

Appendix G: VISSIM Model Measures of Effectiveness

AM Intersection Volume, Delay, and Queue Length

Intersection Volume, Delay, and Queue Length

AM Peak Hour (8:00-9:00 AM)

NOTES:

-Results displayed are the average results across 10 microsimulation runs

-VISSIM reported queue length is capped at the distance to the stop bar of the upstream intersection

#	Intersection	Approach	Movement	Vehicles				
				Average Throughput (vph)		Average Delay (sec/veh)		Max Queue Length (feet)
1	Southbound Key Bridge and George Washington Parkway	SB	TH	1,386	1,949	23.3	33.7	862
			RT	563		59.3		
		WB	LT	33	692	16.8	10.8	414
			TH	659		10.5		
		Intersection				2,641	27.7	
2	Fort Myer Drive and WB Lee Highway	SB	TH	1,108	1,402	6.8	7.3	198
			RT	294		9.3		
		WB	LT	141	327	33.9	26.3	204
			TH	186		20.5		
		Intersection				1,729	10.9	
3	Fort Myer Drive and EB Lee Highway	SB	LT	409	1,245	22.6	19.2	282
			TH	836		17.6		
		EB	TH	1,623	1,931	32.7	29.1	336
			RT	308		9.9		
		Intersection				3,176	25.2	
4	Fort Myer Drive and 19th Street N/N. Nash Street	SB	LT	261	1,221	35.6	18.5	385
			TH	742		15.8		
			RT	218		7.2		
		EB	TH	262	373	21.8	18.0	192
			RT	111		9.0		
		WB	LT	96	253	26.8	15.9	147
			TH	157		9.2		
Intersection				1,847	18.0			
5	Fort Myer Drive and Wilson Boulevard	SB	LT	200	806	67.0	28.5	559
			TH	122		31.3		
			Tunnel	442		12.1		
			RT	42		10.3		
		EB	TH	751	842	37.8	37.3	307
			RT	91		32.6		
		WB	U-Turn	31	762	23.9	9.3	130
			LT	123		17.9		
TH	608		6.9					
Intersection				2,410	25.5			
6	N. Nash Street and 17th Street N.	SB	LT	80	101	5.1	7.0	103
			RT	21		14.6		
		EB	LT	66	205	5.8	4.5	125
			TH	139		4.0		
		WB	TH	2	19	9.0	9.7	131
			RT	17		9.8		
Intersection				325	5.6			

AM Intersection Volume, Delay, and Queue Length

#	Intersection	Approach	Movement	Vehicles					
				Average Throughput (vph)		Average Delay (sec/veh)		Max Queue Length (feet)	
7	Fort Myer Drive and Fairfax Drive	SB	LT	72	585	12.4	29.0		275
			TH	471		28.1			
			RT	42		67.7			
		EB	TH	128	309	73.9	69.8	670	
			RT	181		66.9			
		WB	LT	50	93	26.4	25.0	169	
			TH	43		23.5			
Intersection				987	41.4				
8	Fort Myer Drive/N. Meade Street and WB Arlington Boulevard Ramp	NB	LT	93	1,346	14.1	15.3	1,975	
			TH	1,253		15.4			
		SB	TH	425	701	22.7	14.6	195	
			RT	276		2.2			
		WB	LT	58	505	92.3	55.4	894	
			TH	0		0.0			
			RT	447		50.7			
Intersection				2,552	23.1				
9	N. Moore Street and EB Lee Hwy	NB	RT	27	27	77.4	77.4	119	
		EB	TH	1,847	1,847	48.5	48.5	413	
		Intersection				1,874	48.9		
10	N. Moore Street and 19th Street N.	SB	LT	25	48	52.1	42.0	170	
			TH	18		31.5			
			RT	5		28.9			
		EB	LT	74	525	20.6	18.8	298	
			TH	431		19.0			
			RT	20		8.4			
		WB	LT	28	362	19.1	8.1	178	
TH	250		7.9						
RT	84		5.0						
Intersection				935	15.8				
11	N. Moore Street and Wilson Boulevard	SB	RT	89	89	56.9	56.9	237	
		EB	TH	975	975	21.3	21.3	255	
		WB	TH	669	669	3.1	3.1	347	
		Intersection				1,733	16.1		
12	N. Lynn Street and WB Lee Highway	NB	LT	130	2,659	16.0	22.0	314	
			TH	2,529		22.4			
		WB	TH	197	731	63.9	184.2	1,820	
			RT	534		228.7			
Intersection				3,390	57.0				
13	N. Lynn Street and EB Lee Highway	NB	TH	1,658	1,869	49.0	44.9	461	
			RT	211		13.0			
		EB	LT	1,004	1,873	20.5	15.6	165	
			TH	869		10.0			
Intersection				3,742	30.2				

AM Intersection Volume, Delay, and Queue Length

#	Intersection	Approach	Movement	Vehicles				
				Average Throughput (vph)		Average Delay (sec/veh)		Max Queue Length (feet)
14	N. Lynn Street and 19th Street N.	NB	LT	131	1,550	90.4	51.4	
			TH	1,347		47.8		
			RT	72		48.7		
		EB	LT	208	455	31.4	19.3	
			TH	247		9.1		
		WB	TH	229	545	46.3	47.5	
			RT	316		48.4		
Intersection				2,550	44.9			
300	N. Lynn Street Midblock	NB	TH	1,884	1,884	27.6	27.6	417
		EB	PED					
		WB	PED					
		Intersection				1,884	27.6	
15	N. Lynn Street and Wilson Boulevard	NB	LT	178	1,723	49.9	79.1	704
			TH	1,307		82.9		
			RT	238		80.5		
		EB	LT	574	972	35.0	24.9	
			TH	398		10.4		
		WB	TH	491	502	34.1	33.7	
			RT	11		19.4		
Intersection				3,197	55.5			
16	N. Lynn Street and 17th Street N	NB	TH	279	279	4.9	4.9	497
		EB	LT	24	24	12.4	12.4	44
		Intersection				303	5.5	
17	N. Lynn Street and Fairfax Drive	NB	LT	26	1,688	25.5	21.7	305
			TH	1,605		21.6		
			RT	57		22.0		
		EB	LT	127	170	21.9	24.2	
			TH	43		31.1		
		WB	TH	67	119	56.1	59.8	
			RT	52		64.6		
Intersection				1,977	24.2			
18	N. Nash Street and WB Lee Highway	NB	LT	68	88	34.3	32.0	201
			TH	20		24.0		
		SB	TH	11	13	25.3	22.9	
			RT	2		9.8		
		WB	LT	18	479	2.5	2.7	
			TH	453		2.7		
			RT	8		2.3		
Intersection				580	7.6			
19	N. Nash Street and EB Lee Highway	NB	TH	54	202	58.1	66.6	497
			RT	148		69.7		
		SB	LT	39	76	116.8	75.1	
			TH	37		31.1		
		EB	LT	35	1,808	129.1	135.8	
			TH	1,742		136.3		
			RT	31		113.4		
Intersection				2,086	126.9			

AM Intersection Volume, Delay, and Queue Length

#	Intersection	Approach	Movement	Vehicles				
				Average Throughput (vph)		Average Delay (sec/veh)		Max Queue Length (feet)
20	N. Nash Street and Key Boulevard	NB	LT	50	199	22.6	23.2	
			TH	149		23.4		
		SB	TH	263	375	5.3	5.9	227
			RT	112		7.3		
		EB	LT	224	378	68.5	67.2	1,084
			RT	154		65.4		
Intersection				952		33.9		
21	N. Nash Street and Wilson Boulevard	NB	LT	6	83	34.5	26.3	125
			TH	43		25.3		
			RT	34		26.2		
		SB	LT	63	221	37.1	27.6	101
			TH	63		21.8		
			RT	95		25.3		
		EB	LT	92	852	83.6	31.4	278
			TH	756		25.1		
			RT	4		21.1		
		WB	U-Turn	33	681	0.0	12.0	272
			LT	33		21.7		
			TH	401		12.8		
RT	214		10.9					
Intersection				1,837		23.5		
22	N. Nash Street and Arlington Boulevard	NB	LT	28	92	28.5	34.3	161
			RT	64		36.8		
		EB	TH	152	169	141.4	144.2	1,013
			RT	17		169.8		
		WB	LT	12	36	2.4	1.1	38
			TH	24		0.4		
Intersection				297		92.8		
23	N. Meade Street and EB Arlington Boulevard	NB	LT	25	439	9.9	9.7	160
			TH	324		4.1		
			RT	90		30.0		
		SB	LT	311	473	115.6	77.6	575
			TH	150		3.9		
			RT	12		14.0		
		EB	LT	67	210	153.8	151.0	501
			TH	96		165.1		
RT	47		118.1					
Intersection				1,122		64.8		

AM Intersection Volume, Delay, and Queue Length

#	Intersection	Approach	Movement	Vehicles				
				Average Throughput (vph)	Average Delay (sec/veh)		Max Queue Length (feet)	
24	N. Kent Street and 19th Street N.	NB	LT	106	172	34.4	28.2	203
			TH	28		27.9		
			RT	38		11.0		
		SB	LT	3	62	16.4	16.1	82
			TH	0		0.0		
			RT	59		16.0		
		EB	LT	150	320	20.4	13.2	321
			TH	129		7.1		
			RT	41		6.0		
		WB	LT	8	430	15.6	14.8	362
TH	388		14.8					
RT	34		14.1					
Intersection				984	16.7			
25	N. Kent Street and Wilson Boulevard	EB	LT	169	550	28.9	16.0	309
			TH	381		10.3		
		WB	TH	665	816	9.3	9.4	261
			RT	151		9.9		
		Intersection				1,366	12.1	
26	N. Arlington Ridge Road and Wilson Boulevard	NB	LT	7	42	8.5	9.2	58
			TH	5		23.0		
			RT	30		7.1		
		SB	LT	28	63	6.8	5.6	46
			TH	6		8.2		
			RT	29		3.9		
		EB	LT	61	379	15.3	2.9	126
			TH	301		0.5		
			RT	17		0.6		
		WB	LT	5	1,350	6.9	6.6	66
TH	780		6.7					
RT	565		6.4					
Intersection				1,834	5.8			
27	N. Oak Street and Wilson Boulevard	NB	LT	126	200	12.0	8.5	107
			TH	74		2.7		
		SB	TH	109	183	44.3	44.3	270
			RT	74		44.4		
		WB	TH	444	502	23.0	24.0	228
			RT	58		31.7		
Intersection				885	24.7			
36	N. Oak Street and Clarendon Boulevard	NB	TH	73	108	35.9	34.8	181
			RT	35		32.7		
		SB	LT	66	110	5.3	3.5	87
			TH	44		0.8		
		EB	LT	127	879	166.9	107.3	1,612
			TH	752		97.2		
		Intersection				1,097	89.7	

Freeway Volume, Density, and Speed

AM Peak Hour (8:00-9:00 AM)

NOTES:

-Results displayed are the average results across 10 microsimulation runs

Interchange	Segment	Type	Vehicles		
			Average Throughput (vph)	Average Density (vpmp)	Average Speed (mph)
I-66 Eastbound	Upstream	Basic	2,557	57.4	27
	On-ramp from EB Lee Hwy	Ramp	1,078	78.0	15
	Between Ramps	Weave	3,557	104.4	12
	Off-ramp to SB Route 110	Ramp	910	20.6	44
	Between Ramps	Basic	2,631	123.5	11
	On-ramp from SB GW Pkwy	Ramp	820	129.8	7
	Between Ramps	Merge	3,473	81.4	14
	On-ramp from EB US 50	Ramp	1,038	109.9	9
	Downstream	Basic	4,511	84.8	13
I-66 Westbound	Upstream	Diverge	2,853	25.2	38
	Off-ramp to WB US 50 and GW Pkwy	Ramp	1,168	17.8	35
	Off-ramp to GW Pkwy	Ramp	363	9.0	41
	Off-ramp to WB US 50	Ramp	803	27.1	33
	Between Ramps	Basic	1,678	19.9	42
	On-ramp from NB Route 110	Ramp	1,022	39.8	31
	Between Ramps	Weave	2,712	31.1	37
	Off-ramp to WB Lee Hwy/Key Bridge	Ramp	733	77.2	15
	Downstream	Basic	1,978	17.8	56
US 50 Eastbound	Upstream	Diverge	2,920	115.5	11
	Off-ramp to NB N. Meade St	Ramp	965	77.2	14
	Between Ramps	Basic	1,969	138.6	5
	On-ramp from N. Meade St	Ramp	480	146.8	3
	Between Ramps	Weave	2,476	147.5	6
	Off-ramp to EB I-66	Ramp	1,039	171	3
	Off-ramp to SB GW Pkwy	Ramp	1,441	16.8	43
US 50 Westbound	On-ramp from WB I-66	Ramp	803	27.1	33
	On-ramp from SB GW Pkwy	Ramp	396	22.1	26
	On-ramp from WB I-66 and SB GW Pkwy	Ramp	1,195	24.7	39
	On-ramp from NB GW Pkwy	Ramp	761	21.8	42
	Between Ramps	Weave	1,951	26.8	38
	Off-ramp to NB N. Lynn St	Ramp	509	47.9	19
	Between Ramps	Basic	1,439	10.1	48
	On-ramp from SB Ft Myer Dr	Ramp	364	10.1	36
	Downstream	Merge	1,794	9.5	47
Route 110 Northbound	Upstream	Basic	2,373	27.3	44
	Off-ramp to WB I-66	Ramp	1,022	40	31
	Downstream (Wilson Blvd)	Basic	1,069	22	25
Route 110 Southbound	Upstream (Wilson Blvd)	Basic	358	7.9	45
	On-ramp from I-66 EB	Ramp	910	21	44
	Downstream	Basic	1,270	13.5	47

AM Pedestrian and Bicycle Volume and Delay

Pedestrian and Bicycle Volume and Delay

AM Peak Hour (8:00-9:00 AM)

NOTES:

-Results displayed are the average results across 10 microsimulation runs

#	Intersection	Approach	Pedestrians		Bicycles	
			Average Throughput (per)	Average Delay (sec/per)	Average Throughput (per)	Average Delay (sec/per)
2	Fort Myer Drive and WB Lee Highway	NB	61	40.7	0	0.0
		SB	50	38.5	28	23.2
		EB	164	38.0	190	40.2
		WB	163	36.5	22	36.4
		Intersection	438	37.9	240	37.8
3	Fort Myer Drive and EB Lee Highway	NB	74	38.3	0	0.0
		SB	74	39.2	8	28.1
		NB-RT	41	0.1	0	0.0
		SB-RT	41	0.0	0	0.0
		EB	61	42.4	8	23.5
		WB	62	38.4	0	0.0
		Intersection	353	30.3	16	25.8
4	Fort Myer Drive and 19th Street N./N. Nash Street	NB	277	39.9	0	0.0
		SB	277	40.3	18	15.6
		EB	290	39.5	0	0.0
		WB	287	38.8	0	0.0
		Intersection	1,131	39.6	18	15.6
5	Fort Myer Drive and Wilson Boulevard	NB	364	41.4	0	0.0
		SB	366	40.9	4	41.6
		EB	702	109.7	16	32.0
		WB	237	113.3	2	29.6
		Intersection	1,669	80.2	22	33.5
10	N. Moore Street and 19th Street N.	NB	212	40.1	0	0.0
		SB	211	38.3	0	0.0
		EB	259	39.5	0	0.0
		WB	259	39.8	0	0.0
		Intersection	941	39.5	0	0.0
12	N. Lynn Street and WB Lee Highway	NB	130	41.0	21	12.5
		SB	130	39.7	29	43.6
		EB	169	37.5	186	32.0
		WB	170	36.8	21	25.9
		Intersection	599	38.5	257	31.2
13	N. Lynn Street and EB Lee Highway	NB	15	40.9	21	15.7
		NB-Ramp	13	0.0	0	0.0
		SB	15	40.0	19	14.9
		SB-Ramp	13	0.1	0	0.0
		EB	20	39.1	0	0.0
		WB	20	38.4	0	0.0
		Intersection	96	28.8	40	15.3

AM Pedestrian and Bicycle Volume and Delay

#	Intersection	Approach	Pedestrians		Bicycles	
			Average Throughput (per)	Average Delay (sec/per)	Average Throughput (per)	Average Delay (sec/per)
14	N. Lynn Street and 19th Street N.	NB	457	39.3	29	14.1
		SB	458	39.6	0	0.0
		EB	608	41.3	0	0.0
		WB	609	40.6	0	0.0
		Intersection	2,132	40.3	29	14.1
300	N. Lynn Street Midblock	NB			29	0.8
		EB	244	39.9	0	0.0
		WB	252	39.8	0	0.0
		Intersection	496	39.9	29	0.8
15	N. Lynn Street and Wilson Boulevard	NB	490	39.6	25	23.4
		SB	488	39.9	0	0.0
		EB	426	39.8	4	14.1
		WB	427	39.9	5	14.4
		Intersection	1,831	39.8	34	20.9
21	N. Nash St and Wilson Boulevard	NB	135	40.8	0	0.0
		SB	135	41.1	0	0.0
		EB	409	39.2	16	5.9
		EB-RT	158	0.1	0	0.0
		WB	409	39.9	2	9.6
		WB-RT	158	0.0	0	0.0
		Intersection	1,404	31.0	18	6.3
27	N. Oak Street and Wilson Boulevard	NB	183	40.4	4	0.0
		SB	183	40.2	0	0.0
		EB	339	38.7	0	0.0
		WB	340	39.5	2	43.3
		Intersection	1,045	39.5	6	14.4
36	N. Oak Street and Clarendon Boulevard	NB	110	39.5	4	32.6
		SB	110	38.1	0	0.0
		EB	157	40.1	16	10.3
		WB	157	38.9	0	0.0
		Intersection	534	39.2	20	14.8

PM Intersection Volume, Delay, and Queue Length

Intersection Volume, Delay, and Queue Length

PM Peak Hour (5:00-6:00 PM)

NOTES:

-Results displayed are the average results across 10 microsimulation runs

-VISSIM reported queue length is capped at the distance to the stop bar of the upstream intersection

#	Intersection	Approach	Movement	Vehicles				
				Average Throughput (vph)		Average Delay (sec/veh)		Max Queue Length (feet)
1	Southbound Key Bridge and George Washington Parkway	SB	TH	1,910	2,316	53.5	51.1	1,534
			RT	406		39.9		
		WB	LT	7	683	33.8	33.5	
			TH	676		33.5		
		Intersection				2,999	47.1	
2	Fort Myer Drive and WB Lee Highway	SB	TH	1,546	1,916	17.1	17.2	371
			RT	370		17.3		
		WB	LT	125	739	44.5	19.7	
			TH	614		14.7		
		Intersection				2,655	17.9	
3	Fort Myer Drive and EB Lee Highway	SB	LT	671	1,662	36.8	19.7	299
			TH	991		8.1		
		EB	TH	958	1,234	17.6	14.9	
			RT	276		5.8		
		Intersection				2,896	17.7	
4	Fort Myer Drive and 19th Street N/N. Nash Street	SB	LT	80	1,282	27.3	8.9	316
			TH	1,025		8.0		
			RT	177		5.8		
		EB	TH	216	363	23.6	18.6	
			RT	147		11.3		
		WB	LT	137	299	25.2	26.3	
			TH	162		27.3		
Intersection				1,944	13.4			
5	Fort Myer Drive and Wilson Boulevard	SB	LT	247	1,338	34.4	10.8	323
			TH	170		24.5		
			Tunnel	865		1.6		
			RT	56		8.0		
		EB	TH	800	925	36.9	39.1	
			RT	125		53.5		
		WB	U-Turn	41	758	21.0	14.1	
LT	193		27.2					
TH	524	8.7						
Intersection				3,021	20.3			
6	N. Nash Street and 17th Street N.	SB	LT	34	59	3.3	5.0	68
			RT	25		7.3		
		EB	LT	42	60	18.4	16.6	
			TH	18		12.3		
		WB	TH	14	107	11.3	13.8	
			RT	93		14.2		
Intersection				226	12.2			

PM Intersection Volume, Delay, and Queue Length

#	Intersection	Approach	Movement	Vehicles				
				Average Throughput (vph)		Average Delay (sec/veh)		Max Queue Length (feet)
7	Fort Myer Drive and Fairfax Drive	SB	LT	151	1,362	19.1	29.4	567
			TH	1,159		30.1		
			RT	52		43.9		
		EB	TH	86	219	35.4	30.0	232
			RT	133		26.5		
		WB	LT	56	81	27.1	26.9	128
			TH	25		26.6		
Intersection				1,662	29.3			
8	Fort Myer Drive/N. Meade Street and WB Arlington Boulevard Ramp	NB	LT	94	841	9.7	4.2	102
			TH	747		3.5		
		SB	TH	667	1,349	0.6	2.1	210
			RT	682		3.6		
		WB	LT	101	598	22.6	11.7	171
			TH	0		0.0		
			RT	497		9.5		
Intersection				2,788	4.8			
9	N. Moore Street and EB Lee Hwy	NB	RT	134	134	64.1	64.1	233
		EB	TH	1,581	1,581	24.8	24.8	387
		Intersection				1,715	27.9	
10	N. Moore Street and 19th Street N.	SB	LT	17	115	48.6	39.8	181
			TH	15		27.7		
			RT	83		40.1		
		EB	LT	10	294	3.4	15.1	162
			TH	266		16.0		
			RT	18		9.4		
		WB	LT	14	236	19.0	7.3	138
TH	216		6.5					
RT	6		9.0					
Intersection				645	16.7			
11	N. Moore Street and Wilson Boulevard	SB	RT	143	143	64.0	64.0	168
		EB	TH	1,086	1,086	6.1	6.1	234
		WB	TH	582	582	3.1	3.1	227
		Intersection				1,811	9.7	
12	N. Lynn Street and WB Lee Highway	NB	LT	316	2,211	15.2	14.8	286
			TH	1,895		14.7		
		WB	TH	428	912	40.5	66.6	582
			RT	484		89.6		
		Intersection				3,123	29.9	
13	N. Lynn Street and EB Lee Highway	NB	TH	1,485	1,759	27.6	37.1	444
			RT	274		88.3		
		EB	LT	732	1,711	10.7	17.0	143
			TH	979		21.6		
		Intersection				3,470	27.2	

PM Intersection Volume, Delay, and Queue Length

#	Intersection	Approach	Movement	Vehicles					
				Average Throughput (vph)		Average Delay (sec/veh)		Max Queue Length (feet)	
14	N. Lynn Street and 19th Street N.	NB	LT	103	1,437	46.5	17.0		375
			TH	1,296		13.3			
			RT	38		64.3			
		EB	LT	188	281	29.2	21.2	176	
			TH	93		5.1			
		WB		TH	132	419	49.0	85.0	377
				RT	287		101.5		
Intersection				2,137	30.9				
300	N. Lynn Street Midblock	NB	TH	1,526	1,526	4.7	4.7	234	
		EB	PED						
		WB	PED						
		Intersection				1,526	4.7		
15	N. Lynn Street and Wilson Boulevard	NB	LT	237	1,460	44.5	41.1	540	
			TH	934		31.0			
			RT	289		70.9			
		EB	LT	374	1,086	31.5	13.4	201	
			TH	712		3.9			
		WB		TH	344	565	32.1	44.2	373
				RT	221		63.1		
Intersection				3,111	32.0				
16	N. Lynn Street and 17th Street N	NB	TH	230	230	3.9	3.9	289	
		EB	LT	51	51	15.2	15.2	60	
		Intersection				281	5.9		
17	N. Lynn Street and Fairfax Drive	NB	LT	15	1,245	13.2	9.9	267	
			TH	1,175		9.9			
			RT	55		8.8			
		EB	LT	86	138	17.6	23.5	134	
			TH	52		33.1			
		WB		TH	65	121	54.6	55.3	148
				RT	56		56.1		
Intersection				1,504	14.8				
18	N. Nash Street and WB Lee Highway	NB	LT	44	59	41.3	39.2	88	
			TH	15		33.2			
		SB	TH	10	26	29.5	16.0	60	
			RT	16		7.5			
		WB		LT	42	984	2.2	3.0	98
				TH	939		3.1		
				RT	3		1.1		
Intersection				1,069	5.3				
19	N. Nash Street and EB Lee Highway	NB	TH	52	147	19.9	13.9	124	
			RT	95		10.6			
		SB	LT	30	94	31.4	26.4	102	
			TH	64		24.0			
		EB		LT	7	1,205	12.4	11.3	232
				TH	1,110		11.5		
				RT	88		10.0		
Intersection				1,446	12.6				

PM Intersection Volume, Delay, and Queue Length

#	Intersection	Approach	Movement	Vehicles				
				Average Throughput (vph)	Average Delay (sec/veh)		Max Queue Length (feet)	
20	N. Nash Street and Key Boulevard	NB	LT	62	272	14.6	16.0	258
			TH	210		16.4		
		SB	TH	167	338	2.7	2.8	154
			RT	171		2.9		
		EB	LT	150	226	29.9	26.8	416
			RT	76		20.6		
Intersection				836	13.6			
21	N. Nash Street and Wilson Boulevard	NB	LT	21	136	48.2	42.8	193
			TH	53		38.4		
			RT	62		44.7		
		SB	LT	134	328	75.1	49.5	366
			TH	35		26.1		
			RT	159		33.0		
		EB	LT	43	768	36.8	27.6	282
			TH	723		27.1		
			RT	2		39.0		
		WB	U-Turn	22	586	5.1	12.9	251
LT	22		26.5					
TH	457		13.0					
RT	85		10.7					
Intersection				1,818	27.9			
22	N. Nash Street and Arlington Boulevard	NB	LT	5	19	7.7	7.5	37
			RT	14		7.4		
		EB	TH	148	168	4.3	4.1	167
			RT	20		3.4		
		WB	LT	13	63	1.5	0.4	22
			TH	50		0.1		
Intersection				250	3.5			
23	N. Meade Street and EB Arlington Boulevard	NB	LT	4	295	6.0	2.4	66
			TH	204		0.5		
			RT	87		6.8		
		SB	LT	528	768	8.4	6.0	303
			TH	181		0.5		
			RT	59		1.8		
		EB	LT	25	167	79.8	72.0	393
			TH	96		76.7		
RT	46		57.9					
Intersection				1,230	14.1			

PM Intersection Volume, Delay, and Queue Length

#	Intersection	Approach	Movement	Vehicles				
				Average Throughput (vph)	Average Delay (sec/veh)	Max Queue Length (feet)		
24	N. Kent Street and 19th Street N.	NB	LT	165	241	73.9	60.8	319
			TH	3		50.1		
			RT	73		31.8		
		SB	LT	55	163	52.8	56.3	137
			TH	1		0.0		
			RT	107		58.6		
		EB	LT	7	131	11.0	4.2	80
			TH	87		4.4		
			RT	37		2.5		
		WB	LT	6	167	89.1	110.2	486
TH	159		111.6					
RT	2		60.8					
Intersection				702	60.9			
25	N. Kent Street and Wilson Boulevard	EB	LT	67	1,041	37.5	15.5	253
			TH	974		14.0		
		WB	TH	492	567	8.3	8.5	223
			RT	75		9.8		
		Intersection				1,608	13.0	
26	N. Arlington Ridge Road and Wilson Boulevard	NB	LT	2	44	17.5	15.1	66
			TH	6		19.2		
			RT	36		14.3		
		SB	LT	205	241	6.1	5.7	102
			TH	1		7.1		
			RT	35		3.2		
		EB	LT	24	975	4.7	2.7	49
			TH	939		2.7		
			RT	12		1.3		
		WB	LT	8	616	9.8	2.4	30
TH	531		2.3					
RT	77		1.8					
Intersection				1,876	3.3			
27	N. Oak Street and Wilson Boulevard	NB	LT	89	149	9.6	9.6	119
			TH	60		9.7		
		SB	TH	71	115	28.0	29.7	141
			RT	44		32.5		
		WB	TH	567	636	17.5	20.3	219
			RT	69		43.3		
Intersection				900	19.8			
36	N. Oak Street and Clarendon Boulevard	NB	TH	48	88	30.2	29.1	122
			RT	40		27.9		
		SB	LT	48	70	5.1	5.0	75
			TH	22		4.9		
		EB	LT	100	780	101.4	71.5	608
			TH	680		67.1		
Intersection				938	62.5			

Freeway Volume, Density, and Speed

PM Peak Hour (5:00-6:00 PM)

NOTES:

-Results displayed are the average results across 10 microsimulation runs

Interchange	Segment	Type	Vehicles		
			Average Throughput (vph)	Average Density (vpmpl)	Average Speed (mph)
I-66 Eastbound	Upstream	Basic	2,395	50.1	31
	On-ramp from EB Lee Hwy	Ramp	1,240	97.8	14
	Between Ramps	Weave	3,569	71.7	18
	Off-ramp to SB Route 110	Ramp	1,530	36.6	42
	Between Ramps	Basic	2,017	100.8	14
	On-ramp from SB GW Pkwy	Ramp	827	38.9	22
	Between Ramps	Merge	2,831	84.0	17
	On-ramp from EB US 50	Ramp	906	36.0	26
	Downstream	Basic	3,743	75.8	17
I-66 Westbound	Upstream	Diverge	5,335	36.7	36
	Off-ramp to WB US 50 and GW Pkwy	Ramp	3,136	43.8	36
	Off-ramp to GW Pkwy	Ramp	1,815	47.7	38
	Off-ramp to WB US 50	Ramp	1,334	39.3	34
	Between Ramps	Basic	2,167	25.8	42
	On-ramp from NB Route 110	Ramp	1,012	28.9	35
	Between Ramps	Weave	3,191	24.3	44
	Off-ramp to WB Lee Hwy/Key Bridge	Ramp	925	25.5	36
	Downstream	Basic	2,267	20.4	56
US 50 Eastbound	Upstream	Diverge	1,844	13.1	47
	Off-ramp to NB N. Meade St	Ramp	607	30.0	20
	Between Ramps	Basic	1,235	8.6	48
	On-ramp from N. Meade St	Ramp	693	28.4	24
	Between Ramps	Weave	1,945	15.5	42
	Off-ramp to EB I-66	Ramp	906	13.9	33
	Off-ramp to SB GW Pkwy	Ramp	1,043	11.2	47
US 50 Westbound	On-ramp from WB I-66	Ramp	1334	39.3	34
	On-ramp from SB GW Pkwy	Ramp	448	15.4	29
	On-ramp from WB I-66 and SB GW Pkwy	Ramp	1,786	19.6	46
	On-ramp from NB GW Pkwy	Ramp	1,225	27.2	45
	Between Ramps	Weave	3,009	22.0	46
	Off-ramp to NB N. Lynn St	Ramp	596	18.6	32
	Between Ramps	Basic	2,417	17.0	47
	On-ramp from SB Ft Myer Dr	Ramp	768	21.4	36
	Downstream	Merge	3,172	17.4	45
Route 110 Northbound	Upstream	Basic	1,627	17.6	46
	Off-ramp to WB I-66	Ramp	1,012	28.9	35
	Downstream (Wilson Blvd)	Basic	572	11.6	25
Route 110 Southbound	Upstream (Wilson Blvd)	Basic	1,178	27.4	43
	On-ramp from I-66 EB	Ramp	1,530	36.6	42
	Downstream	Basic	2,715	31.8	43

PM Pedestrian and Bicycle Volume and Delay

Pedestrian and Bicycle Volume and Delay

PM Peak Hour (5:00-6:00 PM)

NOTES:

-Results displayed are the average results across 10 microsimulation runs

#	Intersection	Approach	Pedestrians		Bicycles	
			Average Throughput (per)	Average Delay (sec/per)	Average Throughput (per)	Average Delay (sec/per)
2	Fort Myer Drive and WB Lee Highway	NB	192	39.5	0	0.0
		SB	192	38.4	41	11.9
		EB	142	40.9	38	39.7
		WB	139	54.1	130	53.9
		Intersection	665	42.5	209	43.1
3	Fort Myer Drive and EB Lee Highway	NB	175	39.7	0	0.0
		SB	176	41.0	8	15.9
		NB-RT	110	0.0	0	0.0
		SB-RT	111	0.0	0	0.0
		EB	64	38.9	0	0.0
		WB	30	37.0	0	0.0
		Intersection	666	26.7	8	15.9
4	Fort Myer Drive and 19th Street N./N. Nash Street	NB	291	39.3	0	0.0
		SB	292	39.4	17	10.5
		EB	276	40.1	4	17.2
		WB	275	39.4	4	14.6
		Intersection	1,134	39.5	25	12.2
5	Fort Myer Drive and Wilson Boulevard	NB	435	42.4	2	16.9
		SB	437	41.2	3	23.1
		EB	656	112.3	12	59.4
		WB	654	114.1	6	36.0
		Intersection	2,182	84.7	23	44.9
10	N. Moore Street and 19th Street N.	NB	428	40.3	0	0.0
		SB	427	39.9	0	0.0
		EB	304	40.2	5	6.2
		WB	304	39.7	5	7.1
		Intersection	1,463	40.0	10	6.6
12	N. Lynn Street and WB Lee Highway	NB	183	41.2	30	9.7
		SB	182	39.2	32	33.5
		EB	141	36.1	27	30.5
		WB	142	36.1	112	28.6
		Intersection	648	38.4	201	26.8
13	N. Lynn Street and EB Lee Highway	NB	40	38.5	30	18.3
		NB-Ramp	23	0.1	0	0.0
		SB	40	38.5	6	28.2
		SB-Ramp	23	0.0	0	0.0
		EB	20	37.7	0	0.0
		WB	20	39.8	0	0.0
		Intersection	166	27.9	36	19.9

PM Pedestrian and Bicycle Volume and Delay

#	Intersection	Approach	Pedestrians		Bicycles	
			Average Throughput (per)	Average Delay (sec/per)	Average Throughput (per)	Average Delay (sec/per)
14	N. Lynn Street and 19th Street N.	NB	501	40.2	28	18.2
		SB	501	41.8	0	0.0
		EB	628	42.5	5	27.4
		WB	629	41.2	1	161.9
		Intersection	2,259	41.5	34	23.8
300	N. Lynn Street Midblock	NB			29	0.5
		EB	245	40.0	0	0.0
		WB	245	38.9	0	0.0
		Intersection	490	39.5	29	0.5
15	N. Lynn Street and Wilson Boulevard	NB	470	39.4	7	25.5
		SB	467	38.7	0	0.0
		EB	324	40.5	10	12.3
		WB	324	40.3	6	31.2
		Intersection	1,585	39.6	23	21.3
21	N. Nash St and Wilson Boulevard	NB	152	44.0	0	0.0
		SB	152	44.2	0	0.0
		EB	391	40.1	12	14.9
		EB-RT	151	0.1	0	0.0
		WB	389	47.8	6	7.1
		WB-RT	151	0.1	0	0.0
		Intersection	1,386	34.4	18	12.3
27	N. Oak Street and Wilson Boulevard	NB	346	40.9	0	0.0
		SB	346	40.8	0	0.0
		EB	468	39.6	0	0.0
		WB	468	39.5	6	40.3
		Intersection	1,628	40.1	6	40.3
36	N. Oak Street and Clarendon Boulevard	NB	65	41.6	1	22.4
		SB	65	42.0	0	0.0
		EB	36	41.3	13	9.3
		WB	36	42.8	0	0.0
		Intersection	202	41.9	14	10.2