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KHA PROJECT	142224000
DATE	05-15-2012
SCALE	AS SHOWN
DESIGNED BY	WJL
DRAWN BY	BL
CHECKED BY	GER

WOODVILLE HWY (SR 363) PD&E
PREPARED FOR
**CAPITAL REGION TRANSPORTATION
PLANNING AGENCY**

TALLAHASSEE,

FLORIDA

LICENSED PROFESSIONAL	_____
FLORIDA LICENSE NUMBER	_____
DATE:	_____

CONCEPT PLAN

SHEET NUMBER

1-7

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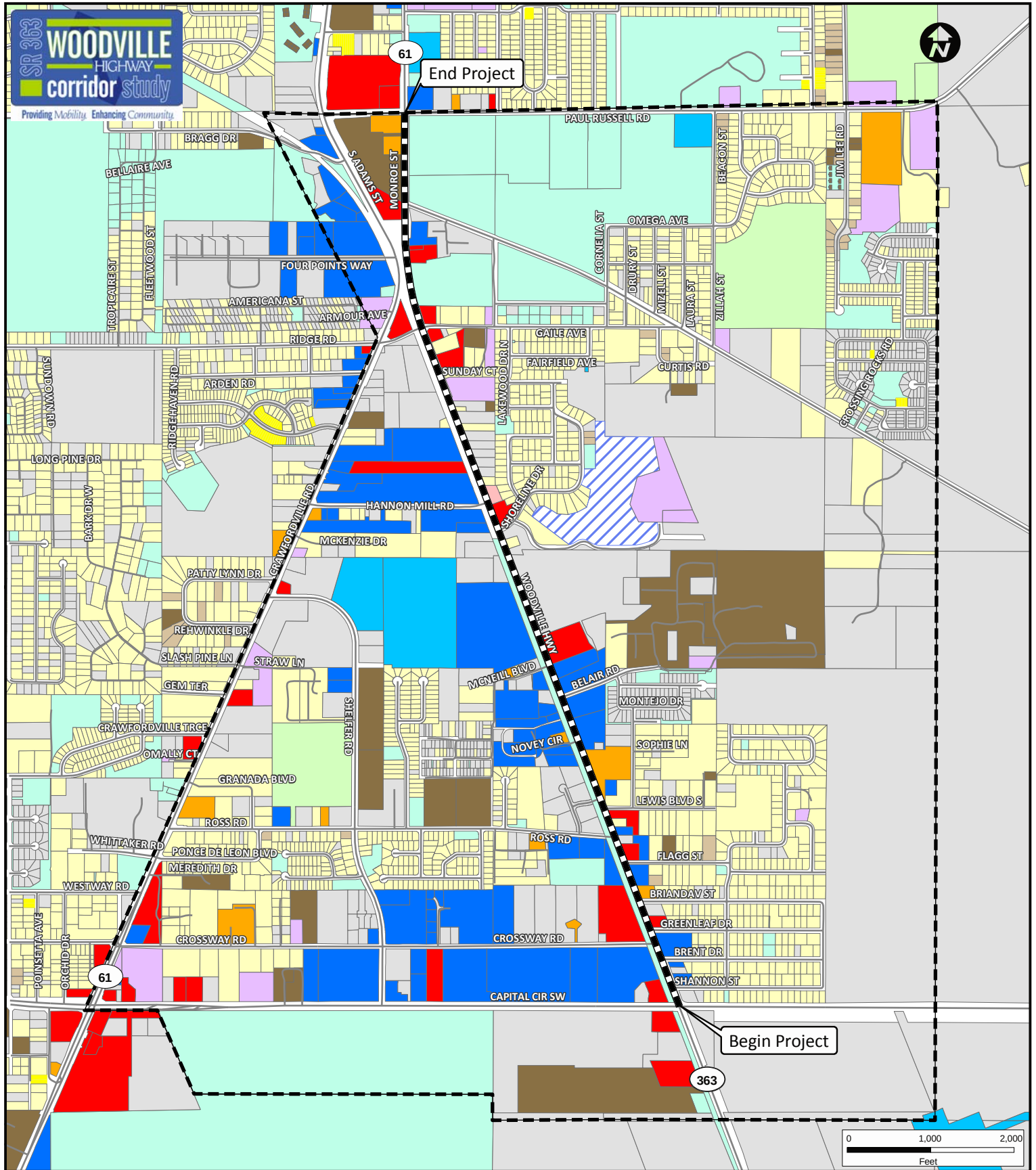
SHEET NUMBER
1-9

Appendix D

Land Use Maps

WOODVILLE HIGHWAY CORRIDOR STUDY

EXISTING LAND USE MAP



- Area of Study
- Woodville Highway
- Corridor Study Limits
- Local Roads

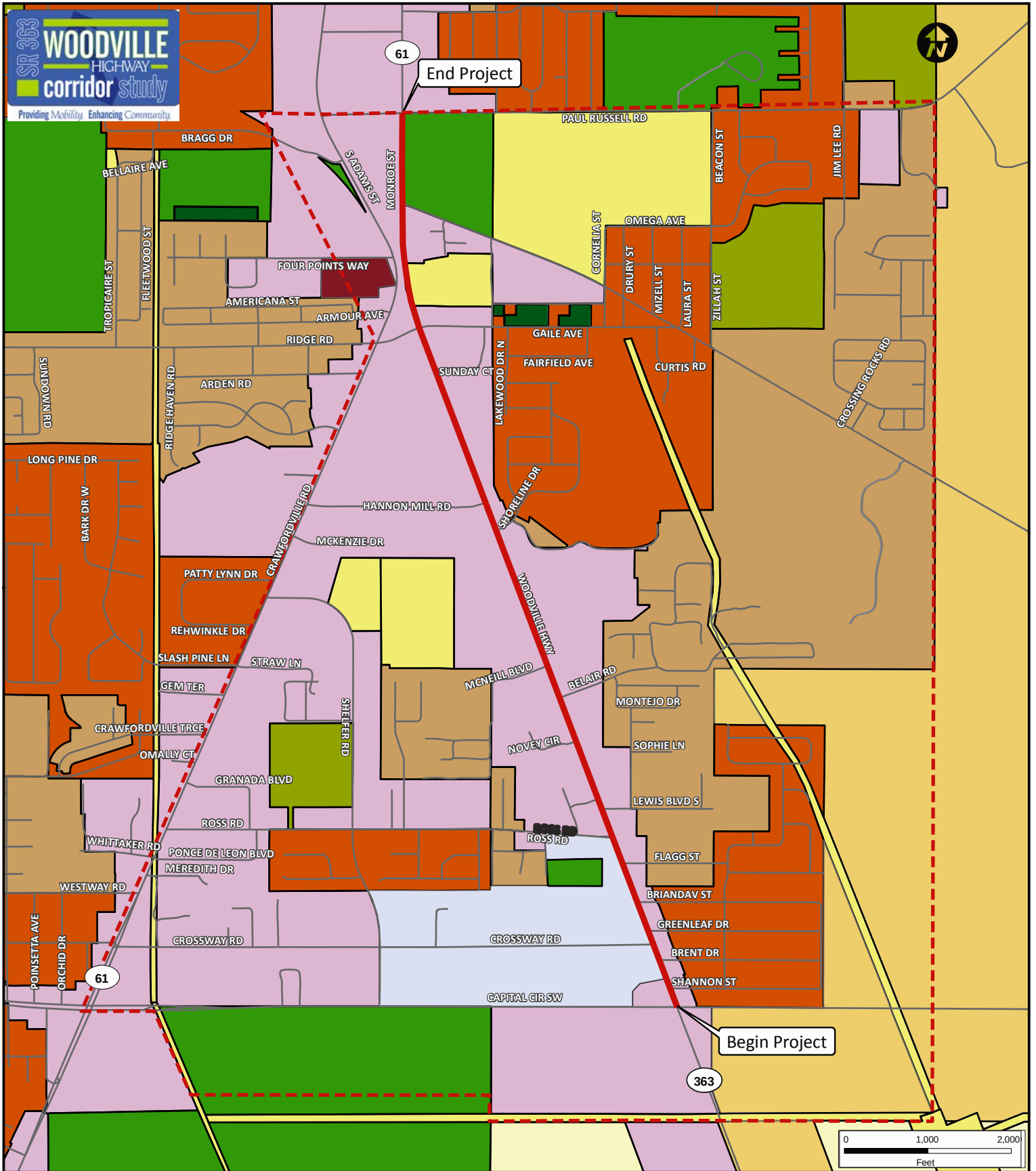
- Single Family Detached/
Mobile Home
- Single Family Attached
- Two-Family Dwelling
- Multi-Family
- Motel/Hospital/Clinic
- Retail

- Office
- Warehouse
- Government Operation
- School
- Open Space
- Religious/Non-profit
- Water
- Vacant



WOODVILLE HIGHWAY CORRIDOR STUDY

FUTURE LAND USE MAP



- - - Area of Study
- Woodville Highway
- Corridor Study Limits
- Local Roads
- Industrial
- Education Facilities
- Government Operational
- Planned Development
- Urban Residential 2
- Recreation/Open Space
- Residential Preservation
- Suburban
- Rural
- Open Space/Stormwater Facilities



Appendix E

Synchro Summary Reports

HCM Signalized Intersection Capacity Analysis 15: San Marcos Rd & Woodville Hwy

Woodville Hwy
2035 Build PM Peak

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	45	15	20	1200	2060	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
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)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.06	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	106	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	16	22	1304	2239	87
RTOR Reduction (vph)	0	15	0	0	0	20
Lane Group Flow (vph)	49	1	22	1304	2239	67
Turn Type	Perm		pm+pt		Perm	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	4.0	4.0	72.9	72.9	65.9	65.9
Effective Green, g (s)	4.0	4.0	72.9	72.9	65.9	65.9
Actuated g/C Ratio	0.05	0.05	0.85	0.85	0.77	0.77
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	82	74	138	3003	2715	1214
v/s Ratio Prot	c0.03		0.00	c0.37	c0.63	
v/s Ratio Perm		0.00	0.13			0.04
v/c Ratio	0.60	0.01	0.16	0.43	0.82	0.05
Uniform Delay, d1	40.2	39.1	10.3	1.6	6.3	2.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.2	0.1	0.5	0.1	2.2	0.0
Delay (s)	51.3	39.1	10.8	1.7	8.5	2.4
Level of Service	D	D	B	A	A	A
Approach Delay (s)	48.3			1.8	8.3	
Approach LOS	D			A	A	
Intersection Summary						
HCM Average Control Delay			6.7	HCM Level of Service		A
HCM Volume to Capacity ratio			0.81			
Actuated Cycle Length (s)			85.9	Sum of lost time (s)		13.5
Intersection Capacity Utilization			67.8%	ICU Level of Service		C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis 12: Capital Cir & Woodville Hwy

Woodville Hwy
2035 Build PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	195	875	405	685	1030	225	300	540	400	225	1050	285
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	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)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
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)	3433	5085	1583	3433	5085	1583	3433	3539	1583	3433	3539	1583
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)	212	951	440	745	1120	245	326	587	435	245	1141	310
RTOR Reduction (vph)	0	0	6	0	0	45	0	0	13	0	0	4
Lane Group Flow (vph)	212	951	434	745	1120	200	326	587	422	245	1141	306
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	9.3	18.7	28.2	20.5	29.9	41.4	9.5	31.3	51.8	11.5	33.3	42.6
Effective Green, g (s)	9.3	18.7	28.2	20.5	29.9	41.4	9.5	31.3	51.8	11.5	33.3	42.6
Actuated g/C Ratio	0.09	0.19	0.28	0.20	0.30	0.41	0.10	0.31	0.52	0.12	0.33	0.43
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	319	951	518	704	1520	727	326	1108	891	395	1178	746
v/s Ratio Prot	0.06	c0.19	c0.08	c0.22	0.22	0.03	0.09	0.17	0.10	0.07	c0.32	0.04
v/s Ratio Perm			0.19			0.09			0.17			0.16
v/c Ratio	0.66	1.00	0.84	1.06	0.74	0.28	1.00	0.53	0.47	0.62	0.97	0.41
Uniform Delay, d1	43.8	40.6	33.7	39.8	31.5	19.4	45.2	28.3	15.4	42.2	32.8	20.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.1	29.2	11.3	50.4	1.9	0.2	49.8	0.5	0.4	3.0	18.9	0.4
Delay (s)	49.0	69.8	45.0	90.1	33.4	19.6	95.1	28.7	15.8	45.2	51.7	20.3
Level of Service	D	E	D	F	C	B	F	C	B	D	D	C
Approach Delay (s)		60.3			51.8			40.6			45.0	
Approach LOS		E			D			D			D	

Intersection Summary

HCM Average Control Delay	49.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis 11: Crossway Rd & Woodville Hwy

Woodville Hwy
2035 Build PM Peak

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	35	40	40	920	1520	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	43	43	1000	1652	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)				825		
pX, platoon unblocked	0.88					
vC, conflicting volume	2261	848	1696			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2162	848	1696			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	86	88			
cM capacity (veh/h)	31	305	372			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	82	377	667	1101	594	
Volume Left	38	43	0	0	0	
Volume Right	43	0	0	0	43	
cSH	60	372	1700	1700	1700	
Volume to Capacity	1.35	0.12	0.39	0.65	0.35	
Queue Length 95th (ft)	175	10	0	0	0	
Control Delay (s)	349.5	3.9	0.0	0.0	0.0	
Lane LOS	F	A				
Approach Delay (s)	349.5	1.4		0.0		
Approach LOS	F					
Intersection Summary						
Average Delay			10.6			
Intersection Capacity Utilization			65.9%	ICU Level of Service		C
Analysis Period (min)			15			

HCM Signalized Intersection Capacity Analysis 8: Ross Rd & Woodville Hwy

Woodville Hwy
2035 Build PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	0	40	0	0	0	50	905	0	0	1525	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5					4.5	4.5			4.5	4.5
Lane Util. Factor		1.00					1.00	0.95			0.95	1.00
Frt		0.96					1.00	1.00			1.00	0.85
Flt Protected		0.97					0.95	1.00			1.00	1.00
Satd. Flow (prot)		1722					1770	3539			3539	1583
Flt Permitted		0.80					0.10	1.00			1.00	1.00
Satd. Flow (perm)		1421					182	3539			3539	1583
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)	87	0	43	0	0	0	54	984	0	0	1658	98
RTOR Reduction (vph)	0	26	0	0	0	0	0	0	0	0	0	40
Lane Group Flow (vph)	0	104	0	0	0	0	54	984	0	0	1658	58
Turn Type	Perm			Perm			pm+pt			Perm		Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)		7.9					44.6	44.6			36.5	36.5
Effective Green, g (s)		7.9					44.6	44.6			36.5	36.5
Actuated g/C Ratio		0.13					0.73	0.73			0.59	0.59
Clearance Time (s)		4.5					4.5	4.5			4.5	4.5
Vehicle Extension (s)		3.0					3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		183					225	2566			2100	940
v/s Ratio Prot							0.01	c0.28			c0.47	
v/s Ratio Perm		c0.07					0.16					0.04
v/c Ratio		0.57					0.24	0.38			0.79	0.06
Uniform Delay, d1		25.2					7.5	3.2			9.6	5.3
Progression Factor		1.00					1.00	1.00			1.00	1.00
Incremental Delay, d2		4.0					0.6	0.1			2.1	0.0
Delay (s)		29.2					8.1	3.3			11.6	5.3
Level of Service		C					A	A			B	A
Approach Delay (s)		29.2			0.0			3.6			11.3	
Approach LOS		C			A			A			B	

Intersection Summary

HCM Average Control Delay	9.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	61.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis 7: Hannon Mill Rd & Woodville Hwy

Woodville Hwy
2035 Build PM Peak

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	25	25	25	960	1585	25
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	27	27	27	1043	1723	27
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2312	875	1750			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2312	875	1750			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	8	91	92			
cM capacity (veh/h)	29	292	354			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	54	375	696	1149	601	
Volume Left	27	27	0	0	0	
Volume Right	27	0	0	0	27	
cSH	54	354	1700	1700	1700	
Volume to Capacity	1.02	0.08	0.41	0.68	0.35	
Queue Length 95th (ft)	114	6	0	0	0	
Control Delay (s)	251.2	2.6	0.0	0.0	0.0	
Lane LOS	F	A				
Approach Delay (s)	251.2	0.9		0.0		
Approach LOS	F					
Intersection Summary						
Average Delay		5.1				
Intersection Capacity Utilization		54.6%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Signalized Intersection Capacity Analysis

1: Paul Russell Rd & Adams St

Woodville Hwy Corridor Study
2035 No Build 4-Lane PM Peak

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	680	230	870	205	230	1535
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	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)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.18	1.00
Satd. Flow (perm)	3433	1583	3539	1583	337	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	739	250	946	223	250	1668
RTOR Reduction (vph)	0	185	0	140	0	0
Lane Group Flow (vph)	739	65	946	83	250	1668
Turn Type	Perm		Perm		pm+pt	
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Actuated Green, G (s)	12.7	12.7	18.1	18.1	28.1	28.1
Effective Green, g (s)	12.7	12.7	18.1	18.1	28.1	28.1
Actuated g/C Ratio	0.26	0.26	0.37	0.37	0.58	0.58
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	893	412	1313	587	370	2038
v/s Ratio Prot	c0.22		0.27		0.08	c0.47
v/s Ratio Perm		0.04		0.05	0.31	
v/c Ratio	0.83	0.16	0.72	0.14	0.68	0.82
Uniform Delay, d1	17.0	13.9	13.2	10.2	7.3	8.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.4	0.2	2.0	0.1	4.8	2.7
Delay (s)	23.4	14.1	15.2	10.3	12.1	11.0
Level of Service	C	B	B	B	B	B
Approach Delay (s)	21.0		14.2			11.1
Approach LOS	C		B			B
Intersection Summary						
HCM Average Control Delay			14.4	HCM Level of Service		B
HCM Volume to Capacity ratio			0.82			
Actuated Cycle Length (s)			48.8	Sum of lost time (s)		8.0
Intersection Capacity Utilization			68.5%	ICU Level of Service		C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis 2: Paul Russell Rd & Woodville Hwy

Woodville Hwy Corridor Study
2035 No Build 4-Lane PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	200	145	265	340	60	240	1080	225	130	1800	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.94		1.00	0.98		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3316		1770	3460		1770	3448		1770	3455	
Flt Permitted	0.33	1.00		0.25	1.00		0.05	1.00		0.12	1.00	
Satd. Flow (perm)	621	3316		466	3460		85	3448		229	3455	
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)	103	217	158	288	370	65	261	1174	245	141	1957	370
RTOR Reduction (vph)	0	94	0	0	10	0	0	12	0	0	11	0
Lane Group Flow (vph)	103	281	0	288	425	0	261	1407	0	141	2316	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	19.0	12.0		31.0	20.0		100.8	87.8		93.2	84.0	
Effective Green, g (s)	19.0	12.0		31.0	20.0		100.8	87.8		93.2	84.0	
Actuated g/C Ratio	0.14	0.09		0.22	0.14		0.72	0.63		0.67	0.60	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	142	284		243	494		218	2162		254	2073	
v/s Ratio Prot	0.04	0.08		c0.13	0.12		c0.11	0.41		0.04	0.67	
v/s Ratio Perm	0.06			c0.14			c0.75			0.33		
v/c Ratio	0.73	0.99		1.19	0.86		1.20	0.65		0.56	1.12	
Uniform Delay, d1	56.0	63.9		51.2	58.6		51.9	16.4		13.6	28.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	16.7	49.8		117.1	13.9		124.5	0.7		2.6	60.0	
Delay (s)	72.7	113.7		168.3	72.5		176.4	17.2		16.2	88.0	
Level of Service	E	F		F	E		F	B		B	F	
Approach Delay (s)		104.9			110.7			41.9			83.9	
Approach LOS		F			F			D			F	

Intersection Summary

HCM Average Control Delay	76.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	112.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

4: Gaile Ave & Woodville Hwy

Woodville Hwy Corridor Study
2035 No Build 4-Lane PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	300	190	160	110	225	45	110	810	65	90	1340	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.93		1.00	0.97		1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1735		1770	1816		1770	3500		1770	3375	
Flt Permitted	0.20	1.00		0.25	1.00		0.06	1.00		0.22	1.00	
Satd. Flow (perm)	373	1735		466	1816		113	3500		406	3375	
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)	326	207	174	120	245	49	120	880	71	98	1457	652
RTOR Reduction (vph)	0	26	0	0	6	0	0	5	0	0	43	0
Lane Group Flow (vph)	326	355	0	120	288	0	120	946	0	98	2066	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.0	27.0		21.0	16.0		70.0	66.0		74.0	68.0	
Effective Green, g (s)	36.0	27.0		21.0	16.0		70.0	66.0		74.0	68.0	
Actuated g/C Ratio	0.30	0.22		0.18	0.13		0.58	0.55		0.62	0.57	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	298	390		136	242		121	1925		319	1913	
v/s Ratio Prot	c0.15	0.20		0.04	0.16		c0.03	0.27		c0.02	c0.61	
v/s Ratio Perm	c0.18			0.12			0.55			0.17		
v/c Ratio	1.09	0.91		0.88	1.19		0.99	0.49		0.31	1.08	
Uniform Delay, d1	37.4	45.3		47.2	52.0		30.0	16.7		11.1	26.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	79.6	25.0		43.9	118.9		79.0	0.2		0.5	46.0	
Delay (s)	117.0	70.3		91.0	170.9		109.0	16.8		11.7	72.0	
Level of Service	F	E		F	F		F	B		B	E	
Approach Delay (s)		91.9			147.8			27.2			69.3	
Approach LOS		F			F			C			E	
Intersection Summary												
HCM Average Control Delay		70.0					HCM Level of Service		E			
HCM Volume to Capacity ratio		1.07										
Actuated Cycle Length (s)		120.0					Sum of lost time (s)		12.0			
Intersection Capacity Utilization		106.9%					ICU Level of Service		G			
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis 5: Ridge Rd & Adams St

Woodville Hwy Corridor Study
2035 No Build 4-Lane PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	200	85	635	230	45	75	815	200	220	1700	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.95	
Frt	1.00	0.96		1.00	0.98		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1780		1770	1817		1770	4935		1770	3481	
Flt Permitted	0.58	1.00		0.17	1.00		0.07	1.00		0.14	1.00	
Satd. Flow (perm)	1076	1780		324	1817		126	4935		269	3481	
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)	163	217	92	690	250	49	82	886	217	239	1848	228
RTOR Reduction (vph)	0	10	0	0	5	0	0	27	0	0	6	0
Lane Group Flow (vph)	163	299	0	690	294	0	82	1076	0	239	2070	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.5	19.0		63.0	47.5		63.3	59.3		79.0	71.0	
Effective Green, g (s)	30.5	19.0		63.0	47.5		63.3	59.3		79.0	71.0	
Actuated g/C Ratio	0.20	0.13		0.42	0.32		0.42	0.40		0.53	0.47	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	272	225		522	575		97	1951		299	1648	
v/s Ratio Prot	0.05	0.17		c0.35	0.16		0.02	0.22		c0.08	c0.59	
v/s Ratio Perm	0.08			c0.20			0.34			0.34		
v/c Ratio	0.60	1.33		1.32	0.51		0.85	0.55		0.80	1.26	
Uniform Delay, d1	52.4	65.5		44.6	41.8		38.6	35.1		24.2	39.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.5	174.4		157.8	0.8		45.6	0.3		13.8	120.3	
Delay (s)	56.0	239.9		202.5	42.6		84.2	35.4		38.1	159.8	
Level of Service	E	F		F	D		F	D		D	F	
Approach Delay (s)		176.4			154.1			38.8			147.2	
Approach LOS		F			F			D			F	
Intersection Summary												
HCM Average Control Delay			125.5			HCM Level of Service				F		
HCM Volume to Capacity ratio			1.27									
Actuated Cycle Length (s)			150.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			122.1%			ICU Level of Service			H			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis 13: Bragg Dr & Adams St

Woodville Hwy Corridor Study
2035 No Build 4-Lane PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	55	5	115	5	5	55	90	940	5	40	2020	135
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	60	5	125	5	5	60	98	1022	5	43	2196	147
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage (veh)								2			2	
Upstream signal (ft)											582	
pX, platoon unblocked	0.57	0.57	0.57	0.57	0.57		0.57					
vC, conflicting volume	2955	3579	1171	2533	3649	343	2342			1027		
vC1, stage 1 conf vol	2356	2356		1220	1220							
vC2, stage 2 conf vol	599	1223		1312	2429							
vCu, unblocked vol	2920	4022	0	2175	4146	343	1839			1027		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	88	80	93	0	91	47			94		
cM capacity (veh/h)	37	45	614	83	1	653	185			672		
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3		
Volume Total	190	11	60	98	409	409	210	43	1464	879		
Volume Left	60	5	0	98	0	0	0	43	0	0		
Volume Right	125	0	60	0	0	0	5	0	0	147		
cSH	97	1	653	185	1700	1700	1700	672	1700	1700		
Volume to Capacity	1.95	9.76	0.09	0.53	0.24	0.24	0.12	0.06	0.86	0.52		
Queue Length 95th (ft)	401	Err	8	67	0	0	0	5	0	0		
Control Delay (s)	536.3	Err	11.1	44.3	0.0	0.0	0.0	10.7	0.0	0.0		
Lane LOS	F	F	B	E				B				
Approach Delay (s)	536.3	1547.7		3.9				0.2				
Approach LOS	F	F										
Intersection Summary												
Average Delay			57.3									
Intersection Capacity Utilization			92.2%			ICU Level of Service			F			
Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis 17: Tram Rd & Woodville Hwy

Woodville Hwy Corridor Study
2035 No Build 4-Lane PM Peak

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	25	440	1125	25	245	1975
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0		6.0	6.0
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.87		1.00		1.00	1.00
Flt Protected	1.00		1.00		0.95	1.00
Satd. Flow (prot)	1620		3528		1770	3539
Flt Permitted	1.00		1.00		0.11	1.00
Satd. Flow (perm)	1620		3528		202	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	478	1223	27	266	2147
RTOR Reduction (vph)	281	0	2	0	0	0
Lane Group Flow (vph)	224	0	1248	0	266	2147
Turn Type					pm+pt	
Protected Phases	8		2		1	6
Permitted Phases					6	
Actuated Green, G (s)	11.0		30.9		47.0	47.0
Effective Green, g (s)	11.0		30.9		47.0	47.0
Actuated g/C Ratio	0.16		0.44		0.67	0.67
Clearance Time (s)	6.0		6.0		6.0	6.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	255		1557		362	2376
v/s Ratio Prot	c0.14		0.35		0.11	c0.61
v/s Ratio Perm					0.39	
v/c Ratio	0.88		0.80		0.73	0.90
Uniform Delay, d1	28.9		16.9		14.8	9.6
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	27.2		4.4		7.5	6.2
Delay (s)	56.1		21.3		22.4	15.8
Level of Service	E		C		C	B
Approach Delay (s)	56.1		21.3			16.5
Approach LOS	E		C			B
Intersection Summary						
HCM Average Control Delay			22.8		HCM Level of Service	C
HCM Volume to Capacity ratio			0.90			
Actuated Cycle Length (s)			70.0		Sum of lost time (s)	12.0
Intersection Capacity Utilization			93.2%		ICU Level of Service	F
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

1: Paul Russell Rd & Adams St

Woodville Hwy Corridor Study
2035 Tram Rd Ext (4-Lane Woodville) PM Peak

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	450	150	1120	165	135	1900
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	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)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.12	1.00
Satd. Flow (perm)	3433	1583	3539	1583	229	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	163	1217	179	147	2065
RTOR Reduction (vph)	0	132	0	88	0	0
Lane Group Flow (vph)	489	31	1217	91	147	2065
Turn Type	Perm		Perm		pm+pt	
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Actuated Green, G (s)	11.5	11.5	30.7	30.7	40.6	40.6
Effective Green, g (s)	11.5	11.5	30.7	30.7	40.6	40.6
Actuated g/C Ratio	0.19	0.19	0.51	0.51	0.68	0.68
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	657	303	1808	809	306	2391
v/s Ratio Prot	c0.14		0.34		0.05	c0.58
v/s Ratio Perm		0.02		0.06	0.28	
v/c Ratio	0.74	0.10	0.67	0.11	0.48	0.86
Uniform Delay, d1	22.9	20.0	11.0	7.6	6.8	7.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.6	0.1	1.0	0.1	1.2	3.5
Delay (s)	27.5	20.2	12.0	7.7	8.0	11.1
Level of Service	C	C	B	A	A	B
Approach Delay (s)	25.7		11.4			10.9
Approach LOS	C		B			B
Intersection Summary						
HCM Average Control Delay			13.3	HCM Level of Service		B
HCM Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			60.1	Sum of lost time (s)		8.0
Intersection Capacity Utilization			72.0%	ICU Level of Service		C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: Paul Russell Rd & Woodville Hwy

Woodville Hwy Corridor Study
2035 Tram Rd Ext (4-Lane Woodville) PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	190	50	280	330	70	150	975	235	140	1800	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.97		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3429		1770	3446		1770	3436		1770	3506	
Flt Permitted	0.50	1.00		0.28	1.00		0.07	1.00		0.10	1.00	
Satd. Flow (perm)	930	3429		516	3446		130	3436		185	3506	
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)	65	207	54	304	359	76	163	1060	255	152	1957	130
RTOR Reduction (vph)	0	22	0	0	15	0	0	18	0	0	5	0
Lane Group Flow (vph)	65	239	0	304	420	0	163	1297	0	152	2082	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	18.1	11.4		31.4	20.7		64.5	57.5		69.5	60.0	
Effective Green, g (s)	18.1	11.4		31.4	20.7		64.5	57.5		69.5	60.0	
Actuated g/C Ratio	0.16	0.10		0.28	0.19		0.58	0.52		0.63	0.54	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	203	354		329	646		180	1790		253	1905	
v/s Ratio Prot	0.02	0.07		c0.13	0.12		c0.06	0.38		c0.05	c0.59	
v/s Ratio Perm	0.03			c0.13			0.47			0.33		
v/c Ratio	0.32	0.68		0.92	0.65		0.91	0.72		0.60	1.09	
Uniform Delay, d1	40.1	47.7		34.7	41.5		30.1	20.4		15.7	25.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	5.1		30.6	2.3		41.0	1.5		4.0	51.0	
Delay (s)	41.0	52.8		65.4	43.8		71.1	21.8		19.7	76.2	
Level of Service	D	D		E	D		E	C		B	E	
Approach Delay (s)		50.4			52.6			27.3			72.4	
Approach LOS		D			D			C			E	
Intersection Summary												
HCM Average Control Delay			53.9			HCM Level of Service				D		
HCM Volume to Capacity ratio			1.02									
Actuated Cycle Length (s)			110.4			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			97.6%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis 4: Gaile Ave & Woodville Hwy

Woodville Hwy Corridor Study
2035 Tram Rd Ext (4-Lane Woodville) PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	220	180	140	100	200	40	100	825	60	70	1380	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	0.97	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Flt	1.00	0.93		1.00	0.98		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)	3433	1741		1770	1817		1770	3503		1770	3406	
Flt Permitted	0.95	1.00		0.31	1.00		0.09	1.00		0.22	1.00	
Satd. Flow (perm)	3433	1741		578	1817		159	3503		410	3406	
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)	239	196	152	109	217	43	109	897	65	76	1500	500
RTOR Reduction (vph)	0	30	0	0	8	0	0	6	0	0	36	0
Lane Group Flow (vph)	239	318	0	109	252	0	109	956	0	76	1964	0
Turn Type	Prot			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases				8			2			6		
Actuated Green, G (s)	8.0	14.7		19.1	12.9		53.0	46.8		51.8	46.2	
Effective Green, g (s)	8.0	14.7		19.1	12.9		53.0	46.8		51.8	46.2	
Actuated g/C Ratio	0.09	0.16		0.21	0.14		0.59	0.52		0.58	0.52	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	308	287		206	262		206	1836		323	1762	
v/s Ratio Prot	c0.07	c0.18		0.04	0.14		c0.04	0.27		0.01	c0.58	
v/s Ratio Perm				0.08			0.28			0.12		
v/c Ratio	0.78	1.11		0.53	0.96		0.53	0.52		0.24	1.11	
Uniform Delay, d1	39.8	37.3		29.9	38.0		18.8	13.9		9.2	21.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	11.6	85.2		2.4	45.1		2.4	0.3		0.4	60.2	
Delay (s)	51.4	122.5		32.3	83.1		21.2	14.2		9.5	81.7	
Level of Service	D	F		C	F		C	B		A	F	
Approach Delay (s)		93.5			68.1			14.9			79.1	
Approach LOS		F			E			B			E	
Intersection Summary												
HCM Average Control Delay			63.4			HCM Level of Service			E			
HCM Volume to Capacity ratio			1.00									
Actuated Cycle Length (s)			89.3			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			95.3%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis 5: Ridge Rd & Adams St

Woodville Hwy Corridor Study
2035 Tram Rd Ext (4-Lane Woodville) PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	200	85	515	230	40	75	850	165	175	1820	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		0.97	1.00		1.00	0.91		1.00	0.95	
Frt	1.00	0.96		1.00	0.98		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1780		3433	1822		1770	4962		1770	3484	
Flt Permitted	0.27	1.00		0.95	1.00		0.05	1.00		0.18	1.00	
Satd. Flow (perm)	511	1780		3433	1822		102	4962		345	3484	
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)	163	217	92	560	250	43	82	924	179	190	1978	228
RTOR Reduction (vph)	0	11	0	0	5	0	0	20	0	0	6	0
Lane Group Flow (vph)	163	298	0	560	288	0	82	1083	0	190	2200	0
Turn Type	pm+pt			Prot			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4						2			6		
Actuated Green, G (s)	32.9	22.0		17.0	28.1		80.9	73.1		88.7	77.0	
Effective Green, g (s)	32.9	22.0		17.0	28.1		80.9	73.1		88.7	77.0	
Actuated g/C Ratio	0.24	0.16		0.12	0.20		0.58	0.52		0.63	0.55	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	218	280		417	366		152	2595		338	1919	
v/s Ratio Prot	0.06	c0.17		c0.16	0.16		0.03	0.22		c0.05	c0.63	
v/s Ratio Perm	0.12						0.28			0.31		
v/c Ratio	0.75	1.06		1.34	0.79		0.54	0.42		0.56	1.15	
Uniform Delay, d1	45.6	58.9		61.4	53.0		30.9	20.4		12.7	31.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.1	71.9		169.7	10.7		3.7	0.1		2.1	72.5	
Delay (s)	58.7	130.8		231.1	63.7		34.5	20.5		14.9	103.9	
Level of Service	E	F		F	E		C	C		B	F	
Approach Delay (s)		105.9			173.6			21.4			96.8	
Approach LOS		F			F			C			F	
Intersection Summary												
HCM Average Control Delay			92.8			HCM Level of Service			F			
HCM Volume to Capacity ratio			1.13									
Actuated Cycle Length (s)			139.8			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			104.9%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis 13: Bragg Dr & Adams St

Woodville Hwy Corridor Study
2035 Tram Rd Ext (4-Lane Woodville) PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	5	125	5	5	55	100	1180	5	40	2175	140
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	65	5	136	5	5	60	109	1283	5	43	2364	152
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage (veh)								2			2	
Upstream signal (ft)								727			582	
pX, platoon unblocked	0.44	0.44	0.38	0.44	0.44	0.88	0.38			0.88		
vC, conflicting volume	3235	4033	1258	2910	4106	430	2516			1288		
vC1, stage 1 conf vol	2527	2527		1503	1503							
vC2, stage 2 conf vol	707	1505		1408	2603							
vCu, unblocked vol	1906	3732	0	1163	3900	0	1719			855		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	39	67	86	0	94	21			94		
cM capacity (veh/h)	28	9	409	38	0	956	138			688		
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3		
Volume Total	207	11	60	109	513	513	262	43	1576	940		
Volume Left	65	5	0	109	0	0	0	43	0	0		
Volume Right	136	0	60	0	0	0	5	0	0	152		
cSH	63	1	956	138	1700	1700	1700	688	1700	1700		
Volume to Capacity	3.30	19.28	0.06	0.79	0.30	0.30	0.15	0.06	0.93	0.55		
Queue Length 95th (ft)	Err	Err	5	121	0	0	0	5	0	0		
Control Delay (s)	Err	Err	9.0	91.4	0.0	0.0	0.0	10.6	0.0	0.0		
Lane LOS	F	F	A	F				B				
Approach Delay (s)	Err	1545.9		7.1				0.2				
Approach LOS	F	F										
Intersection Summary												
Average Delay			516.0									
Intersection Capacity Utilization			98.1%		ICU Level of Service				F			
Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis 17: Tram Rd Ext & Woodville Hwy

Woodville Hwy Corridor Study
2035 Tram Rd Ext (4-Lane Woodville) PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	225	140	200	30	300	190	110	950	30	140	1665	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	1.00
Flt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1698		1770	1863	1583	1770	3523		1770	3539	1583
Flt Permitted	0.95	1.00		0.29	1.00	1.00	0.11	1.00		0.13	1.00	1.00
Satd. Flow (perm)	3433	1698		547	1863	1583	198	3523		234	3539	1583
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)	245	152	217	33	326	207	120	1033	33	152	1810	348
RTOR Reduction (vph)	0	51	0	0	0	151	0	2	0	0	0	159
Lane Group Flow (vph)	245	318	0	33	326	56	120	1064	0	152	1810	189
Turn Type	Prot			pm+pt		Perm	pm+pt			pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases				8		8	2			6		6
Actuated Green, G (s)	8.1	23.6		23.9	19.7	19.7	43.8	37.7		47.0	39.3	39.3
Effective Green, g (s)	8.1	23.6		23.9	19.7	19.7	43.8	37.7		47.0	39.3	39.3
Actuated g/C Ratio	0.09	0.26		0.27	0.22	0.22	0.49	0.42		0.53	0.44	0.44
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	312	449		204	411	350	205	1489		256	1559	697
v/s Ratio Prot	c0.07	c0.19		0.01	0.18		0.04	0.30		c0.05	c0.51	
v/s Ratio Perm				0.04		0.04	0.25			0.26		0.12
v/c Ratio	0.79	0.71		0.16	0.79	0.16	0.59	0.71		0.59	1.16	0.27
Uniform Delay, d1	39.7	29.7		24.8	32.8	28.1	19.2	21.3		14.4	25.0	15.9
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	12.2	5.1		0.4	10.1	0.2	4.2	1.7		3.7	80.0	0.2
Delay (s)	51.9	34.8		25.2	42.9	28.3	23.4	23.0		18.1	104.9	16.1
Level of Service	D	C		C	D	C	C	C		B	F	B
Approach Delay (s)		41.6			36.5			23.0			85.8	
Approach LOS		D			D			C			F	

Intersection Summary

HCM Average Control Delay	58.1	HCM Level of Service	E
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	89.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis 19: Tram Rd Ext & Adams St

Woodville Hwy Corridor Study
2035 Tram Rd Ext (4-Lane Woodville) PM Peak

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			  			 
Volume (vph)	350	370	940	90	470	1835
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	0.91	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)	1770	1583	5085	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.17	1.00
Satd. Flow (perm)	1770	1583	5085	1583	324	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	380	402	1022	98	511	1995
RTOR Reduction (vph)	0	299	0	67	0	0
Lane Group Flow (vph)	380	103	1022	31	511	1995
Turn Type	Perm		Perm		pm+pt	
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Actuated Green, G (s)	15.2	15.2	19.0	19.0	36.0	36.0
Effective Green, g (s)	15.2	15.2	19.0	19.0	36.0	36.0
Actuated g/C Ratio	0.26	0.26	0.32	0.32	0.61	0.61
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	454	406	1632	508	515	2152
v/s Ratio Prot	c0.21		0.20		0.22	c0.56
v/s Ratio Perm		0.07		0.02	c0.39	
v/c Ratio	0.84	0.25	0.63	0.06	0.99	0.93
Uniform Delay, d1	20.8	17.5	17.1	13.9	14.2	10.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.6	0.3	0.8	0.1	37.5	7.5
Delay (s)	33.5	17.8	17.8	14.0	51.7	18.0
Level of Service	C	B	B	B	D	B
Approach Delay (s)	25.4		17.5			24.8
Approach LOS	C		B			C
Intersection Summary						
HCM Average Control Delay			23.1		HCM Level of Service	C
HCM Volume to Capacity ratio			0.93			
Actuated Cycle Length (s)			59.2		Sum of lost time (s)	8.0
Intersection Capacity Utilization			76.8%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

1: Paul Russell Rd & Adams St

Woodville Hwy Corridor Study
2035 Loop PM Peak

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	525	200	790	155	205	1385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	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)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.20	1.00
Satd. Flow (perm)	3433	1583	3539	1583	368	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	571	217	859	168	223	1505
RTOR Reduction (vph)	0	159	0	96	0	0
Lane Group Flow (vph)	571	58	859	72	223	1505
Turn Type	Perm		Perm		pm+pt	
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Actuated Green, G (s)	20.3	20.3	32.4	32.4	47.5	47.5
Effective Green, g (s)	20.3	20.3	32.4	32.4	47.5	47.5
Actuated g/C Ratio	0.27	0.27	0.43	0.43	0.63	0.63
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	919	424	1513	677	436	2218
v/s Ratio Prot	c0.17		0.24		0.07	c0.43
v/s Ratio Perm		0.04		0.05	0.25	
v/c Ratio	0.62	0.14	0.57	0.11	0.51	0.68
Uniform Delay, d1	24.4	21.1	16.4	13.0	8.2	9.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.1	0.5	0.1	1.0	0.8
Delay (s)	25.7	21.2	16.9	13.1	9.3	10.0
Level of Service	C	C	B	B	A	B
Approach Delay (s)	24.5		16.3			9.9
Approach LOS	C		B			A
Intersection Summary						
HCM Average Control Delay			15.0	HCM Level of Service		B
HCM Volume to Capacity ratio			0.66			
Actuated Cycle Length (s)			75.8	Sum of lost time (s)		8.0
Intersection Capacity Utilization			59.9%	ICU Level of Service		B
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis 2: Paul Russell Rd & Woodville Hwy

Woodville Hwy Corridor Study
2035 Loop PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	160	115	165	200	50	215	1185	105	80	1880	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.94		1.00	0.97		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3317		1770	3433		1770	3496		1770	3464	
Flt Permitted	0.46	1.00		0.25	1.00		0.04	1.00		0.15	1.00	
Satd. Flow (perm)	862	3317		475	3433		75	3496		285	3464	
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)	92	174	125	179	217	54	234	1288	114	87	2043	337
RTOR Reduction (vph)	0	88	0	0	14	0	0	4	0	0	9	0
Lane Group Flow (vph)	92	211	0	179	257	0	234	1398	0	87	2371	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	17.7	11.7		26.7	16.7		115.0	104.3		102.7	96.0	
Effective Green, g (s)	17.7	11.7		26.7	16.7		115.0	104.3		102.7	96.0	
Actuated g/C Ratio	0.12	0.08		0.18	0.11		0.77	0.70		0.69	0.64	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	138	259		180	383		227	2436		262	2221	
v/s Ratio Prot	0.03	0.06		c0.07	0.07		c0.10	0.40		0.01	c0.68	
v/s Ratio Perm	0.05			c0.10			0.69			0.21		
v/c Ratio	0.67	0.81		0.99	0.67		1.03	0.57		0.33	1.07	
Uniform Delay, d1	61.9	67.9		58.9	63.9		57.7	11.5		9.4	26.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	11.5	17.4		65.1	4.6		68.0	0.3		0.7	40.1	
Delay (s)	73.4	85.3		124.0	68.4		125.6	11.8		10.1	67.0	
Level of Service	E	F		F	E		F	B		B	E	
Approach Delay (s)		82.5			90.5			28.1			65.0	
Approach LOS		F			F			C			E	
Intersection Summary												
HCM Average Control Delay			56.5			HCM Level of Service				E		
HCM Volume to Capacity ratio			1.04									
Actuated Cycle Length (s)			149.7			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			104.3%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

Intersection Sign configuration not allowed in HCM analysis.

HCM Signalized Intersection Capacity Analysis 5: Ridge Rd & Adams St

Woodville Hwy Corridor Study
2035 Loop PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	310	75	0	0	0	70	0	1020	1100	2345	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5					4.5		4.5	4.5	4.5	4.5
Lane Util. Factor		0.95					1.00		0.76	0.94	0.95	1.00
Frt		0.97					1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00					0.95		1.00	0.95	1.00	1.00
Satd. Flow (prot)		3435					1770		3610	4990	3539	1583
Flt Permitted		1.00					0.07		1.00	0.95	1.00	1.00
Satd. Flow (perm)		3435					128		3610	4990	3539	1583
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	337	82	0	0	0	76	0	1109	1196	2549	418
RTOR Reduction (vph)	0	20	0	0	0	0	0	0	6	129	0	119
Lane Group Flow (vph)	0	399	0	0	0	0	76	0	1103	1067	2549	299
Turn Type							custom		custom	Prot		Perm
Protected Phases		4					5		2	1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)		11.5					63.9		58.1	25.4	77.7	77.7
Effective Green, g (s)		11.5					63.9		58.1	25.4	77.7	77.7
Actuated g/C Ratio		0.11					0.59		0.54	0.23	0.72	0.72
Clearance Time (s)		4.5					4.5		4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0					3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		364					163		1933	1168	2534	1134
v/s Ratio Prot		c0.12					0.02		0.31	c0.21	c0.72	
v/s Ratio Perm							0.25					0.19
v/c Ratio		1.10					0.47		0.57	0.91	1.01	0.26
Uniform Delay, d1		48.5					46.7		16.9	40.5	15.4	5.4
Progression Factor		1.00					1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		75.9					2.1		0.4	10.9	19.3	0.1
Delay (s)		124.4					48.8		17.3	51.4	34.7	5.5
Level of Service		F					D		B	D	C	A
Approach Delay (s)		124.4			0.0			19.3			36.6	
Approach LOS		F			A			B			D	
Intersection Summary												
HCM Average Control Delay			39.4				HCM Level of Service			D		
HCM Volume to Capacity ratio			1.03									
Actuated Cycle Length (s)			108.5				Sum of lost time (s)		13.5			
Intersection Capacity Utilization			83.3%				ICU Level of Service		E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis 13: Bragg Dr & Adams St

Woodville Hwy Corridor Study
2035 Loop PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	65	5	135	5	5	55	105	825	5	40	1710	160
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	71	5	147	5	5	60	114	897	5	43	1859	174
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLTL	
Median storage (veh)											2	
Upstream signal (ft)											582	
pX, platoon unblocked	0.70	0.70	0.70	0.70	0.70		0.70					
vC, conflicting volume	2622	3163	1016	2293	3247	302	2033			902		
vC1, stage 1 conf vol	2033	2033		1128	1128							
vC2, stage 2 conf vol	590	1130		1166	2120							
vCu, unblocked vol	2460	3233	166	1991	3353	302	1618			902		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	93	75	95	0	91	59			94		
cM capacity (veh/h)	63	74	594	99	3	694	279			749		
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3		
Volume Total	223	11	60	114	359	359	185	43	1239	793		
Volume Left	71	5	0	114	0	0	0	43	0	0		
Volume Right	147	0	60	0	0	0	5	0	0	174		
cSH	155	6	694	279	1700	1700	1700	749	1700	1700		
Volume to Capacity	1.44	1.85	0.09	0.41	0.21	0.21	0.11	0.06	0.73	0.47		
Queue Length 95th (ft)	357	59	7	48	0	0	0	5	0	0		
Control Delay (s)	283.1	1548.7	10.7	26.5	0.0	0.0	0.0	10.1	0.0	0.0		
Lane LOS	F	F	B	D				B				
Approach Delay (s)	283.1	247.3		3.0				0.2				
Approach LOS	F	F										
Intersection Summary												
Average Delay			24.8									
Intersection Capacity Utilization			87.0%		ICU Level of Service					E		
Analysis Period (min)			15									

HCM Signalized Intersection Capacity Analysis 17: Tram Rd Ext & Woodville Hwy

Woodville Hwy Corridor Study
2035 Loop PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑	↑	↑↑↑	↑↑		↑		↑↑↑
Volume (vph)	0	0	0	0	380	180	610	1315	195	285	0	1895
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.5	4.5	4.5	4.5		4.5		4.5
Lane Util. Factor					0.95	1.00	0.94	0.95		1.00		0.76
Frt					1.00	0.85	1.00	0.98		1.00		0.85
Flt Protected					1.00	1.00	0.95	1.00		0.95		1.00
Satd. Flow (prot)					3539	1583	4990	3471		1770		3610
Flt Permitted					1.00	1.00	0.95	1.00		0.08		1.00
Satd. Flow (perm)					3539	1583	4990	3471		142		3610
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	0	413	196	663	1429	212	310	0	2060
RTOR Reduction (vph)	0	0	0	0	0	171	22	13	0	0	0	7
Lane Group Flow (vph)	0	0	0	0	413	25	641	1628	0	310	0	2053
Turn Type						Perm	Prot			custom		custom
Protected Phases					8		5	2		1		
Permitted Phases						8				6		6
Actuated Green, G (s)					11.5	11.5	12.5	50.5		67.0		52.5
Effective Green, g (s)					11.5	11.5	12.5	50.5		67.0		52.5
Actuated g/C Ratio					0.13	0.13	0.14	0.56		0.74		0.58
Clearance Time (s)					4.5	4.5	4.5	4.5		4.5		4.5
Vehicle Extension (s)					3.0	3.0	3.0	3.0		3.0		3.0
Lane Grp Cap (vph)					452	202	693	1948		368		2106
v/s Ratio Prot					c0.12		0.13	0.47		c0.14		
v/s Ratio Perm						0.02				0.49		c0.57
v/c Ratio					0.91	0.12	0.92	0.84		0.84		0.97
Uniform Delay, d1					38.8	34.8	38.3	16.3		26.2		18.1
Progression Factor					1.00	1.00	1.00	1.00		1.00		1.00
Incremental Delay, d2					22.8	0.3	18.1	3.3		15.9		14.1
Delay (s)					61.5	35.1	56.4	19.6		42.1		32.2
Level of Service					E	D	E	B		D		C
Approach Delay (s)		0.0			53.0			30.2			33.5	
Approach LOS		A			D			C			C	
Intersection Summary												
HCM Average Control Delay			34.3				HCM Level of Service			C		
HCM Volume to Capacity ratio			0.91									
Actuated Cycle Length (s)			90.0				Sum of lost time (s)		9.0			
Intersection Capacity Utilization			79.7%				ICU Level of Service		D			
Analysis Period (min)			15									
c Critical Lane Group												

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

Intersection Sign configuration not allowed in HCM analysis.

1: Paul Russell Rd & Adams St Performance by approach

Approach	WB	NB	SB	All
Total Delay (hr)	0.8	0.4	0.8	1.9
Delay / Veh (s)	22.9	9.1	10.0	12.6
Travel Dist (mi)	20.7	14.8	25.3	60.8
Travel Time (hr)	1.6	0.9	1.7	4.2
Vehicles Entered	118	151	286	555
Vehicles Exited	125	153	278	556
Hourly Exit Rate	750	918	1668	3336
Input Volume	920	1075	1765	3760
% of Volume	82	85	95	89

2: Paul Russell Rd & Woodville Hwy Performance by approach

Approach	EB	WB	NB	SB	All
Total Delay (hr)	1.7	2.8	4.2	10.6	19.3
Delay / Veh (s)	96.8	98.4	63.4	116.4	94.9
Travel Dist (mi)	11.6	8.2	50.1	19.3	89.1
Travel Time (hr)	2.2	3.1	6.0	11.4	22.6
Vehicles Entered	72	109	258	328	767
Vehicles Exited	53	94	220	329	696
Hourly Exit Rate	318	564	1320	1974	4176
Input Volume	440	665	1565	2270	4940
% of Volume	72	85	84	87	85

4: Gaile Ave & Woodville Hwy Performance by approach

Approach	EB	WB	NB	SB	All
Total Delay (hr)	1.7	1.6	1.7	3.8	8.7
Delay / Veh (s)	60.5	137.1	35.8	52.7	55.3
Travel Dist (mi)	9.2	2.8	15.8	74.8	102.6
Travel Time (hr)	2.1	1.7	2.2	6.4	12.4
Vehicles Entered	103	44	174	280	601
Vehicles Exited	95	40	163	236	534
Hourly Exit Rate	570	240	978	1416	3204
Input Volume	650	380	985	2030	4045
% of Volume	88	63	99	70	79

5: Ridge Rd & Adams St Performance by approach

Approach	EB	WB	NB	SB	All
Total Delay (hr)	1.7	1.7	1.5	6.8	11.7
Delay / Veh (s)	84.6	66.4	31.5	86.0	68.2
Travel Dist (mi)	14.4	8.0	12.2	133.5	168.0
Travel Time (hr)	2.2	2.1	2.0	11.4	17.6
Vehicles Entered	80	96	163	314	653
Vehicles Exited	65	91	168	256	580
Hourly Exit Rate	390	546	1008	1536	3480
Input Volume	435	935	1090	2140	4600
% of Volume	90	58	92	72	76

13: Bragg Dr & Adams St Performance by approach

Approach	EB	WB	NB	SB	All
Total Delay (hr)	1.6	0.0	0.3	0.3	2.2
Delay / Veh (s)	262.6	6.9	8.1	2.9	15.5
Travel Dist (mi)	1.8	0.2	66.1	36.6	104.7
Travel Time (hr)	1.7	0.0	2.6	1.6	5.9
Vehicles Entered	27	9	160	338	534
Vehicles Exited	18	10	146	333	507
Hourly Exit Rate	108	60	876	1998	3042
Input Volume	175	65	1035	2215	3490
% of Volume	62	92	85	90	87

17: Tram Rd & Woodville Hwy Performance by approach

Approach	WB	NB	SB	All
Total Delay (hr)	0.3	1.1	1.3	2.7
Delay / Veh (s)	14.1	20.7	15.0	16.9
Travel Dist (mi)	11.4	54.5	68.3	134.2
Travel Time (hr)	0.7	3.0	3.7	7.4
Vehicles Entered	64	193	325	582
Vehicles Exited	65	197	317	579
Hourly Exit Rate	390	1182	1902	3474
Input Volume	465	1156	2220	3841
% of Volume	84	102	86	90

Total Network Performance

Total Delay (hr)	47.4
Delay / Veh (s)	142.3
Travel Dist (mi)	809.8
Travel Time (hr)	76.3
Vehicles Entered	1312
Vehicles Exited	1085
Hourly Exit Rate	6510
Input Volume	36821
% of Volume	18