APPENDIX TABLE OF CONTENTS

Appendix A: Turning Movement Counts

DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

Counted By: Miovision/ Video

File Name : US 17 Business and Court Street
Site Code : 00015225
Start Date : 11/17/2015
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Groups Printed- Cars - Trucks - Bikes

	Driveway Southbound					US 17 Business (Marine Boulevard) Westbound					Court Street Northbound					US 17 Business (Marine Boulevard) Eastbound							
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	0	0	0	0	0	160	7	0	167	1	0	1	0	2	4	141	0	0	145	0	314	314
06:45 AM	0	0	0	0	0	0	174	3	0	177	2	0	2	0	4	4	147	0	0	151	0	332	332
Total	0	0	0	0	0	0	334	10	0	344	3	0	3	0	6	8	288	0	0	296	0	646	646
07:00 AM	0	0	0	0	0	0	180	6	0	186	4	0	3	0	7	2	191	0	0	193	0	386	386
07:15 AM	0	0	0	0	0	0	184	12	0	196	1	0	5	0	6	1	193	0	0	194	0	396	396
07:30 AM	0	0	0	0	0	0	197	13	0	210	1	0	11	0	12	9	257	0	0	266	0	488	488
07:45 AM	0	0	0	0	0	0	208	25	0	233	3	0	3	0	6	9	276	0	0	285	0	524	524
Total	0	0	0	0	0	0	769	56	0	825	9	0	22	0	31	21	917	0	0	938	0	1794	1794
08:00 AM	0	0	0	0	0	0	177	10	0	187	3	0	6	0	9	3	214	1	0	218	0	414	414
08:15 AM	0	0	0	0	0	0	166	10	0	176	1	0	5	0	6	3	242	0	0	245	0	427	427
Total	0	0	0	0	0	0	343	20	0	363	4	0	11	0	15	6	456	1	0	463	0	841	841
04:00 PM	2	0	1	1	3	0	246	6	0	252	5	0	11	2	16	0	303	0	0	303	3	574	577
04:15 PM	0	0	1	0	1	0	252	3	0	255	16	0	11	1	27	4	290	0	0	294	1	577	578
04:30 PM	0	0	0	1	0	0	257	8	0	265	8	0	8	1	16	5	309	1	0	315	2	596	598
04:45 PM	5	0	1	0	6	0	263	9	0	272	4	1	9	1	14	2	302	0	0	304	1	596	597
Total	7	0	3	2	10	0	1018	26	0	1044	33	1	39	5	73	11	1204	1	0	1216	7	2343	2350
05:00 PM	1	0	0	0	1	1	317	5	0	323	12	0	32	0	44	0	361	0	0	361	0	729	729
05:15 PM	0	0	0	0	0	0	302	5	0	307	4	0	8	0	12	1	360	0	0	361	0	680	680
05:30 PM	0	0	0	0	0	1	285	4	0	290	8	0	11	0	19	6	316	0	0	322	0	631	631
05:45 PM	1	0	0	0	1	4	238	14	0	256	5	0	9	0	14	2	292	0	0	294	0	565	565
Total	2	0	0	0	2	6	1142	28	0	1176	29	0	60	0	89	9	1329	0	0	1338	0	2605	2605
Grand Total	9	0	3	2	12	6	3606	140	0	3752	78	1	135	5	214	55	4194	2	0	4251	7	8229	8236
Apprch %	75	0	25			0.2	96.1	3.7			36.4	0.5	63.1			1.3	98.7	0					
Total %	0.1	0	0		0.1	0.1	43.8	1.7		45.6	0.9	0	1.6		2.6	0.7	51	0		51.7	0.1	99.9	
Cars	9	0	3		14	6	3509	139		3654	78	1	135		219	55	4073	2		4130	0	0	8017
% Cars	100	0	100	100	100	100	97.3	99.3	0	97.4	100	100	100	100	100	100	97.1	100	0	97.2	0	0	97.3
Trucks	0	0	0		0	0	96	1		97	0	0	0		0	0	119	0		119	0	0	216
% Trucks	0	0	0	0	0	0	2.7	0.7	0	2.6	0	0	0	0	0	0	2.8	0	0	2.8	0	0	2.6
Bikes	0	0	0		0	0	1	0		1	0	0	0		0	0	2	0		2	0	0	3
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
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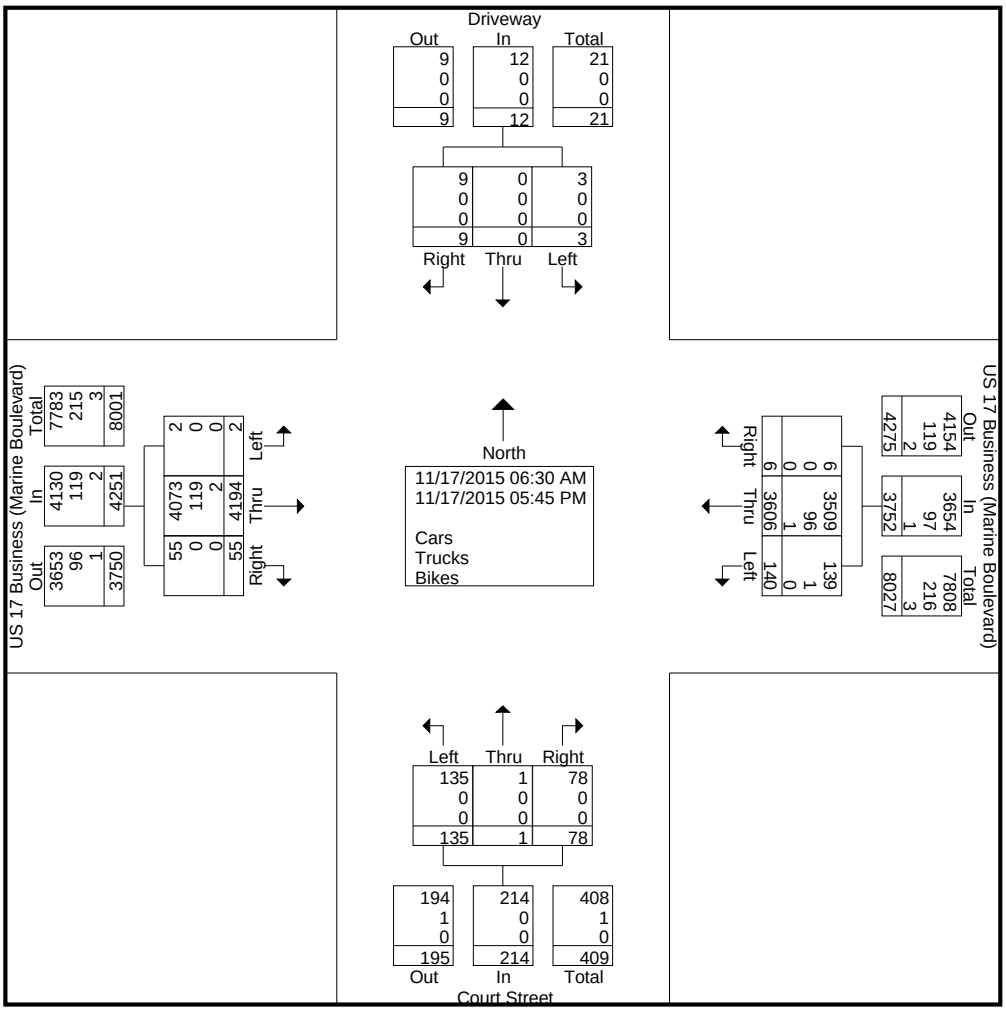
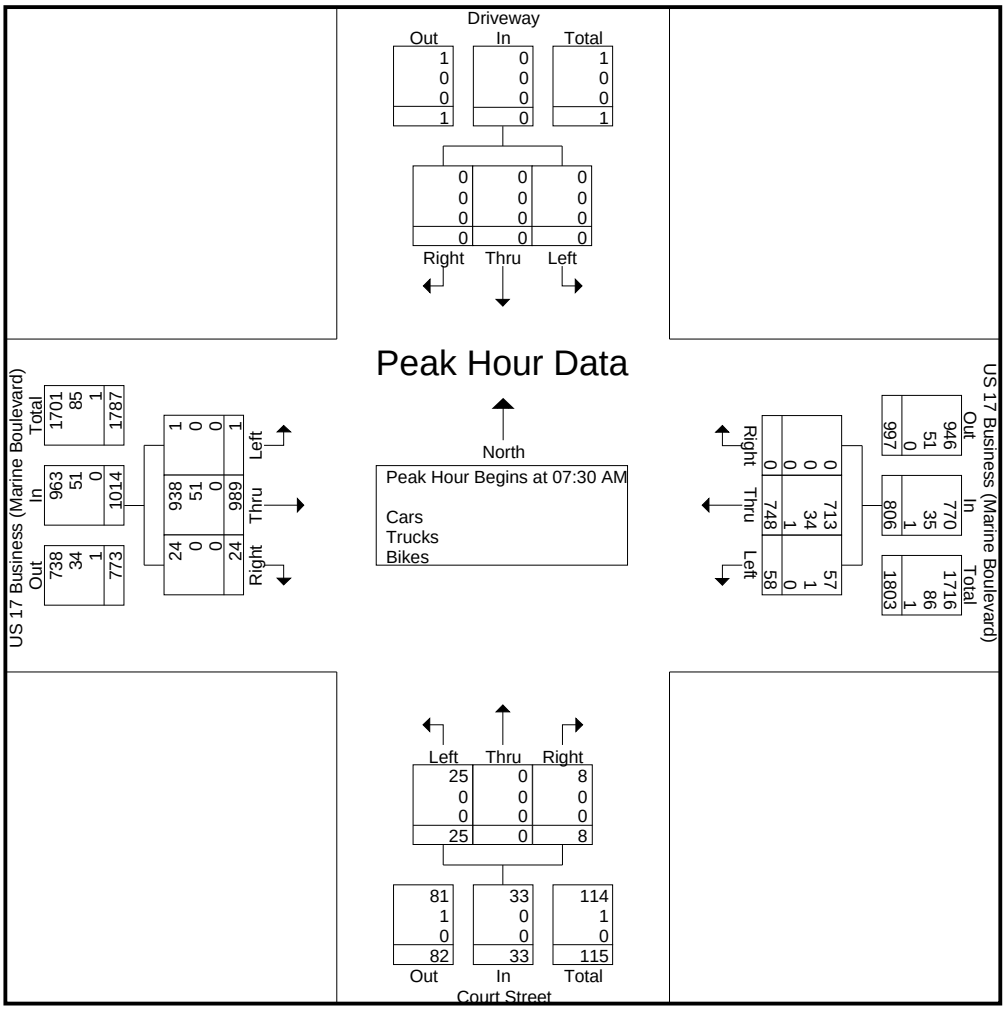


DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

File Name : US 17 Business and Court Street
Site Code : 00015225
Start Date : 11/17/2015
Page No : 3

	Driveway Southbound				US 17 Business (Marine Boulevard) Westbound				Court Street Northbound				US 17 Business (Marine Boulevard) Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 11:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	197	13	210	1	0	**11**	**12**	**9**	257	0	266	488
07:45 AM	0	0	0	0	0	**208**	**25**	**233**	**3**	0	3	6	9	**276**	0	**285**	**524**
08:00 AM	0	0	0	0	0	177	10	187	3	0	6	9	3	214	**1**	218	414
08:15 AM	0	0	0	0	0	166	10	176	1	0	5	6	3	242	0	245	427
Total Volume	0	0	0	0	0	748	58	806	8	0	25	33	24	989	1	1014	1853
% App. Total	0	0	0		0	92.8	7.2		24.2	0	75.8		2.4	97.5	0.1		
PHF	.000	.000	.000	.000	.000	.899	.580	.865	.667	.000	.568	.688	.667	.896	.250	.889	.884
Cars	0	0	0	0	0	713	57	770	8	0	25	33	24	938	1	963	1766
% Cars	0	0	0	0	0	95.3	98.3	95.5	100	0	100	100	100	94.8	100	95.0	95.3
Trucks	0	0	0	0	0	34	1	35	0	0	0	0	0	51	0	51	86
% Trucks	0	0	0	0	0	4.5	1.7	4.3	0	0	0	0	0	5.2	0	5.0	4.6
Bikes	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% Bikes	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0	0	0	0.1



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305 West 4th Street, Winston Salem NC, 27101
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File Name : US 17 Business and Court Street
Site Code : 00015225
Start Date : 11/17/2015
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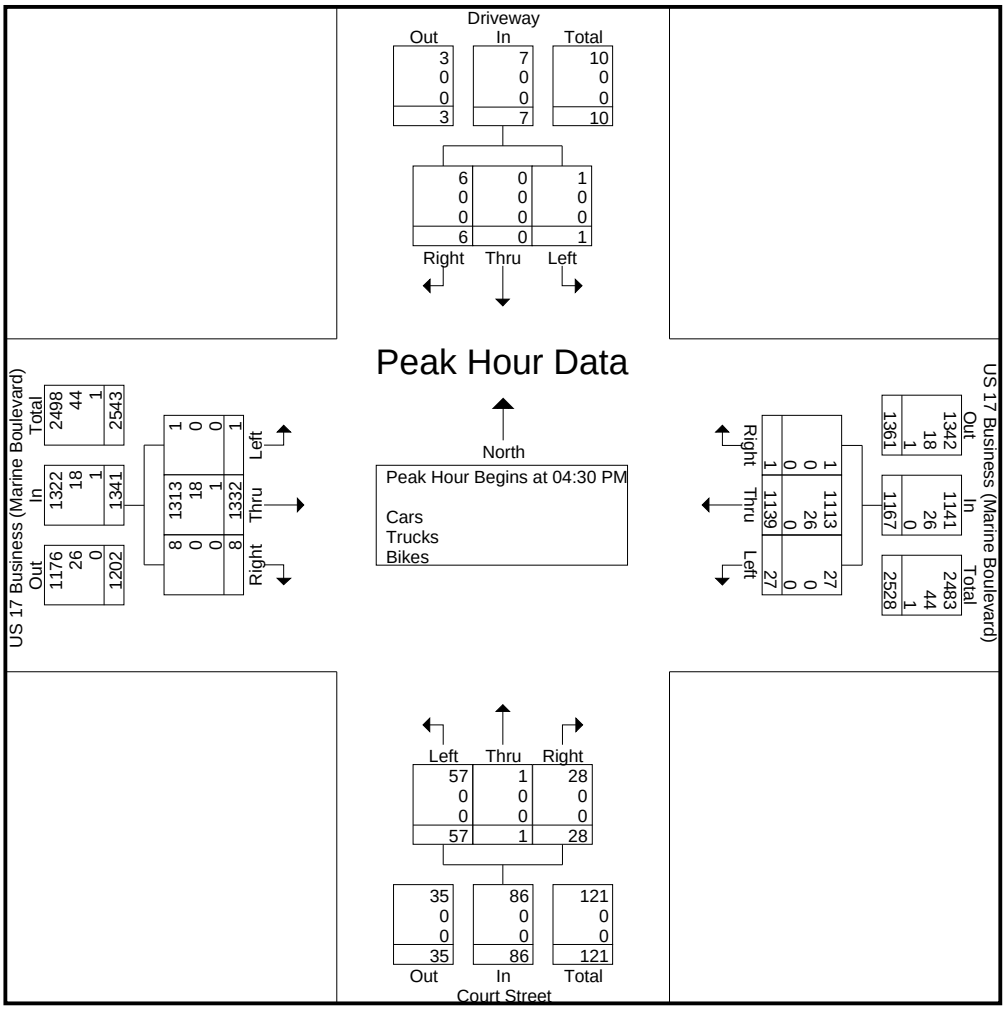
	Driveway Southbound				US 17 Business (Marine Boulevard) Westbound				Court Street Northbound				US 17 Business (Marine Boulevard) Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	257	8	265	8	0	8	16	**5**	309	**1**	315	596
04:45 PM	**5**	0	**1**	**6**	0	263	**9**	272	4	**1**	9	14	2	302	0	304	596
05:00 PM	1	0	0	1	**1**	**317**	5	**323**	**12**	0	**32**	**44**	0	**361**	0	**361**	**729**
05:15 PM	0	0	0	0	0	302	5	307	4	0	8	12	1	360	0	361	680
Total Volume	6	0	1	7	1	1139	27	1167	28	1	57	86	8	1332	1	1341	2601
% App. Total	85.7	0	14.3		0.1	97.6	2.3		32.6	1.2	66.3		0.6	99.3	0.1		
PHF	.300	.000	.250	.292	.250	.898	.750	.903	.583	.250	.445	.489	.400	.922	.250	.929	.892
Cars	6	0	1	7	1	1113	27	1141	28	1	57	86	8	1313	1	1322	2556
% Cars	100	0	100	100	100	97.7	100	97.8	100	100	100	100	100	98.6	100	98.6	98.3
Trucks	0	0	0	0	0	26	0	26	0	0	0	0	0	18	0	18	44
% Trucks	0	0	0	0	0	2.3	0	2.2	0	0	0	0	0	1.4	0	1.3	1.7
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0.0



DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

Counted By: R. Privott

File Name : Court Street and New Bridge Street
Site Code : 00015225
Start Date : 11/10/2015
Page No : 1

Groups Printed- Cars - Trucks - Bikes

	Court Street Southbound					New Bridge Street Westbound					Court Street Northbound					New Bridge Street Eastbound							
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	1	1	0	2	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	5	5
06:45 AM	0	0	1	0	1	3	0	0	1	3	0	0	0	0	0	0	0	0	0	0	1	4	5
Total	0	1	2	0	3	6	0	0	1	6	0	0	0	0	0	0	0	0	0	0	1	9	10
07:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:15 AM	0	3	3	0	6	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	10	10
07:30 AM	0	6	7	0	13	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	19	19
07:45 AM	0	15	2	0	17	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	26	26
Total	0	24	13	0	37	19	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	56	56
08:00 AM	0	9	5	0	14	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	24	24
08:15 AM	0	15	5	0	20	16	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	36	36
Total	0	24	10	0	34	26	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	60	60
04:00 PM	0	7	3	0	10	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	14	14
04:15 PM	0	7	5	0	12	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	23	23
04:30 PM	0	7	5	0	12	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	19	19
04:45 PM	0	7	5	0	12	13	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	25	25
Total	0	28	18	0	46	35	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	81	81
05:00 PM	0	8	6	0	14	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	23	23
05:15 PM	0	10	2	0	12	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	14	14
05:30 PM	0	2	2	0	4	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	13	13
05:45 PM	0	10	0	0	10	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	17	17
Total	0	30	10	0	40	27	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	67	67
Grand Total	0	107	53	0	160	113	0	0	1	113	0	0	0	0	0	0	0	0	0	0	1	273	274
Apprch %	0	66.9	33.1			100	0	0			0	0	0			0	0	0					
Total %	0	39.2	19.4		58.6	41.4	0	0		41.4	0	0	0		0	0	0	0		0	0.4	99.6	
Cars	0	105	52		157	113	0	0		114	0	0	0		0	0	0	0		0	0	0	271
% Cars	0	98.1	98.1	0	98.1	100	0	0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	98.9
Trucks	0	2	1		3	0	0	0		0	0	0	0		0	0	0	0		0	0	0	3
% Trucks	0	1.9	1.9	0	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1
Bikes	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAVENPORT

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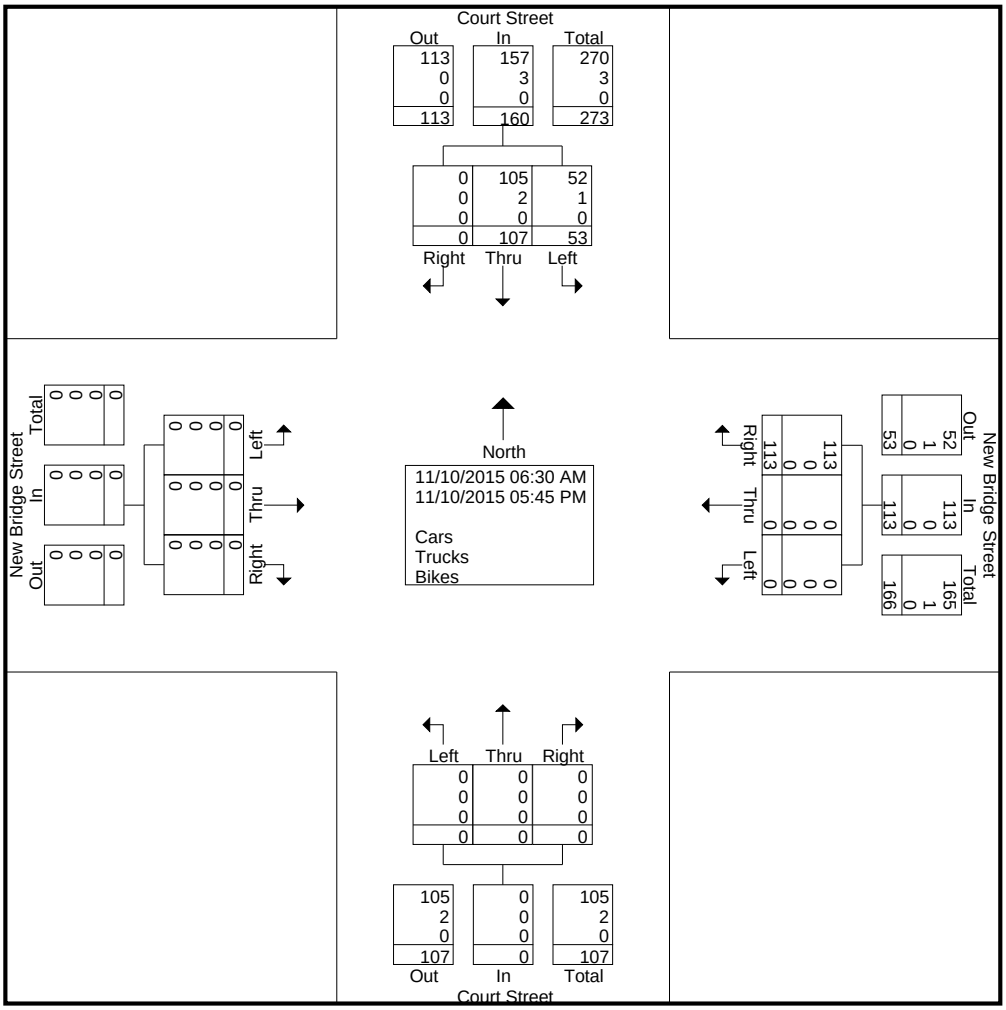

DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
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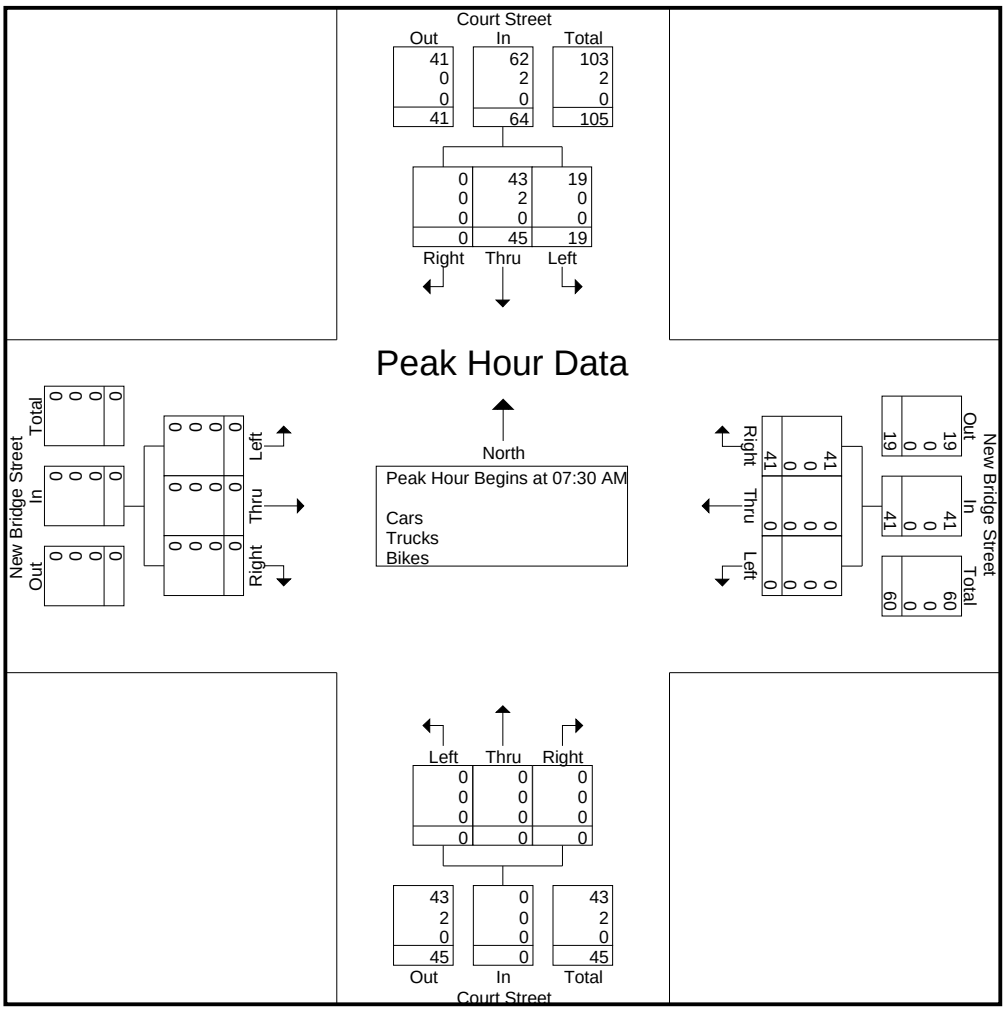
File Name : Court Street and New Bridge Street
Site Code : 00015225
Start Date : 11/10/2015
Page No : 3

	Court Street Southbound				New Bridge Street Westbound				Court Street Northbound				New Bridge Street Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	6	**7**	13	6	0	0	6	0	0	0	0	0	0	0	0	19
07:45 AM	0	**15**	2	17	9	0	0	9	0	0	0	0	0	0	0	0	26
08:00 AM	0	9	5	14	10	0	0	10	0	0	0	0	0	0	0	0	24
08:15 AM	0	15	5	**20**	**16**	0	0	**16**	0	0	0	0	0	0	0	0	**36**
Total Volume	0	45	19	64	41	0	0	41	0	0	0	0	0	0	0	0	105
% App. Total	0	70.3	29.7		100	0	0		0	0	0		0	0	0		
PHF	.000	.750	.679	.800	.641	.000	.000	.641	.000	.000	.000	.000	.000	.000	.000	.000	.729
Cars	0	43	19	62	41	0	0	41	0	0	0	0	0	0	0	0	103
% Cars	0	95.6	100	96.9	100	0	0	100	0	0	0	0	0	0	0	0	98.1
Trucks	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% Trucks	0	4.4	0	3.1	0	0	0	0	0	0	0	0	0	0	0	0	1.9
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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File Name : Court Street and New Bridge Street
Site Code : 00015225
Start Date : 11/10/2015
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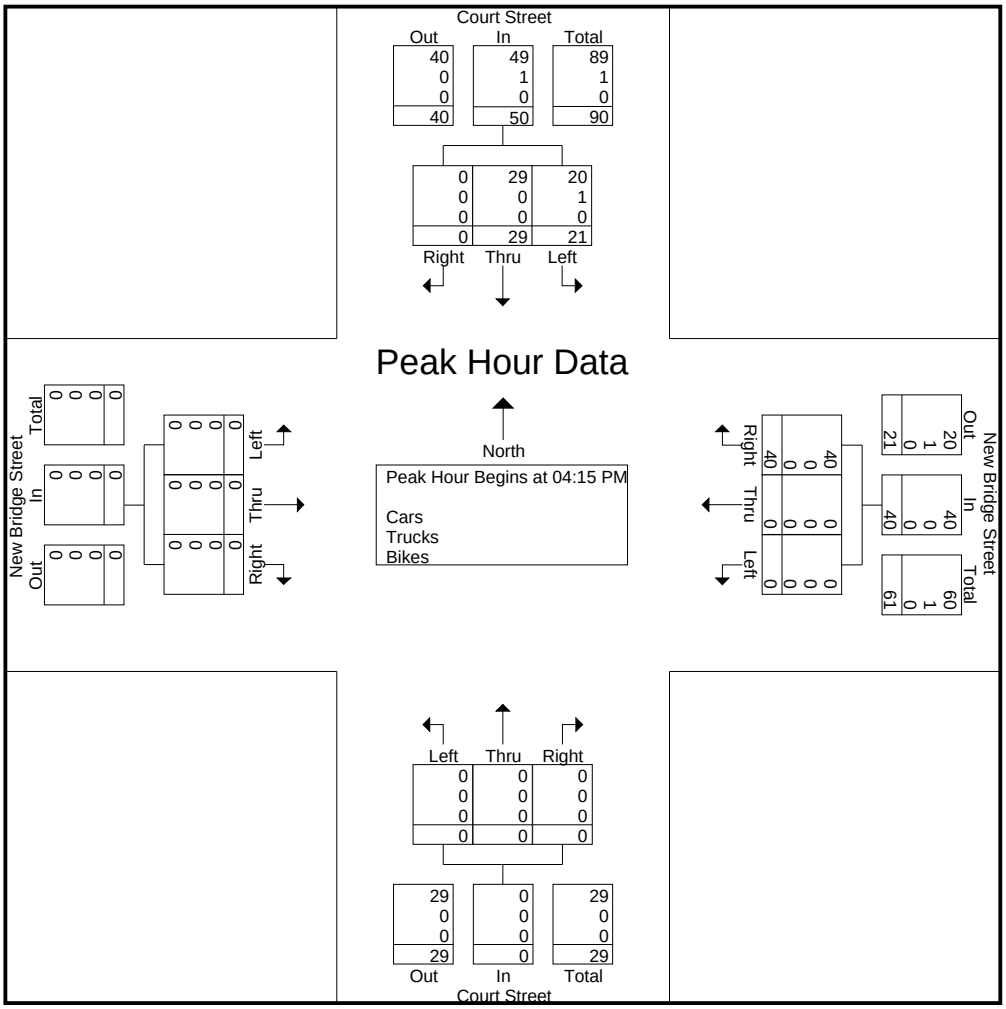
	Court Street Southbound				New Bridge Street Westbound				Court Street Northbound				New Bridge Street Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	7	5	12	11	0	0	11	0	0	0	0	0	0	0	0	23
04:30 PM	0	7	5	12	7	0	0	7	0	0	0	0	0	0	0	0	19
04:45 PM	0	7	5	12	**13**	0	0	**13**	0	0	0	0	0	0	0	0	**25**
05:00 PM	0	**8**	**6**	**14**	9	0	0	9	0	0	0	0	0	0	0	0	23
Total Volume	0	29	21	50	40	0	0	40	0	0	0	0	0	0	0	0	90
% App. Total	0	58	42		100	0	0		0	0	0		0	0	0		
PHF	.000	.906	.875	.893	.769	.000	.000	.769	.000	.000	.000	.000	.000	.000	.000	.000	.900
Cars	0	29	20	49	40	0	0	40	0	0	0	0	0	0	0	0	89
% Cars	0	100	95.2	98.0	100	0	0	100	0	0	0	0	0	0	0	0	98.9
Trucks	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% Trucks	0	0	4.8	2.0	0	0	0	0	0	0	0	0	0	0	0	0	1.1
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
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Counted By: R. Privott

File Name : Court Street and Old Bridge Street
Site Code : 00015225
Start Date : 11/12/2015
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Groups Printed- Cars - Trucks - Bikes

	Court Street Southbound					Old Bridge Street Westbound					Court Street Northbound					Old Bridge Street Eastbound							
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	1	0	0	1	0	14	0	0	14	0	0	0	0	0	1	8	0	0	9	0	24	24
06:45 AM	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	4	13	0	0	17	0	28	28
Total	0	1	0	0	1	0	25	0	0	25	0	0	0	0	0	5	21	0	0	26	0	52	52
07:00 AM	5	1	0	0	6	0	10	0	0	10	0	0	2	0	2	1	15	0	0	16	0	34	34
07:15 AM	1	0	1	0	2	0	15	0	0	15	0	0	0	0	0	1	32	0	0	33	0	50	50
07:30 AM	2	2	0	0	4	0	22	1	0	23	0	0	0	0	0	5	38	0	0	43	0	70	70
07:45 AM	4	5	1	0	10	0	48	0	0	48	0	0	4	0	4	2	56	0	0	58	0	120	120
Total	12	8	2	0	22	0	95	1	0	96	0	0	6	0	6	9	141	0	0	150	0	274	274
08:00 AM	3	3	1	0	7	0	22	0	0	22	0	0	4	0	4	1	43	0	0	44	0	77	77
08:15 AM	7	6	1	0	14	0	32	0	0	32	0	0	5	0	5	1	35	0	0	36	0	87	87
Total	10	9	2	0	21	0	54	0	0	54	0	0	9	0	9	2	78	0	0	80	0	164	164
04:00 PM	8	5	1	0	14	0	39	0	0	39	0	0	6	0	6	5	45	0	0	50	0	109	109
04:15 PM	3	4	2	0	9	0	42	1	0	43	6	0	3	0	9	5	36	0	0	41	0	102	102
04:30 PM	3	1	0	0	4	0	23	1	0	24	1	0	3	0	4	7	27	0	0	34	0	66	66
04:45 PM	4	5	3	0	12	0	30	1	0	31	2	0	3	0	5	1	31	0	0	32	0	80	80
Total	18	15	6	0	39	0	134	3	0	137	9	0	15	0	24	18	139	0	0	157	0	357	357
05:00 PM	6	5	1	0	12	0	51	0	0	51	3	0	2	0	5	5	39	0	0	44	0	112	112
05:15 PM	4	2	0	0	6	0	36	3	0	39	2	0	8	1	10	3	22	0	0	25	1	80	81
05:30 PM	4	2	0	0	6	0	34	0	0	34	1	0	5	0	6	8	14	0	0	22	0	68	68
05:45 PM	1	1	1	0	3	0	31	0	0	31	0	0	5	0	5	6	16	0	0	22	0	61	61
Total	15	10	2	0	27	0	152	3	0	155	6	0	20	1	26	22	91	0	0	113	1	321	322
Grand Total	55	43	12	0	110	0	460	7	0	467	15	0	50	1	65	56	470	0	0	526	1	1168	1169
Apprch %	50	39.1	10.9			0	98.5	1.5			23.1	0	76.9			10.6	89.4	0					
Total %	4.7	3.7	1		9.4	0	39.4	0.6		40	1.3	0	4.3		5.6	4.8	40.2	0		45	0.1	99.9	
Cars	55	41	10		106	0	441	7		448	15	0	48		64	56	457	0		513	0	0	1131
% Cars	100	95.3	83.3	0	96.4	0	95.9	100	0	95.9	100	0	96	100	97	100	97.2	0	0	97.5	0	0	96.7
Trucks	0	2	2		4	0	15	0		15	0	0	2		2	0	11	0		11	0	0	32
% Trucks	0	4.7	16.7	0	3.6	0	3.3	0	0	3.2	0	0	4	0	3	0	2.3	0	0	2.1	0	0	2.7
Bikes	0	0	0		0	0	4	0		4	0	0	0		0	0	2	0		2	0	0	6
% Bikes	0	0	0	0	0	0	0.9	0	0	0.9	0	0	0	0	0	0	0.4	0	0	0.4	0	0	0.5

DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

File Name : Court Street and Old Bridge Street
Site Code : 00015225
Start Date : 11/12/2015
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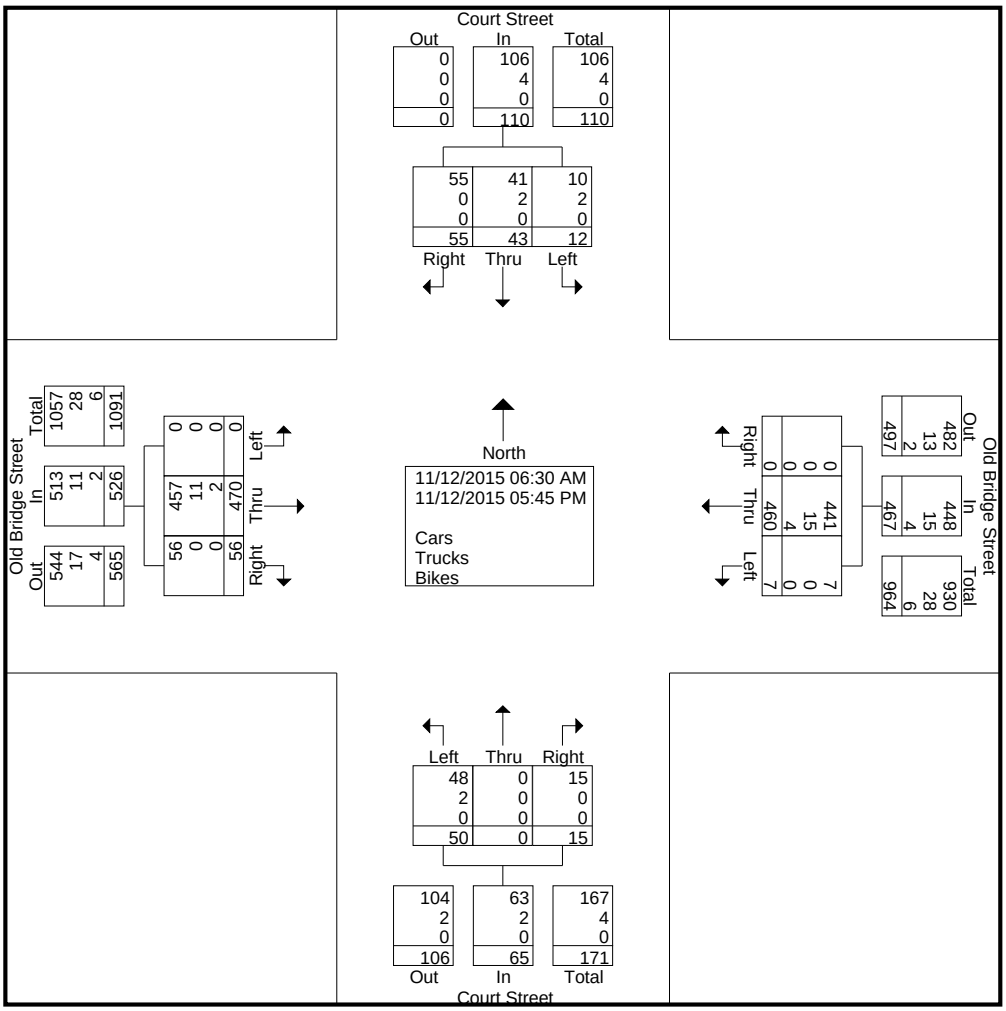
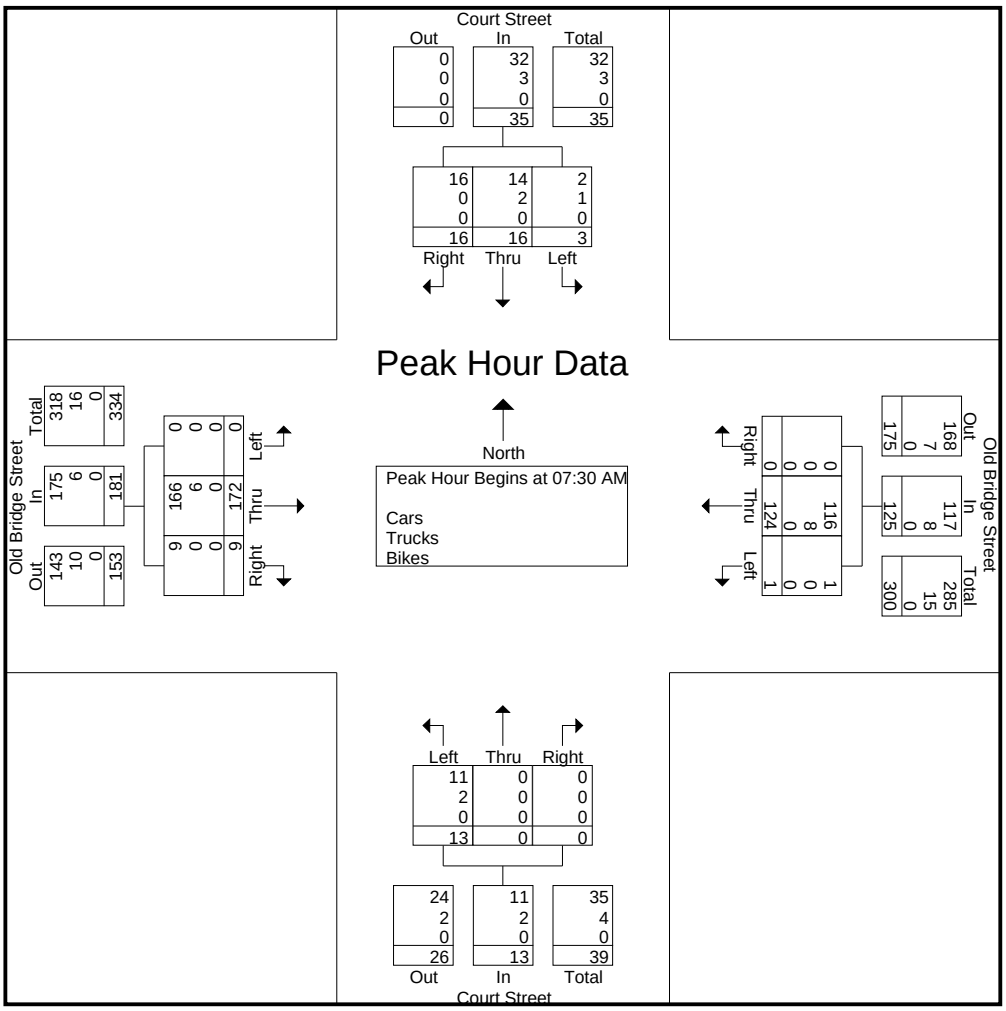


DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

File Name : Court Street and Old Bridge Street
Site Code : 00015225
Start Date : 11/12/2015
Page No : 3

	Court Street Southbound				Old Bridge Street Westbound				Court Street Northbound				Old Bridge Street Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	2	0	4	0	22	**1**	23	0	0	0	0	**5**	38	0	43	70
07:45 AM	4	5	**1**	10	0	**48**	0	**48**	0	0	4	4	2	**56**	0	**58**	**120**
08:00 AM	3	3	1	7	0	22	0	22	0	0	4	4	1	43	0	44	77
08:15 AM	**7**	**6**	1	**14**	0	32	0	32	0	0	**5**	**5**	1	35	0	36	87
Total Volume	16	16	3	35	0	124	1	125	0	0	13	13	9	172	0	181	354
% App. Total	45.7	45.7	8.6		0	99.2	0.8		0	0	100		5	95	0		
PHF	.571	.667	.750	.625	.000	.646	.250	.651	.000	.000	.650	.650	.450	.768	.000	.780	.738
Cars	16	14	2	32	0	116	1	117	0	0	11	11	9	166	0	175	335
% Cars	100	87.5	66.7	91.4	0	93.5	100	93.6	0	0	84.6	84.6	100	96.5	0	96.7	94.6
Trucks	0	2	1	3	0	8	0	8	0	0	2	2	0	6	0	6	19
% Trucks	0	12.5	33.3	8.6	0	6.5	0	6.4	0	0	15.4	15.4	0	3.5	0	3.3	5.4
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

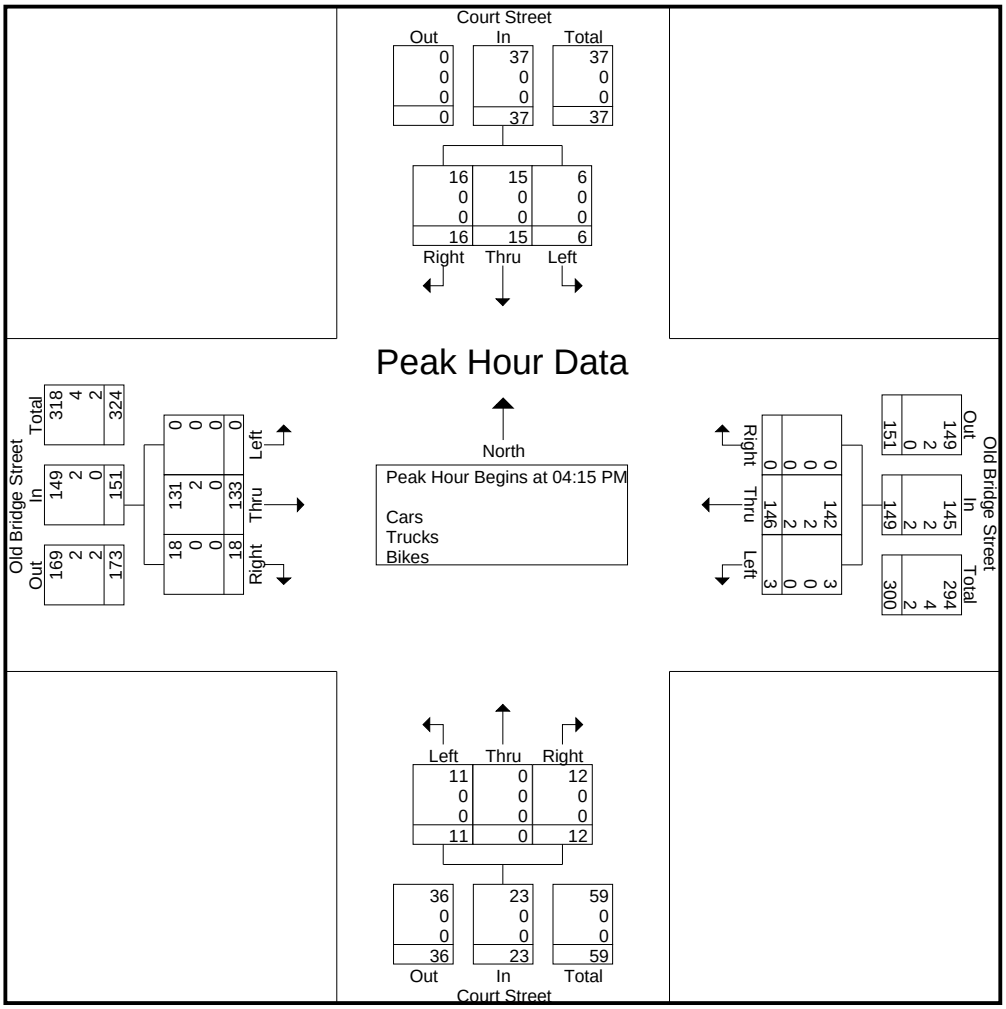


DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

File Name : Court Street and Old Bridge Street
Site Code : 00015225
Start Date : 11/12/2015
Page No : 4

	Court Street Southbound				Old Bridge Street Westbound				Court Street Northbound				Old Bridge Street Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	3	4	2	9	0	42	**1**	43	**6**	0	**3**	**9**	5	36	0	41	102
04:30 PM	3	1	0	4	0	23	1	24	1	0	3	4	**7**	27	0	34	66
04:45 PM	4	**5**	**3**	**12**	0	30	1	31	2	0	3	5	1	31	0	32	80
05:00 PM	**6**	5	1	12	0	**51**	0	**51**	3	0	2	5	5	**39**	0	**44**	**112**
Total Volume	16	15	6	37	0	146	3	149	12	0	11	23	18	133	0	151	360
% App. Total	43.2	40.5	16.2		0	98	2		52.2	0	47.8		11.9	88.1	0		
PHF	.667	.750	.500	.771	.000	.716	.750	.730	.500	.000	.917	.639	.643	.853	.000	.858	.804
Cars	16	15	6	37	0	142	3	145	12	0	11	23	18	131	0	149	354
% Cars	100	100	100	100	0	97.3	100	97.3	100	0	100	100	100	98.5	0	98.7	98.3
Trucks	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
% Trucks	0	0	0	0	0	1.4	0	1.3	0	0	0	0	0	1.5	0	1.3	1.1
Bikes	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
% Bikes	0	0	0	0	0	1.4	0	1.3	0	0	0	0	0	0	0	0	0.6



DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

Counted By: Miovision/Video

File Name : New Bridge Street and Railroad Street
Site Code : 00015225
Start Date : 11/10/2015
Page No : 1

Groups Printed- Cars - Trucks - Bikes

	Railroad Street Southbound					New Bridge Street Westbound					Railroad Street Northbound					New Bridge Street Eastbound							
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	7	0	0	7	0	2	10	1	12	12	4	1	0	17	0	1	0	0	1	1	37	38
06:45 AM	2	11	1	0	14	0	4	9	0	13	9	6	0	0	15	0	1	1	0	2	0	44	44
Total	2	18	1	0	21	0	6	19	1	25	21	10	1	0	32	0	2	1	0	3	1	81	82
07:00 AM	0	10	0	0	10	0	1	12	0	13	16	8	2	0	26	0	0	0	0	0	0	49	49
07:15 AM	2	8	4	1	14	3	5	10	0	18	20	19	2	0	41	0	5	0	0	5	1	78	79
07:30 AM	2	20	10	0	32	1	5	11	0	17	25	15	0	0	40	0	3	0	0	3	0	92	92
07:45 AM	3	32	11	0	46	10	5	43	0	58	39	19	4	1	62	0	1	1	0	2	1	168	169
Total	7	70	25	1	102	14	16	76	0	106	100	61	8	1	169	0	9	1	0	10	2	387	389
08:00 AM	6	21	7	0	34	8	8	32	0	48	23	15	6	0	44	0	5	1	1	6	1	132	133
08:15 AM	9	17	5	0	31	3	13	25	0	41	23	11	7	0	41	0	3	0	0	3	0	116	116
Total	15	38	12	0	65	11	21	57	0	89	46	26	13	0	85	0	8	1	1	9	1	248	249
04:00 PM	1	16	3	0	20	6	2	38	1	46	49	18	2	0	69	1	7	2	0	10	1	145	146
04:15 PM	1	14	4	2	19	7	8	41	0	56	28	18	3	0	49	0	3	1	1	4	3	128	131
04:30 PM	0	14	6	0	20	5	10	30	1	45	29	24	2	0	55	0	6	1	2	7	3	127	130
04:45 PM	4	14	3	0	21	9	9	22	0	40	19	20	1	1	40	2	6	2	0	10	1	111	112
Total	6	58	16	2	80	27	29	131	2	187	125	80	8	1	213	3	22	6	3	31	8	511	519
05:00 PM	2	12	3	0	17	14	5	40	0	59	31	29	3	0	63	2	10	3	2	15	2	154	156
05:15 PM	1	8	2	0	11	16	2	21	0	39	21	14	0	0	35	0	5	2	0	7	0	92	92
05:30 PM	1	16	1	0	18	4	5	33	0	42	13	13	2	0	28	0	2	4	0	6	0	94	94
05:45 PM	1	11	0	0	12	6	7	36	0	49	14	10	1	0	25	0	2	1	2	3	2	89	91
Total	5	47	6	0	58	40	19	130	0	189	79	66	6	0	151	2	19	10	4	31	4	429	433
Grand Total	35	231	60	3	326	92	91	413	3	596	371	243	36	2	650	5	60	19	8	84	16	1656	1672
Apprch %	10.7	70.9	18.4			15.4	15.3	69.3			57.1	37.4	5.5			6	71.4	22.6					
Total %	2.1	13.9	3.6		19.7	5.6	5.5	24.9		36	22.4	14.7	2.2		39.3	0.3	3.6	1.1		5.1	1	99	
Cars	35	216	60		314	91	90	397		581	365	237	34		638	5	59	18		90	0	0	1623
% Cars	100	93.5	100	100	95.4	98.9	98.9	96.1	100	97	98.4	97.5	94.4	100	97.9	100	98.3	94.7	100	97.8	0	0	97.1
Trucks	0	14	0		14	1	0	14		15	5	6	1		12	0	0	1		1	0	0	42
% Trucks	0	6.1	0	0	4.3	1.1	0	3.4	0	2.5	1.3	2.5	2.8	0	1.8	0	0	5.3	0	1.1	0	0	2.5
Bikes	0	1	0		1	0	1	2		3	1	0	1		2	0	1	0		1	0	0	7
% Bikes	0	0.4	0	0	0.3	0	1.1	0.5	0	0.5	0.3	0	2.8	0	0.3	0	1.7	0	0	1.1	0	0	0.4

DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

File Name : New Bridge Street and Railroad Street
Site Code : 00015225
Start Date : 11/10/2015
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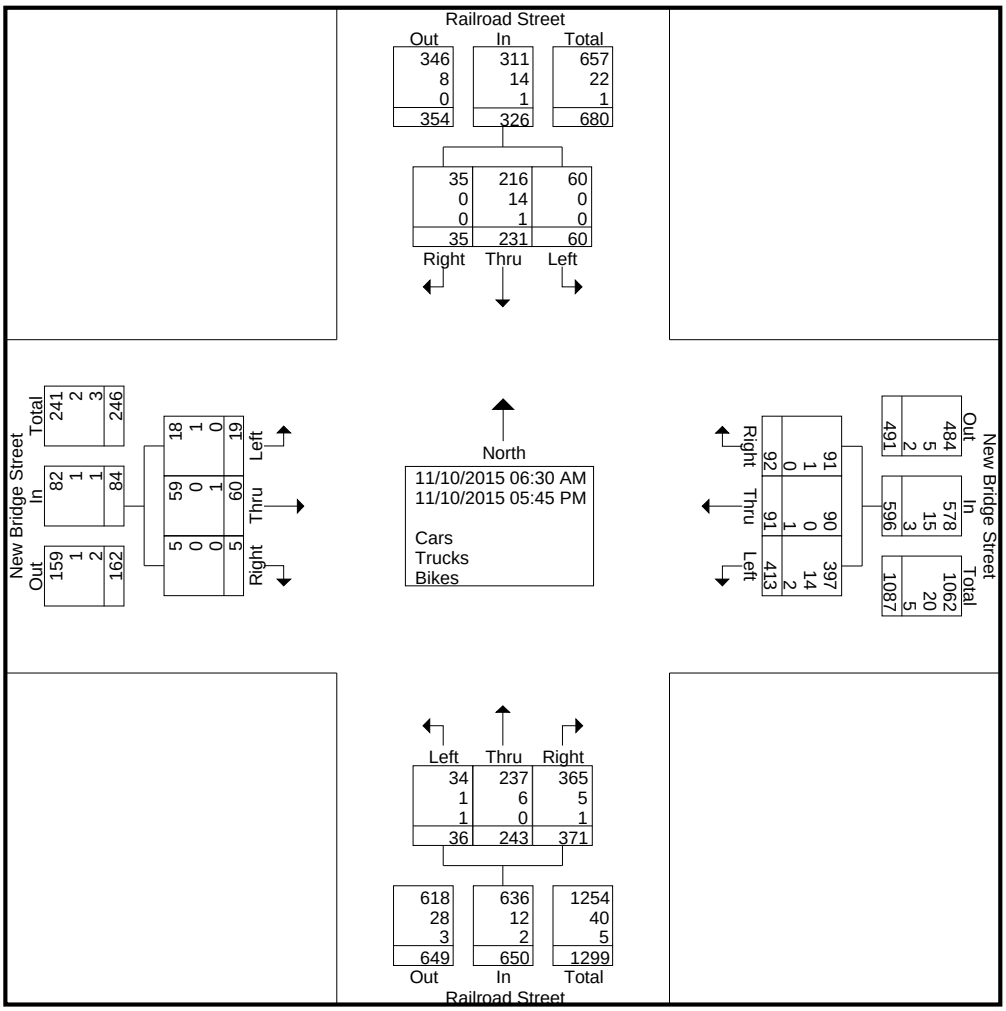
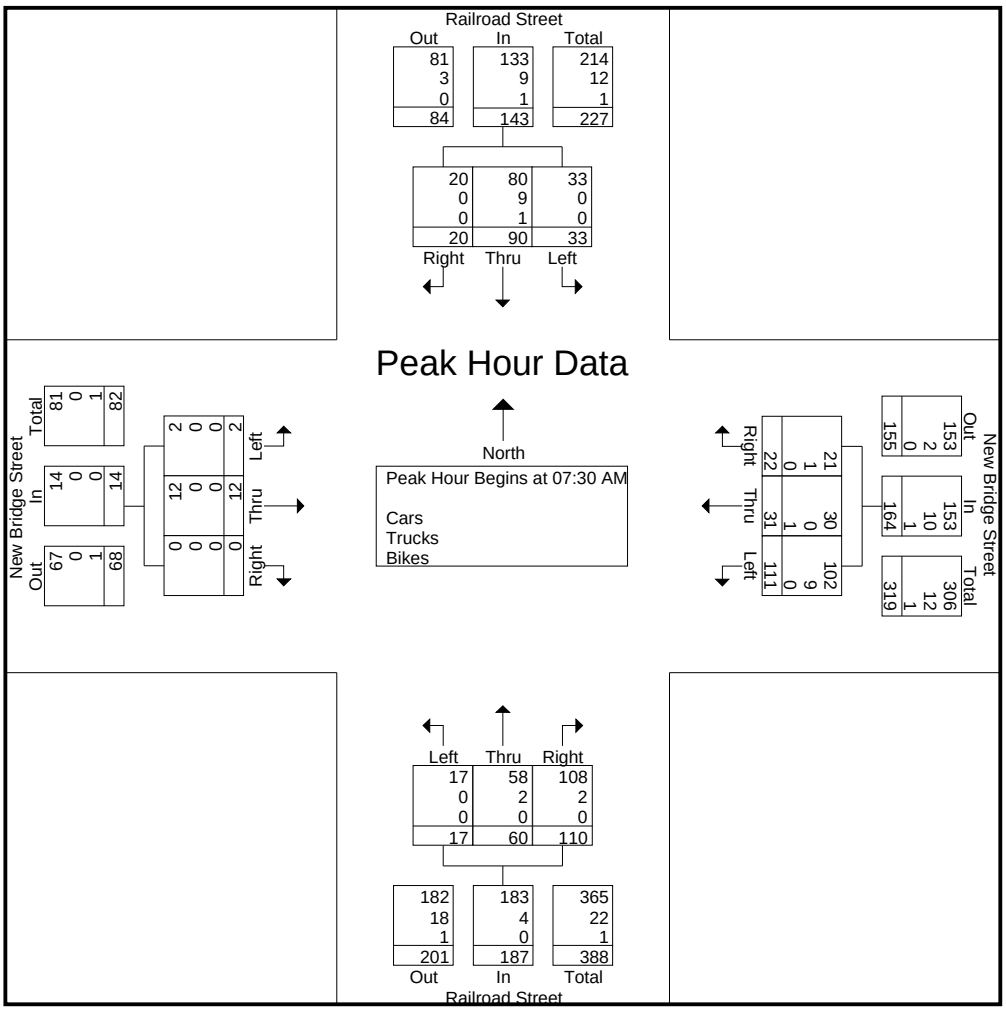


DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

File Name : New Bridge Street and Railroad Street
Site Code : 00015225
Start Date : 11/10/2015
Page No : 3

	Railroad Street Southbound				New Bridge Street Westbound				Railroad Street Northbound				New Bridge Street Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 11:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	20	10	32	1	5	11	17	25	15	0	40	0	3	0	3	92
07:45 AM	3	**32**	**11**	**46**	**10**	5	**43**	**58**	**39**	**19**	4	**62**	0	1	**1**	2	**168**
08:00 AM	6	21	7	34	8	8	32	48	23	15	6	44	0	**5**	1	**6**	132
08:15 AM	**9**	17	5	31	3	**13**	25	41	23	11	**7**	41	0	3	0	3	116
Total Volume	20	90	33	143	22	31	111	164	110	60	17	187	0	12	2	14	508
% App. Total	14	62.9	23.1		13.4	18.9	67.7		58.8	32.1	9.1		0	85.7	14.3		
PHF	.556	.703	.750	.777	.550	.596	.645	.707	.705	.789	.607	.754	.000	.600	.500	.583	.756
Cars	20	80	33	133	21	30	102	153	108	58	17	183	0	12	2	14	483
% Cars	100	88.9	100	93.0	95.5	96.8	91.9	93.3	98.2	96.7	100	97.9	0	100	100	100	95.1
Trucks	0	9	0	9	1	0	9	10	2	2	0	4	0	0	0	0	23
% Trucks	0	10.0	0	6.3	4.5	0	8.1	6.1	1.8	3.3	0	2.1	0	0	0	0	4.5
Bikes	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
% Bikes	0	1.1	0	0.7	0	3.2	0	0.6	0	0	0	0	0	0	0	0	0.4

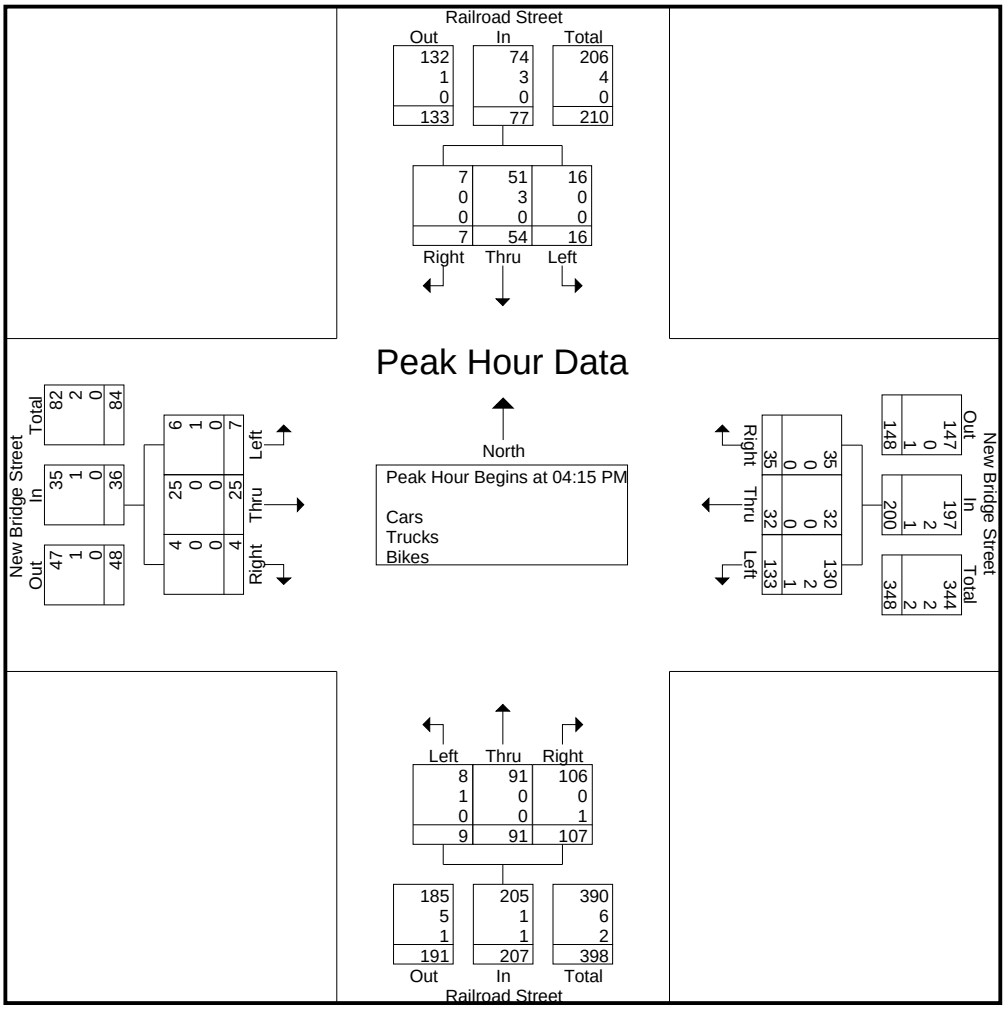


DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

File Name : New Bridge Street and Railroad Street
Site Code : 00015225
Start Date : 11/10/2015
Page No : 4

	Railroad Street Southbound				New Bridge Street Westbound				Railroad Street Northbound				New Bridge Street Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	**14**	4	19	7	8	**41**	56	28	18	**3**	49	0	3	1	4	128
04:30 PM	0	14	**6**	20	5	**10**	30	45	29	24	2	55	0	6	1	7	127
04:45 PM	**4**	14	3	**21**	9	9	22	40	19	20	1	40	**2**	6	2	10	111
05:00 PM	2	12	3	17	**14**	5	40	**59**	**31**	**29**	3	**63**	2	**10**	**3**	**15**	**154**
Total Volume	7	54	16	77	35	32	133	200	107	91	9	207	4	25	7	36	520
% App. Total	9.1	70.1	20.8		17.5	16	66.5		51.7	44	4.3		11.1	69.4	19.4		
PHF	.438	.964	.667	.917	.625	.800	.811	.847	.863	.784	.750	.821	.500	.625	.583	.600	.844
Cars	7	51	16	74	35	32	130	197	106	91	8	205	4	25	6	35	511
% Cars	100	94.4	100	96.1	100	100	97.7	98.5	99.1	100	88.9	99.0	100	100	85.7	97.2	98.3
Trucks	0	3	0	3	0	0	2	2	0	0	1	1	0	0	1	1	7
% Trucks	0	5.6	0	3.9	0	0	1.5	1.0	0	0	11.1	0.5	0	0	14.3	2.8	1.3
Bikes	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	2
% Bikes	0	0	0	0	0	0	0.8	0.5	0.9	0	0	0.5	0	0	0	0	0.4



DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

Counted By: Miovision/Video

File Name : Old Bridge Street and Railroad Street
Site Code : 00015225
Start Date : 11/10/2015
Page No : 1

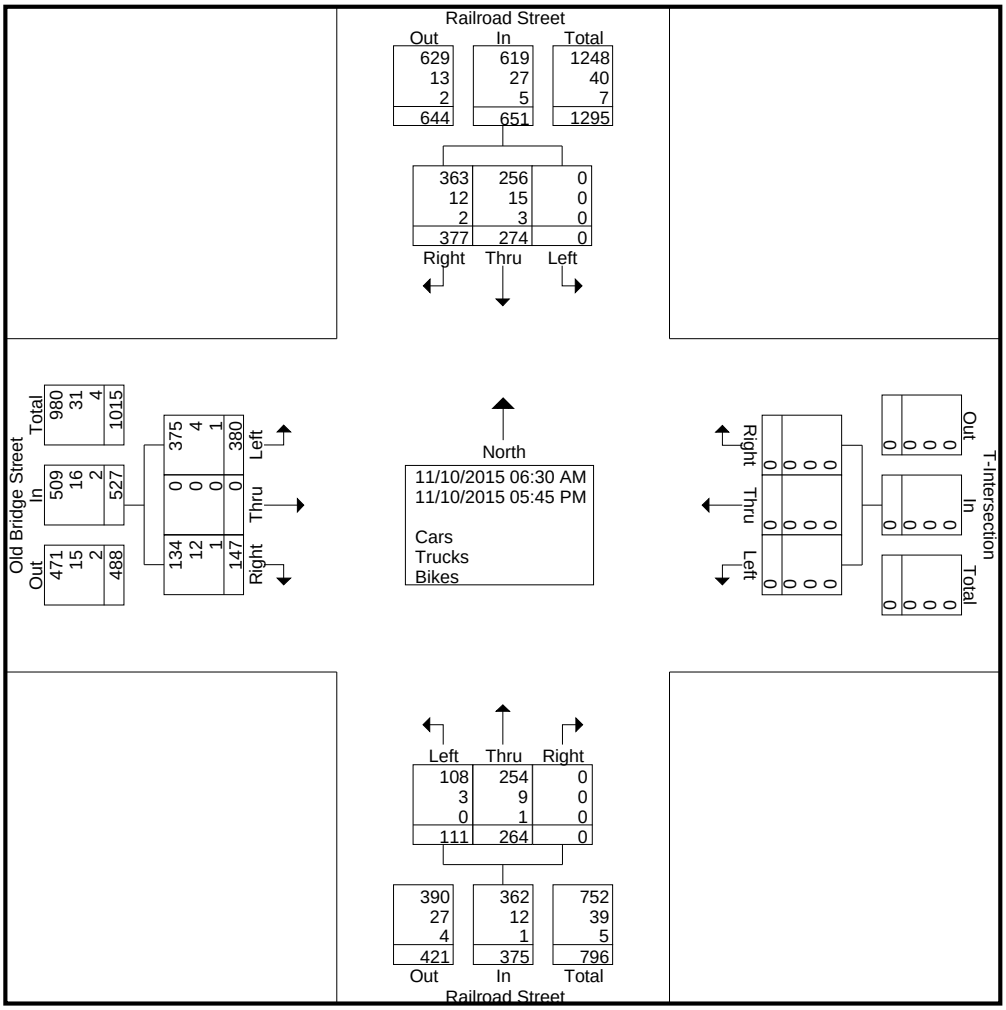
Groups Printed- Cars - Trucks - Bikes

	Railroad Street Southbound					T-Intersection Westbound					Railroad Street Northbound					Old Bridge Street Eastbound							
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	10	7	0	0	17	0	0	0	1	0	0	9	3	0	12	2	0	9	0	11	1	40	41
06:45 AM	11	9	0	0	20	0	0	0	0	0	0	11	2	0	13	2	0	4	0	6	0	39	39
Total	21	16	0	0	37	0	0	0	1	0	0	20	5	0	25	4	0	13	0	17	1	79	80
07:00 AM	12	6	0	0	18	0	0	0	0	0	0	11	2	0	13	8	0	13	0	21	0	52	52
07:15 AM	12	7	0	0	19	0	0	0	0	0	0	14	3	0	17	8	0	27	0	35	0	71	71
07:30 AM	13	16	0	0	29	0	0	0	0	0	0	12	2	0	14	21	0	27	0	48	0	91	91
07:45 AM	43	32	0	0	75	0	0	0	0	0	0	9	5	0	14	19	0	51	1	70	1	159	160
Total	80	61	0	0	141	0	0	0	0	0	0	46	12	0	58	56	0	118	1	174	1	373	374
08:00 AM	25	30	0	0	55	0	0	0	0	0	0	16	7	0	23	17	0	30	1	47	1	125	126
08:15 AM	19	20	0	0	39	0	0	0	0	0	0	17	2	0	19	14	0	24	0	38	0	96	96
Total	44	50	0	0	94	0	0	0	0	0	0	33	9	0	42	31	0	54	1	85	1	221	222
04:00 PM	37	13	0	0	50	0	0	0	0	0	0	37	11	0	48	7	0	31	0	38	0	136	136
04:15 PM	41	17	0	0	58	0	0	0	0	0	0	20	9	0	29	12	0	28	0	40	0	127	127
04:30 PM	26	23	0	0	49	0	0	0	1	0	0	23	8	0	31	8	0	34	0	42	1	122	123
04:45 PM	19	20	0	0	39	0	0	0	0	0	0	15	13	0	28	11	0	22	0	33	0	100	100
Total	123	73	0	0	196	0	0	0	1	0	0	95	41	0	136	38	0	115	0	153	1	485	486
05:00 PM	36	16	0	0	52	0	0	0	0	0	0	31	19	1	50	9	0	30	0	39	1	141	142
05:15 PM	24	14	0	0	38	0	0	0	0	0	0	18	14	0	32	2	0	17	0	19	0	89	89
05:30 PM	24	25	0	0	49	0	0	0	0	0	0	7	6	0	13	3	0	20	0	23	0	85	85
05:45 PM	25	19	0	0	44	0	0	0	1	0	0	14	5	0	19	4	0	13	1	17	2	80	82
Total	109	74	0	0	183	0	0	0	1	0	0	70	44	1	114	18	0	80	1	98	3	395	398
Grand Total	377	274	0	0	651	0	0	0	3	0	0	264	111	1	375	147	0	380	3	527	7	1553	1560
Apprch %	57.9	42.1	0			0	0	0			0	70.4	29.6			27.9	0	72.1					
Total %	24.3	17.6	0		41.9	0	0	0		0	0	17	7.1		24.1	9.5	0	24.5		33.9	0.4	99.6	
Cars	363	256	0		619	0	0	0		3	0	254	108		363	134	0	375		512	0	0	1497
% Cars	96.3	93.4	0	0	95.1	0	0	0	100	100	0	96.2	97.3	100	96.5	91.2	0	98.7	100	96.6	0	0	96
Trucks	12	15	0		27	0	0	0		0	0	9	3		12	12	0	4		16	0	0	55
% Trucks	3.2	5.5	0	0	4.1	0	0	0	0	0	0	3.4	2.7	0	3.2	8.2	0	1.1	0	3	0	0	3.5
Bikes	2	3	0		5	0	0	0		0	0	1	0		1	1	0	1		2	0	0	8
% Bikes	0.5	1.1	0	0	0.8	0	0	0	0	0	0	0.4	0	0	0.3	0.7	0	0.3	0	0.4	0	0	0.5

DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

File Name : Old Bridge Street and Railroad Street
Site Code : 00015225
Start Date : 11/10/2015
Page No : 2

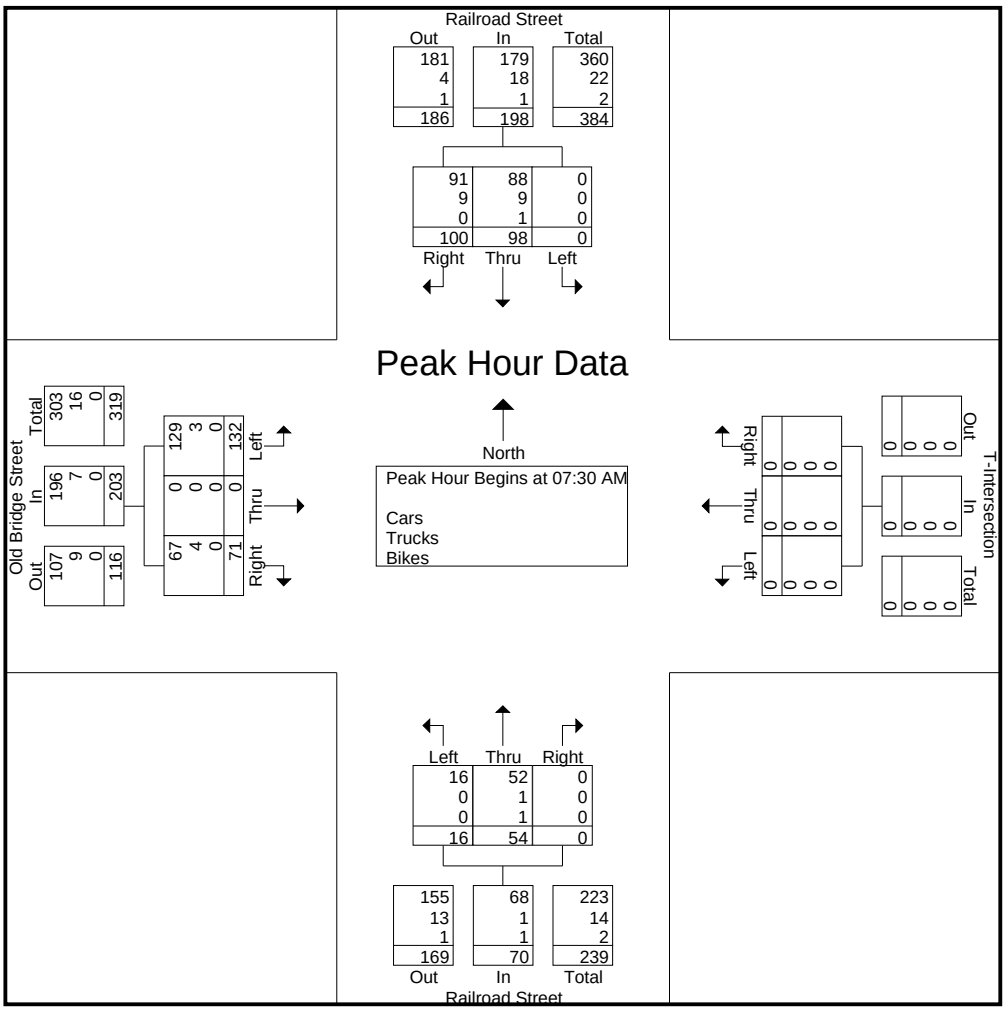


DAVENPORT

305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

File Name : Old Bridge Street and Railroad Street
Site Code : 00015225
Start Date : 11/10/2015
Page No : 3

	Railroad Street Southbound				T-Intersection Westbound				Railroad Street Northbound				Old Bridge Street Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 11:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	13	16	0	29	0	0	0	0	0	12	2	14	**21**	0	27	48	91
07:45 AM	**43**	**32**	0	**75**	0	0	0	0	0	9	5	14	19	0	**51**	**70**	**159**
08:00 AM	25	30	0	55	0	0	0	0	0	16	**7**	**23**	17	0	30	47	125
08:15 AM	19	20	0	39	0	0	0	0	0	**17**	2	19	14	0	24	38	96
Total Volume	100	98	0	198	0	0	0	0	0	54	16	70	71	0	132	203	471
% App. Total	50.5	49.5	0		0	0	0		0	77.1	22.9		35	0	65		
PHF	.581	.766	.000	.660	.000	.000	.000	.000	.000	.794	.571	.761	.845	.000	.647	.725	.741
Cars	91	88	0	179	0	0	0	0	0	52	16	68	67	0	129	196	443
% Cars	91.0	89.8	0	90.4	0	0	0	0	0	96.3	100	97.1	94.4	0	97.7	96.6	94.1
Trucks	9	9	0	18	0	0	0	0	0	1	0	1	4	0	3	7	26
% Trucks	9.0	9.2	0	9.1	0	0	0	0	0	1.9	0	1.4	5.6	0	2.3	3.4	5.5
Bikes	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% Bikes	0	1.0	0	0.5	0	0	0	0	0	1.9	0	1.4	0	0	0	0	0.4

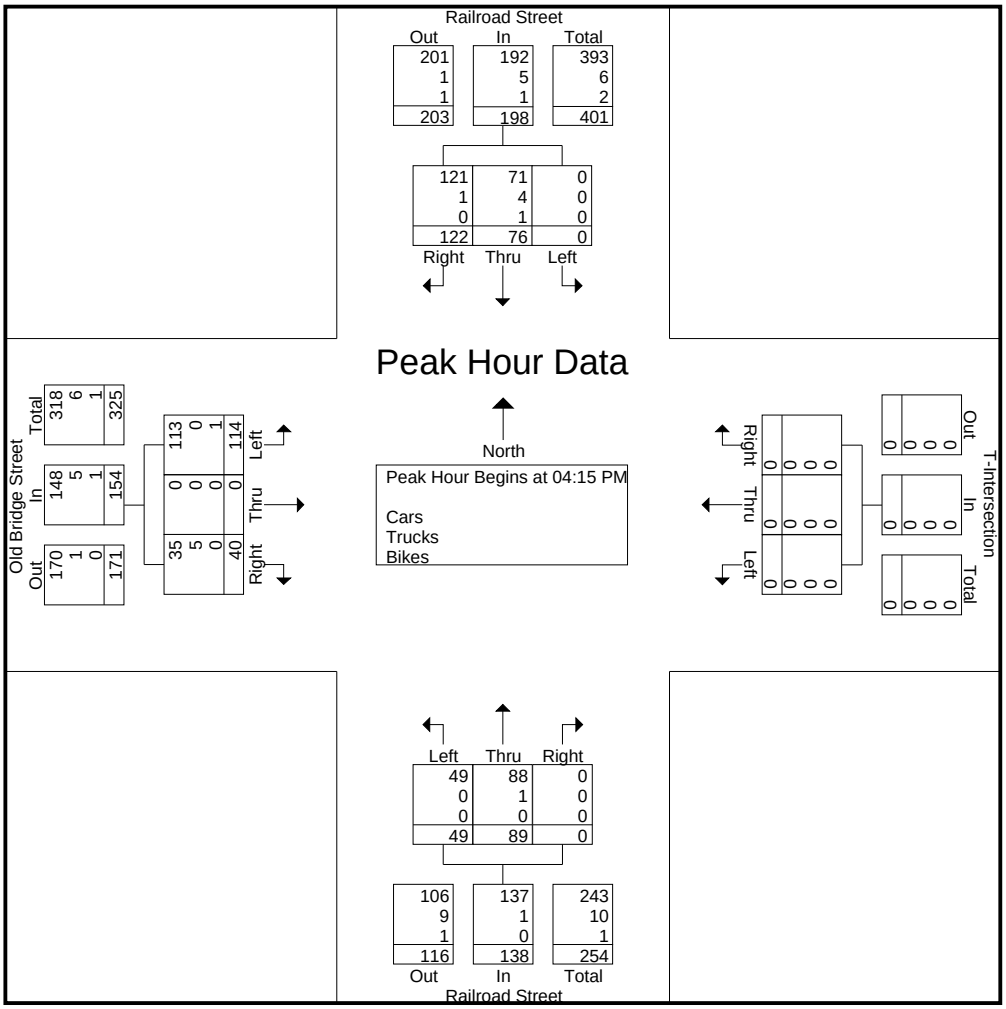


DAVENPORT

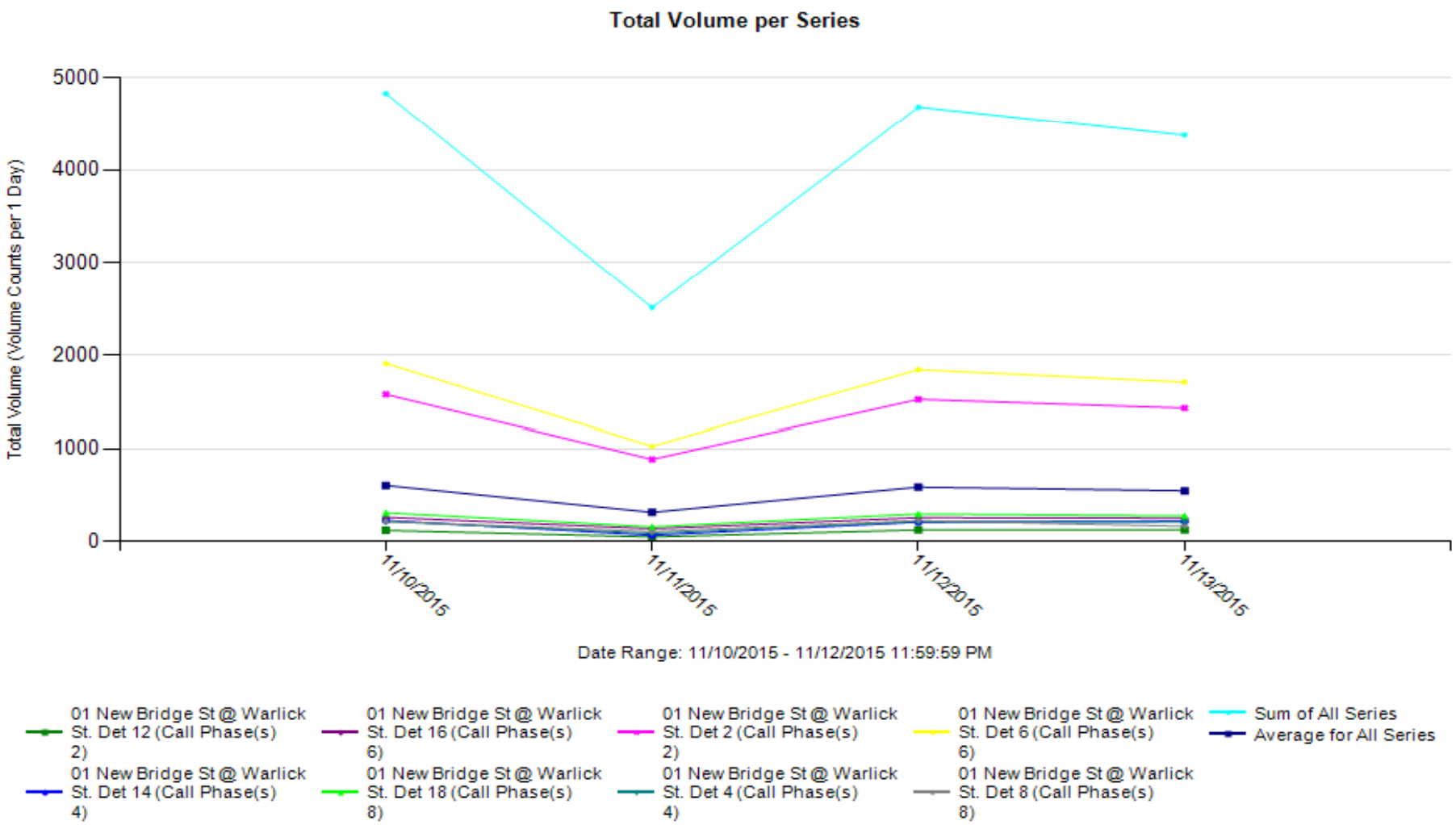
305 West 4th Street, Winston Salem NC, 27101
Ph:(336)744-1636

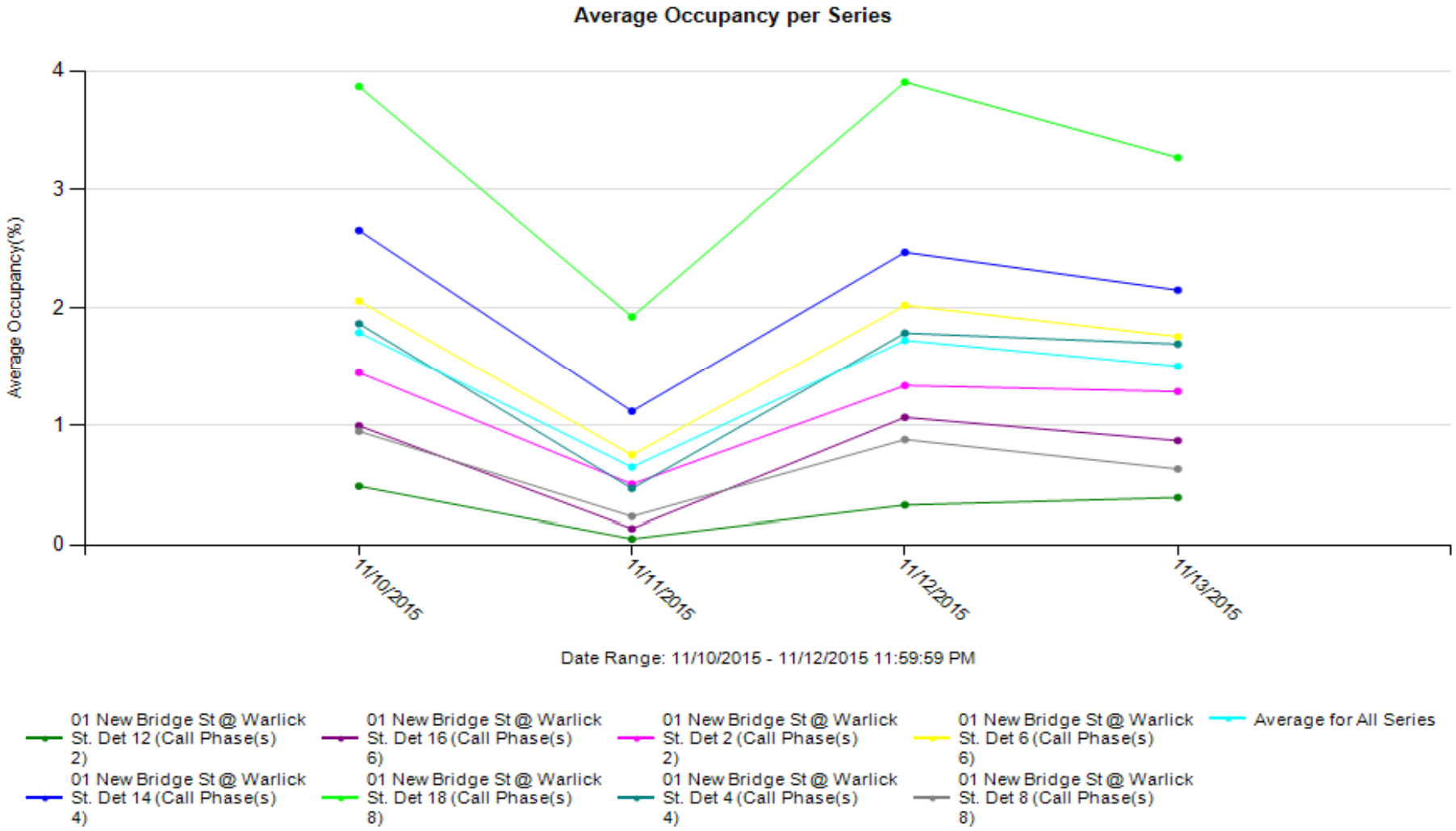
File Name : Old Bridge Street and Railroad Street
Site Code : 00015225
Start Date : 11/10/2015
Page No : 4

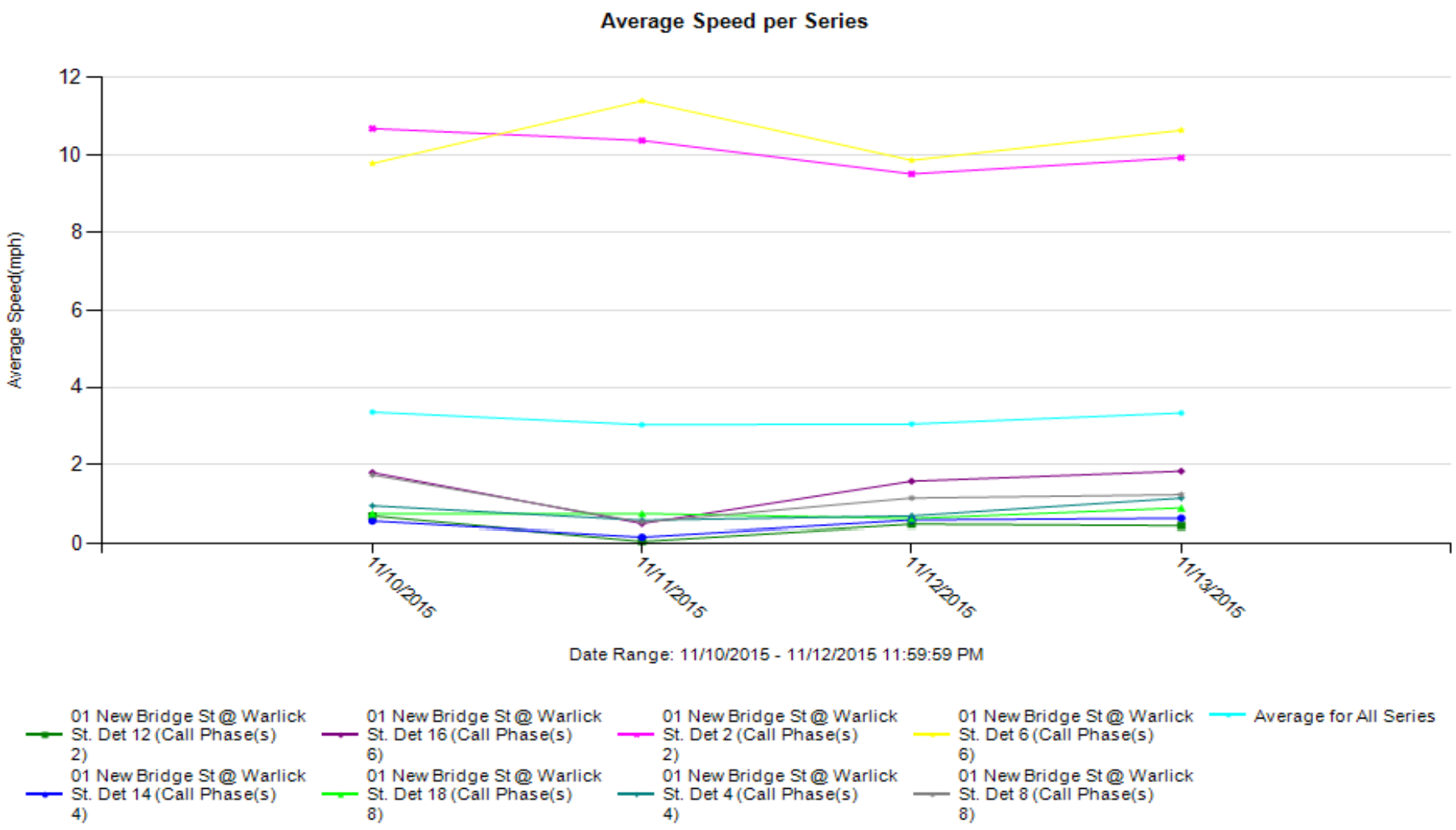
	Railroad Street Southbound				T-Intersection Westbound				Railroad Street Northbound				Old Bridge Street Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**41**	17	0	**58**	0	0	0	0	0	20	9	29	**12**	0	28	40	127
04:30 PM	26	**23**	0	49	0	0	0	0	0	23	8	31	8	0	**34**	**42**	122
04:45 PM	19	20	0	39	0	0	0	0	0	15	13	28	11	0	22	33	100
05:00 PM	36	16	0	52	0	0	0	0	0	**31**	**19**	**50**	9	0	30	39	**141**
Total Volume	122	76	0	198	0	0	0	0	0	89	49	138	40	0	114	154	490
% App. Total	61.6	38.4	0		0	0	0		0	64.5	35.5		26	0	74		
PHF	.744	.826	.000	.853	.000	.000	.000	.000	.000	.718	.645	.690	.833	.000	.838	.917	.869
Cars	121	71	0	192	0	0	0	0	0	88	49	137	35	0	113	148	477
% Cars	99.2	93.4	0	97.0	0	0	0	0	0	98.9	100	99.3	87.5	0	99.1	96.1	97.3
Trucks	1	4	0	5	0	0	0	0	0	1	0	1	5	0	0	5	11
% Trucks	0.8	5.3	0	2.5	0	0	0	0	0	1.1	0	0.7	12.5	0	0	3.2	2.2
Bikes	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
% Bikes	0	1.3	0	0.5	0	0	0	0	0	0	0	0	0	0	0.9	0.6	0.4

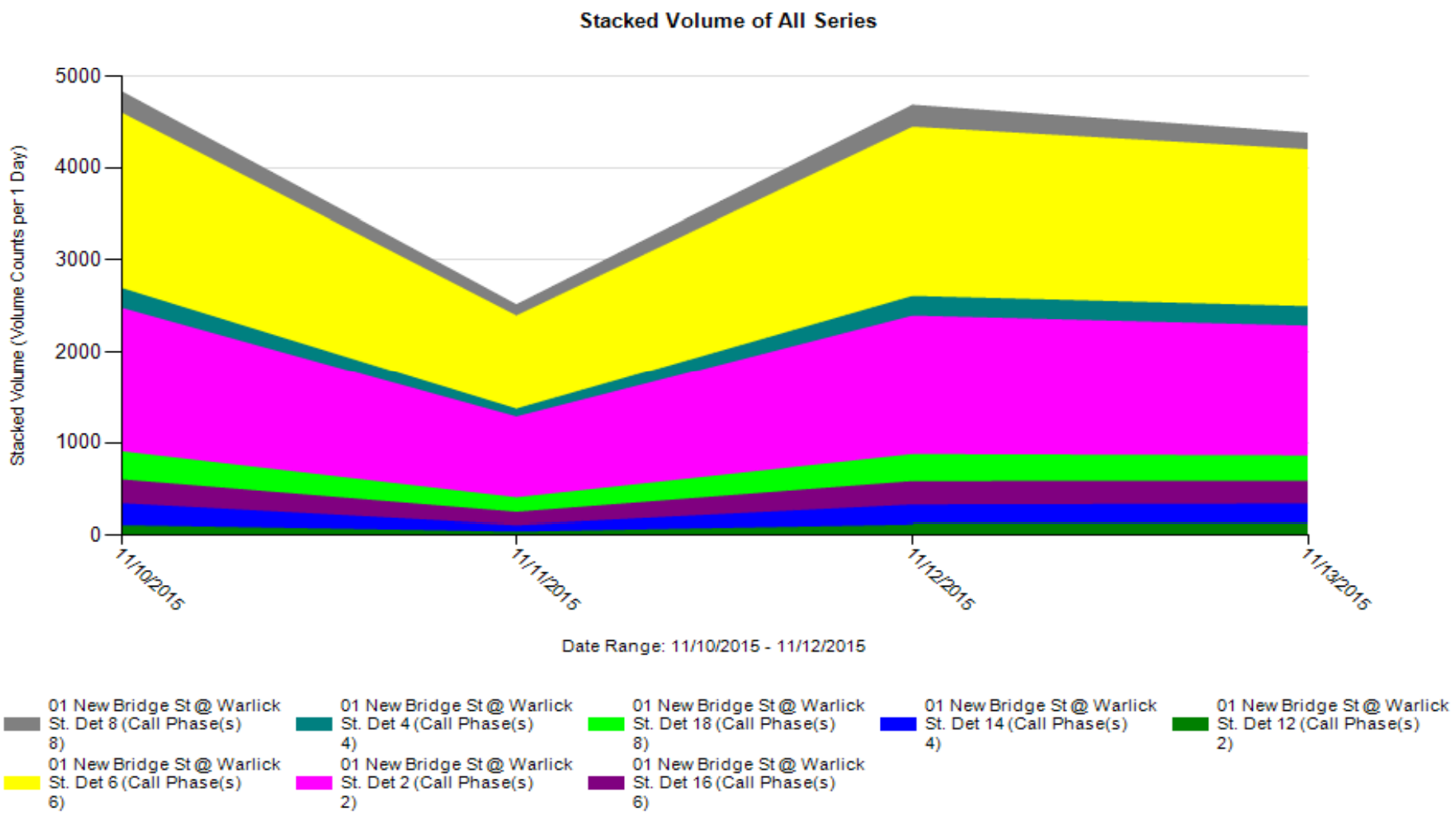


VOS Daily Detector Report




Average Occupancy per Series
Average Occupancy(%)
4
3
2
1
0
11/10/2015
11/11/2015
11/12/2015
11/13/2015
Date Range: 11/10/2015 - 11/12/2015 11:59:59 PM
01 New Bridge St @ Warlick St. Det 12 (Call Phase(s) 2)
01 New Bridge St @ Warlick St. Det 16 (Call Phase(s) 6)
01 New Bridge St @ Warlick St. Det 2 (Call Phase(s) 2)
01 New Bridge St @ Warlick St. Det 6 (Call Phase(s) 6)
Average for All Series
01 New Bridge St @ Warlick St. Det 14 (Call Phase(s) 4)
01 New Bridge St @ Warlick St. Det 18 (Call Phase(s) 8)
01 New Bridge St @ Warlick St. Det 4 (Call Phase(s) 4)
01 New Bridge St @ Warlick St. Det 8 (Call Phase(s) 8)


Average Speed per Series
Average Speed(mph)
12
10
8
6
4
2
0
11/10/2015
11/11/2015
11/12/2015
11/13/2015
Date Range: 11/10/2015 - 11/12/2015 11:59:59 PM
01 New Bridge St @ Warlick St. Det 12 (Call Phase(s) 2)
01 New Bridge St @ Warlick St. Det 16 (Call Phase(s) 6)
01 New Bridge St @ Warlick St. Det 2 (Call Phase(s) 2)
01 New Bridge St @ Warlick St. Det 6 (Call Phase(s) 6)
Average for All Series
01 New Bridge St @ Warlick St. Det 14 (Call Phase(s) 4)
01 New Bridge St @ Warlick St. Det 18 (Call Phase(s) 8)
01 New Bridge St @ Warlick St. Det 4 (Call Phase(s) 4)
01 New Bridge St @ Warlick St. Det 8 (Call Phase(s) 8)



VOS Data (11/10/2015 - 11/12/2015)					
Series	**Detectors**	**Time Range**	**Volume**	**Avg Occupancy**	**Avg Speed(mph)**
1	**01 New Bridge St @ Warlick St. Det 12 (Call Phase(s) 2)**	11/10/2015	119	0	1
		11/11/2015	49	0	0
		11/12/2015	124	0	0
		11/13/2015	124	0	0
		Total Volume, Avg Occ, Avg Speed:	**416**	**0**	**0**

2	**01 New Bridge St @ Warlick St. Det 14 (Call Phase(s) 4)**	11/10/2015	227	3	1
		11/11/2015	67	1	0
		11/12/2015	208	2	1
		11/13/2015	219	2	1
		Total Volume, Avg Occ, Avg Speed:	**721**	**2**	**0**
3	**01 New Bridge St @ Warlick St. Det 16 (Call Phase(s) 6)**	11/10/2015	260	1	2
		11/11/2015	137	0	0
		11/12/2015	256	1	2
		11/13/2015	250	1	2
		Total Volume, Avg Occ, Avg Speed:	**903**	**1**	**1**
4	**01 New Bridge St @ Warlick St. Det 18 (Call Phase(s) 8)**	11/10/2015	308	4	1
		11/11/2015	157	2	1
		11/12/2015	296	4	1
		11/13/2015	275	3	1
		Total Volume, Avg Occ, Avg Speed:	**1036**	**3**	**1**
5	**01 New Bridge St @ Warlick St. Det 2 (Call Phase(s) 2)**	11/10/2015	1574	1	11
		11/11/2015	884	1	10
		11/12/2015	1520	1	10
		11/13/2015	1426	1	10
		Total Volume, Avg Occ, Avg Speed:	**5404**	**1**	**10**
6	**01 New Bridge St @ Warlick St. Det 4 (Call Phase(s) 4)**	11/10/2015	216	2	1
		11/11/2015	87	0	1
		11/12/2015	214	2	1
		11/13/2015	213	2	1
		Total Volume, Avg Occ, Avg Speed:	**730**	**1**	**1**
7	**01 New Bridge St @ Warlick St. Det 6 (Call Phase(s) 6)**	11/10/2015	1907	2	10
		11/11/2015	1024	1	11
		11/12/2015	1840	2	10
		11/13/2015	1705	2	11
		Total Volume, Avg Occ, Avg Speed:	**6476**	**2**	**10**
8	**01 New Bridge St @ Warlick St. Det 8 (Call Phase(s) 8)**	11/10/2015	218	1	2
		11/11/2015	106	0	1
		11/12/2015	225	1	1
		11/13/2015	164	1	1
		Total Volume, Avg Occ, Avg Speed:	**713**	**1**	**1**

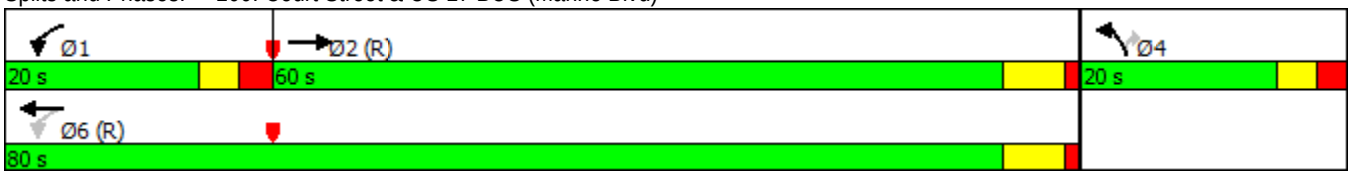
Appendix B: Level of Service Results for Existing Conditions

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	989	24	58	748	25	8
Future Volume (vph)	989	24	58	748	25	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.996					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3525	0	1770	5085	1770	1583
Flt Permitted			0.210		0.950	
Satd. Flow (perm)	3525	0	391	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1099	27	64	831	28	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1126	0	64	831	28	9
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		7.0	12.0	7.0	7.0
Minimum Split (s)	17.7		12.6	17.7	12.4	12.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	54.3		14.4	74.3	14.6	14.6
Yellow Time (s)	4.6		3.0	4.6	3.0	3.0
All-Red Time (s)	1.1		2.6	1.1	2.4	2.4
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7		5.6	5.7	5.4	5.4
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	77.3		86.3	88.5	7.6	7.6
Actuated g/C Ratio	0.77		0.86	0.88	0.08	0.08
v/c Ratio	0.41		0.15	0.18	0.21	0.07
Control Delay	6.1		2.4	1.6	46.8	43.8
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	6.1		2.4	1.6	46.8	43.8

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	A		A	A	D	D
Approach Delay	6.1			1.7	46.1	
Approach LOS	A			A	D	
Queue Length 50th (ft)	149		6	30	17	5
Queue Length 95th (ft)	205		14	45	44	21
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2724		536	4501	258	231
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.41		0.12	0.18	0.11	0.04

Intersection Summary	
Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.41	
Intersection Signal Delay: 4.9	Intersection LOS: A
Intersection Capacity Utilization 53.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	41	0	0	19	45
Future Volume (Veh/h)	0	41	0	0	19	45
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	46	0	0	21	50
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						1049
pX, platoon unblocked						
vC, conflicting volume	92	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	92	0			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			99	
cM capacity (veh/h)	896	1085			1623	

Direction, Lane #	WB 1	SB 1
Volume Total	46	71
Volume Left	0	21
Volume Right	46	0
cSH	1085	1623
Volume to Capacity	0.04	0.01
Queue Length 95th (ft)	3	1
Control Delay (s)	8.5	2.2
Lane LOS	A	A
Approach Delay (s)	8.5	2.2
Approach LOS	A	

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	7.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	172	9	1	124	0	13	0	0	3	16	16
Future Volume (Veh/h)	0	172	9	1	124	0	13	0	0	3	16	16
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	191	10	1	138	0	14	0	0	3	18	18
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	138			201			358	331	191	331	341	138
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	138			201			358	331	191	331	341	138
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			98	100	100	100	97	98
cM capacity (veh/h)	1446			1371			571	588	851	622	580	910

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	191	10	139	14	39
Volume Left	0	0	1	14	3
Volume Right	0	10	0	0	18
cSH	1700	1700	1371	571	701
Volume to Capacity	0.11	0.01	0.00	0.02	0.06
Queue Length 95th (ft)	0	0	0	2	4
Control Delay (s)	0.0	0.0	0.1	11.5	10.4
Lane LOS			A	B	B
Approach Delay (s)	0.0		0.1	11.5	10.4
Approach LOS				B	B

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	24.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	12	0	111	31	22	17	60	110	33	90	20
Future Volume (vph)	2	12	0	111	31	22	17	60	110	33	90	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	0		0	150		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			100			25			100		
Lane Util. 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
Frt					0.938			0.903			0.973	
Flt Protected		0.993		0.950			0.950			0.950		
Satd. Flow (prot)	0	1665	0	1593	1573	0	1593	1514	0	1593	1631	0
Flt Permitted		0.983		0.689			0.679			0.569		
Satd. Flow (perm)	0	1648	0	1155	1573	0	1138	1514	0	954	1631	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		575			1475			364			1124	
Travel Time (s)		19.6			50.3			7.1			21.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			40			6						
Adj. Flow (vph)	2	13	0	123	34	24	19	67	122	37	100	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	123	58	0	19	189	0	37	122	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	16.1	16.1		13.1	16.1		12.3	12.3		12.4	12.4	
Total Split (s)	30.0	30.0		20.0	50.0		20.0	20.0		20.0	20.0	
Total Split (%)	42.9%	42.9%		28.6%	71.4%		28.6%	28.6%		28.6%	28.6%	
Maximum Green (s)	23.9	23.9		13.9	43.9		14.7	14.7		14.6	14.6	
Yellow Time (s)	3.8	3.8		3.0	3.8		3.7	3.7		3.9	3.9	
All-Red Time (s)	2.3	2.3		3.1	2.3		1.6	1.6		1.5	1.5	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.1		6.1	6.1		5.3	5.3		5.4	5.4	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		None	Max		None	None		None	None	
Act Effct Green (s)		32.7		44.0	44.0		12.4	12.4		12.3	12.3	
Actuated g/C Ratio		0.48		0.65	0.65		0.18	0.18		0.18	0.18	
v/c Ratio		0.02		0.15	0.06		0.09	0.68		0.22	0.41	
Control Delay		12.4		5.6	5.1		23.6	39.2		26.6	28.9	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		12.4		5.6	5.1		23.6	39.2		26.6	28.9	
LOS		B		A	A		C	D		C	C	
Approach Delay		12.4			5.4			37.8			28.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			A			D			C	
Queue Length 50th (ft)		4		18	8		7	74		13	45	
Queue Length 95th (ft)		14		37	20		23	137		37	90	
Internal Link Dist (ft)		495			1395			284			1044	
Turn Bay Length (ft)				115						150		
Base Capacity (vph)		795		839	1020		247	328		205	352	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.02		0.15	0.06		0.08	0.58		0.18	0.35	

Intersection Summary

Area Type: CBD
Cycle Length: 70
Actuated Cycle Length: 67.8
Natural Cycle: 45
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 24.0 Intersection LOS: C
Intersection Capacity Utilization 44.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 400: Railroad Street & New Bridge

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	132	71	16	54	98	100
Future Volume (Veh/h)	132	71	16	54	98	100
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	147	79	18	60	109	111
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					364	
pX, platoon unblocked	0.98	0.98	0.98			
vC, conflicting volume	260	164	220			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	236	138	195			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	80	91	99			
cM capacity (veh/h)	728	892	1352			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	226	18	60	220
Volume Left	147	18	0	0
Volume Right	79	0	0	111
cSH	1119	1352	1700	1700
Volume to Capacity	0.20	0.01	0.04	0.13
Queue Length 95th (ft)	19	1	0	0
Control Delay (s)	10.6	7.7	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	10.6	1.8		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	29.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	10	1	7	10	27	0	29	11	74	50	22
Future Volume (Veh/h)	12	10	1	7	10	27	0	29	11	74	50	22
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	13	11	1	8	11	30	0	32	12	82	56	24
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											574	
pX, platoon unblocked												
vC, conflicting volume	300	276	68	276	282	38	80			44		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	300	276	68	276	282	38	80			44		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	98	100	99	98	97	100			95		
cM capacity (veh/h)	600	598	995	639	594	1034	1518			1564		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	25	49	0	44	162
Volume Left	13	8	0	0	82
Volume Right	1	30	0	12	24
cSH	609	816	1700	1700	1564
Volume to Capacity	0.04	0.06	0.00	0.03	0.05
Queue Length 95th (ft)	3	5	0	0	4
Control Delay (s)	11.2	9.7	0.0	0.0	4.0
Lane LOS	B	A			A
Approach Delay (s)	11.2	9.7	0.0		4.0
Approach LOS	B	A			

Intersection Summary				
Average Delay	5.0			
Intersection Capacity Utilization	25.8%	ICU Level of Service	A	
Analysis Period (min)	15			

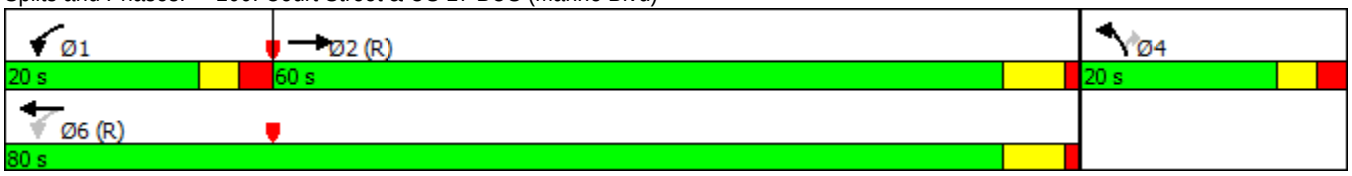
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1332	8	27	1139	57	28
Future Volume (vph)	1332	8	27	1139	57	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.999					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3536	0	1770	5085	1770	1583
Flt Permitted			0.127		0.950	
Satd. Flow (perm)	3536	0	237	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1480	9	30	1266	63	31
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1489	0	30	1266	63	31
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		4.0	12.0	7.0	7.0
Minimum Split (s)	17.7		9.6	17.7	12.4	12.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	54.3		14.4	74.3	14.6	14.6
Yellow Time (s)	4.6		3.0	4.6	3.0	3.0
All-Red Time (s)	1.1		2.6	1.1	2.4	2.4
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7		5.6	5.7	5.4	5.4
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	76.3		82.3	83.3	9.2	9.2
Actuated g/C Ratio	0.76		0.82	0.83	0.09	0.09
v/c Ratio	0.55		0.11	0.30	0.39	0.21
Control Delay	8.2		3.2	2.8	49.1	44.6
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	8.2		3.2	2.8	49.1	44.6

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	A		A	A	D	D
Approach Delay	8.2			2.8	47.6	
Approach LOS	A			A	D	
Queue Length 50th (ft)	238		3	60	39	19
Queue Length 95th (ft)	345		10	90	78	46
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2698		415	4237	258	231
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.55		0.07	0.30	0.24	0.13

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.55
Intersection Signal Delay: 7.1 Intersection LOS: A
Intersection Capacity Utilization 52.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	40	0	0	21	29
Future Volume (Veh/h)	0	40	0	0	21	29
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	44	0	0	23	32
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						1049
pX, platoon unblocked						
vC, conflicting volume	78	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	78	0			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			99	
cM capacity (veh/h)	912	1085			1623	

Direction, Lane #	WB 1	SB 1
Volume Total	44	55
Volume Left	0	23
Volume Right	44	0
cSH	1085	1623
Volume to Capacity	0.04	0.01
Queue Length 95th (ft)	3	1
Control Delay (s)	8.5	3.1
Lane LOS	A	A
Approach Delay (s)	8.5	3.1
Approach LOS	A	

Intersection Summary			
Average Delay	5.5		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	133	18	3	146	0	11	0	12	6	15	16
Future Volume (Veh/h)	0	133	18	3	146	0	11	0	12	6	15	16
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	148	20	3	162	0	12	0	13	7	17	18
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	162			168			342	316	148	329	336	162
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	162			168			342	316	148	329	336	162
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			98	100	99	99	97	98
cM capacity (veh/h)	1417			1410			585	599	899	614	583	883

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	148	20	165	25	42
Volume Left	0	0	3	12	7
Volume Right	0	20	0	13	18
cSH	1700	1700	1410	715	689
Volume to Capacity	0.09	0.01	0.00	0.03	0.06
Queue Length 95th (ft)	0	0	0	3	5
Control Delay (s)	0.0	0.0	0.2	10.2	10.6
Lane LOS			A	B	B
Approach Delay (s)	0.0		0.2	10.2	10.6
Approach LOS				B	B

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	25.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	25	4	133	32	35	9	91	107	16	54	7
Future Volume (vph)	7	25	4	133	32	35	9	91	107	16	54	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	0		0	150		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			100			25			100		
Lane Util. 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
Frt		0.986			0.922			0.919			0.982	
Flt Protected		0.990		0.950			0.950			0.950		
Satd. Flow (prot)	0	1636	0	1593	1546	0	1593	1541	0	1593	1646	0
Flt Permitted		0.962		0.679			0.713			0.498		
Satd. Flow (perm)	0	1590	0	1138	1546	0	1195	1541	0	835	1646	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		575			1475			364			1124	
Travel Time (s)		19.6			50.3			7.1			21.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			40			6						
Adj. Flow (vph)	8	28	4	148	36	39	10	101	119	18	60	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	40	0	148	75	0	10	220	0	18	68	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	16.1	16.1		13.1	16.1		12.3	12.3		12.4	12.4	
Total Split (s)	30.0	30.0		20.0	50.0		20.0	20.0		20.0	20.0	
Total Split (%)	42.9%	42.9%		28.6%	71.4%		28.6%	28.6%		28.6%	28.6%	
Maximum Green (s)	23.9	23.9		13.9	43.9		14.7	14.7		14.6	14.6	
Yellow Time (s)	3.8	3.8		3.0	3.8		3.7	3.7		3.9	3.9	
All-Red Time (s)	2.3	2.3		3.1	2.3		1.6	1.6		1.5	1.5	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.1		6.1	6.1		5.3	5.3		5.4	5.4	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		None	Max		None	None		None	None	
Act Effct Green (s)		32.3		43.9	43.9		13.2	13.2		13.1	13.1	
Actuated g/C Ratio		0.47		0.64	0.64		0.19	0.19		0.19	0.19	
v/c Ratio		0.05		0.19	0.08		0.04	0.75		0.11	0.22	
Control Delay		13.1		5.9	5.3		22.8	43.0		24.6	25.1	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		13.1		5.9	5.3		22.8	43.0		24.6	25.1	
LOS		B		A	A		C	D		C	C	
Approach Delay		13.1			5.7			42.1			25.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			A			D			C	
Queue Length 50th (ft)		10		23	11		4	88		6	24	
Queue Length 95th (ft)		28		44	25		15	#178		23	56	
Internal Link Dist (ft)		495			1395			284			1044	
Turn Bay Length (ft)				115						150		
Base Capacity (vph)		749		822	991		256	330		178	351	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.05		0.18	0.08		0.04	0.67		0.10	0.19	

Intersection Summary

Area Type: CBD
Cycle Length: 70
Actuated Cycle Length: 68.5
Natural Cycle: 45
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 23.5 Intersection LOS: C
Intersection Capacity Utilization 39.2% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 400: Railroad Street & New Bridge

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	114	40	49	89	76	122
Future Volume (Veh/h)	114	40	49	89	76	122
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	127	44	54	99	84	136
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					364	
pX, platoon unblocked	1.00	1.00	1.00			
vC, conflicting volume	359	152	220			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	358	150	218			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	79	95	96			
cM capacity (veh/h)	614	895	1349			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	171	54	99	220
Volume Left	127	54	0	0
Volume Right	44	0	0	136
cSH	827	1349	1700	1700
Volume to Capacity	0.21	0.04	0.06	0.13
Queue Length 95th (ft)	19	3	0	0
Control Delay (s)	11.6	7.8	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	11.6	2.7		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	33.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	16	0	7	8	75	0	61	4	43	62	9
Future Volume (Veh/h)	30	16	0	7	8	75	0	61	4	43	62	9
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	33	18	0	8	9	83	0	68	4	48	69	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											574	
pX, platoon unblocked												
vC, conflicting volume	326	242	74	249	245	70	79			72		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	326	242	74	249	245	70	79			72		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	97	100	99	99	92	100			97		
cM capacity (veh/h)	555	639	988	673	636	993	1519			1528		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	51	100	0	72	127
Volume Left	33	8	0	0	48
Volume Right	0	83	0	4	10
cSH	582	912	1700	1700	1528
Volume to Capacity	0.09	0.11	0.00	0.04	0.03
Queue Length 95th (ft)	7	9	0	0	2
Control Delay (s)	11.8	9.4	0.0	0.0	3.0
Lane LOS	B	A			A
Approach Delay (s)	11.8	9.4	0.0		3.0
Approach LOS	B	A			

Intersection Summary				
Average Delay	5.5			
Intersection Capacity Utilization	29.7%	ICU Level of Service	A	
Analysis Period (min)	15			

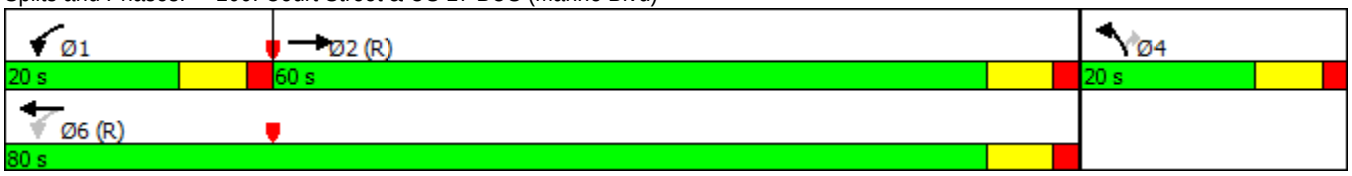
Appendix C: Level of Service Results for 2030 Future Volumes

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1148	28	67	868	29	9
Future Volume (vph)	1148	28	67	868	29	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.996					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3525	0	1770	5085	1770	1583
Flt Permitted			0.159		0.950	
Satd. Flow (perm)	3525	0	296	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1276	31	74	964	32	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1307	0	74	964	32	10
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		7.0	12.0	7.0	7.0
Minimum Split (s)	19.0		14.6	19.0	14.4	14.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	53.0		13.0	73.0	13.0	13.0
Yellow Time (s)	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	75.5		85.8	87.8	9.8	9.8
Actuated g/C Ratio	0.76		0.86	0.88	0.10	0.10
v/c Ratio	0.49		0.19	0.22	0.18	0.06
Control Delay	7.9		3.0	1.9	43.6	41.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	7.9		3.0	1.9	43.6	41.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	A		A	A	D	D
Approach Delay	7.9			2.0	43.0	
Approach LOS	A			A	D	
Queue Length 50th (ft)	206		7	39	19	6
Queue Length 95th (ft)	284		17	58	47	22
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2662		475	4464	265	237
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.49		0.16	0.22	0.12	0.04

Intersection Summary	
Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 5.9	Intersection LOS: A
Intersection Capacity Utilization 56.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	48	0	0	22	52
Future Volume (Veh/h)	0	48	0	0	22	52
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	53	0	0	24	58
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						1049
pX, platoon unblocked						
vC, conflicting volume	106	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	106	0			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			99	
cM capacity (veh/h)	878	1085			1623	

Direction, Lane #	WB 1	SB 1
Volume Total	53	82
Volume Left	0	24
Volume Right	53	0
cSH	1085	1623
Volume to Capacity	0.05	0.01
Queue Length 95th (ft)	4	1
Control Delay (s)	8.5	2.2
Lane LOS	A	A
Approach Delay (s)	8.5	2.2
Approach LOS	A	

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	7.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	200	10	1	144	0	15	0	0	3	19	19
Future Volume (Veh/h)	0	200	10	1	144	0	15	0	0	3	19	19
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	222	11	1	160	0	17	0	0	3	21	21
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	160			233			416	384	222	384	395	160
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	160			233			416	384	222	384	395	160
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			97	100	100	99	96	98
cM capacity (veh/h)	1419			1335			518	549	818	574	541	885

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	222	11	161	17	45
Volume Left	0	0	1	17	3
Volume Right	0	11	0	0	21
cSH	1700	1700	1335	518	664
Volume to Capacity	0.13	0.01	0.00	0.03	0.07
Queue Length 95th (ft)	0	0	0	3	5
Control Delay (s)	0.0	0.0	0.1	12.2	10.8
Lane LOS			A	B	B
Approach Delay (s)	0.0		0.1	12.2	10.8
Approach LOS				B	B

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	25.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	14	0	129	36	26	20	70	128	38	104	23
Future Volume (vph)	2	14	0	129	36	26	20	70	128	38	104	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	0		0	150		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			100			25			100		
Lane Util. 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
Frt					0.937			0.903			0.973	
Flt Protected		0.994		0.950			0.950			0.950		
Satd. Flow (prot)	0	1666	0	1593	1571	0	1593	1514	0	1593	1631	0
Flt Permitted		0.984		0.705			0.666			0.495		
Satd. Flow (perm)	0	1650	0	1182	1571	0	1117	1514	0	830	1631	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		575			1475			364			1124	
Travel Time (s)		19.6			50.3			7.1			21.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			40			6						
Adj. Flow (vph)	2	16	0	143	40	29	22	78	142	42	116	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	18	0	143	69	0	22	220	0	42	142	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	17.3	17.3		15.1	17.3		14.0	14.0		14.0	14.0	
Total Split (s)	30.0	30.0		20.0	50.0		20.0	20.0		20.0	20.0	
Total Split (%)	42.9%	42.9%		28.6%	71.4%		28.6%	28.6%		28.6%	28.6%	
Maximum Green (s)	23.0	23.0		13.0	43.0		13.0	13.0		13.0	13.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		None	Max		None	None		None	None	
Act Effct Green (s)		32.8		45.0	45.0		14.2	14.2		14.2	14.2	
Actuated g/C Ratio		0.47		0.65	0.65		0.20	0.20		0.20	0.20	
v/c Ratio		0.02		0.17	0.07		0.10	0.71		0.25	0.42	
Control Delay		12.6		5.5	4.9		23.4	39.8		27.2	28.3	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		12.6		5.5	4.9		23.4	39.8		27.2	28.3	
LOS		B		A	A		C	D		C	C	
Approach Delay		12.6			5.3			38.3			28.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			A			D			C	
Queue Length 50th (ft)		4		21	10		8	88		15	53	
Queue Length 95th (ft)		16		40	22		25	#178		41	103	
Internal Link Dist (ft)		495			1395			284			1044	
Turn Bay Length (ft)				115						150		
Base Capacity (vph)		780		857	1020		242	328		179	353	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.02		0.17	0.07		0.09	0.67		0.23	0.40	

Intersection Summary

Area Type: CBD
Cycle Length: 70
Actuated Cycle Length: 69.3
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 24.0 Intersection LOS: C
Intersection Capacity Utilization 45.8% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 400: Railroad Street & New Bridge

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	153	82	19	63	114	116
Future Volume (Veh/h)	153	82	19	63	114	116
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	170	91	21	70	127	129
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					364	
pX, platoon unblocked	0.97	0.97	0.97			
vC, conflicting volume	304	192	256			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	264	148	215			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	75	90	98			
cM capacity (veh/h)	691	870	1312			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	261	21	70	256
Volume Left	170	21	0	0
Volume Right	91	0	0	129
cSH	1060	1312	1700	1700
Volume to Capacity	0.25	0.02	0.04	0.15
Queue Length 95th (ft)	24	1	0	0
Control Delay (s)	11.1	7.8	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	11.1	1.8		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	5.0		
Intersection Capacity Utilization	30.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	12	1	8	12	31	0	34	13	86	58	26
Future Volume (Veh/h)	14	12	1	8	12	31	0	34	13	86	58	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	13	1	9	13	34	0	38	14	96	64	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											574	
pX, platoon unblocked												
vC, conflicting volume	349	322	78	323	330	45	93			52		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	349	322	78	323	330	45	93			52		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	98	100	98	98	97	100			94		
cM capacity (veh/h)	548	558	982	589	553	1025	1501			1554		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	30	56	0	52	189
Volume Left	16	9	0	0	96
Volume Right	1	34	0	14	29
cSH	561	778	1700	1700	1554
Volume to Capacity	0.05	0.07	0.00	0.03	0.06
Queue Length 95th (ft)	4	6	0	0	5
Control Delay (s)	11.8	10.0	0.0	0.0	4.0
Lane LOS	B	A			A
Approach Delay (s)	11.8	10.0	0.0		4.0
Approach LOS	B	A			

Intersection Summary				
Average Delay	5.1			
Intersection Capacity Utilization	28.0%	ICU Level of Service	A	
Analysis Period (min)	15			

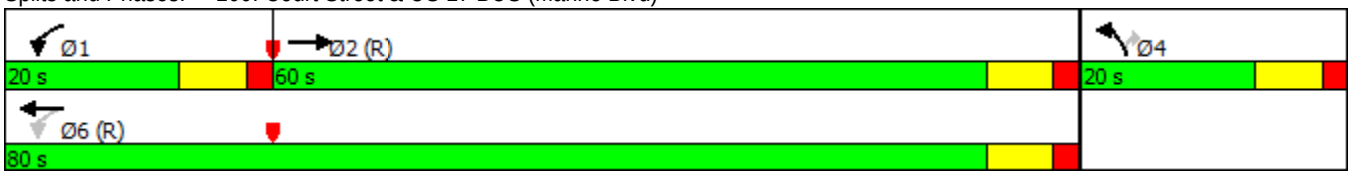
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1546	9	31	1322	66	33
Future Volume (vph)	1546	9	31	1322	66	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.999					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3536	0	1770	5085	1770	1583
Flt Permitted			0.079		0.950	
Satd. Flow (perm)	3536	0	147	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1718	10	34	1469	73	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1728	0	34	1469	73	37
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		4.0	12.0	7.0	7.0
Minimum Split (s)	19.0		11.6	19.0	14.4	14.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	53.0		13.0	73.0	13.0	13.0
Yellow Time (s)	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	74.2		81.1	82.1	11.7	11.7
Actuated g/C Ratio	0.74		0.81	0.82	0.12	0.12
v/c Ratio	0.66		0.14	0.35	0.35	0.20
Control Delay	11.4		4.0	3.4	44.8	41.5
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	11.4		4.0	3.4	44.8	41.5

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	B		A	A	D	D
Approach Delay	11.4			3.4	43.7	
Approach LOS	B			A	D	
Queue Length 50th (ft)	351		4	81	44	22
Queue Length 95th (ft)	503		12	119	84	51
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2623		362	4175	265	237
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.66		0.09	0.35	0.28	0.16

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 8.9 Intersection LOS: A
Intersection Capacity Utilization 57.2% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	46	0	0	24	34
Future Volume (Veh/h)	0	46	0	0	24	34
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	51	0	0	27	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						1049
pX, platoon unblocked						
vC, conflicting volume	92	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	92	0			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			98	
cM capacity (veh/h)	893	1085			1623	

Direction, Lane #	WB 1	SB 1
Volume Total	51	65
Volume Left	0	27
Volume Right	51	0
cSH	1085	1623
Volume to Capacity	0.05	0.02
Queue Length 95th (ft)	4	1
Control Delay (s)	8.5	3.1
Lane LOS	A	A
Approach Delay (s)	8.5	3.1
Approach LOS	A	

Intersection Summary			
Average Delay	5.5		
Intersection Capacity Utilization	6.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	154	21	3	170	0	13	0	14	7	17	19
Future Volume (Veh/h)	0	154	21	3	170	0	13	0	14	7	17	19
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	171	23	3	189	0	14	0	16	8	19	21
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	189			194			396	366	171	382	389	189
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	189			194			396	366	171	382	389	189
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			97	100	98	99	97	98
cM capacity (veh/h)	1385			1379			534	561	873	565	545	853

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	171	23	192	30	48
Volume Left	0	0	3	14	8
Volume Right	0	23	0	16	21
cSH	1700	1700	1379	673	652
Volume to Capacity	0.10	0.01	0.00	0.04	0.07
Queue Length 95th (ft)	0	0	0	3	6
Control Delay (s)	0.0	0.0	0.1	10.6	11.0
Lane LOS			A	B	B
Approach Delay (s)	0.0		0.1	10.6	11.0
Approach LOS				B	B

Intersection Summary			
Average Delay	1.9		
Intersection Capacity Utilization	26.8%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	29	5	154	37	41	10	106	124	19	63	8
Future Volume (vph)	8	29	5	154	37	41	10	106	124	19	63	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	0		0	150		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			100			25			100		
Lane Util. 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
Frt		0.983			0.921			0.919			0.983	
Flt Protected		0.991		0.950			0.950			0.950		
Satd. Flow (prot)	0	1633	0	1593	1544	0	1593	1541	0	1593	1648	0
Flt Permitted		0.958		0.688			0.706			0.431		
Satd. Flow (perm)	0	1579	0	1153	1544	0	1184	1541	0	723	1648	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		575			1475			364			1124	
Travel Time (s)		19.6			50.3			7.1			21.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			40			6						
Adj. Flow (vph)	9	32	6	171	41	46	11	118	138	21	70	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	47	0	171	87	0	11	256	0	21	79	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	17.3	17.3		15.1	17.3		14.0	14.0		14.0	14.0	
Total Split (s)	30.0	30.0		20.0	50.0		20.0	20.0		20.0	20.0	
Total Split (%)	42.9%	42.9%		28.6%	71.4%		28.6%	28.6%		28.6%	28.6%	
Maximum Green (s)	23.0	23.0		13.0	43.0		13.0	13.0		13.0	13.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		None	Max		None	None		None	None	
Act Effct Green (s)		29.3		45.0	45.0		14.6	14.6		14.6	14.6	
Actuated g/C Ratio		0.42		0.65	0.65		0.21	0.21		0.21	0.21	
v/c Ratio		0.07		0.21	0.09		0.04	0.80		0.14	0.23	
Control Delay		13.4		5.7	5.0		22.5	46.2		25.0	24.8	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		13.4		5.7	5.0		22.5	46.2		25.0	24.8	
LOS		B		A	A		C	D		C	C	
Approach Delay		13.4			5.5			45.3			24.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			A			D			C	
Queue Length 50th (ft)		12		25	12		4	104		7	28	
Queue Length 95th (ft)		32		48	26		16	#216		26	63	
Internal Link Dist (ft)		495			1395			284			1044	
Turn Bay Length (ft)				115						150		
Base Capacity (vph)		665		840	998		255	332		155	355	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.07		0.20	0.09		0.04	0.77		0.14	0.22	

Intersection Summary

Area Type: CBD
Cycle Length: 70
Actuated Cycle Length: 69.6
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 24.7 Intersection LOS: C
Intersection Capacity Utilization 42.0% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 400: Railroad Street & New Bridge

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	132	46	57	103	88	142
Future Volume (Veh/h)	132	46	57	103	88	142
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	147	51	63	114	98	158
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					364	
pX, platoon unblocked	0.99	0.99	0.99			
vC, conflicting volume	417	177	256			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	405	162	242			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	74	94	95			
cM capacity (veh/h)	567	873	1310			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	198	63	114	256
Volume Left	147	63	0	0
Volume Right	51	0	0	158
cSH	763	1310	1700	1700
Volume to Capacity	0.26	0.05	0.07	0.15
Queue Length 95th (ft)	26	4	0	0
Control Delay (s)	12.5	7.9	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	12.5	2.8		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	19	0	8	9	87	0	71	5	50	72	10
Future Volume (Veh/h)	35	19	0	8	9	87	0	71	5	50	72	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	39	21	0	9	10	97	0	79	6	56	80	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											574	
pX, platoon unblocked												
vC, conflicting volume	378	282	86	290	285	82	91			85		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	378	282	86	290	285	82	91			85		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	92	97	100	99	98	90	100			96		
cM capacity (veh/h)	500	603	973	626	601	978	1504			1512		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	60	116	0	85	147
Volume Left	39	9	0	0	56
Volume Right	0	97	0	6	11
cSH	532	891	1700	1700	1512
Volume to Capacity	0.11	0.13	0.00	0.05	0.04
Queue Length 95th (ft)	9	11	0	0	3
Control Delay (s)	12.6	9.6	0.0	0.0	3.0
Lane LOS	B	A			A
Approach Delay (s)	12.6	9.6	0.0		3.0
Approach LOS	B	A			

Intersection Summary				
Average Delay	5.7			
Intersection Capacity Utilization	31.2%	ICU Level of Service	A	
Analysis Period (min)	15			

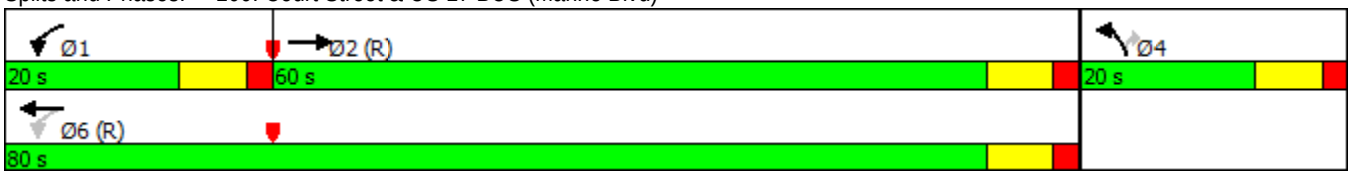
Appendix D: Level of Service Results for 2030 Future Volumes – Alternate 1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1148	28	67	868	29	9
Future Volume (vph)	1148	28	67	868	29	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.996					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3525	0	1770	5085	1770	1583
Flt Permitted			0.159		0.950	
Satd. Flow (perm)	3525	0	296	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1276	31	74	964	32	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1307	0	74	964	32	10
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		7.0	12.0	7.0	7.0
Minimum Split (s)	19.0		14.6	19.0	14.4	14.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	53.0		13.0	73.0	13.0	13.0
Yellow Time (s)	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	75.5		85.8	87.8	9.8	9.8
Actuated g/C Ratio	0.76		0.86	0.88	0.10	0.10
v/c Ratio	0.49		0.19	0.22	0.18	0.06
Control Delay	7.9		3.0	1.9	43.6	41.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	7.9		3.0	1.9	43.6	41.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	A		A	A	D	D
Approach Delay	7.9			2.0	43.0	
Approach LOS	A			A	D	
Queue Length 50th (ft)	206		7	39	19	6
Queue Length 95th (ft)	284		17	58	47	22
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2662		475	4464	265	237
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.49		0.16	0.22	0.12	0.04

Intersection Summary	
Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 5.9	Intersection LOS: A
Intersection Capacity Utilization 56.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	117	48	0	115	22	52
Future Volume (Veh/h)	117	48	0	115	22	52
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	130	53	0	128	24	58
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						1049
pX, platoon unblocked						
vC, conflicting volume	170	64			128	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	170	64			128	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	84	95			98	
cM capacity (veh/h)	807	1000			1458	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	183	128	24	58
Volume Left	130	0	24	0
Volume Right	53	128	0	0
cSH	855	1700	1458	1700
Volume to Capacity	0.21	0.08	0.02	0.03
Queue Length 95th (ft)	20	0	1	0
Control Delay (s)	10.4	0.0	7.5	0.0
Lane LOS	B		A	
Approach Delay (s)	10.4	0.0	2.2	
Approach LOS	B			

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	25.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	115	85	10	1	28	0	15	0	0	3	19	136
Future Volume (vph)	115	85	10	1	28	0	15	0	0	3	19	136
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	128	94	11	1	31	0	17	0	0	3	21	151

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total (vph)	222	11	32	17	175
Volume Left (vph)	128	0	1	17	3
Volume Right (vph)	0	11	0	0	151
Hadj (s)	0.32	-0.67	0.04	0.23	-0.48
Departure Headway (s)	5.3	4.3	4.8	5.0	4.1
Degree Utilization, x	0.33	0.01	0.04	0.02	0.20
Capacity (veh/h)	654	804	707	666	815
Control Delay (s)	9.6	6.2	8.0	8.2	8.2
Approach Delay (s)	9.5		8.0	8.2	8.2
Approach LOS	A		A	A	A

Intersection Summary			
Delay	8.8		
Level of Service	A		
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		

DELAY (CONTROL)

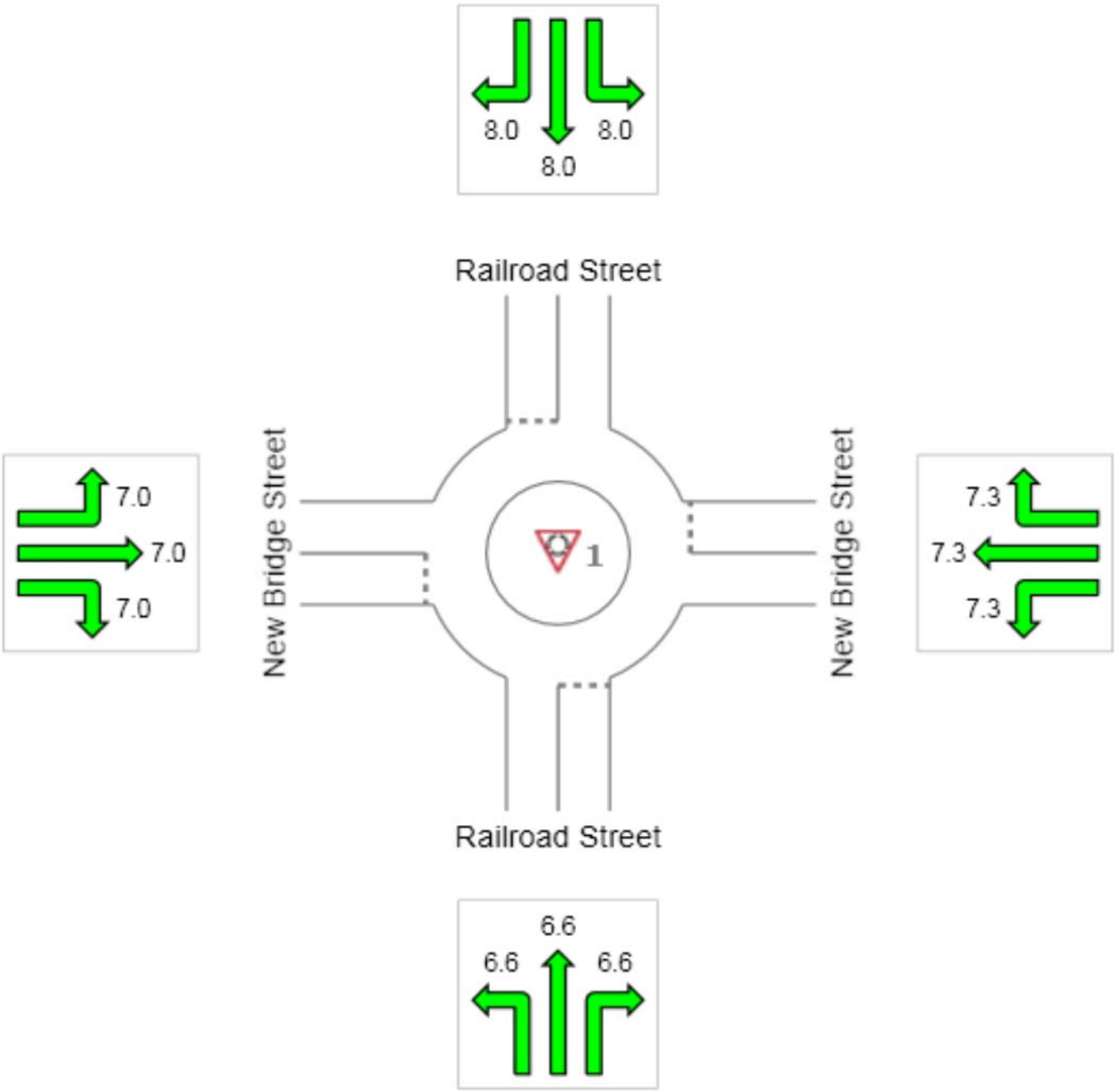
Average control delay per vehicle, or average pedestrian delay (seconds)

Site: New Bridge Street at Railroad Street AM Peak

New Bridge Street at Railroad Street
AM Peak
Roundabout

All Movement Classes

	South	East	North	West	Intersection
	6.6	7.3	8.0	7.0	7.3
LOS	A	A	A	A	A



Colour code based on Level of Service

LOS A	LOS B	LOS C	LOS D	LOS E	LOS F	Continuous

Level of Service Method: Delay & v/c (HCM 2010)
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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SIDRA INTERSECTION 6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	38	82	19	63	114	0
Future Volume (Veh/h)	38	82	19	63	114	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	42	91	21	70	127	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	239	127	127			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	239	127	127			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	90	99			
cM capacity (veh/h)	738	923	1459			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	133	21	70	127
Volume Left	42	21	0	0
Volume Right	91	0	0	0
cSH	1349	1459	1700	1700
Volume to Capacity	0.10	0.01	0.04	0.07
Queue Length 95th (ft)	8	1	0	0
Control Delay (s)	9.6	7.5	0.0	0.0
Lane LOS	A	A		
Approach Delay (s)	9.6	1.7		0.0
Approach LOS	A			

Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	19.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	12	1	8	12	31	0	34	13	86	58	26
Future Volume (Veh/h)	14	12	1	8	12	31	0	34	13	86	58	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	13	1	9	13	34	0	38	14	96	64	29
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	349	322	78	323	330	45	93			52		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	349	322	78	323	330	45	93			52		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	98	100	98	98	97	100			94		
cM capacity (veh/h)	548	558	982	589	553	1025	1501			1554		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	30	56	0	52	189
Volume Left	16	9	0	0	96
Volume Right	1	34	0	14	29
cSH	561	778	1700	1700	1554
Volume to Capacity	0.05	0.07	0.00	0.03	0.06
Queue Length 95th (ft)	4	6	0	0	5
Control Delay (s)	11.8	10.0	0.0	0.0	4.0
Lane LOS	B	A			A
Approach Delay (s)	11.8	10.0	0.0		4.0
Approach LOS	B	A			

Intersection Summary				
Average Delay	5.1			
Intersection Capacity Utilization	28.0%	ICU Level of Service	A	
Analysis Period (min)	15			

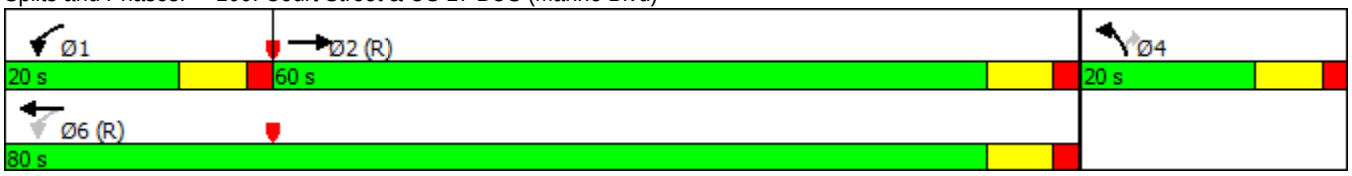
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1546	9	31	1322	66	33
Future Volume (vph)	1546	9	31	1322	66	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.999					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3536	0	1770	5085	1770	1583
Flt Permitted			0.079		0.950	
Satd. Flow (perm)	3536	0	147	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1718	10	34	1469	73	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1728	0	34	1469	73	37
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		4.0	12.0	7.0	7.0
Minimum Split (s)	19.0		11.6	19.0	14.4	14.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	53.0		13.0	73.0	13.0	13.0
Yellow Time (s)	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	74.2		81.1	82.1	11.7	11.7
Actuated g/C Ratio	0.74		0.81	0.82	0.12	0.12
v/c Ratio	0.66		0.14	0.35	0.35	0.20
Control Delay	11.4		4.0	3.4	44.8	41.5
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	11.4		4.0	3.4	44.8	41.5

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	B		A	A	D	D
Approach Delay	11.4			3.4	43.7	
Approach LOS	B			A	D	
Queue Length 50th (ft)	351		4	81	44	22
Queue Length 95th (ft)	503		12	119	84	51
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2623		362	4175	265	237
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.66		0.09	0.35	0.28	0.16

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 8.9 Intersection LOS: A
Intersection Capacity Utilization 57.2% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	109	46	0	99	24	34
Future Volume (Veh/h)	109	46	0	99	24	34
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	121	51	0	110	27	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						1049
pX, platoon unblocked						
vC, conflicting volume	147	55			110	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	147	55			110	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	95			98	
cM capacity (veh/h)	830	1012			1480	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	172	110	27	38
Volume Left	121	0	27	0
Volume Right	51	110	0	0
cSH	877	1700	1480	1700
Volume to Capacity	0.20	0.06	0.02	0.02
Queue Length 95th (ft)	18	0	1	0
Control Delay (s)	10.1	0.0	7.5	0.0
Lane LOS	B		A	
Approach Delay (s)	10.1	0.0	3.1	
Approach LOS	B			

Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	24.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	99	55	21	3	28	0	13	0	14	7	17	128
Future Volume (vph)	99	55	21	3	28	0	13	0	14	7	17	128
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	110	61	23	3	31	0	14	0	16	8	19	142

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total (vph)	171	23	34	30	169
Volume Left (vph)	110	0	3	14	8
Volume Right (vph)	0	23	0	16	142
Hadj (s)	0.36	-0.67	0.05	-0.19	-0.46
Departure Headway (s)	5.3	4.3	4.7	4.5	4.1
Degree Utilization, x	0.25	0.03	0.04	0.04	0.19
Capacity (veh/h)	646	800	712	751	834
Control Delay (s)	8.9	6.2	8.0	7.7	8.0
Approach Delay (s)	8.6		8.0	7.7	8.0
Approach LOS	A		A	A	A

Intersection Summary			
Delay	8.3		
Level of Service	A		
Intersection Capacity Utilization	32.9%	ICU Level of Service	A
Analysis Period (min)	15		

DELAY (CONTROL)

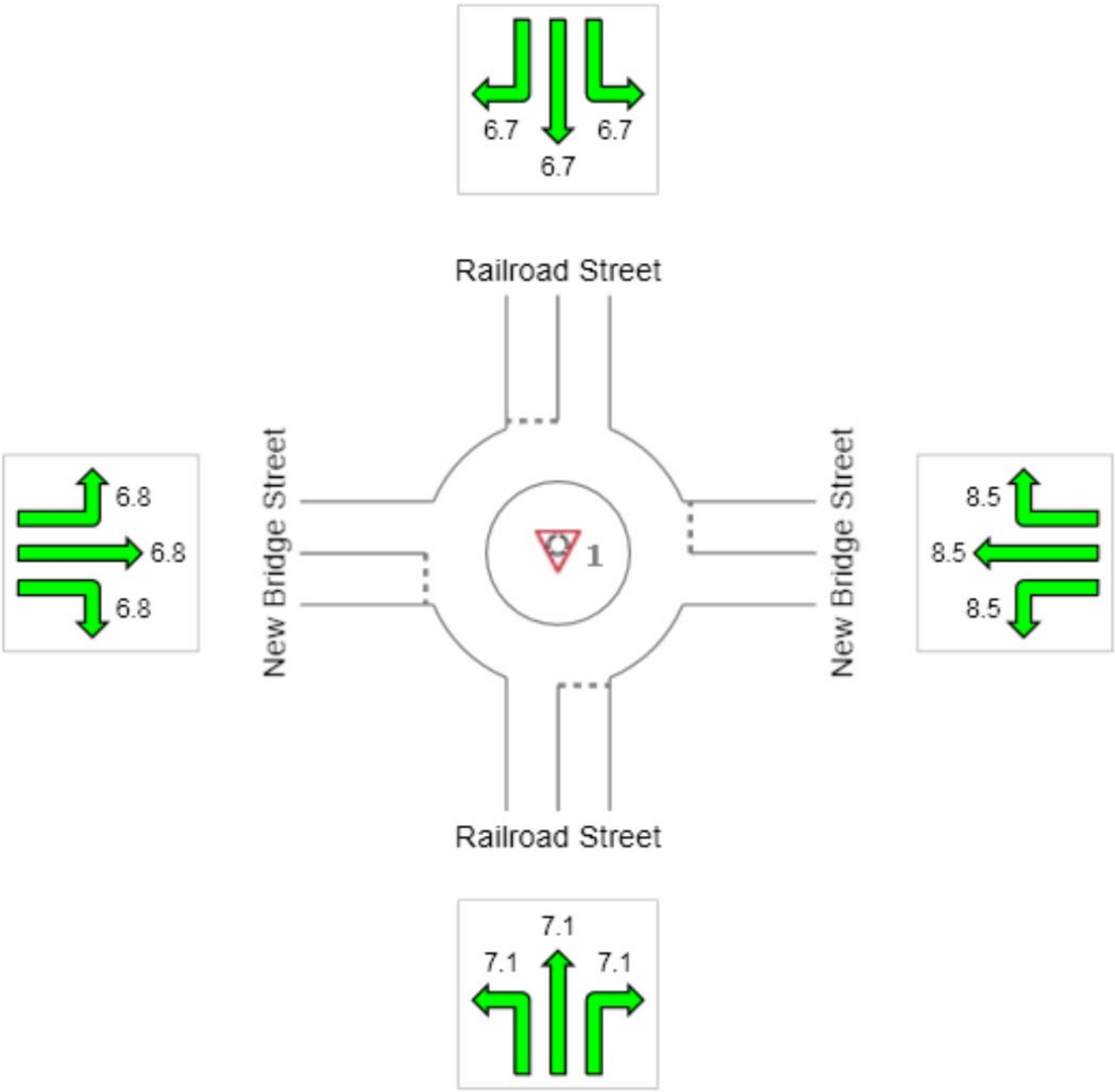
Average control delay per vehicle, or average pedestrian delay (seconds)

Site: New Bridge Street at Railroad Street PM Peak

New Bridge Street at Railroad Street
PM Peak
Roundabout

All Movement Classes

	South	East	North	West	Intersection
	7.1	8.5	6.7	6.8	7.5
LOS	A	A	A	A	A



Colour code based on Level of Service

LOS A	LOS B	LOS C	LOS D	LOS E	LOS F	Continuous

Level of Service Method: Delay & v/c (HCM 2010)
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	33	46	57	103	88	0
Future Volume (Veh/h)	33	46	57	103	88	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	37	51	63	114	98	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	338	98	98			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	338	98	98			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	95	96			
cM capacity (veh/h)	630	958	1495			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	88	63	114	98
Volume Left	37	63	0	0
Volume Right	51	0	0	0
cSH	1498	1495	1700	1700
Volume to Capacity	0.06	0.04	0.07	0.06
Queue Length 95th (ft)	5	3	0	0
Control Delay (s)	9.9	7.5	0.0	0.0
Lane LOS	A	A		
Approach Delay (s)	9.9	2.7		0.0
Approach LOS	A			

Intersection Summary			
Average Delay	3.7		
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	19	0	8	9	87	0	71	5	50	72	10
Future Volume (Veh/h)	35	19	0	8	9	87	0	71	5	50	72	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	39	21	0	9	10	97	0	79	6	56	80	11
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	378	282	86	290	285	82	91			85		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	378	282	86	290	285	82	91			85		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	92	97	100	99	98	90	100			96		
cM capacity (veh/h)	500	603	973	626	601	978	1504			1512		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	60	116	0	85	147
Volume Left	39	9	0	0	56
Volume Right	0	97	0	6	11
cSH	532	891	1700	1700	1512
Volume to Capacity	0.11	0.13	0.00	0.05	0.04
Queue Length 95th (ft)	9	11	0	0	3
Control Delay (s)	12.6	9.6	0.0	0.0	3.0
Lane LOS	B	A			A
Approach Delay (s)	12.6	9.6	0.0		3.0
Approach LOS	B	A			

Intersection Summary				
Average Delay	5.7			
Intersection Capacity Utilization	31.2%	ICU Level of Service	A	
Analysis Period (min)	15			

Appendix E: Level of Service Results for 2030 Future Volumes – Alternate 2A

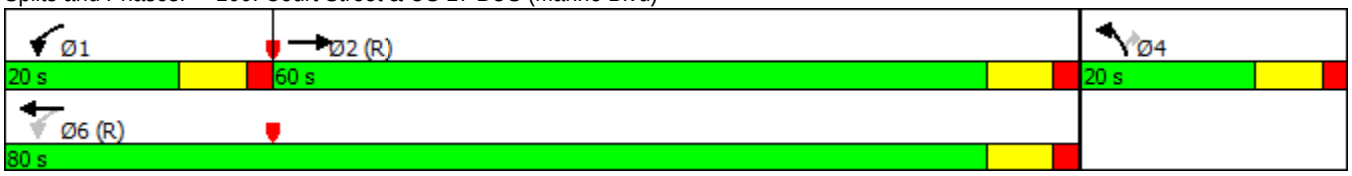
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1148	28	67	868	32	9
Future Volume (vph)	1148	28	67	868	32	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.996					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3525	0	1770	5085	1770	1583
Flt Permitted			0.159		0.950	
Satd. Flow (perm)	3525	0	296	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1276	31	74	964	36	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1307	0	74	964	36	10
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		7.0	12.0	7.0	7.0
Minimum Split (s)	19.0		14.6	19.0	14.4	14.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	53.0		13.0	73.0	13.0	13.0
Yellow Time (s)	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	75.4		85.6	87.6	10.0	10.0
Actuated g/C Ratio	0.75		0.86	0.88	0.10	0.10
v/c Ratio	0.49		0.19	0.22	0.20	0.06
Control Delay	8.0		3.1	2.0	43.8	40.9
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	8.0		3.1	2.0	43.8	40.9

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	A		A	A	D	D
Approach Delay	8.0			2.0	43.1	
Approach LOS	A			A	D	
Queue Length 50th (ft)	207		7	40	22	6
Queue Length 95th (ft)	288		17	60	52	22
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2656		474	4455	265	237
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.49		0.16	0.22	0.14	0.04

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.49
Intersection Signal Delay: 6.1 Intersection LOS: A
Intersection Capacity Utilization 56.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	117	48	3	153	22	52
Future Volume (vph)	117	48	3	153	22	52
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	130	53	3	170	24	58

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	183	173	82
Volume Left (vph)	130	0	24
Volume Right (vph)	53	170	0
Hadj (s)	0.00	-0.56	0.09
Departure Headway (s)	4.4	3.9	4.6
Degree Utilization, x	0.23	0.19	0.10
Capacity (veh/h)	762	881	736
Control Delay (s)	8.7	7.8	8.1
Approach Delay (s)	8.7	7.8	8.1
Approach LOS	A	A	A

Intersection Summary			
Delay	8.2		
Level of Service	A		
Intersection Capacity Utilization	35.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	153	0	92	0	0	0	34	3	0	0	22	136
Future Volume (vph)	153	0	92	0	0	0	34	3	0	0	22	136
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	170	0	102	0	0	0	38	3	0	0	24	151

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total (vph)	170	102	0	41	175
Volume Left (vph)	170	0	0	38	0
Volume Right (vph)	0	102	0	0	151
Hadj (s)	0.53	-0.67	0.00	0.22	-0.48
Departure Headway (s)	5.5	4.3	4.8	5.0	4.1
Degree Utilization, x	0.26	0.12	0.00	0.06	0.20
Capacity (veh/h)	625	799	900	679	820
Control Delay (s)	9.3	6.7	7.8	8.3	8.2
Approach Delay (s)	8.3		0.0	8.3	8.2
Approach LOS	A		A	A	A

Intersection Summary			
Delay	8.3		
Level of Service	A		
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	106	0	65	100	26	20	5	36	38	52	75
Future Volume (vph)	63	106	0	65	100	26	20	5	36	38	52	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	0		0	150		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			100			25			100		
Lane Util. 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
Frt					0.969			0.870			0.912	
Flt Protected		0.982		0.950			0.950			0.950		
Satd. Flow (prot)	0	1646	0	1593	1625	0	1593	1459	0	1593	1529	0
Flt Permitted		0.855		0.619			0.665			0.727		
Satd. Flow (perm)	0	1433	0	1038	1625	0	1115	1459	0	1219	1529	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		575			1475			364			1124	
Travel Time (s)		19.6			50.3			7.1			21.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			40			6						
Adj. Flow (vph)	70	118	0	72	111	29	22	6	40	42	58	83
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	188	0	72	140	0	22	46	0	42	141	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	17.3	17.3		15.1	17.3		14.0	14.0		14.0	14.0	
Total Split (s)	30.0	30.0		18.0	48.0		22.0	22.0		22.0	22.0	
Total Split (%)	42.9%	42.9%		25.7%	68.6%		31.4%	31.4%		31.4%	31.4%	
Maximum Green (s)	23.0	23.0		11.0	41.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		None	Max		None	None		None	None	
Act Effct Green (s)		38.8		46.2	47.3		13.1	13.1		13.1	13.1	
Actuated g/C Ratio		0.58		0.70	0.71		0.20	0.20		0.20	0.20	
v/c Ratio		0.22		0.09	0.12		0.10	0.16		0.17	0.47	
Control Delay		12.7		5.2	5.2		22.2	22.9		23.4	28.7	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		12.7		5.2	5.2		22.2	22.9		23.4	28.7	
LOS		B		A	A		C	C		C	C	
Approach Delay		12.7			5.2			22.7			27.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			A			C			C	
Queue Length 50th (ft)		47		9	18		7	16		14	51	
Queue Length 95th (ft)		102		25	44		24	40		38	99	
Internal Link Dist (ft)		495			1395			284			1044	
Turn Bay Length (ft)				115						150		
Base Capacity (vph)		837		831	1157		285	374		312	392	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.22		0.09	0.12		0.08	0.12		0.13	0.36	

Intersection Summary

Area Type: CBD
Cycle Length: 70
Actuated Cycle Length: 66.4
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.47
Intersection Signal Delay: 15.5 Intersection LOS: B
Intersection Capacity Utilization 49.1% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 400: Railroad Street & New Bridge

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	60	114	0
Future Volume (Veh/h)	0	0	0	60	114	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	0	67	127	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					364	
pX, platoon unblocked						
vC, conflicting volume	194	127	127			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	194	127	127			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	795	923	1459			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	0	0	67	127
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.04	0.07
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.0	0.0		0.0
Approach LOS	A			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	10.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	74	1	8	29	14	2	29	13	24	37	26
Future Volume (Veh/h)	14	74	1	8	29	14	2	29	13	24	37	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	82	1	9	32	16	2	32	14	27	41	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											574	
pX, platoon unblocked												
vC, conflicting volume	178	160	56	194	167	39	70			46		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	178	160	56	194	167	39	70			46		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	89	100	99	96	98	100			98		
cM capacity (veh/h)	735	719	1011	688	712	1033	1531			1562		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	99	57	2	46	97
Volume Left	16	9	2	0	27
Volume Right	1	16	0	14	29
cSH	724	775	1531	1700	1562
Volume to Capacity	0.14	0.07	0.00	0.03	0.02
Queue Length 95th (ft)	12	6	0	0	1
Control Delay (s)	10.8	10.0	7.4	0.0	2.1
Lane LOS	B	B	A		A
Approach Delay (s)	10.8	10.0	0.3		2.1
Approach LOS	B	B			

Intersection Summary				
Average Delay	6.2			
Intersection Capacity Utilization	25.8%	ICU Level of Service	A	
Analysis Period (min)	15			

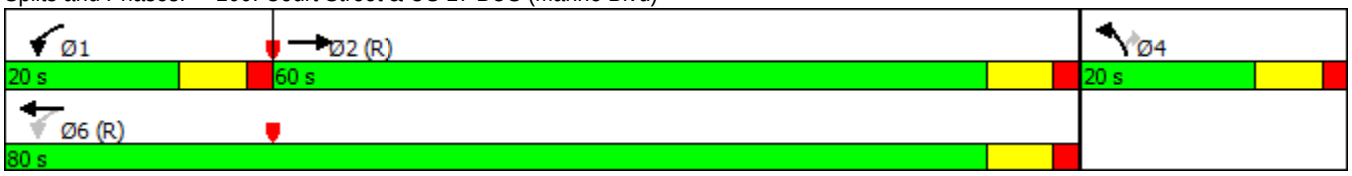
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1546	9	31	1322	73	33
Future Volume (vph)	1546	9	31	1322	73	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.999					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3536	0	1770	5085	1770	1583
Flt Permitted			0.077		0.950	
Satd. Flow (perm)	3536	0	143	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1718	10	34	1469	81	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1728	0	34	1469	81	37
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		7.0	12.0	7.0	7.0
Minimum Split (s)	19.0		14.6	19.0	14.4	14.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	53.0		13.0	73.0	13.0	13.0
Yellow Time (s)	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	73.5		80.9	81.9	11.9	11.9
Actuated g/C Ratio	0.74		0.81	0.82	0.12	0.12
v/c Ratio	0.67		0.13	0.35	0.38	0.20
Control Delay	12.0		3.9	3.4	45.3	41.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	12.0		3.9	3.4	45.3	41.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	B		A	A	D	D
Approach Delay	12.0			3.4	44.0	
Approach LOS	B			A	D	
Queue Length 50th (ft)	370		4	83	48	22
Queue Length 95th (ft)	509		12	119	92	51
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2597		359	4162	265	237
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.67		0.09	0.35	0.31	0.16

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.67
Intersection Signal Delay: 9.3 Intersection LOS: A
Intersection Capacity Utilization 57.2% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	141	46	7	146	24	34
Future Volume (vph)	141	46	7	146	24	34
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	157	51	8	162	27	38

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	208	170	65
Volume Left (vph)	157	0	27
Volume Right (vph)	51	162	0
Hadj (s)	0.04	-0.54	0.12
Departure Headway (s)	4.4	3.9	4.7
Degree Utilization, x	0.26	0.19	0.08
Capacity (veh/h)	765	865	718
Control Delay (s)	9.0	7.8	8.1
Approach Delay (s)	9.0	7.8	8.1
Approach LOS	A	A	A

Intersection Summary			
Delay	8.4		
Level of Service	A		
Intersection Capacity Utilization	35.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	132	0	67	0	0	0	70	21	0	0	24	160
Future Volume (vph)	132	0	67	0	0	0	70	21	0	0	24	160
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	147	0	74	0	0	0	78	23	0	0	27	178

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total (vph)	147	74	0	101	205
Volume Left (vph)	147	0	0	78	0
Volume Right (vph)	0	74	0	0	178
Hadj (s)	0.53	-0.67	0.00	0.19	-0.49
Departure Headway (s)	5.7	4.5	5.0	4.9	4.1
Degree Utilization, x	0.23	0.09	0.00	0.14	0.23
Capacity (veh/h)	596	751	900	697	827
Control Delay (s)	9.3	6.8	8.0	8.7	8.4
Approach Delay (s)	8.4		0.0	8.7	8.4
Approach LOS	A		A	A	A

Intersection Summary			
Delay	8.5		
Level of Service	A		
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	117	5	23	168	41	10	46	45	19	54	17
Future Volume (vph)	67	117	5	23	168	41	10	46	45	19	54	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	0		0	150		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			100			25			100		
Lane Util. 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
Frt		0.996			0.970			0.926			0.964	
Flt Protected		0.983		0.950			0.950			0.950		
Satd. Flow (prot)	0	1641	0	1593	1626	0	1593	1552	0	1593	1616	0
Flt Permitted		0.831		0.611			0.706			0.692		
Satd. Flow (perm)	0	1388	0	1024	1626	0	1184	1552	0	1160	1616	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		575			1475			364			1124	
Travel Time (s)		19.6			50.3			7.1			21.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			40			6						
Adj. Flow (vph)	74	130	6	26	187	46	11	51	50	21	60	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	210	0	26	233	0	11	101	0	21	79	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	17.3	17.3		15.1	17.3		14.0	14.0		14.0	14.0	
Total Split (s)	34.0	34.0		17.0	51.0		19.0	19.0		19.0	19.0	
Total Split (%)	48.6%	48.6%		24.3%	72.9%		27.1%	27.1%		27.1%	27.1%	
Maximum Green (s)	27.0	27.0		10.0	44.0		12.0	12.0		12.0	12.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		None	Max		None	None		None	None	
Act Effct Green (s)		44.7		49.1	50.1		11.6	11.6		11.6	11.6	
Actuated g/C Ratio		0.66		0.72	0.74		0.17	0.17		0.17	0.17	
v/c Ratio		0.23		0.03	0.19		0.05	0.38		0.11	0.29	
Control Delay		9.6		4.1	4.6		23.7	29.2		24.6	27.1	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		9.6		4.1	4.6		23.7	29.2		24.6	27.1	
LOS		A		A	A		C	C		C	C	
Approach Delay		9.6			4.6			28.7			26.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		27		3	30		4	37		7	29	
Queue Length 95th (ft)		101		10	61		16	79		25	64	
Internal Link Dist (ft)		495			1395			284			1044	
Turn Bay Length (ft)				115						150		
Base Capacity (vph)		914		842	1202		244	320		239	333	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.23		0.03	0.19		0.05	0.32		0.09	0.24	

Intersection Summary

Area Type: CBD
Cycle Length: 70
Actuated Cycle Length: 67.8
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.38
Intersection Signal Delay: 13.3 Intersection LOS: B
Intersection Capacity Utilization 44.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 400: Railroad Street & New Bridge

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	96	88	0
Future Volume (Veh/h)	0	0	0	96	88	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	0	107	98	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					364	
pX, platoon unblocked						
vC, conflicting volume	205	98	98			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	205	98	98			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	783	958	1495			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	0	0	107	98
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.06	0.06
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.0	0.0		0.0
Approach LOS	A			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	8.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	54	0	8	60	36	6	58	5	15	60	10
Future Volume (Veh/h)	35	54	0	8	60	36	6	58	5	15	60	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	39	60	0	9	67	40	7	64	6	17	67	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											574	
pX, platoon unblocked												
vC, conflicting volume	258	190	72	218	193	67	78			70		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	258	190	72	218	193	67	78			70		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	91	100	99	90	96	100			99		
cM capacity (veh/h)	610	693	990	682	691	997	1520			1531		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	99	116	7	70	95
Volume Left	39	9	7	0	17
Volume Right	0	40	0	6	11
cSH	658	772	1520	1700	1531
Volume to Capacity	0.15	0.15	0.00	0.04	0.01
Queue Length 95th (ft)	13	13	0	0	1
Control Delay (s)	11.4	10.5	7.4	0.0	1.4
Lane LOS	B	B	A		A
Approach Delay (s)	11.4	10.5	0.7		1.4
Approach LOS	B	B			

Intersection Summary				
Average Delay	6.5			
Intersection Capacity Utilization	30.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Appendix F: Level of Service Results for 2030 Future Volumes – Alternate 2B

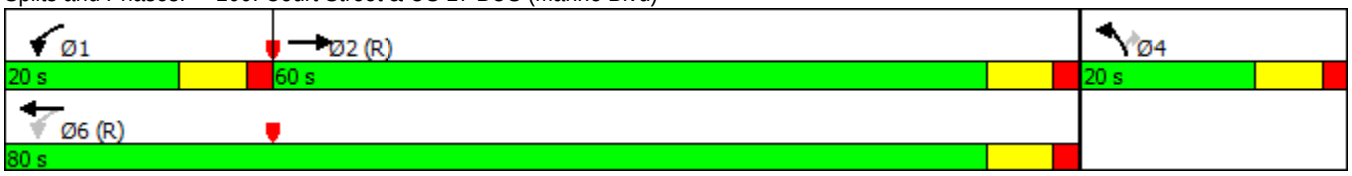
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1148	28	67	868	32	9
Future Volume (vph)	1148	28	67	868	32	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.996					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3525	0	1770	5085	1770	1583
Flt Permitted			0.159		0.950	
Satd. Flow (perm)	3525	0	296	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1276	31	74	964	36	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1307	0	74	964	36	10
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		7.0	12.0	7.0	7.0
Minimum Split (s)	19.0		14.6	19.0	14.4	14.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	53.0		13.0	73.0	13.0	13.0
Yellow Time (s)	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	75.4		85.6	87.6	10.0	10.0
Actuated g/C Ratio	0.75		0.86	0.88	0.10	0.10
v/c Ratio	0.49		0.19	0.22	0.20	0.06
Control Delay	8.0		3.1	2.0	43.8	40.9
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	8.0		3.1	2.0	43.8	40.9

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	A		A	A	D	D
Approach Delay	8.0			2.0	43.1	
Approach LOS	A			A	D	
Queue Length 50th (ft)	207		7	40	22	6
Queue Length 95th (ft)	288		17	60	52	22
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2656		474	4455	265	237
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.49		0.16	0.22	0.14	0.04

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.49
Intersection Signal Delay: 6.1 Intersection LOS: A
Intersection Capacity Utilization 56.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	117	48	3	153	22	52
Future Volume (Veh/h)	117	48	3	153	22	52
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	130	53	3	170	24	58
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						1049
pX, platoon unblocked						
vC, conflicting volume	194	88			173	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	194	88			173	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	83	95			98	
cM capacity (veh/h)	781	970			1404	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	183	173	82
Volume Left	130	0	24
Volume Right	53	170	0
cSH	828	1700	1404
Volume to Capacity	0.22	0.10	0.02
Queue Length 95th (ft)	21	0	1
Control Delay (s)	10.6	0.0	2.3
Lane LOS	B		A
Approach Delay (s)	10.6	0.0	2.3
Approach LOS	B		

Intersection Summary			
Average Delay	4.9		
Intersection Capacity Utilization	35.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	0	92	0	0	0	34	3	0	0	22	136
Future Volume (Veh/h)	153	0	92	0	0	0	34	3	0	0	22	136
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	170	0	102	0	0	0	38	3	0	0	24	151
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											1239	
pX, platoon unblocked												
vC, conflicting volume	178	178	100	280	254	3	175			3		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	178	178	100	280	254	3	175			3		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	78	100	89	100	100	100	97			100		
cM capacity (veh/h)	767	696	956	588	632	1081	1401			1619		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	170	102	0	41	175
Volume Left	170	0	0	38	0
Volume Right	0	102	0	0	151
cSH	767	956	1700	1401	1619
Volume to Capacity	0.22	0.11	0.00	0.03	0.00
Queue Length 95th (ft)	21	9	0	2	0
Control Delay (s)	11.0	9.2	0.0	7.1	0.0
Lane LOS	B	A	A	A	
Approach Delay (s)	10.3		0.0	7.1	0.0
Approach LOS	B		A		

Intersection Summary			
Average Delay	6.4		
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	106	0	65	100	26	20	5	36	38	52	75
Future Volume (vph)	63	106	0	65	100	26	20	5	36	38	52	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	0		0	150		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			100			25			100		
Lane Util. 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
Frt					0.969			0.870			0.912	
Flt Protected		0.982		0.950			0.950			0.950		
Satd. Flow (prot)	0	1646	0	1593	1625	0	1593	1459	0	1593	1529	0
Flt Permitted		0.855		0.619			0.665			0.727		
Satd. Flow (perm)	0	1433	0	1038	1625	0	1115	1459	0	1219	1529	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		575			1475			364			1124	
Travel Time (s)		19.6			50.3			7.1			21.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			40			6						
Adj. Flow (vph)	70	118	0	72	111	29	22	6	40	42	58	83
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	188	0	72	140	0	22	46	0	42	141	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	17.3	17.3		15.1	17.3		14.0	14.0		14.0	14.0	
Total Split (s)	30.0	30.0		18.0	48.0		22.0	22.0		22.0	22.0	
Total Split (%)	42.9%	42.9%		25.7%	68.6%		31.4%	31.4%		31.4%	31.4%	
Maximum Green (s)	23.0	23.0		11.0	41.0		15.0	15.0		15.0	15.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		None	Max		None	None		None	None	
Act Effct Green (s)		38.8		46.2	47.3		13.1	13.1		13.1	13.1	
Actuated g/C Ratio		0.58		0.70	0.71		0.20	0.20		0.20	0.20	
v/c Ratio		0.22		0.09	0.12		0.10	0.16		0.17	0.47	
Control Delay		12.7		5.2	5.2		22.2	22.9		23.4	28.7	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		12.7		5.2	5.2		22.2	22.9		23.4	28.7	
LOS		B		A	A		C	C		C	C	
Approach Delay		12.7			5.2			22.7			27.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			A			C			C	
Queue Length 50th (ft)		47		9	18		7	16		14	51	
Queue Length 95th (ft)		102		25	44		24	40		38	99	
Internal Link Dist (ft)		495			1395			284			1044	
Turn Bay Length (ft)				115						150		
Base Capacity (vph)		837		831	1157		285	374		312	392	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.22		0.09	0.12		0.08	0.12		0.13	0.36	

Intersection Summary

Area Type: CBD
Cycle Length: 70
Actuated Cycle Length: 66.4
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.47
Intersection Signal Delay: 15.5 Intersection LOS: B
Intersection Capacity Utilization 49.1% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 400: Railroad Street & New Bridge

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	60	114	0
Future Volume (Veh/h)	0	0	0	60	114	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	0	67	127	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					364	
pX, platoon unblocked						
vC, conflicting volume	194	127	127			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	194	127	127			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	795	923	1459			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	0	0	67	127
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.04	0.07
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.0	0.0		0.0
Approach LOS	A			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	10.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	74	1	8	29	14	2	29	13	24	37	26
Future Volume (Veh/h)	14	74	1	8	29	14	2	29	13	24	37	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	82	1	9	32	16	2	32	14	27	41	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											574	
pX, platoon unblocked												
vC, conflicting volume	178	160	56	194	167	39	70			46		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	178	160	56	194	167	39	70			46		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	89	100	99	96	98	100			98		
cM capacity (veh/h)	735	719	1011	688	712	1033	1531			1562		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	99	57	2	46	97
Volume Left	16	9	2	0	27
Volume Right	1	16	0	14	29
cSH	724	775	1531	1700	1562
Volume to Capacity	0.14	0.07	0.00	0.03	0.02
Queue Length 95th (ft)	12	6	0	0	1
Control Delay (s)	10.8	10.0	7.4	0.0	2.1
Lane LOS	B	B	A		A
Approach Delay (s)	10.8	10.0	0.3		2.1
Approach LOS	B	B			

Intersection Summary				
Average Delay	6.2			
Intersection Capacity Utilization	25.8%	ICU Level of Service	A	
Analysis Period (min)	15			

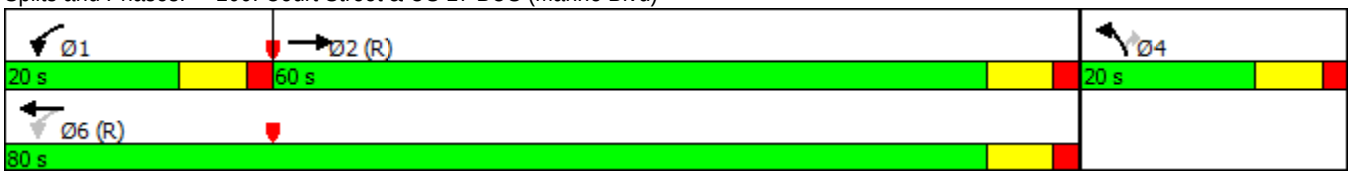
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1546	9	31	1322	73	33
Future Volume (vph)	1546	9	31	1322	73	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.999					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3536	0	1770	5085	1770	1583
Flt Permitted			0.077		0.950	
Satd. Flow (perm)	3536	0	143	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1718	10	34	1469	81	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1728	0	34	1469	81	37
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		7.0	12.0	7.0	7.0
Minimum Split (s)	19.0		14.6	19.0	14.4	14.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	53.0		13.0	73.0	13.0	13.0
Yellow Time (s)	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	73.5		80.9	81.9	11.9	11.9
Actuated g/C Ratio	0.74		0.81	0.82	0.12	0.12
v/c Ratio	0.67		0.13	0.35	0.38	0.20
Control Delay	12.0		3.9	3.4	45.3	41.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	12.0		3.9	3.4	45.3	41.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	B		A	A	D	D
Approach Delay	12.0			3.4	44.0	
Approach LOS	B			A	D	
Queue Length 50th (ft)	370		4	83	48	22
Queue Length 95th (ft)	509		12	119	92	51
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2597		359	4162	265	237
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.67		0.09	0.35	0.31	0.16

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.67
Intersection Signal Delay: 9.3 Intersection LOS: A
Intersection Capacity Utilization 57.2% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	141	46	7	146	24	34
Future Volume (Veh/h)	141	46	7	146	24	34
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	157	51	8	162	27	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						1049
pX, platoon unblocked						
vC, conflicting volume	181	89			170	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	181	89			170	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	80	95			98	
cM capacity (veh/h)	793	969			1407	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	208	170	65
Volume Left	157	0	27
Volume Right	51	162	0
cSH	830	1700	1407
Volume to Capacity	0.25	0.10	0.02
Queue Length 95th (ft)	25	0	1
Control Delay (s)	10.8	0.0	3.2
Lane LOS	B		A
Approach Delay (s)	10.8	0.0	3.2
Approach LOS	B		

Intersection Summary			
Average Delay	5.5		
Intersection Capacity Utilization	35.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	0	67	0	0	0	70	21	0	0	24	160
Future Volume (Veh/h)	132	0	67	0	0	0	70	21	0	0	24	160
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	147	0	74	0	0	0	78	23	0	0	27	178
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											1239	
pX, platoon unblocked												
vC, conflicting volume	295	295	116	369	384	23	205			23		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	295	295	116	369	384	23	205			23		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	77	100	92	100	100	100	94			100		
cM capacity (veh/h)	629	581	936	517	518	1054	1366			1592		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	147	74	0	101	205
Volume Left	147	0	0	78	0
Volume Right	0	74	0	0	178
cSH	629	936	1700	1366	1592
Volume to Capacity	0.23	0.08	0.00	0.06	0.00
Queue Length 95th (ft)	23	6	0	5	0
Control Delay (s)	12.5	9.2	0.0	6.1	0.0
Lane LOS	B	A	A	A	
Approach Delay (s)	11.4		0.0	6.1	0.0
Approach LOS	B		A		

Intersection Summary			
Average Delay	5.9		
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	117	5	23	168	41	10	46	45	19	54	17
Future Volume (vph)	67	117	5	23	168	41	10	46	45	19	54	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	0		0	150		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			100			25			100		
Lane Util. 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
Frt		0.996			0.970			0.926			0.964	
Flt Protected		0.983		0.950			0.950			0.950		
Satd. Flow (prot)	0	1641	0	1593	1626	0	1593	1552	0	1593	1616	0
Flt Permitted		0.831		0.611			0.706			0.692		
Satd. Flow (perm)	0	1388	0	1024	1626	0	1184	1552	0	1160	1616	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		575			1475			364			1124	
Travel Time (s)		19.6			50.3			7.1			21.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			40			6						
Adj. Flow (vph)	74	130	6	26	187	46	11	51	50	21	60	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	210	0	26	233	0	11	101	0	21	79	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	17.3	17.3		15.1	17.3		14.0	14.0		14.0	14.0	
Total Split (s)	34.0	34.0		17.0	51.0		19.0	19.0		19.0	19.0	
Total Split (%)	48.6%	48.6%		24.3%	72.9%		27.1%	27.1%		27.1%	27.1%	
Maximum Green (s)	27.0	27.0		10.0	44.0		12.0	12.0		12.0	12.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		None	Max		None	None		None	None	
Act Effct Green (s)		44.7		49.1	50.1		11.6	11.6		11.6	11.6	
Actuated g/C Ratio		0.66		0.72	0.74		0.17	0.17		0.17	0.17	
v/c Ratio		0.23		0.03	0.19		0.05	0.38		0.11	0.29	
Control Delay		9.6		4.1	4.6		23.7	29.2		24.6	27.1	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		9.6		4.1	4.6		23.7	29.2		24.6	27.1	
LOS		A		A	A		C	C		C	C	
Approach Delay		9.6			4.6			28.7			26.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		A			A			C			C	
Queue Length 50th (ft)		27		3	30		4	37		7	29	
Queue Length 95th (ft)		101		10	61		16	79		25	64	
Internal Link Dist (ft)		495			1395			284			1044	
Turn Bay Length (ft)				115						150		
Base Capacity (vph)		914		842	1202		244	320		239	333	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.23		0.03	0.19		0.05	0.32		0.09	0.24	

Intersection Summary

Area Type: CBD
Cycle Length: 70
Actuated Cycle Length: 67.8
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.38
Intersection Signal Delay: 13.3 Intersection LOS: B
Intersection Capacity Utilization 44.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 400: Railroad Street & New Bridge

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	96	88	0
Future Volume (Veh/h)	0	0	0	96	88	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	0	107	98	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					364	
pX, platoon unblocked						
vC, conflicting volume	205	98	98			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	205	98	98			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	783	958	1495			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	0	0	107	98
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1700	1700	1700
Volume to Capacity	0.00	0.00	0.06	0.06
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS	A			
Approach Delay (s)	0.0	0.0		0.0
Approach LOS	A			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	8.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	54	0	8	60	36	6	58	5	15	60	10
Future Volume (Veh/h)	35	54	0	8	60	36	6	58	5	15	60	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	39	60	0	9	67	40	7	64	6	17	67	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											574	
pX, platoon unblocked												
vC, conflicting volume	258	190	72	218	193	67	78			70		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	258	190	72	218	193	67	78			70		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	91	100	99	90	96	100			99		
cM capacity (veh/h)	610	693	990	682	691	997	1520			1531		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	99	116	7	70	95
Volume Left	39	9	7	0	17
Volume Right	0	40	0	6	11
cSH	658	772	1520	1700	1531
Volume to Capacity	0.15	0.15	0.00	0.04	0.01
Queue Length 95th (ft)	13	13	0	0	1
Control Delay (s)	11.4	10.5	7.4	0.0	1.4
Lane LOS	B	B	A		A
Approach Delay (s)	11.4	10.5	0.7		1.4
Approach LOS	B	B			

Intersection Summary				
Average Delay	6.5			
Intersection Capacity Utilization	30.4%	ICU Level of Service	A	
Analysis Period (min)	15			

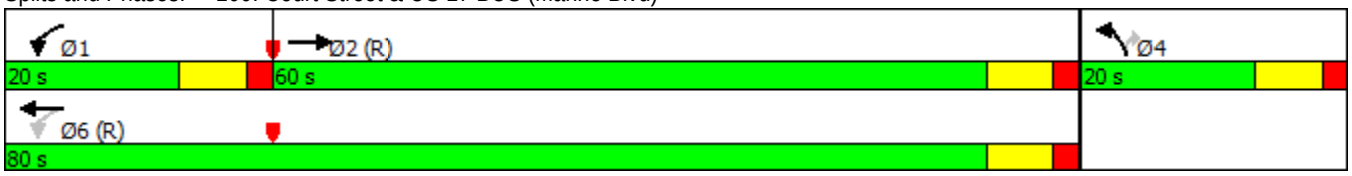
Appendix G: Level of Service Results for 2030 Future Volumes – Alternate 3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1148	28	67	868	29	9
Future Volume (vph)	1148	28	67	868	29	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.996					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3525	0	1770	5085	1770	1583
Flt Permitted			0.159		0.950	
Satd. Flow (perm)	3525	0	296	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1276	31	74	964	32	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1307	0	74	964	32	10
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		7.0	12.0	7.0	7.0
Minimum Split (s)	19.0		14.6	19.0	14.4	14.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	53.0		13.0	73.0	13.0	13.0
Yellow Time (s)	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	75.5		85.8	87.8	9.8	9.8
Actuated g/C Ratio	0.76		0.86	0.88	0.10	0.10
v/c Ratio	0.49		0.19	0.22	0.18	0.06
Control Delay	7.9		3.0	1.9	43.6	41.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	7.9		3.0	1.9	43.6	41.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	A		A	A	D	D
Approach Delay	7.9			2.0	43.0	
Approach LOS	A			A	D	
Queue Length 50th (ft)	206		7	39	19	6
Queue Length 95th (ft)	284		17	58	47	22
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2662		475	4464	265	237
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.49		0.16	0.22	0.12	0.04

Intersection Summary	
Area Type: Other	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 5.9	Intersection LOS: A
Intersection Capacity Utilization 56.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	48	0	0	74	0
Future Volume (Veh/h)	0	48	0	0	74	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	53	0	0	82	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						1049
pX, platoon unblocked						
vC, conflicting volume	164	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	164	0			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			95	
cM capacity (veh/h)	785	1085			1623	

Direction, Lane #	WB 1	SB 1
Volume Total	53	82
Volume Left	0	82
Volume Right	53	0
cSH	1085	1623
Volume to Capacity	0.05	0.05
Queue Length 95th (ft)	4	4
Control Delay (s)	8.5	7.3
Lane LOS	A	A
Approach Delay (s)	8.5	7.3
Approach LOS	A	

Intersection Summary			
Average Delay	7.8		
Intersection Capacity Utilization	7.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	200	10	27	170	0	15	0	0	0	0	0
Future Volume (Veh/h)	0	200	10	27	170	0	15	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	222	11	30	189	0	17	0	0	0	0	0
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	189			233			471	471	222	471	482	189
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	189			233			471	471	222	471	482	189
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			97	100	100	100	100	100
cM capacity (veh/h)	1385			1335			494	480	818	494	473	853

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	222	11	219	17	0
Volume Left	0	0	30	17	0
Volume Right	0	11	0	0	0
cSH	1700	1700	1335	494	1700
Volume to Capacity	0.13	0.01	0.02	0.03	0.00
Queue Length 95th (ft)	0	0	2	3	0
Control Delay (s)	0.0	0.0	1.2	12.5	0.0
Lane LOS			A	B	A
Approach Delay (s)	0.0		1.2	12.5	0.0
Approach LOS				B	A

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

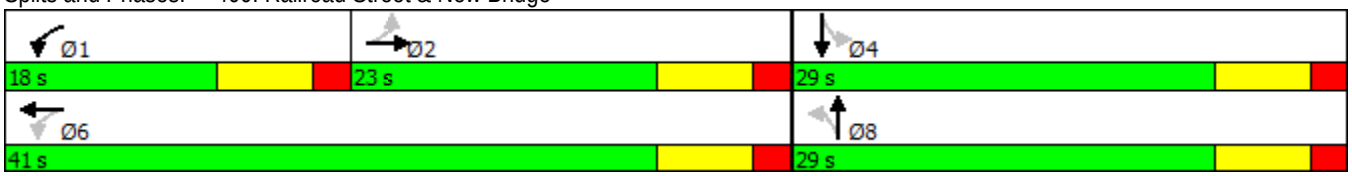
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	14	52	129	36	26	20	70	128	38	104	23
Future Volume (vph)	2	14	52	129	36	26	20	70	128	38	104	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	0		0	150		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			100			25			100		
Lane Util. 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
Frt		0.897			0.937			0.903			0.973	
Flt Protected		0.999		0.950			0.950			0.950		
Satd. Flow (prot)	0	1502	0	1593	1571	0	1593	1514	0	1593	1631	0
Flt Permitted		0.995		0.656			0.666			0.557		
Satd. Flow (perm)	0	1496	0	1100	1571	0	1117	1514	0	934	1631	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		575			1475			364			1124	
Travel Time (s)		19.6			50.3			7.1			21.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			40			6						
Adj. Flow (vph)	2	16	58	143	40	29	22	78	142	42	116	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	76	0	143	69	0	22	220	0	42	142	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	17.3	17.3		15.1	17.3		14.0	14.0		14.0	14.0	
Total Split (s)	23.0	23.0		18.0	41.0		29.0	29.0		29.0	29.0	
Total Split (%)	32.9%	32.9%		25.7%	58.6%		41.4%	41.4%		41.4%	41.4%	
Maximum Green (s)	16.0	16.0		11.0	34.0		22.0	22.0		22.0	22.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		None	Max		None	None		None	None	
Act Effct Green (s)		23.8		36.1	36.1		16.1	16.1		16.1	16.1	
Actuated g/C Ratio		0.38		0.58	0.58		0.26	0.26		0.26	0.26	
v/c Ratio		0.13		0.20	0.08		0.08	0.56		0.17	0.34	
Control Delay		18.0		8.0	7.3		17.2	25.7		19.1	20.6	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		18.0		8.0	7.3		17.2	25.7		19.1	20.6	
LOS		B		A	A		B	C		B	C	
Approach Delay		18.0			7.7			24.9			20.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			A			C			C	
Queue Length 50th (ft)		19		22	10		6	72		12	43	
Queue Length 95th (ft)		57		58	31		21	129		34	84	
Internal Link Dist (ft)		495			1395			284			1044	
Turn Bay Length (ft)				115						150		
Base Capacity (vph)		571		741	911		432	585		361	631	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.13		0.19	0.08		0.05	0.38		0.12	0.23	

Intersection Summary

Area Type: CBD
Cycle Length: 70
Actuated Cycle Length: 62.3
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 17.9 Intersection LOS: B
Intersection Capacity Utilization 45.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 400: Railroad Street & New Bridge



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	153	82	19	63	114	168
Future Volume (Veh/h)	153	82	19	63	114	168
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	170	91	21	70	127	187
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					364	
pX, platoon unblocked	0.98	0.98	0.98			
vC, conflicting volume	332	220	314			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	306	192	287			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	74	89	98			
cM capacity (veh/h)	659	831	1247			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	261	21	70	314
Volume Left	170	21	0	0
Volume Right	91	0	0	187
cSH	1012	1247	1700	1700
Volume to Capacity	0.26	0.02	0.04	0.18
Queue Length 95th (ft)	26	1	0	0
Control Delay (s)	11.5	7.9	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	11.5	1.8		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	34.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	12	1	8	12	31	0	34	13	86	58	26
Future Volume (Veh/h)	14	12	1	8	12	31	0	34	13	86	58	26
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	13	1	9	13	34	0	38	14	96	64	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											574	
pX, platoon unblocked												
vC, conflicting volume	349	322	78	323	330	45	93			52		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	349	322	78	323	330	45	93			52		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	98	100	98	98	97	100			94		
cM capacity (veh/h)	548	558	982	589	553	1025	1501			1554		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	30	56	0	52	189
Volume Left	16	9	0	0	96
Volume Right	1	34	0	14	29
cSH	561	778	1700	1700	1554
Volume to Capacity	0.05	0.07	0.00	0.03	0.06
Queue Length 95th (ft)	4	6	0	0	5
Control Delay (s)	11.8	10.0	0.0	0.0	4.0
Lane LOS	B	A			A
Approach Delay (s)	11.8	10.0	0.0		4.0
Approach LOS	B	A			

Intersection Summary				
Average Delay	5.1			
Intersection Capacity Utilization	28.0%	ICU Level of Service	A	
Analysis Period (min)	15			

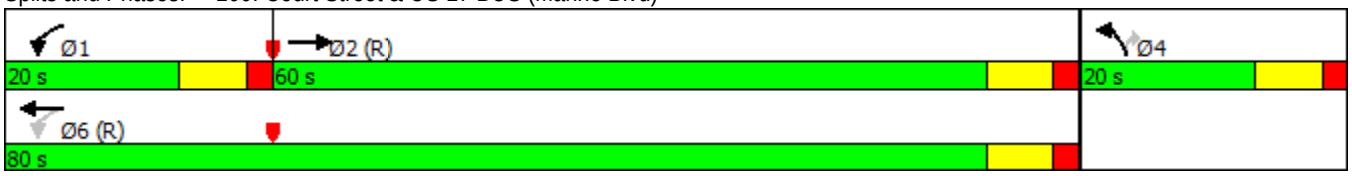
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1546	9	31	1322	66	33
Future Volume (vph)	1546	9	31	1322	66	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	170
Storage Lanes		0	1		1	1
Taper Length (ft)			100		25	
Lane Util. Factor	0.95	0.95	1.00	0.91	1.00	1.00
Frt	0.999					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3536	0	1770	5085	1770	1583
Flt Permitted			0.077		0.950	
Satd. Flow (perm)	3536	0	143	5085	1770	1583
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	35	
Link Distance (ft)	1065			1122	1049	
Travel Time (s)	16.1			17.0	20.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1718	10	34	1469	73	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1728	0	34	1469	73	37
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Detector Phase	2		1	6	4	4
Switch Phase						
Minimum Initial (s)	12.0		7.0	12.0	7.0	7.0
Minimum Split (s)	19.0		14.6	19.0	14.4	14.4
Total Split (s)	60.0		20.0	80.0	20.0	20.0
Total Split (%)	60.0%		20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	53.0		13.0	73.0	13.0	13.0
Yellow Time (s)	5.0		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	4.0					
Flash Dont Walk (s)	7.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	73.7		81.1	82.1	11.7	11.7
Actuated g/C Ratio	0.74		0.81	0.82	0.12	0.12
v/c Ratio	0.66		0.13	0.35	0.35	0.20
Control Delay	11.9		3.8	3.4	44.8	41.5
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	11.9		3.8	3.4	44.8	41.5

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	B		A	A	D	D
Approach Delay	11.9			3.4	43.7	
Approach LOS	B			A	D	
Queue Length 50th (ft)	364		4	81	44	22
Queue Length 95th (ft)	509		12	119	84	51
Internal Link Dist (ft)	985			1042	969	
Turn Bay Length (ft)			100			170
Base Capacity (vph)	2606		360	4175	265	237
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.66		0.09	0.35	0.28	0.16

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 5 (5%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 9.1 Intersection LOS: A
Intersection Capacity Utilization 57.2% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 100: Court Street & US 17 BUS (Marine Blvd)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	46	0	0	58	0
Future Volume (Veh/h)	0	46	0	0	58	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	51	0	0	64	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						1049
pX, platoon unblocked						
vC, conflicting volume	128	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	128	0			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			96	
cM capacity (veh/h)	832	1085			1623	

Direction, Lane #	WB 1	SB 1
Volume Total	51	64
Volume Left	0	64
Volume Right	51	0
cSH	1085	1623
Volume to Capacity	0.05	0.04
Queue Length 95th (ft)	4	3
Control Delay (s)	8.5	7.3
Lane LOS	A	A
Approach Delay (s)	8.5	7.3
Approach LOS	A	

Intersection Summary			
Average Delay	7.8		
Intersection Capacity Utilization	6.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	154	21	20	187	0	13	0	14	0	0	0
Future Volume (Veh/h)	0	154	21	20	187	0	13	0	14	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	171	23	22	208	0	14	0	16	0	0	0
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	208			194			423	423	171	439	446	208
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	208			194			423	423	171	439	446	208
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			97	100	98	100	100	100
cM capacity (veh/h)	1363			1379			535	514	873	512	499	832

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	171	23	230	30	0
Volume Left	0	0	22	14	0
Volume Right	0	23	0	16	0
cSH	1700	1700	1379	674	1700
Volume to Capacity	0.10	0.01	0.02	0.04	0.00
Queue Length 95th (ft)	0	0	1	3	0
Control Delay (s)	0.0	0.0	0.9	10.6	0.0
Lane LOS			A	B	A
Approach Delay (s)	0.0		0.9	10.6	0.0
Approach LOS				B	A

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		

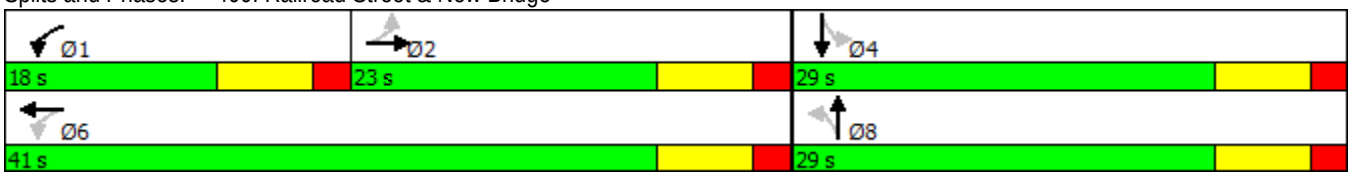
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	29	39	154	37	41	10	106	124	19	63	8
Future Volume (vph)	8	29	39	154	37	41	10	106	124	19	63	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	115		0	0		0	150		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			100			25			100		
Lane Util. 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
Frt		0.931			0.921			0.919			0.983	
Flt Protected		0.995		0.950			0.950			0.950		
Satd. Flow (prot)	0	1553	0	1593	1544	0	1593	1541	0	1593	1648	0
Flt Permitted		0.971		0.649			0.706			0.509		
Satd. Flow (perm)	0	1516	0	1088	1544	0	1184	1541	0	853	1648	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		20			20			35			35	
Link Distance (ft)		575			1475			364			1124	
Travel Time (s)		19.6			50.3			7.1			21.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			40			6						
Adj. Flow (vph)	9	32	43	171	41	46	11	118	138	21	70	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	84	0	171	87	0	11	256	0	21	79	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	17.3	17.3		15.1	17.3		14.0	14.0		14.0	14.0	
Total Split (s)	23.0	23.0		18.0	41.0		29.0	29.0		29.0	29.0	
Total Split (%)	32.9%	32.9%		25.7%	58.6%		41.4%	41.4%		41.4%	41.4%	
Maximum Green (s)	16.0	16.0		11.0	34.0		22.0	22.0		22.0	22.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		None	Max		None	None		None	None	
Act Effct Green (s)		20.3		36.2	36.2		17.4	17.4		17.4	17.4	
Actuated g/C Ratio		0.32		0.57	0.57		0.27	0.27		0.27	0.27	
v/c Ratio		0.17		0.24	0.10		0.03	0.61		0.09	0.18	
Control Delay		19.4		8.8	8.0		16.2	26.5		17.3	17.9	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		19.4		8.8	8.0		16.2	26.5		17.3	17.9	
LOS		B		A	A		B	C		B	B	
Approach Delay		19.4			8.5			26.1			17.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		B			A			C			B	
Queue Length 50th (ft)		23		29	14		3	85		6	23	
Queue Length 95th (ft)		62		70	39		13	151		21	51	
Internal Link Dist (ft)		495			1395			284			1044	
Turn Bay Length (ft)				115						150		
Base Capacity (vph)		483		722	878		448	584		323	624	
Starvation Cap Reductn		0		0	0		0	0		0	0	
Spillback Cap Reductn		0		0	0		0	0		0	0	
Storage Cap Reductn		0		0	0		0	0		0	0	
Reduced v/c Ratio		0.17		0.24	0.10		0.02	0.44		0.07	0.13	

Intersection Summary

Area Type: CBD
Cycle Length: 70
Actuated Cycle Length: 63.6
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 17.7 Intersection LOS: B
Intersection Capacity Utilization 42.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 400: Railroad Street & New Bridge



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	132	46	57	103	88	176
Future Volume (Veh/h)	132	46	57	103	88	176
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	147	51	63	114	98	196
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)		5				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					364	
pX, platoon unblocked	0.98	0.98	0.98			
vC, conflicting volume	436	196	294			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	414	169	269			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	73	94	95			
cM capacity (veh/h)	554	857	1268			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	198	63	114	294
Volume Left	147	63	0	0
Volume Right	51	0	0	196
cSH	746	1268	1700	1700
Volume to Capacity	0.27	0.05	0.07	0.17
Queue Length 95th (ft)	27	4	0	0
Control Delay (s)	12.7	8.0	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	12.7	2.8		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	4.5		
Intersection Capacity Utilization	38.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	19	0	8	9	87	0	71	5	50	72	10
Future Volume (Veh/h)	35	19	0	8	9	87	0	71	5	50	72	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	39	21	0	9	10	97	0	79	6	56	80	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											574	
pX, platoon unblocked												
vC, conflicting volume	378	282	86	290	285	82	91			85		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	378	282	86	290	285	82	91			85		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	92	97	100	99	98	90	100			96		
cM capacity (veh/h)	500	603	973	626	601	978	1504			1512		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	60	116	0	85	147
Volume Left	39	9	0	0	56
Volume Right	0	97	0	6	11
cSH	532	891	1700	1700	1512
Volume to Capacity	0.11	0.13	0.00	0.05	0.04
Queue Length 95th (ft)	9	11	0	0	3
Control Delay (s)	12.6	9.6	0.0	0.0	3.0
Lane LOS	B	A			A
Approach Delay (s)	12.6	9.6	0.0		3.0
Approach LOS	B	A			

Intersection Summary				
Average Delay	5.7			
Intersection Capacity Utilization	31.2%	ICU Level of Service	A	
Analysis Period (min)	15			

Appendix H: Queue Summaries

Intersection: 14: Court Street & College Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 100: Court Street & US 17 BUS (Marine Blvd)

Movement	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	182	184	53	94	72	31	91	48
Average Queue (ft)	82	66	30	40	21	3	27	12
95th Queue (ft)	172	152	54	86	61	18	69	35
Link Distance (ft)	1034	1034		1061	1061	1061	953	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100					170
Storage Blk Time (%)				0				
Queuing Penalty (veh)				0				

Intersection: 200: Court Street & New Bridge

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	79	32
Average Queue (ft)	44	3
95th Queue (ft)	67	18
Link Distance (ft)	487	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Intersection: 300: Court Street & Old Bridge Street

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LTR
Maximum Queue (ft)	93	31	28	20	48
Average Queue (ft)	48	17	21	8	29
95th Queue (ft)	78	42	41	24	43
Link Distance (ft)	365	365	367		119
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 400: Railroad Street & New Bridge

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	54	55	31	53
Average Queue (ft)	12	7	9	15
95th Queue (ft)	40	31	32	45
Link Distance (ft)	487	1421	262	1070
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 500: Railroad Street & Old Bridge Street

Movement	EB	EB	NB
Directions Served	L	R	L
Maximum Queue (ft)	42	53	31
Average Queue (ft)	16	24	3
95th Queue (ft)	34	46	18
Link Distance (ft)	367		117
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		130	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 600: Railroad Street & College Street

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	25	49	18
Average Queue (ft)	13	21	1
95th Queue (ft)	33	42	6
Link Distance (ft)		446	117
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Intersection: 14: Court Street & College Street

Movement								
Directions Served								
Maximum Queue (ft)								
Average Queue (ft)								
95th Queue (ft)								
Link Distance (ft)								
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 100: Court Street & US 17 BUS (Marine Blvd)

Movement	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	204	208	59	109	56	31	63	70
Average Queue (ft)	81	59	32	39	20	4	23	11
95th Queue (ft)	177	155	55	89	51	20	55	37
Link Distance (ft)	1040	1040		1068	1068	1068	954	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100					170
Storage Blk Time (%)				0				
Queuing Penalty (veh)				0				

Intersection: 200: Court Street & New Bridge

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	79	56	54
Average Queue (ft)	45	31	28
95th Queue (ft)	69	43	45
Link Distance (ft)	487	118	954
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 300: Court Street & Old Bridge Street

Movement	EB	EB	NB	SB
Directions Served	L	R	LTR	LTR
Maximum Queue (ft)	76	56	29	54
Average Queue (ft)	36	36	20	36
95th Queue (ft)	59	55	41	53
Link Distance (ft)	365	365		118
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 400: Railroad Street & New Bridge

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	TR	L	TR
Maximum Queue (ft)	92	40	108	59	51	36	91
Average Queue (ft)	40	10	40	8	10	12	40
95th Queue (ft)	81	25	89	27	33	32	85
Link Distance (ft)	487		1413	256	256		1062
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		115				150	
Storage Blk Time (%)			0				
Queuing Penalty (veh)			0				

Intersection: 500: Railroad Street & Old Bridge Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 600: Railroad Street & College Street

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (ft)	53	73
Average Queue (ft)	27	22
95th Queue (ft)	44	46
Link Distance (ft)		446
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Intersection: 14: Court Street & College Street

Movement								
Directions Served								
Maximum Queue (ft)								
Average Queue (ft)								
95th Queue (ft)								
Link Distance (ft)								
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 100: Court Street & US 17 BUS (Marine Blvd)

Movement	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	204	208	59	109	56	31	63	70
Average Queue (ft)	81	59	32	38	20	4	24	11
95th Queue (ft)	177	155	55	89	51	20	56	37
Link Distance (ft)	1040	1040		1068	1068	1068	954	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100					170
Storage Blk Time (%)				0				
Queuing Penalty (veh)				0				

Intersection: 200: Court Street & New Bridge

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	92	27
Average Queue (ft)	47	1
95th Queue (ft)	74	9
Link Distance (ft)	487	954
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 300: Court Street & Old Bridge Street

Movement	EB	EB	NB	SB
Directions Served	L	R	LTR	LTR
Maximum Queue (ft)	97	56	28	38
Average Queue (ft)	40	36	11	1
95th Queue (ft)	75	55	33	12
Link Distance (ft)	365	365		118
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 400: Railroad Street & New Bridge

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	TR	L	TR
Maximum Queue (ft)	110	42	108	59	51	36	91
Average Queue (ft)	40	13	40	8	10	12	39
95th Queue (ft)	80	32	87	27	33	30	83
Link Distance (ft)	487		1413	256	256		1062
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		115				150	
Storage Blk Time (%)			0				
Queuing Penalty (veh)			0				

Intersection: 500: Railroad Street & Old Bridge Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 600: Railroad Street & College Street

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (ft)	53	73
Average Queue (ft)	27	22
95th Queue (ft)	44	46
Link Distance (ft)		446
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Intersection: 14: Court Street & College Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 100: Court Street & US 17 BUS (Marine Blvd)

Movement	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	180	166	94	113	53	42	68	54
Average Queue (ft)	83	53	35	48	16	5	25	10
95th Queue (ft)	167	138	73	107	48	25	56	35
Link Distance (ft)	1040	1040		1068	1068	1068	948	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100					170
Storage Blk Time (%)			0	1				
Queuing Penalty (veh)			1	0				

Intersection: 200: Court Street & New Bridge

Movement	WB
Directions Served	R
Maximum Queue (ft)	54
Average Queue (ft)	26
95th Queue (ft)	51
Link Distance (ft)	488
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 300: Court Street & Old Bridge Street

Movement	WB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	75	20
Average Queue (ft)	7	5
95th Queue (ft)	35	18
Link Distance (ft)	380	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 400: Railroad Street & New Bridge

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	TR	L	TR
Maximum Queue (ft)	70	79	71	38	191	80	92
Average Queue (ft)	26	32	23	8	71	22	44
95th Queue (ft)	62	62	56	25	138	53	86
Link Distance (ft)	488		1413	258	258		1062
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		115				150	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 500: Railroad Street & Old Bridge Street

Movement	EB	EB	NB	SB
Directions Served	L	R	L	TR
Maximum Queue (ft)	71	62	31	22
Average Queue (ft)	44	22	7	1
95th Queue (ft)	73	47	28	10
Link Distance (ft)	380		117	258
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		130		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 600: Railroad Street & College Street

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (ft)	49	70
Average Queue (ft)	13	27
95th Queue (ft)	36	47
Link Distance (ft)		446
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 1

Intersection: 14: Court Street & College Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 100: Court Street & US 17 BUS (Marine Blvd)

Movement	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	221	228	84	138	116	98	110	88
Average Queue (ft)	121	91	26	81	56	32	45	25
95th Queue (ft)	205	181	64	128	105	71	93	62
Link Distance (ft)	1034	1034		1061	1061	1061	953	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100					170
Storage Blk Time (%)			0	2				
Queuing Penalty (veh)			2	1				

Intersection: 200: Court Street & New Bridge

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	79	29
Average Queue (ft)	41	3
95th Queue (ft)	66	17
Link Distance (ft)	487	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 300: Court Street & Old Bridge Street

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LTR
Maximum Queue (ft)	79	31	50	46	96
Average Queue (ft)	44	22	17	13	32
95th Queue (ft)	65	44	42	32	57
Link Distance (ft)	365	365	367		119
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 400: Railroad Street & New Bridge

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	55	31	29	31
Average Queue (ft)	13	8	3	6
95th Queue (ft)	42	29	17	26
Link Distance (ft)	487	1421	262	1070
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 500: Railroad Street & Old Bridge Street

Movement	EB	EB	NB
Directions Served	L	R	L
Maximum Queue (ft)	23	38	31
Average Queue (ft)	12	15	6
95th Queue (ft)	30	31	25
Link Distance (ft)	367		117
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		130	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 600: Railroad Street & College Street

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	51	68	20
Average Queue (ft)	22	30	1
95th Queue (ft)	42	55	10
Link Distance (ft)		446	117
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 3

Intersection: 14: Court Street & College Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 100: Court Street & US 17 BUS (Marine Blvd)

Movement	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	322	310	53	179	113	53	130	89
Average Queue (ft)	109	89	26	74	43	17	50	26
95th Queue (ft)	218	195	53	137	97	47	100	68
Link Distance (ft)	1040	1040		1068	1068	1068	954	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100					170
Storage Blk Time (%)				2				
Queuing Penalty (veh)				1				

Intersection: 200: Court Street & New Bridge

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	129	68	31
Average Queue (ft)	55	34	25
95th Queue (ft)	90	48	44
Link Distance (ft)	487	118	954
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 300: Court Street & Old Bridge Street

Movement	EB	EB	NB	SB
Directions Served	L	R	LTR	LTR
Maximum Queue (ft)	68	56	72	75
Average Queue (ft)	40	32	34	33
95th Queue (ft)	59	52	59	56
Link Distance (ft)	365	365		118
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 400: Railroad Street & New Bridge

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	TR	L	TR
Maximum Queue (ft)	90	16	114	36	106	37	90
Average Queue (ft)	44	3	46	4	30	11	22
95th Queue (ft)	81	13	93	17	69	32	59
Link Distance (ft)	487		1413	256	256		1062
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		115				150	
Storage Blk Time (%)			0				
Queuing Penalty (veh)			0				

Intersection: 500: Railroad Street & Old Bridge Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 600: Railroad Street & College Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	LTR
Maximum Queue (ft)	97	134	15	19
Average Queue (ft)	32	34	0	1
95th Queue (ft)	65	70	5	6
Link Distance (ft)		446	284	117
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 1

Intersection: 14: Court Street & College Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 100: Court Street & US 17 BUS (Marine Blvd)

Movement	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	217	185	74	180	110	51	125	89
Average Queue (ft)	103	85	27	76	47	16	54	29
95th Queue (ft)	194	167	56	137	92	42	102	66
Link Distance (ft)	1040	1040		1068	1068	1068	954	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100					170
Storage Blk Time (%)				2				
Queuing Penalty (veh)				1				

Intersection: 200: Court Street & New Bridge

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	82	31
Average Queue (ft)	53	8
95th Queue (ft)	77	30
Link Distance (ft)	487	954
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 300: Court Street & Old Bridge Street

Movement	EB	EB	NB
Directions Served	L	R	LTR
Maximum Queue (ft)	88	55	79
Average Queue (ft)	43	31	16
95th Queue (ft)	69	47	49
Link Distance (ft)	365	365	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 400: Railroad Street & New Bridge

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	TR	L	TR
Maximum Queue (ft)	148	16	114	38	93	37	67
Average Queue (ft)	51	4	44	5	27	7	14
95th Queue (ft)	93	15	84	21	64	24	41
Link Distance (ft)	487		1413	256	256		1062
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		115				150	
Storage Blk Time (%)			0				
Queuing Penalty (veh)			0				

Intersection: 500: Railroad Street & Old Bridge Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 600: Railroad Street & College Street

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (ft)	97	50
Average Queue (ft)	34	29
95th Queue (ft)	66	46
Link Distance (ft)		446
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 1

Intersection: 14: Court Street & College Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 100: Court Street & US 17 BUS (Marine Blvd)

Movement	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	332	350	70	136	138	54	108	70
Average Queue (ft)	145	103	26	75	47	17	39	23
95th Queue (ft)	252	235	54	130	90	50	76	60
Link Distance (ft)	1040	1040		1068	1068	1068	948	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100					170
Storage Blk Time (%)				2				
Queuing Penalty (veh)				1				

Intersection: 200: Court Street & New Bridge

Movement	WB
Directions Served	R
Maximum Queue (ft)	66
Average Queue (ft)	27
95th Queue (ft)	51
Link Distance (ft)	488
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 300: Court Street & Old Bridge Street

Movement	WB	NB
Directions Served	LT	LTR
Maximum Queue (ft)	54	20
Average Queue (ft)	6	9
95th Queue (ft)	31	26
Link Distance (ft)	380	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 400: Railroad Street & New Bridge

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	TR	L	TR
Maximum Queue (ft)	70	110	52	36	104	34	46
Average Queue (ft)	28	33	19	4	59	6	10
95th Queue (ft)	62	81	47	18	104	20	29
Link Distance (ft)	488		1413	258	258		1062
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		115				150	
Storage Blk Time (%)		0					
Queuing Penalty (veh)		0					

Intersection: 500: Railroad Street & Old Bridge Street

Movement	EB	EB	NB
Directions Served	L	R	L
Maximum Queue (ft)	70	64	55
Average Queue (ft)	30	20	15
95th Queue (ft)	56	45	44
Link Distance (ft)	380		117
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		130	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 600: Railroad Street & College Street

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (ft)	54	48
Average Queue (ft)	27	25
95th Queue (ft)	49	41
Link Distance (ft)		446
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 1

Appendix I: Crash History

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Fiche Report

County	County Code	Division	Municipality	Municipality Code	Begin Date	End Date	Years	Y-Line Feet
ONSLOW	67	3	JACKSONVILLE	274	11/1/2012	10/31/2015	3	150

Road Name	Road Code
	40001402
	50021206
OLD BRIDGE	50021982

Muni. Code	On Road	Miles	Dir From	From Road	Toward Road	Milepost Road	MP	MA	Crash ID	Date	T	C	L	S
274	*LCL 118 OLD BRIDGE ST	0.019	S	OLD BRIDGE	COLLEGE			999.999	104463916	2015-08-11	31	1	1	O
274	ANN	0.004	SW	OLD BRIDGE	COLLEGE			999.999	104311548	2015-01-22	31	1	1	O
274	COURT	0.008	SE	OLD BRIDGE	COLLEGE			999.999	103880828	2013-09-19	18	1	1	O
274	OLD BRIDGE	0.002	N	*LCL LENORD ST	ANN			999.999	104016976	2014-02-28	14	1	1	O
274	PVA 4100 NEW BRIDGE S	0.022	S	NEW BRIDGE	COLLEGE			999.999	103780783	2013-04-23	31	1	1	O
274	PVA 618 COURT ST	0.01	S	OLD BRIDGE	DEAD END			999.999	103744814	2013-04-16	20	1	1	
274	PVA 719 NEW BRIDGE ST	0.008	N	NEW BRIDGE	NC 24			999.999	103882466	2013-09-30	31	1	1	O
274	PVA ANNE ST	0.008	SW	OLD BRIDGE	COLLEGE			999.999	104227102	2014-11-18	20	1	1	
274	RAILROAD	0.019	S	NEW BRIDGE	WARD			999.999	104496977	2015-09-11	30	1	1	O
274	RAILROAD	0.023	S	OLD BRIDGE	COLLEGE			999.999	103780792	2013-04-25	24	1	1	O
274	BAYSHORE	0		NEW BRIDGE	JOHNSON	BAYSHORE		999.999	103829570	2013-07-15	24	1	1	C
274	JOHNSON	0.002	N	NEW BRIDGE	GLENDALE	NC 24BUS		3.328	104444505	2015-07-23	31	1	1	O
274	NC 24	0.011	E	NEW BRIDGE	HARGETT	NC 24BUS		3.341	104542516	2015-10-24	28	1	4	O
274	NEW BRIDGE	0.06	W	RAILROAD	COURT	NEW BRIDGE		0.09	103994760	2014-02-14	30	1	1	O
274	PVA NEW BRIDGE ST	0.015	N	WARLICK	FLETCHER	NEW BRIDGE		0.345	104045158	2014-04-10	20	1	1	
274	NEW BRIDGE	0.028	E	WARLICK	BAYSHORE	NEW BRIDGE		0.388	103881875	2013-09-30	31	1	1	O
274	NEW BRIDGE	0.038	W	HUERTH	BRODEAUX	NEW BRIDGE		0.452	104223276	2014-11-17	28	2	1	O
274	NEW BRIDGE	0.1	E	WARLICK	BAYSHORE	NEW BRIDGE		0.46	104211943	2014-11-03	28	1	1	O
274	NEW BRIDGE	0.026	W	HUERTH	BORDEAUX	NEW BRIDGE		0.464	104239866	2014-11-26	23	1	4	O
274	NEW BRIDGE	0.08		HUERTH	*LCL BAYSHORE BLVD N	NEW BRIDGE		0.49	Y	104151732	2014-08-04	1	1	O
274	NEW BRIDGE	0.004	SE	HUERTH	*LCL N BAYSHORE BVD	NEW BRIDGE		0.494	103944792	2013-11-22	30	1	1	C
274	NEW BRIDGE	0.01	E	HUERTH	BAYSHORE	NEW BRIDGE		0.5	103706023	2013-02-01	28	1	1	O
274	NEW BRIDGE	0.057	N	BAYSHORE	CHANEY	NEW BRIDGE		0.513	104266628	2014-12-18	28	1	1	O
274	NEW BRIDGE	0.057	W	BAYSHORE	HUERTH	NEW BRIDGE		0.513	104044540	2014-03-13	20	1	1	O
274	NEW BRIDGE	0.055	W	BAYSHORE	HUERTH	NEW BRIDGE		0.515	103816825	2013-07-05	31	1	1	O
274	NEW BRIDGE	0.053	N	BAYSHORE	NC 24	NEW BRIDGE		0.517	103880859	2013-09-26	20	1	1	
274	NEW BRIDGE	0.047	W	BAYSHORE	HUERTH	NEW BRIDGE		0.523	104493266	2015-09-09	30	1	1	O
274	NEW BRIDGE	0		BAYSHORE		NEW BRIDGE		0.57	103710675	2013-03-08	30	1	1	C
274	NEW BRIDGE	0.019	S	BAYSHORE	JOHNSON	NEW BRIDGE		0.589	104311816	2015-02-12	21	1	1	O
274	NEW BRIDGE	0.019		NC 24	BAYSHORE	NEW BRIDGE		0.741	Y	103880831	2013-09-21	2	4	O
274	NEW BRIDGE	1		BAYSHORE	NC 24	NEW BRIDGE		0.76	Y	104028739	2014-03-18	2	1	O
274	NEW BRIDGE	0		JOHNSON	*LCL N BAYSHORE DR	NEW BRIDGE		0.76	104523956	2015-10-02	30	2	1	O
274	NEW BRIDGE	0		JOHNSON	NC 24	NEW BRIDGE		0.76	103970530	2013-12-13	21	1	1	O
274	NEW BRIDGE	0.001	W	NEW BRIDGE	STRATFORD	NEW BRIDGE		999.999	104350828	2015-03-31	1	1	1	O
274	NEW BRIDGE	0.057	W	STRATFORD	BAYSHORE	NEW BRIDGE		999.999	104470295	2015-08-14	31	1	1	O
274	PVA NEW BRIDGE ST	0.015	S	NEW BRIDGE	JOHNSON	NEW BRIDGE		999.999	103986225	2014-01-07	31	1	4	O
274	PVA NEW BRIDGE ST	0.023	W	NEW BRIDGE	WARN	NEW BRIDGE		999.999	104076326	2014-04-02	31	1	2	O
274	PVA NEW BRIDGE ST	0.043	N	NEW BRIDGE	BAYSHORE	NEW BRIDGE		999.999	104141817	2014-07-09	29	1	1	O
274	OLD BRIDGE	0	W	JOHNSON	WARLICK	OLD BRIDGE		999.999	103726819	2013-03-29	31	1	1	O
274	PVA OLD BRIDGE ST	0.02	S	OLD BRIDGE	MILL	OLD BRIDGE		999.999	104278845	2014-12-30	31	1	1	
274	PVA OLD BRIDGE ST	0.041	S	OLD BRIDGE	DEAD END	OLD BRIDGE		999.999	104166282	2014-08-28	31	1	1	O
274	OLD BRIDGE	0.002	E	US 17	LEONARD	SR 1402		0.002	104226185	2014-11-14	21	1	1	C
274	OLD BRIDGE	0.036	E	MARINE	ANN	SR 1402		0.036	104535371	2015-10-17	30	1	1	O
274	OLD BRIDGE	0.057	E	US 17	ANN	SR 1402		0.057	104216682	2014-11-04	27	1	1	O

274	OLD BRIDGE	0.33	SE	US 17	ANN	SR 1402	0.33	103920451	2013-11-01	17	2	4	O
274	OLD BRIDGE	0.085	W	COURT	ANN	SR 1402	0.399	104266627	2014-12-19	30	1	1	O
274	OLD BRIDGE	0.023	E	ANN	COURT	SR 1402	0.412	104463875	2015-08-07	28	2	1	O
274	OLD BRIDGE	0.057		COURT	ANN	SR 1402	0.427	Y	104433457	2015-07-02	1	1	O
274	OLD BRIDGE	0		RAILROAD		SR 1402	0.623	103710782	2013-03-02	24	1	1	C
274	US 17	0.025	S	OLD BRIDGE	RIVERVIEW	US 17BUS	1.815	103655206	2012-12-18	17	2	4	A
274	US 17	0.022	W	OLD BRIDGE	RIVERVIEW	US 17BUS	1.818	104526544	2015-10-12	25	2	1	O
274	US 17	0.017	S	OLD BRIDGE	SYBIL	US 17BUS	1.823	104205563	2014-10-21	28	1	1	O
274	US 17	0.014	SW	OLD BRIDGE	RIVERVIEW	US 17BUS	1.826	103606025	2012-11-01	21	1	1	O
274	US 17	0.009		OLD BRIDGE	SYBIL	US 17BUS	1.831	Y	104433738	2015-07-09	1	1	O
274	US 17	0.008	W	OLD BRIDGE	SYBIL	US 17BUS	1.832	104392267	2015-05-17	21	1	1	C
274	US 17	0.002	S	OLD BRIDGE	OLD BRIDGE	US 17BUS	1.838	104169560	2014-09-17	21	1	1	O
274	US 17	0		OLD BRIDGE	SYBIL	US 17BUS	1.84	104350830	2015-03-31	21	1	1	B
274	US 17	0		OLD BRIDGE	SYBIL	US 17BUS	1.84	104094867	2014-05-18	21	1	1	C
274	US 17	0		OLD BRIDGE	SYBIL	US 17BUS	1.84	104286618	2015-01-28	28	1	1	O
274	US 17	0		OLD BRIDGE	*LCL 5 SYBIL RD	US 17BUS	1.84	104022295	2014-03-08	19	1	4	O
274	US 17	0		OLD BRIDGE	RIVERVIEW	US 17BUS	1.84	103840387	2013-08-06	21	1	1	O
274	US 17	0		OLD BRIDGE		US 17BUS	1.84	103629783	2012-11-27	30	1	1	O
274	US 17	0.005	N	OLD BRIDGE	GEORGE TOWN	US 17BUS	1.845	103710777	2013-03-02	21	1	1	B
274	US 17	0.006	N	OLD BRIDGE	RIVERVIEW	US 17BUS	1.846	103655021	2012-12-12	21	2	4	O
274	US 17	0.019	N	OLD BRIDGE	TALLMAN	US 17BUS	1.859	104490760	2015-08-28	21	1	1	O

Legend:

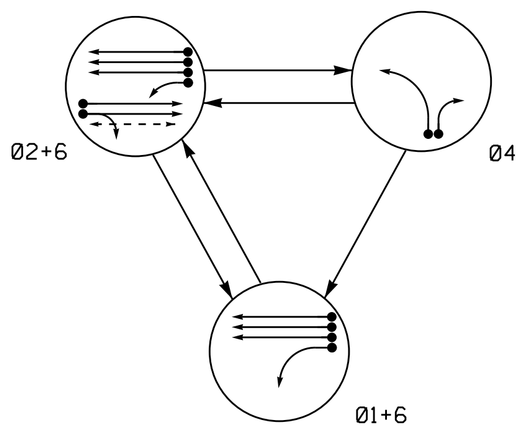
Muni. Code - Municipality Code
Dir - Direction
MP - Milepost
MA - Milepost Assumption

T - Accident Type
C - Road Condition
F - Roadway Feature
L - Light Condition
S - Accident Severity

Appendix J: Supporting Documentation

PROJECT REFERENCE NO.	SHEET NO.
36249.3135	Sig. 1

PHASING DIAGRAM



EV PREEMPT PHASES

(Medium Priority)

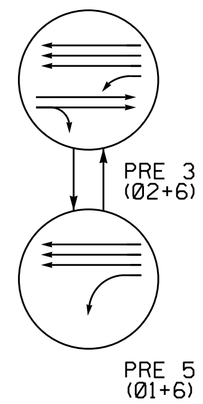
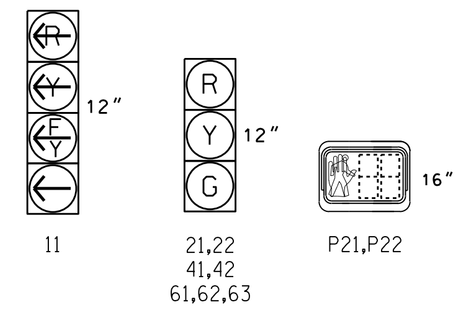


TABLE OF OPERATION

SIGNAL FACE	PHASE 01+6	PHASE 02+6	PHASE 04	PHASE EVP 3	PHASE EVP 5	PHASE FLASH
11	←	F Y	R	F Y	←	Y
21,22,23	R	G	R	G	R	Y
41,42	R	R	G	R	R	R
61,62,63	G	G	R	G	G	Y
P21,P22	DW	W	DW	DW	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	15	-	-
					6	Y	Y	Y	-	3	-	-
2A	6X6	300	4	-	2	Y	Y	-	-	-	-	-
2B	6X6	300	4	-	2	Y	Y	-	-	-	-	-
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	-	-	-
4B	6X40	0	2-4-2	-	4	Y	Y	-	-	-	-	-
6A	6X6	300	5	-	6	Y	Y	-	-	-	-	-
6B	6X6	300	5	-	6	Y	Y	-	-	-	-	-
6C	6X6	300	5	-	6	Y	Y	-	-	-	-	-
S13	6X6	+175	3	-	-	-	-	-	-	-	Y	-
S14	6X6	+175	3	-	-	-	-	-	-	-	Y	-
S15	6X6	+175	3	-	-	-	-	-	-	-	Y	-

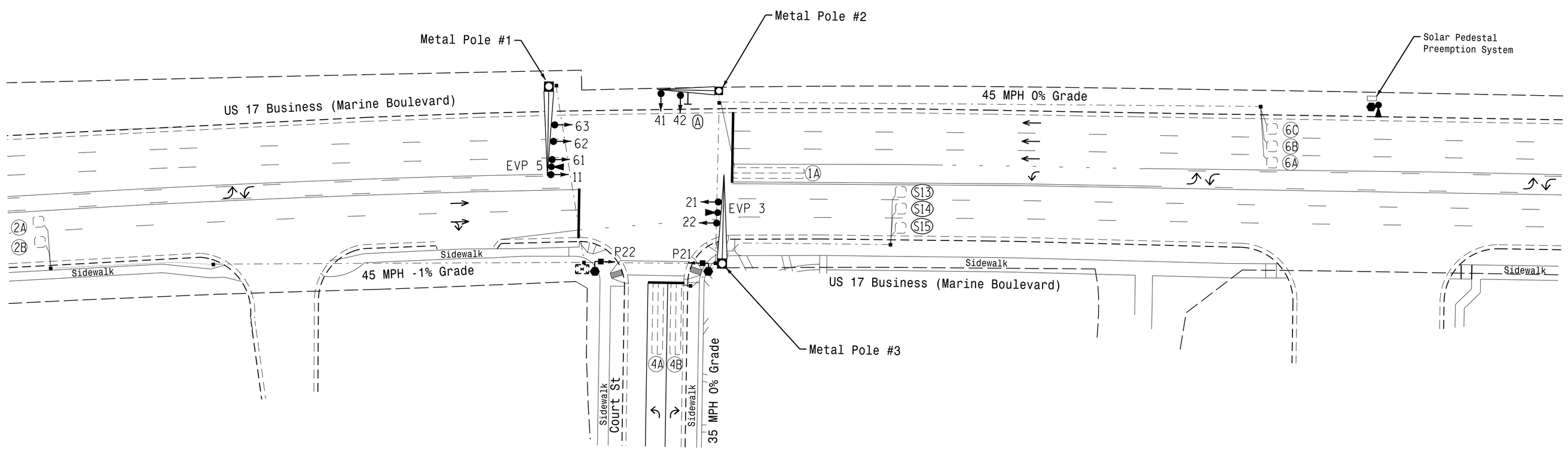
3 Phase
Fully Actuated w/EV Preempt
Jacksonville Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Set all detector units to presence mode.
5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
9. Signal system data: Controller Asset #0114.

PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Optical Detector Unit	
	Metal Pole with Mastarm	
	Type II Signal Pedestal	
N/A	Wheelchair Ramp	
A	"NO TURN ON RED" Sign (R10-11a)	A

OASIS 2070 TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 4	PHASE 6
Min Green 1 *	7	12	7	12
Extension 1 *	2.0	6.0	2.0	6.0
Max Green 1 *	15	90	20	90
Yellow Clearance	3.0	4.6	3.0	4.6
Red Clearance	2.6	1.1	2.4	1.1
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	4	-	-
Don't Walk 1	-	7	-	-
Seconds Per Actuation *	-	1.5	-	1.5
Max Variable Initial *	-	34	-	34
Time Before Reduction *	-	15	-	15
Time To Reduce *	-	45	-	45
Minimum Gap	-	3.0	-	3.0
Recall Mode	-	MIN RECALL	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	YELLOW
Dual Entry	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

OASIS 2070 EV PREEMPT

FUNCTION	PRE 3	PRE 5
Interval 1 – Dwell Green	255	255
Interval 1 – Dwell Yellow	0.0*	0.0*
Interval 1 – Dwell Red	0.0*	0.0*
Interval 5 – Exit Green	1	1
Interval 5 – Yellow	0.0	0.0
Interval 5 – Red	0.0	0.0
Exit Phase(s)	2,6	2,6
Priority	Medium	Medium
Delay Time	0.0	0.0
Min Green Before Pre	1	1
Ped Clear Before Pre	0	0
Yellow Clear Before Pre	0.0*	0.0*
Red Clear Before Pre	0.0*	0.0*
Dwell Min Time	12	12
Enable Backup Protection	N	N
Ped Clear Through Yellow	N	N
Omit Overlaps	-	-
Preempt Extend**	2	2

* Time defaults to time used for phase during normal operation
** Program Timing on Optical Detection Unit

Plan of Record

PREPARED BY: K.G. Peedin, Jr DATE: January 2015
REVIEWED BY: P.L. Alexander DATE: January 2015
SIGNATURE: DocuSigned by: P.L. Alexander B4756E00CE4E46D... DATE: 2/23/2015
COMMENTS
Pavement marking changes

This plan of record reflects existing field conditions as submitted by field personnel. This plan may have been modified from its original state.

Plan of Record

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 40
1"=40'

US 17 Business
(Marine Boulevard)
at
Court Street

Division 3 Onslow County Jacksonville

PLAN DATE: June 2014	REVIEWED BY: N.M. Rodevick
PREPARED BY: TRT	REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL

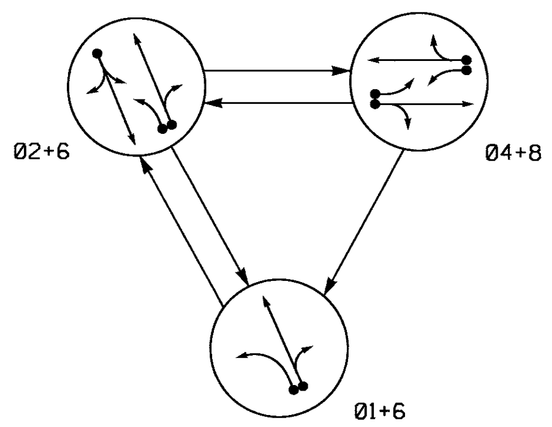
Not a certified document. This document originally issued and sealed by Natasha M.Rodevick,PE-31464 on 6-16-2014 This document shall not be considered a certified document.

SIGNATURE DATE
SIG. INVENTORY NO. 03-0114

23-FEB-2015 13:54
S:*TIMS\SUMITS\Signals\Signal Design Section\Eastern Region\Div-03\PDR\03-0114\030114_sig_PDR_2015mmdd.dgn
kgpeedin

PROJECT REFERENCE NO.	SHEET NO.
U-5168	Sig.107

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

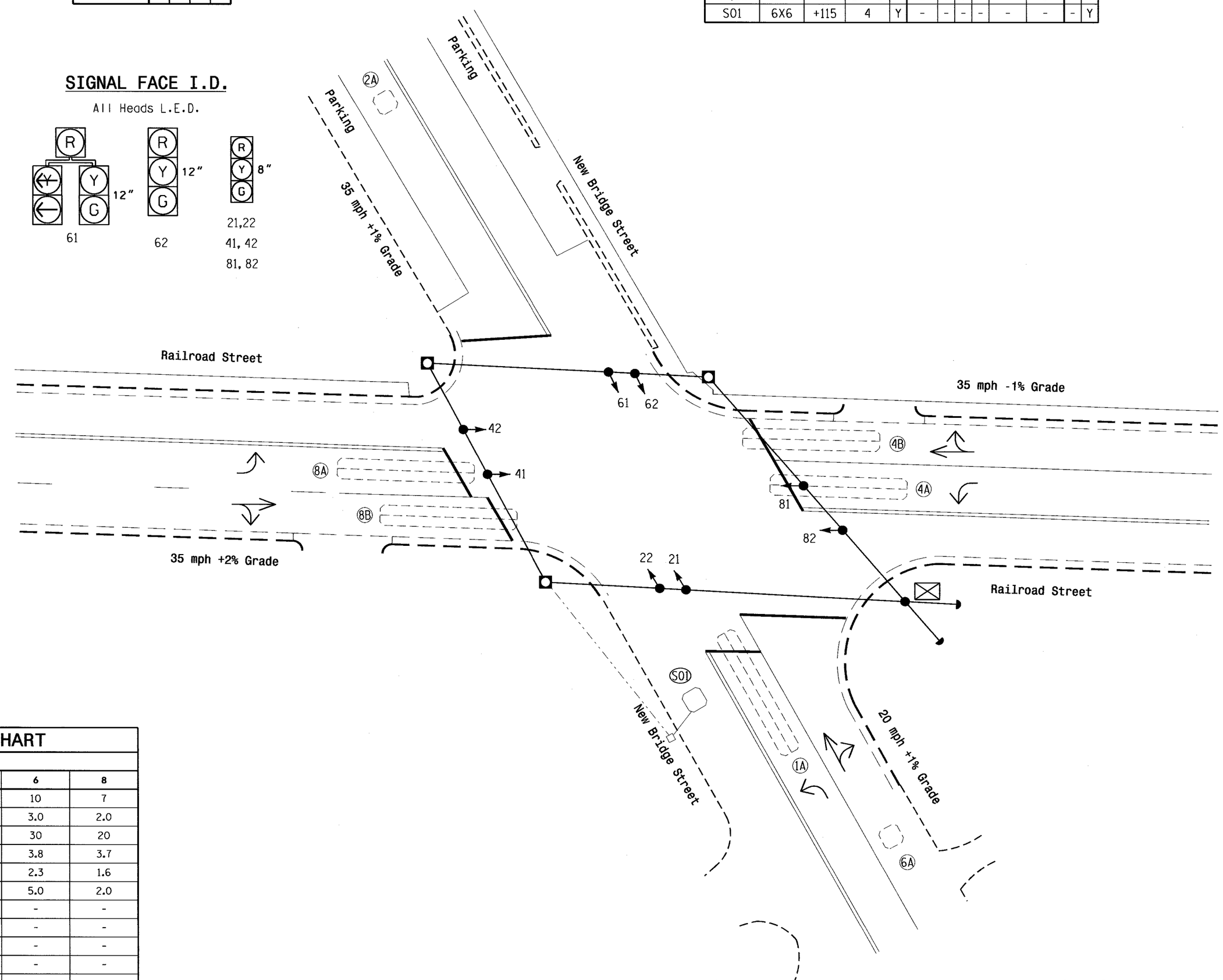
SIGNAL FACE	PHASE 01+6	PHASE 02+6	PHASE 04+8	FLASH
21, 22	R	G	R	Y
41, 42	R	R	G	R
61	G	G	R	Y
62	G	G	R	Y
81, 82	R	R	G	R

OASIS 2070L LOOP & DETECTOR INSTALLATION

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	+5	2-4-2	-	1	Y	Y	-	-	15	-	Y
					6	Y	Y	-	-	-	-	Y
2A	6X6	70	4	-	2	Y	Y	-	-	-	-	Y
4A,4B	6X40	+5	2-4-2	-	4	Y	Y	-	-	3	-	Y
6A	6X6	70	4	-	6	Y	Y	-	-	-	-	Y
8A,8B	6X40	+5	2-4-2	-	8	Y	Y	-	-	3	-	Y
S01	6X6	+115	4	Y	-	-	-	-	-	-	-	Y

SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070L TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 4	PHASE 6	PHASE 8
Min Green 1 *	7	10	7	10	7
Extension 1 *	2.0	3.0	2.0	3.0	2.0
Max Green 1 *	20	30	20	30	20
Yellow Clearance	3.0	3.8	3.9	3.8	3.7
Red Clearance	3.1	2.3	1.5	2.3	1.6
Red Revert	2.0	2.0	2.0	5.0	2.0
Walk 1 *	-	-	-	-	-
Don't Walk 1	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	YELLOW	-
Dual Entry	-	-	ON	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

3 Phase
Fully Actuated
Jacksonville City Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated July 2006 and "Standard Specifications for Roads and Structures" dated July 2006.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Enable Backup Protect for phase 6 to allow the controller to clear from phase 2+6 to phase 1+6 by progressing through an all red display.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Pavement markings are existing.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Signal heads 41, 81, and 82 have backplates.
9. Controller Asset #0665.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Metal Strain Pole	

Signal Upgrade

Prepared in the Offices of:
Transportation Mobility and Safety Division
Traffic Engineering Systems Section
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 20
1"=20'

New Bridge Street At Railroad Street

Division 3 Onslow County Jacksonville

PLAN DATE: April 2011 REVIEWED BY:
PREPARED BY: I. O. Umozurike REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 29904 ENGINEER JASON P. GALLOWAY
SIGNATURE 5/19/11 DATE
SIG. INVENTORY NO. 03-0665

19-MAY-2011 12:26
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bgilbert

County Population Growth: 2010-2020

Open as Excel File

County	July 2020 Projection	April 2010 Estimate Base	Growth Amount	Growth Percent	Projected Births, A2010 - J2020	Projected Deaths, A2010 - J2020	Natural Growth, A2010 - J2020	Net Migration Amount	Net Migration Percent
Alamance	167,370	151,241	16,129	10.7	18,277	16,552	1,725	14,404	9.5
Alexander	40,254	37,193	3,061	8.2	3,798	4,054	-256	3,317	8.9
Alleghany	11,460	11,155	305	2.7	987	1,449	-462	767	6.9
Anson	26,465	26,948	-483	-1.8	2,595	3,037	-442	-41	-0.2
Ashe	27,623	27,281	342	1.3	2,527	3,578	-1,051	1,393	5.1
Avery	17,903	17,795	108	0.6	1,532	2,103	-571	679	3.8
Beaufort	47,718	47,773	-55	-0.1	4,968	6,221	-1,253	1,198	2.5
Bertie	19,058	21,293	-2,235	-10.5	1,979	2,680	-701	-1,534	-7.2
Bladen	35,355	35,190	165	0.5	3,708	4,271	-563	728	2.1
Brunswick	137,032	107,431	29,601	27.6	11,053	14,217	-3,164	32,765	30.5
Buncombe	269,687	238,307	31,380	13.2	26,764	26,712	52	31,328	13.1
Burke	89,196	90,914	-1,718	-1.9	8,780	10,644	-1,864	146	0.2
Cabarrus	217,017	178,182	38,835	21.8	25,330	16,053	9,277	29,558	16.6
Caldwell	82,226	83,029	-803	-1.0	8,186	9,709	-1,523	720	0.9
Camden	10,646	9,980	666	6.7	1,012	832	180	486	4.9
Carteret	70,413	66,469	3,944	5.9	6,300	8,471	-2,171	6,115	9.2
Caswell	23,632	23,719	-87	-0.4	2,173	2,850	-677	590	2.5
Catawba	157,932	154,356	3,576	2.3	17,953	16,856	1,097	2,479	1.6
Chatham	75,494	63,494	12,000	18.9	6,683	7,357	-674	12,674	20.0
Cherokee	27,650	27,444	206	0.8	2,409	3,862	-1,453	1,659	6.0
Chowan	14,668	14,793	-125	-0.8	1,580	1,987	-407	282	1.9
Clay	10,965	10,587	378	3.6	902	1,514	-612	990	9.4
Cleveland	99,359	98,083	1,276	1.3	10,884	11,931	-1,047	2,323	2.4
Columbus	57,579	58,098	-519	-0.9	6,380	7,399	-1,019	500	0.9
Craven	109,277	103,505	5,772	5.6	15,852	10,997	4,855	917	0.9
Cumberland	340,413	319,431	20,982	6.6	55,952	26,157	29,795	-8,813	-2.8
Currituck	28,334	23,547	4,787	20.3	2,681	2,409	272	4,515	19.2
Dare	36,217	33,920	2,297	6.8	3,847	3,336	511	1,786	5.3

County	July 2020 Projection	April 2010 Estimate Base	Growth Amount	Growth Percent	Projected Births, A2010 - J2020	Projected Deaths, A2010 - J2020	Natural Growth, A2010 - J2020	Net Migration Amount	Net Migration Percent
Davidson	167,286	162,878	4,408	2.7	18,184	17,701	483	3,925	2.4
Davie	41,469	41,222	247	0.6	4,185	4,399	-214	461	1.1
Duplin	62,035	58,505	3,530	6.0	7,853	5,866	1,987	1,543	2.6
Durham	325,799	269,974	55,825	20.7	44,325	20,854	23,471	32,354	12.0
Edgecombe	54,937	56,551	-1,614	-2.9	6,384	6,627	-243	-1,371	-2.4
Forsyth	387,682	350,670	37,012	10.6	47,008	33,797	13,211	23,801	6.8
Franklin	66,881	60,594	6,287	10.4	7,003	5,816	1,187	5,100	8.4
Gaston	219,206	206,083	13,123	6.4	25,393	23,185	2,208	10,915	5.3
Gates	11,915	12,186	-271	-2.2	1,164	1,331	-167	-104	-0.9
Graham	9,226	8,861	365	4.1	980	1,152	-172	537	6.1
Granville	59,236	57,532	1,704	3.0	5,704	5,575	129	1,575	2.7
Greene	21,310	21,362	-52	-0.2	2,239	2,047	192	-244	-1.1
Guilford	534,859	488,406	46,453	9.5	61,372	44,064	17,308	29,145	6.0
Halifax	51,330	54,691	-3,361	-6.1	5,816	6,950	-1,134	-2,227	-4.1
Harnett	139,259	114,678	24,581	21.4	18,673	9,940	8,733	15,848	13.8
Haywood	61,476	59,036	2,440	4.1	5,813	7,806	-1,993	4,433	7.5
Henderson	117,942	106,742	11,200	10.5	11,245	14,723	-3,478	14,678	13.8
Hertford	24,121	24,658	-537	-2.2	2,339	2,894	-555	18	0.1
Hoke	57,919	46,952	10,967	23.4	9,224	3,304	5,920	5,047	10.7
Hyde	5,671	5,810	-139	-2.4	509	625	-116	-23	-0.4
Iredell	179,888	159,440	20,448	12.8	19,023	16,015	3,008	17,440	10.9
Jackson	42,477	40,271	2,206	5.5	3,937	3,864	73	2,133	5.3
Johnston	201,850	168,878	32,972	19.5	24,225	14,212	10,013	22,959	13.6
Jones	10,615	10,153	462	4.6	1,119	1,365	-246	708	7.0
Lee	59,242	57,866	1,376	2.4	8,207	5,802	2,405	-1,029	-1.8
Lenoir	58,533	59,495	-962	-1.6	6,905	7,618	-713	-249	-0.4
Lincoln	83,849	78,265	5,584	7.1	8,209	8,025	184	5,400	6.9
Macon	36,974	33,922	3,052	9.0	3,590	4,776	-1,186	4,238	12.5
Madison	22,467	20,774	1,693	8.1	1,909	2,511	-602	2,295	11.0
Martin	23,059	24,505	-1,446	-5.9	2,551	3,402	-851	-595	-2.4
McDowell	45,615	44,996	619	1.4	4,605	5,292	-687	1,306	2.9

County	July 2020 Projection	April 2010 Estimate Base	Growth Amount	Growth Percent	Projected Births, A2010 - J2020	Projected Deaths, A2010 - J2020	Natural Growth, A2010 - J2020	Net Migration Amount	Net Migration Percent
Mecklenburg	1,142,325	919,666	222,659	24.2	144,970	63,051	81,919	140,740	15.3
Mitchell	16,074	15,581	493	3.2	1,591	2,261	-670	1,163	7.5
Montgomery	27,946	27,798	148	0.5	3,283	3,004	279	-131	-0.5
Moore	99,491	88,247	11,244	12.7	10,406	11,847	-1,441	12,685	14.4
Nash	93,380	95,837	-2,457	-2.6	11,017	10,714	303	-2,760	-2.9
New Hanover	235,866	202,683	33,183	16.4	23,140	19,483	3,657	29,526	14.6
Northampton	20,416	22,098	-1,682	-7.6	2,004	2,915	-911	-771	-3.5
Onslow	202,230	177,772	24,458	13.8	40,988	10,614	30,374	-5,916	-3.3
Orange	149,922	133,702	16,220	12.1	12,879	8,656	4,223	11,997	9.0
Pamlico	13,293	13,144	149	1.1	1,043	1,689	-646	795	6.0
Pasquotank	40,331	40,661	-330	-0.8	4,877	4,088	789	-1,119	-2.8
Pender	63,363	52,201	11,162	21.4	6,389	5,517	872	10,290	19.7
Perquimans	13,698	13,453	245	1.8	1,375	1,689	-314	559	4.2
Person	39,588	39,464	124	0.3	4,423	4,525	-102	226	0.6
Pitt	179,778	168,148	11,630	6.9	20,755	13,200	7,555	4,075	2.4
Polk	21,336	20,510	826	4.0	1,577	3,127	-1,550	2,376	11.6
Randolph	146,606	141,752	4,854	3.4	16,518	14,930	1,588	3,266	2.3
Richmond	45,331	46,639	-1,308	-2.8	5,425	5,654	-229	-1,079	-2.3
Robeson	131,710	134,168	-2,458	-1.8	18,837	13,553	5,284	-7,742	-5.8
Rockingham	92,544	93,640	-1,096	-1.2	9,808	11,648	-1,840	744	0.8
Rowan	138,710	138,442	268	0.2	15,454	15,605	-151	419	0.3
Rutherford	67,046	67,809	-763	-1.1	7,364	8,804	-1,440	677	1.0
Sampson	65,108	63,431	1,677	2.6	8,474	6,888	1,586	91	0.1
Scotland	34,482	36,157	-1,675	-4.6	4,624	4,247	377	-2,052	-5.7
Stanly	62,494	60,585	1,909	3.2	6,684	7,094	-410	2,319	3.8
Stokes	46,786	47,401	-615	-1.3	4,452	5,469	-1,017	402	0.8
Surry	73,835	73,673	162	0.2	7,881	9,068	-1,187	1,349	1.8
Swain	15,758	13,981	1,777	12.7	2,157	1,994	163	1,614	11.5
Transylvania	35,284	33,090	2,194	6.6	3,030	4,544	-1,514	3,708	11.2
Tyrrell	4,144	4,407	-263	-6.0	425	496	-71	-192	-4.3
Union	243,620	201,307	42,313	21.0	28,023	14,400	13,623	28,690	14.3

County	July 2020 Projection	April 2010 Estimate Base	Growth Amount	Growth Percent	Projected Births, A2010 - J2020	Projected Deaths, A2010 - J2020	Natural Growth, A2010 - J2020	Net Migration Amount	Net Migration Percent
Vance	44,867	45,419	-552	-1.2	5,747	5,143	604	-1,156	-2.5
Wake	1,105,706	901,018	204,688	22.7	129,166	54,780	74,386	130,302	14.5
Warren	20,515	20,975	-460	-2.2	1,930	2,513	-583	123	0.6
Washington	12,313	13,218	-905	-6.8	1,406	1,677	-271	-634	-4.8
Watauga	55,264	51,079	4,185	8.2	3,555	3,755	-200	4,385	8.6
Wayne	128,931	122,623	6,308	5.1	16,980	12,751	4,229	2,079	1.7
Wilkes	70,586	69,340	1,246	1.8	7,110	8,226	-1,116	2,362	3.4
Wilson	84,198	81,234	2,964	3.6	9,781	9,026	755	2,209	2.7
Yadkin	36,826	38,406	-1,580	-4.1	4,143	4,387	-244	-1,336	-3.5
Yancey	17,946	17,818	128	0.7	1,836	2,371	-535	663	3.7
STATE	10,574,718	9,535,691	1,039,027	10.9	1,236,317	914,177	322,140	716,887	7.5

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Last updated 08OCT2015

County Population Growth: 2020-2030

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County	July 2030 Projection	July 2020 Projection	Growth Amount	Growth Percent	Total Births, J2020 - J2030	Total Deaths, J2020 - J2030	Natural Growth, J2020 - J2030	Net Migration Amount	Net Migration Percent
Alamance	187,290	167,370	19,920	11.9	20,417	19,941	476	19,444	11.6
Alexander	44,102	40,254	3,848	9.6	4,221	5,415	-1,194	5,042	12.5
Alleghany	12,068	11,460	608	5.3	1,212	1,676	-464	1,072	9.4
Anson	26,467	26,465	2	0.0	2,450	3,380	-930	932	3.5
Ashe	27,914	27,623	291	1.1	2,587	4,173	-1,586	1,877	6.8
Avery	17,903	17,903	0	0.0	1,585	2,429	-844	844	4.7
Beaufort	47,717	47,718	-1	-0.0	4,878	7,240	-2,362	2,361	4.9
Bertie	16,454	19,058	-2,604	-13.7	1,801	2,518	-717	-1,887	-9.9
Bladen	35,761	35,355	406	1.1	3,758	4,918	-1,160	1,566	4.4
Brunswick	167,945	137,032	30,913	22.6	12,272	22,511	-10,239	41,152	30.0
Buncombe	300,372	269,687	30,685	11.4	27,310	32,428	-5,118	35,803	13.3
Burke	89,197	89,196	1	0.0	9,114	12,011	-2,897	2,898	3.2
Cabarrus	258,226	217,017	41,209	19.0	30,611	21,358	9,253	31,956	14.7
Caldwell	82,078	82,226	-148	-0.2	8,633	11,105	-2,472	2,324	2.8
Camden	10,818	10,646	172	1.6	1,144	1,085	59	113	1.1
Carteret	72,183	70,413	1,770	2.5	6,304	10,201	-3,897	5,667	8.0
Caswell	23,632	23,632	0	0.0	2,208	3,371	-1,163	1,163	4.9
Catawba	161,432	157,932	3,500	2.2	18,560	19,613	-1,053	4,553	2.9
Chatham	86,776	75,494	11,282	14.9	7,646	10,480	-2,834	14,116	18.7
Cherokee	27,882	27,650	232	0.8	2,564	4,616	-2,052	2,284	8.3
Chowan	14,670	14,668	2	0.0	1,568	2,137	-569	571	3.9
Clay	11,215	10,965	250	2.3	964	1,816	-852	1,102	10.1
Cleveland	100,214	99,359	855	0.9	10,998	13,620	-2,622	3,477	3.5
Columbus	57,579	57,579	0	0.0	6,218	8,272	-2,054	2,054	3.6
Craven	118,536	109,277	9,259	8.5	15,839	12,343	3,496	5,763	5.3
Cumberland	358,765	340,413	18,352	5.4	47,086	31,245	15,841	2,511	0.7
Currituck	33,773	28,334	5,439	19.2	3,197	3,417	-220	5,659	20.0
Dare	36,939	36,217	722	2.0	3,782	4,481	-699	1,421	3.9

			Growth					Net Migration	
County	July 2030 Projection	July 2020 Projection	Amount	Percent	Total Births, J2020 - J2030	Total Deaths, J2020 - J2030	Natural Growth, J2020 - J2030	Amount	Percent
Davidson	172,003	167,286	4,717	2.8	19,036	20,915	-1,879	6,596	3.9
Davie	41,454	41,469	-15	-0.0	4,624	5,167	-543	528	1.3
Duplin	65,213	62,035	3,178	5.1	8,186	6,913	1,273	1,905	3.1
Durham	381,361	325,799	55,562	17.1	47,762	27,200	20,562	35,000	10.7
Edgecombe	54,026	54,937	-911	-1.7	5,910	7,233	-1,323	412	0.7
Forsyth	429,017	387,682	41,335	10.7	50,703	40,803	9,900	31,435	8.1
Franklin	72,963	66,881	6,082	9.1	7,516	7,670	-154	6,236	9.3
Gaston	233,909	219,206	14,703	6.7	25,743	26,813	-1,070	15,773	7.2
Gates	11,914	11,915	-1	-0.0	1,153	1,495	-342	341	2.9
Graham	9,878	9,226	652	7.1	1,046	1,327	-281	933	10.1
Granville	61,145	59,236	1,909	3.2	5,765	6,786	-1,021	2,930	4.9
Greene	21,309	21,310	-1	-0.0	2,279	2,377	-98	97	0.5
Guilford	562,524	534,859	27,665	5.2	61,011	52,877	8,134	19,531	3.7
Halifax	48,233	51,330	-3,097	-6.0	5,251	7,245	-1,994	-1,103	-2.1
Harnett	161,808	139,259	22,549	16.2	19,776	13,030	6,746	15,803	11.3
Haywood	64,073	61,476	2,597	4.2	6,031	9,163	-3,132	5,729	9.3
Henderson	128,380	117,942	10,438	8.9	12,396	17,758	-5,362	15,800	13.4
Hertford	23,360	24,121	-761	-3.2	2,088	3,104	-1,016	255	1.1
Hoke	69,996	57,919	12,077	20.9	9,570	4,647	4,923	7,154	12.4
Hyde	5,548	5,671	-123	-2.2	514	699	-185	62	1.1
Iredell	201,104	179,888	21,216	11.8	21,924	20,759	1,165	20,051	11.1
Jackson	44,873	42,477	2,396	5.6	3,808	4,790	-982	3,378	8.0
Johnston	242,871	201,850	41,021	20.3	29,659	20,135	9,524	31,497	15.6
Jones	10,861	10,615	246	2.3	1,110	1,515	-405	651	6.1
Lee	59,324	59,242	82	0.1	8,070	6,356	1,714	-1,632	-2.8
Lenoir	58,034	58,533	-499	-0.9	6,926	8,079	-1,153	654	1.1
Lincoln	89,931	83,849	6,082	7.3	8,902	10,407	-1,505	7,587	9.0
Macon	41,217	36,974	4,243	11.5	4,107	5,876	-1,769	6,012	16.3
Madison	23,942	22,467	1,475	6.6	1,987	3,055	-1,068	2,543	11.3
Martin	21,966	23,059	-1,093	-4.7	2,514	3,630	-1,116	23	0.1
McDowell	45,850	45,615	235	0.5	4,725	6,117	-1,392	1,627	3.6

County	July 2030 Projection	July 2020 Projection	Growth Amount	Growth Percent	Total Births, J2020 - J2030	Total Deaths, J2020 - J2030	Natural Growth, J2020 - J2030	Net Migration Amount	Net Migration Percent
Mecklenburg	1,361,732	1,142,325	219,407	19.2	153,303	88,179	65,124	154,283	13.5
Mitchell	16,231	16,074	157	1.0	1,677	2,475	-798	955	5.9
Montgomery	28,157	27,946	211	0.8	3,467	3,481	-14	225	0.8
Moore	108,198	99,491	8,707	8.8	11,497	14,078	-2,581	11,288	11.3
Nash	91,476	93,380	-1,904	-2.0	10,219	12,129	-1,910	6	0.0
New Hanover	267,379	235,866	31,513	13.4	24,884	24,922	-38	31,551	13.4
Northampton	19,057	20,416	-1,359	-6.7	1,912	2,993	-1,081	-278	-1.4
Onslow	218,222	202,230	15,992	7.9	31,736	12,982	18,754	-2,762	-1.4
Orange	166,565	149,922	16,643	11.1	13,935	11,675	2,260	14,383	9.6
Pamlico	13,561	13,293	268	2.0	1,111	2,095	-984	1,252	9.4
Pasquotank	40,366	40,331	35	0.1	4,519	4,500	19	16	0.0
Pender	74,721	63,363	11,358	17.9	7,531	7,291	240	11,118	17.5
Perquimans	14,646	13,698	948	6.9	1,395	2,079	-684	1,632	11.9
Person	39,950	39,588	362	0.9	4,395	5,133	-738	1,100	2.8
Pitt	188,556	179,778	8,778	4.9	19,528	15,836	3,692	5,086	2.8
Polk	22,049	21,336	713	3.3	1,781	3,431	-1,650	2,363	11.1
Randolph	152,485	146,606	5,879	4.0	18,030	17,535	495	5,384	3.7
Richmond	44,946	45,331	-385	-0.8	5,332	5,917	-585	200	0.4
Robeson	128,614	131,710	-3,096	-2.4	17,197	15,006	2,191	-5,287	-4.0
Rockingham	92,543	92,544	-1	-0.0	9,773	12,738	-2,965	2,964	3.2
Rowan	138,708	138,710	-2	-0.0	15,284	17,191	-1,907	1,905	1.4
Rutherford	66,722	67,046	-324	-0.5	7,425	9,419	-1,994	1,670	2.5
Sampson	66,289	65,108	1,181	1.8	8,739	7,728	1,011	170	0.3
Scotland	31,846	34,482	-2,636	-7.6	3,991	4,440	-449	-2,187	-6.3
Stanly	64,964	62,494	2,470	4.0	6,725	8,280	-1,555	4,025	6.4
Stokes	46,786	46,786	0	0.0	4,691	6,356	-1,665	1,665	3.6
Surry	73,835	73,835	0	0.0	8,561	9,799	-1,238	1,238	1.7
Swain	17,305	15,758	1,547	9.8	2,183	2,258	-75	1,622	10.3
Transylvania	38,378	35,284	3,094	8.8	3,143	5,758	-2,615	5,709	16.2
Tyrrell	4,143	4,144	-1	-0.0	449	549	-100	99	2.4
Union	289,766	243,620	46,146	18.9	36,412	21,323	15,089	31,057	12.7

County	July 2030 Projection	July 2020 Projection	Growth Amount	Growth Percent	Total Births, J2020 - J2030	Total Deaths, J2020 - J2030	Natural Growth, J2020 - J2030	Net Migration Amount	Net Migration Percent
Vance	44,786	44,867	-81	-0.2	5,536	5,618	-82	1	0.0
Wake	1,306,388	1,105,706	200,682	18.1	141,097	81,218	59,879	140,803	12.7
Warren	20,514	20,515	-1	-0.0	1,806	2,897	-1,091	1,090	5.3
Washington	11,642	12,313	-671	-5.4	1,338	1,827	-489	-182	-1.5
Watauga	59,168	55,264	3,904	7.1	3,793	4,749	-956	4,860	8.8
Wayne	137,064	128,931	8,133	6.3	16,496	14,640	1,856	6,277	4.9
Wilkes	71,758	70,586	1,172	1.7	7,506	9,675	-2,169	3,341	4.7
Wilson	90,377	84,198	6,179	7.3	9,906	10,664	-758	6,937	8.2
Yadkin	35,981	36,826	-845	-2.3	4,268	4,757	-489	-356	-1.0
Yancey	18,014	17,946	68	0.4	1,943	2,695	-752	820	4.6
STATE	11,609,883	10,574,718	1,035,165	9.8	1,283,536	1,128,057	155,479	879,686	8.3

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Last updated 08OCT2015

Southeast Region

Every year, the North Carolina Department of Commerce studies national, statewide, and local economic trends to produce long-term and short-term occupational projections for state and substate areas. Based on historical data, these projections provide a guide for how the state occupational landscape may evolve given the current economic trends. The following projections for the Southeast region have been developed using regional data on occupations. The current projections cover the years 2012 to 2022 for approximately 800 occupations.

Southeast Region

The Southeast region accounts for about 8.7 percent of total state employment and is the fourth-largest employer in the state both in 2012 and 2022. From 2012 to 2022, the region is estimated to gain more than 51,000 positions and have 15,000 average annual job openings with an annualized growth rate of 1.3 percent. In 2012, the top five occupation sectors accounted for about 49 percent of the region's total employment and will comprise approximately 53 percent of new jobs in the 10-year period. The four fastest-growing occupation sectors are: Healthcare Support, Computer and Mathematical, Healthcare Practitioners and Technical, and Construction and Extraction. Each sector will likely experience more than 2 percent annualized growth. The median annual wage, $28,773, of the Southeast region is below the state median. The Top 25 lists of growing and declining detailed occupations are available for viewing and download below.

Southeast Region Data Files

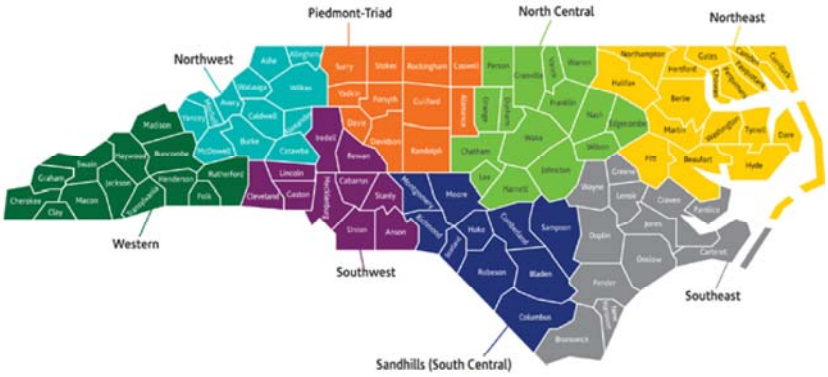
- View the Southeast Region Occupational Projections Data (CSV)
- View the Southeast Region Data Book

Top 25 Number of Projected New Jobs

Top 25 Projected Job Growth Percentage

Top 25 Declining by Number of Jobs

Top 25 Declining by Growth Percentage



- Western Region
- Northwest Region
- Southwest Region
- Piedmont-Triad (Central) Region
- North Central Region
- Sandhills (South Central) Region
- Northeast Region
- Southeast Region

Southeast Region County Profiles

- Brunswick County
- Carteret County
- Craven County
- Duplin County
- Greene County
- Jones County
- Lenoir County
- New Hanover County
- Onslow County
- Pamlico County
- Pender County
- Wayne County

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