

Technical Appendix – Timing Plan Outputs with HCM Worksheets

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

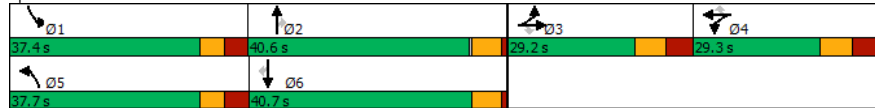
101: Rosser Ave & Ladd Rd
Existing Conditions (June 2018) - AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	61	43	57	57	84	131	40	609	68	57	318	20
Future Volume (vph)	61	43	57	57	84	131	40	609	68	57	318	20
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850			0.850			0.850	
Flt Protected		0.972			0.980		0.950			0.950		
Satd. Flow (prot)	0	1794	1615	0	1840	1553	1787	3404	1567	1704	3440	1553
Flt Permitted		0.972			0.980		0.950			0.950		
Satd. Flow (perm)	0	1794	1615	0	1840	1553	1787	3404	1567	1704	3440	1553
Satd. Flow (RTOR)			155		162		182			182		
Adj. Flow (vph)	75	53	70	70	104	162	49	752	84	70	393	25
Lane Group Flow (vph)	0	128	70	0	174	162	49	752	84	70	393	25
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			6
Total Split (s)	29.2	29.2	29.2	29.3	29.3	29.3	37.7	40.6	40.6	37.4	40.7	40.7
Total Lost Time (s)	9.2	9.2		9.3	9.3		7.7	5.6	5.6	7.4	5.7	5.7
Act Effct Green (s)	13.4	13.4		15.3	15.3		8.5	32.0	32.0	10.4	32.9	32.9
Actuated g/C Ratio	0.13	0.13		0.15	0.15		0.09	0.32	0.32	0.10	0.33	0.33
v/c Ratio	0.53	0.20		0.62	0.43		0.32	0.69	0.13	0.39	0.35	0.04
Control Delay	52.5	1.3		52.8	10.7		54.1	35.2	0.4	53.8	28.1	0.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	1.3		52.8	10.7		54.1	35.2	0.4	53.8	28.1	0.1
LOS	D	A		D	B		D	A	D	C	A	
Approach Delay	34.4			32.5			33.0			30.3		
Approach LOS	C			C			C			C		

Intersection Summary

Cycle Length: 136.9	
Actuated Cycle Length: 99.4	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 32.4	Intersection LOS: C
Intersection Capacity Utilization 56.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 101: Rosser Ave & Ladd Rd



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

101: Rosser Ave & Ladd Rd
Existing Conditions (June 2018) - AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	61	43	57	57	84	131	40	609	68	57	318	20
Future Volume (vph)	61	43	57	57	84	131	40	609	68	57	318	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-4%			-2%			2%			-2%	
Total Lost time (s)		9.2	9.2		9.3	9.3	7.7	5.6	5.6	7.4	5.7	5.7
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.85		1.00	0.85		1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	0.97	1.00		0.98	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1793	1615		1841	1553		1787	3404	1567	1704	3440	1553
Flt Permitted	0.97	1.00		0.98	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1793	1615		1841	1553		1787	3404	1567	1704	3440	1553
Peak-hour factor, PHF	0.81	0.81		0.81	0.81		0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	75	53	70	70	104	162	49	752	84	70	393	25
RTOR Reduction (vph)	0	0	61	0	0	137	0	0	57	0	0	17
Lane Group Flow (vph)	0	128	9	0	174	25	49	752	27	70	393	8
Heavy Vehicles (%)	5%	5%	2%	4%	1%	5%	0%	5%	2%	7%	6%	5%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			6
Actuated Green, G (s)	13.4	13.4		15.3	15.3		6.7	32.1	32.1	7.9	32.9	32.9
Effective Green, g (s)	13.4	13.4		15.3	15.3		6.7	32.1	32.1	7.9	32.9	32.9
Actuated g/C Ratio	0.13	0.13		0.15	0.15		0.07	0.32	0.32	0.08	0.33	0.33
Clearance Time (s)	9.2	9.2		9.3	9.3		7.7	5.6	5.6	7.4	5.7	5.7
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	6.0	6.0	3.0	6.0	6.0
Lane Grp Cap (vph)	239	215		281	237		119	1090	502	134	1129	509
v/s Ratio Prot	c0.07			c0.09			0.03	c0.22		c0.04	0.11	
v/s Ratio Perm		0.01			0.02			0.02			0.01	
v/c Ratio	0.54	0.04		0.62	0.10		0.41	0.69	0.05	0.52	0.35	0.02
Uniform Delay, d1	40.5	37.8		39.7	36.6		44.9	29.7	23.5	44.3	25.5	22.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.1		4.2	0.2		2.3	2.8	0.1	3.6	0.5	0.0
Delay (s)	43.1	37.9		44.0	36.8		47.2	32.5	23.7	48.0	26.0	22.8
Level of Service	D	D		D	D		D	C	C	D	C	C
Approach Delay (s)	41.3			40.5			32.5			29.0		
Approach LOS	D			D			C			C		

Intersection Summary

HCM 2000 Control Delay	33.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	100.2	Sum of lost time (s)	31.9
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

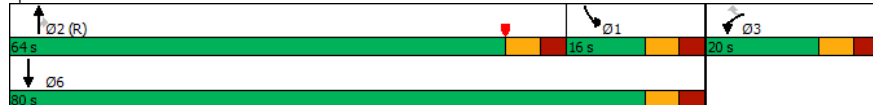
102: Rosser Ave & Town Center Dr
Existing Conditions (June 2018) - AM Peak Hour

	←		↑		→	
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↑↑	↔	↔↔	↑↑
Traffic Volume (vph)	28	10	754	73	7	403
Future Volume (vph)	28	10	754	73	7	403
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	0.850		0.850		0.950	
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1733	1550	3557	1623	3537	3506
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1733	1550	3557	1623	3537	3506
Satd. Flow (RTOR)		11		83		
Adj. Flow (vph)	32	11	857	83	8	458
Lane Group Flow (vph)	32	11	857	83	8	458
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases	3		2			
Total Split (s)	20.0	20.0	64.0	64.0	16.0	80.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Act Effct Green (s)	8.6	8.6	83.2	83.2	8.0	86.2
Actuated g/C Ratio	0.09	0.09	0.83	0.83	0.08	0.86
v/c Ratio	0.22	0.08	0.29	0.06	0.03	0.15
Control Delay	45.9	22.3	4.4	1.6	30.9	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.9	22.3	4.4	1.6	30.9	2.0
LOS	D	C	A	A	C	A
Approach Delay	39.9		4.2			2.5
Approach LOS	D		A			A

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 58 (58%), Referenced to phase 2:NBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.29	
Intersection Signal Delay: 4.7	Intersection LOS: A
Intersection Capacity Utilization 39.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 102: Rosser Ave & Town Center Dr



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

102: Rosser Ave & Town Center Dr
Existing Conditions (June 2018) - AM Peak Hour

	←		↑		→	
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↑↑	↔	↔↔	↑↑
Traffic Volume (vph)	28	10	754	73	7	403
Future Volume (vph)	28	10	754	73	7	403
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	8%		-1%			-2%
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1733	1550	3557	1623	3537	3506
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1733	1550	3557	1623	3537	3506
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	32	11	857	83	8	458
RTOR Reduction (vph)	0	10	0	23	0	0
Lane Group Flow (vph)	32	1	857	60	8	458
Heavy Vehicles (%)	0%	0%	2%	0%	0%	4%
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases	3		2			
Actuated Green, G (s)	5.4	5.4	72.0	72.0	1.6	80.6
Effective Green, g (s)	5.4	5.4	72.0	72.0	1.6	80.6
Actuated g/C Ratio	0.05	0.05	0.72	0.72	0.02	0.81
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	93	83	2561	1168	56	2825
v/s Ratio Prot	c0.02		c0.24		c0.13	
v/s Ratio Perm	0.00		0.04			
v/c Ratio	0.34	0.01	0.33	0.05	0.14	0.16
Uniform Delay, d1	45.6	44.8	5.2	4.1	48.5	2.2
Progression Factor	1.00	1.00	1.00	1.00	0.72	0.84
Incremental Delay, d2	2.6	0.0	0.4	0.1	1.4	0.0
Delay (s)	48.2	44.8	5.5	4.2	36.4	1.8
Level of Service	D	D	A	A	D	A
Approach Delay (s)	47.3		5.4			2.4
Approach LOS	D		A			A

Intersection Summary

HCM 2000 Control Delay	5.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

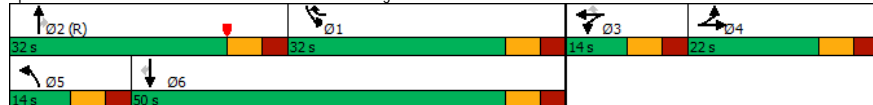
103: Rosser Ave & Shenandoah Village Dr
Existing Conditions (June 2018) - AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↗	↗	↖	↖	↖	↖	↖	↖
Traffic Volume (vph)	4	1	1	29	0	138	0	692	65	251	384	5
Future Volume (vph)	4	1	1	29	0	138	0	692	65	251	384	5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt		0.981				0.850			0.850			0.850
Flt Protected		0.966		0.950						0.950		
Satd. Flow (prot)	0	1846	0	1751	1843	1567	1853	3522	1607	3399	3539	1599
Flt Permitted		0.966		0.950						0.950		
Satd. Flow (perm)	0	1846	0	1751	1843	1567	1853	3522	1607	3399	3539	1599
Satd. Flow (RTOR)		1		484		196				196		196
Adj. Flow (vph)	5	1	1	33	0	157	0	786	74	285	436	6
Lane Group Flow (vph)	0	7	0	33	0	157	0	786	74	285	436	6
Turn Type	Split	NA		Split	pm+ov	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases					3			2				6
Total Split (s)	22.0	22.0		14.0	14.0	32.0	14.0	32.0	32.0	50.0	50.0	
Total Lost Time (s)		7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Act Effct Green (s)		6.5		7.9		23.9		59.3	59.3	14.3	83.4	83.4
Actuated g/C Ratio		0.06		0.08		0.24		0.59	0.59	0.14	0.83	0.83
v/c Ratio		0.06		0.24		0.21		0.38	0.07	0.59	0.15	0.00
Control Delay		42.0		46.7		0.7		10.5	1.2	41.1	1.3	0.0
Queue Delay		0.0		0.0		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		42.0		46.7		0.7		10.5	1.2	41.1	1.3	0.0
LOS		D		D		A		B	A	D	A	A
Approach Delay		42.0			8.7			9.7				16.9
Approach LOS		D			A			A				B

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 53 (53%), Referenced to phase 2:NBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 12.6	Intersection LOS: B
Intersection Capacity Utilization 50.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 103: Rosser Ave & Shenandoah Village Dr



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

103: Rosser Ave & Shenandoah Village Dr
Existing Conditions (June 2018) - AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↗	↗	↖	↖	↖	↖	↖	↖
Traffic Volume (vph)	4	1	1	29	0	138	0	692	65	251	384	5
Future Volume (vph)	4	1	1	29	0	138	0	692	65	251	384	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-5%			6%			1%				2%
Total Lost time (s)		7.0		7.0		7.0		7.0	7.0	7.0	7.0	7.0
Lane Util. Factor		1.00		1.00		1.00		0.95	1.00	0.97	0.95	1.00
Frt		0.98		1.00		0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected		0.97		0.95		1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1844		1751		1567		3522	1607	3399	3539	1599
Flt Permitted		0.97		0.95		1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1844		1751		1567		3522	1607	3399	3539	1599
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	5	1	1	33	0	157	0	786	74	285	436	6
RTOR Reduction (vph)	0	1	0	0	0	126	0	0	36	0	0	2
Lane Group Flow (vph)	0	6	0	33	0	31	0	786	38	285	436	4
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	0%	2%	0%	1%	0%
Turn Type	Split	NA		Split	pm+ov	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases					3			2				6
Actuated Green, G (s)		1.5		5.4		19.7		50.8	50.8	14.3	72.1	72.1
Effective Green, g (s)		1.5		5.4		19.7		50.8	50.8	14.3	72.1	72.1
Actuated g/C Ratio		0.02		0.05		0.20		0.51	0.51	0.14	0.72	0.72
Clearance Time (s)		7.0		7.0		7.0		7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)		3.5		3.5		3.5		3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)		27		94		418		1789	816	486	2551	1152
v/s Ratio Prot		c0.00		c0.02		0.01		c0.22		c0.08	0.12	
v/s Ratio Perm						0.01			0.02			0.00
v/c Ratio		0.22		0.35		0.07		0.44	0.05	0.59	0.17	0.00
Uniform Delay, d1		48.7		45.6		32.7		15.6	12.4	40.1	4.4	3.9
Progression Factor		1.00		1.00		1.00		0.71	1.00	0.91	0.33	1.00
Incremental Delay, d2		4.9		2.7		0.1		0.8	0.1	1.9	0.0	0.0
Delay (s)		53.6		48.3		32.8		11.8	12.5	38.4	1.5	3.9
Level of Service		D		D		C		B	B	D	A	A
Approach Delay (s)		53.6			35.5			11.8				16.0
Approach LOS		D			D			B				B

Intersection Summary

HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

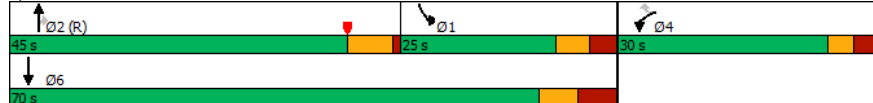
104: Rosser Ave & I-64 EB
Existing Conditions (June 2018) - AM Peak Hour

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Traffic Volume (vph)	90	212	538	296	294	499
Future Volume (vph)	90	212	538	296	294	499
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.850		0.850		0.950	
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1653	1583	3438	1615	1736	3471
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1653	1583	3438	1615	1736	3471
Satd. Flow (RTOR)		241		336		
Adj. Flow (vph)	102	241	611	336	334	567
Lane Group Flow (vph)	102	241	611	336	334	567
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Total Split (s)	30.0	30.0	45.0	45.0	25.0	70.0
Total Lost Time (s)	6.0	6.0	6.1	6.1	7.2	9.2
Act Effct Green (s)	12.4	12.4	50.5	50.5	17.8	72.4
Actuated g/C Ratio	0.12	0.12	0.50	0.50	0.18	0.72
v/c Ratio	0.50	0.59	0.35	0.34	1.08	0.23
Control Delay	48.4	11.5	10.9	2.3	117.7	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.4	11.5	10.9	2.3	117.7	3.3
LOS	D	B	B	A	F	A
Approach Delay	22.5		7.9		45.7	
Approach LOS	C		A		D	

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 50 (50%), Referenced to phase 2:NBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.08
 Intersection Signal Delay: 25.7
 Intersection LOS: C
 Intersection Capacity Utilization 53.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 104: Rosser Ave & I-64 EB



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

104: Rosser Ave & I-64 EB
Existing Conditions (June 2018) - AM Peak Hour

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Traffic Volume (vph)	90	212	538	296	294	499
Future Volume (vph)	90	212	538	296	294	499
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	4%		0%		0%	
Total Lost time (s)	6.0	6.0	6.1	6.1	7.2	9.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1653	1583	3438	1615	1736	3471
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1653	1583	3438	1615	1736	3471
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	102	241	611	336	334	567
RTOR Reduction (vph)	0	211	0	166	0	0
Lane Group Flow (vph)	102	30	611	170	334	567
Heavy Vehicles (%)	7%	0%	5%	0%	4%	4%
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Actuated Green, G (s)	12.4	12.4	50.5	50.5	17.8	72.4
Effective Green, g (s)	12.4	12.4	50.5	50.5	17.8	72.4
Actuated g/C Ratio	0.12	0.12	0.50	0.50	0.18	0.72
Clearance Time (s)	6.0	6.0	6.1	6.1	7.2	9.2
Vehicle Extension (s)	4.0	4.0	3.5	3.5	4.0	3.5
Lane Grp Cap (vph)	204	196	1736	815	309	2513
v/s Ratio Prot	c0.06		c0.18		c0.19	
v/s Ratio Perm	0.02		0.11		0.16	
v/c Ratio	0.50	0.15	0.35	0.21	1.08	0.23
Uniform Delay, d1	40.9	39.1	14.9	13.7	41.1	4.6
Progression Factor	1.00	1.00	0.66	0.76	1.18	0.62
Incremental Delay, d2	2.6	0.5	0.5	0.6	71.8	0.0
Delay (s)	43.5	39.6	10.4	11.0	120.1	2.9
Level of Service	D	D	B	B	F	A
Approach Delay (s)	40.8		10.6		46.3	
Approach LOS	D		B		D	

Intersection Summary

HCM 2000 Control Delay 30.0
 HCM 2000 Volume to Capacity ratio 0.54
 Actuated Cycle Length (s) 100.0
 Intersection Capacity Utilization 53.9%
 Analysis Period (min) 15
 HCM 2000 Level of Service C
 Sum of lost time (s) 19.3
 ICU Level of Service A

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

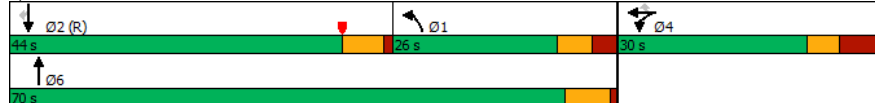
105: Rosser Ave & I-64 WB
Existing Conditions (June 2018) - AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↔			↔	↔
Traffic Volume (vph)	0	0	0	189	2	153	107	643	0	0	598	347
Future Volume (vph)	0	0	0	189	2	153	107	643	0	0	598	347
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.953		0.950					
Satd. Flow (prot)	0	0	0	0	1644	1537	1583	3539	0	0	3471	1615
Flt Permitted					0.953		0.950					
Satd. Flow (perm)	0	0	0	0	1644	1537	1583	3539	0	0	3471	1615
Satd. Flow (RTOR)						176						399
Adj. Flow (vph)	0	0	0	217	2	176	123	739	0	0	687	399
Lane Group Flow (vph)	0	0	0	0	219	176	123	739	0	0	687	399
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		1	6				2
Permitted Phases						4						2
Total Split (s)				30.0	30.0	30.0	26.0	70.0			44.0	44.0
Total Lost Time (s)				8.3	8.3	7.1	6.1				5.8	5.8
Act Effct Green (s)				19.1	19.1	13.8	66.5				45.9	45.9
Actuated g/C Ratio				0.19	0.19	0.14	0.66				0.46	0.46
v/c Ratio				0.70	0.40	0.56	0.31				0.43	0.42
Control Delay				49.7	8.0	38.3	4.8				21.1	6.0
Queue Delay				0.0	0.0	0.0	0.0				0.0	0.0
Total Delay				49.7	8.0	38.3	4.8				21.1	6.0
LOS				D	A	D	A				C	A
Approach Delay				31.1			9.6				15.6	
Approach LOS				C			A				B	

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 37 (37%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 16.0	Intersection LOS: B
Intersection Capacity Utilization 60.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 105: Rosser Ave & I-64 WB



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

105: Rosser Ave & I-64 WB
Existing Conditions (June 2018) - AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↔			↔	↔
Traffic Volume (vph)	0	0	0	189	2	153	107	643	0	0	598	347
Future Volume (vph)	0	0	0	189	2	153	107	643	0	0	598	347
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			4%			4%					0%	0%
Total Lost time (s)				8.3	8.3	7.1	6.1				5.8	5.8
Lane Util. Factor				1.00	1.00	1.00	0.95				0.95	1.00
Frt				1.00	0.85	1.00	1.00				1.00	0.85
Flt Protected				0.95	1.00	0.95	1.00				1.00	1.00
Satd. Flow (prot)				1644	1537	1583	3539				3471	1615
Flt Permitted				0.95	1.00	0.95	1.00				1.00	1.00
Satd. Flow (perm)				1644	1537	1583	3539				3471	1615
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	217	2	176	123	739	0	0	687	399
RTOR Reduction (vph)	0	0	0	0	0	142	0	0	0	0	0	216
Lane Group Flow (vph)	0	0	0	0	219	34	123	739	0	0	687	183
Heavy Vehicles (%)	0%	0%	0%	8%	0%	3%	14%	2%	0%	0%	4%	0%
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		1	6				2
Permitted Phases						4						2
Actuated Green, G (s)				19.1	19.1	13.8	66.5				45.9	45.9
Effective Green, g (s)				19.1	19.1	13.8	66.5				45.9	45.9
Actuated g/C Ratio				0.19	0.19	0.14	0.66				0.46	0.46
Clearance Time (s)				8.3	8.3	7.1	6.1				5.8	5.8
Vehicle Extension (s)				4.0	4.0	3.5	4.0				4.0	4.0
Lane Grp Cap (vph)				314	293	218	2353				1593	741
v/s Ratio Prot				c0.13		c0.08	0.21				c0.20	
v/s Ratio Perm						0.02						0.11
v/c Ratio				0.70	0.11	0.56	0.31				0.43	0.25
Uniform Delay, d1				37.8	33.5	40.3	7.1				18.2	16.5
Progression Factor				1.00	1.00	0.72	0.60				1.03	2.08
Incremental Delay, d2				7.1	0.2	3.4	0.1				0.8	0.8
Delay (s)				44.9	33.7	32.5	4.3				19.6	35.1
Level of Service				D	C	C	A				B	D
Approach Delay (s)		0.0			39.9		8.4				25.3	
Approach LOS		A			D		A				C	

Intersection Summary

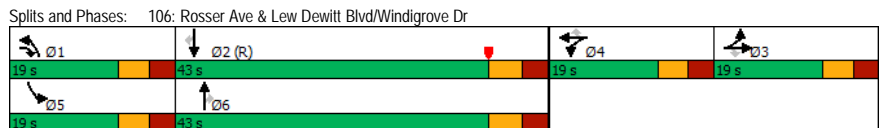
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.2
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
Existing Conditions (June 2018) - AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	80	17	282	189	33	35	281	451	67	22	474	79
Future Volume (vph)	80	17	282	189	33	35	281	451	67	22	474	79
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt			0.850				0.850					0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1762	1837	2829	3283	1748	1529	3382	3486	1515	1832	3557	1623
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1762	1837	2829	3283	1748	1529	3382	3486	1515	1832	3557	1623
Satd. Flow (RTOR)			267			185			180			180
Adj. Flow (vph)	88	19	310	208	36	38	309	496	74	24	521	87
Lane Group Flow (vph)	88	19	310	208	36	38	309	496	74	24	521	87
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Total Split (s)	19.0	19.0	19.0	19.0	19.0	19.0	19.0	43.0	43.0	19.0	43.0	43.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.0	7.0	6.5	7.0	7.0
Act Effct Green (s)	10.6	10.6	27.0	11.3	11.3	11.3	12.8	55.0	55.0	8.2	41.7	41.7
Actuated g/C Ratio	0.11	0.11	0.27	0.11	0.11	0.11	0.13	0.55	0.55	0.08	0.42	0.42
v/c Ratio	0.47	0.10	0.32	0.56	0.18	0.11	0.71	0.26	0.08	0.16	0.35	0.11
Control Delay	50.3	40.5	6.0	47.9	41.8	0.7	54.2	18.6	1.3	53.7	15.8	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.3	40.5	6.0	47.9	41.8	0.7	54.2	18.6	1.3	53.7	15.8	1.4
LOS	D	D	A	D	D	A	D	B	A	D	B	A
Approach Delay		16.9			40.8			29.6			15.2	
Approach LOS		B			D			C			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 40 (40%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 24.5	Intersection LOS: C
Intersection Capacity Utilization 49.8%	ICU Level of Service A
Analysis Period (min) 15	



Rosser Avenue (US340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
Existing Conditions (June 2018) - AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	80	17	282	189	33	35	281	451	67	22	474	79
Future Volume (vph)	80	17	282	189	33	35	281	451	67	22	474	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			-5%									-3%
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.0	7.0	6.5	7.0	7.0
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1762	1837	2829	3283	1748	1529	3382	3486	1515	1832	3557	1623
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1762	1837	2829	3283	1748	1529	3382	3486	1515	1832	3557	1623
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	88	19	310	208	36	38	309	496	74	24	521	87
RTOR Reduction (vph)	0	0	209	0	0	34	0	0	37	0	0	52
Lane Group Flow (vph)	88	19	101	208	36	4	309	496	37	24	521	35
Heavy Vehicles (%)	5%	6%	3%	4%	6%	3%	2%	5%	0%	3%	1%	
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Actuated Green, G (s)	9.0	9.0	21.8	11.3	11.3	11.3	12.8	49.8	49.8	3.4	40.4	40.4
Effective Green, g (s)	9.0	9.0	21.8	11.3	11.3	11.3	12.8	49.8	49.8	3.4	40.4	40.4
Actuated g/C Ratio	0.09	0.09	0.22	0.11	0.11	0.11	0.13	0.50	0.50	0.03	0.40	0.40
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.0	7.0	6.5	7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	158	165	800	370	197	172	432	1736	754	62	1437	655
v/s Ratio Prot	c0.05	0.01	0.02	c0.06	0.02		c0.09	0.14		0.01	c0.15	
v/s Ratio Perm			0.02			0.00			0.02			0.02
v/c Ratio	0.56	0.12	0.13	0.56	0.18	0.02	0.72	0.29	0.05	0.39	0.36	0.05
Uniform Delay, d1	43.6	41.8	31.4	42.0	40.2	39.4	41.9	14.7	12.9	47.3	20.8	18.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.07	1.22	1.00	1.20	0.69	1.00
Incremental Delay, d2	4.6	0.4	0.1	2.1	0.5	0.1	5.5	0.1	0.0	4.7	0.7	0.2
Delay (s)	48.2	42.2	31.5	44.1	40.7	39.5	50.1	18.0	12.9	61.4	15.1	18.3
Level of Service	D	D	C	D	D	D	D	B	B	E	B	B
Approach Delay (s)		35.5			43.1			28.9			17.3	
Approach LOS		D			D			C			B	

Intersection Summary	
HCM 2000 Control Delay	28.6 HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio	0.48
Actuated Cycle Length (s)	100.0 Sum of lost time (s) 26.5
Intersection Capacity Utilization	49.8% ICU Level of Service A
Analysis Period (min)	15
c Critical Lane Group	

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

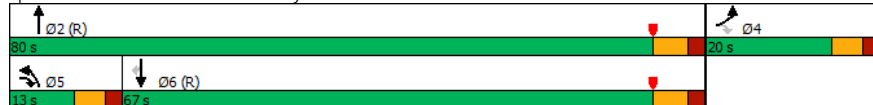
107: Rosser Ave & Lucy Ln
Existing Conditions (June 2018) - AM Peak Hour

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	22	27	478	444	14
Future Volume (vph)	10	22	27	478	444	14
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.850				0.850	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1538	1778	3419	3452	1591
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1805	1538	1778	3419	3452	1591
Satd. Flow (RTOR)		24				15
Adj. Flow (vph)	11	24	30	525	488	15
Lane Group Flow (vph)	11	24	30	525	488	15
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Total Split (s)	20.0	13.0	13.0	80.0	67.0	67.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	6.0
Act Effct Green (s)	6.7	10.4	7.7	96.1	85.2	85.2
Actuated g/C Ratio	0.07	0.10	0.08	0.96	0.85	0.85
v/c Ratio	0.09	0.13	0.22	0.16	0.17	0.01
Control Delay	45.0	14.8	50.9	0.2	6.0	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.0	14.8	50.9	0.2	6.0	6.3
LOS	D	B	D	A	A	A
Approach Delay	24.3			2.9	6.0	
Approach LOS	C			A	A	

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 55 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.22
 Intersection Signal Delay: 5.0
 Intersection LOS: A
 Intersection Capacity Utilization 36.4%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 107: Rosser Ave & Lucy Ln



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

107: Rosser Ave & Lucy Ln
Existing Conditions (June 2018) - AM Peak Hour

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	22	27	478	444	14
Future Volume (vph)	10	22	27	478	444	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%			3%		
Total Lost time (s)	5.5	5.5	5.5	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1805	1538	1778	3419	3452	1591
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1805	1538	1778	3419	3452	1591
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	24	30	525	488	15
RTOR Reduction (vph)	0	22	0	0	0	4
Lane Group Flow (vph)	11	2	30	525	488	11
Heavy Vehicles (%)	0%		5%		0%	
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)	1.6	6.8	5.2	86.9	76.2	76.2
Effective Green, g (s)	1.6	6.8	5.2	86.9	76.2	76.2
Actuated g/C Ratio	0.02	0.07	0.05	0.87	0.76	0.76
Clearance Time (s)	5.5	5.5	5.5	6.0	6.0	6.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	28	189	92	2971	2630	1212
v/s Ratio Prot	c0.01	0.00	c0.02	0.15	c0.14	
v/s Ratio Perm		0.00				0.01
v/c Ratio	0.39	0.01	0.33	0.18	0.19	0.01
Uniform Delay, d1	48.7	43.5	45.7	1.0	3.3	2.9
Progression Factor	1.00	1.00	1.10	0.11	1.96	2.70
Incremental Delay, d2	10.4	0.0	2.4	0.1	0.2	0.0
Delay (s)	59.1	43.5	52.9	0.2	6.6	7.7
Level of Service	E	D	D	A	A	A
Approach Delay (s)	48.4			3.1	6.6	
Approach LOS	D			A	A	

Intersection Summary

HCM 2000 Control Delay 6.2 HCM 2000 Level of Service A
 HCM 2000 Volume to Capacity ratio 0.20
 Actuated Cycle Length (s) 100.0 Sum of lost time (s) 17.0
 Intersection Capacity Utilization 36.4% ICU Level of Service A
 Analysis Period (min) 15

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

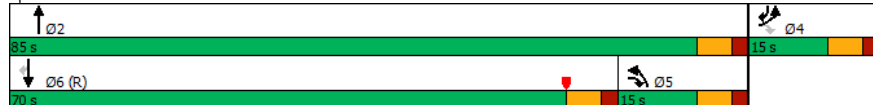
108: Rosser Ave & Lennox PI
Existing Conditions (June 2018) - AM Peak Hour

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	19	20	459	445	16
Future Volume (vph)	10	19	20	459	445	16
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.850				0.850	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1841	1484	1832	3523	3505	1615
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1841	1484	1832	3523	3505	1615
Satd. Flow (RTOR)	21				17	
Adj. Flow (vph)	11	21	22	499	484	17
Lane Group Flow (vph)	11	21	22	499	484	17
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases	4				6	
Total Split (s)	15.0	15.0	15.0	85.0	70.0	15.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Act Effcl Green (s)	6.4	14.5	6.9	88.8	80.7	88.3
Actuated g/C Ratio	0.06	0.14	0.07	0.89	0.81	0.88
v/c Ratio	0.09	0.09	0.17	0.16	0.17	0.01
Control Delay	45.5	13.7	52.2	1.4	4.1	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.5	13.7	52.2	1.4	4.1	0.8
LOS	D	B	D	A	A	A
Approach Delay	24.7		3.5		3.9	
Approach LOS	C		A		A	

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 70 (70%), Referenced to phase 6:SBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.17
 Intersection Signal Delay: 4.4
 Intersection LOS: A
 Intersection Capacity Utilization 31.6%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 108: Rosser Ave & Lennox PI



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

108: Rosser Ave & Lennox PI
Existing Conditions (June 2018) - AM Peak Hour

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	19	20	459	445	16
Future Volume (vph)	10	19	20	459	445	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-4%				-3%	
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1841	1484	1832	3523	3505	1615
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1841	1484	1832	3523	3505	1615
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	21	22	499	484	17
RTOR Reduction (vph)	0	19	0	0	0	4
Lane Group Flow (vph)	11	2	22	499	484	13
Heavy Vehicles (%)	0%	11%	0%	4%	3%	0%
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases	4				6	
Actuated Green, G (s)	4.0	8.5	4.5	84.0	73.5	77.5
Effective Green, g (s)	4.0	8.5	4.5	84.0	73.5	77.5
Actuated g/C Ratio	0.04	0.08	0.04	0.84	0.74	0.78
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	73	215	82	2959	2576	1348
v/s Ratio Prot	c0.01	0.00	c0.01	0.14	c0.14	0.00
v/s Ratio Perm	0.00				0.01	
v/c Ratio	0.15	0.01	0.27	0.17	0.19	0.01
Uniform Delay, d1	46.4	41.9	46.2	1.5	4.1	2.6
Progression Factor	1.00	1.00	1.13	0.85	0.90	0.84
Incremental Delay, d2	1.0	0.0	1.8	0.0	0.2	0.0
Delay (s)	47.3	41.9	53.9	1.3	3.8	2.1
Level of Service	D	D	D	A	A	A
Approach Delay (s)	43.8		3.5		3.8	
Approach LOS	D		A		A	

Intersection Summary

HCM 2000 Control Delay 4.9
 HCM 2000 Level of Service A
 HCM 2000 Volume to Capacity ratio 0.19
 Actuated Cycle Length (s) 100.0
 Sum of lost time (s) 18.0
 Intersection Capacity Utilization 31.6%
 ICU Level of Service A
 Analysis Period (min) 15

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

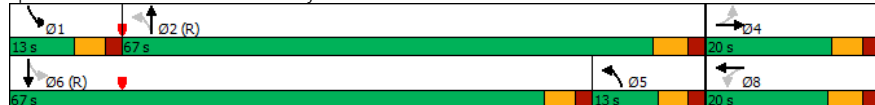
109: Rosser Ave & Tiffany Dr
Existing Conditions (June 2018) - AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	36	4	30	30	4	34	22	416	12	12	423	54
Future Volume (vph)	36	4	30	30	4	34	22	416	12	12	423	54
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt	0.869		0.867		0.996		0.983					
Flt Protected	0.950		0.950			0.950			0.950			
Satd. Flow (prot)	1787	1467	0	1814	1613	0	1673	3554	0	1663	3462	0
Flt Permitted	0.728		0.732			0.450			0.437			
Satd. Flow (perm)	1370	1467	0	1398	1613	0	792	3554	0	765	3462	0
Satd. Flow (RTOR)	34		39		5		25		25			
Adj. Flow (vph)	41	5	34	34	5	39	25	473	14	14	481	61
Lane Group Flow (vph)	41	39	0	34	44	0	25	487	0	14	542	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4		8		8		5		2		1	
Permitted Phases	4		8		2		6					
Total Split (s)	20.0	20.0	20.0		20.0		13.0	67.0	13.0		67.0	
Total Lost Time (s)	5.5	5.5	6.0		6.0		5.5	6.0	5.5		5.5	
Act Effct Green (s)	9.0	9.0	8.6		8.6		80.9	80.5	77.1		78.2	
Actuated g/C Ratio	0.09	0.09	0.09		0.09		0.81	0.80	0.77		0.78	
v/c Ratio	0.33	0.24	0.28		0.25		0.04	0.17	0.02		0.20	
Control Delay	49.1	19.9	47.9		19.1		7.5	6.4	5.7		4.6	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0		0.0	
Total Delay	49.1	19.9	47.9		19.1		7.5	6.4	5.7		4.6	
LOS	D	B	D		B		A	A	A		A	
Approach Delay	34.8		31.6		6.4		4.6					
Approach LOS	C		C		A		A					

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 60 (60%), Referenced to phase 2:NBTl and 6:SBTL, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.33
 Intersection Signal Delay: 9.1
 Intersection LOS: A
 Intersection Capacity Utilization 36.6%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 109: Rosser Ave & Tiffany Dr



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

109: Rosser Ave & Tiffany Dr
Existing Conditions (June 2018) - AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	36	4	30	30	4	34	22	416	12	12	423	54
Future Volume (vph)	36	4	30	30	4	34	22	416	12	12	423	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)	-4%		-1%		-2%		1%					
Total Lost time (s)	5.5	5.5	6.0		6.0		5.5	6.0	5.5		5.5	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00		0.95	
Frt	1.00	0.87	1.00		0.87		1.00	1.00	1.00		0.98	
Flt Protected	0.95	1.00	0.95		1.00		0.95	1.00	0.95		1.00	
Satd. Flow (prot)	1787	1467	1814		1613		1673	3553	1663		3462	
Flt Permitted	0.73	1.00	0.73		1.00		0.45	1.00	0.44		1.00	
Satd. Flow (perm)	1370	1467	1397		1613		792	3553	766		3462	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	41	5	34	34	5	39	25	473	14	14	481	61
RTOR Reduction (vph)	0	31	0	0	36	0	0	1	0	0	7	0
Lane Group Flow (vph)	41	8	0	34	8	0	25	486	0	14	535	0
Heavy Vehicles (%)	3%	0%	17%	0%	0%	3%	9%	2%	8%	8%	2%	2%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4		8		8		5		2		1	
Permitted Phases	4		8		2		6					
Actuated Green, G (s)	7.9	7.9	7.4		7.4		74.2	73.7	71.5		71.5	
Effective Green, g (s)	7.9	7.9	7.4		7.4		74.2	73.7	71.5		71.5	
Actuated g/C Ratio	0.08	0.08	0.07		0.07		0.74	0.74	0.72		0.72	
Clearance Time (s)	5.5	5.5	6.0		6.0		5.5	6.0	5.5		5.5	
Vehicle Extension (s)	3.5	3.5	3.5		3.5		3.5	3.5	3.5		3.5	
Lane Grp Cap (vph)	108	115	103		119		623	2618	560		2475	
v/s Ratio Prot	0.01		0.00		0.00		c0.14	0.00	c0.15		c0.15	
v/s Ratio Perm	c0.03		0.02		0.03		0.03	0.02	0.02		0.02	
v/c Ratio	0.38	0.07	0.33		0.07		0.04	0.19	0.03		0.22	
Uniform Delay, d1	43.7	42.6	43.9		43.1		3.4	4.0	4.2		4.8	
Progression Factor	1.00	1.00	1.00		1.00		1.71	1.73	1.00		1.00	
Incremental Delay, d2	2.6	0.3	2.2		0.3		0.0	0.2	0.0		0.2	
Delay (s)	46.4	42.9	46.2		43.4		5.9	7.1	4.3		5.0	
Level of Service	D	D	D		D		A	A	A		A	
Approach Delay (s)	44.7		44.6		7.0		5.0					
Approach LOS	D		D		A		A					

Intersection Summary

HCM 2000 Control Delay 10.9
 HCM 2000 Level of Service B
 HCM 2000 Volume to Capacity ratio 0.24
 Actuated Cycle Length (s) 100.0
 Sum of lost time (s) 17.5
 Intersection Capacity Utilization 36.6%
 ICU Level of Service A
 Analysis Period (min) 15

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

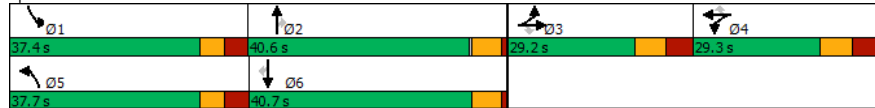
101: Rosser Ave & Ladd Rd
Existing Conditions (June 2018) - Mid Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	64	58	18	26	46	102	18	396	26	103	377	36
Future Volume (vph)	64	58	18	26	46	102	18	396	26	103	377	36
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850			0.850			0.850	
Flt Protected		0.974			0.982		0.950			0.950		
Satd. Flow (prot)	0	1851	1554	0	1834	1584	1610	3309	1480	1787	3440	1539
Flt Permitted		0.974			0.982		0.950			0.950		
Satd. Flow (perm)	0	1851	1554	0	1834	1584	1610	3309	1480	1787	3440	1539
Satd. Flow (RTOR)		155			154			182			182	
Adj. Flow (vph)	69	62	19	28	49	110	19	426	28	111	405	39
Lane Group Flow (vph)	0	131	19	0	77	110	19	426	28	111	405	39
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases		3			4			2			6	
Total Split (s)	29.2	29.2	29.2	29.3	29.3	29.3	37.7	40.6	40.6	37.4	40.7	40.7
Total Lost Time (s)	9.2	9.2		9.3	9.3		7.7	5.6	5.6	7.4	5.7	5.7
Act Effct Green (s)	12.5	12.5		10.3	10.3		6.8	21.4	21.4	11.6	35.0	35.0
Actuated g/C Ratio	0.14	0.14		0.12	0.12		0.08	0.24	0.24	0.13	0.40	0.40
v/c Ratio	0.50	0.05		0.36	0.34		0.15	0.53	0.06	0.47	0.30	0.05
Control Delay	44.1	0.3		44.6	5.5		46.5	32.5	0.2	45.3	21.3	0.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	0.3		44.6	5.5		46.5	32.5	0.2	45.3	21.3	0.1
LOS	D	A		D	A		D	C	A	D	C	A
Approach Delay	38.5		21.6		31.2		24.6					
Approach LOS	D		C		C		C					

Intersection Summary

Cycle Length: 136.9	
Actuated Cycle Length: 88.1	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 28.0	Intersection LOS: C
Intersection Capacity Utilization 50.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 101: Rosser Ave & Ladd Rd



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

101: Rosser Ave & Ladd Rd
Existing Conditions (June 2018) - Mid Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	64	58	18	26	46	102	18	396	26	103	377	36
Future Volume (vph)	64	58	18	26	46	102	18	396	26	103	377	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-4%			-2%			2%			-2%	
Total Lost time (s)		9.2	9.2		9.3	9.3		7.7	5.6	5.6	7.4	5.7
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85	1.00	0.85	1.00
Flt Protected		0.97	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1851	1554		1835	1584	1610	3309	1480	1787	3440	1539
Flt Permitted		0.97	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1851	1554		1835	1584	1610	3309	1480	1787	3440	1539
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	69	62	19	28	49	110	19	426	28	111	405	39
RTOR Reduction (vph)	0	0	16	0	0	98	0	0	20	0	0	24
Lane Group Flow (vph)	0	131	3	0	77	12	19	426	8	111	405	15
Heavy Vehicles (%)	2%	2%	6%	4%	2%	3%	11%	8%	8%	2%	6%	6%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases		3			4			2			6	
Actuated Green, G (s)		12.5	12.5		10.3	10.3	2.8	26.6	26.6	11.6	35.0	35.0
Effective Green, g (s)		12.5	12.5		10.3	10.3	2.8	26.6	26.6	11.6	35.0	35.0
Actuated g/C Ratio		0.14	0.14		0.11	0.11	0.03	0.29	0.29	0.13	0.38	0.38
Clearance Time (s)		9.2	9.2		9.3	9.3	7.7	5.6	5.6	7.4	5.7	5.7
Vehicle Extension (s)		3.5	3.5		3.5	3.5	3.0	6.0	6.0	3.0	6.0	6.0
Lane Grp Cap (vph)		250	210		204	176	48	951	425	224	1301	582
v/s Ratio Prot		c0.07			c0.04			0.01	c0.13		c0.06	c0.12
v/s Ratio Perm		0.00			0.01			0.01			0.01	0.01
v/c Ratio		0.52	0.01		0.38	0.07	0.40	0.45	0.02	0.50	0.31	0.03
Uniform Delay, d1		37.2	34.7		38.1	36.8	44.0	26.9	23.6	37.7	20.3	18.0
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		2.3	0.0		1.4	0.2	5.3	0.9	0.1	1.7	0.4	0.0
Delay (s)		39.5	34.7		39.5	37.0	49.3	27.9	23.7	39.4	20.6	18.1
Level of Service		D	C		D	D	D	C	C	D	C	B
Approach Delay (s)		38.9			38.0			28.5			24.2	
Approach LOS		D			D			C			C	

Intersection Summary

HCM 2000 Control Delay	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	92.5	Sum of lost time (s)	31.9
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

102: Rosser Ave & Town Center Dr
Existing Conditions (June 2018) - Mid Peak Hour

	↙	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↖	↑↑	↗	↘↘	↓
Traffic Volume (vph)	103	124	503	97	33	580
Future Volume (vph)	103	124	503	97	33	580
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	0.850		0.850		0.950	
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1733	1535	3522	1607	3537	3540
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1733	1535	3522	1607	3537	3540
Satd. Flow (RTOR)		132		103		
Adj. Flow (vph)	110	132	535	103	35	617
Lane Group Flow (vph)	110	132	535	103	35	617
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Total Split (s)	20.0	20.0	64.0	64.0	16.0	80.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Act Effct Green (s)	11.6	11.6	65.4	65.4	8.0	74.4
Actuated g/C Ratio	0.12	0.12	0.65	0.65	0.08	0.74
v/c Ratio	0.55	0.45	0.23	0.09	0.12	0.23
Control Delay	51.8	12.2	8.8	2.2	33.6	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.8	12.2	8.8	2.2	33.6	2.3
LOS	D	B	A	A	C	A
Approach Delay	30.2		7.7			4.0
Approach LOS	C		A			A

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 58 (58%), Referenced to phase 2:NBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 9.7
 Intersection LOS: A
 Intersection Capacity Utilization 34.4%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 102: Rosser Ave & Town Center Dr



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

102: Rosser Ave & Town Center Dr
Existing Conditions (June 2018) - Mid Peak Hour

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↖	↑↑	↗	↘↘	↓
Traffic Volume (vph)	103	124	503	97	33	580
Future Volume (vph)	103	124	503	97	33	580
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	8%		-1%			-2%
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1733	1535	3522	1607	3537	3540
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1733	1535	3522	1607	3537	3540
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	110	132	535	103	35	617
RTOR Reduction (vph)	0	117	0	39	0	0
Lane Group Flow (vph)	110	15	535	64	35	617
Heavy Vehicles (%)	0%	1%	3%	1%	0%	3%
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Actuated Green, G (s)	11.6	11.6	62.6	62.6	4.8	74.4
Effective Green, g (s)	11.6	11.6	62.6	62.6	4.8	74.4
Actuated g/C Ratio	0.12	0.12	0.63	0.63	0.05	0.74
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	201	178	2204	1005	169	2633
v/s Ratio Prot	c0.06		0.15		0.01	c0.17
v/s Ratio Perm		0.01		0.04		
v/c Ratio	0.55	0.09	0.24	0.06	0.21	0.23
Uniform Delay, d1	41.7	39.5	8.2	7.3	45.8	4.0
Progression Factor	1.00	1.00	1.00	1.00	0.76	0.50
Incremental Delay, d2	3.4	0.2	0.3	0.1	0.7	0.1
Delay (s)	45.1	39.7	8.5	7.4	35.6	2.0
Level of Service	D	D	A	A	D	A
Approach Delay (s)	42.2		8.3			3.8
Approach LOS	D		A			A

Intersection Summary

HCM 2000 Control Delay 11.8 HCM 2000 Level of Service B
 HCM 2000 Volume to Capacity ratio 0.30
 Actuated Cycle Length (s) 100.0 Sum of lost time (s) 21.0
 Intersection Capacity Utilization 34.4% ICU Level of Service A
 Analysis Period (min) 15

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

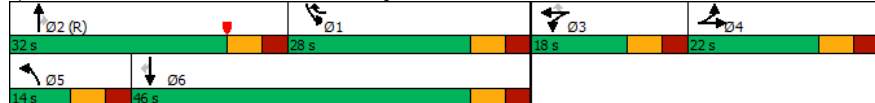
103: Rosser Ave & Shenandoah Village Dr
Existing Conditions (June 2018) - Mid Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↗	↗	↖	↖	↖	↖	↖	↖
Traffic Volume (vph)	4	3	0	58	1	338	0	573	49	457	485	8
Future Volume (vph)	4	3	0	58	1	338	0	573	49	457	485	8
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt						0.850			0.850			0.850
Flt Protected		0.972		0.950						0.950		
Satd. Flow (prot)	0	1893	0	1717	1843	1551	1890	3454	1575	3399	3470	1599
Flt Permitted		0.972		0.950						0.950		
Satd. Flow (perm)	0	1893	0	1717	1843	1551	1890	3454	1575	3399	3470	1599
Satd. Flow (RTOR)						348		196				196
Adj. Flow (vph)	4	3	0	60	1	348	0	591	51	471	500	8
Lane Group Flow (vph)	0	7	0	60	1	348	0	591	51	471	500	8
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases						3			2			6
Total Split (s)	22.0	22.0		18.0	18.0	28.0	14.0	32.0	32.0	28.0	46.0	46.0
Total Lost Time (s)		7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Act Effct Green (s)		6.5		9.0	9.0	32.4		50.7	50.7	19.0	78.1	78.1
Actuated g/C Ratio		0.06		0.09	0.09	0.32		0.51	0.51	0.19	0.78	0.78
v/c Ratio		0.06		0.39	0.01	0.47		0.34	0.06	0.73	0.18	0.01
Control Delay		44.6		49.7	40.0	4.6		11.7	0.9	43.0	1.6	0.0
Queue Delay		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		44.6		49.7	40.0	4.6		11.7	0.9	43.0	1.6	0.0
LOS		D		D	D	A		B	A	D	A	A
Approach Delay		44.6			11.3			10.8			21.5	
Approach LOS		D			B			B			C	

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 53 (53%), Referenced to phase 2:NBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 16.2	Intersection LOS: B
Intersection Capacity Utilization 59.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 103: Rosser Ave & Shenandoah Village Dr



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

103: Rosser Ave & Shenandoah Village Dr
Existing Conditions (June 2018) - Mid Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↗	↗	↖	↖	↖	↖	↖	↖
Traffic Volume (vph)	4	3	0	58	1	338	0	573	49	457	485	8
Future Volume (vph)	4	3	0	58	1	338	0	573	49	457	485	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-5%			6%			1%				2%
Total Lost time (s)		7.0		7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0
Lane Util. Factor		1.00		1.00	1.00	1.00		0.95	1.00	0.97	0.95	1.00
Frt		1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected		0.97		0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1893		1717	1843	1551		3454	1575	3399	3470	1599
Flt Permitted		0.97		0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1893		1717	1843	1551		3454	1575	3399	3470	1599
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	4	3	0	60	1	348	0	591	51	471	500	8
RTOR Reduction (vph)	0	0	0	0	0	255	0	0	29	0	0	2
Lane Group Flow (vph)	0	7	0	60	1	93	0	591	22	471	500	6
Heavy Vehicles (%)	0%	0%	0%	2%	0%	1%	0%	4%	2%	2%	3%	0%
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases						3			2			6
Actuated Green, G (s)		1.5		7.8	7.8	26.8		43.7	43.7	19.0	69.7	69.7
Effective Green, g (s)		1.5		7.8	7.8	26.8		43.7	43.7	19.0	69.7	69.7
Actuated g/C Ratio		0.02		0.08	0.08	0.27		0.44	0.44	0.19	0.70	0.70
Clearance Time (s)		7.0		7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)		3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)		28		133	143	524		1509	688	645	2418	1114
v/s Ratio Prot		c0.00		c0.03	0.00	0.03		c0.17		c0.14	0.14	
v/s Ratio Perm						0.03			0.01			0.00
v/c Ratio		0.25		0.45	0.01	0.18		0.39	0.03	0.73	0.21	0.01
Uniform Delay, d1		48.7		44.1	42.5	28.1		19.1	16.1	38.1	5.4	4.6
Progression Factor		1.00		1.00	1.00	1.00		0.64	1.00	0.95	0.32	1.00
Incremental Delay, d2		5.5		2.9	0.0	0.2		0.7	0.1	4.2	0.0	0.0
Delay (s)		54.2		46.9	42.6	28.3		12.9	16.2	40.6	1.8	4.6
Level of Service		D		D	D	C		B	B	D	A	A
Approach Delay (s)		54.2			31.1			13.2			20.4	
Approach LOS		D			C			B			C	

Intersection Summary

HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

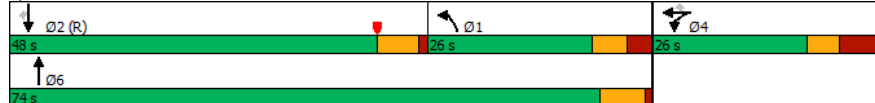
105: Rosser Ave & I-64 WB
Existing Conditions (June 2018) - Mid Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↔			↔	↔
Traffic Volume (vph)	0	0	0	162	1	201	143	844	0	0	744	210
Future Volume (vph)	0	0	0	162	1	201	143	844	0	0	744	210
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.953	0.950						
Satd. Flow (prot)	0	0	0	0	1675	1552	1656	3539	0	0	3539	1615
Flt Permitted					0.953	0.950						
Satd. Flow (perm)	0	0	0	0	1675	1552	1656	3539	0	0	3539	1615
Satd. Flow (RTOR)						186						228
Adj. Flow (vph)	0	0	0	176	1	218	155	917	0	0	809	228
Lane Group Flow (vph)	0	0	0	0	177	218	155	917	0	0	809	228
Turn Type				Split	NA	Perm	Prot	NA		NA	Perm	
Protected Phases				4	4		1	6			2	
Permitted Phases						4						2
Total Split (s)				26.0	26.0	26.0	26.0	74.0			48.0	48.0
Total Lost Time (s)				8.3	8.3	7.1	6.1				5.8	5.8
Act Effct Green (s)				16.7	16.7	14.8	68.9				47.3	47.3
Actuated g/C Ratio				0.17	0.17	0.15	0.69				0.47	0.47
v/c Ratio				0.63	0.53	0.64	0.38				0.48	0.26
Control Delay				49.5	13.4	35.8	4.0				23.2	8.4
Queue Delay				0.0	0.0	0.0	0.0				0.0	0.0
Total Delay				49.5	13.4	35.8	4.0				23.2	8.4
LOS				D	B	D	A				C	A
Approach Delay				29.5			8.6				20.0	
Approach LOS				C			A				B	

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 37 (37%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 16.6	Intersection LOS: B
Intersection Capacity Utilization 59.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 105: Rosser Ave & I-64 WB



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

105: Rosser Ave & I-64 WB
Existing Conditions (June 2018) - Mid Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↔			↔	↔
Traffic Volume (vph)	0	0	0	162	1	201	143	844	0	0	744	210
Future Volume (vph)	0	0	0	162	1	201	143	844	0	0	744	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		4%			4%			0%			0%	
Total Lost time (s)					8.3	8.3	7.1	6.1			5.8	5.8
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1674	1552	1656	3539			3539	1615
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1674	1552	1656	3539			3539	1615
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)	0	0	0	176	1	218	155	917	0	0	809	228
RTOR Reduction (vph)	0	0	0	0	0	155	0	0	0	0	0	120
Lane Group Flow (vph)	0	0	0	0	177	63	155	917	0	0	809	108
Heavy Vehicles (%)	0%	0%	0%	6%	0%	2%	9%	2%	0%	0%	2%	0%
Turn Type				Split	NA	Perm	Prot	NA		NA	Perm	
Protected Phases				4	4		1	6			2	
Permitted Phases						4						2
Actuated Green, G (s)					16.7	16.7	14.8	68.9			47.3	47.3
Effective Green, g (s)					16.7	16.7	14.8	68.9			47.3	47.3
Actuated g/C Ratio					0.17	0.17	0.15	0.69			0.47	0.47
Clearance Time (s)					8.3	8.3	7.1	6.1			5.8	5.8
Vehicle Extension (s)					4.0	4.0	3.5	4.0			4.0	4.0
Lane Grp Cap (vph)					279	259	245	2438			1673	763
v/s Ratio Prot					c0.11		c0.09	0.26			c0.23	
v/s Ratio Perm						0.04						0.07
v/c Ratio					0.63	0.24	0.63	0.38			0.48	0.14
Uniform Delay, d1					38.8	36.2	40.0	6.5			18.0	14.9
Progression Factor					1.00	1.00	0.63	0.53			1.17	3.00
Incremental Delay, d2					5.2	0.7	4.9	0.1			0.9	0.4
Delay (s)					44.0	36.8	30.3	3.6			22.0	45.0
Level of Service					D	D	C	A			C	D
Approach Delay (s)		0.0			40.1			7.5			27.0	
Approach LOS		A			D			A			C	

Intersection Summary

HCM 2000 Control Delay	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.2
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

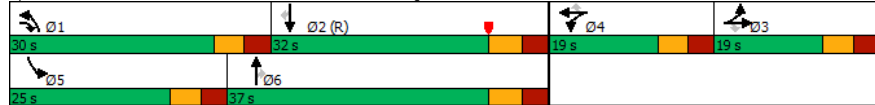
Rosser Avenue (US340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
Existing Conditions (June 2018) - Mid Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	103	70	339	111	70	56	445	382	148	63	504	118
Future Volume (vph)	103	70	339	111	70	56	445	382	148	63	504	118
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt			0.850				0.850			0.850		0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1850	1837	2829	3315	1799	1514	3382	3486	1544	1796	3557	1591
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1850	1837	2829	3315	1799	1514	3382	3486	1544	1796	3557	1591
Satd. Flow (RTOR)			256			185			180			180
Adj. Flow (vph)	111	75	365	119	75	60	478	411	159	68	542	127
Lane Group Flow (vph)	111	75	365	119	75	60	478	411	159	68	542	127
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Total Split (s)	19.0	19.0	30.0	19.0	19.0	19.0	30.0	37.0	37.0	25.0	32.0	32.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.0	7.0	6.5	7.0	7.0
Act Effct Green (s)	11.1	11.1	37.8	10.1	10.1	10.1	20.2	45.2	45.2	10.0	32.1	32.1
Actuated g/C Ratio	0.11	0.11	0.38	0.10	0.10	0.10	0.20	0.45	0.45	0.10	0.32	0.32
v/c Ratio	0.54	0.37	0.30	0.36	0.41	0.19	0.70	0.26	0.20	0.38	0.47	0.20
Control Delay	51.6	45.9	6.5	44.5	48.8	1.3	49.3	27.7	11.1	62.2	17.9	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.6	45.9	6.5	44.5	48.8	1.3	49.3	27.7	11.1	62.2	17.9	1.4
LOS	D	D	A	D	D	A	D	C	B	E	B	A
Approach Delay		21.0			35.6			35.1			19.2	
Approach LOS		C			D			D			B	

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 40 (40%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 27.6	Intersection LOS: C
Intersection Capacity Utilization 55.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr



Rosser Avenue (US340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
Existing Conditions (June 2018) - Mid Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	103	70	339	111	70	56	445	382	148	63	504	118
Future Volume (vph)	103	70	339	111	70	56	445	382	148	63	504	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			-5%				5%					-3%
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.0	7.0	6.5	7.0	7.0
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1850	1837	2829	3315	1799	1514	3382	3486	1544	1796	3557	1591
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1850	1837	2829	3315	1799	1514	3382	3486	1544	1796	3557	1591
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	111	75	365	119	75	60	478	411	159	68	542	127
RTOR Reduction (vph)	0	0	176	0	0	54	0	0	89	0	0	86
Lane Group Flow (vph)	111	75	189	119	75	6	478	411	70	68	542	41
Heavy Vehicles (%)	0%	6%	3%	3%	3%	4%	2%	3%	2%	3%	3%	3%
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Actuated Green, G (s)	11.1	11.1	31.3	10.1	10.1	10.1	20.2	43.9	43.9	8.4	32.1	32.1
Effective Green, g (s)	11.1	11.1	31.3	10.1	10.1	10.1	20.2	43.9	43.9	8.4	32.1	32.1
Actuated g/C Ratio	0.11	0.11	0.31	0.10	0.10	0.10	0.20	0.44	0.44	0.08	0.32	0.32
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.0	7.0	6.5	7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	205	203	1069	334	181	152	683	1530	677	150	1141	510
v/s Ratio Prot	c0.06	0.04	0.04	0.04	c0.04		c0.14	0.12		0.04	c0.15	
v/s Ratio Perm			0.03			0.00		0.05			0.03	
v/c Ratio	0.54	0.37	0.18	0.36	0.41	0.04	0.70	0.27	0.10	0.45	0.48	0.08
Uniform Delay, d1	42.0	41.2	25.0	41.9	42.2	40.6	37.1	17.8	16.5	43.6	27.2	23.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.19	1.41	4.11	1.35	0.57	0.43
Incremental Delay, d2	3.2	1.3	0.1	0.8	1.8	0.1	3.1	0.1	0.1	2.5	1.4	0.3
Delay (s)	45.3	42.6	25.1	42.7	44.0	40.7	47.2	25.3	67.8	61.3	16.9	10.4
Level of Service	D	D	C	D	D	D	D	C	E	E	B	B
Approach Delay (s)		31.5			42.6			41.7			19.9	
Approach LOS		C			D			D			B	

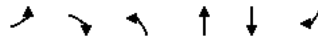
Intersection Summary

HCM 2000 Control Delay	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	26.5
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

108: Rosser Ave & Lennox PI
Existing Conditions (June 2018) - Mid Peak Hour

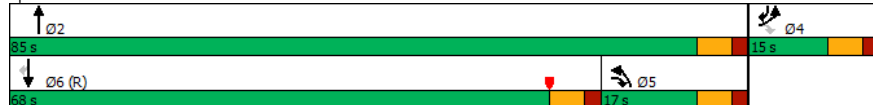


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↕	↕	↔
Traffic Volume (vph)	27	72	32	480	537	26
Future Volume (vph)	27	72	32	480	537	26
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.850				0.850	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1841	1631	1832	3592	3505	1615
Flt Permitted	0.950					
Satd. Flow (perm)	1841	1631	1832	3592	3505	1615
Satd. Flow (RTOR)	80				29	
Adj. Flow (vph)	30	80	36	533	597	29
Lane Group Flow (vph)	30	80	36	533	597	29
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases	4				6	
Total Split (s)	15.0	17.0	17.0	85.0	68.0	15.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Act Effct Green (s)	7.2	16.0	7.6	88.0	75.6	84.0
Actuated g/C Ratio	0.07	0.16	0.08	0.88	0.76	0.84
v/c Ratio	0.23	0.24	0.26	0.17	0.23	0.02
Control Delay	47.3	9.0	53.9	2.5	5.1	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.3	9.0	53.9	2.5	5.1	0.7
LOS	D	A	D	A	A	A
Approach Delay	19.4		5.7		4.9	
Approach LOS	B		A		A	

Intersection Summary

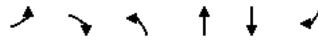
Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 70 (70%), Referenced to phase 6:SBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.26
 Intersection Signal Delay: 6.5
 Intersection LOS: A
 Intersection Capacity Utilization 39.8%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 108: Rosser Ave & Lennox PI



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

108: Rosser Ave & Lennox PI
Existing Conditions (June 2018) - Mid Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↕	↕	↔
Traffic Volume (vph)	27	72	32	480	537	26
Future Volume (vph)	27	72	32	480	537	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-4%				-3%	
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1841	1631	1832	3592	3505	1615
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1841	1631	1832	3592	3505	1615
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	30	80	36	533	597	29
RTOR Reduction (vph)	0	71	0	0	0	7
Lane Group Flow (vph)	30	9	36	533	597	22
Heavy Vehicles (%)	0%	1%	0%	2%	3%	0%
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases	4				6	
Actuated Green, G (s)	4.8	11.2	6.4	83.2	70.8	75.6
Effective Green, g (s)	4.8	11.2	6.4	83.2	70.8	75.6
Actuated g/C Ratio	0.05	0.11	0.06	0.83	0.71	0.76
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	88	280	117	2988	2481	1317
v/s Ratio Prot	c0.02	0.00	c0.02	0.15	c0.17	0.00
v/s Ratio Perm	0.00				0.01	
v/c Ratio	0.34	0.03	0.31	0.18	0.24	0.02
Uniform Delay, d1	46.1	39.6	44.7	1.7	5.1	3.0
Progression Factor	1.00	1.00	1.15	1.37	0.88	0.80
Incremental Delay, d2	2.3	0.0	1.5	0.0	0.2	0.0
Delay (s)	48.4	39.6	52.8	2.3	4.8	2.4
Level of Service	D	D	D	A	A	A
Approach Delay (s)	42.0		5.5		4.7	
Approach LOS	D		A		A	

Intersection Summary

HCM 2000 Control Delay 8.2
 HCM 2000 Level of Service A
 HCM 2000 Volume to Capacity ratio 0.25
 Actuated Cycle Length (s) 100.0
 Sum of lost time (s) 18.0
 Intersection Capacity Utilization 39.8%
 ICU Level of Service A
 Analysis Period (min) 15

c Critical Lane Group

Rosser Avenue (US340) Corridor Study
Lanes, Volumes, Timings

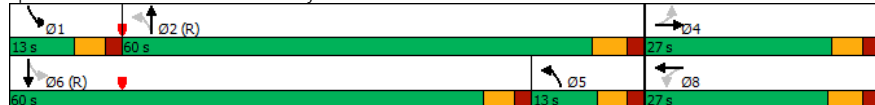
109: Rosser Ave & Tiffany Dr
Existing Conditions (June 2018) - Mid Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	101	11	87	25	14	21	88	412	28	16	446	138
Future Volume (vph)	101	11	87	25	14	21	88	412	28	16	446	138
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt	0.867		0.909		0.990		0.965					
Flt Protected	0.950	0.950		0.950		0.950		0.950				
Satd. Flow (prot)	1841	1637	0	1814	1637	0	1787	3534	0	1796	3406	0
Flt Permitted	0.732	0.689		0.414		0.436						
Satd. Flow (perm)	1419	1637	0	1316	1637	0	779	3534	0	824	3406	0
Satd. Flow (RTOR)	94		23		11		64					
Adj. Flow (vph)	109	12	94	27	15	23	95	443	30	17	480	148
Lane Group Flow (vph)	109	106	0	27	38	0	95	473	0	17	628	0
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA				
Protected Phases	4		8		5		2		1		6	
Permitted Phases	4		8		2		6					
Total Split (s)	27.0	27.0	27.0		27.0		13.0	60.0	13.0		60.0	
Total Lost Time (s)	5.5	5.5	6.0		6.0		5.5	6.0	5.5		5.5	
Act Effct Green (s)	13.4	13.4	12.9		12.9		70.6	70.1	65.2		65.2	
Actuated g/C Ratio	0.13	0.13	0.13		0.13		0.71	0.70	0.65		0.65	
v/c Ratio	0.57	0.35	0.16		0.16		0.15	0.19	0.03		0.28	
Control Delay	51.7	13.1	38.7		21.5		13.9	11.0	8.6		8.0	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0		0.0	
Total Delay	51.7	13.1	38.7		21.5		13.9	11.0	8.6		8.0	
LOS	D	B	D		C		B	B	A		A	
Approach Delay	32.7		28.6		8.0							
Approach LOS	C		C		B		A					

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 60 (60%), Referenced to phase 2:NBL and 6:SBTL, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.57
 Intersection Signal Delay: 13.8 Intersection LOS: B
 Intersection Capacity Utilization 47.7% ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 109: Rosser Ave & Tiffany Dr



Rosser Avenue (US340) Corridor Study
HCM Signalized Intersection Capacity Analysis

109: Rosser Ave & Tiffany Dr
Existing Conditions (June 2018) - Mid Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	101	11	87	25	14	21	88	412	28	16	446	138
Future Volume (vph)	101	11	87	25	14	21	88	412	28	16	446	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)	-4%		-1%		-2%		1%					
Total Lost time (s)	5.5	5.5	6.0		6.0		5.5	6.0	5.5		5.5	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00		0.95	
Frt	1.00	0.87	1.00		0.91		1.00	0.99	1.00		0.96	
Flt Protected	0.95	1.00	0.95		1.00		0.95	1.00	0.95		1.00	
Satd. Flow (prot)	1841	1637	1814		1637		1787	3536	1796		3405	
Flt Permitted	0.73	1.00	0.69		1.00		0.41	1.00	0.44		1.00	
Satd. Flow (perm)	1419	1637	1315		1637		778	3536	825		3405	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	109	12	94	27	15	23	95	443	30	17	480	148
RTOR Reduction (vph)	0	81	0	0	20	0	0	4	0	0	24	0
Lane Group Flow (vph)	109	25	0	27	18	0	95	469	0	17	604	0
Heavy Vehicles (%)	0%	0%	3%	0%	0%	10%	2%	2%	4%	0%	2%	1%
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA		
Protected Phases	4		8		5		2		1		6	
Permitted Phases	4		8		2		6					
Actuated Green, G (s)	13.4	13.4	12.9		12.9		67.3	66.8	61.9		61.9	
Effective Green, g (s)	13.4	13.4	12.9		12.9		67.3	66.8	61.9		61.9	
Actuated g/C Ratio	0.13	0.13	0.13		0.13		0.67	0.67	0.62		0.62	
Clearance Time (s)	5.5	5.5	6.0		6.0		5.5	6.0	5.5		5.5	
Vehicle Extension (s)	3.5	3.5	3.5		3.5		3.5	3.5	3.5		3.5	
Lane Grp Cap (vph)	190	219	169		211		606	2362	537		2107	
v/s Ratio Prot	0.02		0.01		0.01		c0.13	0.00	c0.18			
v/s Ratio Perm	c0.08		0.02		0.09		0.02	0.02				
v/c Ratio	0.57	0.11	0.16		0.09		0.16	0.20	0.03		0.29	
Uniform Delay, d1	40.6	38.1	38.7		38.4		6.1	6.4	7.5		8.8	
Progression Factor	1.00	1.00	1.00		1.00		1.75	1.67	1.00		1.00	
Incremental Delay, d2	4.5	0.3	0.5		0.2		0.1	0.2	0.0		0.3	
Delay (s)	45.1	38.3	39.3		38.6		10.8	10.8	7.5		9.2	
Level of Service	D	D	D		D		B	B	A		A	
Approach Delay (s)	41.8		38.8		10.8		9.1					
Approach LOS	D		D		B		A					

Intersection Summary

HCM 2000 Control Delay 15.8 HCM 2000 Level of Service B
 HCM 2000 Volume to Capacity ratio 0.33
 Actuated Cycle Length (s) 100.0 Sum of lost time (s) 17.5
 Intersection Capacity Utilization 47.7% ICU Level of Service A
 Analysis Period (min) 15

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

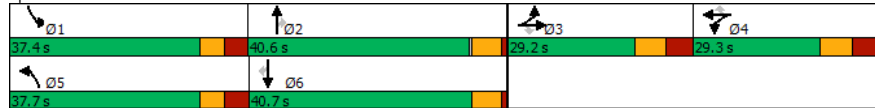
101: Rosser Ave & Ladd Rd
Existing Conditions (June 2018) - PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	65	84	34	81	62	106	43	498	82	163	654	100
Future Volume (vph)	65	84	34	81	62	106	43	498	82	163	654	100
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850			0.850			0.850	
Flt Protected		0.979			0.972		0.950			0.950		
Satd. Flow (prot)	0	1887	1647	0	1819	1615	1787	3470	1599	1823	3575	1615
Flt Permitted		0.979			0.972		0.950			0.950		
Satd. Flow (perm)	0	1887	1647	0	1819	1615	1787	3470	1599	1823	3575	1615
Satd. Flow (RTOR)		155			154			182			182	
Adj. Flow (vph)	67	87	35	84	64	109	44	513	85	168	674	103
Lane Group Flow (vph)	0	154	35	0	148	109	44	513	85	168	674	103
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases		3			4			2			6	
Total Split (s)	29.2	29.2	29.2	29.3	29.3	29.3	37.7	40.6	40.6	37.4	40.7	40.7
Total Lost Time (s)	9.2	9.2		9.3	9.3		7.7	5.6	5.6	7.4	5.7	5.7
Act Effct Green (s)	14.4	14.4		14.4	14.4		8.3	25.9	25.9	15.3	39.4	39.4
Actuated g/C Ratio	0.14	0.14		0.14	0.14		0.08	0.25	0.25	0.15	0.38	0.38
v/c Ratio	0.58	0.10		0.58	0.30		0.31	0.59	0.16	0.62	0.49	0.14
Control Delay	53.8	0.5		54.2	4.5		55.9	37.9	0.6	53.9	28.0	0.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.8	0.5		54.2	4.5		55.9	37.9	0.6	53.9	28.0	0.4
LOS	D	A		D	A		E	D	A	D	C	A
Approach Delay	44.0			33.2			34.2			29.6		
Approach LOS	D			C			C			C		

Intersection Summary

Cycle Length: 136.9	
Actuated Cycle Length: 102.6	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 32.8	Intersection LOS: C
Intersection Capacity Utilization 56.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 101: Rosser Ave & Ladd Rd



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

101: Rosser Ave & Ladd Rd
Existing Conditions (June 2018) - PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	65	84	34	81	62	106	43	498	82	163	654	100
Future Volume (vph)	65	84	34	81	62	106	43	498	82	163	654	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-4%			-2%			2%			-2%	
Total Lost time (s)		9.2	9.2		9.3	9.3		7.7	5.6	5.6	7.4	5.7
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85	1.00	0.85	1.00
Flt Protected		0.98	1.00		0.97	1.00		0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1886	1647		1819	1615		1787	3470	1599	1823	3575
Flt Permitted		0.98	1.00		0.97	1.00		0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1886	1647		1819	1615		1787	3470	1599	1823	3575
Peak-hour factor, PHF	0.97	0.97		0.97	0.97		0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	67	87	35	84	64	109	44	513	85	168	674	103
RTOR Reduction (vph)	0	0	30	0	0	94	0	0	61	0	0	64
Lane Group Flow (vph)	0	154	5	0	148	15	44	513	24	168	674	39
Heavy Vehicles (%)	0%	1%	0%	3%	2%	1%	0%	3%	0%	2%	2%	1%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases		3			4			2			6	
Actuated Green, G (s)	14.4	14.4		14.4	14.4		5.2	29.7	29.7	15.3	39.4	39.4
Effective Green, g (s)	14.4	14.4		14.4	14.4		5.2	29.7	29.7	15.3	39.4	39.4
Actuated g/C Ratio	0.14	0.14		0.14	0.14		0.05	0.28	0.28	0.15	0.37	0.37
Clearance Time (s)	9.2	9.2		9.3	9.3		7.7	5.6	5.6	7.4	5.7	5.7
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	6.0	6.0	3.0	6.0	6.0
Lane Grp Cap (vph)	257	225		248	220		88	978	451	264	1337	604
v/s Ratio Prot	c0.08			c0.08			0.02	0.15		c0.09	c0.19	
v/s Ratio Perm		0.00			0.01			0.01			0.02	
v/c Ratio	0.60	0.02		0.60	0.07		0.50	0.52	0.05	0.64	0.50	0.06
Uniform Delay, d1	42.7	39.3		42.7	39.6		48.8	31.9	27.6	42.4	25.4	21.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	0.0		4.1	0.2		4.4	1.3	0.1	5.0	0.8	0.1
Delay (s)	46.7	39.4		46.8	39.8		53.2	33.1	27.7	47.3	26.3	21.3
Level of Service	D	D		D	D		D	C	C	D	C	C
Approach Delay (s)	45.3			43.8			33.8			29.5		
Approach LOS	D			D			C			C		

Intersection Summary

HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	105.3	Sum of lost time (s)	31.9
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

102: Rosser Ave & Town Center Dr
Existing Conditions (June 2018) - PM Peak Hour

	←		↑		→	
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↑↑	↔	↔↔	↔↔
Traffic Volume (vph)	101	142	618	122	47	796
Future Volume (vph)	101	142	618	122	47	796
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	0.850		0.850		0.950	
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1733	1550	3557	1623	3537	3610
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1733	1550	3557	1623	3537	3610
Satd. Flow (RTOR)		146		126		
Adj. Flow (vph)	104	146	637	126	48	821
Lane Group Flow (vph)	104	146	637	126	48	821
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Total Split (s)	20.0	20.0	64.0	64.0	16.0	80.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Act Effct Green (s)	11.3	11.3	65.6	65.6	8.1	74.7
Actuated g/C Ratio	0.11	0.11	0.66	0.66	0.08	0.75
v/c Ratio	0.53	0.48	0.27	0.11	0.17	0.30
Control Delay	51.6	12.5	9.0	2.1	25.5	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	51.6	12.5	9.0	2.1	25.5	2.5
LOS	D	B	A	A	C	A
Approach Delay	28.8		7.8		3.8	
Approach LOS	C		A		A	

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 58 (58%), Referenced to phase 2:NBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 8.8	Intersection LOS: A
Intersection Capacity Utilization 40.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 102: Rosser Ave & Town Center Dr



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

102: Rosser Ave & Town Center Dr
Existing Conditions (June 2018) - PM Peak Hour

	←		↑		→	
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↑↑	↔	↔↔	↔↔
Traffic Volume (vph)	101	142	618	122	47	796
Future Volume (vph)	101	142	618	122	47	796
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	8%		-1%			-2%
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1733	1550	3557	1623	3537	3610
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1733	1550	3557	1623	3537	3610
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	104	146	637	126	48	821
RTOR Reduction (vph)	0	130	0	47	0	0
Lane Group Flow (vph)	104	16	637	79	48	821
Heavy Vehicles (%)	0%	0%	2%	0%	0%	1%
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Actuated Green, G (s)	11.3	11.3	62.8	62.8	4.9	74.7
Effective Green, g (s)	11.3	11.3	62.8	62.8	4.9	74.7
Actuated g/C Ratio	0.11	0.11	0.63	0.63	0.05	0.75
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	195	175	2233	1019	173	2696
v/s Ratio Prot	c0.06		0.18		0.01 c0.23	
v/s Ratio Perm	0.01		0.05			
v/c Ratio	0.53	0.09	0.29	0.08	0.28	0.30
Uniform Delay, d1	41.9	39.8	8.4	7.3	45.8	4.1
Progression Factor	1.00	1.00	1.00	1.00	0.57	0.50
Incremental Delay, d2	3.1	0.3	0.3	0.1	1.0	0.1
Delay (s)	45.0	40.0	8.8	7.4	26.9	2.1
Level of Service	D	D	A	A	C	A
Approach Delay (s)	42.1		8.5		3.5	
Approach LOS	D		A		A	


Intersection Summary

HCM 2000 Control Delay	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	40.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

103: Rosser Ave & Shenandoah Village Dr
Existing Conditions (June 2018) - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↗	↗	↖	↖	↖	↖	↖	↖
Traffic Volume (vph)	4	1	1	90	2	403	2	693	49	416	769	5
Future Volume (vph)	4	1	1	90	2	403	2	693	49	416	769	5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt		0.977				0.850			0.850			0.850
Flt Protected		0.968		0.950			0.950			0.950		
Satd. Flow (prot)	0	1842	0	1751	1843	1551	1796	3522	1607	3432	3539	1599
Flt Permitted		0.968		0.950			0.950			0.950		
Satd. Flow (perm)	0	1842	0	1751	1843	1551	1796	3522	1607	3432	3539	1599
Satd. Flow (RTOR)		1			420			196				196
Adj. Flow (vph)	4	1	1	94	2	420	2	722	51	433	801	5
Lane Group Flow (vph)	0	6	0	94	2	420	2	722	51	433	801	5
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases					3			2				6
Total Split (s)	22.0	22.0		21.0	21.0	25.0	14.0	32.0	32.0	25.0	43.0	43.0
Total Lost Time (s)		7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Act Effct Green (s)		6.4		10.9	10.9	32.0	6.2	51.1	51.1	17.0	73.8	73.8
Actuated g/C Ratio		0.06		0.11	0.11	0.32	0.06	0.51	0.51	0.17	0.74	0.74
v/c Ratio		0.05		0.49	0.01	0.54	0.02	0.40	0.06	0.74	0.31	0.00
Control Delay		41.7		50.4	38.0	4.9	46.5	12.0	0.7	37.0	3.1	0.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		41.7		50.4	38.0	4.9	46.5	12.0	0.7	37.0	3.1	0.0
LOS		D		D	D	A	D	B	A	D	A	A
Approach Delay		41.7			13.3			11.4				14.9
Approach LOS		D			B			B				B

Intersection Summary


Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 53 (53%), Referenced to phase 2:NBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 13.6 Intersection LOS: B
 Intersection Capacity Utilization 66.6% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 103: Rosser Ave & Shenandoah Village Dr



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

103: Rosser Ave & Shenandoah Village Dr
Existing Conditions (June 2018) - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↗	↗	↖	↖	↖	↖	↖	↖
Traffic Volume (vph)	4	1	1	90	2	403	2	693	49	416	769	5
Future Volume (vph)	4	1	1	90	2	403	2	693	49	416	769	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-5%			6%			1%				2%
Total Lost time (s)		7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lane Util. Factor		1.00		1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.97		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1842		1751	1843	1551	1796	3522	1607	3432	3539	1599
Flt Permitted		0.97		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1842		1751	1843	1551	1796	3522	1607	3432	3539	1599
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	4	1	1	94	2	420	2	722	51	433	801	5
RTOR Reduction (vph)	0	1	0	0	0	285	0	0	31	0	0	2
Lane Group Flow (vph)	0	5	0	94	2	135	2	722	20	433	801	3
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	0%	1%	1%	0%
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases					3			2				6
Actuated Green, G (s)		1.4		9.5	9.5	32.1	1.3	38.5	38.5	22.6	59.8	59.8
Effective Green, g (s)		1.4		9.5	9.5	32.1	1.3	38.5	38.5	22.6	59.8	59.8
Actuated g/C Ratio		0.01		0.10	0.10	0.32	0.01	0.38	0.38	0.23	0.60	0.60
Clearance Time (s)		7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)		3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)		25		166	175	606	23	1355	618	775	2116	956
v/s Ratio Prot		c0.00		c0.05	0.00	0.05	0.00	c0.21		c0.13	0.23	
v/s Ratio Perm						0.04			0.01			0.00
v/c Ratio		0.20		0.57	0.01	0.22	0.09	0.53	0.03	0.56	0.38	0.00
Uniform Delay, d1		48.7		43.3	41.0	24.8	48.8	23.8	19.1	34.3	10.4	8.1
Progression Factor		1.00		1.00	1.00	1.00	1.05	0.63	1.00	0.74	0.35	1.00
Incremental Delay, d2		4.6		4.8	0.0	0.2	1.9	1.5	0.1	0.9	0.1	0.0
Delay (s)		53.4		48.0	41.0	25.0	53.0	16.5	19.2	26.2	3.8	8.1
Level of Service		D		D	D	C	D	B	B	C	A	A
Approach Delay (s)		53.4			29.3			16.8				11.7
Approach LOS		D			C			B				B

Intersection Summary

HCM 2000 Control Delay 16.9 HCM 2000 Level of Service B
 HCM 2000 Volume to Capacity ratio 0.54
 Actuated Cycle Length (s) 100.0 Sum of lost time (s) 28.0
 Intersection Capacity Utilization 66.6% ICU Level of Service C
 Analysis Period (min) 15

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

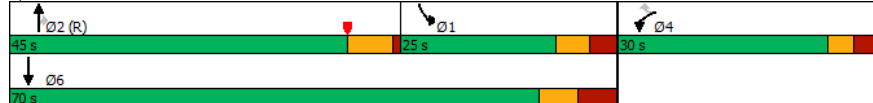
104: Rosser Ave & I-64 EB
Existing Conditions (June 2018) - PM Peak Hour

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Traffic Volume (vph)	134	335	857	227	199	1001
Future Volume (vph)	134	335	857	227	199	1001
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.850		0.850			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1701	1583	3539	1615	1770	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1701	1583	3539	1615	1770	3539
Satd. Flow (RTOR)		348		241		
Adj. Flow (vph)	143	356	912	241	212	1065
Lane Group Flow (vph)	143	356	912	241	212	1065
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Total Split (s)	30.0	30.0	45.0	45.0	25.0	70.0
Total Lost Time (s)	6.0	6.0	6.1	6.1	7.2	9.2
Act Effct Green (s)	14.9	14.9	49.6	49.6	16.2	69.9
Actuated g/C Ratio	0.15	0.15	0.50	0.50	0.16	0.70
v/c Ratio	0.56	0.67	0.52	0.26	0.74	0.43
Control Delay	47.3	11.2	14.1	2.8	43.9	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.3	11.2	14.1	2.8	43.9	2.8
LOS	D	B	B	A	D	A
Approach Delay	21.5		11.7			9.6
Approach LOS	C		B			A

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 50 (50%), Referenced to phase 2:NBT, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 12.5
Intersection LOS: B
Intersection Capacity Utilization 58.2%
ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 104: Rosser Ave & I-64 EB



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

104: Rosser Ave & I-64 EB
Existing Conditions (June 2018) - PM Peak Hour

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Traffic Volume (vph)	134	335	857	227	199	1001
Future Volume (vph)	134	335	857	227	199	1001
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	4%		0%			0%
Total Lost time (s)	6.0	6.0	6.1	6.1	7.2	9.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1701	1583	3539	1615	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1701	1583	3539	1615	1770	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	143	356	912	241	212	1065
RTOR Reduction (vph)	0	296	0	121	0	0
Lane Group Flow (vph)	143	60	912	120	212	1065
Heavy Vehicles (%)	4%	0%	2%	0%	2%	2%
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Actuated Green, G (s)	14.9	14.9	49.6	49.6	16.2	69.9
Effective Green, g (s)	14.9	14.9	49.6	49.6	16.2	69.9
Actuated g/C Ratio	0.15	0.15	0.50	0.50	0.16	0.70
Clearance Time (s)	6.0	6.0	6.1	6.1	7.2	9.2
Vehicle Extension (s)	4.0	4.0	3.5	3.5	4.0	3.5
Lane Grp Cap (vph)	253	235	1755	801	286	2473
v/s Ratio Prot	c0.08		c0.26		c0.12	0.30
v/s Ratio Perm		0.04		0.07		
v/c Ratio	0.57	0.25	0.52	0.15	0.74	0.43
Uniform Delay, d1	39.5	37.6	17.1	13.7	39.9	6.5
Progression Factor	1.00	1.00	0.70	0.91	0.86	0.35
Incremental Delay, d2	3.5	0.8	1.0	0.4	6.1	0.1
Delay (s)	43.0	38.4	13.0	12.8	40.6	2.4
Level of Service	D	D	B	B	D	A
Approach Delay (s)	39.7		13.0			8.7
Approach LOS	D		B			A

Intersection Summary

HCM 2000 Control Delay 15.7
HCM 2000 Level of Service B
HCM 2000 Volume to Capacity ratio 0.57
Actuated Cycle Length (s) 100.0
Sum of lost time (s) 19.3
Intersection Capacity Utilization 58.2%
ICU Level of Service B
Analysis Period (min) 15

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

105: Rosser Ave & I-64 WB
Existing Conditions (June 2018) - PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕	↕	↕	↕			↕	↕
Traffic Volume (vph)	0	0	0	313	0	437	179	1029	0	0	899	327
Future Volume (vph)	0	0	0	313	0	437	179	1029	0	0	899	327
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1669	1552	1703	3574	0	0	3574	1615
Flt Permitted					0.950		0.950					
Satd. Flow (perm)	0	0	0	0	1669	1552	1703	3574	0	0	3574	1615
Satd. Flow (RTOR)						136						341
Adj. Flow (vph)	0	0	0	326	0	455	186	1072	0	0	936	341
Lane Group Flow (vph)	0	0	0	0	326	455	186	1072	0	0	936	341
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		1	6			2	
Permitted Phases						4						2
Total Split (s)				26.0	26.0	26.0	39.0	74.0			35.0	35.0
Total Lost Time (s)				8.3	8.3	8.3	7.1	6.1			5.8	5.8
Act Effct Green (s)				32.9	32.9	16.7	52.7				29.2	29.2
Actuated g/C Ratio				0.33	0.33	0.17	0.53				0.29	0.29
v/c Ratio				0.59	0.76	0.65	0.57				0.90	0.48
Control Delay				34.9	31.4	33.4	7.2				41.6	6.5
Queue Delay				0.0	0.0	0.0	0.0				0.0	0.0
Total Delay				34.9	31.4	33.4	7.2				41.6	6.5
LOS				C	C	C	A				D	A
Approach Delay				32.8			11.0				32.2	
Approach LOS				C			B				C	

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 37 (37%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 24.3	Intersection LOS: C
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 105: Rosser Ave & I-64 WB



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

105: Rosser Ave & I-64 WB
Existing Conditions (June 2018) - PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕	↕	↕	↕			↕	↕
Traffic Volume (vph)	0	0	0	313	0	437	179	1029	0	0	899	327
Future Volume (vph)	0	0	0	313	0	437	179	1029	0	0	899	327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			4%			4%			0%			0%
Total Lost time (s)					8.3	8.3	7.1	6.1			5.8	5.8
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1669	1552	1703	3574			3574	1615
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1669	1552	1703	3574			3574	1615
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	326	0	455	186	1072	0	0	936	341
RTOR Reduction (vph)	0	0	0	0	0	91	0	0	0	0	0	241
Lane Group Flow (vph)	0	0	0	0	326	364	186	1072	0	0	936	100
Heavy Vehicles (%)	0%	0%	0%	6%	0%	2%	6%	1%	0%	0%	1%	0%
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		1	6			2	
Permitted Phases						4						2
Actuated Green, G (s)					32.9	32.9	16.7	52.7			29.2	29.2
Effective Green, g (s)					32.9	32.9	16.7	52.7			29.2	29.2
Actuated g/C Ratio					0.33	0.33	0.17	0.53			0.29	0.29
Clearance Time (s)					8.3	8.3	7.1	6.1			5.8	5.8
Vehicle Extension (s)					4.0	4.0	3.5	4.0			4.0	4.0
Lane Grp Cap (vph)					549	510	284	1883			1043	471
v/s Ratio Prot					0.20		0.11	c0.30			c0.26	
v/s Ratio Perm						c0.23						0.06
v/c Ratio					0.59	0.71	0.65	0.57			0.90	0.21
Uniform Delay, d1					28.0	29.4	39.0	16.0			34.0	26.7
Progression Factor					1.00	1.00	0.62	0.39			0.88	1.38
Incremental Delay, d2					2.0	5.0	4.8	0.4			10.9	0.9
Delay (s)					30.0	34.4	29.0	6.6			40.8	37.8
Level of Service					C	C	C	A			D	D
Approach Delay (s)		0.0			32.6			9.9			40.0	
Approach LOS		A			C			A			D	

Intersection Summary

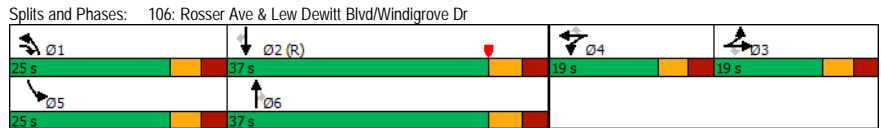
HCM 2000 Control Delay	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.2
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
Existing Conditions (June 2018) - PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	108	72	493	114	55	47	584	642	230	58	619	137
Future Volume (vph)	108	72	493	114	55	47	584	642	230	58	619	137
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt			0.850				0.850			0.850		0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1850	1947	2885	3315	1853	1575	3415	3521	1560	1796	3592	1623
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1850	1947	2885	3315	1853	1575	3415	3521	1560	1796	3592	1623
Satd. Flow (RTOR)			240			185			240			180
Adj. Flow (vph)	113	75	514	119	57	49	608	669	240	60	645	143
Lane Group Flow (vph)	113	75	514	119	57	49	608	669	240	60	645	143
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Total Split (s)	19.0	19.0	25.0	19.0	19.0	19.0	25.0	37.0	37.0	25.0	37.0	37.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.0	7.0	6.5	7.0	7.0
Act Effct Green (s)	11.3	11.3	39.2	9.6	9.6	9.6	21.3	45.8	45.8	9.6	31.2	31.2
Actuated g/C Ratio	0.11	0.11	0.39	0.10	0.10	0.10	0.21	0.46	0.46	0.10	0.31	0.31
v/c Ratio	0.54	0.34	0.40	0.37	0.32	0.15	0.84	0.41	0.28	0.35	0.58	0.23
Control Delay	51.3	44.6	12.2	45.4	46.6	1.0	48.9	25.8	8.6	57.8	19.7	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	44.6	12.2	45.4	46.6	1.0	48.9	25.8	8.6	57.8	19.7	1.3
LOS	D	D	B	D	D	A	D	C	A	E	B	A
Approach Delay		21.9			36.0			32.3			19.3	
Approach LOS		C			D			C			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 40 (40%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 27.0	Intersection LOS: C
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	



Rosser Avenue (US 340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
Existing Conditions (June 2018) - PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	108	72	493	114	55	47	584	642	230	58	619	137
Future Volume (vph)	108	72	493	114	55	47	584	642	230	58	619	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-5%			5%					3%		-3%
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.0	7.0	6.5	7.0	7.0
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1850	1947	2885	3315	1852	1575	3415	3521	1560	1796	3592	1623
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1850	1947	2885	3315	1852	1575	3415	3521	1560	1796	3592	1623
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	112	75	514	119	57	49	608	669	240	60	645	143
RTOR Reduction (vph)	0	0	162	0	0	44	0	0	133	0	0	98
Lane Group Flow (vph)	113	75	352	119	57	5	608	669	107	60	645	45
Heavy Vehicles (%)	0%	0%	1%	3%	0%	0%	1%	2%	2%	2%	2%	1%
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Actuated Green, G (s)	11.3	11.3	32.6	9.6	9.6	9.6	21.3	44.6	44.6	8.0	31.3	31.3
Effective Green, g (s)	11.3	11.3	32.6	9.6	9.6	9.6	21.3	44.6	44.6	8.0	31.3	31.3
Actuated g/C Ratio	0.11	0.11	0.33	0.10	0.10	0.10	0.21	0.45	0.45	0.08	0.31	0.31
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.0	7.0	6.5	7.0	7.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	209	220	1128	318	177	151	727	1570	695	143	1124	507
v/s Ratio Prot	c0.06	0.04	0.07	c0.04	0.03		c0.18	0.19		0.03	c0.18	
v/s Ratio Perm			0.06			0.00		0.07			0.03	0.03
v/c Ratio	0.54	0.34	0.31	0.37	0.32	0.03	0.84	0.43	0.15	0.42	0.57	0.09
Uniform Delay, d1	41.9	40.9	25.3	42.4	42.2	41.0	37.7	18.9	16.5	43.8	28.8	24.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.01	1.23	2.62	1.25	0.59	0.26
Incremental Delay, d2	3.2	1.1	0.2	0.9	1.3	0.1	7.4	0.2	0.1	2.3	2.1	0.3
Delay (s)	45.1	42.0	25.5	43.3	43.4	41.1	45.5	23.6	43.2	57.2	19.2	6.6
Level of Service	D	D	C	D	D	D	D	C	D	E	B	A
Approach Delay (s)		30.4			42.8			35.5			19.7	
Approach LOS		C			D			D			B	

Intersection Summary	
HCM 2000 Control Delay	30.8 HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio	0.62
Actuated Cycle Length (s)	100.0 Sum of lost time (s) 26.5
Intersection Capacity Utilization	63.1% ICU Level of Service B
Analysis Period (min)	15

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

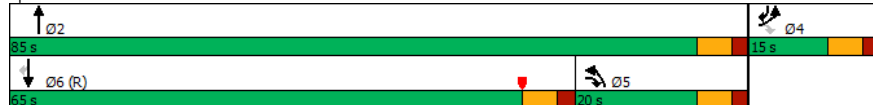
108: Rosser Ave & Lennox PI
Existing Conditions (June 2018) - PM Peak Hour

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	45	59	58	691	625	34
Future Volume (vph)	45	59	58	691	625	34
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.850				0.850	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1841	1615	1832	3628	3539	1615
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1841	1615	1832	3628	3539	1615
Satd. Flow (RTOR)		64				37
Adj. Flow (vph)	49	64	63	751	679	37
Lane Group Flow (vph)	49	64	63	751	679	37
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases	4				6	
Total Split (s)	15.0	20.0	20.0	85.0	65.0	15.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Act Effct Green (s)	8.2	20.7	8.9	83.4	70.9	82.7
Actuated g/C Ratio	0.08	0.21	0.09	0.83	0.71	0.83
v/c Ratio	0.32	0.17	0.39	0.25	0.27	0.03
Control Delay	48.4	8.2	52.6	2.5	6.8	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.4	8.2	52.6	2.5	6.8	0.8
LOS	D	A	D	A	A	A
Approach Delay	25.7		6.4		6.5	
Approach LOS	C		A		A	

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 70 (70%), Referenced to phase 6:SBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.39
 Intersection Signal Delay: 7.7
 Intersection LOS: A
 Intersection Capacity Utilization 42.3%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 108: Rosser Ave & Lennox PI



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

108: Rosser Ave & Lennox PI
Existing Conditions (June 2018) - PM Peak Hour

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	45	59	58	691	625	34
Future Volume (vph)	45	59	58	691	625	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-4%				-3%	
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1841	1615	1832	3628	3539	1615
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1841	1615	1832	3628	3539	1615
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	64	63	751	679	37
RTOR Reduction (vph)	0	55	0	0	0	10
Lane Group Flow (vph)	49	9	63	751	679	27
Heavy Vehicles (%)	0%	2%	0%	1%	2%	0%
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases	4				6	
Actuated Green, G (s)	7.0	14.7	7.7	81.0	67.3	74.3
Effective Green, g (s)	7.0	14.7	7.7	81.0	67.3	74.3
Actuated g/C Ratio	0.07	0.15	0.08	0.81	0.67	0.74
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	128	334	141	2938	2381	1296
v/s Ratio Prot	c0.03	0.00	c0.03	0.21	c0.19	0.00
v/s Ratio Perm	0.00				0.02	
v/c Ratio	0.38	0.03	0.45	0.26	0.29	0.02
Uniform Delay, d1	44.4	36.5	44.1	2.3	6.6	3.4
Progression Factor	1.00	1.00	1.08	0.94	0.87	0.82
Incremental Delay, d2	1.9	0.0	2.2	0.0	0.3	0.0
Delay (s)	46.3	36.6	50.0	2.2	6.0	2.7
Level of Service	D	D	D	A	A	A
Approach Delay (s)	40.8		5.9		5.9	
Approach LOS	D		A		A	

Intersection Summary

HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

109: Rosser Ave & Tiffany Dr
Existing Conditions (June 2018) - PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	119	9	94	21	14	25	82	613	40	34	547	134
Future Volume (vph)	119	9	94	21	14	25	82	613	40	34	547	134
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt	0.864		0.904		0.991		0.970					
Flt Protected	0.950		0.950		0.950		0.950		0.950			
Satd. Flow (prot)	1841	1659	0	1814	1684	0	1805	3580	0	1796	3422	0
Flt Permitted	0.730		0.684		0.376		0.328		0.328			
Satd. Flow (perm)	1415	1659	0	1306	1684	0	714	3580	0	620	3422	0
Satd. Flow (RTOR)	100		27		10		44					
Adj. Flow (vph)	127	10	100	22	15	27	87	652	43	36	582	143
Lane Group Flow (vph)	127	110	0	22	42	0	87	695	0	36	725	0
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA				
Protected Phases	4		8		5		2		1		6	
Permitted Phases	4		8		2		6					
Total Split (s)	30.0	30.0	30.0	30.0	13.0	57.0	13.0	57.0	13.0	57.0		
Total Lost Time (s)	5.5	5.5	6.0	6.0	5.5	6.0	5.5	6.0	5.5	6.0		
Act Effct Green (s)	14.7	14.7	14.2	14.2	66.6	66.1	63.9	63.9				
Actuated g/C Ratio	0.15	0.15	0.14	0.14	0.67	0.66	0.64	0.64				
v/c Ratio	0.61	0.33	0.12	0.16	0.16	0.29	0.08	0.33				
Control Delay	51.8	11.7	36.4	19.4	15.1	13.5	9.4	9.4				
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Delay	51.8	11.7	36.4	19.4	15.1	13.5	9.4	9.4				
LOS	D	B	D	B	B	B	A	A				
Approach Delay	33.2		25.3		13.7		9.4					
Approach LOS	C		C		B		A					

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 60 (60%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.61
 Intersection Signal Delay: 14.8
 Intersection LOS: B
 Intersection Capacity Utilization 51.4%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 109: Rosser Ave & Tiffany Dr



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

109: Rosser Ave & Tiffany Dr
Existing Conditions (June 2018) - PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	119	9	94	21	14	25	82	613	40	34	547	134
Future Volume (vph)	119	9	94	21	14	25	82	613	40	34	547	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)	-4%		-1%		-2%		1%					
Total Lost time (s)	5.5	5.5	6.0	6.0	5.5	6.0	5.5	6.0	5.5	6.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95		
Frt	1.00	0.86	1.00	0.90	1.00	0.99	1.00	0.97				
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00		
Satd. Flow (prot)	1841	1659	1814	1683	1805	3579	1796	3424				
Flt Permitted	0.73	1.00	0.68	1.00	0.38	1.00	0.33	1.00				
Satd. Flow (perm)	1414	1659	1305	1683	715	3579	621	3424				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	127	10	100	22	15	27	87	652	43	36	582	143
RTOR Reduction (vph)	0	85	0	0	23	0	0	4	0	0	17	0
Lane Group Flow (vph)	127	25	0	22	19	0	87	691	0	36	708	0
Heavy Vehicles (%)	0%	0%	1%	0%	7%	0%	1%	1%	0%	0%	2%	1%
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA				
Protected Phases	4		8		5		2		1		6	
Permitted Phases	4		8		2		6					
Actuated Green, G (s)	14.7	14.7	14.2	14.2	64.4	63.9	61.7	61.7				
Effective Green, g (s)	14.7	14.7	14.2	14.2	64.4	63.9	61.7	61.7				
Actuated g/C Ratio	0.15	0.15	0.14	0.14	0.64	0.64	0.62	0.62				
Clearance Time (s)	5.5	5.5	6.0	6.0	5.5	6.0	5.5	5.5				
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5				
Lane Grp Cap (vph)	207	243	185	238	537	2286	434	2112				
v/s Ratio Prot	0.01		0.01		0.01		c0.19		0.00		c0.21	
v/s Ratio Perm	c0.09		0.02		0.09		0.05					
v/c Ratio	0.61	0.10	0.12	0.08	0.16	0.30	0.08	0.34				
Uniform Delay, d1	40.0	36.9	37.4	37.2	7.2	8.1	7.9	9.2				
Progression Factor	1.00	1.00	1.00	1.00	1.52	1.52	1.00	1.00				
Incremental Delay, d2	5.6	0.2	0.3	0.2	0.2	0.3	0.1	0.4				
Delay (s)	45.6	37.2	37.8	37.4	11.1	12.6	8.0	9.7				
Level of Service	D	D	D	D	B	B	A	A				
Approach Delay (s)	41.7		37.5		12.5		9.6					
Approach LOS	D		D		B		A					

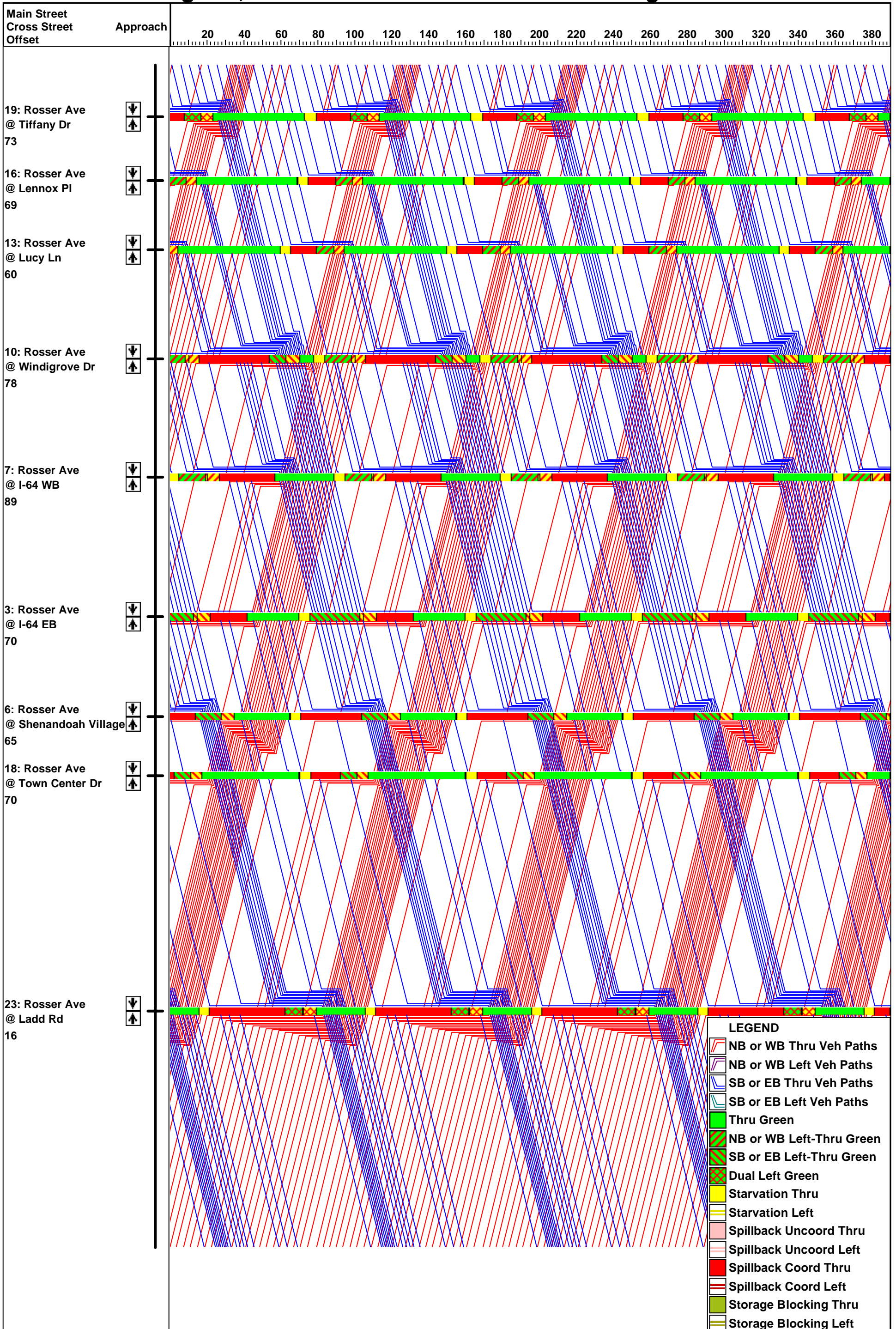
Intersection Summary

HCM 2000 Control Delay 15.9
 HCM 2000 Level of Service B
 HCM 2000 Volume to Capacity ratio 0.39
 Actuated Cycle Length (s) 100.0
 Sum of lost time (s) 17.5
 Intersection Capacity Utilization 51.4%
 ICU Level of Service A
 Analysis Period (min) 15

c Critical Lane Group

Time-Space Diagram - Rosser Ave US 340 (Rosser Avenue) Small Area Study

Traffic Flow Diagram, 90th Percentile Flow and Green Timing Plan: AM Peak Hour



New Timings (June 2018)
Kimley-Horn

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

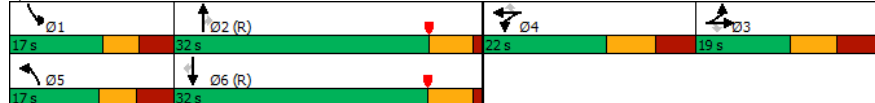
101: Rosser Ave & Ladd Rd
New Timings (June 2018) - AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	61	43	57	57	84	131	40	609	68	57	318	20
Future Volume (vph)	61	43	57	57	84	131	40	609	68	57	318	20
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850			0.850			0.850	
Flt Protected		0.972			0.980		0.950			0.950		
Satd. Flow (prot)	0	1794	1615	0	1840	1553	1787	3404	1567	1704	3440	1553
Flt Permitted		0.972			0.980		0.950			0.950		
Satd. Flow (perm)	0	1794	1615	0	1840	1553	1787	3404	1567	1704	3440	1553
Satd. Flow (RTOR)			239		238		281			281		
Adj. Flow (vph)	75	53	70	70	104	162	49	752	84	70	393	25
Lane Group Flow (vph)	0	128	70	0	174	162	49	752	84	70	393	25
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			6
Total Split (s)	19.0	19.0	19.0	22.0	22.0	22.0	17.0	32.0	32.0	17.0	32.0	32.0
Total Lost Time (s)		9.2	9.2		9.3	9.3	7.7	5.6	5.6	7.4	5.7	5.7
Act Effct Green (s)		9.7	9.7		12.0	12.0	9.1	30.9	30.9	9.2	34.0	34.0
Actuated g/C Ratio		0.11	0.11		0.13	0.13	0.10	0.34	0.34	0.10	0.38	0.38
v/c Ratio		0.66	0.18		0.71	0.39	0.27	0.64	0.12	0.40	0.30	0.03
Control Delay		56.2	1.0		54.3	3.9	41.7	29.7	0.3	37.8	28.8	0.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		56.2	1.0		54.3	3.9	41.7	29.7	0.3	37.8	28.8	0.4
LOS		E	A		D	A	D	C	A	D	C	A
Approach Delay		36.7			30.0			27.6			28.6	
Approach LOS		D			C			C			C	

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 16 (18%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 29.2	Intersection LOS: C
Intersection Capacity Utilization 57.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 101: Rosser Ave & Ladd Rd



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

101: Rosser Ave & Ladd Rd
New Timings (June 2018) - AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	61	43	57	57	84	131	40	609	68	57	318	20
Future Volume (vph)	61	43	57	57	84	131	40	609	68	57	318	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-4%			-2%			2%			-2%	
Total Lost time (s)		9.2	9.2		9.3	9.3	7.7	5.6	5.6	7.4	5.7	5.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	0.95	1.00
Frt	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	0.97	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1793	1615		1841	1553	1787	3404	1567	1704	3440	1553	1553
Flt Permitted	0.97	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1793	1615		1841	1553	1787	3404	1567	1704	3440	1553	1553
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	75	53	70	70	104	162	49	752	84	70	393	25
RTOR Reduction (vph)	0	0	62	0	0	140	0	0	57	0	0	16
Lane Group Flow (vph)	0	128	8	0	174	22	49	752	27	70	393	9
Heavy Vehicles (%)	5%	5%	2%	4%	1%	5%	0%	5%	2%	7%	6%	5%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			6
Actuated Green, G (s)		9.7	9.7		12.0	12.0	5.5	29.4	29.4	7.4	30.9	30.9
Effective Green, g (s)		9.7	9.7		12.0	12.0	5.5	29.4	29.4	7.4	30.9	30.9
Actuated g/C Ratio		0.11	0.11		0.13	0.13	0.06	0.33	0.33	0.08	0.34	0.34
Clearance Time (s)		9.2	9.2		9.3	9.3	7.7	5.6	5.6	7.4	5.7	5.7
Vehicle Extension (s)		3.5	3.5		3.5	3.5	3.0	6.0	6.0	3.0	6.0	6.0
Lane Grp Cap (vph)		193	174		245	207	109	1111	511	140	1181	533
v/s Ratio Prot		c0.07			c0.09			0.03	c0.22		c0.04	0.11
v/s Ratio Perm		0.00			0.01			0.02			0.02	0.01
v/c Ratio		0.66	0.04		0.71	0.10	0.45	0.68	0.05	0.50	0.33	0.02
Uniform Delay, d1		38.6	36.0		37.3	34.3	40.8	26.2	20.8	39.5	21.9	19.5
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.81	1.28	1.00
Incremental Delay, d2		8.6	0.1		9.6	0.3	2.9	3.3	0.2	2.8	0.8	0.1
Delay (s)		47.2	36.1		47.0	34.5	43.7	29.5	21.0	34.8	28.7	19.6
Level of Service		D	D		D	C	D	C	C	C	C	B
Approach Delay (s)		43.3			41.0			29.5			29.1	
Approach LOS		D			D			C			C	

Intersection Summary

HCM 2000 Control Delay	32.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	31.9
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

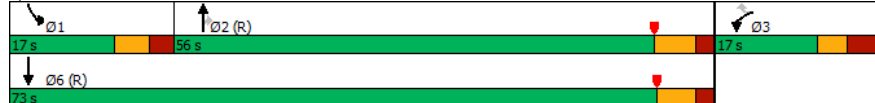
102: Rosser Ave & Town Center Dr
New Timings (June 2018) - AM Peak Hour

	↙	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↖	↑↑	↗	↘↙	↘↖
Traffic Volume (vph)	28	10	754	73	7	403
Future Volume (vph)	28	10	754	73	7	403
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	0.850		0.850		0.950	
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1733	1550	3557	1623	3537	3506
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1733	1550	3557	1623	3537	3506
Satd. Flow (RTOR)	11		83			
Adj. Flow (vph)	32	11	857	83	8	458
Lane Group Flow (vph)	32	11	857	83	8	458
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases	3		2			
Total Split (s)	17.0	17.0	56.0	56.0	17.0	73.0
Total Lost Time (s)	6.4	6.4	6.3	6.3	6.2	6.0
Act Effct Green (s)	9.2	9.2	73.8	73.8	9.0	77.0
Actuated g/C Ratio	0.10	0.10	0.82	0.82	0.10	0.86
v/c Ratio	0.18	0.07	0.29	0.06	0.02	0.15
Control Delay	39.6	20.3	1.9	0.2	47.6	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.6	20.3	1.9	0.2	47.6	0.9
LOS	D	C	A	A	D	A
Approach Delay	34.6		1.7		1.7	
Approach LOS	C		A		A	

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 70 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.29	
Intersection Signal Delay: 2.7	Intersection LOS: A
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 102: Rosser Ave & Town Center Dr



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

102: Rosser Ave & Town Center Dr
New Timings (June 2018) - AM Peak Hour

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↖	↑↑	↗	↘↙	↘↖
Traffic Volume (vph)	28	10	754	73	7	403
Future Volume (vph)	28	10	754	73	7	403
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	8%		-1%		-2%	
Total Lost time (s)	6.4	6.4	6.3	6.3	6.2	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1733	1550	3557	1623	3537	3506
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1733	1550	3557	1623	3537	3506
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	32	11	857	83	8	458
RTOR Reduction (vph)	0	10	0	24	0	0
Lane Group Flow (vph)	32	1	857	59	8	458
Heavy Vehicles (%)	0%	0%	2%	0%	0%	4%
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases	3		2			
Actuated Green, G (s)	5.6	5.6	63.7	63.7	1.8	72.0
Effective Green, g (s)	5.6	5.6	63.7	63.7	1.8	72.0
Actuated g/C Ratio	0.06	0.06	0.71	0.71	0.02	0.80
Clearance Time (s)	6.4	6.4	6.3	6.3	6.2	6.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	107	96	2517	1148	70	2804
v/s Ratio Prot	c0.02		c0.24		0.00	
v/s Ratio Perm	0.00		0.04		0.16	
v/c Ratio	0.30	0.01	0.34	0.05	0.11	0.16
Uniform Delay, d1	40.3	39.6	5.1	4.0	43.3	2.1
Progression Factor	1.00	1.00	0.38	0.10	1.29	0.36
Incremental Delay, d2	1.9	0.0	0.3	0.1	0.9	0.1
Delay (s)	42.2	39.6	2.2	0.5	56.9	0.9
Level of Service	D	D	A	A	E	A
Approach Delay (s)	41.5		2.0		1.8	
Approach LOS	D		A		A	

Intersection Summary

HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	38.9%	ICU Level of Service	A
Analysis Period (min)	15		

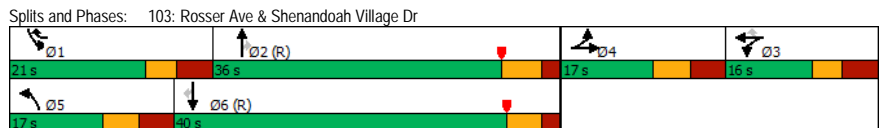
c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

103: Rosser Ave & Shenandoah Village Dr
New Timings (June 2018) - AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕	↕	↕	↕	↕	↕	↕	↕
Traffic Volume (vph)	4	1	1	29	0	138	0	692	65	251	384	5
Future Volume (vph)	4	1	1	29	0	138	0	692	65	251	384	5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt	0.981			0.850			0.850			0.850		
Flt Protected	0.966			0.950			0.950			0.950		
Satd. Flow (prot)	0	1846	0	1751	1843	1567	1853	3522	1607	3399	3539	1599
Flt Permitted	0.966			0.950			0.950			0.950		
Satd. Flow (perm)	0	1846	0	1751	1843	1567	1853	3522	1607	3399	3539	1599
Satd. Flow (RTOR)	1			284			225			225		
Adj. Flow (vph)	5	1	1	33	0	157	0	786	74	285	436	6
Lane Group Flow (vph)	0	7	0	33	0	157	0	786	74	285	436	6
Turn Type	Split	NA		Split	pm+ov	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases				3			2			6		
Total Split (s)	17.0	17.0		16.0	16.0	21.0	17.0	36.0	36.0	21.0	40.0	40.0
Total Lost Time (s)	7.4		6.9		7.0		7.3		6.1		5.6	
Act Effct Green (s)	9.0		9.1		22.3		51.3		51.3		73.7	
Actuated g/C Ratio	0.10		0.10		0.25		0.57		0.57		0.82	
v/c Ratio	0.04		0.19		0.26		0.39		0.07		0.15	
Control Delay	35.0		39.7		1.1		4.7		0.7		38.4	
Queue Delay	0.0		0.0		0.0		0.0		0.0		0.0	
Total Delay	35.0		39.7		1.1		4.7		0.7		38.4	
LOS	C		D		A		A		A		A	
Approach Delay	35.0			7.8			4.3			17.2		
Approach LOS	C			A			A			B		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 65 (72%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 10.1	Intersection LOS: B
Intersection Capacity Utilization 52.3%	ICU Level of Service A
Analysis Period (min) 15	



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

103: Rosser Ave & Shenandoah Village Dr
New Timings (June 2018) - AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕	↕	↕	↕	↕	↕	↕	↕
Traffic Volume (vph)	4	1	1	29	0	138	0	692	65	251	384	5
Future Volume (vph)	4	1	1	29	0	138	0	692	65	251	384	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)	-5%			6%			1%			2%		
Total Lost time (s)	7.4		6.9		7.0		6.1		6.1		5.6	
Lane Util. Factor	1.00		1.00		1.00		0.95		1.00		0.95	
Frt	0.98			1.00			0.85			1.00		
Flt Protected	0.97			0.95			1.00			1.00		
Satd. Flow (prot)	1844	1751		1567	3522	1607	3399	3539	1599			
Flt Permitted	0.97			0.95			1.00			1.00		
Satd. Flow (perm)	1844	1751		1567	3522	1607	3399	3539	1599			
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	5	1	1	33	0	157	0	786	74	285	436	6
RTOR Reduction (vph)	0	1	0	0	0	125	0	0	39	0	0	2
Lane Group Flow (vph)	0	6	0	33	0	32	0	786	35	285	436	4
Heavy Vehicles (%)	0%		0%		0%		2%		0%		2%	
Turn Type	Split	NA		Split	pm+ov	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases				3			2			6		
Actuated Green, G (s)	1.8		5.5		18.2		42.6		42.6		12.7	
Effective Green, g (s)	1.8		5.5		18.2		42.6		42.6		12.7	
Actuated g/C Ratio	0.02		0.06		0.20		0.47		0.47		0.14	
Clearance Time (s)	7.4		6.9		7.0		6.1		6.1		5.6	
Vehicle Extension (s)	3.5		3.5		3.5		3.5		3.5		3.5	
Lane Grp Cap (vph)	36		107		316		1667		760		479	
v/s Ratio Prot	c0.00		c0.02		0.01		c0.22		c0.08		0.12	
v/s Ratio Perm					0.01		0.02				0.00	
v/c Ratio	0.17		0.31		0.10		0.47		0.05		0.18	
Uniform Delay, d1	43.4		40.4		29.2		16.1		12.8		36.2	
Progression Factor	1.00		1.00		1.00		0.29		1.00		0.88	
Incremental Delay, d2	2.6		1.9		0.2		0.9		0.1		2.1	
Delay (s)	46.0		42.4		29.4		5.6		12.9		35.2	
Level of Service	D		D		C		A		B		D	
Approach Delay (s)	46.0			31.7			6.2			16.4		
Approach LOS	D			C			A			B		

Intersection Summary	
HCM 2000 Control Delay	13.2 HCM 2000 Level of Service B
HCM 2000 Volume to Capacity ratio	0.47
Actuated Cycle Length (s)	90.0 Sum of lost time (s) 27.4
Intersection Capacity Utilization	52.3% ICU Level of Service A
Analysis Period (min)	15

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

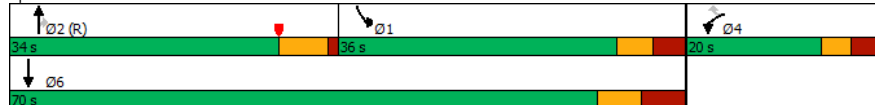
104: Rosser Ave & I-64 EB
New Timings (June 2018) - AM Peak Hour

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Traffic Volume (vph)	90	212	538	296	294	499
Future Volume (vph)	90	212	538	296	294	499
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.850		0.850		0.950	
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1653	1583	3438	1615	1736	3471
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1653	1583	3438	1615	1736	3471
Satd. Flow (RTOR)		241		336		
Adj. Flow (vph)	102	241	611	336	334	567
Lane Group Flow (vph)	102	241	611	336	334	567
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Total Split (s)	20.0	20.0	34.0	34.0	36.0	70.0
Total Lost Time (s)	6.0	6.0	6.1	6.1	7.2	9.2
Act Effct Green (s)	11.7	11.7	36.1	36.1	22.9	63.1
Actuated g/C Ratio	0.13	0.13	0.40	0.40	0.25	0.70
v/c Ratio	0.48	0.58	0.44	0.40	0.76	0.23
Control Delay	43.6	11.0	7.9	2.0	23.9	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.6	11.0	7.9	2.0	23.9	1.8
LOS	D	B	A	A	C	A
Approach Delay	20.7		5.8			10.0
Approach LOS	C		A			A

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 70 (78%), Referenced to phase 2:NBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 9.8
 Intersection LOS: A
 Intersection Capacity Utilization 54.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 104: Rosser Ave & I-64 EB



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

104: Rosser Ave & I-64 EB
New Timings (June 2018) - AM Peak Hour

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙	↑↑
Traffic Volume (vph)	90	212	538	296	294	499
Future Volume (vph)	90	212	538	296	294	499
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	4%		0%			0%
Total Lost time (s)	6.0	6.0	6.1	6.1	7.2	9.2
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1653	1583	3438	1615	1736	3471
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1653	1583	3438	1615	1736	3471
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	102	241	611	336	334	567
RTOR Reduction (vph)	0	210	0	201	0	0
Lane Group Flow (vph)	102	31	611	135	334	567
Heavy Vehicles (%)	7%	0%	5%	0%	4%	4%
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Actuated Green, G (s)	11.7	11.7	36.1	36.1	22.9	63.1
Effective Green, g (s)	11.7	11.7	36.1	36.1	22.9	63.1
Actuated g/C Ratio	0.13	0.13	0.40	0.40	0.25	0.70
Clearance Time (s)	6.0	6.0	6.1	6.1	7.2	9.2
Vehicle Extension (s)	4.0	4.0	3.5	3.5	4.0	3.5
Lane Grp Cap (vph)	214	205	1379	647	441	2433
v/s Ratio Prot	c0.06		c0.18		c0.19	0.16
v/s Ratio Perm		0.02		0.08		
v/c Ratio	0.48	0.15	0.44	0.21	0.76	0.23
Uniform Delay, d1	36.3	34.8	19.6	17.6	31.0	4.8
Progression Factor	1.00	1.00	0.32	0.23	0.45	0.31
Incremental Delay, d2	2.3	0.5	1.0	0.7	6.9	0.1
Delay (s)	38.6	35.2	7.3	4.8	20.8	1.6
Level of Service	D	D	A	A	C	A
Approach Delay (s)	36.2		6.4			8.7
Approach LOS	D		A			A

Intersection Summary

HCM 2000 Control Delay 12.0 HCM 2000 Level of Service B
 HCM 2000 Volume to Capacity ratio 0.55
 Actuated Cycle Length (s) 90.0 Sum of lost time (s) 19.3
 Intersection Capacity Utilization 54.7% ICU Level of Service A
 Analysis Period (min) 15

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

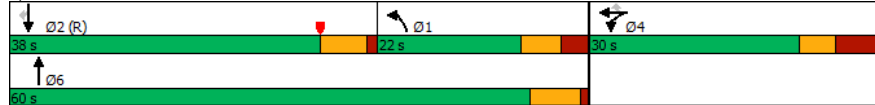
105: Rosser Ave & I-64 WB
New Timings (June 2018) - AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↔			↔	↔
Traffic Volume (vph)	0	0	0	189	2	153	107	643	0	0	598	347
Future Volume (vph)	0	0	0	189	2	153	107	643	0	0	598	347
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt					0.850							0.850
Flt Protected					0.953		0.950					
Satd. Flow (prot)	0	0	0	0	1644	1537	1583	3539	0	0	3471	1615
Flt Permitted					0.953		0.950					
Satd. Flow (perm)	0	0	0	0	1644	1537	1583	3539	0	0	3471	1615
Satd. Flow (RTOR)						176						399
Adj. Flow (vph)	0	0	0	217	2	176	123	739	0	0	687	399
Lane Group Flow (vph)	0	0	0	0	219	176	123	739	0	0	687	399
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		1	6			2	
Permitted Phases						4						2
Total Split (s)				30.0	30.0	30.0	22.0	60.0			38.0	38.0
Total Lost Time (s)				8.3	8.3	7.1	6.1				5.8	5.8
Act Effct Green (s)				18.3	18.3	12.6	57.3				37.9	37.9
Actuated g/C Ratio				0.20	0.20	0.14	0.64				0.42	0.42
v/c Ratio				0.66	0.39	0.56	0.33				0.47	0.44
Control Delay				42.5	7.3	42.9	3.1				10.7	2.2
Queue Delay				0.0	0.0	0.0	0.0				0.0	0.0
Total Delay				42.5	7.3	42.9	3.1				10.7	2.2
LOS				D	A	D	A				B	A
Approach Delay				26.8			8.8				7.6	
Approach LOS				C			A				A	

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 89 (99%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 11.3	Intersection LOS: B
Intersection Capacity Utilization 60.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 105: Rosser Ave & I-64 WB



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

105: Rosser Ave & I-64 WB
New Timings (June 2018) - AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↔			↔	↔
Traffic Volume (vph)	0	0	0	189	2	153	107	643	0	0	598	347
Future Volume (vph)	0	0	0	189	2	153	107	643	0	0	598	347
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			4%			4%			0%			0%
Total Lost time (s)				8.3	8.3	7.1	6.1				5.8	5.8
Lane Util. Factor				1.00	1.00	1.00	0.95				0.95	1.00
Frt				1.00	0.85	1.00	1.00				1.00	0.85
Flt Protected				0.95	1.00	0.95	1.00				1.00	1.00
Satd. Flow (prot)				1644	1537	1583	3539				3471	1615
Flt Permitted				0.95	1.00	0.95	1.00				1.00	1.00
Satd. Flow (perm)				1644	1537	1583	3539				3471	1615
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	217	2	176	123	739	0	0	687	399
RTOR Reduction (vph)	0	0	0	0	0	140	0	0	0	0	0	231
Lane Group Flow (vph)	0	0	0	0	219	36	123	739	0	0	687	168
Heavy Vehicles (%)	0%	0%	0%	8%	0%	3%	14%	2%	0%	0%	4%	0%
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		1	6			2	
Permitted Phases						4						2
Actuated Green, G (s)				18.3	18.3	12.6	57.3				37.9	37.9
Effective Green, g (s)				18.3	18.3	12.6	57.3				37.9	37.9
Actuated g/C Ratio				0.20	0.20	0.14	0.64				0.42	0.42
Clearance Time (s)				8.3	8.3	7.1	6.1				5.8	5.8
Vehicle Extension (s)				4.0	4.0	3.5	4.0				4.0	4.0
Lane Grp Cap (vph)				334	312	221	2253				1461	680
v/s Ratio Prot				c0.13		c0.08	0.21				c0.20	
v/s Ratio Perm						0.02						0.10
v/c Ratio				0.66	0.11	0.56	0.33				0.47	0.25
Uniform Delay, d1				33.0	29.2	36.1	7.5				18.8	16.8
Progression Factor				1.00	1.00	0.95	0.35				0.48	0.34
Incremental Delay, d2				5.1	0.2	3.0	0.1				1.0	0.8
Delay (s)				38.0	29.5	37.2	2.7				10.1	6.5
Level of Service				D	C	D	A				B	A
Approach Delay (s)		0.0			34.2		7.6				8.8	
Approach LOS		A			C		A				A	

Intersection Summary

HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	21.2
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
 Lanes, Volumes, Timings

New Timings (June 2018) - AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	80	17	282	189	33	35	281	451	67	22	474	79
Future Volume (vph)	80	17	282	189	33	35	281	451	67	22	474	79
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1762	1837	2829	3283	1748	1529	3382	3486	1515	1832	3557	1623
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1762	1837	2829	3283	1748	1529	3382	3486	1515	1832	3557	1623
Satd. Flow (RTOR)			247			315			269			269
Adj. Flow (vph)	88	19	310	208	36	38	309	496	74	24	521	87
Lane Group Flow (vph)	88	19	310	208	36	38	309	496	74	24	521	87
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Total Split (s)	18.0	18.0	22.0	20.0	20.0	20.0	22.0	35.0	35.0	17.0	30.0	30.0
Total Lost Time (s)	7.9	7.9	7.5	9.8	9.8	9.8	7.5	5.5	5.5	7.5	6.1	6.1
Act Effct Green (s)	9.7	9.7	27.3	10.0	10.0	10.0	13.1	43.8	43.8	9.0	29.2	29.2
Actuated g/C Ratio	0.11	0.11	0.30	0.11	0.11	0.11	0.15	0.49	0.49	0.10	0.32	0.32
v/c Ratio	0.47	0.10	0.30	0.57	0.18	0.08	0.63	0.29	0.08	0.13	0.45	0.12
Control Delay	46.1	37.2	5.7	44.4	38.7	0.4	28.2	7.1	0.2	28.5	22.4	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.1	37.2	5.7	44.4	38.7	0.4	28.2	7.1	0.2	28.5	22.4	1.0
LOS	D	D	A	D	D	A	C	A	A	C	C	A
Approach Delay		15.7			37.8			13.9			19.7	
Approach LOS		B			D			B			B	

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 78 (87%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 19.0	Intersection LOS: B
Intersection Capacity Utilization 52.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr



Rosser Avenue (US 340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
 HCM Signalized Intersection Capacity Analysis

New Timings (June 2018) - AM Peak Hour

	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	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	80	17	282	189	33	35	281	451	67	22	474	79
Future Volume (vph)	80	17	282	189	33	35	281	451	67	22	474	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-5%			5%			3%				-3%
Total Lost time (s)	7.9	7.9	7.5	9.8	9.8	9.8	7.5	5.5	5.5	7.5	6.1	6.1
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1762	1837	2829	3283	1748	1529	3382	3486	1515	1832	3557	1623
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1762	1837	2829	3283	1748	1529	3382	3486	1515	1832	3557	1623
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	88	19	310	208	36	38	309	496	74	24	521	87
RTOR Reduction (vph)	0	0	177	0	0	34	0	0	43	0	0	65
Lane Group Flow (vph)	88	19	133	208	36	4	309	496	31	24	521	22
Heavy Vehicles (%)	5%	6%	3%	4%	6%	3%	2%	5%	0%	3%	1%	
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Actuated Green, G (s)	7.9	7.9	25.5	10.0	10.0	10.0	17.6	37.8	37.8	3.6	23.2	23.2
Effective Green, g (s)	7.9	7.9	25.5	10.0	10.0	10.0	17.6	37.8	37.8	3.6	23.2	23.2
Actuated g/C Ratio	0.09	0.09	0.28	0.11	0.11	0.11	0.20	0.42	0.42	0.04	0.26	0.26
Clearance Time (s)	7.9	7.9	7.5	9.8	9.8	9.8	7.5	5.5	5.5	7.5	6.1	6.1
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	154	161	1037	364	194	169	661	1464	636	73	916	418
v/s Ratio Prot	c0.05	0.01	0.03	c0.06	0.02		c0.09	0.14		0.01	c0.15	
v/s Ratio Perm			0.02			0.00		0.02				0.01
v/c Ratio	0.57	0.12	0.13	0.57	0.19	0.02	0.47	0.34	0.05	0.33	0.57	0.05
Uniform Delay, d1	39.4	37.8	24.0	38.0	36.3	35.7	32.1	17.6	15.5	42.0	29.0	25.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.62	0.39	1.00	0.72	0.80	1.00
Incremental Delay, d2	5.4	0.4	0.1	2.3	0.5	0.1	0.6	0.2	0.0	3.1	2.5	0.2
Delay (s)	44.9	38.2	24.1	40.3	36.9	35.7	20.5	7.0	15.5	33.4	25.9	25.4
Level of Service	D	D	C	D	D	D	C	A	B	C	C	C
Approach Delay (s)		29.1			39.2			12.5			26.1	
Approach LOS		C			D			B			C	

Intersection Summary

HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	31.3
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

109: Rosser Ave & Tiffany Dr
New Timings (June 2018) - AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	36	4	30	30	4	34	22	416	12	12	423	54
Future Volume (vph)	36	4	30	30	4	34	22	416	12	12	423	54
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt	0.869		0.867		0.996		0.983					
Flt Protected	0.950		0.950		0.950		0.950		0.950			
Satd. Flow (prot)	1787	1467	0	1814	1613	0	1673	3554	0	1663	3462	0
Flt Permitted	0.728		0.732		0.437		0.475		0.475			
Satd. Flow (perm)	1370	1467	0	1398	1613	0	769	3554	0	831	3462	0
Satd. Flow (RTOR)	34		39		5		23					
Adj. Flow (vph)	41	5	34	34	5	39	25	473	14	14	481	61
Lane Group Flow (vph)	41	39	0	34	44	0	25	487	0	14	542	0
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA				
Protected Phases	4		8		5		2		1		6	
Permitted Phases	4		8		2		6					
Total Split (s)	20.0	20.0	20.0	20.0	16.0	54.0	16.0	54.0	16.0	54.0		
Total Lost Time (s)	6.9	6.9	6.9	6.9	6.3	6.3	6.3	6.3	6.3	6.3		
Act Effcl Green (s)	9.7	9.7	9.7	9.7	69.0	68.4	67.7	65.4				
Actuated g/C Ratio	0.11	0.11	0.11	0.11	0.77	0.76	0.75	0.73				
v/c Ratio	0.28	0.21	0.23	0.21	0.04	0.18	0.02	0.21				
Control Delay	41.5	17.5	40.1	16.4	1.8	4.5	3.5	6.5				
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Delay	41.5	17.5	40.1	16.4	1.8	4.5	3.5	6.5				
LOS	D	B	D	B	A	A	A	A				
Approach Delay	29.8		26.7		4.4		6.4					
Approach LOS	C		C		A		A					

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 73 (81%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.28	
Intersection Signal Delay: 8.4	Intersection LOS: A
Intersection Capacity Utilization 37.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 109: Rosser Ave & Tiffany Dr



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

109: Rosser Ave & Tiffany Dr
New Timings (June 2018) - AM Peak Hour

	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	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	36	4	30	30	4	34	22	416	12	12	423	54
Future Volume (vph)	36	4	30	30	4	34	22	416	12	12	423	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)	-4%		-1%		-2%		1%					
Total Lost time (s)	6.9	6.9	6.9	6.9	6.3	6.3	6.3	6.3	6.3	6.3		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95		
Frt	1.00	0.87	1.00	0.87	1.00	1.00	1.00	0.98				
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00		
Satd. Flow (prot)	1787	1467	1814	1613	1673	3553	1663	3462				
Flt Permitted	0.73	1.00	0.73	1.00	0.44	1.00	0.47	1.00				
Satd. Flow (perm)	1370	1467	1397	1613	769	3553	831	3462				
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	41	5	34	34	5	39	25	473	14	14	481	61
RTOR Reduction (vph)	0	31	0	0	36	0	0	2	0	0	8	0
Lane Group Flow (vph)	41	8	0	34	8	0	25	485	0	14	534	0
Heavy Vehicles (%)	3%	0%	17%	0%	0%	3%	9%	2%	8%	2%	2%	
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA				
Protected Phases	4		8		5		2		1		6	
Permitted Phases	4		8		2		6					
Actuated Green, G (s)	7.9	7.9	7.9	7.9	64.4	60.8	60.8	59.0				
Effective Green, g (s)	7.9	7.9	7.9	7.9	64.4	60.8	60.8	59.0				
Actuated g/C Ratio	0.09	0.09	0.09	0.09	0.72	0.68	0.68	0.66				
Clearance Time (s)	6.9	6.9	6.9	6.9	6.3	6.3	6.3	6.3				
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5				
Lane Grp Cap (vph)	120	128	122	141	586	2400	578	2269				
v/s Ratio Prot	0.01		0.01		c0.00		0.14		0.00		c0.15	
v/s Ratio Perm	c0.03		0.02		0.03		0.02					
v/c Ratio	0.34	0.06	0.28	0.06	0.04	0.20	0.02	0.24				
Uniform Delay, d1	38.6	37.7	38.4	37.6	3.7	5.5	4.8	6.3				
Progression Factor	1.00	1.00	1.00	1.00	0.50	0.88	1.00	1.00				
Incremental Delay, d2	2.0	0.2	1.5	0.2	0.0	0.2	0.0	0.2				
Delay (s)	40.6	37.9	39.9	37.9	1.9	5.0	4.8	6.6				
Level of Service	D	D	D	D	A	A	A	A				
Approach Delay (s)	39.3		38.7		4.9		6.5					
Approach LOS	D		D		A		A					

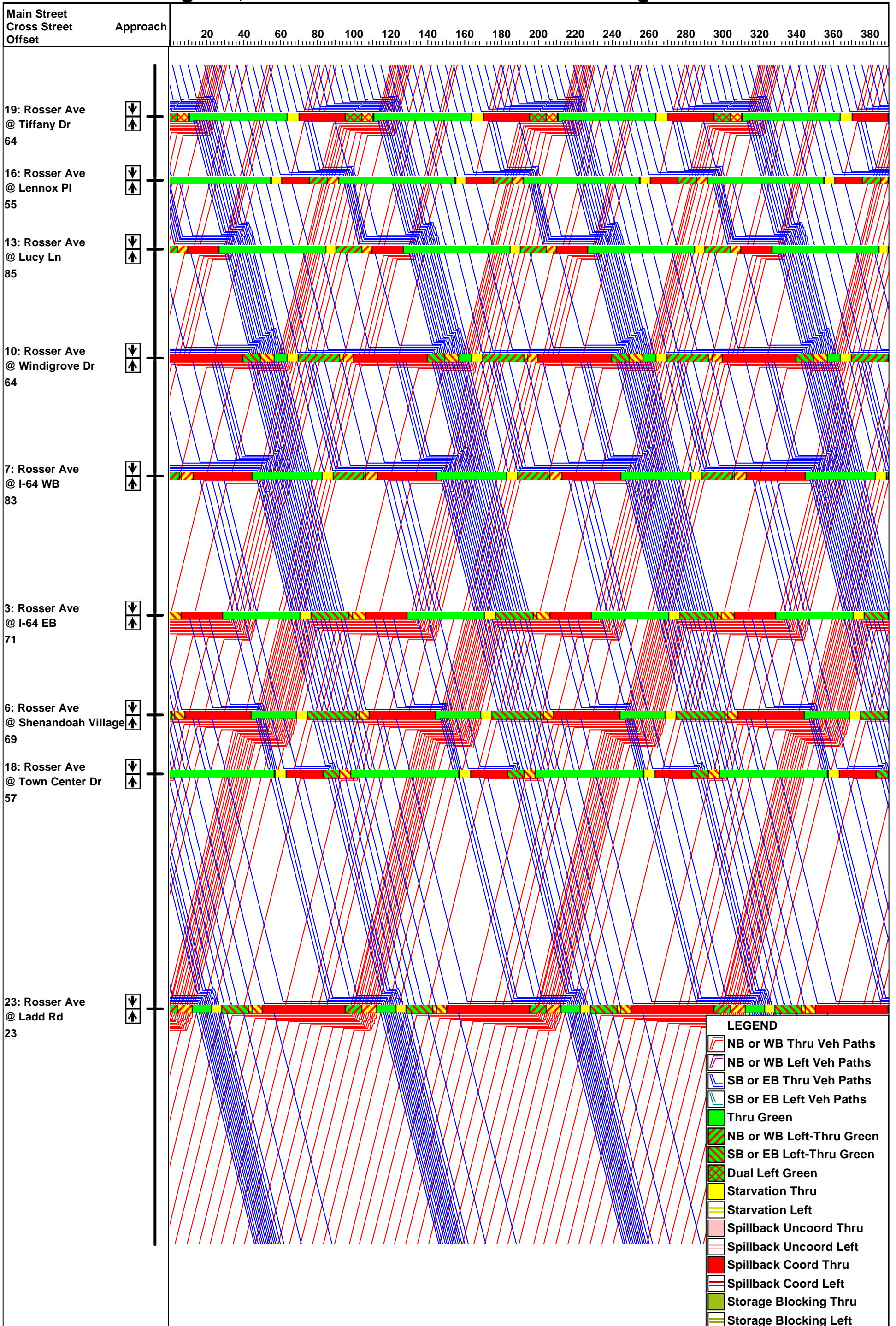
Intersection Summary

HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	37.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Time-Space Diagram - Rosser Ave US 340 (Rosser Avenue) Small Area Study

Traffic Flow Diagram, 90th Percentile Flow and Green Timings Plan: MID Peak Hour



New Timings (June 2018)
Kimley-Horn

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

101: Rosser Ave & Ladd Rd
New Timings (June 2018) - Mid Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	64	58	18	26	46	102	18	396	26	103	377	36
Future Volume (vph)	64	58	18	26	46	102	18	396	26	103	377	36
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850			0.850			0.850	
Flt Protected		0.974			0.982		0.950			0.950		
Satd. Flow (prot)	0	1851	1554	0	1834	1584	1610	3309	1480	1787	3440	1539
Flt Permitted		0.974			0.982		0.950			0.950		
Satd. Flow (perm)	0	1851	1554	0	1834	1584	1610	3309	1480	1787	3440	1539
Satd. Flow (RTOR)		295			293			250			253	
Adj. Flow (vph)	69	62	19	28	49	110	19	426	28	111	405	39
Lane Group Flow (vph)	0	131	19	0	77	110	19	426	28	111	405	39
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases		3			4			2			6	
Total Split (s)	24.0	24.0	24.0	21.0	21.0	21.0	17.0	33.0	33.0	22.0	38.0	38.0
Total Lost Time (s)	9.2	9.2		9.3	9.3		7.7	5.6	5.6	7.4	5.7	5.7
Act Effct Green (s)	12.4	12.4		10.2	10.2		9.0	34.2	34.2	11.6	46.4	46.4
Actuated g/C Ratio	0.12	0.12		0.10	0.10		0.09	0.34	0.34	0.12	0.46	0.46
v/c Ratio	0.57	0.04		0.41	0.26		0.13	0.38	0.04	0.54	0.25	0.05
Control Delay	50.9	0.2		48.6	1.5		44.3	27.4	0.1	44.6	13.9	0.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.9	0.2		48.6	1.5		44.3	27.4	0.1	44.6	13.9	0.1
LOS	D	A		D	A		D	C	A	D	B	A
Approach Delay	44.5			20.9			26.5			19.0		
Approach LOS	D			C			C			B		

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 23 (23%), Referenced to phase 2:NBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 24.7	Intersection LOS: C
Intersection Capacity Utilization 52.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 101: Rosser Ave & Ladd Rd



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

101: Rosser Ave & Ladd Rd
New Timings (June 2018) - Mid Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	64	58	18	26	46	102	18	396	26	103	377	36
Future Volume (vph)	64	58	18	26	46	102	18	396	26	103	377	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-4%			-2%			2%			-2%	
Total Lost time (s)		9.2	9.2		9.3	9.3	7.7	5.6	5.6	7.4	5.7	5.7
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.97	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1851	1554		1835	1584	1610	3309	1480	1787	3440	1539	1539
Flt Permitted	0.97	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1851	1554		1835	1584	1610	3309	1480	1787	3440	1539	1539
Peak-hour factor, PHF	0.93	0.93		0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	69	62	19	28	49	110	19	426	28	111	405	39
RTOR Reduction (vph)	0	0	17	0	0	99	0	0	20	0	0	23
Lane Group Flow (vph)	0	131	2	0	77	11	19	426	8	111	405	16
Heavy Vehicles (%)	2%	2%	6%	4%	2%	3%	11%	8%	8%	2%	6%	6%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases		3			4			2			6	
Actuated Green, G (s)	12.4	12.4		10.2	10.2		3.6	29.7	29.7	16.2	41.9	41.9
Effective Green, g (s)	12.4	12.4		10.2	10.2		3.6	29.7	29.7	16.2	41.9	41.9
Actuated g/C Ratio	0.12	0.12		0.10	0.10		0.04	0.30	0.30	0.16	0.42	0.42
Clearance Time (s)	9.2	9.2		9.3	9.3		7.7	5.6	5.6	7.4	5.7	5.7
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	6.0	6.0	3.0	6.0	6.0
Lane Grp Cap (vph)	229	192		187	161		57	982	439	289	1441	644
v/s Ratio Prot	c0.07			c0.04			0.01	c0.13		c0.06	0.12	
v/s Ratio Perm		0.00			0.01			0.01			0.01	
v/c Ratio	0.57	0.01		0.41	0.07	0.33	0.43	0.02	0.38	0.28	0.03	0.03
Uniform Delay, d1	41.3	38.4		42.1	40.6	47.0	28.4	24.9	37.4	19.1	17.1	17.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.85	0.71	1.00	1.00
Incremental Delay, d2	3.7	0.0		1.7	0.2	3.4	1.4	0.1	0.8	0.3	0.0	0.0
Delay (s)	45.0	38.5		43.8	40.8	50.5	29.8	24.9	32.7	13.9	17.1	17.1
Level of Service	D	D		D	D	D	C	C	C	B	B	B
Approach Delay (s)	44.2			42.1			30.3			17.9		
Approach LOS	D			D			C			B		

Intersection Summary

HCM 2000 Control Delay	28.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	31.9
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

102: Rosser Ave & Town Center Dr
New Timings (June 2018) - Mid Peak Hour

	↙	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↖	↑↑	↗	↘↘	↓
Traffic Volume (vph)	103	124	503	97	33	580
Future Volume (vph)	103	124	503	97	33	580
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	0.850		0.850		0.950	
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1733	1535	3522	1607	3537	3540
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1733	1535	3522	1607	3537	3540
Satd. Flow (RTOR)		132		103		
Adj. Flow (vph)	110	132	535	103	35	617
Lane Group Flow (vph)	110	132	535	103	35	617
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Total Split (s)	20.0	20.0	62.0	62.0	18.0	80.0
Total Lost Time (s)	6.4	6.4	6.3	6.3	6.2	6.0
Act Effct Green (s)	11.7	11.7	66.5	66.5	9.0	75.9
Actuated g/C Ratio	0.12	0.12	0.66	0.66	0.09	0.76
v/c Ratio	0.54	0.45	0.23	0.09	0.11	0.23
Control Delay	51.7	12.2	1.8	0.2	46.2	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.7	12.2	1.8	0.2	46.2	2.5
LOS	D	B	A	A	D	A
Approach Delay	30.1		1.5			4.9
Approach LOS	C		A			A

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 57 (57%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.54
 Intersection Signal Delay: 7.5
 Intersection LOS: A
 Intersection Capacity Utilization 33.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 102: Rosser Ave & Town Center Dr



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

102: Rosser Ave & Town Center Dr
New Timings (June 2018) - Mid Peak Hour

	↙	↖	↑	↗	↘	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↖	↑↑	↗	↘↘	↓
Traffic Volume (vph)	103	124	503	97	33	580
Future Volume (vph)	103	124	503	97	33	580
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	8%		-1%			-2%
Total Lost time (s)	6.4	6.4	6.3	6.3	6.2	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1733	1535	3522	1607	3537	3540
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1733	1535	3522	1607	3537	3540
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	110	132	535	103	35	617
RTOR Reduction (vph)	0	117	0	37	0	0
Lane Group Flow (vph)	110	15	535	66	35	617
Heavy Vehicles (%)	0%	1%	3%	1%	0%	3%
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Actuated Green, G (s)	11.7	11.7	64.0	64.0	5.4	75.9
Effective Green, g (s)	11.7	11.7	64.0	64.0	5.4	75.9
Actuated g/C Ratio	0.12	0.12	0.64	0.64	0.05	0.76
Clearance Time (s)	6.4	6.4	6.3	6.3	6.2	6.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	202	179	2254	1028	190	2686
v/s Ratio Prot	c0.06		0.15		0.01	c0.17
v/s Ratio Perm		0.01		0.04		
v/c Ratio	0.54	0.09	0.24	0.06	0.18	0.23
Uniform Delay, d1	41.6	39.4	7.6	6.8	45.2	3.5
Progression Factor	1.00	1.00	0.19	0.00	1.08	0.63
Incremental Delay, d2	3.3	0.2	0.2	0.1	0.6	0.2
Delay (s)	45.0	39.6	1.7	0.1	49.4	2.4
Level of Service	D	D	A	A	D	A
Approach Delay (s)	42.0		1.5			4.9
Approach LOS	D		A			A


Intersection Summary

HCM 2000 Control Delay	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

103: Rosser Ave & Shenandoah Village Dr
New Timings (June 2018) - Mid Peak Hour

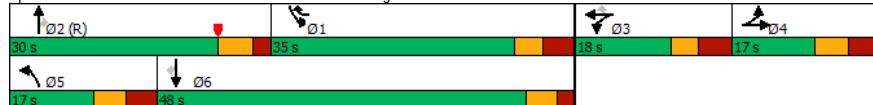


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕	↕	↕	↕	↕	↕	↕	↕
Traffic Volume (vph)	4	3	0	58	1	338	0	573	49	457	485	8
Future Volume (vph)	4	3	0	58	1	338	0	573	49	457	485	8
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt					0.850			0.850				0.850
Flt Protected		0.972		0.950						0.950		
Satd. Flow (prot)	0	1893	0	1717	1843	1551	1890	3454	1575	3399	3470	1599
Flt Permitted		0.972		0.950						0.950		
Satd. Flow (perm)	0	1893	0	1717	1843	1551	1890	3454	1575	3399	3470	1599
Satd. Flow (RTOR)				348		200				203		
Adj. Flow (vph)	4	3	0	60	1	348	0	591	51	471	500	8
Lane Group Flow (vph)	0	7	0	60	1	348	0	591	51	471	500	8
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases					3			2				6
Total Split (s)	17.0	17.0		18.0	18.0	35.0	17.0	30.0	30.0	35.0	48.0	48.0
Total Lost Time (s)		7.4		6.9	6.9	7.0	7.3	6.1	6.1	7.0	5.6	5.6
Act Effct Green (s)		9.0		10.1	10.1	34.5		49.1	49.1	20.7	78.4	78.4
Actuated g/C Ratio		0.09		0.10	0.10	0.34		0.49	0.49	0.21	0.78	0.78
v/c Ratio		0.04		0.35	0.01	0.46		0.35	0.06	0.67	0.18	0.01
Control Delay		42.3		47.2	39.0	4.0		11.7	0.6	29.0	2.6	0.0
Queue Delay		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		42.3		47.2	39.0	4.0		11.7	0.6	29.0	2.6	0.0
LOS		D		D	D	A		B	A	C	A	A
Approach Delay		42.3			10.4			10.9			15.2	
Approach LOS		D			B			B			B	

Intersection Summary


Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 69 (69%), Referenced to phase 2:NBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 13.0 Intersection LOS: B
 Intersection Capacity Utilization 61.4% ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 103: Rosser Ave & Shenandoah Village Dr



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

103: Rosser Ave & Shenandoah Village Dr
New Timings (June 2018) - Mid Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕	↕	↕	↕	↕	↕	↕	↕
Traffic Volume (vph)	4	3	0	58	1	338	0	573	49	457	485	8
Future Volume (vph)	4	3	0	58	1	338	0	573	49	457	485	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-5%			6%			1%			2%	
Total Lost time (s)		7.4		6.9	6.9	7.0		6.1	6.1	7.0	5.6	5.6
Lane Util. Factor		1.00		1.00	1.00	1.00		0.95	1.00	0.97	0.95	1.00
Frt		1.00		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected		0.97		0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1893		1717	1843	1551		3454	1575	3399	3470	1599
Flt Permitted		0.97		0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1893		1717	1843	1551		3454	1575	3399	3470	1599
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	4	3	0	60	1	348	0	591	51	471	500	8
RTOR Reduction (vph)	0	0	0	0	0	247	0	0	30	0	0	2
Lane Group Flow (vph)	0	7	0	60	1	101	0	591	21	471	500	6
Heavy Vehicles (%)	0%	0%	0%	2%	0%	1%	0%	4%	2%	2%	3%	0%
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases					3			2				6
Actuated Green, G (s)		1.8		8.3	8.3	29.0		41.8	41.8	20.7	70.0	70.0
Effective Green, g (s)		1.8		8.3	8.3	29.0		41.8	41.8	20.7	70.0	70.0
Actuated g/C Ratio		0.02		0.08	0.08	0.29		0.42	0.42	0.21	0.70	0.70
Clearance Time (s)		7.4		6.9	6.9	7.0		6.1	6.1	7.0	5.6	5.6
Vehicle Extension (s)		3.5		3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)		34		142	152	558		1443	658	703	2429	1119
v/s Ratio Prot		c0.00		c0.03	0.00	0.04		c0.17		c0.14	0.14	
v/s Ratio Perm						0.03			0.01			0.00
v/c Ratio		0.21		0.42	0.01	0.18		0.41	0.03	0.67	0.21	0.01
Uniform Delay, d1		48.4		43.6	42.1	26.6		20.4	17.2	36.5	5.3	4.5
Progression Factor		1.00		1.00	1.00	1.00		0.57	1.00	0.67	0.53	1.00
Incremental Delay, d2		3.5		2.4	0.0	0.2		0.8	0.1	2.4	0.0	0.0
Delay (s)		51.9		46.0	42.1	26.8		12.5	17.3	26.9	2.8	4.5
Level of Service		D		D	D	C		B	B	C	A	A
Approach Delay (s)		51.9			29.6			12.9			14.4	
Approach LOS		D			C			B			B	

Intersection Summary

HCM 2000 Control Delay 17.1 HCM 2000 Level of Service B
 HCM 2000 Volume to Capacity ratio 0.48
 Actuated Cycle Length (s) 100.0 Sum of lost time (s) 27.4
 Intersection Capacity Utilization 61.4% ICU Level of Service B
 Analysis Period (min) 15

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

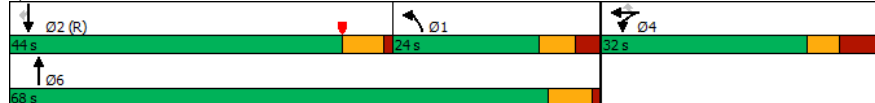
105: Rosser Ave & I-64 WB
New Timings (June 2018) - Mid Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↔			↔	↔
Traffic Volume (vph)	0	0	0	162	1	201	143	844	0	0	744	210
Future Volume (vph)	0	0	0	162	1	201	143	844	0	0	744	210
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.953		0.950					
Satd. Flow (prot)	0	0	0	0	1675	1552	1656	3539	0	0	3539	1615
Flt Permitted					0.953		0.950					
Satd. Flow (perm)	0	0	0	0	1675	1552	1656	3539	0	0	3539	1615
Satd. Flow (RTOR)						155						228
Adj. Flow (vph)	0	0	0	176	1	218	155	917	0	0	809	228
Lane Group Flow (vph)	0	0	0	0	177	218	155	917	0	0	809	228
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		1	6				2
Permitted Phases						4						2
Total Split (s)				32.0	32.0	32.0	24.0	68.0			44.0	44.0
Total Lost Time (s)				8.3	8.3	7.1	6.1				5.8	5.8
Act Effct Green (s)				18.1	18.1	14.3	67.5				46.4	46.4
Actuated g/C Ratio				0.18	0.18	0.14	0.68				0.46	0.46
v/c Ratio				0.59	0.54	0.66	0.38				0.49	0.26
Control Delay				45.1	16.5	48.3	2.3				12.5	1.8
Queue Delay				0.0	0.0	0.0	0.0				0.0	0.0
Total Delay				45.1	16.5	48.3	2.3				12.5	1.8
LOS				D	B	D	A				B	A
Approach Delay				29.3			9.0				10.1	
Approach LOS				C			A				B	

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 83 (83%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 12.7	Intersection LOS: B
Intersection Capacity Utilization 59.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 105: Rosser Ave & I-64 WB



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

105: Rosser Ave & I-64 WB
New Timings (June 2018) - Mid Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↔			↔	↔
Traffic Volume (vph)	0	0	0	162	1	201	143	844	0	0	744	210
Future Volume (vph)	0	0	0	162	1	201	143	844	0	0	744	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			4%			4%		0%			0%	
Total Lost time (s)					8.3	8.3	7.1	6.1			5.8	5.8
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1674	1552	1656	3539			3539	1615
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1674	1552	1656	3539			3539	1615
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)	0	0	0	176	1	218	155	917	0	0	809	228
RTOR Reduction (vph)	0	0	0	0	0	127	0	0	0	0	0	122
Lane Group Flow (vph)	0	0	0	0	177	91	155	917	0	0	809	106
Heavy Vehicles (%)	0%	0%	0%	6%	0%	2%	9%	2%	0%	0%	2%	0%
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		1	6				2
Permitted Phases						4						2
Actuated Green, G (s)					18.1	18.1	14.3	67.5			46.4	46.4
Effective Green, g (s)					18.1	18.1	14.3	67.5			46.4	46.4
Actuated g/C Ratio					0.18	0.18	0.14	0.68			0.46	0.46
Clearance Time (s)					8.3	8.3	7.1	6.1			5.8	5.8
Vehicle Extension (s)					4.0	4.0	3.5	4.0			4.0	4.0
Lane Grp Cap (vph)					302	280	236	2388			1642	749
v/s Ratio Prot					c0.11		c0.09	0.26			c0.23	
v/s Ratio Perm						0.06						0.07
v/c Ratio					0.59	0.33	0.66	0.38			0.49	0.14
Uniform Delay, d1					37.5	35.6	40.5	7.1			18.6	15.4
Progression Factor					1.00	1.00	0.90	0.25			0.57	0.41
Incremental Delay, d2					3.4	0.9	6.0	0.1			1.0	0.4
Delay (s)					40.9	36.6	42.5	1.9			11.7	6.6
Level of Service					D	D	D	A			B	A
Approach Delay (s)		0.0			38.5			7.8			10.6	
Approach LOS		A			D			A			B	

Intersection Summary

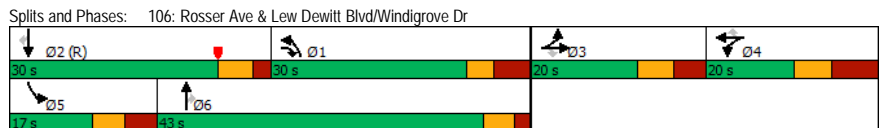
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.2
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
 Lanes, Volumes, Timings New Timings (June 2018) - Mid Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	103	70	339	111	70	56	445	382	148	63	504	118
Future Volume (vph)	103	70	339	111	70	56	445	382	148	63	504	118
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt		0.850			0.850			0.850			0.850	
Flt Protected	0.950		0.950			0.950			0.950			0.950
Satd. Flow (prot)	1850	1837	2829	3315	1799	1514	3382	3486	1544	1796	3557	1591
Flt Permitted	0.950		0.950			0.950			0.950			0.950
Satd. Flow (perm)	1850	1837	2829	3315	1799	1514	3382	3486	1544	1796	3557	1591
Satd. Flow (RTOR)			223		284			242			242	
Adj. Flow (vph)	111	75	365	119	75	60	478	411	159	68	542	127
Lane Group Flow (vph)	111	75	365	119	75	60	478	411	159	68	542	127
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Total Split (s)	20.0	20.0	30.0	20.0	20.0	20.0	30.0	43.0	43.0	17.0	30.0	30.0
Total Lost Time (s)	7.9	7.9	7.5	9.8	9.8	9.8	7.5	5.5	5.5	7.5	6.1	6.1
Act Effct Green (s)	11.0	11.0	38.7	9.7	9.7	9.7	19.8	42.6	42.6	9.3	28.2	28.2
Actuated g/C Ratio	0.11	0.11	0.39	0.10	0.10	0.10	0.20	0.43	0.43	0.09	0.28	0.28
v/c Ratio	0.55	0.37	0.30	0.37	0.43	0.15	0.71	0.28	0.20	0.41	0.54	0.20
Control Delay	52.5	46.5	7.9	45.7	50.6	0.8	33.4	12.4	0.9	44.2	19.8	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	46.5	7.9	45.7	50.6	0.8	33.4	12.4	0.9	44.2	19.8	0.8
LOS	D	D	A	D	D	A	C	B	A	D	B	A
Approach Delay		22.2			36.5			20.2			18.8	
Approach LOS		C			D			C			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 64 (64%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 21.8	Intersection LOS: C
Intersection Capacity Utilization 55.2%	ICU Level of Service B
Analysis Period (min) 15	



Rosser Avenue (US 340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
 HCM Signalized Intersection Capacity Analysis New Timings (June 2018) - Mid Peak Hour

	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	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	103	70	339	111	70	56	445	382	148	63	504	118
Future Volume (vph)	103	70	339	111	70	56	445	382	148	63	504	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-5%			5%			3%			-3%	
Total Lost time (s)	7.9	7.9	7.5	9.8	9.8	9.8	7.5	5.5	5.5	7.5	6.1	6.1
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1850	1837	2829	3315	1799	1514	3382	3486	1544	1796	3557	1591
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1850	1837	2829	3315	1799	1514	3382	3486	1544	1796	3557	1591
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	111	75	365	119	75	60	478	411	159	68	542	127
RTOR Reduction (vph)	0	0	151	0	0	54	0	0	94	0	0	93
Lane Group Flow (vph)	111	75	214	119	75	6	478	411	65	68	542	34
Heavy Vehicles (%)	0%	6%	3%	3%	3%	4%	2%	2%	3%	2%	3%	3%
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Actuated Green, G (s)	11.0	11.0	32.3	9.7	9.7	9.7	21.3	41.1	41.1	7.5	26.7	26.7
Effective Green, g (s)	11.0	11.0	32.3	9.7	9.7	9.7	21.3	41.1	41.1	7.5	26.7	26.7
Actuated g/C Ratio	0.11	0.11	0.32	0.10	0.10	0.10	0.21	0.41	0.41	0.08	0.27	0.27
Clearance Time (s)	7.9	7.9	7.5	9.8	9.8	9.8	7.5	5.5	5.5	7.5	6.1	6.1
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	203	202	1125	321	174	146	720	1432	634	134	949	424
v/s Ratio Prot	c0.06	0.04	0.04	0.04	c0.04		c0.14	0.12		0.04	c0.15	
v/s Ratio Perm			0.04			0.00			0.04			0.02
v/c Ratio	0.55	0.37	0.19	0.37	0.43	0.04	0.66	0.29	0.10	0.51	0.57	0.08
Uniform Delay, d1	42.1	41.3	24.4	42.3	42.5	40.9	36.1	19.7	18.1	44.5	31.7	27.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.74	0.59	1.18	0.86	0.56	1.00
Incremental Delay, d2	3.3	1.4	0.1	0.9	2.0	0.1	2.3	0.1	0.1	3.5	2.4	0.4
Delay (s)	45.5	42.7	24.5	43.1	44.6	41.1	28.8	11.7	21.5	41.6	20.2	27.8
Level of Service	D	D	C	D	D	D	C	B	C	D	C	C
Approach Delay (s)		31.2			43.1			21.0			23.5	
Approach LOS		C			D			C			C	

Intersection Summary	
HCM 2000 Control Delay	26.0 HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio	0.58
Actuated Cycle Length (s)	100.0 Sum of lost time (s) 31.3
Intersection Capacity Utilization	55.2% ICU Level of Service B
Analysis Period (min)	15

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

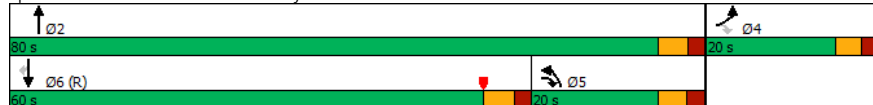
107: Rosser Ave & Lucy Ln
New Timings (June 2018) - Mid Peak Hour

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	54	105	71	477	544	52
Future Volume (vph)	54	105	71	477	544	52
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.850				0.850	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1599	1778	3486	3452	1591
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1805	1599	1778	3486	3452	1591
Satd. Flow (RTOR)		115				57
Adj. Flow (vph)	59	115	78	524	598	57
Lane Group Flow (vph)	59	115	78	524	598	57
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Total Split (s)	20.0	20.0	20.0	80.0	60.0	60.0
Total Lost Time (s)	5.1	5.4	5.4	5.5	5.5	5.5
Act Effct Green (s)	10.0	23.0	10.8	83.4	66.1	66.1
Actuated g/C Ratio	0.10	0.23	0.11	0.83	0.66	0.66
v/c Ratio	0.33	0.25	0.41	0.18	0.26	0.05
Control Delay	46.7	6.5	39.3	2.6	8.3	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.7	6.5	39.3	2.6	8.3	4.0
LOS	D	A	D	A	A	A
Approach Delay	20.1			7.4	7.9	
Approach LOS	C			A	A	

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 85 (85%), Referenced to phase 6:SBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.41
 Intersection Signal Delay: 9.2
 Intersection LOS: A
 Intersection Capacity Utilization 43.4%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 107: Rosser Ave & Lucy Ln



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

107: Rosser Ave & Lucy Ln
New Timings (June 2018) - Mid Peak Hour

	EBL	EBR	NBL	NBT	SBT	SBR
Movement						
Lane Configurations						
Traffic Volume (vph)	54	105	71	477	544	52
Future Volume (vph)	54	105	71	477	544	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		3%		3%	
Total Lost time (s)	5.1	5.4	5.4	5.5	5.5	5.5
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1805	1599	1778	3486	3452	1591
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1805	1599	1778	3486	3452	1591
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	59	115	78	524	598	57
RTOR Reduction (vph)	0	93	0	0	0	20
Lane Group Flow (vph)	59	22	78	524	598	37
Heavy Vehicles (%)	0%		1%		0%	
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)	8.2	19.0	10.8	81.2	65.0	65.0
Effective Green, g (s)	8.2	19.0	10.8	81.2	65.0	65.0
Actuated g/C Ratio	0.08	0.19	0.11	0.81	0.65	0.65
Clearance Time (s)	5.1	5.4	5.4	5.5	5.5	5.5
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	148	390	192	2830	2243	1034
v/s Ratio Prot	c0.03	0.01	c0.04	0.15	c0.17	
v/s Ratio Perm		0.01				0.02
v/c Ratio	0.40	0.06	0.41	0.19	0.27	0.04
Uniform Delay, d1	43.6	33.2	41.6	2.1	7.4	6.3
Progression Factor	1.00	1.00	0.80	1.07	0.99	1.56
Incremental Delay, d2	2.1	0.1	1.6	0.0	0.3	0.1
Delay (s)	45.6	33.2	34.9	2.3	7.6	9.8
Level of Service	D	C	C	A	A	A
Approach Delay (s)	37.4			6.5	7.8	
Approach LOS	D			A	A	

Intersection Summary

HCM 2000 Control Delay 10.9
 HCM 2000 Level of Service B
 HCM 2000 Volume to Capacity ratio 0.30
 Actuated Cycle Length (s) 100.0
 Sum of lost time (s) 16.0
 Intersection Capacity Utilization 43.4%
 ICU Level of Service A
 Analysis Period (min) 15

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

109: Rosser Ave & Tiffany Dr
New Timings (June 2018) - Mid Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Traffic Volume (vph)	101	11	87	25	14	21	88	412	28	16	446	138	
Future Volume (vph)	101	11	87	25	14	21	88	412	28	16	446	138	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	0.867		0.909		0.990		0.965						
Flt Protected	0.950		0.950		0.950		0.950		0.950				
Satd. Flow (prot)	1841	1637	0	1814	1637	0	1787	3534	0	1796	3406	0	
Flt Permitted	0.732		0.689		0.372		0.481		0.481				
Satd. Flow (perm)	1419	1637	0	1316	1637	0	700	3534	0	909	3406	0	
Satd. Flow (RTOR)	94		23		10		55						
Adj. Flow (vph)	109	12	94	27	15	23	95	443	30	17	480	148	
Lane Group Flow (vph)	109	106	0	27	38	0	95	473	0	17	628	0	
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA					
Protected Phases	4		8		5		2		1			6	
Permitted Phases	4		8		2		6						
Total Split (s)	25.0	25.0	25.0	25.0	22.0	59.0	16.0	53.0					
Total Lost Time (s)	6.9	6.9	6.9	6.9	6.3	6.3	6.3	6.3					
Act Effcl Green (s)	13.4	13.4	13.4	13.4	70.9	67.2	68.3	61.1					
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.71	0.67	0.68	0.61					
v/c Ratio	0.57	0.35	0.15	0.16	0.16	0.20	0.02	0.30					
Control Delay	51.9	13.2	38.4	21.3	4.1	9.1	4.8	10.0					
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Total Delay	51.9	13.2	38.4	21.3	4.1	9.1	4.8	10.0					
LOS	D	B	D	C	A	A	A	B					
Approach Delay	32.8		28.4		8.3		9.9						
Approach LOS	C		C		A		A						

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 64 (64%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.57
 Intersection Signal Delay: 13.4 Intersection LOS: B
 Intersection Capacity Utilization 52.7% ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 109: Rosser Ave & Tiffany Dr



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

109: Rosser Ave & Tiffany Dr
New Timings (June 2018) - Mid Peak Hour

	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	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Traffic Volume (vph)	101	11	87	25	14	21	88	412	28	16	446	138	
Future Volume (vph)	101	11	87	25	14	21	88	412	28	16	446	138	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Grade (%)	-4%		-1%		-2%		1%						
Total Lost time (s)	6.9	6.9	6.9	6.9	6.3	6.3	6.3	6.3					
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95			
Frt	1.00	0.87	1.00	0.91	1.00	0.99	1.00	0.96					
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00			
Satd. Flow (prot)	1841	1637	1814	1637	1787	3536	1796	3405					
Flt Permitted	0.73	1.00	0.69	1.00	0.37	1.00	0.48	1.00					
Satd. Flow (perm)	1419	1637	1315	1637	701	3536	910	3405					
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	
Adj. Flow (vph)	109	12	94	27	15	23	95	443	30	17	480	148	
RTOR Reduction (vph)	0	81	0	0	20	0	0	4	0	0	22	0	
Lane Group Flow (vph)	109	25	0	27	18	0	95	469	0	17	606	0	
Heavy Vehicles (%)	0%	0%	3%	0%	0%	10%	2%	2%	4%	0%	2%	1%	
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA					
Protected Phases	4		8		5		2		1			6	
Permitted Phases	4		8		2		6						
Actuated Green, G (s)	13.4	13.4	13.4	13.4	70.7	63.5	63.5	59.9					
Effective Green, g (s)	13.4	13.4	13.4	13.4	70.7	63.5	63.5	59.9					
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.71	0.64	0.64	0.60					
Clearance Time (s)	6.9	6.9	6.9	6.9	6.3	6.3	6.3	6.3					
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5					
Lane Grp Cap (vph)	190	219	176	219	573	2245	609	2039					
v/s Ratio Prot	0.02		0.01		c0.01		c0.13		0.00		c0.18		
v/s Ratio Perm	c0.08		0.15		0.11		0.02		0.02				
v/c Ratio	0.57	0.11	0.15	0.08	0.17	0.21	0.03	0.30					
Uniform Delay, d1	40.6	38.1	38.3	37.9	4.8	7.7	6.7	9.8					
Progression Factor	1.00	1.00	1.00	1.00	0.79	1.15	1.00	1.00					
Incremental Delay, d2	4.5	0.3	0.5	0.2	0.2	0.2	0.0	0.4					
Delay (s)	45.1	38.3	38.8	38.1	3.9	9.0	6.7	10.2					
Level of Service	D	D	D	D	A	A	A	B					
Approach Delay (s)	41.8		38.4		8.2		10.1						
Approach LOS	D		D		A		B						

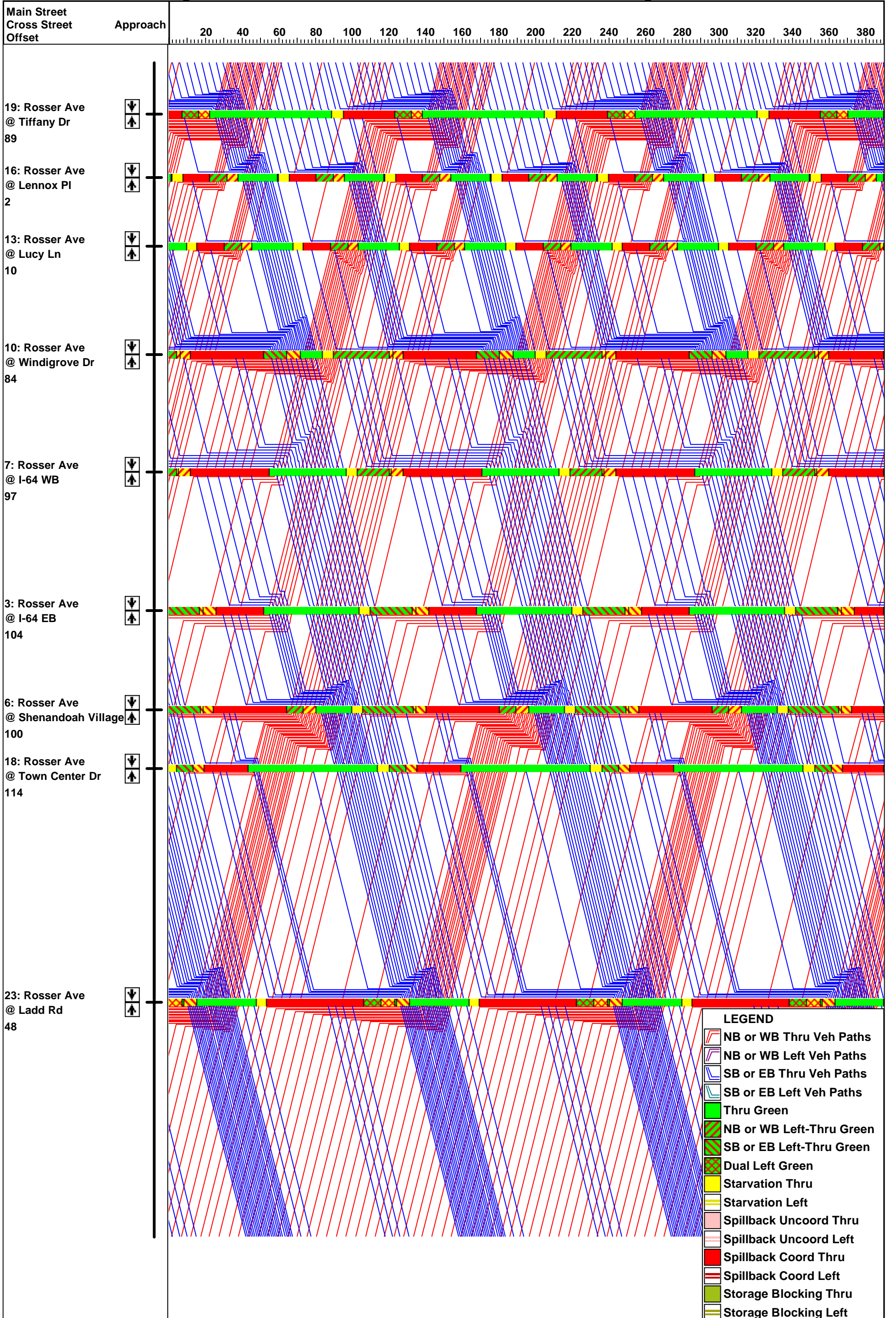
Intersection Summary

HCM 2000 Control Delay: 15.1 HCM 2000 Level of Service: B
 HCM 2000 Volume to Capacity ratio: 0.33
 Actuated Cycle Length (s): 100.0 Sum of lost time (s): 19.5
 Intersection Capacity Utilization: 52.7% ICU Level of Service: A
 Analysis Period (min): 15

c Critical Lane Group

Time-Space Diagram - Rosser Ave US 340 (Rosser Avenue) Small Area Study

Traffic Flow Diagram, 90th Percentile Flow and Green Timing Plan: PM Peak Hour



New Timings (June 2018)
Kimley-Horn

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

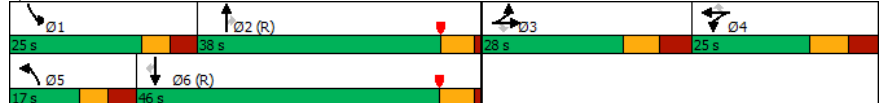
101: Rosser Ave & Ladd Rd
New Timings (June 2018) - PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	65	84	34	81	62	106	43	498	82	163	654	100
Future Volume (vph)	65	84	34	81	62	106	43	498	82	163	654	100
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.850				0.850		0.850				0.850
Flt Protected		0.979			0.972		0.950			0.950		
Satd. Flow (prot)	0	1887	1647	0	1819	1615	1787	3470	1599	1823	3575	1615
Flt Permitted		0.979			0.972		0.950			0.950		
Satd. Flow (perm)	0	1887	1647	0	1819	1615	1787	3470	1599	1823	3575	1615
Satd. Flow (RTOR)		255			254			288			218	
Adj. Flow (vph)	67	87	35	84	64	109	44	513	85	168	674	103
Lane Group Flow (vph)	0	154	35	0	148	109	44	513	85	168	674	103
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases		3			4			2			6	
Total Split (s)	28.0	28.0	28.0	25.0	25.0	25.0	17.0	38.0	38.0	25.0	46.0	46.0
Total Lost Time (s)	9.2	9.2	9.2	9.3	9.3	9.3	7.7	5.6	5.6	7.4	5.7	5.7
Act Effct Green (s)	14.8	14.8		14.1	14.1		9.1	40.6	40.6	14.9	49.4	49.4
Actuated g/C Ratio	0.13	0.13		0.12	0.12		0.08	0.35	0.35	0.13	0.43	0.43
v/c Ratio	0.64	0.08		0.67	0.26		0.31	0.42	0.11	0.72	0.44	0.13
Control Delay	59.9	0.4		63.5	1.5		56.8	31.9	0.3	77.0	22.3	0.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.9	0.4		63.5	1.5		56.8	31.9	0.3	77.0	22.3	0.7
LOS	E	A		E	A		E	C	A	E	C	A
Approach Delay	48.8			37.2			29.5			29.7		
Approach LOS	D			D			C			C		

Intersection Summary

Cycle Length: 116	
Actuated Cycle Length: 116	
Offset: 48 (41%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 32.4	Intersection LOS: C
Intersection Capacity Utilization 59.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 101: Rosser Ave & Ladd Rd



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

101: Rosser Ave & Ladd Rd
New Timings (June 2018) - PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	65	84	34	81	62	106	43	498	82	163	654	100
Future Volume (vph)	65	84	34	81	62	106	43	498	82	163	654	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-4%			-2%			2%			-2%	
Total Lost time (s)	9.2	9.2		9.3	9.3		7.7	5.6	5.6	7.4	5.7	5.7
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.85		1.00	0.85		1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	0.98	1.00		0.97	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1886	1647		1819	1615		1787	3470	1599	1823	3575	1615
Flt Permitted	0.98	1.00		0.97	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1886	1647		1819	1615		1787	3470	1599	1823	3575	1615
Peak-hour factor, PHF	0.97	0.97		0.97	0.97		0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	67	87	35	84	64	109	44	513	85	168	674	103
RTOR Reduction (vph)	0	0	31	0	0	96	0	0	55	0	0	60
Lane Group Flow (vph)	0	154	4	0	148	13	44	513	30	168	674	43
Heavy Vehicles (%)	0%	1%	0%	3%	2%	1%	0%	3%	0%	0%	2%	1%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases		3			4			2			6	
Actuated Green, G (s)	14.8	14.8		14.1	14.1		7.3	40.7	40.7	14.9	47.9	47.9
Effective Green, g (s)	14.8	14.8		14.1	14.1		7.3	40.7	40.7	14.9	47.9	47.9
Actuated g/C Ratio	0.13	0.13		0.12	0.12		0.06	0.35	0.35	0.13	0.41	0.41
Clearance Time (s)	9.2	9.2		9.3	9.3		7.7	5.6	5.6	7.4	5.7	5.7
Vehicle Extension (s)	3.5	3.5		3.5	3.5		3.0	6.0	6.0	3.0	6.0	6.0
Lane Grp Cap (vph)	240	210		221	196		112	1217	561	234	1476	666
v/s Ratio Prot	c0.08			c0.08			0.02	0.15		c0.09	c0.19	
v/s Ratio Perm		0.00			0.01			0.02			0.03	
v/c Ratio	0.64	0.02		0.67	0.07		0.39	0.42	0.05	0.72	0.46	0.06
Uniform Delay, d1	48.1	44.3		48.7	45.1		52.2	28.7	24.9	48.5	24.6	20.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.25	0.82	1.00
Incremental Delay, d2	6.0	0.0		7.8	0.2		2.3	1.1	0.2	9.8	1.0	0.2
Delay (s)	54.1	44.3		56.5	45.3		54.5	29.8	25.1	70.4	21.2	20.7
Level of Service	D	D		E	D		D	C	C	E	C	C
Approach Delay (s)	52.3			51.8			30.8			29.9		
Approach LOS	D			D			C			C		

Intersection Summary

HCM 2000 Control Delay	35.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	31.9
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

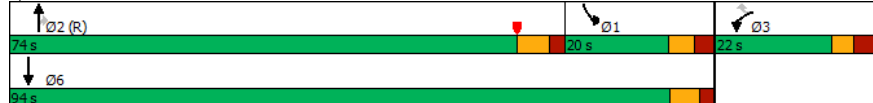
102: Rosser Ave & Town Center Dr
New Timings (June 2018) - PM Peak Hour

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙↘	↑↑
Traffic Volume (vph)	101	142	618	122	47	796
Future Volume (vph)	101	142	618	122	47	796
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	0.850		0.850		0.950	
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1733	1550	3557	1623	3537	3610
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1733	1550	3557	1623	3537	3610
Satd. Flow (RTOR)		146		126		
Adj. Flow (vph)	104	146	637	126	48	821
Lane Group Flow (vph)	104	146	637	126	48	821
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Total Split (s)	22.0	22.0	74.0	74.0	20.0	94.0
Total Lost Time (s)	6.4	6.4	6.3	6.3	6.2	6.0
Act Effct Green (s)	12.9	12.9	78.2	78.2	9.0	90.7
Actuated g/C Ratio	0.11	0.11	0.67	0.67	0.08	0.78
v/c Ratio	0.54	0.48	0.27	0.11	0.18	0.29
Control Delay	58.6	12.9	2.3	0.2	34.9	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	58.6	12.9	2.3	0.2	34.9	1.8
LOS	E	B	A	A	C	A
Approach Delay	31.9		2.0			3.6
Approach LOS	C		A			A

Intersection Summary

Cycle Length: 116	
Actuated Cycle Length: 116	
Offset: 114 (98%), Referenced to phase 2:NBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 6.7	Intersection LOS: A
Intersection Capacity Utilization 39.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 102: Rosser Ave & Town Center Dr



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

102: Rosser Ave & Town Center Dr
New Timings (June 2018) - PM Peak Hour

	↖	↗	↑	↘	↙	↓
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↑↑	↘	↙↘	↑↑
Traffic Volume (vph)	101	142	618	122	47	796
Future Volume (vph)	101	142	618	122	47	796
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	8%		-1%			-2%
Total Lost time (s)	6.4	6.4	6.3	6.3	6.2	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1733	1550	3557	1623	3537	3610
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1733	1550	3557	1623	3537	3610
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	104	146	637	126	48	821
RTOR Reduction (vph)	0	130	0	42	0	0
Lane Group Flow (vph)	104	16	637	84	48	821
Heavy Vehicles (%)	0%	0%	2%	0%	0%	1%
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Actuated Green, G (s)	12.9	12.9	77.0	77.0	7.2	90.7
Effective Green, g (s)	12.9	12.9	77.0	77.0	7.2	90.7
Actuated g/C Ratio	0.11	0.11	0.66	0.66	0.06	0.78
Clearance Time (s)	6.4	6.4	6.3	6.3	6.2	6.0
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	192	172	2361	1077	219	2822
v/s Ratio Prot	c0.06		0.18		0.01	c0.23
v/s Ratio Perm		0.01		0.05		
v/c Ratio	0.54	0.09	0.27	0.08	0.22	0.29
Uniform Delay, d1	48.8	46.3	8.0	6.9	51.7	3.6
Progression Factor	1.00	1.00	0.24	0.02	0.67	0.37
Incremental Delay, d2	3.4	0.3	0.3	0.1	0.6	0.1
Delay (s)	52.2	46.6	2.2	0.3	35.0	1.4
Level of Service	D	D	A	A	D	A
Approach Delay (s)	48.9		1.9			3.3
Approach LOS	D		A			A

Intersection Summary

HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

103: Rosser Ave & Shenandoah Village Dr
New Timings (June 2018) - PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↗	↗	↖	↖	↖	↖	↖	↖
Traffic Volume (vph)	4	1	1	90	2	403	2	693	49	416	769	5
Future Volume (vph)	4	1	1	90	2	403	2	693	49	416	769	5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt		0.977				0.850			0.850			0.850
Flt Protected		0.968		0.950		0.950		0.950		0.950		
Satd. Flow (prot)	0	1842	0	1751	1843	1551	1796	3522	1607	3432	3539	1599
Flt Permitted		0.968		0.950		0.950		0.950		0.950		
Satd. Flow (perm)	0	1842	0	1751	1843	1551	1796	3522	1607	3432	3539	1599
Satd. Flow (RTOR)		1		305		172		172		175		175
Adj. Flow (vph)	4	1	1	94	2	420	2	722	51	433	801	5
Lane Group Flow (vph)	0	6	0	94	2	420	2	722	51	433	801	5
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases					3			2				6
Total Split (s)	17.0	17.0		23.0	23.0	37.0	17.0	39.0	39.0	37.0	59.0	59.0
Total Lost Time (s)		7.4		6.9	6.9	7.0	7.3	6.1	6.1	7.0	5.6	5.6
Act Effct Green (s)		9.0		12.3	12.3	40.8	9.0	58.8	58.8	21.7	84.7	84.7
Actuated g/C Ratio		0.08		0.11	0.11	0.35	0.08	0.51	0.51	0.19	0.73	0.73
v/c Ratio		0.04		0.51	0.01	0.57	0.01	0.40	0.06	0.68	0.31	0.00
Control Delay		46.8		58.1	44.0	10.3	52.0	9.8	0.7	36.2	3.0	0.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total Delay		46.8		58.1	44.0	10.3	52.0	9.9	0.7	36.2	3.0	0.0
LOS		D		E	D	B	D	A	A	D	A	A
Approach Delay		46.8			19.1			9.4			14.6	
Approach LOS		D			B			A			B	

Intersection Summary

Cycle Length: 116
 Actuated Cycle Length: 116
 Offset: 100 (86%), Referenced to phase 2:NBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 14.0
 Intersection LOS: B
 Intersection Capacity Utilization 68.7%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 103: Rosser Ave & Shenandoah Village Dr



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

103: Rosser Ave & Shenandoah Village Dr
New Timings (June 2018) - PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↗	↗	↖	↖	↖	↖	↖	↖
Traffic Volume (vph)	4	1	1	90	2	403	2	693	49	416	769	5
Future Volume (vph)	4	1	1	90	2	403	2	693	49	416	769	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-5%			6%			1%			2%	
Total Lost time (s)		7.4		6.9	6.9	7.0	7.3	6.1	6.1	7.0	5.6	5.6
Lane Util. Factor		1.00		1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt		0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.97		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1842		1751	1843	1551	1796	3522	1607	3432	3539	1599
Flt Permitted		0.97		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1842		1751	1843	1551	1796	3522	1607	3432	3539	1599
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	4	1	1	94	2	420	2	722	51	433	801	5
RTOR Reduction (vph)	0	1	0	0	0	200	0	0	30	0	0	2
Lane Group Flow (vph)	0	5	0	94	2	220	2	722	21	433	801	3
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	2%	0%	1%	1%	0%
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases					3			2				6
Actuated Green, G (s)		1.8		12.3	12.3	39.8	1.8	47.0	47.0	27.5	72.9	72.9
Effective Green, g (s)		1.8		12.3	12.3	39.8	1.8	47.0	47.0	27.5	72.9	72.9
Actuated g/C Ratio		0.02		0.11	0.11	0.34	0.02	0.41	0.41	0.24	0.63	0.63
Clearance Time (s)		7.4		6.9	6.9	7.0	7.3	6.1	6.1	7.0	5.6	5.6
Vehicle Extension (s)		3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)		28		185	195	625	27	1427	651	813	2224	1004
v/s Ratio Prot		c0.00		c0.05	0.00	0.08	0.00	c0.21		c0.13	0.23	
v/s Ratio Perm						0.06			0.01			0.00
v/c Ratio		0.18		0.51	0.01	0.35	0.07	0.51	0.03	0.53	0.36	0.00
Uniform Delay, d1		56.4		49.0	46.4	28.5	56.3	25.8	20.8	38.6	10.3	8.0
Progression Factor		1.00		1.00	1.00	1.00	1.05	0.44	1.00	0.71	0.33	1.00
Incremental Delay, d2		3.6		2.6	0.0	0.4	1.3	1.2	0.1	0.7	0.1	0.0
Delay (s)		60.0		51.6	46.4	28.9	60.3	12.7	20.9	28.3	3.6	8.0
Level of Service		E		D	D	C	E	B	C	C	A	A
Approach Delay (s)		60.0			33.1			13.4			12.2	
Approach LOS		E			C			B			B	

Intersection Summary

HCM 2000 Control Delay 16.9
 HCM 2000 Volume to Capacity ratio 0.51
 Actuated Cycle Length (s) 116.0
 Intersection Capacity Utilization 68.7%
 Analysis Period (min) 15

HCM 2000 Level of Service B
 Sum of lost time (s) 27.4
 ICU Level of Service C

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

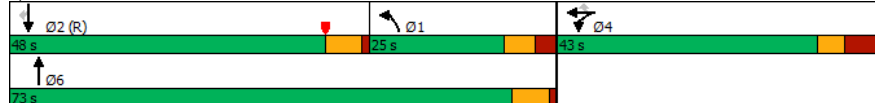
105: Rosser Ave & I-64 WB
New Timings (June 2018) - PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↔			↔	↔
Traffic Volume (vph)	0	0	0	313	0	437	179	1029	0	0	899	327
Future Volume (vph)	0	0	0	313	0	437	179	1029	0	0	899	327
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1669	1552	1703	3574	0	0	3574	1615
Flt Permitted					0.950		0.950					
Satd. Flow (perm)	0	0	0	0	1669	1552	1703	3574	0	0	3574	1615
Satd. Flow (RTOR)							93					341
Adj. Flow (vph)	0	0	0	326	0	455	186	1072	0	0	936	341
Lane Group Flow (vph)	0	0	0	0	326	455	186	1072	0	0	936	341
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4			1	6			2
Permitted Phases						4						2
Total Split (s)				43.0	43.0	43.0	25.0	73.0			48.0	48.0
Total Lost Time (s)				8.3	8.3	8.3	7.1	6.1			5.8	5.8
Act Effct Green (s)				32.5	32.5	16.4	69.1				45.9	45.9
Actuated g/C Ratio				0.28	0.28	0.14	0.60				0.40	0.40
v/c Ratio				0.70	0.91	0.78	0.50				0.66	0.40
Control Delay				45.7	54.9	52.1	3.9				22.5	3.5
Queue Delay				0.0	0.0	0.0	0.0				0.0	0.0
Total Delay				45.7	54.9	52.1	3.9				22.5	3.5
LOS				D	D	D	A				C	A
Approach Delay					51.0		11.1					17.4
Approach LOS					D		B					B

Intersection Summary

Cycle Length: 116	
Actuated Cycle Length: 116	
Offset: 97 (84%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 22.9	Intersection LOS: C
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 105: Rosser Ave & I-64 WB



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

105: Rosser Ave & I-64 WB
New Timings (June 2018) - PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↔			↔	↔
Traffic Volume (vph)	0	0	0	313	0	437	179	1029	0	0	899	327
Future Volume (vph)	0	0	0	313	0	437	179	1029	0	0	899	327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			4%			4%		0%				0%
Total Lost time (s)					8.3	8.3	7.1	6.1			5.8	5.8
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1669	1552	1703	3574			3574	1615
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1669	1552	1703	3574			3574	1615
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	326	0	455	186	1072	0	0	936	341
RTOR Reduction (vph)	0	0	0	0	0	67	0	0	0	0	0	206
Lane Group Flow (vph)	0	0	0	0	326	388	186	1072	0	0	936	135
Heavy Vehicles (%)	0%	0%	0%	6%	0%	2%	6%	1%	0%	0%	1%	0%
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				4	4		1	6				2
Permitted Phases						4						2
Actuated Green, G (s)					32.5	32.5	16.4	69.1			45.9	45.9
Effective Green, g (s)					32.5	32.5	16.4	69.1			45.9	45.9
Actuated g/C Ratio					0.28	0.28	0.14	0.60			0.40	0.40
Clearance Time (s)					8.3	8.3	7.1	6.1			5.8	5.8
Vehicle Extension (s)					4.0	4.0	3.5	4.0			4.0	4.0
Lane Grp Cap (vph)					467	434	240	2128			1414	639
v/s Ratio Prot					0.20		c0.11	0.30			c0.26	
v/s Ratio Perm						c0.25						0.08
v/c Ratio					0.70	0.89	0.78	0.50			0.66	0.21
Uniform Delay, d1					37.4	40.1	48.0	13.5			28.7	23.1
Progression Factor					1.00	1.00	0.68	0.23			0.68	0.81
Incremental Delay, d2					4.9	20.7	13.0	0.2			2.2	0.7
Delay (s)					42.2	60.8	45.7	3.3			21.6	19.4
Level of Service					D	E	D	A			C	B
Approach Delay (s)		0.0				53.0		9.6				21.0
Approach LOS		A				D		A				C

Intersection Summary

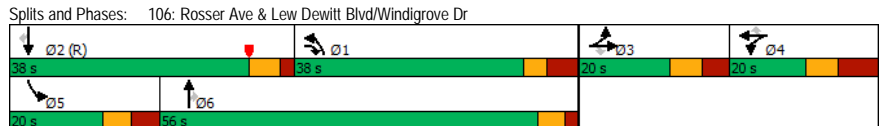
HCM 2000 Control Delay	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.2
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
 Lanes, Volumes, Timings New Timings (June 2018) - PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	108	72	493	114	55	47	584	642	230	58	619	137
Future Volume (vph)	108	72	493	114	55	47	584	642	230	58	619	137
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt			0.850				0.850			0.850		0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1850	1947	2885	3315	1853	1575	3415	3521	1560	1796	3592	1623
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1850	1947	2885	3315	1853	1575	3415	3521	1560	1796	3592	1623
Satd. Flow (RTOR)			192			245			240			209
Adj. Flow (vph)	113	75	514	119	57	49	608	669	240	60	645	143
Lane Group Flow (vph)	113	75	514	119	57	49	608	669	240	60	645	143
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Total Split (s)	20.0	20.0	38.0	20.0	20.0	20.0	38.0	56.0	56.0	20.0	38.0	38.0
Total Lost Time (s)	7.9	7.9	7.5	9.8	9.8	9.8	7.5	5.5	5.5	7.5	6.1	6.1
Act Effct Green (s)	11.4	11.4	46.6	9.7	9.7	9.7	27.3	57.3	57.3	10.3	36.4	36.4
Actuated g/C Ratio	0.10	0.10	0.40	0.08	0.08	0.08	0.24	0.49	0.49	0.09	0.31	0.31
v/c Ratio	0.62	0.39	0.40	0.43	0.37	0.14	0.76	0.39	0.27	0.38	0.57	0.22
Control Delay	65.7	55.1	15.4	55.5	57.4	0.8	40.9	15.8	2.4	65.6	27.3	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.7	55.1	15.4	55.5	57.4	0.8	40.9	15.8	2.4	65.6	27.3	4.3
LOS	E	E	B	E	E	A	D	B	A	E	C	A
Approach Delay		27.7			44.1			23.7				26.1
Approach LOS		C			D			C				C

Intersection Summary	
Cycle Length: 116	
Actuated Cycle Length: 116	
Offset: 84 (72%), Referenced to phase 2:SBT, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 26.6	Intersection LOS: C
Intersection Capacity Utilization 63.8%	ICU Level of Service B
Analysis Period (min) 15	



Rosser Avenue (US 340) Corridor Study 106: Rosser Ave & Lew Dewitt Blvd/Windigrove Dr
 HCM Signalized Intersection Capacity Analysis New Timings (June 2018) - PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	108	72	493	114	55	47	584	642	230	58	619	137
Future Volume (vph)	108	72	493	114	55	47	584	642	230	58	619	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			-5%									-3%
Total Lost time (s)	7.9	7.9	7.5	9.8	9.8	9.8	7.5	5.5	5.5	7.5	6.1	6.1
Lane Util. Factor	1.00	1.00	0.88	0.97	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1850	1947	2885	3315	1852	1575	3415	3521	1560	1796	3592	1623
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1850	1947	2885	3315	1852	1575	3415	3521	1560	1796	3592	1623
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	112	75	514	119	57	49	608	669	240	60	645	143
RTOR Reduction (vph)	0	0	125	0	0	45	0	0	125	0	0	100
Lane Group Flow (vph)	113	75	389	119	57	4	608	669	115	60	645	43
Heavy Vehicles (%)	0%	0%	1%	3%	0%	0%	1%	1%	2%	2%	2%	1%
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3	1	4	4		1	6		5	2	
Permitted Phases			3			4			6			2
Actuated Green, G (s)	11.4	11.4	40.2	9.7	9.7	9.7	28.8	55.7	55.7	8.5	34.8	34.8
Effective Green, g (s)	11.4	11.4	40.2	9.7	9.7	9.7	28.8	55.7	55.7	8.5	34.8	34.8
Actuated g/C Ratio	0.10	0.10	0.35	0.08	0.08	0.08	0.25	0.48	0.48	0.07	0.30	0.30
Clearance Time (s)	7.9	7.9	7.5	9.8	9.8	9.8	7.5	5.5	5.5	7.5	6.1	6.1
Vehicle Extension (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Lane Grp Cap (vph)	181	191	1186	277	154	131	847	1690	749	131	1077	486
v/s Ratio Prot	c0.06	0.04	0.08	c0.04	0.03		c0.18	0.19		0.03	c0.18	
v/s Ratio Perm			0.05			0.00		0.07				0.03
v/c Ratio	0.62	0.39	0.33	0.43	0.37	0.03	0.72	0.40	0.15	0.46	0.60	0.09
Uniform Delay, d1	50.2	49.1	27.9	50.5	50.3	48.8	39.9	16.9	16.9	51.5	34.6	29.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.76	0.71	1.19	0.73	4.29
Incremental Delay, d2	6.9	1.6	0.2	1.3	1.8	0.1	2.4	0.1	0.1	2.9	2.4	0.3
Delay (s)	57.1	50.6	28.1	51.8	52.0	48.9	37.0	14.9	12.1	64.1	27.6	125.5
Level of Service	E	D	C	D	D	D	D	B	B	E	C	F
Approach Delay (s)		35.2			51.2			23.3				46.7
Approach LOS		D			D			C				D

Intersection Summary	
HCM 2000 Control Delay	33.8 HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio	0.62
Actuated Cycle Length (s)	116.0 Sum of lost time (s) 31.3
Intersection Capacity Utilization	63.8% ICU Level of Service B
Analysis Period (min)	15

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

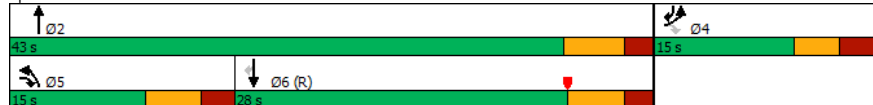
108: Rosser Ave & Lennox Pl
New Timings (June 2018) - PM Peak Hour

	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↕↕	↕↕	↔
Traffic Volume (vph)	45	59	58	691	625	34
Future Volume (vph)	45	59	58	691	625	34
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.850				0.850	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1841	1615	1832	3628	3539	1615
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1841	1615	1832	3628	3539	1615
Satd. Flow (RTOR)		64				37
Adj. Flow (vph)	49	64	63	751	679	37
Lane Group Flow (vph)	49	64	63	751	679	37
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases	4				6	
Total Split (s)	15.0	15.0	15.0	43.0	28.0	15.0
Total Lost Time (s)	5.7	5.9	5.9	6.1	5.8	5.7
Act Effct Green (s)	9.0	17.9	9.1	45.5	32.5	44.4
Actuated g/C Ratio	0.16	0.31	0.16	0.78	0.56	0.77
v/c Ratio	0.17	0.12	0.22	0.26	0.34	0.03
Control Delay	23.0	4.0	31.3	1.9	8.4	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.0	4.0	31.3	1.9	8.4	1.6
LOS	C	A	C	A	A	A
Approach Delay	12.2		4.2		8.1	
Approach LOS	B		A		A	

Intersection Summary

Cycle Length: 58
 Actuated Cycle Length: 58
 Offset: 2 (3%), Referenced to phase 6:SBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.34
 Intersection Signal Delay: 6.4
 Intersection LOS: A
 Intersection Capacity Utilization 46.8%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 108: Rosser Ave & Lennox Pl



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

108: Rosser Ave & Lennox Pl
New Timings (June 2018) - PM Peak Hour

	EBL	EBR	NBL	NBT	SBT	SBR
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↕↕	↕↕	↔
Traffic Volume (vph)	45	59	58	691	625	34
Future Volume (vph)	45	59	58	691	625	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-4%			-3%	0%	
Total Lost time (s)	5.7	5.9	5.9	6.1	5.8	5.7
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1841	1615	1832	3628	3539	1615
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1841	1615	1832	3628	3539	1615
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	64	63	751	679	37
RTOR Reduction (vph)	0	50	0	0	0	16
Lane Group Flow (vph)	49	14	63	751	679	21
Heavy Vehicles (%)	0%	2%	0%	1%	2%	0%
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases	4				6	
Actuated Green, G (s)	5.4	12.7	7.3	40.8	27.9	33.3
Effective Green, g (s)	5.4	12.7	7.3	40.8	27.9	33.3
Actuated g/C Ratio	0.09	0.22	0.13	0.70	0.48	0.57
Clearance Time (s)	5.7	5.9	5.9	6.1	5.8	5.7
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	171	353	230	2552	1702	927
v/s Ratio Prot	c0.03	0.00	0.03	c0.21	c0.19	0.00
v/s Ratio Perm	0.00				0.01	
v/c Ratio	0.29	0.04	0.27	0.29	0.40	0.02
Uniform Delay, d1	24.5	17.8	23.0	3.2	9.7	5.3
Progression Factor	1.00	1.00	1.37	0.52	0.78	1.29
Incremental Delay, d2	0.9	0.0	0.6	0.1	0.7	0.0
Delay (s)	25.4	17.9	32.0	1.7	8.2	6.9
Level of Service	C	B	C	A	A	A
Approach Delay (s)	21.2		4.1		8.1	
Approach LOS	C		A		A	

Intersection Summary

HCM 2000 Control Delay: 7.0
 HCM 2000 Volume to Capacity ratio: 0.39
 Actuated Cycle Length (s): 58.0
 Intersection Capacity Utilization: 46.8%
 Analysis Period (min): 15
 HCM 2000 Level of Service: A
 Sum of lost time (s): 17.4
 ICU Level of Service: A

c Critical Lane Group

Rosser Avenue (US 340) Corridor Study
Lanes, Volumes, Timings

109: Rosser Ave & Tiffany Dr
New Timings (June 2018) - PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	119	9	94	21	14	25	82	613	40	34	547	134
Future Volume (vph)	119	9	94	21	14	25	82	613	40	34	547	134
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt	0.864		0.904		0.991		0.970					
Flt Protected	0.950	0.950		0.950		0.950		0.950				
Satd. Flow (prot)	1841	1659	0	1814	1684	0	1805	3580	0	1796	3422	0
Flt Permitted	0.730	0.686		0.341		0.375		0.375				
Satd. Flow (perm)	1415	1659	0	1310	1684	0	648	3580	0	709	3422	0
Satd. Flow (RTOR)	100		27		10		38					
Adj. Flow (vph)	127	10	100	22	15	27	87	652	43	36	582	143
Lane Group Flow (vph)	127	110	0	22	42	0	87	695	0	36	725	0
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	NA	NA
Protected Phases	4		8		5		2		1		6	
Permitted Phases	4		8		2		6					
Total Split (s)	28.0	28.0	28.0		22.0		72.0		16.0		66.0	
Total Lost Time (s)	6.9	6.9	6.9		6.3		6.3		6.3		6.3	
Act Effcl Green (s)	15.8	15.8	15.8		83.2		77.8		81.9		74.7	
Actuated g/C Ratio	0.14	0.14	0.14		0.72		0.67		0.71		0.64	
v/c Ratio	0.66	0.35	0.12		0.16		0.29		0.06		0.33	
Control Delay	63.1	13.4	43.2		22.6		8.1		17.5		5.0	
Queue Delay	0.0	0.0	0.0		0.0		0.0		0.0		0.0	
Total Delay	63.1	13.4	43.2		22.6		8.1		17.5		5.0	
LOS	E	B	D		C		A		B		A	
Approach Delay	40.0		29.7		16.4		10.2					
Approach LOS	D		C		B		B					

Intersection Summary

Cycle Length: 116	
Actuated Cycle Length: 116	
Offset: 89 (77%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 17.3	Intersection LOS: B
Intersection Capacity Utilization 56.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 109: Rosser Ave & Tiffany Dr



Rosser Avenue (US 340) Corridor Study
HCM Signalized Intersection Capacity Analysis

109: Rosser Ave & Tiffany Dr
New Timings (June 2018) - PM Peak Hour

	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	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	119	9	94	21	14	25	82	613	40	34	547	134
Future Volume (vph)	119	9	94	21	14	25	82	613	40	34	547	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)	-4%		-1%		-2%		1%					
Total Lost time (s)	6.9	6.9	6.9		6.3		6.3		6.3		6.3	
Lane Util. Factor	1.00	1.00	1.00		1.00		0.95		1.00		0.95	
Frt	1.00	0.86	1.00		0.90		1.00		0.99		1.00	
Flt Protected	0.95	1.00	0.95		1.00		0.95		1.00		0.95	
Satd. Flow (prot)	1841	1659	1814		1683		1805		3579		1796	
Flt Permitted	0.73	1.00	0.69		1.00		0.34		1.00		0.38	
Satd. Flow (perm)	1414	1659	1310		1683		649		3579		710	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	127	10	100	22	15	27	87	652	43	36	582	143
RTOR Reduction (vph)	0	86	0	0	23	0	0	4	0	0	14	0
Lane Group Flow (vph)	127	24	0	22	19	0	87	691	0	36	711	0
Heavy Vehicles (%)	0%	0%	1%	0%	7%	0%	1%	1%	0%	0%	2%	1%
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	NA	NA
Protected Phases	4		8		5		2		1		6	
Permitted Phases	4		8		2		6					
Actuated Green, G (s)	15.8	15.8	15.8		82.5		75.3		78.9		73.5	
Effective Green, g (s)	15.8	15.8	15.8		82.5		75.3		78.9		73.5	
Actuated g/C Ratio	0.14	0.14	0.14		0.71		0.65		0.68		0.63	
Clearance Time (s)	6.9	6.9	6.9		6.3		6.3		6.3		6.3	
Vehicle Extension (s)	3.5	3.5	3.5		3.5		3.5		3.5		3.5	
Lane Grp Cap (vph)	192	225	178		229		533		2323		533	
v/s Ratio Prot	0.01		0.01		c0.01		0.19		0.00		c0.21	
v/s Ratio Perm	c0.09		0.02		0.11		0.04					
v/c Ratio	0.66	0.10	0.12		0.08		0.16		0.30		0.07	
Uniform Delay, d1	47.6	43.9	44.0		43.8		5.3		8.9		6.1	
Progression Factor	1.00	1.00	1.00		1.00		1.60		1.84		1.00	
Incremental Delay, d2	8.6	0.2	0.4		0.2		0.2		0.3		0.1	
Delay (s)	56.2	44.1	44.4		43.9		8.7		16.6		6.1	
Level of Service	E	D	D		D		A		B		A	
Approach Delay (s)	50.6		44.1		15.8		10.0					
Approach LOS	D		D		B		B					

Intersection Summary

HCM 2000 Control Delay	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Technical Appendix – Intersection Turning Movement Count Data

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US 340 and Ladd Rd AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Ladd Rd Eastbound					Ladd Rd Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	9	8	4	0	21	11	11	12	0	34	4	80	12	0	96	11	63	3	0	77	228
06:45 AM	10	6	8	0	24	4	11	24	0	39	6	137	6	0	149	13	42	3	0	58	270
Total	19	14	12	0	45	15	22	36	0	73	10	217	18	0	245	24	105	6	0	135	498
07:00 AM	7	5	9	0	21	7	16	40	0	63	4	103	10	0	117	10	48	5	0	63	264
07:15 AM	24	9	9	0	42	12	17	28	0	57	4	138	10	0	152	16	69	4	0	89	340
07:30 AM	13	9	17	0	39	17	22	31	0	70	3	140	13	0	156	14	83	4	0	101	366
07:45 AM	8	12	17	0	37	19	24	37	0	80	13	170	30	0	213	15	98	6	0	119	449
Total	52	35	52	0	139	55	79	136	0	270	24	551	63	0	638	55	298	19	0	372	1419
08:00 AM	13	11	13	0	37	7	20	28	0	55	20	129	14	0	163	8	50	5	0	63	318
08:15 AM	22	13	4	0	39	2	13	23	0	38	7	115	11	0	133	15	60	9	0	84	294
08:30 AM	18	14	9	0	41	5	18	28	0	51	3	113	8	0	124	13	33	8	0	54	270
08:45 AM	16	12	5	0	33	8	16	20	0	44	11	95	7	0	113	15	45	16	0	76	266
Total	69	50	31	0	150	22	67	99	0	188	41	452	40	0	533	51	188	38	0	277	1148
09:00 AM	12	8	2	0	22	1	10	18	0	29	8	72	4	0	84	7	50	5	0	62	197
09:15 AM	21	4	2	0	27	3	18	21	0	42	2	87	5	0	94	12	36	8	0	56	219
Grand Total	173	111	99	0	383	96	196	310	0	602	85	1379	130	0	1594	149	677	76	0	902	3481
Apprch %	45.2	29	25.8	0		15.9	32.6	51.5	0		5.3	86.5	8.2	0		16.5	75.1	8.4	0		
Total %	5	3.2	2.8	0	11	2.8	5.6	8.9	0	17.3	2.4	39.6	3.7	0	45.8	4.3	19.4	2.2	0	25.9	

Start Time	Ladd Rd Eastbound				Ladd Rd Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	24	9	9	42	12	17	28	57	4	138	10	152	16	69	4	89	340
07:30 AM	13	9	17	39	17	22	31	70	3	140	13	156	14	83	4	101	366
07:45 AM	8	12	17	37	19	24	37	80	13	170	30	213	15	98	6	119	449
08:00 AM	13	11	13	37	7	20	28	55	20	129	14	163	8	50	5	63	318
Total Volume	58	41	56	155	55	83	124	262	40	577	67	684	53	300	19	372	1473
% App. Total	37.4	26.5	36.1		21	31.7	47.3		5.8	84.4	9.8		14.2	80.6	5.1		
PHF	.604	.854	.824	.923	.724	.865	.838	.819	.500	.849	.558	.803	.828	.765	.792	.782	.820

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US 340 and Ladd Rd AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Ladd Rd Eastbound					Ladd Rd Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	2
06:45 AM	0	0	0	0	0	0	1	1	0	2	0	4	0	0	4	0	4	0	0	0	4
Total	0	0	0	0	0	0	1	1	0	2	0	4	1	0	5	0	6	0	0	0	6
07:00 AM	1	0	0	0	1	1	0	0	0	1	0	7	1	0	8	2	2	1	0	5	15
07:15 AM	1	0	0	0	1	0	0	2	0	2	0	9	1	0	10	1	6	0	0	7	20
07:30 AM	1	0	0	0	1	0	1	0	0	1	0	3	0	0	3	0	7	0	0	7	12
07:45 AM	0	2	1	0	3	2	0	4	0	6	0	12	0	0	12	1	4	1	0	6	27
Total	3	2	1	0	6	3	1	6	0	10	0	31	2	0	33	4	19	2	0	25	74
08:00 AM	1	0	0	0	1	0	0	1	0	1	0	8	0	0	8	2	1	0	0	3	13
08:15 AM	0	0	0	0	0	0	1	2	0	3	0	5	1	0	6	2	5	0	0	7	16
08:30 AM	0	1	0	0	1	1	1	1	0	3	0	4	0	0	4	0	4	0	0	4	12
08:45 AM	2	0	0	0	2	0	1	0	0	1	0	5	0	0	5	0	6	0	0	6	14
Total	3	1	0	0	4	1	3	4	0	8	0	22	1	0	23	4	16	0	0	20	55
09:00 AM	0	0	0	0	0	1	0	0	0	1	0	14	0	0	14	1	6	0	0	7	22
09:15 AM	0	2	0	0	2	0	0	1	0	1	0	8	0	0	8	0	4	0	0	4	15
Grand Total	6	5	1	0	12	5	5	12	0	22	0	79	4	0	83	9	51	2	0	62	179
Apprch %	50	41.7	8.3	0		22.7	22.7	54.5	0		0	95.2	4.8	0		14.5	82.3	3.2	0		
Total %	3.4	2.8	0.6	0	6.7	2.8	2.8	6.7	0	12.3	0	44.1	2.2	0	46.4	5	28.5	1.1	0	34.6	

Start Time	Ladd Rd Eastbound				Ladd Rd Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	0	0	1	1	0	0	1	0	7	1	8	2	2	1	5	15
07:15 AM	1	0	0	1	0	0	2	2	0	9	1	10	1	6	0	7	20
07:30 AM	1	0	0	1	0	1	0	1	0	3	0	3	0	7	0	7	12
07:45 AM	0	2	1	3	2	0	4	6	0	12	0	12	1	4	1	6	27
Total Volume	3	2	1	6	3	1	6	10	0	31	2	33	4	19	2	25	74
% App. Total	50	33.3	16.7		30	10	60		0	93.9	6.1		16	76	8		
PHF	.750	.250	.250	.500	.375	.250	.375	.417	.000	.646	.500	.688	.500	.679	.500	.893	.685

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US 340 and Ladd Rd AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Ladd Rd Eastbound					Ladd Rd Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	9	8	4	0	21	11	11	12	0	34	4	80	13	0	97	11	65	3	0	79	231
06:45 AM	10	6	8	0	24	4	12	25	0	41	6	141	6	0	153	13	46	3	0	62	280
Total	19	14	12	0	45	15	23	37	0	75	10	221	19	0	250	24	111	6	0	141	511
07:00 AM	8	5	9	0	22	8	16	40	0	64	4	110	11	0	125	12	50	6	0	68	279
07:15 AM	25	9	9	0	43	12	17	30	0	59	4	147	11	0	162	17	75	4	0	96	360
07:30 AM	14	9	17	0	40	17	23	31	0	71	3	143	13	0	159	14	90	4	0	108	378
07:45 AM	8	14	18	0	40	21	24	41	0	86	13	182	30	0	225	16	102	7	0	125	476
Total	55	37	53	0	145	58	80	142	0	280	24	582	65	0	671	59	317	21	0	397	1493
08:00 AM	14	11	13	0	38	7	20	29	0	56	20	137	14	0	171	10	51	5	0	66	331
08:15 AM	22	13	4	0	39	2	14	25	0	41	7	120	12	0	139	17	65	9	0	91	310
08:30 AM	18	15	9	0	42	6	19	29	0	54	3	117	8	0	128	13	37	8	0	58	282
08:45 AM	18	12	5	0	35	8	17	20	0	45	11	100	7	0	118	15	51	16	0	82	280
Total	72	51	31	0	154	23	70	103	0	196	41	474	41	0	556	55	204	38	0	297	1203
09:00 AM	12	8	2	0	22	2	10	18	0	30	8	86	4	0	98	8	56	5	0	69	219
09:15 AM	21	6	2	0	29	3	18	22	0	43	2	95	5	0	102	12	40	8	0	60	234
Grand Total	179	116	100	0	395	101	201	322	0	624	85	1458	134	0	1677	158	728	78	0	964	3660
Apprch %	45.3	29.4	25.3	0		16.2	32.2	51.6	0		5.1	86.9	8	0		16.4	75.5	8.1	0		
Total %	4.9	3.2	2.7	0	10.8	2.8	5.5	8.8	0	17	2.3	39.8	3.7	0	45.8	4.3	19.9	2.1	0	26.3	

Start Time	Ladd Rd Eastbound				Ladd Rd Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	25	9	9	43	12	17	30	59	4	147	11	162	17	75	4	96	360
07:30 AM	14	9	17	40	17	23	31	71	3	143	13	159	14	90	4	108	378
07:45 AM	8	14	18	40	21	24	41	86	13	182	30	225	16	102	7	125	476
08:00 AM	14	11	13	38	7	20	29	56	20	137	14	171	10	51	5	66	331
Total Volume	61	43	57	161	57	84	131	272	40	609	68	717	57	318	20	395	1545
% App. Total	37.9	26.7	35.4		21	30.9	48.2		5.6	84.9	9.5		14.4	80.5	5.1		
PHF	.610	.768	.792	.936	.679	.875	.799	.791	.500	.837	.567	.797	.838	.779	.714	.790	.811

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US 340 and Ladd Rd MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Ladd Rd Eastbound					Ladd Rd Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	18	4	3	0	25	5	10	17	0	32	3	92	10	0	105	21	54	9	0	84	246
11:15 AM	18	12	5	0	35	2	5	17	0	24	3	96	4	0	103	34	79	10	0	123	285
11:30 AM	16	19	6	0	41	6	15	31	0	52	5	100	6	0	111	24	91	7	0	122	326
11:45 AM	13	9	3	0	25	6	8	24	0	38	4	84	7	0	95	24	101	10	0	135	293
Total	65	44	17	0	126	19	38	89	0	146	15	372	27	0	414	103	325	36	0	464	1150
12:00 PM	16	17	3	0	36	11	17	27	0	55	4	86	7	0	97	19	84	7	0	110	298
12:15 PM	18	9	5	0	32	7	13	32	0	52	4	81	7	0	92	22	75	10	0	107	283
12:30 PM	14	11	7	0	32	2	6	23	0	31	1	85	5	0	91	27	94	16	0	137	291
12:45 PM	14	10	7	0	31	6	15	34	0	55	5	85	8	0	98	22	82	24	0	128	312
Total	62	47	22	0	131	26	51	116	0	193	14	337	27	0	378	90	335	57	0	482	1184
Grand Total	127	91	39	0	257	45	89	205	0	339	29	709	54	0	792	193	660	93	0	946	2334
Apprch %	49.4	35.4	15.2	0		13.3	26.3	60.5	0		3.7	89.5	6.8	0		20.4	69.8	9.8	0		
Total %	5.4	3.9	1.7	0	11	1.9	3.8	8.8	0	14.5	1.2	30.4	2.3	0	33.9	8.3	28.3	4	0	40.5	

Start Time	Ladd Rd Eastbound				Ladd Rd Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:15 AM																	
11:15 AM	18	12	5	35	2	5	17	24	3	96	4	103	34	79	10	123	285
11:30 AM	16	19	6	41	6	15	31	52	5	100	6	111	24	91	7	122	326
11:45 AM	13	9	3	25	6	8	24	38	4	84	7	95	24	101	10	135	293
12:00 PM	16	17	3	36	11	17	27	55	4	86	7	97	19	84	7	110	298
Total Volume	63	57	17	137	25	45	99	169	16	366	24	406	101	355	34	490	1202
% App. Total	46	41.6	12.4		14.8	26.6	58.6		3.9	90.1	5.9		20.6	72.4	6.9		
PHF	.875	.750	.708	.835	.568	.662	.798	.768	.800	.915	.857	.914	.743	.879	.850	.907	.922

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US 340 and Ladd Rd MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Ladd Rd Eastbound					Ladd Rd Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	1	1	0	0	2	1	0	3	0	4	0	5	0	0	5	0	7	0	0	7	18
11:15 AM	0	0	0	0	0	0	0	1	0	1	0	8	1	0	9	1	6	1	0	8	18
11:30 AM	0	0	1	0	1	0	1	0	0	1	0	6	1	0	7	0	6	0	0	6	15
11:45 AM	0	0	0	0	0	1	0	1	0	2	1	7	0	0	8	1	6	1	0	8	18
Total	1	1	1	0	3	2	1	5	0	8	1	26	2	0	29	2	25	2	0	29	69
12:00 PM	1	1	0	0	2	0	0	1	0	1	1	9	0	0	10	0	4	0	0	4	17
12:15 PM	1	2	0	0	3	0	1	1	0	2	0	3	1	0	4	0	3	1	0	4	13
12:30 PM	0	0	0	0	0	0	0	0	0	0	1	3	2	0	6	0	8	0	0	8	14
12:45 PM	0	0	0	0	0	0	0	1	0	1	0	5	0	0	5	1	5	0	0	6	12
Total	2	3	0	0	5	0	1	3	0	4	2	20	3	0	25	1	20	1	0	22	56
Grand Total	3	4	1	0	8	2	2	8	0	12	3	46	5	0	54	3	45	3	0	51	125
Apprch %	37.5	50	12.5	0		16.7	16.7	66.7	0		5.6	85.2	9.3	0		5.9	88.2	5.9	0		
Total %	2.4	3.2	0.8	0	6.4	1.6	1.6	6.4	0	9.6	2.4	36.8	4	0	43.2	2.4	36	2.4	0	40.8	

Start Time	Ladd Rd Eastbound				Ladd Rd Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:00 AM																	
11:00 AM	1	1	0	2	1	0	3	4	0	5	0	5	0	7	0	7	18
11:15 AM	0	0	0	0	0	0	1	1	0	8	1	9	1	6	1	8	18
11:30 AM	0	0	1	1	0	1	0	1	0	6	1	7	0	6	0	6	15
11:45 AM	0	0	0	0	1	0	1	2	1	7	0	8	1	6	1	8	18
Total Volume	1	1	1	3	2	1	5	8	1	26	2	29	2	25	2	29	69
% App. Total	33.3	33.3	33.3		25	12.5	62.5		3.4	89.7	6.9		6.9	86.2	6.9		
PHF	.250	.250	.250	.375	.500	.250	.417	.500	.250	.813	.500	.806	.500	.893	.500	.906	.958

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US 340 and Ladd Rd MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Ladd Rd Eastbound					Ladd Rd Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	19	5	3	0	27	6	10	20	0	36	3	97	10	0	110	21	61	9	0	91	264
11:15 AM	18	12	5	0	35	2	5	18	0	25	3	104	5	0	112	35	85	11	0	131	303
11:30 AM	16	19	7	0	42	6	16	31	0	53	5	106	7	0	118	24	97	7	0	128	341
11:45 AM	13	9	3	0	25	7	8	25	0	40	5	91	7	0	103	25	107	11	0	143	311
Total	66	45	18	0	129	21	39	94	0	154	16	398	29	0	443	105	350	38	0	493	1219
12:00 PM	17	18	3	0	38	11	17	28	0	56	5	95	7	0	107	19	88	7	0	114	315
12:15 PM	19	11	5	0	35	7	14	33	0	54	4	84	8	0	96	22	78	11	0	111	296
12:30 PM	14	11	7	0	32	2	6	23	0	31	2	88	7	0	97	27	102	16	0	145	305
12:45 PM	14	10	7	0	31	6	15	35	0	56	5	90	8	0	103	23	87	24	0	134	324
Total	64	50	22	0	136	26	52	119	0	197	16	357	30	0	403	91	355	58	0	504	1240
Grand Total	130	95	40	0	265	47	91	213	0	351	32	755	59	0	846	196	705	96	0	997	2459
Apprch %	49.1	35.8	15.1	0		13.4	25.9	60.7	0		3.8	89.2	7	0		19.7	70.7	9.6	0		
Total %	5.3	3.9	1.6	0	10.8	1.9	3.7	8.7	0	14.3	1.3	30.7	2.4	0	34.4	8	28.7	3.9	0	40.5	

Start Time	Ladd Rd Eastbound				Ladd Rd Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:15 AM																	
11:15 AM	18	12	5	35	2	5	18	25	3	104	5	112	35	85	11	131	303
11:30 AM	16	19	7	42	6	16	31	53	5	106	7	118	24	97	7	128	341
11:45 AM	13	9	3	25	7	8	25	40	5	91	7	103	25	107	11	143	311
12:00 PM	17	18	3	38	11	17	28	56	5	95	7	107	19	88	7	114	315
Total Volume	64	58	18	140	26	46	102	174	18	396	26	440	103	377	36	516	1270
% App. Total	45.7	41.4	12.9		14.9	26.4	58.6		4.1	90	5.9		20	73.1	7		
PHF	.889	.763	.643	.833	.591	.676	.823	.777	.900	.934	.929	.932	.736	.881	.818	.902	.931

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US 340 and Ladd Rd PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Ladd Rd Eastbound					Ladd Rd Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	10	13	15	0	38	11	14	17	0	42	9	98	10	0	117	30	126	18	0	174	371
03:15 PM	24	22	6	0	52	11	12	17	0	40	14	125	12	0	151	19	103	19	0	141	384
03:30 PM	14	24	9	0	47	12	9	27	0	48	9	145	16	0	170	24	141	30	0	195	460
03:45 PM	22	23	13	0	58	7	13	36	0	56	7	153	11	0	171	21	125	21	0	167	452
Total	70	82	43	0	195	41	48	97	0	186	39	521	49	0	609	94	495	88	0	677	1667
04:00 PM	25	19	4	0	48	8	16	19	0	43	9	133	11	0	153	18	116	18	0	152	396
04:15 PM	18	21	10	0	49	12	12	21	0	45	7	136	19	0	162	29	156	17	0	202	458
04:30 PM	12	16	11	0	39	22	9	36	0	67	7	104	15	1	127	33	150	27	0	210	443
04:45 PM	26	22	10	0	58	14	12	22	0	48	7	122	10	0	139	35	133	22	0	190	435
Total	81	78	35	0	194	56	49	98	0	203	30	495	55	1	581	115	555	84	0	754	1732
05:00 PM	12	31	12	0	55	20	18	28	0	66	5	120	18	0	143	42	175	20	0	237	501
05:15 PM	23	20	7	0	50	17	20	23	0	60	9	133	17	0	159	33	155	22	0	210	479
05:30 PM	13	13	7	0	33	24	9	29	0	62	16	114	29	0	159	51	148	26	0	225	479
05:45 PM	17	19	8	0	44	18	14	25	0	57	13	115	18	0	146	37	160	31	0	228	475
Total	65	83	34	0	182	79	61	105	0	245	43	482	82	0	607	163	638	99	0	900	1934
Grand Total	216	243	112	0	571	176	158	300	0	634	112	1498	186	1	1797	372	1688	271	0	2331	5333
Apprch %	37.8	42.6	19.6	0		27.8	24.9	47.3	0		6.2	83.4	10.4	0.1		16	72.4	11.6	0		
Total %	4.1	4.6	2.1	0	10.7	3.3	3	5.6	0	11.9	2.1	28.1	3.5	0	33.7	7	31.7	5.1	0	43.7	

Start Time	Ladd Rd Eastbound				Ladd Rd Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	12	31	12	55	20	18	28	66	5	120	18	143	42	175	20	237	501
05:15 PM	23	20	7	50	17	20	23	60	9	133	17	159	33	155	22	210	479
05:30 PM	13	13	7	33	24	9	29	62	16	114	29	159	51	148	26	225	479
05:45 PM	17	19	8	44	18	14	25	57	13	115	18	146	37	160	31	228	475
Total Volume	65	83	34	182	79	61	105	245	43	482	82	607	163	638	99	900	1934
% App. Total	35.7	45.6	18.7		32.2	24.9	42.9		7.1	79.4	13.5		18.1	70.9	11		
PHF	.707	.669	.708	.827	.823	.763	.905	.928	.672	.906	.707	.954	.799	.911	.798	.949	.965

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US 340 and Ladd Rd PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Ladd Rd Eastbound					Ladd Rd Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	0	0	1	0	1	0	2	1	0	3	0	6	0	0	6	0	15	0	0	15	25
03:15 PM	0	0	1	0	1	0	0	0	0	0	0	6	1	0	7	0	6	0	0	6	14
03:30 PM	0	2	1	0	3	0	0	1	0	1	0	7	1	0	8	0	6	1	0	7	19
03:45 PM	1	1	1	0	3	1	1	1	0	3	0	5	1	0	6	1	7	2	0	10	22
Total	1	3	4	0	8	1	3	3	0	7	0	24	3	0	27	1	34	3	0	38	80
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	1	3	0	0	4	9
04:15 PM	0	2	0	0	2	0	0	0	0	0	0	11	0	0	11	2	5	1	0	8	21
04:30 PM	0	1	0	0	1	0	1	1	0	2	0	3	0	0	3	1	6	0	0	7	13
04:45 PM	1	0	0	0	1	0	1	0	0	1	0	6	0	0	6	0	6	0	0	6	14
Total	1	4	0	0	5	0	2	1	0	3	0	24	0	0	24	4	20	1	0	25	57
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	4	1	0	5	10
05:15 PM	0	0	0	0	0	0	1	1	0	2	0	4	0	0	4	0	4	0	0	4	10
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	5	0	0	5	8
05:45 PM	0	0	0	0	0	2	0	0	0	2	0	5	0	0	5	0	3	0	0	3	10
Total	0	1	0	0	1	2	1	1	0	4	0	16	0	0	16	0	16	1	0	17	38
Grand Total	2	8	4	0	14	3	6	5	0	14	0	64	3	0	67	5	70	5	0	80	175
Apprch %	14.3	57.1	28.6	0		21.4	42.9	35.7	0		0	95.5	4.5	0		6.2	87.5	6.2	0		
Total %	1.1	4.6	2.3	0	8	1.7	3.4	2.9	0	8	0	36.6	1.7	0	38.3	2.9	40	2.9	0	45.7	

Start Time	Ladd Rd Eastbound				Ladd Rd Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	0	1	1	0	2	1	3	0	6	0	6	0	15	0	15	25
03:15 PM	0	0	1	1	0	0	0	0	0	6	1	7	0	6	0	6	14
03:30 PM	0	2	1	3	0	0	1	1	0	7	1	8	0	6	1	7	19
03:45 PM	1	1	1	3	1	1	1	3	0	5	1	6	1	7	2	10	22
Total Volume	1	3	4	8	1	3	3	7	0	24	3	27	1	34	3	38	80
% App. Total	12.5	37.5	50		14.3	42.9	42.9		0	88.9	11.1		2.6	89.5	7.9		
PHF	.250	.375	1.00	.667	.250	.375	.750	.583	.000	.857	.750	.844	.250	.567	.375	.633	.800

Peggy Malone & Associates

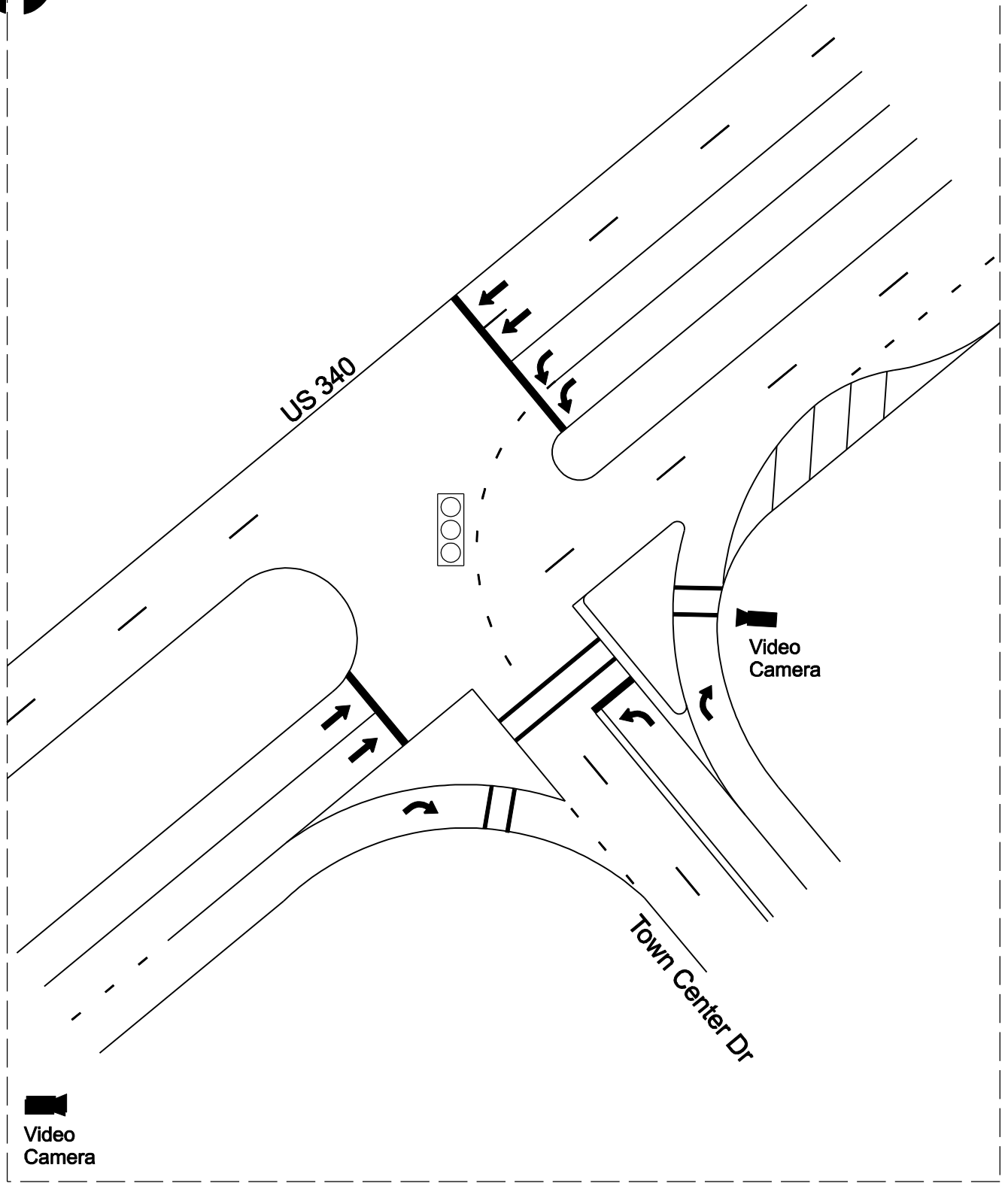
(888) 247-8602

File Name : 1-US 340 and Ladd Rd PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Ladd Rd Eastbound					Ladd Rd Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	10	13	16	0	39	11	16	18	0	45	9	104	10	0	123	30	141	18	0	189	396
03:15 PM	24	22	7	0	53	11	12	17	0	40	14	131	13	0	158	19	109	19	0	147	398
03:30 PM	14	26	10	0	50	12	9	28	0	49	9	152	17	0	178	24	147	31	0	202	479
03:45 PM	23	24	14	0	61	8	14	37	0	59	7	158	12	0	177	22	132	23	0	177	474
Total	71	85	47	0	203	42	51	100	0	193	39	545	52	0	636	95	529	91	0	715	1747
04:00 PM	25	20	4	0	49	8	16	19	0	43	9	137	11	0	157	19	119	18	0	156	405
04:15 PM	18	23	10	0	51	12	12	21	0	45	7	147	19	0	173	31	161	18	0	210	479
04:30 PM	12	17	11	0	40	22	10	37	0	69	7	107	15	1	130	34	156	27	0	217	456
04:45 PM	27	22	10	0	59	14	13	22	0	49	7	128	10	0	145	35	139	22	0	196	449
Total	82	82	35	0	199	56	51	99	0	206	30	519	55	1	605	119	575	85	0	779	1789
05:00 PM	12	32	12	0	56	20	18	28	0	66	5	124	18	0	147	42	179	21	0	242	511
05:15 PM	23	20	7	0	50	17	21	24	0	62	9	137	17	0	163	33	159	22	0	214	489
05:30 PM	13	13	7	0	33	24	9	29	0	62	16	117	29	0	162	51	153	26	0	230	487
05:45 PM	17	19	8	0	44	20	14	25	0	59	13	120	18	0	151	37	163	31	0	231	485
Total	65	84	34	0	183	81	62	106	0	249	43	498	82	0	623	163	654	100	0	917	1972
Grand Total	218	251	116	0	585	179	164	305	0	648	112	1562	189	1	1864	377	1758	276	0	2411	5508
Apprch %	37.3	42.9	19.8	0		27.6	25.3	47.1	0		6	83.8	10.1	0.1		15.6	72.9	11.4	0		
Total %	4	4.6	2.1	0	10.6	3.2	3	5.5	0	11.8	2	28.4	3.4	0	33.8	6.8	31.9	5	0	43.8	

Start Time	Ladd Rd Eastbound				Ladd Rd Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	12	32	12	56	20	18	28	66	5	124	18	147	42	179	21	242	511
05:15 PM	23	20	7	50	17	21	24	62	9	137	17	163	33	159	22	214	489
05:30 PM	13	13	7	33	24	9	29	62	16	117	29	162	51	153	26	230	487
05:45 PM	17	19	8	44	20	14	25	59	13	120	18	151	37	163	31	231	485
Total Volume	65	84	34	183	81	62	106	249	43	498	82	623	163	654	100	917	1972
% App. Total	35.5	45.9	18.6		32.5	24.9	42.6		6.9	79.9	13.2		17.8	71.3	10.9		
PHF	.707	.656	.708	.817	.844	.738	.914	.943	.672	.909	.707	.956	.799	.913	.806	.947	.965



2013-0525S Site B
US 340
at
Town Center Drive

FIELD WORK BY: *BG/EG*

DRAWN BY: *C.P.*

DATE: 3/22/17

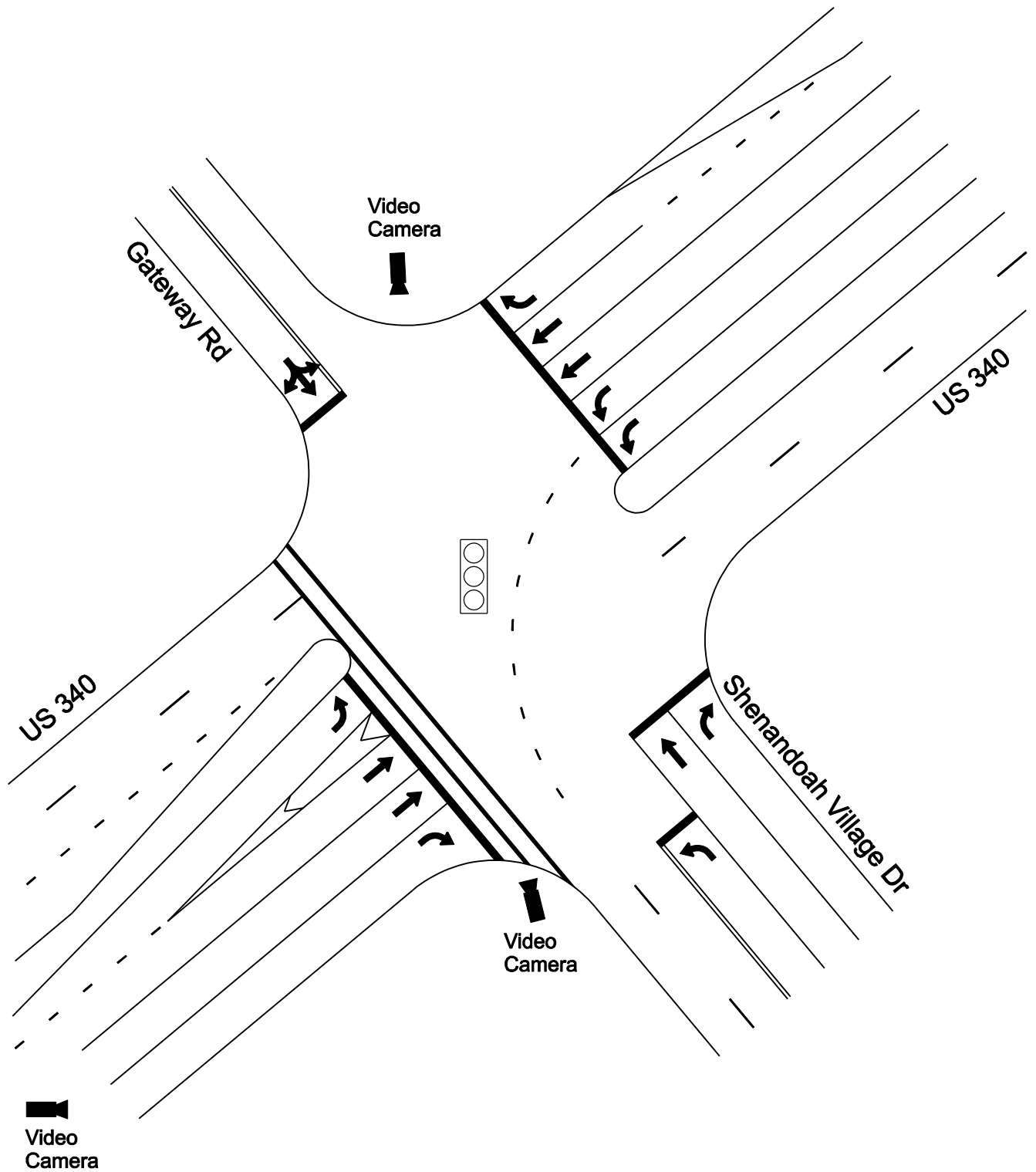
TIME: 7am-7pm

JOB NO.: 2013-0525S

DGN NAME: 2013-0525S US 340 at Town Center

LOCATION: Augusta Co, VA

SHEET NO.: 1 OF 1



2013-0525S Site A
US 340
at
Shenandoah Village Drive

FIELD WORK BY: *BG/EG*

DRAWN BY: *C.P.*

DATE: 3/22/17

TIME: 7am-7pm

JOB NO.: 2013-0525S

DGN NAME: 2013-0525S US 340 at Shenandoah

LOCATION: Augusta Co, VA

SHEET NO.: 1 OF 1

Peggy Malone & Associates

(888) 247-8602

File Name : 2-US 340 and I-64 East Ramps AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
06:30 AM	9	0	0	9	0	66	0	0	66	53	86	0	139	214
06:45 AM	25	0	0	25	0	99	0	0	99	43	74	0	117	241
Total	34	0	0	34	0	165	0	0	165	96	160	0	256	455
07:00 AM	10	0	0	10	0	100	0	0	100	77	96	0	173	283
07:15 AM	16	0	0	16	0	117	0	0	117	75	106	0	181	314
07:30 AM	17	0	0	17	0	128	0	0	128	65	118	0	183	328
07:45 AM	29	1	0	30	0	145	0	0	145	69	140	0	209	384
Total	72	1	0	73	0	490	0	0	490	286	460	0	746	1309
08:00 AM	22	0	0	22	0	120	0	0	120	74	115	0	189	331
08:15 AM	31	0	0	31	0	111	0	0	111	57	109	0	166	308
08:30 AM	23	0	0	23	0	114	0	0	114	46	87	0	133	270
08:45 AM	32	0	0	32	0	114	0	0	114	43	102	0	145	291
Total	108	0	0	108	0	459	0	0	459	220	413	0	633	1200
09:00 AM	21	0	0	21	0	97	1	0	98	41	108	0	149	268
09:15 AM	11	1	0	12	0	117	0	0	117	42	88	0	130	259
Grand Total	246	2	0	248	0	1328	1	0	1329	685	1229	0	1914	3491
Apprch %	99.2	0.8	0		0	99.9	0.1	0		35.8	64.2	0		
Total %	7	0.1	0	7.1	0	38	0	0	38.1	19.6	35.2	0	54.8	

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 07:15 AM														
07:15 AM	16	0	0	16	0	117	0	0	117	75	106	0	181	314
07:30 AM	17	0	0	17	0	128	0	0	128	65	118	0	183	328
07:45 AM	29	1	0	30	0	145	0	0	145	69	140	0	209	384
08:00 AM	22	0	0	22	0	120	0	0	120	74	115	0	189	331
Total Volume	84	1	0	85	0	510	0	0	510	283	479	0	762	1357
% App. Total	98.8	1.2	0		0	100	0	0		37.1	62.9	0		
PHF	.724	.250	.708		.000	.879	.000	.879		.943	.855	.911		.883

Peggy Malone & Associates

(888) 247-8602

File Name : 2-US 340 and I-64 East Ramps AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	I-64 East Ramps Westbound				US 340 Northbound				US 340 Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds		App. Total
06:30 AM	1	0	0	1	0	2	0	0	2	5	2	0	7	10
06:45 AM	1	0	0	1	0	3	0	0	3	1	4	0	5	9
Total	2	0	0	2	0	5	0	0	5	6	6	0	12	19
07:00 AM	0	0	0	0	0	3	0	0	3	1	2	0	3	6
07:15 AM	2	0	0	2	0	5	0	0	5	2	5	0	7	14
07:30 AM	1	0	0	1	0	5	0	0	5	1	8	0	9	15
07:45 AM	2	0	0	2	0	9	0	0	9	4	3	0	7	18
Total	5	0	0	5	0	22	0	0	22	8	18	0	26	53
08:00 AM	1	0	0	1	0	9	0	0	9	4	4	0	8	18
08:15 AM	2	0	0	2	0	4	0	0	4	1	5	0	6	12
08:30 AM	4	0	0	4	0	5	0	0	5	2	5	0	7	16
08:45 AM	3	0	0	3	0	3	0	0	3	2	8	0	10	16
Total	10	0	0	10	0	21	0	0	21	9	22	0	31	62
09:00 AM	3	0	0	3	0	3	0	0	3	1	7	0	8	14
09:15 AM	3	0	0	3	0	8	0	0	8	1	2	0	3	14
Grand Total	23	0	0	23	0	59	0	0	59	25	55	0	80	162
Apprch %	100	0	0		0	100	0	0		31.2	68.8	0		
Total %	14.2	0	0	14.2	0	36.4	0	0	36.4	15.4	34	0	49.4	

Start Time	I-64 East Ramps Westbound				US 340 Northbound				US 340 Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds		App. Total
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 07:15 AM														
07:15 AM	2	0	0	2	0	5	0	0	5	2	5	0	7	14
07:30 AM	1	0	0	1	0	5	0	0	5	1	8	0	9	15
07:45 AM	2	0	0	2	0	9	0	0	9	4	3	0	7	18
08:00 AM	1	0	0	1	0	9	0	0	9	4	4	0	8	18
Total Volume	6	0	0	6	0	28	0	0	28	11	20	0	31	65
% App. Total	100	0	0		0	100	0	0		35.5	64.5	0		
PHF	.750	.000	.000	.750	.000	.778	.000	.000	.778	.688	.625	.000	.861	.903

Peggy Malone & Associates

(888) 247-8602

File Name : 2-US 340 and I-64 East Ramps AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
06:30 AM	10	0	0	10	0	68	0	0	68	58	88	0	146	224
06:45 AM	26	0	0	26	0	102	0	0	102	44	78	0	122	250
Total	36	0	0	36	0	170	0	0	170	102	166	0	268	474
07:00 AM	10	0	0	10	0	103	0	0	103	78	98	0	176	289
07:15 AM	18	0	0	18	0	122	0	0	122	77	111	0	188	328
07:30 AM	18	0	0	18	0	133	0	0	133	66	126	0	192	343
07:45 AM	31	1	0	32	0	154	0	0	154	73	143	0	216	402
Total	77	1	0	78	0	512	0	0	512	294	478	0	772	1362
08:00 AM	23	0	0	23	0	129	0	0	129	78	119	0	197	349
08:15 AM	33	0	0	33	0	115	0	0	115	58	114	0	172	320
08:30 AM	27	0	0	27	0	119	0	0	119	48	92	0	140	286
08:45 AM	35	0	0	35	0	117	0	0	117	45	110	0	155	307
Total	118	0	0	118	0	480	0	0	480	229	435	0	664	1262
09:00 AM	24	0	0	24	0	100	1	0	101	42	115	0	157	282
09:15 AM	14	1	0	15	0	125	0	0	125	43	90	0	133	273
Grand Total	269	2	0	271	0	1387	1	0	1388	710	1284	0	1994	3653
Apprch %	99.3	0.7	0		0	99.9	0.1	0		35.6	64.4	0		
Total %	7.4	0.1	0	7.4	0	38	0	0	38	19.4	35.1	0	54.6	

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 07:15 AM														
07:15 AM	18	0	0	18	0	122	0	0	122	77	111	0	188	328
07:30 AM	18	0	0	18	0	133	0	0	133	66	126	0	192	343
07:45 AM	31	1	0	32	0	154	0	0	154	73	143	0	216	402
08:00 AM	23	0	0	23	0	129	0	0	129	78	119	0	197	349
Total Volume	90	1	0	91	0	538	0	0	538	294	499	0	793	1422
% App. Total	98.9	1.1	0		0	100	0	0		37.1	62.9	0		
PHF	.726	.250	.711		.000	.873	.000	.873		.942	.872	.918		.884

Peggy Malone & Associates

(888) 247-8602

File Name : 2-US 340 and I-64 East Ramps MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
11:00 AM	29	0	0	29	0	143	0	0	143	41	146	0	187	359
11:15 AM	34	0	0	34	0	141	0	0	141	26	157	0	183	358
11:30 AM	28	0	0	28	0	190	0	0	190	34	152	0	186	404
11:45 AM	25	0	0	25	1	181	0	0	182	45	188	0	233	440
Total	116	0	0	116	1	655	0	0	656	146	643	0	789	1561
12:00 PM	34	1	0	35	0	164	0	0	164	37	161	0	198	397
12:15 PM	40	1	0	41	0	198	0	0	198	38	176	0	214	453
12:30 PM	32	0	0	32	0	198	0	0	198	42	197	0	239	469
12:45 PM	32	0	0	32	1	155	0	0	156	60	175	0	235	423
Total	138	2	0	140	1	715	0	0	716	177	709	0	886	1742
Grand Total	254	2	0	256	2	1370	0	0	1372	323	1352	0	1675	3303
Apprch %	99.2	0.8	0		0.1	99.9	0	0		19.3	80.7	0		
Total %	7.7	0.1	0	7.8	0.1	41.5	0	0	41.5	9.8	40.9	0	50.7	

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 11:45 AM														
11:45 AM	25	0	0	25	1	181	0	0	182	45	188	0	233	440
12:00 PM	34	1	0	35	0	164	0	0	164	37	161	0	198	397
12:15 PM	40	1	0	41	0	198	0	0	198	38	176	0	214	453
12:30 PM	32	0	0	32	0	198	0	0	198	42	197	0	239	469
Total Volume	131	2	0	133	1	741	0	0	742	162	722	0	884	1759
% App. Total	98.5	1.5	0		0.1	99.9	0	0		18.3	81.7	0		
PHF	.819	.500		.811	.250	.936	.000	.937		.900	.916		.925	.938

Peggy Malone & Associates

(888) 247-8602

File Name : 2-US 340 and I-64 East Ramps MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
11:00 AM	3	0	0	3	0	6	0	0	6	2	6	0	8	17
11:15 AM	3	0	0	3	0	3	0	0	3	2	7	0	9	15
11:30 AM	3	0	0	3	0	5	0	0	5	2	5	0	7	15
11:45 AM	5	0	0	5	0	3	0	0	3	2	3	0	5	13
Total	14	0	0	14	0	17	0	0	17	8	21	0	29	60
12:00 PM	3	0	0	3	0	10	0	0	10	2	2	0	4	17
12:15 PM	1	0	0	1	0	5	0	0	5	1	4	0	5	11
12:30 PM	4	0	0	4	0	5	0	0	5	2	10	0	12	21
12:45 PM	3	0	0	3	0	3	0	0	3	0	3	0	3	9
Total	11	0	0	11	0	23	0	0	23	5	19	0	24	58
Grand Total	25	0	0	25	0	40	0	0	40	13	40	0	53	118
Apprch %	100	0	0		0	100	0	0		24.5	75.5	0		
Total %	21.2	0	0	21.2	0	33.9	0	0	33.9	11	33.9	0	44.9	

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 11:45 AM														
11:45 AM	5	0	0	5	0	3	0	0	3	2	3	0	5	13
12:00 PM	3	0	0	3	0	10	0	0	10	2	2	0	4	17
12:15 PM	1	0	0	1	0	5	0	0	5	1	4	0	5	11
12:30 PM	4	0	0	4	0	5	0	0	5	2	10	0	12	21
Total Volume	13	0	0	13	0	23	0	0	23	7	19	0	26	62
% App. Total	100	0	0		0	100	0	0		26.9	73.1	0		
PHF	.650	.000	.000	.650	.000	.575	.000	.000	.575	.875	.475	.000	.542	.738

Peggy Malone & Associates

(888) 247-8602

File Name : 2-US 340 and I-64 East Ramps MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
11:00 AM	32	0	0	32	0	149	0	0	149	43	152	0	195	376
11:15 AM	37	0	0	37	0	144	0	0	144	28	164	0	192	373
11:30 AM	31	0	0	31	0	195	0	0	195	36	157	0	193	419
11:45 AM	30	0	0	30	1	184	0	0	185	47	191	0	238	453
Total	130	0	0	130	1	672	0	0	673	154	664	0	818	1621
12:00 PM	37	1	0	38	0	174	0	0	174	39	163	0	202	414
12:15 PM	41	1	0	42	0	203	0	0	203	39	180	0	219	464
12:30 PM	36	0	0	36	0	203	0	0	203	44	207	0	251	490
12:45 PM	35	0	0	35	1	158	0	0	159	60	178	0	238	432
Total	149	2	0	151	1	738	0	0	739	182	728	0	910	1800
Grand Total	279	2	0	281	2	1410	0	0	1412	336	1392	0	1728	3421
Apprch %	99.3	0.7	0		0.1	99.9	0	0		19.4	80.6	0		
Total %	8.2	0.1	0	8.2	0.1	41.2	0	0	41.3	9.8	40.7	0	50.5	

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
11:45 AM	30	0	0	30	1	184	0	0	185	47	191	0	238	453
12:00 PM	37	1	0	38	0	174	0	0	174	39	163	0	202	414
12:15 PM	41	1	0	42	0	203	0	0	203	39	180	0	219	464
12:30 PM	36	0	0	36	0	203	0	0	203	44	207	0	251	490
Total Volume	144	2	0	146	1	764	0	0	765	169	741	0	910	1821
% App. Total	98.6	1.4	0		0.1	99.9	0	0		18.6	81.4	0		
PHF	.878	.500	0	.869	.250	.941	0.000	0.000	.942	.899	.895	0	.906	.929

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 11:45 AM

Peggy Malone & Associates

(888) 247-8602

File Name : 2-US 340 and I-64 East Ramps PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
03:00 PM	24	0	0	24	0	174	0	0	174	47	194	0	241	439
03:15 PM	33	0	0	33	0	178	0	0	178	50	195	0	245	456
03:30 PM	31	0	0	31	0	170	0	0	170	37	221	0	258	459
03:45 PM	28	0	0	28	0	247	0	0	247	35	206	0	241	516
Total	116	0	0	116	0	769	0	0	769	169	816	0	985	1870
04:00 PM	25	0	0	25	0	188	0	0	188	42	198	0	240	453
04:15 PM	33	0	0	33	0	201	0	0	201	41	221	0	262	496
04:30 PM	31	0	0	31	0	195	0	0	195	49	233	0	282	508
04:45 PM	36	0	0	36	0	183	0	0	183	50	234	0	284	503
Total	125	0	0	125	0	767	0	0	767	182	886	0	1068	1960
05:00 PM	28	0	0	28	0	231	0	0	231	47	256	0	303	562
05:15 PM	34	0	0	34	0	232	0	0	232	49	258	0	307	573
05:30 PM	30	1	0	31	0	213	0	0	213	36	214	0	250	494
05:45 PM	24	0	0	24	0	177	0	0	177	51	236	0	287	488
Total	116	1	0	117	0	853	0	0	853	183	964	0	1147	2117
Grand Total	357	1	0	358	0	2389	0	0	2389	534	2666	0	3200	5947
Apprch %	99.7	0.3	0		0	100	0	0		16.7	83.3	0		
Total %	6	0	0	6	0	40.2	0	0	40.2	9	44.8	0	53.8	

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 04:30 PM														
04:30 PM	31	0	0	31	0	195	0	0	195	49	233	0	282	508
04:45 PM	36	0	0	36	0	183	0	0	183	50	234	0	284	503
05:00 PM	28	0	0	28	0	231	0	0	231	47	256	0	303	562
05:15 PM	34	0	0	34	0	232	0	0	232	49	258	0	307	573
Total Volume	129	0	0	129	0	841	0	0	841	195	981	0	1176	2146
% App. Total	100	0	0		0	100	0	0		16.6	83.4	0		
PHF	.896	.000	.000	.896	.000	.906	.000	.000	.906	.975	.951	.000	.958	.936

Peggy Malone & Associates

(888) 247-8602

File Name : 2-US 340 and I-64 East Ramps PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
03:00 PM	2	0	0	2	0	6	0	0	6	3	8	0	11	19
03:15 PM	1	0	0	1	0	4	0	0	4	1	6	0	7	12
03:30 PM	0	0	0	0	0	7	0	0	7	2	11	0	13	20
03:45 PM	3	0	0	3	0	6	0	0	6	1	4	0	5	14
Total	6	0	0	6	0	23	0	0	23	7	29	0	36	65
04:00 PM	0	0	0	0	0	3	0	0	3	0	4	0	4	7
04:15 PM	5	0	0	5	0	3	0	0	3	1	6	0	7	15
04:30 PM	3	0	0	3	0	4	0	0	4	2	5	0	7	14
04:45 PM	1	0	0	1	0	4	0	0	4	0	7	0	7	12
Total	9	0	0	9	0	14	0	0	14	3	22	0	25	48
05:00 PM	1	0	0	1	0	4	0	0	4	1	3	0	4	9
05:15 PM	0	0	0	0	0	4	0	0	4	1	5	0	6	10
05:30 PM	1	0	0	1	0	2	0	0	2	0	3	0	3	6
05:45 PM	2	0	0	2	0	2	0	0	2	0	3	0	3	7
Total	4	0	0	4	0	12	0	0	12	2	14	0	16	32
Grand Total	19	0	0	19	0	49	0	0	49	12	65	0	77	145
Apprch %	100	0	0		0	100	0	0		15.6	84.4	0		
Total %	13.1	0	0	13.1	0	33.8	0	0	33.8	8.3	44.8	0	53.1	

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
03:00 PM	2	0	0	2	0	6	0	0	6	3	8	0	11	19
03:15 PM	1	0	0	1	0	4	0	0	4	1	6	0	7	12
03:30 PM	0	0	0	0	0	7	0	0	7	2	11	0	13	20
03:45 PM	3	0	0	3	0	6	0	0	6	1	4	0	5	14
Total Volume	6	0	0	6	0	23	0	0	23	7	29	0	36	65
% App. Total	100	0	0		0	100	0	0		19.4	80.6	0		
PHF	.500	.000	.000	.500	.000	.821	.000	.000	.821	.583	.659	.000	.692	.813

Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 03:00 PM

Peggy Malone & Associates

(888) 247-8602

File Name : 2-US 340 and I-64 East Ramps PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
03:00 PM	26	0	0	26	0	180	0	0	180	50	202	0	252	458
03:15 PM	34	0	0	34	0	182	0	0	182	51	201	0	252	468
03:30 PM	31	0	0	31	0	177	0	0	177	39	232	0	271	479
03:45 PM	31	0	0	31	0	253	0	0	253	36	210	0	246	530
Total	122	0	0	122	0	792	0	0	792	176	845	0	1021	1935
04:00 PM	25	0	0	25	0	191	0	0	191	42	202	0	244	460
04:15 PM	38	0	0	38	0	204	0	0	204	42	227	0	269	511
04:30 PM	34	0	0	34	0	199	0	0	199	51	238	0	289	522
04:45 PM	37	0	0	37	0	187	0	0	187	50	241	0	291	515
Total	134	0	0	134	0	781	0	0	781	185	908	0	1093	2008
05:00 PM	29	0	0	29	0	235	0	0	235	48	259	0	307	571
05:15 PM	34	0	0	34	0	236	0	0	236	50	263	0	313	583
05:30 PM	31	1	0	32	0	215	0	0	215	36	217	0	253	500
05:45 PM	26	0	0	26	0	179	0	0	179	51	239	0	290	495
Total	120	1	0	121	0	865	0	0	865	185	978	0	1163	2149
Grand Total	376	1	0	377	0	2438	0	0	2438	546	2731	0	3277	6092
Apprch %	99.7	0.3	0		0	100	0	0		16.7	83.3	0		
Total %	6.2	0	0	6.2	0	40	0	0	40	9	44.8	0	53.8	

Start Time	I-64 East Ramps Westbound				US 340 Northbound					US 340 Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 04:30 PM														
04:30 PM	34	0	0	34	0	199	0	0	199	51	238	0	289	522
04:45 PM	37	0	0	37	0	187	0	0	187	50	241	0	291	515
05:00 PM	29	0	0	29	0	235	0	0	235	48	259	0	307	571
05:15 PM	34	0	0	34	0	236	0	0	236	50	263	0	313	583
Total Volume	134	0	0	134	0	857	0	0	857	199	1001	0	1200	2191
% App. Total	100	0	0		0	100	0	0		16.6	83.4	0		
PHF	.905	.000	.000	.905	.000	.908	.000	.000	.908	.975	.952	.000	.958	.940

Peggy Malone & Associates

(888) 247-8602

File Name : 3-US 340 and I-64 West Ramps AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	W Ramp Eastbound					E Ramp Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	0	0	0	0	0	41	0	18	0	59	11	83	0	0	94	0	101	0	0	101	254
06:45 AM	0	0	0	0	0	36	0	20	0	56	20	111	0	0	131	0	89	0	0	89	276
Total	0	0	0	0	0	77	0	38	0	115	31	194	0	0	225	0	190	0	0	190	530
07:00 AM	0	0	0	0	0	27	0	20	0	47	25	116	0	0	141	0	152	0	0	152	340
07:15 AM	0	0	0	0	0	36	0	32	0	68	26	138	0	0	164	0	130	0	0	130	362
07:30 AM	0	0	0	0	0	38	0	33	0	71	25	162	0	0	187	0	150	0	0	150	408
07:45 AM	0	0	0	0	0	59	0	40	0	99	19	185	0	0	204	0	163	0	0	163	466
Total	0	0	0	0	0	160	0	125	0	285	95	601	0	0	696	0	595	0	0	595	1576
08:00 AM	0	0	1	0	1	41	2	44	0	87	22	143	0	0	165	0	134	0	0	134	387
08:15 AM	0	0	0	0	0	36	0	31	0	67	26	146	0	0	172	0	125	0	0	125	364
08:30 AM	0	0	0	0	0	26	0	42	0	68	13	155	0	0	168	0	113	0	0	113	349
08:45 AM	0	0	0	0	0	37	0	37	0	74	20	157	0	0	177	0	107	0	0	107	358
Total	0	0	1	0	1	140	2	154	0	296	81	601	0	0	682	0	479	0	0	479	1458
09:00 AM	0	0	0	0	0	30	0	27	0	57	15	119	0	0	134	0	117	0	0	117	308
09:15 AM	0	0	0	0	0	25	0	49	0	74	22	139	0	0	161	0	101	0	0	101	336
Grand Total	0	0	1	0	1	432	2	393	0	827	244	1654	0	0	1898	0	1482	0	0	1482	4208
Apprch %	0	0	100	0		52.2	0.2	47.5	0		12.9	87.1	0	0		0	100	0	0		
Total %	0	0	0	0	0	10.3	0	9.3	0	19.7	5.8	39.3	0	0	45.1	0	35.2	0	0	35.2	

Start Time	W Ramp Eastbound				E Ramp Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	38	0	33	71	25	162	0	187	0	150	0	150	408
07:45 AM	0	0	0	0	59	0	40	99	19	185	0	204	0	163	0	163	466
08:00 AM	0	0	1	1	41	2	44	87	22	143	0	165	0	134	0	134	387
08:15 AM	0	0	0	0	36	0	31	67	26	146	0	172	0	125	0	125	364
Total Volume	0	0	1	1	174	2	148	324	92	636	0	728	0	572	0	572	1625
% App. Total	0	0	100		53.7	0.6	45.7		12.6	87.4	0		0	100	0		
PHF	.000	.000	.250	.250	.737	.250	.841	.818	.885	.859	.000	.892	.000	.877	.000	.877	.872

Peggy Malone & Associates

(888) 247-8602

File Name : 3-US 340 and I-64 West Ramps AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	W Ramp Eastbound					E Ramp Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	6	0	0	6	8
06:45 AM	0	0	0	0	0	2	0	0	0	2	3	3	0	0	6	0	2	0	0	2	10
Total	0	0	0	0	0	2	0	0	0	2	4	4	0	0	8	0	8	0	0	8	18
07:00 AM	0	0	0	0	0	1	0	3	0	4	2	6	0	0	8	0	2	0	0	2	14
07:15 AM	0	0	0	0	0	4	0	2	0	6	3	5	0	0	8	0	4	0	0	4	18
07:30 AM	0	0	0	0	0	5	0	0	0	5	3	1	0	0	4	0	6	0	0	6	15
07:45 AM	0	0	0	0	0	4	0	2	0	6	4	5	0	0	9	0	6	0	0	6	21
Total	0	0	0	0	0	14	0	7	0	21	12	17	0	0	29	0	18	0	0	18	68
08:00 AM	0	0	0	0	0	2	0	0	0	2	5	4	0	0	9	0	5	0	0	5	16
08:15 AM	0	0	0	0	0	2	0	0	0	2	3	3	0	0	6	0	3	0	0	3	11
08:30 AM	0	0	0	0	0	3	0	0	0	3	3	5	0	0	8	0	3	0	0	3	14
08:45 AM	0	0	0	0	0	5	0	2	0	7	2	3	0	0	5	0	3	0	0	3	15
Total	0	0	0	0	0	12	0	2	0	14	13	15	0	0	28	0	14	0	0	14	56
09:00 AM	0	0	0	0	0	3	0	2	0	5	2	4	0	0	6	0	5	0	0	5	16
09:15 AM	0	0	0	0	0	0	0	2	0	2	5	6	0	0	11	0	2	0	0	2	15
Grand Total	0	0	0	0	0	31	0	13	0	44	36	46	0	0	82	0	47	0	0	47	173
Apprch %	0	0	0	0	0	70.5	0	29.5	0	25.4	43.9	56.1	0	0	47.4	0	100	0	0	0	173
Total %	0	0	0	0	0	17.9	0	7.5	0	25.4	20.8	26.6	0	0	47.4	0	27.2	0	0	27.2	173

Start Time	W Ramp Eastbound				E Ramp Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	4	0	2	6	3	5	0	8	0	4	0	4	18
07:30 AM	0	0	0	0	5	0	0	5	3	1	0	4	0	6	0	6	15
07:45 AM	0	0	0	0	4	0	2	6	4	5	0	9	0	6	0	6	21
08:00 AM	0	0	0	0	2	0	0	2	5	4	0	9	0	5	0	5	16
Total Volume	0	0	0	0	15	0	4	19	15	15	0	30	0	21	0	21	70
% App. Total	0	0	0	0	78.9	0	21.1	25.4	50	50	0	75	0	100	0	75	173
PHF	.000	.000	.000	.000	.750	.000	.500	.792	.750	.750	.000	.833	.000	.875	.000	.875	.833

Peggy Malone & Associates

(888) 247-8602

File Name : 3-US 340 and I-64 West Ramps AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	W Ramp Eastbound					E Ramp Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	0	0	0	0	0	41	0	18	0	59	12	84	0	0	96	0	107	0	0	107	262
06:45 AM	0	0	0	0	0	38	0	20	0	58	23	114	0	0	137	0	91	0	0	91	286
Total	0	0	0	0	0	79	0	38	0	117	35	198	0	0	233	0	198	0	0	198	548
07:00 AM	0	0	0	0	0	28	0	23	0	51	27	122	0	0	149	0	154	0	0	154	354
07:15 AM	0	0	0	0	0	40	0	34	0	74	29	143	0	0	172	0	134	0	0	134	380
07:30 AM	0	0	0	0	0	43	0	33	0	76	28	163	0	0	191	0	156	0	0	156	423
07:45 AM	0	0	0	0	0	63	0	42	0	105	23	190	0	0	213	0	169	0	0	169	487
Total	0	0	0	0	0	174	0	132	0	306	107	618	0	0	725	0	613	0	0	613	1644
08:00 AM	0	0	1	0	1	43	2	44	0	89	27	147	0	0	174	0	139	0	0	139	403
08:15 AM	0	0	0	0	0	38	0	31	0	69	29	149	0	0	178	0	128	0	0	128	375
08:30 AM	0	0	0	0	0	29	0	42	0	71	16	160	0	0	176	0	116	0	0	116	363
08:45 AM	0	0	0	0	0	42	0	39	0	81	22	160	0	0	182	0	110	0	0	110	373
Total	0	0	1	0	1	152	2	156	0	310	94	616	0	0	710	0	493	0	0	493	1514
09:00 AM	0	0	0	0	0	33	0	29	0	62	17	123	0	0	140	0	122	0	0	122	324
09:15 AM	0	0	0	0	0	25	0	51	0	76	27	145	0	0	172	0	103	0	0	103	351
Grand Total	0	0	1	0	1	463	2	406	0	871	280	1700	0	0	1980	0	1529	0	0	1529	4381
Apprch %	0	0	100	0		53.2	0.2	46.6	0		14.1	85.9	0	0		0	100	0	0		
Total %	0	0	0	0	0	10.6	0	9.3	0	19.9	6.4	38.8	0	0	45.2	0	34.9	0	0	34.9	

Start Time	W Ramp Eastbound				E Ramp Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	40	0	34	74	29	143	0	172	0	134	0	134	380
07:30 AM	0	0	0	0	43	0	33	76	28	163	0	191	0	156	0	156	423
07:45 AM	0	0	0	0	63	0	42	105	23	190	0	213	0	169	0	169	487
08:00 AM	0	0	1	1	43	2	44	89	27	147	0	174	0	139	0	139	403
Total Volume	0	0	1	1	189	2	153	344	107	643	0	750	0	598	0	598	1693
% App. Total	0	0	100		54.9	0.6	44.5		14.3	85.7	0		0	100	0		
PHF	.000	.000	.250	.250	.750	.250	.869	.819	.922	.846	.000	.880	.000	.885	.000	.885	.869

Peggy Malone & Associates

(888) 247-8602

File Name : 3-US 340 and I-64 West Ramps MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	W Ramp Eastbound					E Ramp Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	0	0	0	0	0	25	0	50	0	75	19	181	0	0	200	0	165	0	0	165	440
11:15 AM	0	0	0	0	0	22	0	49	0	71	20	164	0	0	184	0	155	0	0	155	410
11:30 AM	0	0	0	0	0	45	0	43	0	88	38	207	0	0	245	0	155	0	0	155	488
11:45 AM	0	0	0	0	0	46	0	38	0	84	33	210	0	0	243	0	181	0	0	181	508
Total	0	0	0	0	0	138	0	180	0	318	110	762	0	0	872	0	656	0	0	656	1846
12:00 PM	0	0	0	0	0	30	1	56	0	87	19	193	0	0	212	0	156	0	0	156	455
12:15 PM	0	0	0	0	0	39	0	57	0	96	32	208	0	0	240	0	183	0	0	183	519
12:30 PM	0	0	0	0	0	37	0	47	0	84	46	215	0	0	261	0	207	0	0	207	552
12:45 PM	0	0	0	0	0	24	0	41	0	65	32	167	0	0	199	0	204	0	0	204	468
Total	0	0	0	0	0	130	1	201	0	332	129	783	0	0	912	0	750	0	0	750	1994
Grand Total	0	0	0	0	0	268	1	381	0	650	239	1545	0	0	1784	0	1406	0	0	1406	3840
Apprch %	0	0	0	0	0	41.2	0.2	58.6	0	16.9	13.4	86.6	0	0	46.5	0	100	0	0	36.6	
Total %	0	0	0	0	0	7	0	9.9	0	16.9	6.2	40.2	0	0	46.5	0	36.6	0	0	36.6	

Start Time	W Ramp Eastbound				E Ramp Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	0	0	0	0	46	0	38	84	33	210	0	243	0	181	0	181	508
12:00 PM	0	0	0	0	30	1	56	87	19	193	0	212	0	156	0	156	455
12:15 PM	0	0	0	0	39	0	57	96	32	208	0	240	0	183	0	183	519
12:30 PM	0	0	0	0	37	0	47	84	46	215	0	261	0	207	0	207	552
Total Volume	0	0	0	0	152	1	198	351	130	826	0	956	0	727	0	727	2034
% App. Total	0	0	0	0	43.3	0.3	56.4	16.9	13.6	86.4	0	46.5	0	100	0	36.6	
PHF	.000	.000	.000	.000	.826	.250	.868	.914	.707	.960	.000	.916	.000	.878	.000	.878	.921

Peggy Malone & Associates

(888) 247-8602

File Name : 3-US 340 and I-64 West Ramps MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	W Ramp Eastbound					E Ramp Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	0	0	0	0	0	4	0	1	0	5	3	4	0	0	7	0	4	0	0	4	16
11:15 AM	0	0	0	0	0	5	0	0	0	5	2	1	0	0	3	0	4	0	0	4	12
11:30 AM	0	0	0	0	0	4	0	0	0	4	5	5	0	0	10	0	3	0	0	3	17
11:45 AM	0	0	0	0	0	2	0	2	0	4	1	1	0	0	2	0	4	0	0	4	10
Total	0	0	0	0	0	15	0	3	0	18	11	11	0	0	22	0	15	0	0	15	55
12:00 PM	0	0	0	0	0	1	0	1	0	2	5	11	0	0	16	0	3	0	0	3	21
12:15 PM	0	0	0	0	0	2	0	0	0	2	2	5	0	0	7	0	3	0	0	3	12
12:30 PM	0	0	0	0	0	5	0	0	0	5	5	1	0	0	6	0	7	0	0	7	18
12:45 PM	0	0	0	0	0	1	0	1	0	2	3	4	0	0	7	0	2	0	0	2	11
Total	0	0	0	0	0	9	0	2	0	11	15	21	0	0	36	0	15	0	0	15	62
Grand Total	0	0	0	0	0	24	0	5	0	29	26	32	0	0	58	0	30	0	0	30	117
Apprch %	0	0	0	0	0	82.8	0	17.2	0	24.8	44.8	55.2	0	0	49.6	0	100	0	0	25.6	
Total %	0	0	0	0	0	20.5	0	4.3	0	24.8	22.2	27.4	0	0	49.6	0	25.6	0	0	25.6	

Start Time	W Ramp Eastbound				E Ramp Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	0	0	0	0	1	0	1	2	5	11	0	16	0	3	0	3	21
12:15 PM	0	0	0	0	2	0	0	2	2	5	0	7	0	3	0	3	12
12:30 PM	0	0	0	0	5	0	0	5	5	1	0	6	0	7	0	7	18
12:45 PM	0	0	0	0	1	0	1	2	3	4	0	7	0	2	0	2	11
Total Volume	0	0	0	0	9	0	2	11	15	21	0	36	0	15	0	15	62
% App. Total	0	0	0	0	81.8	0	18.2	24.8	41.7	58.3	0	49.6	0	100	0	25.6	
PHF	.000	.000	.000	.000	.450	.000	.500	.550	.750	.477	.000	.563	.000	.536	.000	.536	.738

Peggy Malone & Associates

(888) 247-8602

File Name : 3-US 340 and I-64 West Ramps MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	W Ramp Eastbound					E Ramp Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	0	0	0	0	0	29	0	51	0	80	22	185	0	0	207	0	169	0	0	169	456
11:15 AM	0	0	0	0	0	27	0	49	0	76	22	165	0	0	187	0	159	0	0	159	422
11:30 AM	0	0	0	0	0	49	0	43	0	92	43	212	0	0	255	0	158	0	0	158	505
11:45 AM	0	0	0	0	0	48	0	40	0	88	34	211	0	0	245	0	185	0	0	185	518
Total	0	0	0	0	0	153	0	183	0	336	121	773	0	0	894	0	671	0	0	671	1901
12:00 PM	0	0	0	0	0	31	1	57	0	89	24	204	0	0	228	0	159	0	0	159	476
12:15 PM	0	0	0	0	0	41	0	57	0	98	34	213	0	0	247	0	186	0	0	186	531
12:30 PM	0	0	0	0	0	42	0	47	0	89	51	216	0	0	267	0	214	0	0	214	570
12:45 PM	0	0	0	0	0	25	0	42	0	67	35	171	0	0	206	0	206	0	0	206	479
Total	0	0	0	0	0	139	1	203	0	343	144	804	0	0	948	0	765	0	0	765	2056
Grand Total	0	0	0	0	0	292	1	386	0	679	265	1577	0	0	1842	0	1436	0	0	1436	3957
Apprch %	0	0	0	0	0	43	0.1	56.8	0	679	14.4	85.6	0	0	1842	0	100	0	0	1436	3957
Total %	0	0	0	0	0	7.4	0	9.8	0	17.2	6.7	39.9	0	0	46.6	0	36.3	0	0	36.3	100

Start Time	W Ramp Eastbound				E Ramp Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	0	0	0	0	48	0	40	88	34	211	0	245	0	185	0	185	518
12:00 PM	0	0	0	0	31	1	57	89	24	204	0	228	0	159	0	159	476
12:15 PM	0	0	0	0	41	0	57	98	34	213	0	247	0	186	0	186	531
12:30 PM	0	0	0	0	42	0	47	89	51	216	0	267	0	214	0	214	570
Total Volume	0	0	0	0	162	1	201	364	143	844	0	987	0	744	0	744	2095
% App. Total	0	0	0	0	44.5	0.3	55.2	92.9	14.5	85.5	0	92.4	0	100	0	100	919
PHF	.000	.000	.000	.000	.844	.250	.882	.929	.701	.977	.000	.924	.000	.869	.000	.869	.919

Peggy Malone & Associates

(888) 247-8602

File Name : 3-US 340 and I-64 West Ramps PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	W Ramp Eastbound					E Ramp Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	0	0	0	0	0	35	0	59	0	94	29	192	0	0	221	0	198	0	0	198	513
03:15 PM	0	0	0	0	0	42	0	75	0	117	21	231	0	0	252	0	213	0	0	213	582
03:30 PM	0	0	0	0	0	59	0	64	0	123	27	216	0	0	243	0	200	0	0	200	566
03:45 PM	0	0	0	0	0	54	0	58	0	112	51	279	0	0	330	0	193	0	0	193	635
Total	0	0	0	0	0	190	0	256	0	446	128	918	0	0	1046	0	804	0	0	804	2296
04:00 PM	0	0	0	0	0	35	0	51	0	86	35	220	0	0	255	0	203	0	0	203	544
04:15 PM	0	0	0	0	0	59	0	71	0	130	48	232	0	0	280	0	197	0	0	197	607
04:30 PM	0	0	0	0	0	66	0	105	0	171	27	256	0	0	283	0	228	0	0	228	682
04:45 PM	0	0	0	0	0	67	0	100	0	167	33	239	0	0	272	0	221	1	0	222	661
Total	0	0	0	0	0	227	0	327	0	554	143	947	0	0	1090	0	849	1	0	850	2494
05:00 PM	0	0	0	0	0	84	0	103	0	187	64	255	0	0	319	0	217	0	0	217	723
05:15 PM	0	0	0	0	0	78	0	119	0	197	44	270	0	0	314	0	222	0	0	222	733
05:30 PM	0	0	0	0	0	66	0	86	0	152	42	247	0	0	289	0	209	0	0	209	650
05:45 PM	0	0	0	0	0	77	0	128	0	205	30	223	0	0	253	0	217	1	0	218	676
Total	0	0	0	0	0	305	0	436	0	741	180	995	0	0	1175	0	865	1	0	866	2782
Grand Total	0	0	0	0	0	722	0	1019	0	1741	451	2860	0	0	3311	0	2518	2	0	2520	7572
Apprch %	0	0	0	0	0	41.5	0	58.5	0	17.4	13.6	86.4	0	0	43.7	0	99.9	0.1	0	33.3	
Total %	0	0	0	0	0	9.5	0	13.5	0	23	6	37.8	0	0	43.7	0	33.3	0	0	33.3	

Start Time	W Ramp Eastbound				E Ramp Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	66	0	105	171	27	256	0	283	0	228	0	228	682
04:45 PM	0	0	0	0	67	0	100	167	33	239	0	272	0	221	1	222	661
05:00 PM	0	0	0	0	84	0	103	187	64	255	0	319	0	217	0	217	723
05:15 PM	0	0	0	0	78	0	119	197	44	270	0	314	0	222	0	222	733
Total Volume	0	0	0	0	295	0	427	722	168	1020	0	1188	0	888	1	889	2799
% App. Total	0	0	0	0	40.9	0	59.1	17.4	14.1	85.9	0	43.7	0	99.9	0.1	33.3	
PHF	.000	.000	.000	.000	.878	.000	.897	.916	.656	.944	.000	.931	.000	.974	.250	.975	.955

Peggy Malone & Associates

(888) 247-8602

File Name : 3-US 340 and I-64 West Ramps PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	W Ramp Eastbound					E Ramp Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	0	0	0	0	0	4	0	0	0	4	3	8	0	0	11	0	4	0	0	4	19
03:15 PM	0	0	0	0	0	4	0	2	0	6	1	6	0	0	7	0	4	0	0	4	17
03:30 PM	0	0	0	0	0	8	0	1	0	9	3	6	0	0	9	0	4	0	0	4	22
03:45 PM	0	0	0	0	0	2	0	1	0	3	2	6	0	0	8	0	3	0	0	3	14
Total	0	0	0	0	0	18	0	4	0	22	9	26	0	0	35	0	15	0	0	15	72
04:00 PM	0	0	0	0	0	3	0	5	0	8	1	1	0	0	2	0	2	0	0	2	12
04:15 PM	0	0	0	0	0	5	0	2	0	7	4	3	0	0	7	0	2	0	0	2	16
04:30 PM	0	0	0	0	0	4	0	4	0	8	3	4	0	0	7	0	3	0	0	3	18
04:45 PM	0	0	0	0	0	5	0	5	0	10	4	1	0	0	5	0	2	0	0	2	17
Total	0	0	0	0	0	17	0	16	0	33	12	9	0	0	21	0	9	0	0	9	63
05:00 PM	0	0	0	0	0	2	0	0	0	2	1	3	0	0	4	0	3	0	0	3	9
05:15 PM	0	0	0	0	0	7	0	1	0	8	3	1	0	0	4	0	3	0	0	3	15
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	3	0	0	3	6
05:45 PM	0	0	0	0	0	3	0	2	0	5	1	3	0	0	4	0	0	0	0	0	9
Total	0	0	0	0	0	12	0	3	0	15	6	9	0	0	15	0	9	0	0	9	39
Grand Total	0	0	0	0	0	47	0	23	0	70	27	44	0	0	71	0	33	0	0	33	174
Apprch %	0	0	0	0	0	67.1	0	32.9	0	0	38	62	0	0	0	0	100	0	0	0	0
Total %	0	0	0	0	0	27	0	13.2	0	40.2	15.5	25.3	0	0	40.8	0	19	0	0	19	0

Start Time	W Ramp Eastbound				E Ramp Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	0	0	0	4	0	0	4	3	8	0	11	0	4	0	4	19
03:15 PM	0	0	0	0	4	0	2	6	1	6	0	7	0	4	0	4	17
03:30 PM	0	0	0	0	8	0	1	9	3	6	0	9	0	4	0	4	22
03:45 PM	0	0	0	0	2	0	1	3	2	6	0	8	0	3	0	3	14
Total Volume	0	0	0	0	18	0	4	22	9	26	0	35	0	15	0	15	72
% App. Total	0	0	0	0	81.8	0	18.2	0	25.7	74.3	0	0	0	100	0	0	0
PHF	.000	.000	.000	.000	.563	.000	.500	.611	.750	.813	.000	.795	.000	.938	.000	.938	.818

Peggy Malone & Associates

(888) 247-8602

File Name : 3-US 340 and I-64 West Ramps PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	W Ramp Eastbound					E Ramp Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	0	0	0	0	0	39	0	59	0	98	32	200	0	0	232	0	202	0	0	202	532
03:15 PM	0	0	0	0	0	46	0	77	0	123	22	237	0	0	259	0	217	0	0	217	599
03:30 PM	0	0	0	0	0	67	0	65	0	132	30	222	0	0	252	0	204	0	0	204	588
03:45 PM	0	0	0	0	0	56	0	59	0	115	53	285	0	0	338	0	196	0	0	196	649
Total	0	0	0	0	0	208	0	260	0	468	137	944	0	0	1081	0	819	0	0	819	2368
04:00 PM	0	0	0	0	0	38	0	56	0	94	36	221	0	0	257	0	205	0	0	205	556
04:15 PM	0	0	0	0	0	64	0	73	0	137	52	235	0	0	287	0	199	0	0	199	623
04:30 PM	0	0	0	0	0	70	0	109	0	179	30	260	0	0	290	0	231	0	0	231	700
04:45 PM	0	0	0	0	0	72	0	105	0	177	37	240	0	0	277	0	223	1	0	224	678
Total	0	0	0	0	0	244	0	343	0	587	155	956	0	0	1111	0	858	1	0	859	2557
05:00 PM	0	0	0	0	0	86	0	103	0	189	65	258	0	0	323	0	220	0	0	220	732
05:15 PM	0	0	0	0	0	85	0	120	0	205	47	271	0	0	318	0	225	0	0	225	748
05:30 PM	0	0	0	0	0	66	0	86	0	152	43	249	0	0	292	0	212	0	0	212	656
05:45 PM	0	0	0	0	0	80	0	130	0	210	31	226	0	0	257	0	217	1	0	218	685
Total	0	0	0	0	0	317	0	439	0	756	186	1004	0	0	1190	0	874	1	0	875	2821
Grand Total	0	0	0	0	0	769	0	1042	0	1811	478	2904	0	0	3382	0	2551	2	0	2553	7746
Apprch %	0	0	0	0	0	42.5	0	57.5	0	23.4	14.1	85.9	0	0	43.7	0	99.9	0.1	0	33	
Total %	0	0	0	0	0	9.9	0	13.5	0	23.4	6.2	37.5	0	0	43.7	0	32.9	0	0	33	

Start Time	W Ramp Eastbound				E Ramp Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	70	0	109	179	30	260	0	290	0	231	0	231	700
04:45 PM	0	0	0	0	72	0	105	177	37	240	0	277	0	223	1	224	678
05:00 PM	0	0	0	0	86	0	103	189	65	258	0	323	0	220	0	220	732
05:15 PM	0	0	0	0	85	0	120	205	47	271	0	318	0	225	0	225	748
Total Volume	0	0	0	0	313	0	437	750	179	1029	0	1208	0	899	1	900	2858
% App. Total	0	0	0	0	41.7	0	58.3		14.8	85.2	0		0	99.9	0.1		
PHF	.000	.000	.000	.000	.910	.000	.910	.915	.688	.949	.000	.935	.000	.973	.250	.974	.955

Peggy Malone & Associates

(888) 247-8602

File Name : 4-US 340 and Lew Dewitt_Windigrove Dr AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Lee Dewitt Eastbound					Windigrove Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	4	1	43	0	48	21	3	9	0	33	29	62	7	0	98	1	72	10	0	83	262
06:45 AM	8	5	39	0	52	32	5	3	0	40	47	77	9	0	133	6	57	14	0	77	302
Total	12	6	82	0	100	53	8	12	0	73	76	139	16	0	231	7	129	24	0	160	564
07:00 AM	10	0	73	0	83	41	6	7	0	54	42	70	15	0	127	3	101	17	0	121	385
07:15 AM	17	5	80	0	102	43	4	10	0	57	50	110	12	0	172	7	103	15	0	125	456
07:30 AM	19	4	72	0	95	43	9	8	0	60	69	111	17	0	197	7	116	22	0	145	497
07:45 AM	26	3	61	0	90	53	12	7	0	72	79	120	21	0	220	6	129	24	0	159	541
Total	72	12	286	0	370	180	31	32	0	243	240	411	65	0	716	23	449	78	0	550	1879
08:00 AM	14	4	61	0	79	43	6	9	0	58	78	99	14	0	191	2	110	17	0	129	457
08:15 AM	9	1	67	0	77	28	13	6	0	47	70	78	22	0	170	4	102	28	0	134	428
08:30 AM	11	6	57	0	74	26	7	2	0	35	80	91	21	0	192	6	95	18	0	119	420
08:45 AM	16	10	53	0	79	21	14	6	0	41	77	104	12	0	193	3	76	14	0	93	406
Total	50	21	238	0	309	118	40	23	0	181	305	372	69	0	746	15	383	77	0	475	1711
09:00 AM	10	3	70	0	83	24	9	3	0	36	73	68	13	0	154	6	79	22	0	107	380
09:15 AM	12	7	55	0	74	22	8	5	0	35	66	98	14	0	178	4	74	23	0	101	388
Grand Total	156	49	731	0	936	397	96	75	0	568	760	1088	177	0	2025	55	1114	224	0	1393	4922
Apprch %	16.7	5.2	78.1	0		69.9	16.9	13.2	0		37.5	53.7	8.7	0		3.9	80	16.1	0		
Total %	3.2	1	14.9	0	19	8.1	2	1.5	0	11.5	15.4	22.1	3.6	0	41.1	1.1	22.6	4.6	0	28.3	

Start Time	Lee Dewitt Eastbound				Windigrove Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	17	5	80	102	43	4	10	57	50	110	12	172	7	103	15	125	456
07:30 AM	19	4	72	95	43	9	8	60	69	111	17	197	7	116	22	145	497
07:45 AM	26	3	61	90	53	12	7	72	79	120	21	220	6	129	24	159	541
08:00 AM	14	4	61	79	43	6	9	58	78	99	14	191	2	110	17	129	457
Total Volume	76	16	274	366	182	31	34	247	276	440	64	780	22	458	78	558	1951
% App. Total	20.8	4.4	74.9		73.7	12.6	13.8		35.4	56.4	8.2		3.9	82.1	14		
PHF	.731	.800	.856	.897	.858	.646	.850	.858	.873	.917	.762	.886	.786	.888	.813	.877	.902

Peggy Malone & Associates

(888) 247-8602

File Name : 4-US 340 and Lew Dewitt_Windigrove Dr AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Lee Dewitt Eastbound					Windigrove Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	0	0	3	0	3	2	1	0	0	3	1	3	0	0	4	0	1	0	0	1	11
06:45 AM	0	0	2	0	2	1	0	1	0	2	1	1	1	0	3	0	0	0	0	0	7
Total	0	0	5	0	5	3	1	1	0	5	2	4	1	0	7	0	1	0	0	1	18
07:00 AM	0	0	0	0	0	0	0	1	0	1	4	4	0	0	8	1	5	0	0	6	15
07:15 AM	0	1	0	0	1	3	2	0	0	5	0	5	1	0	6	0	3	0	0	3	15
07:30 AM	2	0	3	0	5	1	0	1	0	2	0	1	0	0	1	0	6	1	0	7	15
07:45 AM	1	0	3	0	4	1	0	0	0	1	2	3	0	0	5	0	2	0	0	2	12
Total	3	1	6	0	10	5	2	2	0	9	6	13	1	0	20	1	16	1	0	18	57
08:00 AM	1	0	2	0	3	2	0	0	0	2	3	2	2	0	7	0	5	0	0	5	17
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	4	0	0	4	5
08:30 AM	0	0	2	0	2	0	1	0	0	1	1	4	0	0	5	0	4	0	0	4	12
08:45 AM	0	0	3	0	3	1	0	0	0	1	2	2	0	0	4	0	1	0	0	1	9
Total	1	0	7	0	8	3	1	0	0	4	6	9	2	0	17	0	14	0	0	14	43
09:00 AM	0	0	2	0	2	0	0	0	0	0	1	3	1	0	5	0	3	1	0	4	11
09:15 AM	0	0	4	0	4	1	0	0	0	1	0	5	1	0	6	0	1	0	0	1	12
Grand Total	4	1	24	0	29	12	4	3	0	19	15	34	6	0	55	1	35	2	0	38	141
Apprch %	13.8	3.4	82.8	0		63.2	21.1	15.8	0		27.3	61.8	10.9	0		2.6	92.1	5.3	0		
Total %	2.8	0.7	17	0	20.6	8.5	2.8	2.1	0	13.5	10.6	24.1	4.3	0	39	0.7	24.8	1.4	0		27

Start Time	Lee Dewitt Eastbound				Windigrove Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	0	1	3	2	0	5	0	5	1	6	0	3	0	3	15
07:30 AM	2	0	3	5	1	0	1	2	0	1	0	1	0	6	1	7	15
07:45 AM	1	0	3	4	1	0	0	1	2	3	0	5	0	2	0	2	12
08:00 AM	1	0	2	3	2	0	0	2	3	2	2	7	0	5	0	5	17
Total Volume	4	1	8	13	7	2	1	10	5	11	3	19	0	16	1	17	59
% App. Total	30.8	7.7	61.5		70	20	10		26.3	57.9	15.8		0	94.1	5.9		
PHF	.500	.250	.667	.650	.583	.250	.250	.500	.417	.550	.375	.679	.000	.667	.250	.607	.868

Peggy Malone & Associates

(888) 247-8602

File Name : 4-US 340 and Lew Dewitt_Windigrove Dr AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Lee Dewitt Eastbound					Windigrove Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	4	1	46	0	51	23	4	9	0	36	30	65	7	0	102	1	73	10	0	84	273
06:45 AM	8	5	41	0	54	33	5	4	0	42	48	78	10	0	136	6	57	14	0	77	309
Total	12	6	87	0	105	56	9	13	0	78	78	143	17	0	238	7	130	24	0	161	582
07:00 AM	10	0	73	0	83	41	6	8	0	55	46	74	15	0	135	4	106	17	0	127	400
07:15 AM	17	6	80	0	103	46	6	10	0	62	50	115	13	0	178	7	106	15	0	128	471
07:30 AM	21	4	75	0	100	44	9	9	0	62	69	112	17	0	198	7	122	23	0	152	512
07:45 AM	27	3	64	0	94	54	12	7	0	73	81	123	21	0	225	6	131	24	0	161	553
Total	75	13	292	0	380	185	33	34	0	252	246	424	66	0	736	24	465	79	0	568	1936
08:00 AM	15	4	63	0	82	45	6	9	0	60	81	101	16	0	198	2	115	17	0	134	474
08:15 AM	9	1	67	0	77	28	13	6	0	47	70	79	22	0	171	4	106	28	0	138	433
08:30 AM	11	6	59	0	76	26	8	2	0	36	81	95	21	0	197	6	99	18	0	123	432
08:45 AM	16	10	56	0	82	22	14	6	0	42	79	106	12	0	197	3	77	14	0	94	415
Total	51	21	245	0	317	121	41	23	0	185	311	381	71	0	763	15	397	77	0	489	1754
09:00 AM	10	3	72	0	85	24	9	3	0	36	74	71	14	0	159	6	82	23	0	111	391
09:15 AM	12	7	59	0	78	23	8	5	0	36	66	103	15	0	184	4	75	23	0	102	400
Grand Total	160	50	755	0	965	409	100	78	0	587	775	1122	183	0	2080	56	1149	226	0	1431	5063
Apprch %	16.6	5.2	78.2	0		69.7	17	13.3	0		37.3	53.9	8.8	0		3.9	80.3	15.8	0		
Total %	3.2	1	14.9	0	19.1	8.1	2	1.5	0	11.6	15.3	22.2	3.6	0	41.1	1.1	22.7	4.5	0	28.3	

Start Time	Lee Dewitt Eastbound				Windigrove Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	17	6	80	103	46	6	10	62	50	115	13	178	7	106	15	128	471
07:30 AM	21	4	75	100	44	9	9	62	69	112	17	198	7	122	23	152	512
07:45 AM	27	3	64	94	54	12	7	73	81	123	21	225	6	131	24	161	553
08:00 AM	15	4	63	82	45	6	9	60	81	101	16	198	2	115	17	134	474
Total Volume	80	17	282	379	189	33	35	257	281	451	67	799	22	474	79	575	2010
% App. Total	21.1	4.5	74.4		73.5	12.8	13.6		35.2	56.4	8.4		3.8	82.4	13.7		
PHF	.741	.708	.881	.920	.875	.688	.875	.880	.867	.917	.798	.888	.786	.905	.823	.893	.909

Peggy Malone & Associates

(888) 247-8602

File Name : 4-US 340 and Lew Dewitt_Windigrove Dr MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Lee Dewitt Blvd Eastbound					Windigrove Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	12	13	85	0	110	19	10	10	0	39	97	103	21	0	221	9	107	32	0	148	518
11:15 AM	21	18	84	0	123	18	13	12	0	43	103	84	31	0	218	16	84	30	0	130	514
11:30 AM	29	10	88	0	127	23	20	13	0	56	106	107	29	0	242	5	103	32	0	140	565
11:45 AM	20	14	91	0	125	24	14	13	0	51	103	115	33	1	252	11	114	24	0	149	577
Total	82	55	348	0	485	84	57	48	0	189	409	409	114	1	933	41	408	118	0	567	2174
12:00 PM	28	20	72	0	120	19	8	15	0	42	118	111	32	0	261	15	110	20	0	145	568
12:15 PM	25	17	85	0	127	30	14	11	0	55	108	76	46	0	230	16	109	31	0	156	568
12:30 PM	25	11	81	0	117	27	25	14	0	66	115	103	42	1	261	15	137	38	0	190	634
12:45 PM	25	18	92	0	135	32	21	14	0	67	96	84	24	0	204	16	135	26	0	177	583
Total	103	66	330	0	499	108	68	54	0	230	437	374	144	1	956	62	491	115	0	668	2353
Grand Total	185	121	678	0	984	192	125	102	0	419	846	783	258	2	1889	103	899	233	0	1235	4527
Apprch %	18.8	12.3	68.9	0		45.8	29.8	24.3	0		44.8	41.5	13.7	0.1		8.3	72.8	18.9	0		
Total %	4.1	2.7	15	0	21.7	4.2	2.8	2.3	0	9.3	18.7	17.3	5.7	0	41.7	2.3	19.9	5.1	0	27.3	

Start Time	Lee Dewitt Blvd Eastbound				Windigrove Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	28	20	72	120	19	8	15	42	118	111	32	261	15	110	20	145	568
12:15 PM	25	17	85	127	30	14	11	55	108	76	46	230	16	109	31	156	568
12:30 PM	25	11	81	117	27	25	14	66	115	103	42	260	15	137	38	190	633
12:45 PM	25	18	92	135	32	21	14	67	96	84	24	204	16	135	26	177	583
Total Volume	103	66	330	499	108	68	54	230	437	374	144	955	62	491	115	668	2352
% App. Total	20.6	13.2	66.1		47	29.6	23.5		45.8	39.2	15.1		9.3	73.5	17.2		
PHF	.920	.825	.897	.924	.844	.680	.900	.858	.926	.842	.783	.915	.969	.896	.757	.879	.929

Peggy Malone & Associates

(888) 247-8602

File Name : 4-US 340 and Lew Dewitt_Windigrove Dr MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Lee Dewitt Blvd Eastbound					Windigrove Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	0	0	1	0	1	2	0	0	0	2	2	4	0	0	6	1	2	0	0	3	12
11:15 AM	1	0	3	0	4	1	1	0	0	2	1	0	0	0	1	0	2	0	0	2	9
11:30 AM	0	1	0	0	1	1	0	0	0	1	0	2	0	0	2	0	3	0	0	3	7
11:45 AM	0	0	1	0	1	0	0	0	0	0	3	3	0	0	6	0	3	0	0	3	10
Total	1	1	5	0	7	4	1	0	0	5	6	9	0	0	15	1	10	0	0	11	38
12:00 PM	0	2	3	0	5	1	0	0	0	1	6	2	3	0	11	0	2	0	0	2	19
12:15 PM	0	1	3	0	4	0	1	1	0	2	1	1	1	0	3	0	2	3	0	5	14
12:30 PM	0	0	3	0	3	0	1	0	0	1	0	1	0	0	1	1	7	0	0	8	13
12:45 PM	0	1	0	0	1	2	0	1	0	3	1	4	0	0	5	0	2	0	0	2	11
Total	0	4	9	0	13	3	2	2	0	7	8	8	4	0	20	1	13	3	0	17	57
Grand Total	1	5	14	0	20	7	3	2	0	12	14	17	4	0	35	2	23	3	0	28	95
Apprch %	5	25	70	0		58.3	25	16.7	0		40	48.6	11.4	0		7.1	82.1	10.7	0		
Total %	1.1	5.3	14.7	0	21.1	7.4	3.2	2.1	0	12.6	14.7	17.9	4.2	0	36.8	2.1	24.2	3.2	0	29.5	

Start Time	Lee Dewitt Blvd Eastbound				Windigrove Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	0	2	3	5	1	0	0	1	6	2	3	11	0	2	0	2	19
12:15 PM	0	1	3	4	0	1	1	2	1	1	1	3	0	2	3	5	14
12:30 PM	0	0	3	3	0	1	0	1	0	1	0	1	1	7	0	8	13
12:45 PM	0	1	0	1	2	0	1	3	1	4	0	5	0	2	0	2	11
Total Volume	0	4	9	13	3	2	2	7	8	8	4	20	1	13	3	17	57
% App. Total	0	30.8	69.2		42.9	28.6	28.6		40	40	20		5.9	76.5	17.6		
PHF	.000	.500	.750	.650	.375	.500	.500	.583	.333	.500	.333	.455	.250	.464	.250	.531	.750

Peggy Malone & Associates

(888) 247-8602

File Name : 4-US 340 and Lew Dewitt_Windigrove Dr MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Lee Dewitt Blvd Eastbound					Windigrove Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	12	13	86	0	111	21	10	10	0	41	99	107	21	0	227	10	109	32	0	151	530
11:15 AM	22	18	87	0	127	19	14	12	0	45	104	84	31	0	219	16	86	30	0	132	523
11:30 AM	29	11	88	0	128	24	20	13	0	57	106	109	29	0	244	5	106	32	0	143	572
11:45 AM	20	14	92	0	126	24	14	13	0	51	106	118	33	1	258	11	117	24	0	152	587
Total	83	56	353	0	492	88	58	48	0	194	415	418	114	1	948	42	418	118	0	578	2212
12:00 PM	28	22	75	0	125	20	8	15	0	43	124	113	35	0	272	15	112	20	0	147	587
12:15 PM	25	18	88	0	131	30	15	12	0	57	109	77	47	0	233	16	111	34	0	161	582
12:30 PM	25	11	84	0	120	27	26	14	0	67	115	104	42	1	262	16	144	38	0	198	647
12:45 PM	25	19	92	0	136	34	21	15	0	70	97	88	24	0	209	16	137	26	0	179	594
Total	103	70	339	0	512	111	70	56	0	237	445	382	148	1	976	63	504	118	0	685	2410
Grand Total	186	126	692	0	1004	199	128	104	0	431	860	800	262	2	1924	105	922	236	0	1263	4622
Apprch %	18.5	12.5	68.9	0		46.2	29.7	24.1	0		44.7	41.6	13.6	0.1		8.3	73	18.7	0		
Total %	4	2.7	15	0	21.7	4.3	2.8	2.3	0	9.3	18.6	17.3	5.7	0	41.6	2.3	19.9	5.1	0	27.3	

Start Time	Lee Dewitt Blvd Eastbound				Windigrove Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	28	22	75	125	20	8	15	43	124	113	35	272	15	112	20	147	587
12:15 PM	25	18	88	131	30	15	12	57	109	77	47	233	16	111	34	161	582
12:30 PM	25	11	84	120	27	26	14	67	115	104	42	261	16	144	38	198	646
12:45 PM	25	19	92	136	34	21	15	70	97	88	24	209	16	137	26	179	594
Total Volume	103	70	339	512	111	70	56	237	445	382	148	975	63	504	118	685	2409
% App. Total	20.1	13.7	66.2		46.8	29.5	23.6		45.6	39.2	15.2		9.2	73.6	17.2		
PHF	.920	.795	.921	.941	.816	.673	.933	.846	.897	.845	.787	.896	.984	.875	.776	.865	.932

Peggy Malone & Associates

(888) 247-8602

File Name : 4-US 340 and Lew Dewitt_Windigrove Dr PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Lee Dewitt Blvd Eastbound					Windigrove Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	24	12	97	0	133	20	10	10	0	40	100	116	28	1	245	11	143	29	0	183	601
03:15 PM	13	11	107	1	132	30	8	10	0	48	106	127	45	0	278	3	122	34	0	159	617
03:30 PM	8	18	90	0	116	32	12	7	0	51	108	124	41	0	273	15	152	21	0	188	628
03:45 PM	29	19	95	0	143	29	11	16	0	56	118	177	42	0	337	18	125	27	0	170	706
Total	74	60	389	1	524	111	41	43	0	195	432	544	156	1	1133	47	542	111	0	700	2552
04:00 PM	15	16	101	0	132	22	13	13	0	48	118	141	32	0	291	14	163	24	0	201	672
04:15 PM	31	16	95	0	142	23	10	9	0	42	115	143	30	0	288	15	138	29	0	182	654
04:30 PM	23	12	114	0	149	27	10	9	0	46	145	163	54	0	362	18	158	26	0	202	759
04:45 PM	30	23	120	0	173	35	17	10	0	62	128	165	40	0	333	12	157	42	0	211	779
Total	99	67	430	0	596	107	50	41	0	198	506	612	156	0	1274	59	616	121	0	796	2864
05:00 PM	28	18	130	0	176	15	19	16	0	50	157	133	68	0	358	10	146	22	0	178	762
05:15 PM	27	19	125	0	171	34	9	12	0	55	148	173	64	0	385	17	144	45	0	206	817
05:30 PM	27	29	106	0	162	26	14	16	0	56	126	165	52	0	343	23	129	32	0	184	745
05:45 PM	36	21	121	0	178	37	20	17	0	74	137	159	57	0	353	21	133	36	0	190	795
Total	118	87	482	0	687	112	62	61	0	235	568	630	241	0	1439	71	552	135	0	758	3119
Grand Total	291	214	1301	1	1807	330	153	145	0	628	1506	1786	553	1	3846	177	1710	367	0	2254	8535
Apprch %	16.1	11.8	72	0.1		52.5	24.4	23.1	0		39.2	46.4	14.4	0		7.9	75.9	16.3	0		
Total %	3.4	2.5	15.2	0	21.2	3.9	1.8	1.7	0	7.4	17.6	20.9	6.5	0	45.1	2.1	20	4.3	0	26.4	

Start Time	Lee Dewitt Blvd Eastbound				Windigrove Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	28	18	130	176	15	19	16	50	157	133	68	358	10	146	22	178	762
05:15 PM	27	19	125	171	34	9	12	55	148	173	64	385	17	144	45	206	817
05:30 PM	27	29	106	162	26	14	16	56	126	165	52	343	23	129	32	184	745
05:45 PM	36	21	121	178	37	20	17	74	137	159	57	353	21	133	36	190	795
Total Volume	118	87	482	687	112	62	61	235	568	630	241	1439	71	552	135	758	3119
% App. Total	17.2	12.7	70.2		47.7	26.4	26		39.5	43.8	16.7		9.4	72.8	17.8		
PHF	.819	.750	.927	.965	.757	.775	.897	.794	.904	.910	.886	.934	.772	.945	.750	.920	.954

Peggy Malone & Associates

(888) 247-8602

File Name : 4-US 340 and Lew Dewitt_Windigrove Dr PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Lee Dewitt Blvd Eastbound					Windigrove Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	1	0	3	0	4	1	0	0	0	1	3	0	0	0	3	1	1	0	0	2	10
03:15 PM	0	1	3	0	4	0	0	0	0	0	4	2	3	0	9	1	2	0	0	3	16
03:30 PM	1	0	3	0	4	2	0	0	0	2	4	2	1	0	7	0	3	0	0	3	16
03:45 PM	1	3	3	0	7	2	2	1	0	5	3	1	2	0	6	0	3	0	0	3	21
Total	3	4	12	0	19	5	2	1	0	8	14	5	6	0	25	2	9	0	0	11	63
04:00 PM	0	0	1	0	1	2	0	0	0	2	4	2	0	0	6	0	2	0	0	2	11
04:15 PM	0	1	1	0	2	2	0	0	0	2	0	5	0	0	5	0	1	0	0	1	10
04:30 PM	0	0	1	0	1	2	0	0	0	2	2	2	1	0	5	0	4	0	0	4	12
04:45 PM	0	0	0	0	0	0	0	0	0	0	2	2	1	0	5	0	5	1	0	6	11
Total	0	1	3	0	4	6	0	0	0	6	8	11	2	0	21	0	12	1	0	13	44
05:00 PM	0	0	2	0	2	1	0	0	0	1	0	3	2	0	5	1	4	0	0	5	13
05:15 PM	0	0	1	0	1	0	0	0	0	0	2	1	0	0	3	0	1	1	0	2	6
05:30 PM	0	0	0	0	0	2	0	0	0	2	0	1	0	0	1	0	2	0	0	2	5
05:45 PM	0	0	0	0	0	0	0	1	0	1	1	4	1	0	6	0	1	0	0	1	8
Total	0	0	3	0	3	3	0	1	0	4	3	9	3	0	15	1	8	1	0	10	32
Grand Total	3	5	18	0	26	14	2	2	0	18	25	25	11	0	61	3	29	2	0	34	139
Apprch %	11.5	19.2	69.2	0		77.8	11.1	11.1	0		41	41	18	0		8.8	85.3	5.9	0		
Total %	2.2	3.6	12.9	0	18.7	10.1	1.4	1.4	0	12.9	18	18	7.9	0	43.9	2.2	20.9	1.4	0	24.5	

Start Time	Lee Dewitt Blvd Eastbound					Windigrove Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	0	1	3	0	4	0	0	0	0	0	4	2	3	0	9	1	2	0	0	3	16
03:30 PM	1	0	3	0	4	2	0	0	0	2	4	2	1	0	7	0	3	0	0	3	16
03:45 PM	1	3	3	0	7	2	2	1	0	5	3	1	2	0	6	0	3	0	0	3	21
04:00 PM	0	0	1	0	1	2	0	0	0	2	4	2	0	0	6	0	2	0	0	2	11
Total Volume	2	4	10	0	16	6	2	1	0	9	15	7	6	0	28	1	10	0	0	11	64
% App. Total	12.5	25	62.5	0		66.7	22.2	11.1	0		53.6	25	21.4	0		9.1	90.9	0	0		
PHF	.500	.333	.833	0	.571	.750	.250	.250	0	.450	.938	.875	.500	0	.778	.250	.833	.000	0	.917	.762

Peggy Malone & Associates

(888) 247-8602

File Name : 4-US 340 and Lew Dewitt_Windigrove Dr PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Lee Dewitt Blvd Eastbound					Windigrove Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	25	12	100	0	137	21	10	10	0	41	103	116	28	1	248	12	144	29	0	185	611
03:15 PM	13	12	110	1	136	30	8	10	0	48	110	129	48	0	287	4	124	34	0	162	633
03:30 PM	9	18	93	0	120	34	12	7	0	53	112	126	42	0	280	15	155	21	0	191	644
03:45 PM	30	22	98	0	150	31	13	17	0	61	121	178	44	0	343	18	128	27	0	173	727
Total	77	64	401	1	543	116	43	44	0	203	446	549	162	1	1158	49	551	111	0	711	2615
04:00 PM	15	16	102	0	133	24	13	13	0	50	122	143	32	0	297	14	165	24	0	203	683
04:15 PM	31	17	96	0	144	25	10	9	0	44	115	148	30	0	293	15	139	29	0	183	664
04:30 PM	23	12	115	0	150	29	10	9	0	48	147	165	55	0	367	18	162	26	0	206	771
04:45 PM	30	23	120	0	173	35	17	10	0	62	130	167	41	0	338	12	162	43	0	217	790
Total	99	68	433	0	600	113	50	41	0	204	514	623	158	0	1295	59	628	122	0	809	2908
05:00 PM	28	18	132	0	178	16	19	16	0	51	157	136	70	0	363	11	150	22	0	183	775
05:15 PM	27	19	126	0	172	34	9	12	0	55	150	174	64	0	388	17	145	46	0	208	823
05:30 PM	27	29	106	0	162	28	14	16	0	58	126	166	52	0	344	23	131	32	0	186	750
05:45 PM	36	21	121	0	178	37	20	18	0	75	138	163	58	0	359	21	134	36	0	191	803
Total	118	87	485	0	690	115	62	62	0	239	571	639	244	0	1454	72	560	136	0	768	3151
Grand Total	294	219	1319	1	1833	344	155	147	0	646	1531	1811	564	1	3907	180	1739	369	0	2288	8674
Apprch %	16	11.9	72	0.1		53.3	24	22.8	0		39.2	46.4	14.4	0		7.9	76	16.1	0		
Total %	3.4	2.5	15.2	0	21.1	4	1.8	1.7	0	7.4	17.7	20.9	6.5	0	45	2.1	20	4.3	0	26.4	

Start Time	Lee Dewitt Blvd Eastbound				Windigrove Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	23	12	115	150	29	10	9	48	147	165	55	367	18	162	26	206	771
04:45 PM	30	23	120	173	35	17	10	62	130	167	41	338	12	162	43	217	790
05:00 PM	28	18	132	178	16	19	16	51	157	136	70	363	11	150	22	183	775
05:15 PM	27	19	126	172	34	9	12	55	150	174	64	388	17	145	46	208	823
Total Volume	108	72	493	673	114	55	47	216	584	642	230	1456	58	619	137	814	3159
% App. Total	16	10.7	73.3		52.8	25.5	21.8		40.1	44.1	15.8		7.1	76	16.8		
PHF	.900	.783	.934	.945	.814	.724	.734	.871	.930	.922	.821	.938	.806	.955	.745	.938	.960

Peggy Malone & Associates

(888) 247-8602

File Name : 5-US 340 and Lucy Lane AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Lucy Lane Eastbound					School Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	0	0	3	0	3	0	0	0	0	0	3	58	0	0	61	0	60	1	0	61	125
06:45 AM	0	0	9	0	9	0	0	0	0	0	4	67	0	0	71	0	66	4	0	70	150
Total	0	0	12	0	12	0	0	0	0	0	7	125	0	0	132	0	126	5	0	131	275
07:00 AM	1	0	15	0	16	0	0	0	0	0	6	78	0	0	84	0	101	0	0	101	201
07:15 AM	1	0	4	0	5	0	0	0	0	0	6	112	0	0	118	0	96	1	0	97	220
07:30 AM	4	0	5	0	9	0	0	0	0	0	6	119	0	0	125	0	112	3	0	115	249
07:45 AM	4	0	7	0	11	0	0	0	0	0	6	126	0	0	132	0	121	8	0	129	272
Total	10	0	31	0	41	0	0	0	0	0	24	435	0	0	459	0	430	12	0	442	942
08:00 AM	1	0	5	0	6	0	0	0	0	0	9	104	0	0	113	0	100	2	0	102	221
08:15 AM	3	0	13	0	16	0	0	0	0	0	3	80	0	0	83	0	112	4	0	116	215
08:30 AM	2	0	7	0	9	0	0	0	0	0	8	86	0	0	94	0	101	6	0	107	210
08:45 AM	5	0	10	0	15	0	0	0	0	0	9	101	0	0	110	0	70	12	0	82	207
Total	11	0	35	0	46	0	0	0	0	0	29	371	0	0	400	0	383	24	0	407	853
09:00 AM	4	0	13	0	17	0	0	1	0	1	5	73	0	0	78	0	79	5	0	84	180
09:15 AM	6	0	9	0	15	0	0	0	0	0	7	96	0	0	103	0	81	7	0	88	206
Grand Total	31	0	100	0	131	0	0	1	0	1	72	1100	0	0	1172	0	1099	53	0	1152	2456
Apprch %	23.7	0	76.3	0		0	0	100	0		6.1	93.9	0	0		0	95.4	4.6	0		
Total %	1.3	0	4.1	0	5.3	0	0	0	0	0	2.9	44.8	0	0	47.7	0	44.7	2.2	0	46.9	

Start Time	Lucy Lane Eastbound				School Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	0	4	5	0	0	0	0	6	112	0	118	0	96	1	97	220
07:30 AM	4	0	5	9	0	0	0	0	6	119	0	125	0	112	3	115	249
07:45 AM	4	0	7	11	0	0	0	0	6	126	0	132	0	121	8	129	272
08:00 AM	1	0	5	6	0	0	0	0	9	104	0	113	0	100	2	102	221
Total Volume	10	0	21	31	0	0	0	0	27	461	0	488	0	429	14	443	962
% App. Total	32.3	0	67.7		0	0	0		5.5	94.5	0		0	96.8	3.2		
PHF	.625	.000	.750	.705	.000	.000	.000	.000	.750	.915	.000	.924	.000	.886	.438	.859	.884

Peggy Malone & Associates

(888) 247-8602

File Name : 5-US 340 and Lucy Lane AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Lucy Lane Eastbound					School Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	1	0	0	1	5
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
Total	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	0	1	0	0	1	8
07:00 AM	0	0	3	0	3	0	0	0	0	0	1	3	0	0	4	0	2	0	0	2	9
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	2	0	0	2	7
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	9	0	0	9	14
07:45 AM	0	0	1	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Total	0	0	4	0	4	0	0	0	0	0	1	15	0	0	16	0	13	0	0	13	33
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	4	0	0	4	9
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	0	3	4
08:30 AM	0	0	1	0	1	0	0	0	0	0	0	4	0	0	4	0	6	0	0	6	11
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	3
Total	0	0	1	0	1	0	0	0	0	0	0	12	0	0	12	0	14	0	0	14	27
09:00 AM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	4	0	0	4	7
09:15 AM	0	0	1	0	1	0	0	0	0	0	0	5	0	0	5	0	1	0	0	1	7
Grand Total	0	0	6	0	6	0	0	0	0	0	2	41	0	0	43	0	33	0	0	33	82
Apprch %	0	0	100	0		0	0	0	0		4.7	95.3	0	0		0	100	0	0		
Total %	0	0	7.3	0	7.3	0	0	0	0	0	2.4	50	0	0	52.4	0	40.2	0	0	40.2	

Start Time	Lucy Lane Eastbound				School Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:45 AM																	
06:45 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
07:00 AM	0	0	3	3	0	0	0	0	1	3	0	4	0	2	0	2	9
07:15 AM	0	0	0	0	0	0	0	0	0	5	0	5	0	2	0	2	7
07:30 AM	0	0	0	0	0	0	0	0	0	5	0	5	0	9	0	9	14
Total Volume	0	0	3	3	0	0	0	0	1	16	0	17	0	13	0	13	33
% App. Total	0	0	100		0	0	0		5.9	94.1	0		0	100	0		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.250	.800	.000	.850	.000	.361	.000	.361	.589

Peggy Malone & Associates

(888) 247-8602

File Name : 5-US 340 and Lucy Lane AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Lucy Lane Eastbound					School Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	0	0	3	0	3	0	0	0	0	0	3	62	0	0	65	0	61	1	0	62	130
06:45 AM	0	0	9	0	9	0	0	0	0	0	4	70	0	0	74	0	66	4	0	70	153
Total	0	0	12	0	12	0	0	0	0	0	7	132	0	0	139	0	127	5	0	132	283
07:00 AM	1	0	18	0	19	0	0	0	0	0	7	81	0	0	88	0	103	0	0	103	210
07:15 AM	1	0	4	0	5	0	0	0	0	0	6	117	0	0	123	0	98	1	0	99	227
07:30 AM	4	0	5	0	9	0	0	0	0	0	6	124	0	0	130	0	121	3	0	124	263
07:45 AM	4	0	8	0	12	0	0	0	0	0	6	128	0	0	134	0	121	8	0	129	275
Total	10	0	35	0	45	0	0	0	0	0	25	450	0	0	475	0	443	12	0	455	975
08:00 AM	1	0	5	0	6	0	0	0	0	0	9	109	0	0	118	0	104	2	0	106	230
08:15 AM	3	0	13	0	16	0	0	0	0	0	3	81	0	0	84	0	115	4	0	119	219
08:30 AM	2	0	8	0	10	0	0	0	0	0	8	90	0	0	98	0	107	6	0	113	221
08:45 AM	5	0	10	0	15	0	0	0	0	0	9	103	0	0	112	0	71	12	0	83	210
Total	11	0	36	0	47	0	0	0	0	0	29	383	0	0	412	0	397	24	0	421	880
09:00 AM	4	0	13	0	17	0	0	1	0	1	6	75	0	0	81	0	83	5	0	88	187
09:15 AM	6	0	10	0	16	0	0	0	0	0	7	101	0	0	108	0	82	7	0	89	213
Grand Total	31	0	106	0	137	0	0	1	0	1	74	1141	0	0	1215	0	1132	53	0	1185	2538
Apprch %	22.6	0	77.4	0		0	0	100	0		6.1	93.9	0	0		0	95.5	4.5	0		
Total %	1.2	0	4.2	0	5.4	0	0	0	0	0	2.9	45	0	0	47.9	0	44.6	2.1	0	46.7	

Start Time	Lucy Lane Eastbound				School Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	0	4	5	0	0	0	0	6	117	0	123	0	98	1	99	227
07:30 AM	4	0	5	9	0	0	0	0	6	124	0	130	0	121	3	124	263
07:45 AM	4	0	8	12	0	0	0	0	6	128	0	134	0	121	8	129	275
08:00 AM	1	0	5	6	0	0	0	0	9	109	0	118	0	104	2	106	230
Total Volume	10	0	22	32	0	0	0	0	27	478	0	505	0	444	14	458	995
% App. Total	31.2	0	68.8		0	0	0		5.3	94.7	0		0	96.9	3.1		
PHF	.625	.000	.688	.667	.000	.000	.000	.000	.750	.934	.000	.942	.000	.917	.438	.888	.905

Peggy Malone & Associates

(888) 247-8602

File Name : 5-US 340 and Lucy Lane MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Lucy Lane Eastbound					School Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	12	0	22	0	34	0	0	0	0	0	13	107	0	0	120	0	117	9	0	126	280
11:15 AM	13	0	24	0	37	0	0	0	0	0	18	89	0	0	107	0	103	10	0	113	257
11:30 AM	10	0	20	0	30	1	0	0	0	1	19	127	0	0	146	0	111	9	0	120	297
11:45 AM	5	0	28	0	33	0	0	0	0	0	13	128	0	0	141	0	112	6	0	118	292
Total	40	0	94	0	134	1	0	0	0	1	63	451	0	0	514	0	443	34	0	477	1126
12:00 PM	20	0	25	0	45	0	0	0	1	1	26	121	0	0	147	0	115	10	0	125	318
12:15 PM	6	0	29	0	35	0	0	0	0	0	13	111	0	0	124	0	123	13	0	136	295
12:30 PM	8	0	26	0	34	0	0	0	0	0	15	128	0	0	143	0	158	13	0	171	348
12:45 PM	20	0	24	0	44	0	0	0	0	0	17	107	0	0	124	0	133	16	0	149	317
Total	54	0	104	0	158	0	0	0	1	1	71	467	0	0	538	0	529	52	0	581	1278
Grand Total	94	0	198	0	292	1	0	0	1	2	134	918	0	0	1052	0	972	86	0	1058	2404
Apprch %	32.2	0	67.8	0		50	0	0	50		12.7	87.3	0	0		0	91.9	8.1	0		
Total %	3.9	0	8.2	0	12.1	0	0	0	0	0.1	5.6	38.2	0	0	43.8	0	40.4	3.6	0	44	

Start Time	Lucy Lane Eastbound				School Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	20	0	25	45	0	0	0	0	26	121	0	147	0	115	10	125	317
12:15 PM	6	0	29	35	0	0	0	0	13	111	0	124	0	123	13	136	295
12:30 PM	8	0	26	34	0	0	0	0	15	128	0	143	0	158	13	171	348
12:45 PM	20	0	24	44	0	0	0	0	17	107	0	124	0	133	16	149	317
Total Volume	54	0	104	158	0	0	0	0	71	467	0	538	0	529	52	581	1277
% App. Total	34.2	0	65.8		0	0	0		13.2	86.8	0		0	91	9		
PHF	.675	.000	.897	.878	.000	.000	.000	.000	.683	.912	.000	.915	.000	.837	.813	.849	.917

Peggy Malone & Associates

(888) 247-8602

File Name : 5-US 340 and Lucy Lane MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Lucy Lane Eastbound					School Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	1	0	0	0	1	0	0	0	0	0	0	4	0	0	4	0	2	0	0	2	7
11:15 AM	0	0	1	0	1	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	4
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3	5
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	3	1	0	4	7
Total	1	0	1	0	2	0	0	0	0	0	0	11	0	0	11	0	9	1	0	10	23
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	0	0	4	6
12:30 PM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	7	0	0	7	9
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	2	0	0	2	7
Total	0	0	1	0	1	0	0	0	0	0	0	10	0	0	10	0	15	0	0	15	26
Grand Total	1	0	2	0	3	0	0	0	0	0	0	21	0	0	21	0	24	1	0	25	49
Apprch %	33.3	0	66.7	0		0	0	0	0		0	100	0	0		0	96	4	0		
Total %	2	0	4.1	0	6.1	0	0	0	0	0	0	42.9	0	0	42.9	0	49	2	0	51	

Start Time	Lucy Lane Eastbound				School Westbound				US 340 Northbound				US 340 Southbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 11:45 AM																		
11:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	3	0	3	1	4	7
12:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4
12:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	4	0	4	6
12:30 PM	0	0	1	1	0	0	0	0	0	0	1	0	1	0	7	0	7	9
Total Volume	0	0	1	1	0	0	0	0	0	0	8	0	8	0	16	1	17	26
% App. Total	0	0	100		0	0	0		0	100	0		0	94.1	5.9			
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.667	.000	.667	.000	.571	.250	.607	.722

Peggy Malone & Associates

(888) 247-8602

File Name : 5-US 340 and Lucy Lane MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Lucy Lane Eastbound					School Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	13	0	22	0	35	0	0	0	0	0	13	111	0	0	124	0	119	9	0	128	287
11:15 AM	13	0	25	0	38	0	0	0	0	0	18	91	0	0	109	0	104	10	0	114	261
11:30 AM	10	0	20	0	30	1	0	0	0	1	19	129	0	0	148	0	114	9	0	123	302
11:45 AM	5	0	28	0	33	0	0	0	0	0	13	131	0	0	144	0	115	7	0	122	299
Total	41	0	95	0	136	1	0	0	0	1	63	462	0	0	525	0	452	35	0	487	1149
12:00 PM	20	0	25	0	45	0	0	0	1	1	26	123	0	0	149	0	117	10	0	127	322
12:15 PM	6	0	29	0	35	0	0	0	0	0	13	113	0	0	126	0	127	13	0	140	301
12:30 PM	8	0	27	0	35	0	0	0	0	0	15	129	0	0	144	0	165	13	0	178	357
12:45 PM	20	0	24	0	44	0	0	0	0	0	17	112	0	0	129	0	135	16	0	151	324
Total	54	0	105	0	159	0	0	0	1	1	71	477	0	0	548	0	544	52	0	596	1304
Grand Total	95	0	200	0	295	1	0	0	1	2	134	939	0	0	1073	0	996	87	0	1083	2453
Apprch %	32.2	0	67.8	0		50	0	0	50		12.5	87.5	0	0		0	92	8	0		
Total %	3.9	0	8.2	0	12	0	0	0	0	0.1	5.5	38.3	0	0	43.7	0	40.6	3.5	0	44.2	

Start Time	Lucy Lane Eastbound				School Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	20	0	25	45	0	0	0	0	26	123	0	149	0	117	10	127	321
12:15 PM	6	0	29	35	0	0	0	0	13	113	0	126	0	127	13	140	301
12:30 PM	8	0	27	35	0	0	0	0	15	129	0	144	0	165	13	178	357
12:45 PM	20	0	24	44	0	0	0	0	17	112	0	129	0	135	16	151	324
Total Volume	54	0	105	159	0	0	0	0	71	477	0	548	0	544	52	596	1303
% App. Total	34	0	66		0	0	0		13	87	0		0	91.3	8.7		
PHF	.675	.000	.905	.883	.000	.000	.000	.000	.683	.924	.000	.919	.000	.824	.813	.837	.912

Peggy Malone & Associates

(888) 247-8602

File Name : 5-US 340 and Lucy Lane PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Lucy Lane Eastbound					School Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	13	0	27	0	40	0	0	0	1	1	7	129	0	0	136	0	151	14	0	165	342
03:15 PM	13	0	34	0	47	0	0	0	0	0	23	129	0	0	152	0	118	5	0	123	322
03:30 PM	7	0	20	0	27	1	0	0	0	1	14	121	0	0	135	0	150	11	0	161	324
03:45 PM	17	0	30	0	47	0	0	0	0	0	15	196	0	0	211	0	128	15	0	143	401
Total	50	0	111	0	161	1	0	0	1	2	59	575	0	0	634	0	547	45	0	592	1389
04:00 PM	13	0	36	0	49	0	0	0	0	0	11	153	0	0	164	0	157	5	0	162	375
04:15 PM	8	0	27	0	35	0	0	0	0	0	13	158	0	0	171	0	144	10	0	154	360
04:30 PM	13	0	41	0	54	0	0	0	0	0	27	153	0	0	180	0	149	18	0	167	401
04:45 PM	18	0	31	0	49	0	0	0	0	0	15	185	0	0	200	0	168	12	0	180	429
Total	52	0	135	0	187	0	0	0	0	0	66	649	0	0	715	0	618	45	0	663	1565
05:00 PM	16	0	33	0	49	0	0	0	0	0	19	151	0	0	170	0	150	10	0	160	379
05:15 PM	20	0	29	0	49	0	0	0	0	0	18	186	0	0	204	0	165	6	0	171	424
05:30 PM	21	0	38	0	59	0	0	0	0	0	25	176	0	0	201	0	138	13	0	151	411
05:45 PM	15	0	29	0	44	0	0	0	0	0	17	170	0	0	187	0	143	11	0	154	385
Total	72	0	129	0	201	0	0	0	0	0	79	683	0	0	762	0	596	40	0	636	1599
Grand Total	174	0	375	0	549	1	0	0	1	2	204	1907	0	0	2111	0	1761	130	0	1891	4553
Apprch %	31.7	0	68.3	0		50	0	0	50		9.7	90.3	0	0		0	93.1	6.9	0		
Total %	3.8	0	8.2	0	12.1	0	0	0	0	0	4.5	41.9	0	0	46.4	0	38.7	2.9	0	41.5	

Start Time	Lucy Lane Eastbound				School Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	18	0	31	49	0	0	0	0	15	185	0	200	0	168	12	180	429
05:00 PM	16	0	33	49	0	0	0	0	19	151	0	170	0	150	10	160	379
05:15 PM	20	0	29	49	0	0	0	0	18	186	0	204	0	165	6	171	424
05:30 PM	21	0	38	59	0	0	0	0	25	176	0	201	0	138	13	151	411
Total Volume	75	0	131	206	0	0	0	0	77	698	0	775	0	621	41	662	1643
% App. Total	36.4	0	63.6		0	0	0		9.9	90.1	0		0	93.8	6.2		
PHF	.893	.000	.862	.873	.000	.000	.000	.000	.770	.938	.000	.950	.000	.924	.788	.919	.957

Peggy Malone & Associates

(888) 247-8602

File Name : 5-US 340 and Lucy Lane PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Lucy Lane Eastbound					School Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3	6
03:15 PM	0	0	1	0	1	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3	6
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	4	0	0	4	7
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4
Total	1	0	1	0	2	0	0	0	0	0	0	9	0	0	9	0	12	0	0	12	23
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	1	0	2	4
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	1	0	0	1	6
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	5	0	0	5	8
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	4	0	0	4	6
Total	0	0	0	0	0	0	0	0	0	0	0	12	0	0	12	0	11	1	0	12	24
05:00 PM	1	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	5	0	0	5	8
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
05:45 PM	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	1	0	0	1	5
Total	1	0	0	0	1	1	0	0	0	1	1	6	0	0	7	0	9	0	0	9	18
Grand Total	2	0	1	0	3	1	0	0	0	1	1	27	0	0	28	0	32	1	0	33	65
Apprch %	66.7	0	33.3	0		100	0	0	0		3.6	96.4	0	0		0	97	3	0		
Total %	3.1	0	1.5	0	4.6	1.5	0	0	0	1.5	1.5	41.5	0	0	43.1	0	49.2	1.5	0	50.8	

Start Time	Lucy Lane Eastbound				School Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	5	0	5	0	1	0	1	6
04:30 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	5	0	5	8
04:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	4	0	4	6
05:00 PM	1	0	0	1	0	0	0	0	1	1	0	2	0	5	0	5	8
Total Volume	1	0	0	1	0	0	0	0	1	11	0	12	0	15	0	15	28
% App. Total	100	0	0		0	0	0		8.3	91.7	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.250	.550	.000	.600	.000	.750	.000	.750	.875

Peggy Malone & Associates

(888) 247-8602

File Name : 5-US 340 and Lucy Lane PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Lucy Lane Eastbound					School Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	14	0	27	0	41	0	0	0	1	1	7	131	0	0	138	0	154	14	0	168	348
03:15 PM	13	0	35	0	48	0	0	0	0	0	23	131	0	0	154	0	121	5	0	126	328
03:30 PM	7	0	20	0	27	1	0	0	0	1	14	124	0	0	138	0	154	11	0	165	331
03:45 PM	17	0	30	0	47	0	0	0	0	0	15	198	0	0	213	0	130	15	0	145	405
Total	51	0	112	0	163	1	0	0	1	2	59	584	0	0	643	0	559	45	0	604	1412
04:00 PM	13	0	36	0	49	0	0	0	0	0	11	155	0	0	166	0	158	6	0	164	379
04:15 PM	8	0	27	0	35	0	0	0	0	0	13	163	0	0	176	0	145	10	0	155	366
04:30 PM	13	0	41	0	54	0	0	0	0	0	27	156	0	0	183	0	154	18	0	172	409
04:45 PM	18	0	31	0	49	0	0	0	0	0	15	187	0	0	202	0	172	12	0	184	435
Total	52	0	135	0	187	0	0	0	0	0	66	661	0	0	727	0	629	46	0	675	1589
05:00 PM	17	0	33	0	50	0	0	0	0	0	20	152	0	0	172	0	155	10	0	165	387
05:15 PM	20	0	29	0	49	0	0	0	0	0	18	187	0	0	205	0	167	6	0	173	427
05:30 PM	21	0	38	0	59	0	0	0	0	0	25	177	0	0	202	0	139	13	0	152	413
05:45 PM	15	0	29	0	44	1	0	0	0	1	17	173	0	0	190	0	144	11	0	155	390
Total	73	0	129	0	202	1	0	0	0	1	80	689	0	0	769	0	605	40	0	645	1617
Grand Total	176	0	376	0	552	2	0	0	1	3	205	1934	0	0	2139	0	1793	131	0	1924	4618
Apprch %	31.9	0	68.1	0		66.7	0	0	33.3		9.6	90.4	0	0		0	93.2	6.8	0		
Total %	3.8	0	8.1	0	12	0	0	0	0	0.1	4.4	41.9	0	0	46.3	0	38.8	2.8	0	41.7	

Start Time	Lucy Lane Eastbound				School Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	18	0	31	49	0	0	0	0	15	187	0	202	0	172	12	184	435
05:00 PM	17	0	33	50	0	0	0	0	20	152	0	172	0	155	10	165	387
05:15 PM	20	0	29	49	0	0	0	0	18	187	0	205	0	167	6	173	427
05:30 PM	21	0	38	59	0	0	0	0	25	177	0	202	0	139	13	152	413
Total Volume	76	0	131	207	0	0	0	0	78	703	0	781	0	633	41	674	1662
% App. Total	36.7	0	63.3		0	0	0		10	90	0		0	93.9	6.1		
PHF	.905	.000	.862	.877	.000	.000	.000	.000	.780	.940	.000	.952	.000	.920	.788	.916	.955

Peggy Malone & Associates

(888) 247-8602

File Name : 6-US 340 and Lennox Place AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Lennox PI Eastbound				US 340 Northbound				US 340 Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
06:30 AM	1	0	0	1	3	55	0	58	0	62	0	0	62	121
06:45 AM	0	3	0	3	4	55	0	59	0	62	2	0	64	126
Total	1	3	0	4	7	110	0	117	0	124	2	0	126	247
07:00 AM	1	4	0	5	4	74	0	78	1	100	0	0	101	184
07:15 AM	5	3	0	8	7	102	0	109	0	103	2	0	105	222
07:30 AM	0	4	0	4	3	119	0	122	0	107	2	0	109	235
07:45 AM	1	5	0	6	3	121	0	124	0	125	7	0	132	262
Total	7	16	0	23	17	416	0	433	1	435	11	0	447	903
08:00 AM	4	5	0	9	7	100	0	107	0	97	5	0	102	218
08:15 AM	4	4	0	8	5	78	0	83	0	115	3	0	118	209
08:30 AM	3	4	0	7	6	84	0	90	0	102	3	0	105	202
08:45 AM	2	5	0	7	8	100	0	108	0	77	7	0	84	199
Total	13	18	0	31	26	362	0	388	0	391	18	0	409	828
09:00 AM	3	8	0	11	6	71	0	77	0	75	5	0	80	168
09:15 AM	3	10	0	13	10	93	0	103	0	79	7	0	86	202
Grand Total	27	55	0	82	66	1052	0	1118	1	1104	43	0	1148	2348
Apprch %	32.9	67.1	0		5.9	94.1	0		0.1	96.2	3.7	0		
Total %	1.1	2.3	0	3.5	2.8	44.8	0	47.6	0	47	1.8	0	48.9	

Start Time	Lennox PI Eastbound			US 340 Northbound			US 340 Southbound			Int. Total	
	Left	Right	App. Total	Left	Thru	App. Total	Left	Thru	Right		App. Total
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:15 AM											
07:15 AM	5	3	8	7	102	109	0	103	2	105	222
07:30 AM	0	4	4	3	119	122	0	107	2	109	235
07:45 AM	1	5	6	3	121	124	0	125	7	132	262
08:00 AM	4	5	9	7	100	107	0	97	5	102	218
Total Volume	10	17	27	20	442	462	0	432	16	448	937
% App. Total	37	63		4.3	95.7		0	96.4	3.6		
PHF	.500	.850	.750	.714	.913	.931	.000	.864	.571	.848	.894

Peggy Malone & Associates

(888) 247-8602

File Name : 6-US 340 and Lennox Place AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Lennox PI Eastbound				US 340 Northbound				US 340 Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
06:30 AM	0	1	0	1	0	4	0	4	0	0	0	0	0	5
06:45 AM	0	0	0	0	0	4	0	4	0	0	1	0	1	5
Total	0	1	0	1	0	8	0	8	0	0	1	0	1	10
07:00 AM	0	1	0	1	0	3	0	3	0	1	0	0	1	5
07:15 AM	0	0	0	0	0	5	0	5	0	3	0	0	3	8
07:30 AM	0	2	0	2	0	5	0	5	0	6	0	0	6	13
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2
Total	0	3	0	3	0	15	0	15	0	10	0	0	10	28
08:00 AM	0	0	0	0	0	5	0	5	0	4	0	0	4	9
08:15 AM	0	0	0	0	0	1	0	1	0	6	0	0	6	7
08:30 AM	0	1	0	1	0	4	0	4	0	4	0	0	4	9
08:45 AM	0	1	0	1	0	2	0	2	0	1	0	0	1	4
Total	0	2	0	2	0	12	0	12	0	15	0	0	15	29
09:00 AM	0	0	0	0	0	2	0	2	0	3	0	0	3	5
09:15 AM	0	0	0	0	1	4	0	5	0	1	0	0	1	6
Grand Total	0	6	0	6	1	41	0	42	0	29	1	0	30	78
Apprch %	0	100	0		2.4	97.6	0		0	96.7	3.3	0		
Total %	0	7.7	0	7.7	1.3	52.6	0	53.8	0	37.2	1.3	0	38.5	

Start Time	Lennox PI Eastbound				US 340 Northbound				US 340 Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 07:15 AM														
07:15 AM	0	0	0	0	0	5	0	5	0	3	0	0	3	8
07:30 AM	0	2	0	2	0	5	0	5	0	6	0	0	6	13
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	5	0	5	0	4	0	0	4	9
Total Volume	0	2	0	2	0	17	0	17	0	13	0	0	13	32
% App. Total	0	100	0		0	100	0		0	100	0	0		
PHF	.000	.250	.000	.250	.000	.850	.000	.850	.000	.542	.000	.000	.542	.615

Peggy Malone & Associates

(888) 247-8602

File Name : 6-US 340 and Lennox Place AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Lennox PI Eastbound				US 340 Northbound				US 340 Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
06:30 AM	1	1	0	2	3	59	0	62	0	62	0	0	62	126
06:45 AM	0	3	0	3	4	59	0	63	0	62	3	0	65	131
Total	1	4	0	5	7	118	0	125	0	124	3	0	127	257
07:00 AM	1	5	0	6	4	77	0	81	1	101	0	0	102	189
07:15 AM	5	3	0	8	7	107	0	114	0	106	2	0	108	230
07:30 AM	0	6	0	6	3	124	0	127	0	113	2	0	115	248
07:45 AM	1	5	0	6	3	123	0	126	0	125	7	0	132	264
Total	7	19	0	26	17	431	0	448	1	445	11	0	457	931
08:00 AM	4	5	0	9	7	105	0	112	0	101	5	0	106	227
08:15 AM	4	4	0	8	5	79	0	84	0	121	3	0	124	216
08:30 AM	3	5	0	8	6	88	0	94	0	106	3	0	109	211
08:45 AM	2	6	0	8	8	102	0	110	0	78	7	0	85	203
Total	13	20	0	33	26	374	0	400	0	406	18	0	424	857
09:00 AM	3	8	0	11	6	73	0	79	0	78	5	0	83	173
09:15 AM	3	10	0	13	11	97	0	108	0	80	7	0	87	208
Grand Total	27	61	0	88	67	1093	0	1160	1	1133	44	0	1178	2426
Apprch %	30.7	69.3	0		5.8	94.2	0		0.1	96.2	3.7	0		
Total %	1.1	2.5	0	3.6	2.8	45.1	0	47.8	0	46.7	1.8	0	48.6	

Start Time	Lennox PI Eastbound			App. Total	US 340 Northbound			App. Total	US 340 Southbound			App. Total	Int. Total	
	Left	Right	Peds		Left	Thru	Peds		Left	Thru	Right			
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 07:15 AM														
07:15 AM	5	3		8	7	107		114	0	106	2		108	230
07:30 AM	0	6		6	3	124		127	0	113	2		115	248
07:45 AM	1	5		6	3	123		126	0	125	7		132	264
08:00 AM	4	5		9	7	105		112	0	101	5		106	227
Total Volume	10	19		29	20	459		479	0	445	16		461	969
% App. Total	34.5	65.5			4.2	95.8			0	96.5	3.5			
PHF	.500	.792		.806	.714	.925		.943	.000	.890	.571		.873	.918

Peggy Malone & Associates

(888) 247-8602

File Name : 6-US 340 and Lennox Place MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	US 340 Eastbound				Fake Approach Northbound				Lennox PI Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
11:00 AM	4	13	0	17	14	101	0	115	1	109	10	0	120	252
11:15 AM	8	15	0	23	10	96	0	106	0	102	8	0	110	239
11:30 AM	8	16	0	24	13	126	0	139	0	104	7	0	111	274
11:45 AM	9	13	0	22	15	119	0	134	0	105	9	0	114	270
Total	29	57	0	86	52	442	0	494	1	420	34	0	455	1035
12:00 PM	7	17	0	24	5	134	1	140	0	113	6	0	119	283
12:15 PM	7	20	0	27	9	101	0	110	0	114	7	0	121	258
12:30 PM	10	20	0	30	10	118	0	128	0	151	7	0	158	316
12:45 PM	3	14	0	17	8	117	0	125	0	145	6	0	151	293
Total	27	71	0	98	32	470	1	503	0	523	26	0	549	1150
Grand Total	56	128	0	184	84	912	1	997	1	943	60	0	1004	2185
Apprch %	30.4	69.6	0		8.4	91.5	0.1		0.1	93.9	6	0		
Total %	2.6	5.9	0	8.4	3.8	41.7	0	45.6	0	43.2	2.7	0	45.9	

Start Time	US 340 Eastbound				Fake Approach Northbound				Lennox PI Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 12:00 PM														
12:00 PM	7	17	0	24	5	134	1	139	0	113	6	0	119	282
12:15 PM	7	20	0	27	9	101	0	110	0	114	7	0	121	258
12:30 PM	10	20	0	30	10	118	0	128	0	151	7	0	158	316
12:45 PM	3	14	0	17	8	117	0	125	0	145	6	0	151	293
Total Volume	27	71	0	98	32	470	1	502	0	523	26	0	549	1149
% App. Total	27.6	72.4	0		6.4	93.6	0.1		0	95.3	4.7	0		
PHF	.675	.888	0	.817	.800	.877	0.001	.903	.000	.866	.929	0	.869	.909

Peggy Malone & Associates

(888) 247-8602

File Name : 6-US 340 and Lennox Place MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	US 340 Eastbound				Fake Approach Northbound				Lennox PI Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
11:00 AM	1	0	0	1	0	5	0	5	0	2	0	0	2	8
11:15 AM	0	0	0	0	0	2	0	2	0	1	0	0	1	3
11:30 AM	0	1	0	1	0	1	0	1	0	2	0	0	2	4
11:45 AM	0	1	0	1	0	3	0	3	0	3	0	0	3	7
Total	1	2	0	3	0	11	0	11	0	8	0	0	8	22
12:00 PM	0	0	0	0	0	2	0	2	0	2	0	0	2	4
12:15 PM	0	0	0	0	0	2	0	2	0	4	0	0	4	6
12:30 PM	0	1	0	1	0	1	0	1	0	7	0	0	7	9
12:45 PM	0	0	0	0	0	5	0	5	0	1	0	0	1	6
Total	0	1	0	1	0	10	0	10	0	14	0	0	14	25
Grand Total	1	3	0	4	0	21	0	21	0	22	0	0	22	47
Apprch %	25	75	0		0	100	0		0	100	0	0		
Total %	2.1	6.4	0	8.5	0	44.7	0	44.7	0	46.8	0	0	46.8	

Start Time	US 340 Eastbound				Fake Approach Northbound				Lennox PI Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 11:45 AM														
11:45 AM	0	1	0	1	0	3	0	3	0	3	0	0	3	7
12:00 PM	0	0	0	0	0	2	0	2	0	2	0	0	2	4
12:15 PM	0	0	0	0	0	2	0	2	0	4	0	0	4	6
12:30 PM	0	1	0	1	0	1	0	1	0	7	0	0	7	9
Total Volume	0	2	0	2	0	8	0	8	0	16	0	0	16	26
% App. Total	0	100	0		0	100	0		0	100	0	0		
PHF	.000	.500	.000	.500	.000	.667	.000	.667	.000	.571	.000	.000	.571	.722

Peggy Malone & Associates

(888) 247-8602

File Name : 6-US 340 and Lennox Place MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	US 340 Eastbound				Fake Approach Northbound				Lennox PI Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
11:00 AM	5	13	0	18	14	106	0	120	1	111	10	0	122	260
11:15 AM	8	15	0	23	10	98	0	108	0	103	8	0	111	242
11:30 AM	8	17	0	25	13	127	0	140	0	106	7	0	113	278
11:45 AM	9	14	0	23	15	122	0	137	0	108	9	0	117	277
Total	30	59	0	89	52	453	0	505	1	428	34	0	463	1057
12:00 PM	7	17	0	24	5	136	1	142	0	115	6	0	121	287
12:15 PM	7	20	0	27	9	103	0	112	0	118	7	0	125	264
12:30 PM	10	21	0	31	10	119	0	129	0	158	7	0	165	325
12:45 PM	3	14	0	17	8	122	0	130	0	146	6	0	152	299
Total	27	72	0	99	32	480	1	513	0	537	26	0	563	1175
Grand Total	57	131	0	188	84	933	1	1018	1	965	60	0	1026	2232
Apprch %	30.3	69.7	0		8.3	91.7	0.1		0.1	94.1	5.8	0		
Total %	2.6	5.9	0	8.4	3.8	41.8	0	45.6	0	43.2	2.7	0	46	

Start Time	US 340 Eastbound				Fake Approach Northbound				Lennox PI Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 12:00 PM														
12:00 PM	7	17	0	24	5	136	1	141	0	115	6	0	121	286
12:15 PM	7	20	0	27	9	103	0	112	0	118	7	0	125	264
12:30 PM	10	21	0	31	10	119	0	129	0	158	7	0	165	325
12:45 PM	3	14	0	17	8	122	0	130	0	146	6	0	152	299
Total Volume	27	72	0	99	32	480	1	512	0	537	26	0	563	1174
% App. Total	27.3	72.7	0		6.2	93.8	0		0	95.4	4.6	0		
PHF	.675	.857		.798	.800	.882		.908	.000	.850	.929		.853	.903

Peggy Malone & Associates

(888) 247-8602

File Name : 6-US 340 and Lennox Place PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Lennox PI Eastbound				US 340 Northbound				US 340 Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
03:00 PM	5	12	0	17	10	133	0	143	0	154	3	0	157	317
03:15 PM	7	12	0	19	13	136	0	149	0	121	8	0	129	297
03:30 PM	8	19	0	27	12	116	0	128	0	138	2	0	140	295
03:45 PM	9	7	0	16	9	209	0	218	0	142	11	0	153	387
Total	29	50	0	79	44	594	0	638	0	555	24	0	579	1296
04:00 PM	14	15	0	29	17	148	0	165	0	151	5	0	156	350
04:15 PM	5	14	0	19	15	151	0	166	0	134	10	1	145	330
04:30 PM	15	13	0	28	9	159	1	169	0	155	7	0	162	359
04:45 PM	10	11	0	21	22	183	2	207	0	167	10	0	177	405
Total	44	53	0	97	63	641	3	707	0	607	32	1	640	1444
05:00 PM	9	17	0	26	15	152	0	167	0	153	6	0	159	352
05:15 PM	11	17	0	28	12	189	0	201	0	137	11	0	148	377
05:30 PM	7	12	0	19	21	174	0	195	0	138	3	0	141	355
05:45 PM	13	16	0	29	11	167	0	178	0	136	6	0	142	349
Total	40	62	0	102	59	682	0	741	0	564	26	0	590	1433
Grand Total	113	165	0	278	166	1917	3	2086	0	1726	82	1	1809	4173
Apprch %	40.6	59.4	0		8	91.9	0.1		0	95.4	4.5	0.1		
Total %	2.7	4	0	6.7	4	45.9	0.1	50	0	41.4	2	0	43.4	

Start Time	Lennox PI Eastbound			US 340 Northbound			US 340 Southbound			Int. Total	
	Left	Right	App. Total	Left	Thru	App. Total	Left	Thru	Right		App. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:30 PM											
04:30 PM	15	13	28	9	159	168	0	155	7	162	358
04:45 PM	10	11	21	22	183	205	0	167	10	177	403
05:00 PM	9	17	26	15	152	167	0	153	6	159	352
05:15 PM	11	17	28	12	189	201	0	137	11	148	377
Total Volume	45	58	103	58	683	741	0	612	34	646	1490
% App. Total	43.7	56.3		7.8	92.2		0	94.7	5.3		
PHF	.750	.853	.920	.659	.903	.904	.000	.916	.773	.912	.924

Peggy Malone & Associates

(888) 247-8602

File Name : 6-US 340 and Lennox Place PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Lennox PI Eastbound				US 340 Northbound				US 340 Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
03:00 PM	0	0	0	0	0	3	0	3	0	4	0	0	4	7
03:15 PM	0	0	0	0	0	1	0	1	0	2	0	0	2	3
03:30 PM	0	1	0	1	0	3	0	3	0	3	0	0	3	7
03:45 PM	0	1	0	1	0	2	0	2	0	1	0	0	1	4
Total	0	2	0	2	0	9	0	9	0	10	0	0	10	21
04:00 PM	0	0	0	0	0	2	0	2	0	2	0	0	2	4
04:15 PM	0	1	0	1	0	4	0	4	0	1	0	0	1	6
04:30 PM	0	1	0	1	0	3	0	3	0	3	0	0	3	7
04:45 PM	0	0	0	0	0	2	0	2	0	4	0	0	4	6
Total	0	2	0	2	0	11	0	11	0	10	0	0	10	23
05:00 PM	0	0	0	0	0	2	0	2	0	4	0	0	4	6
05:15 PM	0	0	0	0	0	1	0	1	0	2	0	0	2	3
05:30 PM	0	1	0	1	0	2	0	2	0	0	0	0	0	3
05:45 PM	0	0	0	0	0	5	0	5	0	1	0	0	1	6
Total	0	1	0	1	0	10	0	10	0	7	0	0	7	18
Grand Total	0	5	0	5	0	30	0	30	0	27	0	0	27	62
Apprch %	0	100	0		0	100	0		0	100	0	0		
Total %	0	8.1	0	8.1	0	48.4	0	48.4	0	43.5	0	0	43.5	

Start Time	Lennox PI Eastbound				US 340 Northbound				US 340 Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 04:15 PM														
04:15 PM	0	1		1	0	4		4	0	1	0		1	6
04:30 PM	0	1		1	0	3		3	0	3	0		3	7
04:45 PM	0	0		0	0	2		2	0	4	0		4	6
05:00 PM	0	0		0	0	2		2	0	4	0		4	6
Total Volume	0	2		2	0	11		11	0	12	0		12	25
% App. Total	0	100			0	100			0	100	0			
PHF	.000	.500		.500	.000	.688		.688	.000	.750	.000		.750	.893

Peggy Malone & Associates

(888) 247-8602

File Name : 6-US 340 and Lennox Place PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Lennox PI Eastbound				US 340 Northbound				US 340 Southbound				Int. Total	
	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds		App. Total
03:00 PM	5	12	0	17	10	136	0	146	0	158	3	0	161	324
03:15 PM	7	12	0	19	13	137	0	150	0	123	8	0	131	300
03:30 PM	8	20	0	28	12	119	0	131	0	141	2	0	143	302
03:45 PM	9	8	0	17	9	211	0	220	0	143	11	0	154	391
Total	29	52	0	81	44	603	0	647	0	565	24	0	589	1317
04:00 PM	14	15	0	29	17	150	0	167	0	153	5	0	158	354
04:15 PM	5	15	0	20	15	155	0	170	0	135	10	1	146	336
04:30 PM	15	14	0	29	9	162	1	172	0	158	7	0	165	366
04:45 PM	10	11	0	21	22	185	2	209	0	171	10	0	181	411
Total	44	55	0	99	63	652	3	718	0	617	32	1	650	1467
05:00 PM	9	17	0	26	15	154	0	169	0	157	6	0	163	358
05:15 PM	11	17	0	28	12	190	0	202	0	139	11	0	150	380
05:30 PM	7	13	0	20	21	176	0	197	0	138	3	0	141	358
05:45 PM	13	16	0	29	11	172	0	183	0	137	6	0	143	355
Total	40	63	0	103	59	692	0	751	0	571	26	0	597	1451
Grand Total	113	170	0	283	166	1947	3	2116	0	1753	82	1	1836	4235
Apprch %	39.9	60.1	0		7.8	92	0.1		0	95.5	4.5	0.1		
Total %	2.7	4	0	6.7	3.9	46	0.1	50	0	41.4	1.9	0	43.4	

Start Time	Lennox PI Eastbound			US 340 Northbound			US 340 Southbound			Int. Total	
	Left	Right	App. Total	Left	Thru	App. Total	Left	Thru	Right		App. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:30 PM											
04:30 PM	15	14	29	9	162	171	0	158	7	165	365
04:45 PM	10	11	21	22	185	207	0	171	10	181	409
05:00 PM	9	17	26	15	154	169	0	157	6	163	358
05:15 PM	11	17	28	12	190	202	0	139	11	150	380
Total Volume	45	59	104	58	691	749	0	625	34	659	1512
% App. Total	43.3	56.7		7.7	92.3		0	94.8	5.2		
PHF	.750	.868	.897	.659	.909	.905	.000	.914	.773	.910	.924

Peggy Malone & Associates

(888) 247-8602

File Name : 7-US 340 and Tiffany Dr AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Car

Start Time	Tiffany Dr Eastbound					Tiffany Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	2	1	1	0	4	6	0	5	0	11	5	49	1	0	55	1	57	4	0	62	132
06:45 AM	2	0	5	0	7	12	1	6	0	19	9	50	0	0	59	2	48	10	0	60	145
Total	4	1	6	0	11	18	1	11	0	30	14	99	1	0	114	3	105	14	0	122	277
07:00 AM	6	1	4	0	11	7	0	7	0	14	7	71	1	0	79	1	88	6	0	95	199
07:15 AM	7	1	4	0	12	14	0	3	0	17	9	96	6	0	111	2	83	6	0	91	231
07:30 AM	5	1	6	0	12	5	1	10	0	16	1	116	4	0	121	0	100	6	0	106	255
07:45 AM	11	0	6	0	17	10	2	11	0	23	6	118	2	0	126	5	116	17	0	138	304
Total	29	3	20	0	52	36	3	31	0	70	23	401	13	0	437	8	387	35	0	430	989
08:00 AM	9	2	6	0	17	10	1	5	0	16	8	95	3	0	106	3	96	15	0	114	253
08:15 AM	10	1	7	0	18	5	0	7	0	12	5	78	2	0	85	3	102	15	0	120	235
08:30 AM	5	0	3	0	8	7	1	5	0	13	13	67	3	0	83	6	93	15	0	114	218
08:45 AM	11	1	6	0	18	6	1	2	0	9	10	87	2	0	99	1	69	22	0	92	218
Total	35	4	22	0	61	28	3	19	0	50	36	327	10	0	373	13	360	67	0	440	924
09:00 AM	9	2	6	0	17	5	0	1	0	6	8	63	3	0	74	2	71	20	0	93	190
09:15 AM	13	3	8	0	24	6	2	1	0	9	11	77	4	0	92	4	69	24	0	97	222
Grand Total	90	13	62	0	165	93	9	63	0	165	92	967	31	0	1090	30	992	160	0	1182	2602
Apprch %	54.5	7.9	37.6	0		56.4	5.5	38.2	0		8.4	88.7	2.8	0		2.5	83.9	13.5	0		
Total %	3.5	0.5	2.4	0	6.3	3.6	0.3	2.4	0	6.3	3.5	37.2	1.2	0	41.9	1.2	38.1	6.1	0	45.4	

Start Time	Tiffany Dr Eastbound				Tiffany Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	1	6	12	5	1	10	16	1	116	4	121	0	100	6	106	255
07:45 AM	11	0	6	17	10	2	11	23	6	118	2	126	5	116	17	138	304
08:00 AM	9	2	6	17	10	1	5	16	8	95	3	106	3	96	15	114	253
08:15 AM	10	1	7	18	5	0	7	12	5	78	2	85	3	102	15	120	235
Total Volume	35	4	25	64	30	4	33	67	20	407	11	438	11	414	53	478	1047
% App. Total	54.7	6.2	39.1		44.8	6	49.3		4.6	92.9	2.5		2.3	86.6	11.1		
PHF	.795	.500	.893	.889	.750	.500	.750	.728	.625	.862	.688	.869	.550	.892	.779	.866	.861

Peggy Malone & Associates

(888) 247-8602

File Name : 7-US 340 and Tiffany Dr AM
 Site Code :
 Start Date : 4/11/2018
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Groups Printed- Truck

Start Time	Tiffany Dr Eastbound					Tiffany Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
06:45 AM	0	0	0	0	0	0	0	1	0	1	0	4	0	0	4	1	1	0	0	0	2
Total	0	0	0	0	0	0	0	1	0	1	0	8	0	0	8	1	1	0	0	0	2
07:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	1	1	0	0	0	2
07:15 AM	0	0	1	0	1	0	0	0	0	0	3	2	0	0	5	0	1	1	0	0	2
07:30 AM	0	0	3	0	3	0	0	1	0	1	0	3	1	0	4	1	3	0	0	0	4
07:45 AM	1	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0
Total	1	0	4	0	5	0	0	1	0	1	7	6	1	0	14	2	5	1	0	0	8
08:00 AM	0	0	2	0	2	0	0	0	0	0	0	5	0	0	5	0	2	0	0	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	4	1	0	5	6
08:30 AM	0	0	2	0	2	0	0	0	0	0	1	3	0	0	4	0	2	0	0	0	2
08:45 AM	0	0	1	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0
Total	0	0	5	0	5	0	0	0	0	0	2	10	0	0	12	0	8	1	0	0	9
09:00 AM	0	0	2	0	2	0	0	0	0	0	0	2	0	0	2	1	2	0	0	0	3
09:15 AM	0	0	0	0	0	0	0	0	0	0	1	5	0	0	6	0	1	1	0	0	2
Grand Total	1	0	11	0	12	0	0	2	0	2	10	31	1	0	42	4	17	3	0	24	80
Apprch %	8.3	0	91.7	0		0	0	100	0		23.8	73.8	2.4	0		16.7	70.8	12.5	0		
Total %	1.2	0	13.8	0	15	0	0	2.5	0	2.5	12.5	38.8	1.2	0	52.5	5	21.2	3.8	0	30	

Start Time	Tiffany Dr Eastbound				Tiffany Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total			
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total				
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																				
Peak Hour for Entire Intersection Begins at 06:45 AM																				
06:45 AM	0	0	0	0	0	0	0	1	1	0	4	0	0	4	1	1	0	0	2	7
07:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	3	1	1	1	0	2	5
07:15 AM	0	0	1	1	0	0	0	0	0	0	3	2	0	5	0	1	1	1	2	8
07:30 AM	0	0	3	3	0	0	1	1	0	0	0	3	1	4	1	3	0	0	4	12
Total Volume	0	0	4	4	0	0	2	2	0	0	6	9	1	16	3	6	1	10	32	
% App. Total	0	0	100		0	0	100				37.5	56.2	6.2		30	60	10			
PHF	.000	.000	.333	.333	.000	.000	.500	.500	.500	.563	.250	.800	.750	.500	.250	.625				.667

Peggy Malone & Associates

(888) 247-8602

File Name : 7-US 340 and Tiffany Dr AM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Tiffany Dr Eastbound					Tiffany Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	2	1	1	0	4	6	0	5	0	11	5	53	1	0	59	1	57	4	0	62	136
06:45 AM	2	0	5	0	7	12	1	7	0	20	9	54	0	0	63	3	49	10	0	62	152
Total	4	1	6	0	11	18	1	12	0	31	14	107	1	0	122	4	106	14	0	124	288
07:00 AM	6	1	4	0	11	7	0	7	0	14	10	71	1	0	82	2	89	6	0	97	204
07:15 AM	7	1	5	0	13	14	0	3	0	17	12	98	6	0	116	2	84	7	0	93	239
07:30 AM	5	1	9	0	15	5	1	11	0	17	1	119	5	0	125	1	103	6	0	110	267
07:45 AM	12	0	6	0	18	10	2	11	0	23	7	119	2	0	128	5	116	17	0	138	307
Total	30	3	24	0	57	36	3	32	0	71	30	407	14	0	451	10	392	36	0	438	1017
08:00 AM	9	2	8	0	19	10	1	5	0	16	8	100	3	0	111	3	98	15	0	116	262
08:15 AM	10	1	7	0	18	5	0	7	0	12	6	78	2	0	86	3	106	16	0	125	241
08:30 AM	5	0	5	0	10	7	1	5	0	13	14	70	3	0	87	6	95	15	0	116	226
08:45 AM	11	1	7	0	19	6	1	2	0	9	10	89	2	0	101	1	69	22	0	92	221
Total	35	4	27	0	66	28	3	19	0	50	38	337	10	0	385	13	368	68	0	449	950
09:00 AM	9	2	8	0	19	5	0	1	0	6	8	65	3	0	76	3	73	20	0	96	197
09:15 AM	13	3	8	0	24	6	2	1	0	9	12	82	4	0	98	4	70	25	0	99	230
Grand Total	91	13	73	0	177	93	9	65	0	167	102	998	32	0	1132	34	1009	163	0	1206	2682
Apprch %	51.4	7.3	41.2	0		55.7	5.4	38.9	0		9	88.2	2.8	0		2.8	83.7	13.5	0		
Total %	3.4	0.5	2.7	0	6.6	3.5	0.3	2.4	0	6.2	3.8	37.2	1.2	0	42.2	1.3	37.6	6.1	0	45	

Start Time	Tiffany Dr Eastbound				Tiffany Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:30 AM to 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	1	9	15	5	1	11	17	1	119	5	125	1	103	6	110	267
07:45 AM	12	0	6	18	10	2	11	23	7	119	2	128	5	116	17	138	307
08:00 AM	9	2	8	19	10	1	5	16	8	100	3	111	3	98	15	116	262
08:15 AM	10	1	7	18	5	0	7	12	6	78	2	86	3	106	16	125	241
Total Volume	36	4	30	70	30	4	34	68	22	416	12	450	12	423	54	489	1077
% App. Total	51.4	5.7	42.9		44.1	5.9	50		4.9	92.4	2.7		2.5	86.5	11		
PHF	.750	.500	.833	.921	.750	.500	.773	.739	.688	.874	.600	.879	.600	.912	.794	.886	.877

Peggy Malone & Associates

(888) 247-8602

File Name : 7-US 340 and Tiffany Dr MID
 Site Code :
 Start Date : 4/11/2018
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Groups Printed- Car

Start Time	Tiffany Dr Eastbound					Tiffany Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	29	0	12	0	41	10	3	0	0	13	14	86	2	0	102	2	100	36	0	138	294
11:15 AM	25	1	12	0	38	10	3	3	1	17	15	89	2	1	107	3	85	28	0	116	278
11:30 AM	22	3	17	0	42	4	1	3	0	8	17	107	5	0	129	7	91	24	1	123	302
11:45 AM	22	2	25	0	49	4	6	5	0	15	15	108	6	0	129	5	92	39	0	136	329
Total	98	6	66	0	170	28	13	11	1	53	61	390	15	1	467	17	368	127	1	513	1203
12:00 PM	23	3	17	0	43	3	4	2	0	9	20	115	5	0	140	5	92	36	1	134	326
12:15 PM	36	4	17	0	57	5	4	7	0	16	27	81	5	0	113	4	101	30	0	135	321
12:30 PM	18	1	30	0	49	7	5	4	0	16	18	116	8	1	143	5	119	34	0	158	366
12:45 PM	24	3	20	0	47	10	1	6	0	17	21	93	9	0	123	2	124	36	0	162	349
Total	101	11	84	0	196	25	14	19	0	58	86	405	27	1	519	16	436	136	1	589	1362
Grand Total	199	17	150	0	366	53	27	30	1	111	147	795	42	2	986	33	804	263	2	1102	2565
Apprch %	54.4	4.6	41	0		47.7	24.3	27	0.9		14.9	80.6	4.3	0.2		3	73	23.9	0.2		
Total %	7.8	0.7	5.8	0	14.3	2.1	1.1	1.2	0	4.3	5.7	31	1.6	0.1	38.4	1.3	31.3	10.3	0.1	43	

Start Time	Tiffany Dr Eastbound				Tiffany Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	23	3	17	43	3	4	2	9	20	115	5	140	5	92	36	133	325
12:15 PM	36	4	17	57	5	4	7	16	27	81	5	113	4	101	30	135	321
12:30 PM	18	1	30	49	7	5	4	16	18	116	8	142	5	119	34	158	365
12:45 PM	24	3	20	47	10	1	6	17	21	93	9	123	2	124	36	162	349
Total Volume	101	11	84	196	25	14	19	58	86	405	27	518	16	436	136	588	1360
% App. Total	51.5	5.6	42.9		43.1	24.1	32.8		16.6	78.2	5.2		2.7	74.1	23.1		
PHF	.701	.688	.700	.860	.625	.700	.679	.853	.796	.873	.750	.912	.800	.879	.944	.907	.932

Peggy Malone & Associates

(888) 247-8602

File Name : 7-US 340 and Tiffany Dr MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Tiffany Dr Eastbound					Tiffany Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	2	1	0	3	9
11:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	1	1	0	3	5
11:30 AM	1	0	1	0	2	0	1	0	0	1	1	2	0	0	3	0	1	0	0	1	7
11:45 AM	0	0	2	0	2	0	0	1	0	1	0	3	0	0	3	0	1	2	0	3	9
Total	1	0	3	0	4	0	1	1	0	2	3	11	0	0	14	1	5	4	0	10	30
12:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	2	0	0	2	4
12:15 PM	0	0	2	0	2	0	0	1	0	1	0	1	1	0	2	0	1	2	0	3	8
12:30 PM	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1	0	5	0	0	5	8
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	2	0	0	2	7
Total	0	0	3	0	3	0	0	2	0	2	2	7	1	0	10	0	10	2	0	12	27
Grand Total	1	0	6	0	7	0	1	3	0	4	5	18	1	0	24	1	15	6	0	22	57
Apprch %	14.3	0	85.7	0		0	25	75	0		20.8	75	4.2	0		4.5	68.2	27.3	0		
Total %	1.8	0	10.5	0	12.3	0	1.8	5.3	0	7	8.8	31.6	1.8	0	42.1	1.8	26.3	10.5	0	38.6	

Start Time	Tiffany Dr Eastbound				Tiffany Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:00 AM																	
11:00 AM	0	0	0	0	0	0	0	0	0	6	0	6	0	2	1	3	9
11:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	1	1	1	3	5
11:30 AM	1	0	1	2	0	1	0	1	1	2	0	3	0	1	0	1	7
11:45 AM	0	0	2	2	0	0	1	1	0	3	0	3	0	1	2	3	9
Total Volume	1	0	3	4	0	1	1	2	3	11	0	14	1	5	4	10	30
% App. Total	25	0	75		0	50	50		21.4	78.6	0		10	50	40		
PHF	.250	.000	.375	.500	.000	.250	.250	.500	.375	.458	.000	.583	.250	.625	.500	.833	.833

Peggy Malone & Associates

(888) 247-8602

File Name : 7-US 340 and Tiffany Dr MID
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Combined

Start Time	Tiffany Dr Eastbound					Tiffany Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
11:00 AM	29	0	12	0	41	10	3	0	0	13	14	92	2	0	108	2	102	37	0	141	303
11:15 AM	25	1	12	0	38	10	3	3	1	17	17	89	2	1	109	4	86	29	0	119	283
11:30 AM	23	3	18	0	44	4	2	3	0	9	18	109	5	0	132	7	92	24	1	124	309
11:45 AM	22	2	27	0	51	4	6	6	0	16	15	111	6	0	132	5	93	41	0	139	338
Total	99	6	69	0	174	28	14	12	1	55	64	401	15	1	481	18	373	131	1	523	1233
12:00 PM	23	3	17	0	43	3	4	2	0	9	21	116	5	0	142	5	94	36	1	136	330
12:15 PM	36	4	19	0	59	5	4	8	0	17	27	82	6	0	115	4	102	32	0	138	329
12:30 PM	18	1	31	0	50	7	5	5	0	17	18	117	8	1	144	5	124	34	0	163	374
12:45 PM	24	3	20	0	47	10	1	6	0	17	22	97	9	0	128	2	126	36	0	164	356
Total	101	11	87	0	199	25	14	21	0	60	88	412	28	1	529	16	446	138	1	601	1389
Grand Total	200	17	156	0	373	53	28	33	1	115	152	813	43	2	1010	34	819	269	2	1124	2622
Apprch %	53.6	4.6	41.8	0		46.1	24.3	28.7	0.9		15	80.5	4.3	0.2		3	72.9	23.9	0.2		
Total %	7.6	0.6	5.9	0	14.2	2	1.1	1.3	0	4.4	5.8	31	1.6	0.1	38.5	1.3	31.2	10.3	0.1	42.9	

Start Time	Tiffany Dr Eastbound				Tiffany Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	23	3	17	43	3	4	2	9	21	116	5	142	5	94	36	135	329
12:15 PM	36	4	19	59	5	4	8	17	27	82	6	115	4	102	32	138	329
12:30 PM	18	1	31	50	7	5	5	17	18	117	8	143	5	124	34	163	373
12:45 PM	24	3	20	47	10	1	6	17	22	97	9	128	2	126	36	164	356
Total Volume	101	11	87	199	25	14	21	60	88	412	28	528	16	446	138	600	1387
% App. Total	50.8	5.5	43.7		41.7	23.3	35		16.7	78	5.3		2.7	74.3	23		
PHF	.701	.688	.702	.843	.625	.700	.656	.882	.815	.880	.778	.923	.800	.885	.958	.915	.930

Peggy Malone & Associates

(888) 247-8602

File Name : 7-US 340 and Tiffany Dr PM
 Site Code :
 Start Date : 4/11/2018
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Groups Printed- Car

Start Time	Tiffany Dr Eastbound					Tiffany Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	28	1	28	0	57	7	5	9	0	21	21	116	8	0	145	5	116	31	1	153	376
03:15 PM	26	6	18	0	50	10	3	3	0	16	17	113	6	0	136	5	98	41	0	144	346
03:30 PM	33	6	16	0	55	7	1	7	0	15	20	101	4	0	125	7	116	30	0	153	348
03:45 PM	20	5	23	0	48	5	5	6	0	16	26	177	15	0	218	8	131	30	0	169	451
Total	107	18	85	0	210	29	14	25	0	68	84	507	33	0	624	25	461	132	1	619	1521
04:00 PM	28	5	27	0	60	5	4	8	0	17	18	136	7	0	161	8	118	35	0	161	399
04:15 PM	30	5	26	0	61	2	1	6	0	9	17	136	6	0	159	4	118	29	0	151	380
04:30 PM	31	0	29	0	60	7	1	4	0	12	22	139	9	0	170	8	130	27	0	165	407
04:45 PM	35	0	24	0	59	6	4	7	0	17	24	149	10	0	183	10	148	38	0	196	455
Total	124	10	106	0	240	20	10	25	0	55	81	560	32	0	673	30	514	129	0	673	1641
05:00 PM	26	7	18	0	51	5	3	5	0	13	10	152	9	0	171	7	128	29	0	164	399
05:15 PM	27	2	22	0	51	3	5	9	0	17	25	165	12	0	202	9	130	39	0	178	448
05:30 PM	40	6	22	0	68	5	7	3	0	15	24	145	9	0	178	8	116	27	0	151	412
05:45 PM	31	4	27	0	62	3	4	11	0	18	28	149	8	0	185	8	117	32	0	157	422
Total	124	19	89	0	232	16	19	28	0	63	87	611	38	0	736	32	491	127	0	650	1681
Grand Total	355	47	280	0	682	65	43	78	0	186	252	1678	103	0	2033	87	1466	388	1	1942	4843
Apprch %	52.1	6.9	41.1	0		34.9	23.1	41.9	0		12.4	82.5	5.1	0		4.5	75.5	20	0.1		
Total %	7.3	1	5.8	0	14.1	1.3	0.9	1.6	0	3.8	5.2	34.6	2.1	0	42	1.8	30.3	8	0	40.1	

Start Time	Tiffany Dr Eastbound				Tiffany Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	35	0	24	59	6	4	7	17	24	149	10	183	10	148	38	196	455
05:00 PM	26	7	18	51	5	3	5	13	10	152	9	171	7	128	29	164	399
05:15 PM	27	2	22	51	3	5	9	17	25	165	12	202	9	130	39	178	448
05:30 PM	40	6	22	68	5	7	3	15	24	145	9	178	8	116	27	151	412
Total Volume	128	15	86	229	19	19	24	62	83	611	40	734	34	522	133	689	1714
% App. Total	55.9	6.6	37.6		30.6	30.6	38.7		11.3	83.2	5.4		4.9	75.8	19.3		
PHF	.800	.536	.896	.842	.792	.679	.667	.912	.830	.926	.833	.908	.850	.882	.853	.879	.942

Peggy Malone & Associates

(888) 247-8602

File Name : 7-US 340 and Tiffany Dr PM
 Site Code :
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Truck

Start Time	Tiffany Dr Eastbound					Tiffany Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	1	4	0	0	5	9
03:15 PM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	1	2	1	0	4	6
03:30 PM	0	0	1	0	1	0	0	0	0	0	0	3	0	0	3	1	2	0	0	3	7
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	3
Total	0	0	1	0	1	0	0	2	0	2	1	8	0	0	9	3	9	1	0	13	25
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4
04:15 PM	1	0	0	0	1	0	0	0	0	0	0	4	0	0	4	0	1	0	0	1	6
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	3	0	0	3	0	3	0	0	3	7
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	4	0	0	4	7
Total	1	0	0	0	1	0	1	0	0	1	0	12	0	0	12	0	10	0	0	10	24
05:00 PM	0	0	1	0	1	0	0	0	0	0	1	2	0	0	3	0	4	0	0	4	8
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	1	0	0	1	6
Total	0	0	1	0	1	0	0	0	0	0	2	7	0	0	9	0	5	1	0	6	16
Grand Total	1	0	2	0	3	0	1	2	0	3	3	27	0	0	30	3	24	2	0	29	65
Apprch %	33.3	0	66.7	0		0	33.3	66.7	0		10	90	0	0		10.3	82.8	6.9	0		
Total %	1.5	0	3.1	0	4.6	0	1.5	3.1	0	4.6	4.6	41.5	0	0	46.2	4.6	36.9	3.1	0	44.6	

Start Time	Tiffany Dr Eastbound				Tiffany Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	0	0	1	0	0	0	0	0	4	0	4	0	1	0	1	6
04:30 PM	0	0	0	0	0	1	0	1	0	3	0	3	0	3	0	3	7
04:45 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	4	0	4	7
05:00 PM	0	0	1	1	0	0	0	0	1	2	0	3	0	4	0	4	8
Total Volume	1	0	1	2	0	1	0	1	1	12	0	13	0	12	0	12	28
% App. Total	50	0	50		0	100	0		7.7	92.3	0		0	100	0		
PHF	.250	.000	.250	.500	.000	.250	.000	.250	.250	.750	.000	.813	.000	.750	.000	.750	.875

Peggy Malone & Associates

(888) 247-8602

File Name : 7-US 340 and Tiffany Dr PM
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Groups Printed- Combined

Start Time	Tiffany Dr Eastbound					Tiffany Dr Westbound					US 340 Northbound					US 340 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:00 PM	28	1	28	0	57	7	5	10	0	22	21	119	8	0	148	6	120	31	1	158	385
03:15 PM	26	6	18	0	50	10	3	4	0	17	18	113	6	0	137	6	100	42	0	148	352
03:30 PM	33	6	17	0	56	7	1	7	0	15	20	104	4	0	128	8	118	30	0	156	355
03:45 PM	20	5	23	0	48	5	5	6	0	16	26	179	15	0	220	8	132	30	0	170	454
Total	107	18	86	0	211	29	14	27	0	70	85	515	33	0	633	28	470	133	1	632	1546
04:00 PM	28	5	27	0	60	5	4	8	0	17	18	138	7	0	163	8	120	35	0	163	403
04:15 PM	31	5	26	0	62	2	1	6	0	9	17	140	6	0	163	4	119	29	0	152	386
04:30 PM	31	0	29	0	60	7	2	4	0	13	22	142	9	0	173	8	133	27	0	168	414
04:45 PM	35	0	24	0	59	6	4	7	0	17	24	152	10	0	186	10	152	38	0	200	462
Total	125	10	106	0	241	20	11	25	0	56	81	572	32	0	685	30	524	129	0	683	1665
05:00 PM	26	7	19	0	52	5	3	5	0	13	11	154	9	0	174	7	132	29	0	168	407
05:15 PM	27	2	22	0	51	3	5	9	0	17	25	165	12	0	202	9	130	40	0	179	449
05:30 PM	40	6	22	0	68	5	7	3	0	15	24	146	9	0	179	8	116	27	0	151	413
05:45 PM	31	4	27	0	62	3	4	11	0	18	29	153	8	0	190	8	118	32	0	158	428
Total	124	19	90	0	233	16	19	28	0	63	89	618	38	0	745	32	496	128	0	656	1697
Grand Total	356	47	282	0	685	65	44	80	0	189	255	1705	103	0	2063	90	1490	390	1	1971	4908
Apprch %	52	6.9	41.2	0		34.4	23.3	42.3	0		12.4	82.6	5	0		4.6	75.6	19.8	0.1		
Total %	7.3	1	5.7	0	14	1.3	0.9	1.6	0	3.9	5.2	34.7	2.1	0	42	1.8	30.4	7.9	0	40.2	

Start Time	Tiffany Dr Eastbound				Tiffany Dr Westbound				US 340 Northbound				US 340 Southbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	31	0	29	60	7	2	4	13	22	142	9	173	8	133	27	168	414
04:45 PM	35	0	24	59	6	4	7	17	24	152	10	186	10	152	38	200	462
05:00 PM	26	7	19	52	5	3	5	13	11	154	9	174	7	132	29	168	407
05:15 PM	27	2	22	51	3	5	9	17	25	165	12	202	9	130	40	179	449
Total Volume	119	9	94	222	21	14	25	60	82	613	40	735	34	547	134	715	1732
% App. Total	53.6	4.1	42.3		35	23.3	41.7		11.2	83.4	5.4		4.8	76.5	18.7		
PHF	.850	.321	.810	.925	.750	.700	.694	.882	.820	.929	.833	.910	.850	.900	.838	.894	.937