

Queue Length for No-Build Condition																		
Cross-Street		Traffic Control Device	Geometry	Storage Length		[AM] Peak Hour			[MID] Peak Hour			[PM] Peak Hour			[SAT] Peak Hour			
						Queue Length (Feet)			Queue Length (Feet)			Queue Length (Feet)			Queue Length (Feet)			
						2016	2021	2041	2016	2021	2041	2016	2021	2041	2016	2021	2041	
1	Mack Hatcher Parkway / Hillview Lane	Signal	EASTBOUND (EB)															
			EB Left	150'	(6 veh)	13'	13'	15'	56'	62'	73'	28'	29'	32'	28'	29'	33'	
			EB Thru/Right	450'	(18 veh)	58'	60'	68'	205'	266'	353'	211'	234'	321'	202'	212'	305'	
			WESTBOUND (WB)															
			WB Left	640'	(25 veh)	147'	155'	185'	96'	107'	127'	214'	224'	349'	86'	89'	106'	
			WB Thru	999'	(40 veh)	81'	86'	98'	110'	116'	139'	108'	112'	133'	109'	113'	136'	
			WB Right	325'	(13 veh)	60'	116'	230'	39'	45'	154'	42'	79'	167'	32'	35'	73'	
			NORTHBOUND (NB)															
			NB Left	200'	(8 veh)	36'	37'	44'	57'	55'	61'	53'	53'	61'	81'	84'	100'	
			NB Thru	775'	(31 veh)	587'	678'	1012'	325'	362'	419'	416'	493'	643'	355'	468'	613'	
			NB Right	200'	(8 veh)	15'	18'	27'	15'	16'	15'	14'	14'	19'	15'	15'	21'	
			SOUTHBOUND (SB)															
			SB Left	300'	(12 veh)	161'	214'	277'	210'	252'	323'	164'	184'	214'	169'	194'	204'	
SB Thru	560'	(22 veh)	9'	17'	75'	392'	476'	556'	762'	823'	1117'	420'	474'	607'				
SB Right	400'	(16 veh)	0'	0'	0'	4'	1'	1'	0'	0'	0'	0'	1'	0'				
2	Parkway Commons / Cemetery	Signal	EASTBOUND															
			EB Left/Thru	175'	(7 veh)	108'	112'	131'	292'	313'	413'	198'	218'	276'	176'	185'	224'	
			EB Right	175'	(7 veh)	0'	0'	0'	21'	28'	38'	32'	36'	43'	25'	30'	33'	
			WESTBOUND															
			WB Left/Thru/Right	250'	(10 veh)	12'	12'	12'	45'	47'	52'	12'	12'	12'	18'	18'	20'	
			NORTHBOUND															
			NB Left	50'	(2 veh)	23'	23'	25'	41'	46'	55'	41'	42'	48'	25'	26'	27'	
			NB Thru/Right	150'	(6 veh)	1003'	1188'	1530'	266'	306'	955'	245'	292'	1046'	217'	761'	900'	
			SOUTHBOUND															
			SB Left	150'	(6 veh)	0'	4'	1'	7'	0'	0'	2'	0'	1'	4'	3'	3'	
			SB Thru/Right	150'	(6 veh)	290'	354'	364'	385'	476'	589'	465'	656'	700'	378'	422'	519'	
			3	Southeast Parkway / Shadow Green Drive	Signal	EASTBOUND												
						EB Left	100'	(4 veh)	83'	190'	208'	146'	227'	286'	77'	111'	128'	97'
EB Thru	200'	(8 veh)				41'	68'	73'	44'	70'	77'	31'	47'	48'	35'	48'	52'	
EB Right	75'	(3 veh)				47'	66'	70'	53'	93'	186'	49'	57'	121'	53'	82'	157'	
WESTBOUND																		
WB Left	125'	(5 veh)				35'	36'	41'	110'	114'	135'	62'	65'	75'	38'	38'	44'	
WB Thru/Right	300'	(12 veh)				79'	86'	98'	112'	176'	262'	87'	164'	225'	66'	78'	87'	
NORTHBOUND																		
NB Left	150'	(6 veh)				41'	51'	49'	20'	34'	41'	27'	82'	164'	87'	150'	161'	
NB Thru/Right	150'	(6 veh)				612'	1030'	1360'	188'	382'	1131'	292'	349'	434'	602'	666'	956'	
SOUTHBOUND																		
SB Left	120'	(4 veh)				9'	20'	101'	32'	29'	39'	22'	24'	22'	45'	44'	61'	
SB Thru	580'	(23 veh)				96'	61'	58'	252'	273'	288'	250'	402'	447'	209'	233'	244'	
SB Right	100'	(4 veh)	6'	4'	2'	28'	26'	23'	3'	25'	27'	29'	30'	26'				
4	Alpha Drive	Stop	WESTBOUND															
			WB Left/Thru/Right	200'	(8 veh)	26'	43'	167'	116'	192'	457'	84'	158'	9999'	37'	55'	174'	
			SOUTHBOUND															
			SB Left	75'	(3 veh)	5'	9'	26'	6'	8'	22'	3'	4'	7'	3'	3'	7'	
5	Century Court	Signal	EASTBOUND															
			EB Left	125'	(5 veh)	124'	151'	178'	121'	147'	172'	99'	114'	132'	59'	73'	82'	
			EB Thru/Right	225'	(9 veh)	46'	47'	51'	59'	60'	66'	57'	57'	61'	32'	32'	34'	
			WESTBOUND															
			WB Left/Thru/Right	50'	(2 veh)	11'	11'	11'	11'	11'	11'	11'	11'	12'	12'	13'		
			NORTHBOUND															
			NB Left	75'	(3 veh)	46'	44'	55'	42'	37'	93'	19'	18'	22'	6'	6'	6'	
			NB Thru/Right	200'	(8 veh)	590'	676'	677'	583'	702'	953'	533'	616'	974'	120'	158'	174'	
			SOUTHBOUND															
			SB Left	100'	(4 veh)	1'	1'	0'	2'	1'	2'	1'	1'	1'	1'	0'	1'	
SB Thru/Right	225'	(9 veh)	227'	482'	1111'	821'	1048'	1393'	957'	1204'	1640'	171'	1014'	1390'				
6	Beasley Drive / Lumber Drive	Two-Way Stop Control (TWSC)	EASTBOUND															
			EB Left/Thru/Right	325'	(13 veh)	16'	19'	9999'	30'	55'	101'	42'	64'	151'	29'	44'	183'	
			WESTBOUND															
			WB Left/Thru/Right	200'	(8 veh)	3'	4'	15'	35'	68'	104'	26'	52'	82'	23'	49'	9999'	
			NORTHBOUND															
			NB Left	75'	(3 veh)	9'	10'	18'	9'	11'	32'	4'	5'	13'	3'	4'	10'	
			SOUTHBOUND															
SB Left	25'	(1 veh)	1'	2'	5'	5'	7'	19'	3'	3'	11'	4'	9'	17'				
7	Franklin Business Park (North) / Future Werthan Circle	Signal	WESTBOUND															
			WB Left	150'	(6 veh)	33'	33'	37'	62'	66'	76'	48'	50'	58'	124'	129'	153'	
			WB Right	150'	(6 veh)	30'	31'	34'	33'	33'	37'	31'	31'	34'	41'	42'	46'	
			NORTHBOUND															
			NB Thru/Right	275'	(11 veh)	363'	556'	1328'	638'	795'	1325'	696'	817'	1156'	503'	651'	1158'	
			SOUTHBOUND															
			SB Left	150'	(6 veh)	7'	7'	6'	3'	5'	5'	4'	5'	10'	32'	28'	25'	
			SB Thru	999'	(40 veh)	193'	214'	319'	205'	310'	553'	248'	409'	463'	661'	774'	848'	
8	Confederate Drive / Werthan Circle	TWSC	EASTBOUND															
			EB Left	100'	(4 veh)	16'	61'	9999'	0'	18'	78'	3'	10'	21'	0'	20'	75'	
			EB Thru/Right	150'	(6 veh)	5'	18'	175'	2'	13'	35'	1'	8'	14'	1'	16'	34'	
			WESTBOUND															
			WB Left	100'	(4 veh)	17'	32'	117'	15'	26'	81'	5'	7'	17'	5'	10'	37'	
			WB Thru/Right	200'	(8 veh)	6'	11'	24'	9'	16'	34'	4'	6'	11'	7'	12'	31'	
			NORTHBOUND															
			NB Left	100'	(4 veh)	5'	8'	13'	0'	4'	5'	0'	3'	4'	0'	5'	7'	
			SOUTHBOUND															
SB Left	100'	(4 veh)	7'	9'	22'	7'	9'	21'	1'	1'	2'	4'	5'	11'				
9	Carr Avenue	Stop	WESTBOUND															
			WB Left/Thru/Right	175'	(7 veh)	9'	11'	20'	22'	29'	64'	20'	27'	59'	20'	26'	58'	
			SOUTHBOUND															
			SB Left	150'	(6 veh)	3'	3'	5'	3'	4'	6'	3'	3'	5'	2'	3'	4'	
10	Downs Boulevard	Signal	EASTBOUND															
			EB Left/Thru	350'	(14 veh)	104'	107'	119'	101'	105'	120'	113'	114'	132'	108'	113'	135'	
			EB Right	350'	(14 veh)	107'	111'	274'	92'	96'	104'	95'	99'	107'	101'	149'	412'	
			WESTBOUND															
			WB Left/Thru/Right	50'	(2 veh)	14'	14'	16'	23'	23'	27'	22'	22'	26'	21'	21'	25'	
			NORTHBOUND															
			NB Left	150'	(6 veh)	166'	195'	245'	148'	198'	303'	311'	387'	586'	289'	347'	464'	
			NB Thru/Right	175'	(7 veh)	490'	572'	627'	425'	493'	674'	355'	414'	581'	316'	350'	352'	
			SOUTHBOUND															
			SB Left	50'	(2 veh)	5'	5'	8'	6'	8'	10'	7'	9'	10'	7'	8'	8'	
SB Thru/Right	125'	(5 veh)	301'	374'	596'	460'	685'	1031'	554'	826'	1093'	418'	493'	716'				
11	James Avenue	Stop	WESTBOUND															
			WB Left/Thru/Right	125'	(5 veh)	7'	9'	15'	8'	10'	16'	8'	9'	14'	9'	11'	17'	
			SOUTHBOUND															
			SB Left	200'	(8 veh)	0'	0'	1'	1'	1'	1'	1'	1'	1'	1'	1'	2'	

Queue Length for Five-Lane (Traditional) Concept													
Cross-Street		Traffic Control Device	Geometry	Storage Length		[AM] Peak Hour		[MID] Peak Hour		[PM] Peak Hour		[SAT] Peak Hour	
						Queue Length (Feet)		Queue Length (Feet)		Queue Length (Feet)		Queue Length (Feet)	
						2021	2041	2021	2041	2021	2041	2021	2041
1	Mack Hatcher Parkway / Hillview Lane	Signal	EASTBOUND (EB)										
			EB Left	150'	(6 veh)	10'	11'	44'	52'	23'	26'	27'	30'
			EB Thru	450'	(18 veh)	38'	43'	106'	126'	85'	99'	118'	141'
			EB Right	40'	(1 veh)	0'	0'	0'	0'	17'	34'	0'	0'
			WESTBOUND (WB)										
			WB Left	640'	(25 veh)	109'	129'	75'	89'	178'	198'	82'	97'
			WB Thru	999'	(40 veh)	64'	73'	87'	104'	91'	107'	104'	124'
			WB Right	325'	(13 veh)	109'	182'	66'	145'	87'	161'	74'	144'
			NORTHBOUND (NB)										
			NB Left	200'	(8 veh)	20'	24'	27'	32'	22'	26'	42'	50'
			NB Thru	775'	(31 veh)	228'	291'	135'	162'	160'	196'	157'	190'
			NB Right	40'	(1 veh)	40'	57'	6'	17'	1'	8'	11'	23'
			SOUTHBOUND (SB)										
			SB Left	300'	(12 veh)	153'	175'	100'	114'	116'	127'	91'	140'
SB Thru	560'	(22 veh)	265'	315'	184'	242'	603'	804'	418'	509'			
SB Right	400'	(16 veh)	0'	0'	0'	0'	0'	0'	0'	0'			
2	Parkway Commons / Cemetery	Signal	EASTBOUND										
			EB Left	175'	(7 veh)	102'	120'	229'	308'	175'	242'	183'	244'
			EB Thru/Right	175'	(7 veh)	0'	0'	0'	0'	0'	9'	0'	8'
			WESTBOUND										
			WB Left/Thru/Right	250'	(10 veh)	10'	10'	35'	39'	10'	10'	17'	18'
			NORTHBOUND										
			NB Left	150'	(6 veh)	74'	74'	93'	119'	105'	140'	80'	92'
			NB Thru/Right	150'	(6 veh)	95'	125'	234'	274'	275'	315'	254'	291'
			SOUTHBOUND										
			SB Left	150'	(6 veh)	1'	1'	3'	3'	0'	1'	2'	2'
SB Thru/Right	150'	(6 veh)	52'	57'	132'	448'	60'	78'	79'	98'			
3	Southeast Parkway / Shadow Green Drive	Signal	EASTBOUND										
			EB Left	100'	(4 veh)	99'	124'	121'	137'	78'	86'	105'	119'
			EB Thru	200'	(8 veh)	48'	52'	47'	52'	35'	37'	40'	43'
			EB Right	75'	(3 veh)	46'	48'	82'	124'	50'	80'	78'	121'
			WESTBOUND										
			WB Left	125'	(5 veh)	24'	28'	70'	83'	46'	54'	32'	36'
			WB Thru/Right	300'	(12 veh)	66'	73'	86'	104'	87'	103'	68'	75'
			NORTHBOUND										
			NB Left	200'	(8 veh)	4'	4'	24'	61'	102'	177'	70'	120'
			NB Thru/Right	385'	(15 veh)	50'	59'	92'	113'	32'	44'	72'	91'
			SOUTHBOUND										
			SB Left	100'	(4 veh)	75'	114'	43'	73'	21'	22'	32'	46'
			SB Thru	580'	(23 veh)	147'	205'	143'	193'	113'	176'	101'	127'
			SB Right	100'	(4 veh)	0'	0'	0'	0'	1'	1'	7'	7'
4	Alpha Drive	Two-Way Stop Control (TWSC)	EASTBOUND										
			EB Left/Thru/Right	50'	(2 veh)	1'	1'	2'	3'	2'	4'	2'	3'
			WESTBOUND										
			WB Left/Thru/Right	200'	(8 veh)	11'	16'	43'	74'	34'	60'	16'	23'
			NORTHBOUND										
			NB Left	175'	(7 veh)	1'	1'	2'	2'	2'	3'	0'	1'
SOUTHBOUND													
SB Left	75'	(3 veh)	4'	6'	5'	7'	3'	4'	2'	3'			
5	Century Court	Signal	EASTBOUND										
			EB Left	125'	(5 veh)	107'	124'	107'	125'	84'	98'	64'	70'
			EB Thru/Right	225'	(9 veh)	37'	40'	50'	54'	47'	52'	29'	31'
			WESTBOUND										
			WB Left/Thru/Right	50'	(2 veh)	8'	8'	9'	9'	9'	9'	11'	12'
			NORTHBOUND										
			NB Left	75'	(3 veh)	23'	47'	37'	66'	8'	15'	4'	8'
			NB Thru/Right	200'	(8 veh)	71'	82'	82'	137'	43'	100'	45'	111'
			SOUTHBOUND										
SB Left	100'	(4 veh)	1'	0'	2'	2'	1'	1'	1'	1'			
SB Thru/Right	225'	(9 veh)	262'	327'	130'	152'	97'	128'	265'	384'			
6	Beasley Drive / Lumber Drive	TWSC	EASTBOUND										
			EB Left/Thru/Right	325'	(13 veh)	11'	15'	18'	24'	23'	31'	14'	25'
			WESTBOUND										
			WB Left/Thru/Right	200'	(8 veh)	2'	3'	20'	32'	14'	24'	13'	20'
			NORTHBOUND										
			NB Left	25'	(1 veh)	10'	14'	10'	14'	4'	6'	3'	4'
			SOUTHBOUND										
SB Left	200'	(8 veh)	1'	2'	5'	8'	3'	4'	4'	5'			
7	Franklin Business Park (North) / Future Werthan Circle	Signal	WESTBOUND										
			WB Left	150'	(6 veh)	26'	28'	48'	55'	37'	43'	108'	128'
			WB Right	150'	(6 veh)	25'	28'	27'	30'	25'	28'	37'	41'
			NORTHBOUND										
			NB Thru/Right	275'	(11 veh)	72'	170'	235'	358'	118'	255'	137'	193'
			SOUTHBOUND										
			SB Left	150'	(6 veh)	9'	9'	4'	4'	9'	12'	23'	55'
			SB Thru	999'	(40 veh)	90'	91'	70'	76'	50'	69'	121'	137'
8	Confederate Drive / Werthan Circle	Signal	EASTBOUND										
			EB Left	100'	(4 veh)	62'	68'	36'	36'	35'	37'	39'	39'
			EB Thru/Right	150'	(6 veh)	37'	39'	35'	36'	26'	27'	34'	34'
			WESTBOUND										
			WB Left	100'	(4 veh)	47'	55'	52'	60'	28'	31'	26'	30'
			WB Thru/Right	200'	(8 veh)	29'	31'	36'	39'	25'	26'	31'	32'
			NORTHBOUND										
			NB Left	100'	(4 veh)	0'	0'	8'	7'	3'	3'	9'	8'
			NB Thru/Right	115'	(4 veh)	8'	12'	78'	95'	84'	96'	101'	128'
			SOUTHBOUND										
SB Left	100'	(4 veh)	6'	10'	5'	10'	2'	1'	5'	4'			
SB Thru/Right	325'	(13 veh)	154'	224'	116'	193'	116'	155'	135'	223'			
9	Carr Avenue	Stop	WESTBOUND										
			WB Left/Thru/Right	175'	(7 veh)	6'	8'	13'	20'	13'	20'	11'	15'
			SOUTHBOUND										
			SB Left	150'	(6 veh)	3'	4'	4'	5'	3'	5'	2'	4'
10	Downs Boulevard	Signal	EASTBOUND										
			EB Left	150'	(6 veh)	85'	100'	76'	89'	86'	102'	100'	119'
			EB Thru	350'	(14 veh)	8'	10'	5'	5'	8'	10'	5'	5'
			EB Right	350'	(14 veh)	192'	334'	115'	218'	163'	269'	279'	503'
			WESTBOUND										
			WB Left	100'	(4 veh)	8'	10'	9'	11'	12'	13'	14'	16'
			WB Thru/Right	250'	(10 veh)	9'	10'	14'	18'	13'	15'	11'	14'
			NORTHBOUND										
			NB Left	300'	(12 veh)	94'	102'	134'	195'	103'	159'	145'	184'
			NB Thru/Right	175'	(7 veh)	32'	38'	106'	569'	75'	98'	108'	366'
			SOUTHBOUND										
			SB Left	150'	(6 veh)	5'	7'	5'	7'	6'	7'	7'	8'
SB Thru	450'	(18 veh)	292'	416'	346'	482'	377'	551'	370'	529'			
SB Right	300'	(12 veh)	24'	28'	21'	23'	24'	27'	27'	29'			
11	James Avenue	Stop	WESTBOUND										
			WB Right	125'	(5 veh)	9'	15'	9'	15'	8'	12'	10'	16'

Queue Length for Five-Lane (Access Management) Concept													
Cross-Street		Traffic Control Device	Geometry	Storage Length		[AM] Peak Hour		[MID] Peak Hour		[PM] Peak Hour		[SAT] Peak Hour	
						Queue Length (Feet)		Queue Length (Feet)		Queue Length (Feet)		Queue Length (Feet)	
						2021	2041	2021	2041	2021	2041	2021	2041
1	Mack Hatcher Parkway / Hillview Lane	Signal	EASTBOUND (EB)										
			EB Left	150'	(6 veh)	10'	11'	44'	52'	23'	26'	27'	30'
			EB Thru	450'	(18 veh)	38'	43'	106'	126'	85'	99'	118'	141'
			EB Right	40'	(1 veh)	0'	0'	0'	0'	17'	34'	0'	0'
			WESTBOUND (WB)										
			WB Left	640'	(25 veh)	109'	129'	75'	89'	178'	198'	82'	97'
			WB Thru	999'	(40 veh)	64'	73'	87'	104'	91'	107'	104'	124'
			WB Right	325'	(13 veh)	109'	182'	66'	145'	87'	161'	74'	144'
			NORTHBOUND (NB)										
			NB Left	200'	(8 veh)	20'	24'	27'	32'	22'	26'	42'	50'
			NB Thru	775'	(31 veh)	228'	291'	135'	162'	160'	196'	157'	190'
			NB Right	40'	(1 veh)	40'	57'	6'	17'	1'	8'	11'	23'
			SOUTHBOUND (SB)										
			SB Left	300'	(12 veh)	153'	175'	100'	114'	116'	127'	91'	140'
SB Thru	560'	(22 veh)	265'	314'	184'	243'	603'	804'	418'	509'			
SB Right	400'	(16 veh)	0'	0'	0'	0'	0'	0'	0'	0'			
2	Parkway Commons / Cemetery	Signal	EASTBOUND										
			EB Left	175'	(7 veh)	102'	120'	229'	308'	175'	242'	183'	244'
			EB Thru/Right	175'	(7 veh)	0'	0'	0'	0'	0'	9'	0'	8'
			WESTBOUND										
			WB Left/Thru/Right	250'	(10 veh)	10'	10'	35'	39'	10'	10'	17'	18'
			NORTHBOUND										
			NB Left	150'	(6 veh)	74'	74'	93'	119'	105'	140'	80'	92'
			NB Thru/Right	150'	(6 veh)	95'	125'	234'	274'	275'	315'	254'	291'
			SOUTHBOUND										
			SB Left	150'	(6 veh)	1'	1'	3'	3'	0'	1'	2'	2'
SB Thru/Right	150'	(6 veh)	52'	57'	132'	448'	60'	78'	79'	98'			
3	Southeast Parkway / Shadow Green Drive	Signal	EASTBOUND										
			EB Left	100'	(4 veh)	99'	124'	121'	137'	78'	86'	105'	119'
			EB Thru	200'	(8 veh)	48'	52'	47'	52'	35'	37'	40'	43'
			EB Right	75'	(3 veh)	46'	48'	82'	124'	50'	80'	78'	121'
			WESTBOUND										
			WB Left	125'	(5 veh)	24'	28'	70'	83'	46'	54'	32'	36'
			WB Thru/Right	300'	(12 veh)	66'	73'	86'	104'	87'	103'	68'	75'
			NORTHBOUND										
			NB Left	200'	(8 veh)	4'	4'	24'	61'	102'	177'	70'	120'
			NB Thru/Right	385'	(15 veh)	50'	59'	92'	113'	32'	44'	72'	91'
			SOUTHBOUND										
			SB Left	100'	(4 veh)	75'	114'	43'	73'	21'	21'	34'	46'
			SB Thru	580'	(23 veh)	147'	205'	143'	193'	112'	174'	116'	127'
			SB Right	100'	(4 veh)	0'	0'	0'	0'	1'	1'	7'	7'
4	Alpha Drive	Two-Way Stop Control (TWSC)	EASTBOUND										
			EB Left/Thru/Right	50'	(2 veh)	1'	1'	2'	3'	2'	4'	2'	3'
			WESTBOUND										
			WB Left/Thru/Right	200'	(8 veh)	11'	16'	43'	74'	34'	60'	16'	23'
			NORTHBOUND										
			NB Left	175'	(7 veh)	1'	1'	2'	2'	2'	3'	0'	1'
			SOUTHBOUND										
			SB Left	75'	(3 veh)	4'	6'	5'	7'	3'	4'	2'	3'
5	Century Court	Signal	EASTBOUND										
			EB Left	125'	(5 veh)	107'	124'	107'	125'	84'	98'	64'	70'
			EB Thru/Right	225'	(9 veh)	37'	40'	50'	54'	47'	52'	29'	31'
			WESTBOUND										
			WB Left/Thru/Right	50'	(2 veh)	8'	8'	9'	9'	9'	9'	11'	12'
			NORTHBOUND										
			NB Left	75'	(3 veh)	23'	47'	37'	66'	8'	15'	4'	8'
			NB Thru/Right	200'	(8 veh)	71'	82'	82'	137'	43'	100'	45'	111'
			SOUTHBOUND										
SB Left	100'	(4 veh)	1'	0'	1'	2'	1'	1'	0'	1'			
SB Thru/Right	225'	(9 veh)	261'	325'	131'	153'	99'	130'	253'	374'			
6	Beasley Drive / Lumber Drive	TWSC	EASTBOUND										
			EB Left/Thru/Right	325'	(13 veh)	11'	15'	18'	24'	22'	29'	14'	25'
			WESTBOUND										
			WB Left/Thru/Right	200'	(8 veh)	2'	3'	20'	32'	14'	23'	13'	20'
			NORTHBOUND										
			NB Left	25'	(1 veh)	10'	14'	10'	14'	4'	6'	3'	4'
			SOUTHBOUND										
			SB Left	200'	(8 veh)	1'	2'	5'	8'	3'	4'	4'	5'
7	Franklin Business Park (North) / Future Werthan Circle	Signal	WESTBOUND										
			WB Left	150'	(6 veh)	33'	37'	55'	62'	45'	52'	132'	157'
			WB Right	150'	(6 veh)	25'	28'	27'	29'	25'	28'	37'	41'
			NORTHBOUND										
			NB Thru/Right	275'	(11 veh)	72'	170'	252'	359'	118'	260'	137'	193'
			SOUTHBOUND										
			SB Left	150'	(6 veh)	9'	9'	6'	6'	10'	14'	24'	65'
			SB Thru	999'	(40 veh)	89'	91'	70'	76'	49'	68'	121'	136'
8	Confederate Drive / Werthan Circle	Signal	EASTBOUND										
			EB Left	100'	(4 veh)	62'	68'	36'	36'	35'	37'	39'	39'
			EB Thru/Right	150'	(6 veh)	37'	39'	35'	36'	26'	27'	34'	34'
			WESTBOUND										
			WB Left	100'	(4 veh)	47'	55'	52'	60'	28'	31'	26'	30'
			WB Thru/Right	200'	(8 veh)	29'	31'	36'	39'	25'	26'	31'	32'
			NORTHBOUND										
			NB Left	100'	(4 veh)	0'	0'	8'	8'	3'	2'	8'	8'
			NB Thru/Right	115'	(4 veh)	8'	12'	78'	106'	84'	100'	101'	128'
			SOUTHBOUND										
			SB Left	100'	(4 veh)	6'	10'	5'	10'	2'	1'	5'	4'
SB Thru/Right	325'	(13 veh)	154'	224'	116'	193'	116'	155'	135'	223'			
9	Carr Avenue	Stop	WESTBOUND										
			WB Left/Thru/Right	175'	(7 veh)	6'	8'	13'	20'	13'	20'	11'	15'
			SOUTHBOUND										
			SB Left	150'	(6 veh)	3'	4'	4'	5'	3'	5'	2'	4'
10	Downs Boulevard	Signal	EASTBOUND										
			EB Left	150'	(6 veh)	85'	100'	76'	89'	86'	102'	100'	119'
			EB Thru	350'	(14 veh)	8'	10'	5'	5'	8'	10'	5'	5'
			EB Right	350'	(14 veh)	192'	334'	115'	218'	163'	269'	279'	503'
			WESTBOUND										
			WB Left	100'	(4 veh)	8'	10'	9'	11'	12'	13'	14'	16'
			WB Thru/Right	250'	(10 veh)	9'	10'	14'	18'	13'	15'	11'	14'
			NORTHBOUND										
			NB Left	300'	(12 veh)	94'	102'	137'	195'	104'	159'	144'	184'
			NB Thru/Right	175'	(7 veh)	32'	38'	106'	569'	78'	100'	109'	366'
			SOUTHBOUND										
			SB Left	150'	(6 veh)	5'	7'	5'	7'	6'	7'	7'	8'
			SB Thru	450'	(18 veh)	292'	416'	346'	482'	377'	551'	370'	529'
SB Right	300'	(12 veh)	24'	28'	21'	23'	24'	27'	27'	29'			
11	James Avenue	Stop	WESTBOUND										
			WB Left/Thru/Right	125'	(5 veh)	5'	9'	6'	9'	4'	7'	6'	9'

Queue Length for Roundabout Concept

Cross-Street		Traffic Control Device	Geometry	Storage Length		[AM] Peak Hour		[MID] Peak Hour		[PM] Peak Hour		[SAT] Peak Hour	
						Queue Length (Feet)		Queue Length (Feet)		Queue Length (Feet)		Queue Length (Feet)	
						2021	2041	2021	2041	2021	2041	2021	2041
1	Mack Hatcher Parkway / Hillview Lane	Signal	EASTBOUND (EB)										
			EB Left	150'	(6 veh)	10'	11'	43'	51'	23'	26'	27'	30'
			EB Thru	450'	(18 veh)	38'	43'	104'	123'	85'	101'	121'	144'
			EB Right	40'	(1 veh)	0'	0'	0'	0'	17'	34'	6'	19'
			WESTBOUND (WB)										
			WB Left	640'	(25 veh)	108'	128'	73'	87'	178'	215'	83'	99'
			WB Thru	999'	(40 veh)	64'	73'	86'	102'	91'	108'	106'	126'
			WB Right	325'	(13 veh)	106'	176'	61'	134'	87'	163'	82'	155'
			NORTHBOUND (NB)										
			NB Left	200'	(8 veh)	20'	24'	26'	31'	22'	25'	43'	53'
			NB Thru	999'	(40 veh)	223'	282'	131'	158'	160'	192'	162'	196'
			NB Right	40'	(1 veh)	40'	56'	5'	16'	1'	8'	12'	24'
			SOUTHBOUND (SB)										
			SB Left	300'	(12 veh)	130'	153'	152'	182'	114'	135'	158'	189'
SB Thru	560'	(22 veh)	182'	222'	267'	333'	547'	784'	358'	513'			
SB Right	400'	(16 veh)	0'	0'	0'	0'	0'	0'	0'	0'			
2	Parkway Commons / Cemetery	Roundabout	EASTBOUND										
			EB Left/Thru/U-Turn	175'	(7 veh)	13'	18'	47'	78'	35'	57'	33'	52'
			EB Right	175'	(7 veh)	4'	6'	13'	19'	19'	30'	16'	23'
			WESTBOUND										
			WB Left/Thru/Right/U-Turn	250'	(10 veh)	1'	1'	5'	7'	1'	1'	2'	2'
			NORTHBOUND										
			NB Left/Thru/U-Turn	150'	(6 veh)	70'	99'	53'	79'	55'	74'	52'	71'
			NB Thru/Right	150'	(6 veh)	70'	99'	53'	79'	55'	74'	52'	71'
			SOUTHBOUND										
			SB Left/Thru/U-Turn	150'	(6 veh)	40'	52'	63'	86'	73'	104'	60'	83'
SB Thru/Right	150'	(6 veh)	40'	52'	63'	86'	73'	104'	60'	83'			
3	Southeast Parkway / Shadow Green Drive	Roundabout	EASTBOUND										
			EB Left/Thru/U-Turn	200'	(8 veh)	27'	37'	55'	93'	23'	36'	32'	49'
			EB Right	200'	(8 veh)	29'	41'	54'	87'	32'	50'	48'	77'
			WESTBOUND										
			WB Left/Thru/U-Turn	125'	(5 veh)	8'	12'	32'	53'	16'	24'	11'	16'
			WB Right	300'	(12 veh)	31'	52'	34'	56'	25'	40'	18'	28'
			NORTHBOUND										
			NB Left/Thru/U-Turn	450'	(18 veh)	102'	185'	89'	153'	65'	95'	71'	119'
			NB Thru/Right	450'	(18 veh)	102'	185'	89'	153'	65'	95'	71'	119'
			SOUTHBOUND										
SB Left/Thru/U-Turn	450'	(18 veh)	48'	66'	96'	175'	123'	230'	92'	164'			
SB Thru/Right	450'	(18 veh)	48'	66'	96'	175'	123'	230'	92'	164'			
4	Alpha Drive	Two-Way Stop Control (TWSC)	EASTBOUND										
			EB Left/Thru/Right	50'	(2 veh)	0'	0'	2'	3'	2'	3'	1'	2'
			WESTBOUND										
			WB Left/Thru/Right	150'	(6 veh)	13'	21'	46'	87'	27'	44'	19'	31'
5	Century Court	Roundabout	EASTBOUND										
			EB Left/Thru/U-Turn	125'	(5 veh)	17'	23'	24'	39'	17'	27'	10'	14'
			EB Right	225'	(9 veh)	13'	19'	29'	47'	23'	38'	8'	12'
			WESTBOUND										
			WB Left/Thru/Right/U-Turn	50'	(2 veh)	1'	1'	1'	1'	1'	1'	1'	1'
			NORTHBOUND										
			NB Left/Thru/U-Turn	200'	(8 veh)	90'	146'	98'	187'	71'	101'	71'	101'
			NB Thru/Right	200'	(8 veh)	90'	146'	98'	187'	71'	101'	71'	101'
			SOUTHBOUND										
			SB Left/Thru/U-Turn	275'	(11 veh)	56'	76'	79'	141'	85'	128'	82'	120'
SB Thru/Right	275'	(11 veh)	56'	76'	79'	141'	85'	128'	82'	120'			
6	Beasley Drive / Lumber Drive	TWSC	EASTBOUND										
			EB Right	325'	(13 veh)	16'	24'	30'	52'	39'	70'	29'	50'
			WESTBOUND										
			WB Right	200'	(8 veh)	2'	3'	16'	25'	9'	14'	12'	18'
7	Franklin Business Park (North) / Future Werthan Circle	Roundabout	WESTBOUND										
			WB Left/Right/U-Turn	150'	(6 veh)	9'	13'	15'	22'	9'	13'	39'	66'
			NORTHBOUND										
			NB Thru/U-Turn	275'	11'	73'	103'	70'	97'	59'	75'	63'	88'
			NB Thru/Right	275'	11'	73'	103'	70'	97'	59'	75'	63'	88'
			SOUTHBOUND										
			SB Left/Thru/U-Turn	999'	(40 veh)	50'	69'	55'	76'	60'	83'	71'	102'
SB Thru	999'	(40 veh)	50'	69'	55'	76'	60'	83'	71'	102'			
8	Confederate Drive / Werthan Circle	Roundabout	EASTBOUND										
			EB Left/Thru/Right/U-Turn	150'	(6 veh)	17'	23'	11'	14'	7'	9'	11'	11'
			WESTBOUND										
			WB Left/Thru/Right/U-Turn	200'	(8 veh)	14'	21'	19'	30'	9'	12'	9'	13'
			NORTHBOUND										
			NB Left/Thru/U-Turn	115'	(4 veh)	71'	100'	66'	90'	54'	73'	65'	90'
			NB Thru/Right	115'	(4 veh)	71'	100'	66'	90'	54'	73'	65'	90'
			SOUTHBOUND										
SB Left/Thru/U-Turn	325'	(13 veh)	56'	76'	54'	74'	59'	80'	66'	71'			
SB Thru/Right	325'	(13 veh)	56'	76'	54'	74'	59'	80'	66'	71'			
9	Carr Avenue	Stop	WESTBOUND										
			WB Right	175'	(7 veh)	2'	3'	6'	9'	5'	7'	6'	9'
10	Downs Boulevard	Signal	EASTBOUND										
			EB Left	150'	(6 veh)	82'	9'	76'	88'	83'	96'	100'	116'
			EB Thru	150'	(6 veh)	7'	9'	5'	5'	7'	9'	5'	5'
			EB Right	350'	(14 veh)	203'	237'	101'	191'	152'	257'	283'	517'
			WESTBOUND										
			WB Left	80'	(3 veh)	7'	9'	9'	11'	11'	12'	13'	16'
			WB Thru/Right	80'	(3 veh)	8'	10'	14'	17'	12'	14'	11'	14'
			NORTHBOUND										
			NB Left	900'	(36 veh)	100'	106'	138'	167'	175'	252'	182'	227'
			NB Thru/Right	900'	(36 veh)	192'	287'	176'	264'	150'	217'	198'	283'
			SOUTHBOUND										
			SB Left	150'	(6 veh)	6'	9'	5'	7'	5'	7'	7'	8'
			SB Thru	450'	(18 veh)	332'	547'	327'	433'	359'	480'	377'	541'
			SB Right	300'	(12 veh)	27'	36'	20'	23'	23'	25'	27'	29'
11	James Avenue	Roundabout	WESTBOUND										
			WB Left/Thru/Right	125'	(5 veh)	5'	9'	5'	8'	4'	7'	6'	10'