0.97		0.15	1.00	1.00	
Satd. Flow (perm)	1703		274	1863	1788	
Volume (vph)	119	97	77	763	685	224
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	129	105	84	829	745	243
RTOR Reduction (vph)	56	0	0	0	15	0
Lane Group Flow (vph)	178	0	84	829	973	0
Confl. Peds. (#/hr)	1		5			5
Turn Type			Perm			
Protected Phases	8			6	2	
Permitted Phases			6			
Actuated Green, G (s)	11.2		38.8	38.8	38.8	
Effective Green, g (s)	12.2		39.8	39.8	39.8	
Actuated g/C Ratio	0.20		0.66	0.66	0.66	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	346		182	1236	1186	
v/s Ratio Prot	c0.10			0.45	c0.54	
v/s Ratio Perm			0.31			
v/c Ratio	0.52		0.46	0.67	0.82	
Uniform Delay, d1	21.3		4.9	6.1	7.5	
Progression Factor	1.00		2.20	2.24	0.78	
Incremental Delay, d2	1.3		3.4	1.2	5.7	
Delay (s)	22.6		14.2	14.9	11.6	
Level of Service	C		B	B	B	
Approach Delay (s)	22.6			14.8	11.6	
Approach LOS	C			B	B	
Intersection Summary						
HCM Average Control Delay			14.2		HCM Level of Service	B
HCM Volume to Capacity ratio			0.75			
Actuated Cycle Length (s)			60.0		Sum of lost time (s)	8.0
Intersection Capacity Utilization			78.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

	→	↖	↗	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3531		1770	3539	1770	1583
Flt Permitted	1.00		0.14	1.00	0.95	1.00
Satd. Flow (perm)	3531		263	3539	1770	1583
Volume (vph)	1305	15	20	861	66	646
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1418	16	22	936	72	702
RTOR Reduction (vph)	1	0	0	0	0	58
Lane Group Flow (vph)	1433	0	22	936	72	644
Confl. Peds. (#/hr)		7	7		18	
Turn Type			Perm		Prot	
Protected Phases	6			2	8	8
Permitted Phases			2	2		
Actuated Green, G (s)	70.0		70.0	70.0	19.0	19.0
Effective Green, g (s)	71.0		71.0	71.0	21.0	21.0
Actuated g/C Ratio	0.71		0.71	0.71	0.21	0.21
Clearance Time (s)	5.0		5.0	5.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2507		187	2513	372	332
v/s Ratio Prot	c0.41			0.26	0.04	c0.41
v/s Ratio Perm			0.08			
v/c Ratio	0.57		0.12	0.37	0.19	1.94
Uniform Delay, d1	7.1		4.6	5.7	32.5	39.5
Progression Factor	1.00		1.11	1.49	1.00	1.00
Incremental Delay, d2	1.0		1.1	0.4	0.3	433.2
Delay (s)	8.0		6.2	8.9	32.8	472.7
Level of Service	A		A	A	C	F
Approach Delay (s)	8.0			8.8	431.8	
Approach LOS	A			A	F	
Intersection Summary						
HCM Average Control Delay		111.9		HCM Level of Service		F
HCM Volume to Capacity ratio		0.88				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		83.2%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	166	1785	809	52	47	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	180	1940	879	57	51	78
Pedestrians		10			40	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		1			3	
Right turn flare (veh)						
Median type					None	
Median storage veh						
Upstream signal (ft)		137	301			
pX, platoon unblocked					0.80	
vC, conflicting volume	976				2279	518
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	976				2350	518
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	73				0	84
cM capacity (veh/h)	679				17	482
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	827	1293	586	350	129	
Volume Left	180	0	0	0	51	
Volume Right	0	0	0	57	78	
cSH	679	1700	1700	1700	41	
Volume to Capacity	0.27	0.76	0.34	0.21	3.17	
Queue Length 95th (ft)	27	0	0	0	Err	
Control Delay (s)	6.8	0.0	0.0	0.0	Err	
Lane LOS	A				F	
Approach Delay (s)	2.6		0.0		Err	
Approach LOS					F	
Intersection Summary						
Average Delay		407.7				
Intersection Capacity Utilization		97.6%		ICU Level of Service	F	
Analysis Period (min)		15				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔		↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	0.95		1.00		0.95	0.95			1.00	
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	
Frt		1.00	0.85		0.98		1.00	1.00			0.92	
Flt Protected		0.99	1.00		1.00		0.95	0.96			0.99	
Satd. Flow (prot)		1757	1478		1826		1681	1684			1678	
Flt Permitted		0.87	1.00		1.00		0.95	0.96			0.99	
Satd. Flow (perm)		1536	1478		1826		1681	1684			1678	
Volume (vph)	102	762	1134	0	290	37	492	13	5	23	27	79
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	111	828	1233	0	315	40	535	14	5	25	29	86
RTOR Reduction (vph)	0	0	461	0	4	0	0	1	0	0	59	0
Lane Group Flow (vph)	0	939	772	0	351	0	278	275	0	0	81	0
Confl. Peds. (#/hr)	6		10	10		6	1		16	16		1
Turn Type	Perm		Perm				Split			Split		
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2		2									
Actuated Green, G (s)		52.7	52.7		52.7		18.5	18.5			9.8	
Effective Green, g (s)		53.7	53.7		53.7		21.5	21.5			12.8	
Actuated g/C Ratio		0.54	0.54		0.54		0.22	0.22			0.13	
Clearance Time (s)		5.0	5.0		5.0		7.0	7.0			7.0	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		825	794		981		361	362			215	
v/s Ratio Prot					0.19		c0.17	0.16			c0.05	
v/s Ratio Perm		c0.61	0.52									
v/c Ratio		1.14	0.97		0.36		0.77	0.76			0.38	
Uniform Delay, d1		23.2	22.4		13.3		36.9	36.8			39.9	
Progression Factor		1.08	2.21		1.00		1.00	1.00			1.00	
Incremental Delay, d2		69.6	16.0		1.0		9.7	9.1			1.1	
Delay (s)		94.5	65.6		14.3		46.7	45.9			41.0	
Level of Service		F	E		B		D	D			D	
Approach Delay (s)		78.1			14.3		46.3				41.0	
Approach LOS		E			B		D				D	
Intersection Summary												
HCM Average Control Delay			64.0			HCM Level of Service				E		
HCM Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			117.5%			ICU Level of Service			H			
Analysis Period (min)			15									

c Critical Lane Group

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.99	1.00	1.00	1.00	1.00	0.85	0.96	1.00	0.99	1.00	0.99	1.00
Flt Protected	1.00	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3461	1770	1863	1583	3378	1770	1838	1770	1838	1770	1838	1770
Flt Permitted	0.94	0.12	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3260	219	1863	1583	3378	1770	1838	1770	1838	1770	1838	1770
Volume (vph)	21	692	77	118	210	101	66	740	284	358	422	33
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	752	84	128	228	110	72	804	309	389	459	36
RTOR Reduction (vph)	0	7	0	0	0	73	0	29	0	0	2	0
Lane Group Flow (vph)	0	852	0	128	228	37	0	1156	0	389	493	0
Confl. Peds. (#/hr)			21	21			7		2	2		7
Turn Type	Perm		pm+pt		Perm	Split		Split		Split		
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases	4			8	8							
Actuated Green, G (s)		28.0		38.0	38.0	38.0		36.0		28.0	28.0	
Effective Green, g (s)		30.0		40.0	40.0	40.0		38.0		30.0	30.0	
Actuated g/C Ratio		0.25		0.33	0.33	0.33		0.32		0.25	0.25	
Clearance Time (s)		6.0		4.0	6.0	6.0		6.0		6.0	6.0	
Lane Grp Cap (vph)		815		151	621	528		1070		443	460	
v/s Ratio Prot				c0.04	0.12			c0.34		0.22	c0.27	
v/s Ratio Perm		c0.26		0.24		0.02						
v/c Ratio		1.05		0.85	0.37	0.07		1.08		0.88	1.07	
Uniform Delay, d1		45.0		33.6	30.4	27.3		41.0		43.2	45.0	
Progression Factor		1.00		1.00	1.00	1.00		1.00		0.89	0.90	
Incremental Delay, d2		44.1		41.4	1.7	0.3		51.8		15.5	55.2	
Delay (s)		89.1		75.0	32.1	27.6		92.8		54.0	95.5	
Level of Service		F		E	C	C		F		D	F	
Approach Delay (s)		89.1			42.8			92.8			77.2	
Approach LOS		F			D			F			E	
Intersection Summary												
HCM Average Control Delay		80.9										
HCM Volume to Capacity ratio		1.06										
Actuated Cycle Length (s)		120.0								16.0		
Intersection Capacity Utilization		103.5%										
Analysis Period (min)		15										
c Critical Lane Group												

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	1302	430	0	13	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1415	467	0	14	7
Pedestrians		5	2		23	
Lane Width (ft)		12.0	12.0		12.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	0		2	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		709				
pX, platoon unblocked					0.79	
vC, conflicting volume	490				1200	262
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	490				985	262
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				93	99
cM capacity (veh/h)	1049				189	720
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	708	708	234	234	21	
Volume Left	0	0	0	0	14	
Volume Right	0	0	0	0	7	
cSH	1700	1700	1700	1700	247	
Volume to Capacity	0.42	0.42	0.14	0.14	0.08	
Queue Length 95th (ft)	0	0	0	0	7	
Control Delay (s)	0.0	0.0	0.0	0.0	20.9	
Lane LOS					C	
Approach Delay (s)	0.0		0.0		20.9	
Approach LOS					C	
Intersection Summary						
Average Delay	0.2					
Intersection Capacity Utilization	47.5%		ICU Level of Service		A	
Analysis Period (min)	15					

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑			↑↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	9	784	2	2	802
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	10	852	2	2	872
Pedestrians			1			
Lane Width (ft)			12.0			
Walking Speed (ft/s)			4.0			
Percent Blockage			0			
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			272			
pX, platoon unblocked	0.72	0.72			0.72	
vC, conflicting volume	1294	427			854	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1023	0			414	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	167	783			824	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	11	568	286	293	581	
Volume Left	1	0	0	2	0	
Volume Right	10	0	2	0	0	
cSH	572	1700	1700	824	1700	
Volume to Capacity	0.02	0.33	0.17	0.00	0.34	
Queue Length 95th (ft)	1	0	0	0	0	
Control Delay (s)	11.4	0.0	0.0	0.1	0.0	
Lane LOS	B			A		
Approach Delay (s)	11.4	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			33.6%		ICU Level of Service	A
Analysis Period (min)			15			

	↙	↘	↑	↗	↖	↓
Movement	WBL	WBR	NBT	NBR	SBL	SRT
Lane Configurations			↑↓			↑↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	795	1	18	811
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	864	1	20	882
Pedestrians	1					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			630			1297
pX, platoon unblocked	0.77	0.77			0.77	
vC, conflicting volume	1346	434			866	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1145	0			518	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			98	
cM capacity (veh/h)	144	830			799	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2		
Volume Total	576	289	313	588		
Volume Left	0	0	20	0		
Volume Right	0	1	0	0		
cSH	1700	1700	799	1700		
Volume to Capacity	0.34	0.17	0.02	0.35		
Queue Length 95th (ft)	0	0	2	0		
Control Delay (s)	0.0	0.0	0.9	0.0		
Lane LOS			A			
Approach Delay (s)	0.0		0.3			
Approach LOS						
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization		38.6%		ICU Level of Service		A
Analysis Period (min)		15				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.98			0.98			0.99	
Flt Protected		0.99			0.97			1.00			1.00	
Satd. Flow (prot)		1827			1769			1827			1849	
Flt Permitted		0.90			0.82			1.00			1.00	
Satd. Flow (perm)		1677			1496			1825			1844	
Volume (vph)	20	45	2	106	46	24	2	636	88	4	587	33
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	49	2	115	50	26	2	691	96	4	638	36
RTOR Reduction (vph)	0	2	0	0	9	0	0	6	0	0	2	0
Lane Group Flow (vph)	0	71	0	0	182	0	0	783	0	0	676	0
Confl. Peds. (#/hr)			2	2					3	3		
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		12.7			12.7			47.6			47.6	
Effective Green, g (s)		12.7			12.7			47.6			47.6	
Actuated g/C Ratio		0.19			0.19			0.70			0.70	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		312			278			1272			1285	
v/s Ratio Prot												
v/s Ratio Perm		0.04			0.12			0.43			0.37	
v/c Ratio		0.23			0.65			0.62			0.53	
Uniform Delay, d1		23.6			25.8			5.5			5.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.4			5.5			2.2			1.5	
Delay (s)		24.0			31.2			7.7			6.5	
Level of Service		C			C			A			A	
Approach Delay (s)		24.0			31.2			7.7			6.5	
Approach LOS		C			C			A			A	
Intersection Summary												
HCM Average Control Delay			10.5			HCM Level of Service				B		
HCM Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			68.3			Sum of lost time (s)			8.0			
Intersection Capacity Utilization			63.3%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1856		1770	1863
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	1856		1770	1863
Volume (vph)	26	49	577	13	31	599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	53	627	14	34	651
RTOR Reduction (vph)	0	50	0	0	0	0
Lane Group Flow (vph)	28	3	641	0	34	651
Confl. Peds. (#/hr)				1	1	
Turn Type	Perm			Prot		
Protected Phases	8		6		5	2
Permitted Phases	8					
Actuated Green, G (s)	4.5	4.5	74.3		7.2	85.5
Effective Green, g (s)	5.5	5.5	75.3		7.2	86.5
Actuated g/C Ratio	0.06	0.06	0.75		0.07	0.86
Clearance Time (s)	5.0	5.0	5.0		4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	97	87	1398		127	1611
v/s Ratio Prot	c0.02		c0.35		0.02	c0.35
v/s Ratio Perm		0.00				
v/c Ratio	0.29	0.03	0.46		0.27	0.40
Uniform Delay, d1	45.4	44.7	4.7		43.9	1.4
Progression Factor	1.00	1.00	1.17		1.00	1.00
Incremental Delay, d2	1.6	0.2	1.0		1.1	0.8
Delay (s)	47.0	44.9	6.5		45.0	2.2
Level of Service	D	D	A		D	A
Approach Delay (s)	45.6		6.5			4.3
Approach LOS	D		A			A
Intersection Summary						
HCM Average Control Delay			7.7	HCM Level of Service		A
HCM Volume to Capacity ratio			0.44			
Actuated Cycle Length (s)			100.0	Sum of lost time (s)		8.0
Intersection Capacity Utilization			44.0%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	⇄			⇄			⇄			⇄		
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Volume (veh/h)	32	0	55	2	0	1	29	609	1	1	577	56
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	35	0	60	2	0	1	32	662	1	1	627	61
Pedestrians				2			1					
Lane Width (ft)				12.0			12.0					
Walking Speed (ft/s)				4.0			4.0					
Percent Blockage				0			0					
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)							998			604		
pX, platoon unblocked	0.96	0.96	0.93	0.96	0.96	0.93	0.93				0.93	
vC, conflicting volume	1386	1388	659	1448	1418	664	688				665	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1295	1297	634	1359	1328	640	665				640	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	73	100	87	98	100	100	96				100	
cM capacity (veh/h)	130	150	446	102	144	442	861				877	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	95	3	695	689								
Volume Left	35	2	32	1								
Volume Right	60	1	1	61								
cSH	236	137	861	877								
Volume to Capacity	0.40	0.02	0.04	0.00								
Queue Length 95th (ft)	46	2	3	0								
Control Delay (s)	30.2	32.0	1.0	0.0								
Lane LOS	D	D	A	A								
Approach Delay (s)	30.2	32.0	1.0	0.0								
Approach LOS	D	D										
Intersection Summary												
Average Delay				2.5								
Intersection Capacity Utilization				67.0%	ICU Level of Service			C				
Analysis Period (min)				15								

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.96		1.00	1.00	0.97	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1725		1768	1863	1796	
Flt Permitted	0.97		0.34	1.00	1.00	
Satd. Flow (perm)	1725		635	1863	1796	
Volume (vph)	101	46	68	535	513	152
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	110	50	74	582	558	165
RTOR Reduction (vph)	19	0	0	0	7	0
Lane Group Flow (vph)	141	0	74	582	716	0
Confl. Peds. (#/hr)			1		1	
Turn Type			Perm			
Protected Phases	8			6	2	
Permitted Phases			6			
Actuated Green, G (s)	11.9		78.1	78.1	78.1	
Effective Green, g (s)	12.9		79.1	79.1	79.1	
Actuated g/C Ratio	0.13		0.79	0.79	0.79	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	223		502	1474	1421	
v/s Ratio Prot	c0.08			0.31	c0.40	
v/s Ratio Perm			0.12			
v/c Ratio	0.63		0.15	0.39	0.50	
Uniform Delay, d1	41.3		2.5	3.2	3.6	
Progression Factor	1.06		0.36	0.40	1.54	
Incremental Delay, d2	5.6		0.5	0.7	1.2	
Delay (s)	49.3		1.4	1.9	6.8	
Level of Service	D		A	A	A	
Approach Delay (s)	49.3			1.9	6.8	
Approach LOS	D			A	A	
Intersection Summary						
HCM Average Control Delay		9.1		HCM Level of Service		A
HCM Volume to Capacity ratio		0.52				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		60.5%		ICU Level of Service		B
Analysis Period (min)		15				

c Critical Lane Group

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		0.99	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3499		1754	3539	1770	1583
Flt Permitted	1.00		0.26	1.00	0.95	1.00
Satd. Flow (perm)	3499		484	3539	1770	1583
Volume (vph)	913	51	258	734	41	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	992	55	280	798	45	21
RTOR Reduction (vph)	3	0	0	0	0	19
Lane Group Flow (vph)	1044	0	280	798	45	2
Confl. Peds. (#/hr)		10	10		5	1
Turn Type			Perm			Prot
Protected Phases	6			2	8	8
Permitted Phases			2	2		
Actuated Green, G (s)	82.0		82.0	82.0	7.0	7.0
Effective Green, g (s)	83.0		83.0	83.0	9.0	9.0
Actuated g/C Ratio	0.83		0.83	0.83	0.09	0.09
Clearance Time (s)	5.0		5.0	5.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2904		402	2937	159	142
v/s Ratio Prot	0.30			0.23	c0.03	0.00
v/s Ratio Perm			c0.58			
v/c Ratio	0.36		0.70	0.27	0.28	0.01
Uniform Delay, d1	2.1		3.4	1.9	42.5	41.5
Progression Factor	1.00		1.04	0.40	1.00	1.00
Incremental Delay, d2	0.3		9.2	0.2	1.0	0.0
Delay (s)	2.4		12.8	1.0	43.5	41.5
Level of Service	A		B	A	D	D
Approach Delay (s)	2.4			4.0	42.8	
Approach LOS	A			A	D	
Intersection Summary						
HCM Average Control Delay		4.4		HCM Level of Service		A
HCM Volume to Capacity ratio		0.66				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		57.2%		ICU Level of Service		B
Analysis Period (min)		15				
c Critical Lane Group						

	↖	→	←	↗	↘	
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	63	875	783	34	48	129
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	68	951	851	37	52	140
Pedestrians		3			27	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		0			2	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		137	301			
pX, platoon unblocked					0.93	
vC, conflicting volume	915				1509	474
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	915				1471	474
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	91				46	73
cM capacity (veh/h)	724				97	523
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	386	634	567	321	192	
Volume Left	68	0	0	0	52	
Volume Right	0	0	0	37	140	
cSH	724	1700	1700	1700	239	
Volume to Capacity	0.09	0.37	0.33	0.19	0.81	
Queue Length 95th (ft)	8	0	0	0	152	
Control Delay (s)	2.9	0.0	0.0	0.0	62.4	
Lane LOS	A				F	
Approach Delay (s)	1.1		0.0		62.4	
Approach LOS					F	
Intersection Summary						
Average Delay	6.2					
Intersection Capacity Utilization	69.9%		ICU Level of Service		C	
Analysis Period (min)	15					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔			↔	↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	0.95		1.00		0.95	0.95			1.00	
Frpb, ped/bikes		1.00	0.98		1.00		1.00	0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	
Frt		1.00	0.85		0.99		1.00	0.99			0.90	
Flt Protected		0.99	1.00		1.00		0.95	0.96			0.99	
Satd. Flow (prot)		1755	1478		1841		1681	1667			1648	
Flt Permitted		0.91	1.00		1.00		0.95	0.96			0.99	
Satd. Flow (perm)		1599	1478		1841		1681	1667			1648	
Volume (vph)	44	327	585	0	421	23	390	17	14	13	11	66
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	355	636	0	458	25	424	18	15	14	12	72
RTOR Reduction (vph)	0	0	277	0	1	0	0	3	0	0	65	0
Lane Group Flow (vph)	0	403	359	0	462	0	236	218	0	0	33	0
Confl. Peds. (#/hr)	19		11	11		19	1		24	24		1
Turn Type	Perm		Perm				Split			Split		
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2		2									
Actuated Green, G (s)		55.5	55.5		55.5		18.6	18.6			6.9	
Effective Green, g (s)		56.5	56.5		56.5		21.6	21.6			9.9	
Actuated g/C Ratio		0.56	0.56		0.56		0.22	0.22			0.10	
Clearance Time (s)		5.0	5.0		5.0		7.0	7.0			7.0	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		903	835		1040		363	360			163	
v/s Ratio Prot					c0.26		c0.14	0.13			c0.02	
v/s Ratio Perm		0.25	0.24									
v/c Ratio		0.45	0.43		0.46		0.65	0.61			0.20	
Uniform Delay, d1		12.7	12.5		12.8		35.8	35.4			41.4	
Progression Factor		0.91	1.03		0.51		1.00	1.00			1.00	
Incremental Delay, d2		1.5	1.6		1.1		4.1	2.9			0.6	
Delay (s)		13.0	14.4		7.7		39.9	38.2			42.0	
Level of Service		B	B		A		D	D			D	
Approach Delay (s)		13.9			7.7		39.1				42.0	
Approach LOS		B			A		D				D	
Intersection Summary												
HCM Average Control Delay			19.3			HCM Level of Service				B		
HCM Volume to Capacity ratio			0.48									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			84.0%			ICU Level of Service			E			
Analysis Period (min)			15									

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←↑↑	←↑↑	←↑↑	←↑↑	←↑↑	←↑↑	←↑↑	←↑↑	←↑↑	←↑↑	←↑↑	←↑↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor		0.95		1.00	1.00	1.00		0.95		1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Frt		0.97		1.00	1.00	0.85		0.96		1.00	0.99	
Flt Protected		1.00		0.95	1.00	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		3354		1761	1863	1558		3355		1770	1843	
Flt Permitted		0.88		0.25	1.00	1.00		1.00		0.95	1.00	
Satd. Flow (perm)		2955		463	1863	1558		3355		1770	1843	
Volume (vph)	31	234	70	238	343	153	61	470	217	131	411	27
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	254	76	259	373	166	66	511	236	142	447	29
RTOR Reduction (vph)	0	24	0	0	0	113	0	44	0	0	2	0
Lane Group Flow (vph)	0	340	0	259	373	53	0	769	0	142	474	0
Confl. Peds. (#/hr)	4		16	16			4	1		5	5	1
Turn Type	Perm			pm+pt			Perm	Split		Split		
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases	4			8	8	8						
Actuated Green, G (s)		13.0		30.0	30.0	30.0		34.0		18.0	18.0	
Effective Green, g (s)		15.0		32.0	32.0	32.0		36.0		20.0	20.0	
Actuated g/C Ratio		0.15		0.32	0.32	0.32		0.36		0.20	0.20	
Clearance Time (s)		6.0		4.0	6.0	6.0		6.0		6.0	6.0	
Lane Grp Cap (vph)		443		317	596	499		1208		354	369	
v/s Ratio Prot				c0.11	0.20			c0.23		0.08	c0.26	
v/s Ratio Perm		0.12		c0.16		0.03						
v/c Ratio		0.77		0.82	0.63	0.11		0.64		0.40	1.28	
Uniform Delay, d1		40.8		27.8	28.9	23.9		26.6		34.8	40.0	
Progression Factor		1.07		1.00	1.00	1.00		1.00		1.07	1.07	
Incremental Delay, d2		10.4		20.3	4.9	0.4		2.6		3.1	145.5	
Delay (s)		53.9		48.1	33.8	24.4		29.1		40.4	188.4	
Level of Service		D		D	C	C		C		D	F	
Approach Delay (s)		53.9			36.5			29.1			154.4	
Approach LOS		D			D			C			F	
Intersection Summary												
HCM Average Control Delay		64.7										
HCM Volume to Capacity ratio		0.84										
Actuated Cycle Length (s)		100.0							12.0			
Intersection Capacity Utilization		99.1%							F			
Analysis Period (min)		15										
c Critical Lane Group												

	EBL	EBT	WBT	WBR	SBL	SBR
Movement						
Lane Configurations		↑↑	↑↑		↑	
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	584	723	0	11	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	635	786	0	12	10
Pedestrians		3			31	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		0			3	
Right turn flare (veh)						
Median type					None	
Median storage veh						
Upstream signal (ft)		709				
pX, platoon unblocked						
vC, conflicting volume	817				1134	427
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	817				1134	427
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				94	98
cM capacity (veh/h)	786				191	560
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	317	317	393	393	22	
Volume Left	0	0	0	0	12	
Volume Right	0	0	0	0	10	
cSH	1700	1700	1700	1700	272	
Volume to Capacity	0.19	0.19	0.23	0.23	0.08	
Queue Length 95th (ft)	0	0	0	0	6	
Control Delay (s)	0.0	0.0	0.0	0.0	19.4	
Lane LOS					C	
Approach Delay (s)	0.0		0.0		19.4	
Approach LOS					C	
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			30.9%		ICU Level of Service	A
Analysis Period (min)			15			

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↓			↑↓
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	6	610	2	9	494
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	7	663	2	10	537
Pedestrians	1					1
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			272			
pX, platoon unblocked						
vC, conflicting volume	953	335			666	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	953	335			666	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			99	
cM capacity (veh/h)	254	680			918	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	8	442	223	189	358	
Volume Left	1	0	0	10	0	
Volume Right	7	0	2	0	0	
cSH	537	1700	1700	918	1700	
Volume to Capacity	0.01	0.26	0.13	0.01	0.21	
Queue Length 95th (ft)	1	0	0	1	0	
Control Delay (s)	11.8	0.0	0.0	0.6	0.0	
Lane LOS	B			A		
Approach Delay (s)	11.8	0.0		0.2		
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		30.4%		ICU Level of Service	A	
Analysis Period (min)		15				

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	623	4	10	570
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	677	4	11	620
Pedestrians	2					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			630			1297
pX, platoon unblocked						
vC, conflicting volume	1013	343			684	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1013	343			684	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	232	653			906	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2		
Volume Total	451	230	217	413		
Volume Left	0	0	11	0		
Volume Right	0	4	0	0		
cSH	1700	1700	906	1700		
Volume to Capacity	0.27	0.14	0.01	0.24		
Queue Length 95th (ft)	0	0	1	0		
Control Delay (s)	0.0	0.0	0.6	0.0		
Lane LOS			A			
Approach Delay (s)	0.0		0.2			
Approach LOS						
Intersection Summary						
Average Delay		0.1				
Intersection Capacity Utilization		26.2%		ICU Level of Service		A
Analysis Period (min)		15				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	⇕				⇕			⇕			⇕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.98			0.99			0.98	
Flt Protected		0.97			0.97			1.00			1.00	
Satd. Flow (prot)		1809			1762			1838			1818	
Flt Permitted		0.82			0.81			1.00			0.98	
Satd. Flow (perm)		1527			1473			1837			1791	
Volume (vph)	29	24	1	101	37	29	1	713	67	13	561	120
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	26	1	110	40	32	1	775	73	14	610	130
RTOR Reduction (vph)	0	1	0	0	11	0	0	4	0	0	9	0
Lane Group Flow (vph)	0	58	0	0	171	0	0	845	0	0	745	0
Confl. Peds. (#/hr)			1	1					1	1		
Turn Type	Perm		Perm		Perm		Perm		Perm		Perm	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		12.5			12.5			48.1			48.1	
Effective Green, g (s)		12.5			12.5			48.1			48.1	
Actuated g/C Ratio		0.18			0.18			0.70			0.70	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		278			268			1288			1256	
v/s Ratio Prot												
v/s Ratio Perm		0.04			0.12			0.46			0.42	
v/c Ratio		0.21			0.64			0.66			0.59	
Uniform Delay, d1		23.8			25.9			5.7			5.2	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.4			4.9			2.6			2.1	
Delay (s)		24.2			30.8			8.3			7.3	
Level of Service		C			C			A			A	
Approach Delay (s)		24.2			30.8			8.3			7.3	
Approach LOS		C			C			A			A	
Intersection Summary												
HCM Average Control Delay		10.6			HCM Level of Service			B				
HCM Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		68.6			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		65.8%			ICU Level of Service			C				
Analysis Period (min)		15										

c Critical Lane Group

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1857		1770	1863
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	1857		1770	1863
Volume (vph)	23	29	735	14	29	619
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	32	799	15	32	673
RTOR Reduction (vph)	0	31	0	0	0	0
Lane Group Flow (vph)	25	1	814	0	32	673
Confl. Peds. (#/hr)				2		2
Turn Type	Perm				Prot	
Protected Phases	8		6		5	2
Permitted Phases		8				
Actuated Green, G (s)	3.0	3.0	75.8		7.2	87.0
Effective Green, g (s)	4.0	4.0	76.8		7.2	88.0
Actuated g/C Ratio	0.04	0.04	0.77		0.07	0.88
Clearance Time (s)	5.0	5.0	5.0		4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	71	63	1426		127	1639
v/s Ratio Prot	c0.01		c0.44		0.02	c0.36
v/s Ratio Perm		0.00				
v/c Ratio	0.35	0.02	0.57		0.25	0.41
Uniform Delay, d1	46.7	46.1	4.8		43.9	1.1
Progression Factor	1.00	1.00	0.97		1.00	1.00
Incremental Delay, d2	3.0	0.1	1.6		1.0	0.8
Delay (s)	49.7	46.2	6.2		44.9	1.9
Level of Service	D	D	A		D	A
Approach Delay (s)	47.8		6.2			3.8
Approach LOS	D		A			A
Intersection Summary						
HCM Average Control Delay			6.7		HCM Level of Service	A
HCM Volume to Capacity ratio			0.53			
Actuated Cycle Length (s)			100.0		Sum of lost time (s)	8.0
Intersection Capacity Utilization			52.0%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	⇕											
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Volume (veh/h)	37	0	24	2	0	1	36	711	3	1	606	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	0	26	2	0	1	39	773	3	1	659	38
Pedestrians								2				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								0				
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)								998			604	
pX, platoon unblocked	0.93	0.93	0.94	0.93	0.93	0.90	0.94			0.90		
vC, conflicting volume	1534	1534	680	1561	1552	774	697			776		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1473	1473	659	1502	1492	751	677			752		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	57	100	94	97	100	100	95			100		
cM capacity (veh/h)	94	113	435	85	110	372	859			775		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	66	3	815	698								
Volume Left	40	2	39	1								
Volume Right	26	1	3	38								
cSH	136	114	859	775								
Volume to Capacity	0.49	0.03	0.05	0.00								
Queue Length 95th (ft)	57	2	4	0								
Control Delay (s)	54.2	37.5	1.2	0.0								
Lane LOS	F	E	A	A								
Approach Delay (s)	54.2	37.5	1.2	0.0								
Approach LOS	F	E										
Intersection Summary												
Average Delay				3.0								
Intersection Capacity Utilization				77.0%	ICU Level of Service			D				
Analysis Period (min)				15								

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.95		1.00	1.00	0.98	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1714		1764	1863	1828	
Flt Permitted	0.97		0.38	1.00	1.00	
Satd. Flow (perm)	1714		707	1863	1828	
Volume (vph)	56	34	49	651	547	71
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	61	37	53	708	595	77
RTOR Reduction (vph)	27	0	0	0	2	0
Lane Group Flow (vph)	71	0	53	708	670	0
Confl. Peds. (#/hr)			3			3
Turn Type			Perm			
Protected Phases	8			6	2	
Permitted Phases			6			
Actuated Green, G (s)	7.6		82.4	82.4	82.4	
Effective Green, g (s)	8.6		83.4	83.4	83.4	
Actuated g/C Ratio	0.09		0.83	0.83	0.83	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	147		590	1554	1525	
v/s Ratio Prot	c0.04			c0.38	0.37	
v/s Ratio Perm			0.08			
v/c Ratio	0.49		0.09	0.46	0.44	
Uniform Delay, d1	43.6		1.5	2.2	2.2	
Progression Factor	1.10		0.33	0.69	1.54	
Incremental Delay, d2	2.5		0.2	0.8	0.9	
Delay (s)	50.2		0.7	2.3	4.2	
Level of Service	D		A	A	A	
Approach Delay (s)	50.2			2.2	4.2	
Approach LOS	D			A	A	
Intersection Summary						
HCM Average Control Delay		6.2		HCM Level of Service		A
HCM Volume to Capacity ratio		0.46				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		53.2%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

	→	↖	↗	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↖	↖
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		0.99	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3511		1758	3539	1770	1583
Flt Permitted	1.00		0.28	1.00	0.95	1.00
Satd. Flow (perm)	3511		524	3539	1770	1583
Volume (vph)	877	38	294	746	7	10
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	953	41	320	811	8	11
RTOR Reduction (vph)	2	0	0	0	0	10
Lane Group Flow (vph)	992	0	320	811	8	1
Confl. Peds. (#/hr)		6	6		1	2
Turn Type			Perm		Prot	
Protected Phases	6			2	8	8
Permitted Phases			2	2		
Actuated Green, G (s)	85.4		85.4	85.4	3.6	3.6
Effective Green, g (s)	86.4		86.4	86.4	5.6	5.6
Actuated g/C Ratio	0.86		0.86	0.86	0.06	0.06
Clearance Time (s)	5.0		5.0	5.0	8.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	3034		453	3058	99	89
v/s Ratio Prot	0.28			0.23	c0.00	0.00
v/s Ratio Perm			c0.61			
v/c Ratio	0.33		0.71	0.27	0.08	0.01
Uniform Delay, d1	1.3		2.4	1.2	44.8	44.6
Progression Factor	1.00		1.37	0.32	1.00	1.00
Incremental Delay, d2	0.3		8.2	0.2	0.4	0.0
Delay (s)	1.6		11.4	0.6	45.1	44.6
Level of Service	A		B	A	D	D
Approach Delay (s)	1.6			3.6	44.8	
Approach LOS	A			A	D	
Intersection Summary						
HCM Average Control Delay			3.1		HCM Level of Service	A
HCM Volume to Capacity ratio			0.67			
Actuated Cycle Length (s)			100.0		Sum of lost time (s)	8.0
Intersection Capacity Utilization			57.9%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

	↗	→	←	↖	↘	↙
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖↗	↖↗	↖↗	↖↗	↖↗	↖↗
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	36	837	979	13	45	62
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	39	910	1064	14	49	67
Pedestrians		7			23	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		1			2	
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)		137	301			
pX, platoon unblocked					0.95	
vC, conflicting volume	1101				1627	569
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1101				1607	569
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				41	85
cM capacity (veh/h)	618				83	454
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	342	607	709	369	116	
Volume Left	39	0	0	0	49	
Volume Right	0	0	0	14	67	
cSH	618	1700	1700	1700	158	
Volume to Capacity	0.06	0.36	0.42	0.22	0.73	
Queue Length 95th (ft)	5	0	0	0	112	
Control Delay (s)	2.0	0.0	0.0	0.0	73.4	
Lane LOS	A				F	
Approach Delay (s)	0.7		0.0		73.4	
Approach LOS					F	
Intersection Summary						
Average Delay		4.3				
Intersection Capacity Utilization		64.3%		ICU Level of Service		C
Analysis Period (min)		15				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↗		↖	↗	↖	↔			↔	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	0.95		1.00		0.95	0.95			1.00	
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00			1.00	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	
Frt		1.00	0.85		1.00		1.00	1.00			0.91	
Flt Protected		1.00	1.00		1.00		0.95	0.95			0.99	
Satd. Flow (prot)		1759	1477		1854		1681	1681			1669	
Flt Permitted		0.98	1.00		1.00		0.95	0.95			0.99	
Satd. Flow (perm)		1719	1477		1854		1681	1681			1669	
Volume (vph)	13	318	551	0	520	12	435	7	5	11	5	37
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	346	599	0	565	13	473	8	5	12	5	40
RTOR Reduction (vph)	0	0	258	0	0	0	0	1	0	0	36	0
Lane Group Flow (vph)	0	369	332	0	578	0	249	236	0	0	21	0
Confl. Peds. (#/hr)	15		11	11		15			20	20		
Turn Type	Perm		Perm				Split			Split		
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2		2									
Actuated Green, G (s)		55.2	55.2		55.2		19.5	19.5			6.3	
Effective Green, g (s)		56.2	56.2		56.2		22.5	22.5			9.3	
Actuated g/C Ratio		0.56	0.56		0.56		0.22	0.22			0.09	
Clearance Time (s)		5.0	5.0		5.0		7.0	7.0			7.0	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		966	830		1042		378	378			155	
v/s Ratio Prot					c0.31		c0.15	0.14			c0.01	
v/s Ratio Perm		0.21	0.22									
v/c Ratio		0.38	0.40		0.55		0.66	0.62			0.13	
Uniform Delay, d1		12.2	12.4		13.9		35.3	34.9			41.7	
Progression Factor		0.92	0.99		0.70		1.00	1.00			1.00	
Incremental Delay, d2		1.1	1.4		1.2		4.1	3.2			0.4	
Delay (s)		12.3	13.7		11.0		39.4	38.2			42.0	
Level of Service		B	B		B		D	D			D	
Approach Delay (s)		13.1			11.0			38.8			42.0	
Approach LOS		B			B			D			D	
Intersection Summary												
HCM Average Control Delay			19.3			HCM Level of Service				B		
HCM Volume to Capacity ratio			0.54									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			65.1%			ICU Level of Service			C			
Analysis Period (min)			15									

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔		↔	↑	↔		↔↔		↔	↔	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor		0.95		1.00	1.00	1.00		0.95		1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Frt		0.98		1.00	1.00	0.85		0.96		1.00	0.99	
Flt Protected		1.00		0.95	1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)		3431		1763	1863	1559		3379		1770	1847	
Flt Permitted		0.88		0.25	1.00	1.00		0.99		0.95	1.00	
Satd. Flow (perm)		3026		464	1863	1559		3379		1770	1847	
Volume (vph)	19	272	43	192	443	196	93	493	183	136	429	22
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	296	47	209	482	213	101	536	199	148	466	24
RTOR Reduction (vph)	0	12	0	0	0	145	0	29	0	0	2	0
Lane Group Flow (vph)	0	352	0	209	482	68	0	807	0	148	488	0
Confl. Peds. (#/hr)	3		12	12			3	1		5	5	1
Turn Type	Perm			pm+pt			Perm	Split		Split		
Protected Phases		4		3	8			2	2		6	6
Permitted Phases	4			8	8	8						
Actuated Green, G (s)		13.0		30.0	30.0	30.0		34.0		18.0	18.0	
Effective Green, g (s)		15.0		32.0	32.0	32.0		36.0		20.0	20.0	
Actuated g/C Ratio		0.15		0.32	0.32	0.32		0.36		0.20	0.20	
Clearance Time (s)		6.0		4.0	6.0	6.0		6.0		6.0	6.0	
Lane Grp Cap (vph)		454		317	596	499		1216		354	369	
v/s Ratio Prot				0.09	c0.26			c0.24		0.08	c0.26	
v/s Ratio Perm		0.12		0.13		0.04						
v/c Ratio		0.78		0.66	0.81	0.14		0.66		0.42	1.32	
Uniform Delay, d1		40.9		26.9	31.2	24.2		26.9		34.9	40.0	
Progression Factor		1.14		1.00	1.00	1.00		1.00		1.08	1.06	
Incremental Delay, d2		11.4		10.3	11.3	0.6		2.9		3.4	162.4	
Delay (s)		57.9		37.2	42.5	24.7		29.8		41.1	204.7	
Level of Service		E		D	D	C		C		D	F	
Approach Delay (s)		57.9			37.1			29.8			166.8	
Approach LOS		E			D			C			F	
Intersection Summary												
HCM Average Control Delay			67.8			HCM Level of Service			E			
HCM Volume to Capacity ratio			0.87									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			99.8%			ICU Level of Service			F			
Analysis Period (min)				15								
c Critical Lane Group												

	↖	→	←	↗	↘	↙
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↓	
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	591	831	0	5	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	642	903	0	5	18
Pedestrians		10	11		23	
Lane Width (ft)		12.0	12.0		12.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		2	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		709				
pX, platoon unblocked					0.96	
vC, conflicting volume	926				1258	485
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	926				1231	485
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				97	96
cM capacity (veh/h)	720				159	514
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	321	321	452	452	24	
Volume Left	0	0	0	0	5	
Volume Right	0	0	0	0	18	
cSH	1700	1700	1700	1700	341	
Volume to Capacity	0.19	0.19	0.27	0.27	0.07	
Queue Length 95th (ft)	0	0	0	0	6	
Control Delay (s)	0.0	0.0	0.0	0.0	16.4	
Lane LOS					C	
Approach Delay (s)	0.0		0.0		16.4	
Approach LOS					C	
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		35.8%		ICU Level of Service		A
Analysis Period (min)		15				

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	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBR
Lane Configurations			↑↑		↑↑	↑↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	702	3	10	569
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	763	3	11	618
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			630			1297
pX, platoon unblocked	0.93	0.93			0.93	
vC, conflicting volume	1096	383			766	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1031	268			678	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	211	682			849	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2		
Volume Total	509	258	217	412		
Volume Left	0	0	11	0		
Volume Right	0	3	0	0		
cSH	1700	1700	849	1700		
Volume to Capacity	0.30	0.15	0.01	0.24		
Queue Length 95th (ft)	0	0	1	0		
Control Delay (s)	0.0	0.0	0.6	0.0		
Lane LOS			A			
Approach Delay (s)	0.0		0.2			
Approach LOS						
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			26.2%		ICU Level of Service	A
Analysis Period (min)			15			

Appendix D

Background Future Levels of Service

	↗	→	↘	↖	←	↗	↖	↑	↘	↖	↓	↗
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔			↔			↔			↔	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.99			0.99			1.00	
Flt Protected		0.98			0.96			1.00			1.00	
Satd. Flow (prot)		1824			1764			1830			1853	
Flt Permitted		0.88			0.70			1.00			0.93	
Satd. Flow (perm)		1631			1288			1825			1735	
Volume (vph)	39	71	2	188	29	19	5	848	105	37	815	21
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	77	2	204	32	21	5	922	114	40	886	23
RTOR Reduction (vph)	0	1	0	0	5	0	0	6	0	0	1	0
Lane Group Flow (vph)	0	120	0	0	252	0	0	1035	0	0	948	0
Confl. Peds. (#/hr)	3		1	1		3			3	3		
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		15.3			15.3			46.0			46.0	
Effective Green, g (s)		15.3			15.3			46.0			46.0	
Actuated g/C Ratio		0.22			0.22			0.66			0.66	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		360			284			1211			1152	
v/s Ratio Prot												
v/s Ratio Perm		0.07			c0.20			c0.57			0.55	
v/c Ratio		0.33			0.89			0.85			0.82	
Uniform Delay, d1		22.7			26.2			9.1			8.6	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			26.6			7.8			6.7	
Delay (s)		23.3			52.8			16.9			15.3	
Level of Service		C			D			B			B	
Approach Delay (s)		23.3			52.8			16.9			15.3	
Approach LOS		C			D			B			B	
Intersection Summary												
HCM Average Control Delay		20.5					HCM Level of Service				C	
HCM Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		69.3					Sum of lost time (s)			8.0		
Intersection Capacity Utilization		96.8%					ICU Level of Service			F		
Analysis Period (min)		15										

c Critical Lane Group

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↖	↑	↗	↘	↓
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1852		1770	1863
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	1852		1770	1863
Volume (vph)	28	22	936	37	73	950
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	24	1017	40	79	1033
RTOR Reduction (vph)	0	22	1	0	0	0
Lane Group Flow (vph)	30	2	1056	0	79	1033
Confl. Peds. (#/hr)				1	1	
Turn Type	Perm				Prot	
Protected Phases	8		6		5	2
Permitted Phases		8				
Actuated Green, G (s)	3.0	3.0	35.8		7.2	47.0
Effective Green, g (s)	4.0	4.0	36.8		7.2	48.0
Actuated g/C Ratio	0.07	0.07	0.61		0.12	0.80
Clearance Time (s)	5.0	5.0	5.0		4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	118	106	1136		212	1490
v/s Ratio Prot	c0.02		c0.57		0.04	c0.55
v/s Ratio Perm		0.00				
v/c Ratio	0.25	0.02	0.93		0.37	0.69
Uniform Delay, d1	26.6	26.2	10.4		24.3	2.7
Progression Factor	1.00	1.00	1.10		1.00	1.00
Incremental Delay, d2	1.1	0.1	12.6		1.1	2.7
Delay (s)	27.7	26.2	24.1		25.4	5.4
Level of Service	C	C	C		C	A
Approach Delay (s)	27.1		24.1			6.8
Approach LOS	C		C			A
Intersection Summary						
HCM Average Control Delay			15.5		HCM Level of Service	B
HCM Volume to Capacity ratio			0.81			
Actuated Cycle Length (s)			60.0		Sum of lost time (s)	8.0
Intersection Capacity Utilization			73.2%		ICU Level of Service	D
Analysis Period (min)			15			

c Critical Lane Group

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	⇕			⇕			⇕			⇕		
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Volume (veh/h)	36	2	128	6	5	8	19	938	2	5	898	73
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	39	2	139	7	5	9	21	1020	2	5	976	79
Pedestrians	1											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	4.0											
Percent Blockage	0											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)							674			604		
pX, platoon unblocked	0.59	0.59	0.27	0.59	0.59	0.23	0.27				0.23	
vC, conflicting volume	2100	2091	1016	2230	2129	1022	1055				1023	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1008	993	1058	1228	1058	1095	1205				1100	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	58	98	0	0	95	85	87				96	
cM capacity (veh/h)	93	121	74	0	111	59	156				144	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	180	21	1042	1061								
Volume Left	39	7	21	5								
Volume Right	139	9	2	79								
cSH	78	0	156	144								
Volume to Capacity	2.33	Err	0.13	0.04								
Queue Length 95th (ft)	422	Err	11	3								
Control Delay (s)	721.1	Err	10.9	3.2								
Lane LOS	F	F	B	A								
Approach Delay (s)	721.1	Err	10.9	3.2								
Approach LOS	F	F										
Intersection Summary												
Average Delay				Err								
Intersection Capacity Utilization				81.2%	ICU Level of Service			D				
Analysis Period (min)				15								

	↖	→	↗	↖	←	↖	↖	↑	↗	↘	↓	↙
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖			↖	↗
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	36	2	128	6	5	8	19	938	2	5	898	73
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	39	2	139	7	5	9	21	1020	2	5	976	79
Pedestrians					1							
Lane Width (ft)					12.0							
Walking Speed (ft/s)					4.0							
Percent Blockage					0							
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)								680			604	
pX, platoon unblocked	0.59	0.59	0.27	0.59	0.59	0.23	0.27			0.23		
vC, conflicting volume	2100	2091	1016	2230	2129	1022	1055			1023		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1008	993	1058	1227	1058	1095	1205			1100		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	58	98	0	0	95	85	87			96		
cM capacity (veh/h)	93	122	74	0	111	59	156			145		
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	41	139	12	9	1042	1061						
Volume Left	39	0	7	0	21	5						
Volume Right	0	139	0	9	2	79						
cSH	94	74	0	59	156	145						
Volume to Capacity	0.44	1.89	Err	0.15	0.13	0.04						
Queue Length 95th (ft)	46	310	Err	12	11	3						
Control Delay (s)	70.0	539.2	Err	75.9	10.9	3.2						
Lane LOS	F	F	F	F	B	A						
Approach Delay (s)	431.8		Err		10.9	3.2						
Approach LOS	F		F									
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			78.2%		ICU Level of Service					D		
Analysis Period (min)			15									

	EBL	EBR	NBL	NBT	SBT	SBR
Movement	↙	↘	↙	↘	↙	↘
Lane Configurations	↙	↘	↙	↘	↙	↘
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.94		1.00	1.00	0.97	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1703		1770	1863	1788	
Flt Permitted	0.97		0.10	1.00	1.00	
Satd. Flow (perm)	1703		190	1863	1788	
Volume (vph)	128	105	83	827	750	242
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	139	114	90	899	815	263
RTOR Reduction (vph)	55	0	0	0	16	0
Lane Group Flow (vph)	198	0	90	899	1062	0
Confl. Peds. (#/hr)	1		5		5	
Turn Type			Perm			
Protected Phases	8			6	2	
Permitted Phases			6			
Actuated Green, G (s)	11.7		38.3	38.3	38.3	
Effective Green, g (s)	12.7		39.3	39.3	39.3	
Actuated g/C Ratio	0.21		0.65	0.65	0.65	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	360		124	1220	1171	
v/s Ratio Prot	c0.12			0.48	c0.59	
v/s Ratio Perm			0.47			
v/c Ratio	0.55		0.73	0.74	0.91	
Uniform Delay, d1	21.1		6.8	6.9	8.8	
Progression Factor	1.00		2.13	2.24	0.89	
Incremental Delay, d2	1.7		13.7	1.6	9.8	
Delay (s)	22.8		28.2	17.1	17.6	
Level of Service	C		C	B	B	
Approach Delay (s)	22.8			18.1	17.6	
Approach LOS	C			B	B	
Intersection Summary						
HCM Average Control Delay		18.4		HCM Level of Service		B
HCM Volume to Capacity ratio		0.82				
Actuated Cycle Length (s)		60.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		83.7%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						

	→	↖	↗	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕↕	↕	↕	↕↕	↕	↕
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3531		1770	3539	1770	1583
Flt Permitted	1.00		0.12	1.00	0.95	1.00
Satd. Flow (perm)	3531		221	3539	1770	1583
Volume (vph)	1409	16	22	830	71	697
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1532	17	24	1011	77	758
RTOR Reduction (vph)	1	0	0	0	0	47
Lane Group Flow (vph)	1548	0	24	1011	77	711
Confl. Peds. (#/hr)		7	7		18	
Turn Type			Perm		Prot	
Protected Phases	6			2	8	8
Permitted Phases			2	2		
Actuated Green, G (s)	70.0		70.0	70.0	19.0	19.0
Effective Green, g (s)	71.0		71.0	71.0	21.0	21.0
Actuated g/C Ratio	0.71		0.71	0.71	0.21	0.21
Clearance Time (s)	5.0		5.0	5.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2507		157	2513	372	332
v/s Ratio Prot	c0.44			0.29	0.04	c0.45
v/s Ratio Perm			0.11			
v/c Ratio	0.62		0.15	0.40	0.21	2.14
Uniform Delay, d1	7.5		4.7	5.9	32.6	39.5
Progression Factor	1.00		1.16	1.48	1.00	1.00
Incremental Delay, d2	1.2		1.7	0.4	0.3	524.2
Delay (s)	8.6		7.2	9.1	32.9	563.7
Level of Service	A		A	A	C	F
Approach Delay (s)	8.6			9.0	514.8	
Approach LOS	A			A	F	
Intersection Summary						
HCM Average Control Delay		132.4		HCM Level of Service		F
HCM Volume to Capacity ratio		0.97				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		89.3%		ICU Level of Service		E
Analysis Period (min)		15				
c Critical Lane Group						



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	179	1927	873	56	51	78
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	195	2095	949	61	55	85
Pedestrians		10			40	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		1			3	
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)		137	301			
pX, platoon unblocked					0.76	
vC, conflicting volume	1050				2456	555
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1050				2596	555
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	69				0	81
cM capacity (veh/h)	637				10	456
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	893	1396	633	377	140	
Volume Left	195	0	0	0	55	
Volume Right	0	0	0	61	85	
cSH	637	1700	1700	1700	25	
Volume to Capacity	0.31	0.82	0.37	0.22	5.50	
Queue Length 95th (ft)	32	0	0	0	Err	
Control Delay (s)	8.2	0.0	0.0	0.0	Err	
Lane LOS	A				F	
Approach Delay (s)	3.2		0.0		Err	
Approach LOS					F	
Intersection Summary						
Average Delay		409.8				
Intersection Capacity Utilization		104.3%		ICU Level of Service	G	
Analysis Period (min)		15				

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↔	↔		↔		↔	↔			↔	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	0.95		1.00		0.95	0.95			1.00	
Flpb, ped/bikes		1.00	0.98		1.00		1.00	1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	
Frt		1.00	0.85		0.98		1.00	1.00			0.92	
Flt Protected		0.99	1.00		1.00		0.95	0.96			0.99	
Satd. Flow (prot)		1757	1478		1826		1681	1684			1679	
Flt Permitted		0.82	1.00		1.00		0.95	0.96			0.99	
Satd. Flow (perm)		1452	1478		1826		1681	1684			1679	
Volume (vph)	110	823	1225	0	313	40	531	14	5	25	29	85
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	895	1332	0	340	43	577	15	5	27	32	92
RTOR Reduction (vph)	0	0	468	0	4	0	0	1	0	0	58	0
Lane Group Flow (vph)	0	1015	864	0	379	0	300	296	0	0	93	0
Confl. Peds. (#/hr)	6		10	10		6	1		16	16		1
Turn Type	Perm		Perm				Split			Split		
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2		2									
Actuated Green, G (s)		51.6	51.6		51.6		19.1	19.1			10.3	
Effective Green, g (s)		52.6	52.6		52.6		22.1	22.1			13.3	
Actuated g/C Ratio		0.53	0.53		0.53		0.22	0.22			0.13	
Clearance Time (s)		5.0	5.0		5.0		7.0	7.0			7.0	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		764	777		960		372	372			223	
v/s Ratio Prot					0.21		0.18	0.18			0.06	
v/s Ratio Perm		0.70	0.58									
v/c Ratio		1.33	1.11		0.39		0.81	0.80			0.42	
Uniform Delay, d1		23.7	23.7		14.2		36.9	36.8			39.8	
Progression Factor		1.08	2.12		1.00		1.00	1.00			1.00	
Incremental Delay, d2		150.7	56.4		1.2		12.0	11.2			1.3	
Delay (s)		176.2	106.6		15.4		49.0	48.0			41.1	
Level of Service		F	F		B		D	D			D	
Approach Delay (s)		136.7			15.4			48.5			41.1	
Approach LOS		F			B			D			D	
Intersection Summary												
HCM Average Control Delay			104.1			HCM Level of Service				F		
HCM Volume to Capacity ratio			1.06									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			125.5%			ICU Level of Service			H			
Analysis Period (min)			15									
c Critical Lane Group												

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SSR
Movement												
Lane Configurations		↔↔		↔	↑	↔		↔↔		↔	↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor		0.95		1.00	1.00	1.00		0.95		1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00	1.00		1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Frt		0.99		1.00	1.00	0.85		0.96		1.00	0.99	
Flt Protected		1.00		0.95	1.00	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		3461		1770	1863	1583		3379		1770	1838	
Flt Permitted		0.94		0.12	1.00	1.00		1.00		0.95	1.00	
Satd. Flow (perm)		3256		219	1863	1583		3379		1770	1838	
Volume (vph)	23	747	83	127	227	109	71	802	307	386	466	36
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	812	90	138	247	118	77	872	334	420	507	39
RTOR Reduction (vph)	0	7	0	0	0	79	0	29	0	0	2	0
Lane Group Flow (vph)	0	920	0	138	247	39	0	1254	0	420	544	0
Confl. Peds. (#/hr)			21	21			7		2	2		7
Turn Type	Perm			pm+pt		Perm	Split			Split		
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases	4			8	8	8						
Actuated Green, G (s)		28.0		38.0	38.0	38.0		36.0		28.0	28.0	
Effective Green, g (s)		30.0		40.0	40.0	40.0		38.0		30.0	30.0	
Actuated g/C Ratio		0.25		0.33	0.33	0.33		0.32		0.25	0.25	
Clearance Time (s)		6.0		4.0	6.0	6.0		6.0		6.0	6.0	
Lane Grp Cap (vph)		814		151	621	528		1070		443	460	
v/s Ratio Prot				c0.05	0.13			c0.37		0.24	c0.30	
v/s Ratio Perm		c0.28		0.26		0.02						
v/c Ratio		1.13		0.91	0.40	0.07		1.17		0.95	1.18	
Uniform Delay, d1		45.0		36.2	30.7	27.3		41.0		44.2	45.0	
Progression Factor		1.00		1.00	1.00	1.00		1.00		0.88	0.89	
Incremental Delay, d2		74.0		53.3	1.9	0.3		87.4		22.2	94.7	
Delay (s)		119.0		89.4	32.6	27.6		128.4		61.3	134.8	
Level of Service		F		F	C	C		F		E	F	
Approach Delay (s)		119.0			47.0			128.4			102.9	
Approach LOS		F			D			F			F	
Intersection Summary												
HCM Average Control Delay			108.2									F
HCM Volume to Capacity ratio			1.15									
Actuated Cycle Length (s)			120.0							16.0		
Intersection Capacity Utilization			110.3%							H		
Analysis Period (min)			15									
c Critical Lane Group												

	↖	→	↗	↖	←	↖	↖	↖	↖	↖	↖	↖
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖		↖	↖	↖		↖	↖	↖	↖	↖
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00		0.95		1.00	1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	1.00		1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85		0.96		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1770	3464		1770	1863	1583		3379		1770	1838	
Flt Permitted	0.61	1.00		0.12	1.00	1.00		1.00		0.95	1.00	
Satd. Flow (perm)	1128	3464		219	1863	1583		3379		1770	1838	
Volume (vph)	23	747	83	127	227	109	71	802	307	386	466	36
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	812	90	138	247	118	77	872	334	420	507	39
RTOR Reduction (vph)	0	7	0	0	0	79	0	29	0	0	2	0
Lane Group Flow (vph)	25	895	0	138	247	39	0	1254	0	420	544	0
Confl. Peds. (#/hr)			21	21			7		2	2		7
Turn Type	Perm			pm+pt		Perm	Split			Split		
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases	4			8	8	8						
Actuated Green, G (s)	28.0	28.0		38.0	38.0	38.0		36.0		28.0	28.0	
Effective Green, g (s)	30.0	30.0		40.0	40.0	40.0		38.0		30.0	30.0	
Actuated g/C Ratio	0.25	0.25		0.33	0.33	0.33		0.32		0.25	0.25	
Clearance Time (s)	6.0	6.0		4.0	6.0	6.0		6.0		6.0	6.0	
Lane Grp Cap (vph)	282	866		151	621	528		1070		443	460	
v/s Ratio Prot		c0.26		c0.05	0.13			c0.37		0.24	c0.30	
v/s Ratio Perm	0.02			0.26		0.02						
v/c Ratio	0.09	1.03		0.91	0.40	0.07		1.17		0.95	1.18	
Uniform Delay, d1	34.5	45.0		35.9	30.7	27.3		41.0		44.2	45.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		0.88	0.89	
Incremental Delay, d2	0.6	39.6		53.3	1.9	0.3		87.4		22.2	94.7	
Delay (s)	35.1	84.6		89.2	32.6	27.6		128.4		61.3	134.8	
Level of Service	D	F		F	C	C		F		E	F	
Approach Delay (s)		83.3			47.0			128.4			102.9	
Approach LOS		F			D			F			F	
Intersection Summary												
HCM Average Control Delay		99.2								F		
HCM Volume to Capacity ratio		1.12										
Actuated Cycle Length (s)		120.0				Sum of lost time (s)		16.0				
Intersection Capacity Utilization		104.7%				ICU Level of Service		G				
Analysis Period (min)		15										
c Critical Lane Group												

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↔	↔		↔	↔
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	1368	452	0	14	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1487	491	0	15	7
Pedestrians		5	2		23	
Lane Width (ft)		12.0	12.0		12.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		0	0		2	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		709				
pX, platoon unblocked					0.78	
vC, conflicting volume	514				1260	274
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	514				1051	274
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				91	99
cM capacity (veh/h)	1027				170	707
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	743	743	246	246	22	
Volume Left	0	0	0	0	15	
Volume Right	0	0	0	0	7	
cSH	1700	1700	1700	1700	220	
Volume to Capacity	0.44	0.44	0.14	0.14	0.10	
Queue Length 95th (ft)	0	0	0	0	8	
Control Delay (s)	0.0	0.0	0.0	0.0	23.2	
Lane LOS					C	
Approach Delay (s)	0.0		0.0		23.2	
Approach LOS					C	
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			49.4%		ICU Level of Service	A
Analysis Period (min)			15			

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙		↑			↓
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	10	787	2	2	876
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	11	855	2	2	952
Pedestrians			1			
Lane Width (ft)			12.0			
Walking Speed (ft/s)			4.0			
Percent Blockage			0			
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			272			
pX, platoon unblocked	0.72	0.72			0.72	
vC, conflicting volume	1338	429			858	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1083	0			417	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	152	783			822	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	12	570	287	320	635	
Volume Left	1	0	0	2	0	
Volume Right	11	0	2	0	0	
cSH	569	1700	1700	822	1700	
Volume to Capacity	0.02	0.34	0.17	0.00	0.37	
Queue Length 95th (ft)	2	0	0	0	0	
Control Delay (s)	11.5	0.0	0.0	0.1	0.0	
Lane LOS	B			A		
Approach Delay (s)	11.5	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay		0.1				
Intersection Capacity Utilization		35.6%		ICU Level of Service	A	
Analysis Period (min)		15				

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	861	1	19	886
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	936	1	21	963
Pedestrians	1					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			630			1297
pX, platoon unblocked	0.76	0.76			0.76	
vC, conflicting volume	1460	469			938	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1293	0			609	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			97	
cM capacity (veh/h)	115	828			737	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2		
Volume Total	624	313	342	642		
Volume Left	0	0	21	0		
Volume Right	0	1	0	0		
cSH	1700	1700	737	1700		
Volume to Capacity	0.37	0.18	0.03	0.38		
Queue Length 95th (ft)	0	0	2	0		
Control Delay (s)	0.0	0.0	0.9	0.0		
Lane LOS			A			
Approach Delay (s)	0.0		0.3			
Approach LOS						
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			41.4%		ICU Level of Service	A
Analysis Period (min)			15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰	↱	↰	↱
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1863		1770	1863
Flt Permitted	0.95	1.00	1.00		0.24	1.00
Satd. Flow (perm)	1770	1583	1863		449	1863
Volume (vph)	6	5	954	1	2	986
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	5	1037	1	2	1072
RTOR Reduction (vph)	0	5	0	0	0	0
Lane Group Flow (vph)	7	0	1038	0	2	1072
Turn Type	Perm				Perm	
Protected Phases	8		2			6
Permitted Phases		8			6	
Actuated Green, G (s)	1.3	1.3	50.7		50.7	50.7
Effective Green, g (s)	1.3	1.3	50.7		50.7	50.7
Actuated g/C Ratio	0.02	0.02	0.85		0.85	0.85
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	38	34	1574		379	1574
v/s Ratio Prot	c0.00		0.56			c0.58
v/s Ratio Perm		0.00			0.00	
v/c Ratio	0.18	0.00	0.66		0.01	0.68
Uniform Delay, d1	28.8	28.7	1.6		0.7	1.7
Progression Factor	1.00	1.00	0.85		0.47	1.12
Incremental Delay, d2	2.3	0.0	1.5		0.0	2.1
Delay (s)	31.2	28.8	2.9		0.4	4.0
Level of Service	C	C	A		A	A
Approach Delay (s)	30.2		2.9			4.0
Approach LOS	C		A			A
Intersection Summary						
HCM Average Control Delay			3.6	HCM Level of Service		A
HCM Volume to Capacity ratio			0.67			
Actuated Cycle Length (s)			60.0	Sum of lost time (s)		8.0
Intersection Capacity Utilization			61.9%	ICU Level of Service		B
Analysis Period (min)			15			
c Critical Lane Group						

	↖	→	↗	↖	←	↖	↗	↑	↘	↙	↓	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔		↔	↔		↔	↔	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.98			0.98			0.99	
Flt Protected		0.99			0.97			1.00			1.00	
Satd. Flow (prot)		1827			1770			1826			1849	
Flt Permitted		0.90			0.82			1.00			1.00	
Satd. Flow (perm)		1664			1486			1825			1844	
Volume (vph)	22	49	2	114	50	26	2	673	95	4	644	36
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	53	2	124	54	28	2	732	103	4	700	39
RTOR Reduction (vph)	0	2	0	0	8	0	0	6	0	0	2	0
Lane Group Flow (vph)	0	77	0	0	198	0	0	831	0	0	741	0
Confl. Peds. (#/hr)			2	2					3	3		
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		13.0			13.0			47.0			47.0	
Effective Green, g (s)		13.0			13.0			47.0			47.0	
Actuated g/C Ratio		0.19			0.19			0.69			0.69	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		318			284			1261			1275	
v/s Ratio Prot												
v/s Ratio Perm		0.05			c0.13			c0.46			0.40	
v/c Ratio		0.24			0.70			0.66			0.58	
Uniform Delay, d1		23.3			25.7			6.0			5.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.4			7.2			2.7			1.9	
Delay (s)		23.7			32.9			8.7			7.4	
Level of Service		C			C			A			A	
Approach Delay (s)		23.7			32.9			8.7			7.4	
Approach LOS		C			C			A			A	
Intersection Summary												
HCM Average Control Delay		11.5										
HCM Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		68.0							8.0			
Intersection Capacity Utilization		66.5%										
ICU Level of Service									C			
Analysis Period (min)		15										

c Critical Lane Group

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↘	↙	↓
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1857		1770	1863
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	1857		1770	1863
Volume (vph)	28	53	629	14	33	657
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	58	684	15	36	714
RTOR Reduction (vph)	0	55	0	0	0	0
Lane Group Flow (vph)	30	3	699	0	36	714
Confl. Peds. (#/hr)				1	1	
Turn Type		Perm			Prot	
Protected Phases	8		6		5	2
Permitted Phases		8				
Actuated Green, G (s)	4.5	4.5	74.3		7.2	85.5
Effective Green, g (s)	5.5	5.5	75.3		7.2	86.5
Actuated g/C Ratio	0.06	0.06	0.75		0.07	0.86
Clearance Time (s)	5.0	5.0	5.0		4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	97	87	1398		127	1611
v/s Ratio Prot	c0.02		c0.38		0.02	c0.38
v/s Ratio Perm		0.00				
v/c Ratio	0.31	0.04	0.50		0.28	0.44
Uniform Delay, d1	45.4	44.7	4.9		44.0	1.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.8	0.2	1.3		1.2	0.9
Delay (s)	47.2	44.9	6.2		45.2	2.4
Level of Service	D	D	A		D	A
Approach Delay (s)	45.7		6.2			4.4
Approach LOS	D		A			A
Intersection Summary						
HCM Average Control Delay		7.6		HCM Level of Service		A
HCM Volume to Capacity ratio		0.47				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		47.1%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	⇕			⇕			⇕			⇕		
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Volume (veh/h)	35	1	54	7	2	7	31	657	16	1	623	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	1	59	8	2	8	34	714	17	1	677	65
Pedestrians				2			1					
Lane Width (ft)				12.0			12.0					
Walking Speed (ft/s)				4.0			4.0					
Percent Blockage				0			0					
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)							700			604		
pX, platoon unblocked	0.95	0.95	0.91	0.95	0.95	0.92	0.91				0.92	
vC, conflicting volume	1511	1513	711	1564	1537	725	742				734	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1411	1413	681	1467	1438	701	716				710	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	63	99	86	91	98	98	96				100	
cM capacity (veh/h)	103	125	408	82	120	403	803				816	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	98	17	765	743								
Volume Left	38	8	34	1								
Volume Right	59	8	17	65								
cSH	187	134	803	816								
Volume to Capacity	0.52	0.13	0.04	0.00								
Queue Length 95th (ft)	67	11	3	0								
Control Delay (s)	43.7	35.8	1.1	0.0								
Lane LOS	E	E	A	A								
Approach Delay (s)	43.7	35.8	1.1	0.0								
Approach LOS	E	E										
Intersection Summary												
Average Delay				3.6								
Intersection Capacity Utilization				73.3%			ICU Level of Service			D		
Analysis Period (min)				15								

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		←	←		←	←		←	←		←	←
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	35	1	59	7	2	7	31	657	16	1	623	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	1	64	8	2	8	34	714	17	1	677	65
Pedestrians					2			1				
Lane Width (ft)					12.0			12.0				
Walking Speed (ft/s)					4.0			4.0				
Percent Blockage					0			0				
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)								701			604	
pX, platoon unblocked	0.94	0.94	0.90	0.94	0.94	0.92	0.90			0.92		
vC, conflicting volume	1511	1513	711	1570	1537	725	742			734		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1414	1416	679	1476	1441	701	714			710		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	62	99	84	90	98	98	96			100		
cM capacity (veh/h)	101	123	407	79	119	403	798			816		
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	39	64	10	8	765	743						
Volume Left	38	0	8	0	34	1						
Volume Right	0	64	0	8	17	65						
cSH	102	407	85	403	798	816						
Volume to Capacity	0.38	0.16	0.11	0.02	0.04	0.00						
Queue Length 95th (ft)	39	14	9	1	3	0						
Control Delay (s)	60.9	15.5	52.5	14.1	1.1	0.0						
Lane LOS	F	C	F	B	A	A						
Approach Delay (s)	32.7		35.7		1.1	0.0						
Approach LOS	D		E									
Intersection Summary												
Average Delay			3.0									
Intersection Capacity Utilization			75.3%		ICU Level of Service					D		
Analysis Period (min)			15									

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗		↖	↑	↗	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.96		1.00	1.00	0.97	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1724		1768	1863	1796	
Flt Permitted	0.97		0.31	1.00	1.00	
Satd. Flow (perm)	1724		576	1863	1796	
Volume (vph)	107	50	72	583	559	164
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	116	54	78	634	608	178
RTOR Reduction (vph)	19	0	0	0	7	0
Lane Group Flow (vph)	151	0	78	634	779	0
Confl. Peds. (#/hr)			1			1
Turn Type			Perm			
Protected Phases	8			6	2	
Permitted Phases			6			
Actuated Green, G (s)	12.4		77.6	77.6	77.6	
Effective Green, g (s)	13.4		78.6	78.6	78.6	
Actuated g/C Ratio	0.13		0.79	0.79	0.79	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	231		453	1464	1412	
v/s Ratio Prot	c0.09			0.34	c0.43	
v/s Ratio Perm			0.14			
v/c Ratio	0.65		0.17	0.43	0.55	
Uniform Delay, d1	41.1		2.6	3.5	4.0	
Progression Factor	1.07		0.34	0.45	1.00	
Incremental Delay, d2	6.3		0.7	0.8	1.6	
Delay (s)	50.2		1.6	2.3	5.6	
Level of Service	D		A	A	A	
Approach Delay (s)	50.2			2.2	5.6	
Approach LOS	D			A	A	
Intersection Summary						
HCM Average Control Delay		8.7		HCM Level of Service		A
HCM Volume to Capacity ratio		0.57				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		64.2%		ICU Level of Service		C
Analysis Period (min)		15				

c Critical Lane Group

	→	↖	↗	←	↙	↘
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		0.99	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3499		1756	3539	1770	1583
Flt Permitted	1.00		0.24	1.00	0.95	1.00
Satd. Flow (perm)	3499		440	3539	1770	1583
Volume (vph)	986	55	279	792	44	21
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1072	60	303	861	48	23
RTOR Reduction (vph)	3	0	0	0	0	21
Lane Group Flow (vph)	1129	0	303	861	48	2
Confl. Peds. (#/hr)	10	10		5		1
Turn Type			Perm			Prot
Protected Phases	6			2	8	8
Permitted Phases			2	2		
Actuated Green, G (s)	82.0		82.0	82.0	7.0	7.0
Effective Green, g (s)	83.0		83.0	83.0	9.0	9.0
Actuated g/C Ratio	0.83		0.83	0.83	0.09	0.09
Clearance Time (s)	5.0		5.0	5.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2904		365	2937	159	142
v/s Ratio Prot	0.32			0.24	c0.03	0.00
v/s Ratio Perm			c0.69			
v/c Ratio	0.39		0.83	0.29	0.30	0.01
Uniform Delay, d1	2.1		4.6	1.9	42.6	41.5
Progression Factor	1.00		1.12	0.41	1.00	1.00
Incremental Delay, d2	0.4		18.4	0.2	1.1	0.0
Delay (s)	2.5		23.6	1.0	43.6	41.5
Level of Service	A		C	A	D	D
Approach Delay (s)	2.5			6.9	42.9	
Approach LOS	A			A	D	
Intersection Summary						
HCM Average Control Delay		5.9		HCM Level of Service		A
HCM Volume to Capacity ratio		0.78				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		60.5%		ICU Level of Service		B
Analysis Period (min)		15				

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔↔		↔↔		↘	
Sign Control	Free		Free		Stop	
Grade	0%		0%		0%	
Volume (veh/h)	68	945	845	37	52	139
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	74	1027	918	40	57	151
Pedestrians	3				27	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	0				2	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)	137		301			
pX, platoon unblocked					0.92	
vC, conflicting volume	986				1627	509
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	986				1594	509
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	89				28	70
cM capacity (veh/h)	681				78	496
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	416	685	612	346	208	
Volume Left	74	0	0	0	57	
Volume Right	0	0	0	40	151	
cSH	681	1700	1700	1700	202	
Volume to Capacity	0.11	0.40	0.36	0.20	1.03	
Queue Length 95th (ft)	9	0	0	0	229	
Control Delay (s)	3.2	0.0	0.0	0.0	119.8	
Lane LOS	A				F	
Approach Delay (s)	1.2		0.0		119.8	
Approach LOS					F	
Intersection Summary						
Average Delay	11.6					
Intersection Capacity Utilization	74.6%					
Analysis Period (min)	15					
ICU Level of Service	D					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕	⇕		⇕		⇕	⇕			⇕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	0.95		1.00		0.95	0.95			1.00	
Frpb, ped/bikes		1.00	0.98		1.00		1.00	0.99			0.99	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	
Frt		1.00	0.85		0.99		1.00	0.99			0.90	
Flt Protected		0.99	1.00		1.00		0.95	0.96			0.99	
Satd. Flow (prot)		1759	1477		1842		1681	1667			1648	
Flt Permitted		0.90	1.00		1.00		0.95	0.96			0.99	
Satd. Flow (perm)		1588	1477		1842		1681	1667			1648	
Volume (vph)	48	353	632	0	455	24	421	18	15	14	12	71
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	384	687	0	495	26	458	20	16	15	13	77
RTOR Reduction (vph)	0	0	308	0	1	0	0	3	0	0	69	0
Lane Group Flow (vph)	0	436	379	0	520	0	255	236	0	0	36	0
Confl. Peds. (#/hr)	19		11	11		19	1		24	24		1
Turn Type	Perm		Perm				Split			Split		
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2		2									
Actuated Green, G (s)		54.1	54.1		54.1		19.9	19.9			7.0	
Effective Green, g (s)		55.1	55.1		55.1		22.9	22.9			10.0	
Actuated g/C Ratio		0.55	0.55		0.55		0.23	0.23			0.10	
Clearance Time (s)		5.0	5.0		5.0		7.0	7.0			7.0	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		875	814		1015		385	382			165	
v/s Ratio Prot					c0.28		c0.15	0.14			c0.02	
v/s Ratio Perm		0.27	0.26									
v/c Ratio		0.50	0.47		0.51		0.66	0.62			0.22	
Uniform Delay, d1		13.9	13.6		14.0		35.0	34.6			41.4	
Progression Factor		0.90	1.02		0.53		1.00	1.00			1.00	
Incremental Delay, d2		1.9	1.8		1.3		4.2	3.0			0.7	
Delay (s)		14.4	15.7		8.7		39.3	37.6			42.1	
Level of Service		B	B		A		D	D			D	
Approach Delay (s)		15.2			8.7		38.5				42.1	
Approach LOS		B			A		D				D	
Intersection Summary												
HCM Average Control Delay			20.1			HCM Level of Service				C		
HCM Volume to Capacity ratio			0.52									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			89.3%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations		↔		↔	↔	↔		↔		↔	↔	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor		0.95		1.00	1.00	1.00		0.95		1.00	1.00	
Flpb, ped/bikes		0.98		1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Frt		0.97		1.00	1.00	0.85		0.96		1.00	0.99	
Flt Protected		1.00		0.95	1.00	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		3353		1763	1863	1558		3357		1770	1843	
Flt Permitted		0.87		0.22	1.00	1.00		1.00		0.95	1.00	
Satd. Flow (perm)		2940		402	1863	1558		3357		1770	1843	
Volume (vph)	33	253	76	257	370	165	66	512	234	141	449	29
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	275	83	279	402	179	72	557	254	153	488	32
RTOR Reduction (vph)	0	24	0	0	0	122	0	44	0	0	2	0
Lane Group Flow (vph)	0	370	0	279	402	57	0	839	0	153	518	0
Confl. Peds. (#/hr)	4		16	16		4	1		5	5		1
Turn Type	Perm			pm+pt		Perm	Split			Split		
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases	4			8	8	8						
Actuated Green, G (s)		13.0		30.0	30.0	30.0		34.0		18.0	18.0	
Effective Green, g (s)		15.0		32.0	32.0	32.0		36.0		20.0	20.0	
Actuated g/C Ratio		0.15		0.32	0.32	0.32		0.36		0.20	0.20	
Clearance Time (s)		6.0		4.0	6.0	6.0		6.0		6.0	6.0	
Lane Grp Cap (vph)		441		306	596	499		1209		354	369	
v/s Ratio Prot				c0.12	0.22			c0.25		0.09	c0.28	
v/s Ratio Perm		0.13		c0.17		0.04						
v/c Ratio		0.84		0.91	0.67	0.11		0.69		0.43	1.40	
Uniform Delay, d1		41.3		28.3	29.5	24.0		27.3		35.0	40.0	
Progression Factor		1.03		1.00	1.00	1.00		1.00		1.00	1.02	
Incremental Delay, d2		13.2		33.1	6.0	0.5		3.3		3.5	195.5	
Delay (s)		55.6		61.5	35.5	24.5		30.6		38.5	236.4	
Level of Service		E		E	D	C		C		D	F	
Approach Delay (s)		55.6			41.6			30.6			191.4	
Approach LOS		E			D			C			F	
Intersection Summary												
HCM Average Control Delay			76.0									
HCM Volume to Capacity ratio			0.92									
Actuated Cycle Length (s)			100.0						12.0			
Intersection Capacity Utilization			101.2%									
Analysis Period (min)			15									
c Critical Lane Group												

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00		0.95		1.00	1.00	
Frpb, ped/bikes	1.00	0.98		1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00	1.00		1.00		1.00	1.00	
Frt	1.00	0.97		1.00	1.00	0.85		0.95		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1765	3353		1761	1863	1558		3357		1770	1843	
Flt Permitted	0.53	1.00		0.26	1.00	1.00		1.00		0.95	1.00	
Satd. Flow (perm)	977	3353		475	1863	1558		3357		1770	1843	
Volume (vph)	33	253	76	257	370	165	66	512	234	141	449	29
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	275	83	279	402	179	72	557	254	153	488	32
RTOR Reduction (vph)	0	28	0	0	0	122	0	44	0	0	2	0
Lane Group Flow (vph)	36	330	0	279	402	57	0	839	0	153	518	0
Confl. Peds. (#/hr)	4		16	16		4	1		5	5		1
Turn Type	Perm			pm+pt		Perm	Split			Split		
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases	4			8	8	8						
Actuated Green, G (s)	13.0	13.0		30.0	30.0	30.0		34.0		18.0	18.0	
Effective Green, g (s)	15.0	15.0		32.0	32.0	32.0		36.0		20.0	20.0	
Actuated g/C Ratio	0.15	0.15		0.32	0.32	0.32		0.36		0.20	0.20	
Clearance Time (s)	6.0	6.0		4.0	6.0	6.0		6.0		6.0	6.0	
Lane Grp Cap (vph)	147	503		319	596	499		1209		354	369	
v/s Ratio Prot		0.10		c0.11	0.22			c0.25		0.09	c0.28	
v/s Ratio Perm	0.04			c0.17		0.04						
v/c Ratio	0.24	0.66		0.87	0.67	0.11		0.69		0.43	1.40	
Uniform Delay, d1	37.5	40.1		28.2	29.5	24.0		27.3		35.0	40.0	
Progression Factor	0.91	1.03		1.00	1.00	1.00		1.00		0.99	0.97	
Incremental Delay, d2	3.0	5.1		26.7	6.0	0.5		3.3		3.5	195.5	
Delay (s)	37.3	46.2		54.9	35.5	24.5		30.6		38.2	234.1	
Level of Service	D	D		D	D	C		C		D	F	
Approach Delay (s)		45.4			39.5			30.6			189.6	
Approach LOS		D			D			C			F	
Intersection Summary												
HCM Average Control Delay		73.5										
HCM Volume to Capacity ratio		0.91										
Actuated Cycle Length (s)		100.0							12.0			
Intersection Capacity Utilization		98.3%							F			
Analysis Period (min)		15										
c Critical Lane Group												

	↗	→	←	↖	↘	↙
Movement	EBL	EBT	WBT	WBR	SSL	SBR
Lane Configurations		↑↑	↑↑		↓	
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	630	781	0	12	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	685	849	0	13	11
Pedestrians		3			31	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		0			3	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		709				
pX, platoon unblocked						
vC, conflicting volume	880				1222	458
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	880				1222	458
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				92	98
cM capacity (veh/h)	744				167	534
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	342	342	424	424	24	
Volume Left	0	0	0	0	13	
Volume Right	0	0	0	0	11	
cSH	1700	1700	1700	1700	243	
Volume to Capacity	0.20	0.20	0.25	0.25	0.10	
Queue Length 95th (ft)	0	0	0	0	8	
Control Delay (s)	0.0	0.0	0.0	0.0	21.4	
Lane LOS					C	
Approach Delay (s)	0.0		0.0		21.4	
Approach LOS					C	
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		32.5%		ICU Level of Service		A
Analysis Period (min)		15				

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙		↑↑			↘↘
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	6	664	2	10	538
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	7	722	2	11	585
Pedestrians	1					1
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh						
Upstream signal (ft)			272			
pX, platoon unblocked						
vC, conflicting volume	1038	364			725	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1038	364			725	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			99	
cM capacity (veh/h)	224	632			873	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	8	481	243	206	390	
Volume Left	1	0	0	11	0	
Volume Right	7	0	2	0	0	
cSH	501	1700	1700	873	1700	
Volume to Capacity	0.02	0.28	0.14	0.01	0.23	
Queue Length 95th (ft)	1	0	0	1	0	
Control Delay (s)	12.3	0.0	0.0	0.6	0.0	
Lane LOS	B			A		
Approach Delay (s)	12.3	0.0		0.2		
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			32.3%	ICU Level of Service	A	
Analysis Period (min)			15			

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	678	4	11	520
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	737	4	12	674
Pedestrians	2					
Lane Width (ft)	0.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			630			1297
pX, platoon unblocked						
vC, conflicting volume	1102	373			743	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1102	373			743	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	203	625			860	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2		
Volume Total	491	250	237	449		
Volume Left	0	0	12	0		
Volume Right	0	4	0	0		
cSH	1700	1700	860	1700		
Volume to Capacity	0.29	0.15	0.01	0.26		
Queue Length 95th (ft)	0	0	1	0		
Control Delay (s)	0.0	0.0	0.6	0.0		
Lane LOS			A			
Approach Delay (s)	0.0		0.2			
Approach LOS						
Intersection Summary						
Average Delay		0.1				
Intersection Capacity Utilization		28.3%		ICU Level of Service	A	
Analysis Period (min)		15				

	↙	↘	↑	↗	↖	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↘	↗		↖	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1862		1770	1863
Flt Permitted	0.95	1.00	1.00		0.36	1.00
Satd. Flow (perm)	1770	1583	1862		672	1863
Volume (vph)	3	2	689	3	4	720
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	2	749	3	4	783
RTOR Reduction (vph)	0	2	0	0	0	0
Lane Group Flow (vph)	3	0	752	0	4	783
Turn Type	Perm				Perm	
Protected Phases	8		2		6	
Permitted Phases	8				6	
Actuated Green, G (s)	1.2	1.2	50.8		50.8	50.8
Effective Green, g (s)	1.2	1.2	50.8		50.8	50.8
Actuated g/C Ratio	0.02	0.02	0.85		0.85	0.85
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	35	32	1576		569	1577
v/s Ratio Prot	c0.00		0.40		c0.42	
v/s Ratio Perm	0.00				0.01	
v/c Ratio	0.09	0.00	0.48		0.01	0.50
Uniform Delay, d1	28.9	28.8	1.2		0.7	1.2
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.1	0.0	1.0		0.0	1.1
Delay (s)	29.9	28.8	2.2		0.7	2.3
Level of Service	C		A		A	A
Approach Delay (s)	29.5		2.2		2.3	
Approach LOS	C		A		A	
Intersection Summary						
HCM Average Control Delay			2.4	HCM Level of Service		A
HCM Volume to Capacity ratio			0.49			
Actuated Cycle Length (s)			60.0	Sum of lost time (s)		8.0
Intersection Capacity Utilization			47.9%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇌			⇌			⇌			⇌	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.98			0.99			0.98	
Flt Protected		0.97			0.97			1.00			1.00	
Satd. Flow (prot)		1809			1763			1838			1817	
Flt Permitted		0.81			0.81			1.00			0.98	
Satd. Flow (perm)		1514			1480			1838			1784	
Volume (vph)	31	26	1	109	40	31	1	777	72	14	561	122
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	28	1	118	43	34	1	845	78	15	610	133
RTOR Reduction (vph)	0	1	0	0	11	0	0	4	0	0	10	0
Lane Group Flow (vph)	0	62	0	0	184	0	0	920	0	0	748	0
Confl. Peds. (#/hr)			1	1					1	1		
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		12.8			12.8			47.5			47.5	
Effective Green, g (s)		12.8			12.8			47.5			47.5	
Actuated g/C Ratio		0.19			0.19			0.70			0.70	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		284			277			1278			1241	
v/s Ratio Prot												
v/s Ratio Perm		0.04			0.12			0.50			0.42	
v/c Ratio		0.22			0.66			0.72			0.60	
Uniform Delay, d1		23.5			25.7			6.3			5.5	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.4			5.9			3.5			2.2	
Delay (s)		23.9			31.6			9.9			7.6	
Level of Service		C			C			A			A	
Approach Delay (s)		23.9			31.6			9.9			7.6	
Approach LOS		C			C			A			A	
Intersection Summary												
HCM Average Control Delay			11.6			HCM Level of Service				B		
HCM Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			68.3			Sum of lost time (s)				8.0		
Intersection Capacity Utilization			67.7%			ICU Level of Service				C		
Analysis Period (min)			15									
c Critical Lane Group												

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1857		1770	1863
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	1857		1770	1863
Volume (vph)	25	31	800	15	31	666
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	34	870	16	34	724
RTOR Reduction (vph)	0	32	0	0	0	0
Lane Group Flow (vph)	27	2	886	0	34	724
Confl. Peds. (#/hr)				2		2
Turn Type		Perm			Prot	
Protected Phases	8		6		5	2
Permitted Phases		8				
Actuated Green, G (s)	4.5	4.5	74.3		7.2	85.5
Effective Green, g (s)	5.5	5.5	75.3		7.2	86.5
Actuated g/C Ratio	0.06	0.06	0.75		0.07	0.86
Clearance Time (s)	5.0	5.0	5.0		4.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	97	87	1398		127	1611
v/s Ratio Prot	c0.02		c0.48		0.02	c0.39
v/s Ratio Perm		0.00				
v/c Ratio	0.28	0.02	0.63		0.27	0.45
Uniform Delay, d1	45.3	44.7	5.8		43.9	1.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.6	0.1	2.2		1.1	0.9
Delay (s)	46.9	44.8	8.0		45.0	2.4
Level of Service	D	D	A		D	A
Approach Delay (s)	45.7		8.0			4.3
Approach LOS	D		A			A
Intersection Summary						
HCM Average Control Delay			7.7		HCM Level of Service	A
HCM Volume to Capacity ratio			0.58			
Actuated Cycle Length (s)			100.0		Sum of lost time (s)	8.0
Intersection Capacity Utilization			55.5%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕			↕			↕		
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Volume (veh/h)	40	3	26	3	3	4	39	765	9	16	654	38
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	3	28	3	3	4	42	832	10	17	711	41
Pedestrians	2											
Lane Width (ft)	12.0											
Walking Speed (ft/s)	4.0											
Percent Blockage	0											
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)							696			604		
pX, platoon unblocked	0.89	0.89	0.90	0.89	0.89	0.85	0.90				0.85	
vC, conflicting volume	1693	1692	734	1719	1708	836	752				841	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1612	1611	705	1641	1628	807	725				812	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	36	96	93	95	96	99	95				97	
cM capacity (veh/h)	68	86	393	61	84	323	792				689	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	75	11	884	770								
Volume Left	43	3	42	17								
Volume Right	28	4	10	41								
cSH	100	102	792	689								
Volume to Capacity	0.75	0.11	0.05	0.03								
Queue Length 95th (ft)	100	9	4	2								
Control Delay (s)	109.5	44.3	1.5	0.7								
Lane LOS	F	E	A	A								
Approach Delay (s)	109.5	44.3	1.5	0.7								
Approach LOS	F	E										
Intersection Summary												
Average Delay	6.0											
Intersection Capacity Utilization	74.6%		ICU Level of Service					D				
Analysis Period (min)	15											

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔		↔			↔	↔
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	40	3	26	3	3	4	39	765	9	16	654	38
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	3	28	3	3	4	42	832	10	17	711	41
Pedestrians								2				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								4.0				
Percent Blockage								0				
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)								688			604	
pX, platoon unblocked	0.90	0.90	0.90	0.90	0.90	0.84	0.90			0.84		
vC, conflicting volume	1693	1692	734	1719	1708	836	752			841		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1600	1599	703	1629	1617	806	724			812		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	37	96	93	95	96	99	95			97		
cM capacity (veh/h)	69	88	392	62	86	322	788			688		
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	47	28	7	4	884	770						
Volume Left	43	0	3	0	42	17						
Volume Right	0	28	0	4	10	41						
cSH	70	392	72	322	788	688						
Volume to Capacity	0.67	0.07	0.09	0.01	0.05	0.03						
Queue Length 95th (ft)	74	6	7	1	4	2						
Control Delay (s)	126.4	14.9	60.0	16.3	1.5	0.7						
Lane LOS	F	B	F	C	A	A						
Approach Delay (s)	84.4		42.5		1.5	0.7						
Approach LOS	F		E									
Intersection Summary												
Average Delay			5.0									
Intersection Capacity Utilization			76.1%		ICU Level of Service					D		
Analysis Period (min)			15									

	EBL	EBR	NBL	NBT	SBL	SBR
Movement						
Lane Configurations	↰	↱	↰	↱	↰	↱
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.95		1.00	1.00	0.98	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1714		1765	1863	1827	
Flt Permitted	0.97		0.36	1.00	1.00	
Satd. Flow (perm)	1714		670	1863	1827	
Volume (vph)	60	37	53	712	578	77
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	40	58	774	628	84
RTOR Reduction (vph)	27	0	0	0	3	0
Lane Group Flow (vph)	78	0	58	774	709	0
Confl. Peds. (#/hr)			3			3
Turn Type			Perm			
Protected Phases	8			6	2	
Permitted Phases			6			
Actuated Green, G (s)	8.0		82.0	82.0	82.0	
Effective Green, g (s)	9.0		83.0	83.0	83.0	
Actuated g/C Ratio	0.09		0.83	0.83	0.83	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	154		556	1546	1516	
v/s Ratio Prot	c0.05			c0.42	0.39	
v/s Ratio Perm			0.09			
v/c Ratio	0.50		0.10	0.50	0.47	
Uniform Delay, d1	43.4		1.6	2.5	2.4	
Progression Factor	1.09		0.33	0.74	1.00	
Incremental Delay, d2	2.6		0.3	0.9	1.0	
Delay (s)	49.8		0.8	2.7	3.4	
Level of Service	D		A	A	A	
Approach Delay (s)	49.8			2.6	3.4	
Approach LOS	D			A	A	
Intersection Summary						
HCM Average Control Delay		6.0		HCM Level of Service		A
HCM Volume to Capacity ratio		0.50				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		56.5%		ICU Level of Service		B
Analysis Period (min)		15				
c Critical Lane Group						

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		0.99	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3510		1760	3539	1770	1583
Flt Permitted	1.00		0.26	1.00	0.95	1.00
Satd. Flow (perm)	3510		480	3539	1770	1583
Volume (vph)	947	41	317	805	8	11
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1029	45	345	875	9	12
RTOR Reduction (vph)	2	0	0	0	0	11
Lane Group Flow (vph)	1072	0	345	875	9	1
Confl. Peds. (#/hr)		6	6		1	2
Turn Type			Perm		Prot	
Protected Phases	6			2	8	8
Permitted Phases			2	2		
Actuated Green, G (s)	85.4		85.4	85.4	3.6	3.6
Effective Green, g (s)	86.4		86.4	86.4	5.6	5.6
Actuated g/C Ratio	0.86		0.86	0.86	0.06	0.06
Clearance Time (s)	5.0		5.0	5.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	3033		415	3058	99	89
v/s Ratio Prot	0.31			0.25	c0.01	0.00
v/s Ratio Perm			c0.72			
v/c Ratio	0.35		0.83	0.29	0.09	0.01
Uniform Delay, d1	1.3		3.3	1.2	44.8	44.6
Progression Factor	1.00		1.45	0.37	1.00	1.00
Incremental Delay, d2	0.3		15.8	0.2	0.4	0.0
Delay (s)	1.7		20.5	0.7	45.2	44.6
Level of Service	A		C	A	D	D
Approach Delay (s)	1.7			6.3	44.9	
Approach LOS	A			A	D	
Intersection Summary						
HCM Average Control Delay		4.5		HCM Level of Service		A
HCM Volume to Capacity ratio		0.79				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		61.2%		ICU Level of Service		B
Analysis Period (min)		15				
c Critical Lane Group						

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔↔	↔↔	↔↔		↔	↔
Sign Control	Free	Free	Free		Stop	
Grade	0%	0%	0%		0%	
Volume (veh/h)	38	888	1039	14	48	66
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	41	965	1129	15	52	72
Pedestrians		7			23	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		1			2	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		137	301			
pX, platoon unblocked					0.94	
vC, conflicting volume	1168				1725	602
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1168				1708	602
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				26	83
cM capacity (veh/h)	583				70	432
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	363	643	753	392	124	
Volume Left	41	0	0	0	52	
Volume Right	0	0	0	15	72	
cSH	583	1700	1700	1700	137	
Volume to Capacity	0.07	0.38	0.44	0.23	0.91	
Queue Length 95th (ft)	6	0	0	0	152	
Control Delay (s)	2.2	0.0	0.0	0.0	116.4	
Lane LOS	A				F	
Approach Delay (s)	0.8		0.0		116.4	
Approach LOS					F	
Intersection Summary						
Average Delay			6.7			
Intersection Capacity Utilization			67.5%		ICU Level of Service	C
Analysis Period (min)			15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	+	+	+	+	+	+	+	+	+	+	+	+
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	0.95		1.00		0.95	0.95			1.00	
Frpb, ped/bikes		1.00	0.98		1.00		1.00	1.00			1.00	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	
Frt		1.00	0.85		1.00		1.00	1.00			0.90	
Flt Protected		1.00	1.00		1.00		0.95	0.95			0.99	
Satd. Flow (prot)		1766	1477		1854		1681	1681			1667	
Flt Permitted		0.97	1.00		1.00		0.95	0.95			0.99	
Satd. Flow (perm)		1721	1477		1854		1681	1681			1667	
Volume (vph)	14	338	585	0	552	13	462	7	5	11	5	39
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	367	636	0	600	14	502	8	5	12	5	42
RTOR Reduction (vph)	0	0	284	0	0	0	0	1	0	0	38	0
Lane Group Flow (vph)	0	382	352	0	614	0	264	250	0	0	21	0
Confl. Peds. (#/hr)	15		11	11		15			20	20		
Turn Type	Perm		Perm				Split			Split		
Protected Phases		2			6		4	4		8	8	
Permitted Phases	2		2									
Actuated Green, G (s)		54.3	54.3		54.3		20.4	20.4			6.3	
Effective Green, g (s)		55.3	55.3		55.3		23.4	23.4			9.3	
Actuated g/C Ratio		0.55	0.55		0.55		0.23	0.23			0.09	
Clearance Time (s)		5.0	5.0		5.0		7.0	7.0			7.0	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		952	817		1025		393	393			155	
v/s Ratio Prot					c0.33		c0.16	0.15			c0.01	
v/s Ratio Perm		0.22	0.24									
v/c Ratio		0.40	0.43		0.60		0.67	0.64			0.13	
Uniform Delay, d1		12.8	13.1		14.9		34.8	34.5			41.7	
Progression Factor		0.92	0.97		0.77		1.00	1.00			1.00	
Incremental Delay, d2		1.2	1.6		1.2		4.5	3.4			0.4	
Delay (s)		13.0	14.3		12.7		39.3	37.8			42.1	
Level of Service		B	B		B		D	D			D	
Approach Delay (s)		13.8			12.7		38.6				42.1	
Approach LOS		B			B		D				D	
Intersection Summary												
HCM Average Control Delay			20.0			HCM Level of Service				C		
HCM Volume to Capacity ratio			0.57									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			68.4%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor		0.95		1.00	1.00	1.00		0.95		1.00	1.00	
Frpb, ped/bikes		0.99		1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Frt		0.98		1.00	1.00	0.85		0.96		1.00	0.99	
Flt Protected		1.00		0.95	1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)		3433		1765	1863	1559		3381		1770	1847	
Flt Permitted		0.78		0.22	1.00	1.00		0.99		0.95	1.00	
Satd. Flow (perm)		2702		405	1863	1559		3381		1770	1847	
Volume (vph)	21	294	46	207	478	212	100	541	198	147	470	24
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	320	50	225	520	230	109	588	215	160	511	26
RTOR Reduction (vph)	0	11	0	0	0	156	0	29	0	0	2	0
Lane Group Flow (vph)	0	382	0	225	520	74	0	883	0	160	535	0
Confl. Peds. (#/hr)	3		12	12		3	1		5	5		1
Turn Type	Perm			pm+pt		Perm	Split			Split		
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases	4			8	8	8						
Actuated Green, G (s)		13.0		30.0	30.0	30.0		34.0		18.0	18.0	
Effective Green, g (s)		15.0		32.0	32.0	32.0		36.0		20.0	20.0	
Actuated g/C Ratio		0.15		0.32	0.32	0.32		0.36		0.20	0.20	
Clearance Time (s)		6.0		4.0	6.0	6.0		6.0		6.0	6.0	
Lane Grp Cap (vph)		405		306	596	499		1217		354	369	
v/s Ratio Prot				0.10	c0.28			c0.26		0.09	c0.29	
v/s Ratio Perm		0.14		0.14		0.05						
v/c Ratio		0.94		0.74	0.87	0.15		0.73		0.45	1.45	
Uniform Delay, d1		42.1		27.3	32.1	24.3		27.7		35.2	40.0	
Progression Factor		1.11		1.00	1.00	1.00		1.00		1.02	1.02	
Incremental Delay, d2		30.2		14.6	16.1	0.6		3.8		3.9	216.7	
Delay (s)		76.9		41.9	48.2	24.9		31.5		39.6	257.4	
Level of Service		E		D	D	C		C		D	F	
Approach Delay (s)		76.9			41.2			31.5			207.4	
Approach LOS		E			D			C			F	
Intersection Summary												
HCM Average Control Delay			81.9			HCM Level of Service				F		
HCM Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			103.9%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00		0.95		1.00	1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Frt	1.00	0.98		1.00	1.00	0.85		0.96		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)	1767	3437		1764	1863	1559		3381		1770	1847	
Flt Permitted	0.27	1.00		0.24	1.00	1.00		0.99		0.95	1.00	
Satd. Flow (perm)	496	3437		451	1863	1559		3381		1770	1847	
Volume (vph)	21	294	46	207	478	212	100	541	198	147	470	24
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	320	50	225	520	230	109	588	215	160	511	26
RTOR Reduction (vph)	0	13	0	0	0	156	0	29	0	0	2	0
Lane Group Flow (vph)	23	357	0	225	520	74	0	883	0	160	535	0
Confl. Peds. (#/hr)	3		12	12			3	1		5	5	1
Turn Type	Perm			pm+pt		Perm	Split			Split		
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases	4			8	8	8						
Actuated Green, G (s)	13.0	13.0		30.0	30.0	30.0		34.0		18.0	18.0	
Effective Green, g (s)	15.0	15.0		32.0	32.0	32.0		36.0		20.0	20.0	
Actuated g/C Ratio	0.15	0.15		0.32	0.32	0.32		0.36		0.20	0.20	
Clearance Time (s)	6.0	6.0		4.0	6.0	6.0		6.0		6.0	6.0	
Lane Grp Cap (vph)	74	516		315	596	499		1217		354	369	
v/s Ratio Prot		0.10		0.09	c0.28			c0.26		0.09	c0.29	
v/s Ratio Perm	0.05			0.14		0.05						
v/c Ratio	0.31	0.69		0.71	0.87	0.15		0.73		0.45	1.45	
Uniform Delay, d1	37.9	40.3		27.2	32.1	24.3		27.7		35.2	40.0	
Progression Factor	1.00	1.09		1.00	1.00	1.00		1.00		0.93	0.94	
Incremental Delay, d2	9.5	6.7		13.0	16.1	0.6		3.8		3.9	216.6	
Delay (s)	47.5	50.8		40.2	48.2	24.9		31.5		36.5	254.4	
Level of Service	D	D		D	D	C		C		D	F	
Approach Delay (s)		50.6			40.8			31.5			204.4	
Approach LOS		D			D			C			F	
Intersection Summary												
HCM Average Control Delay		77.6										
HCM Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		100.0						12.0				
Intersection Capacity Utilization		100.2%										
Analysis Period (min)		15										
c Critical Lane Group												

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	638	897	0	5	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	693	975	0	5	20
Pedestrians		10	11		23	
Lane Width (ft)		12.0	12.0		12.0	
Walking Speed (ft/s)		4.0	4.0		4.0	
Percent Blockage		1	1		2	
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		709				
pX, platoon unblocked					0.95	
vC, conflicting volume	998				1356	520
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	998				1324	520
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				96	96
cM capacity (veh/h)	676				137	487
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	347	347	488	488	25	
Volume Left	0	0	0	0	5	
Volume Right	0	0	0	0	20	
cSH	1700	1700	1700	1700	313	
Volume to Capacity	0.20	0.20	0.29	0.29	0.08	
Queue Length 95th (ft)	0	0	0	0	6	
Control Delay (s)	0.0	0.0	0.0	0.0	17.5	
Lane LOS					C	
Approach Delay (s)	0.0		0.0		17.5	
Approach LOS					C	
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			37.6%		ICU Level of Service	A
Analysis Period (min)			15			

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖		↑↑			↘↘
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	9	764	6	8	592
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	10	830	7	9	643
Pedestrians	3					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			272			
pX, platoon unblocked	0.83	0.83			0.83	
vC, conflicting volume	1176	421			840	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1001	87			594	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			99	
cM capacity (veh/h)	195	785			805	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	11	554	283	223	429	
Volume Left	1	0	0	9	0	
Volume Right	10	0	7	0	0	
cSH	603	1700	1700	805	1700	
Volume to Capacity	0.02	0.33	0.17	0.01	0.25	
Queue Length 95th (ft)	1	0	0	1	0	
Control Delay (s)	11.1	0.0	0.0	0.5	0.0	
Lane LOS	B			A		
Approach Delay (s)	11.1	0.0		0.2		
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			32.0%	ICU Level of Service		A
Analysis Period (min)			15			

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	767	3	10	576
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	834	3	11	626
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			630			1297
pX, platoon unblocked	0.90	0.90			0.90	
vC, conflicting volume	1170	418			837	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1079	245			709	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	189	681			798	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2		
Volume Total	556	281	220	417		
Volume Left	0	0	11	0		
Volume Right	0	3	0	0		
cSH	1700	1700	798	1700		
Volume to Capacity	0.33	0.17	0.01	0.25		
Queue Length 95th (ft)	0	0	1	0		
Control Delay (s)	0.0	0.0	0.6	0.0		
Lane LOS			A			
Approach Delay (s)	0.0		0.2			
Approach LOS						
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization		26.4%		ICU Level of Service	A	
Analysis Period (min)		15				

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑	↖	↗	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (vph)	1770	1583	1861		1770	1863
Flt Permitted	0.95	1.00	1.00		0.32	1.00
Satd. Flow (perm)	1770	1583	1861		600	1863
Volume (vph)	4	3	766	6	8	651
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	3	833	7	9	708
RTOR Reduction (vph)	0	3	0	0	0	0
Lane Group Flow (vph)	4	0	840	0	9	708
Turn Type	Perm				Perm	
Protected Phases	8		2			6
Permitted Phases		8			6	
Actuated Green, G (s)	1.2	1.2	50.8		50.8	50.8
Effective Green, g (s)	1.2	1.2	50.8		50.8	50.8
Actuated g/C Ratio	0.02	0.02	0.85		0.85	0.85
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	35	32	1576		508	1577
v/s Ratio Prot	c0.00		c0.45			0.38
v/s Ratio Perm		0.00			0.01	
v/c Ratio	0.11	0.00	0.53		0.02	0.45
Uniform Delay, d1	28.9	28.8	1.3		0.7	1.1
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.5	0.0	1.3		0.1	0.9
Delay (s)	30.3	28.8	2.6		0.8	2.1
Level of Service	C	C	A		A	A
Approach Delay (s)	29.7		2.6			2.0
Approach LOS	C		A			A
Intersection Summary						
HCM Average Control Delay			2.5	HCM Level of Service		A
HCM Volume to Capacity ratio			0.52			
Actuated Cycle Length (s)			60.0	Sum of lost time (s)		8.0
Intersection Capacity Utilization			50.7%	ICU Level of Service		A
Analysis Period (min)			15			
c Critical Lane Group						