Traffic Volume Figures

Trip Generation Figures

Midtown Redevelopment
Turning Movement Counts
September 21, 2010 7:45am-8:45am, 4:45pm-5:45pm

Clinton Ave / Court St Intersection

Time	Clinton Ave NB			Court St EB		Total
	NB Left	NB Thru	NB Right	EB Left	EB Thru	
7:45-8:00	107	376	114	14	42	653
8:00-8:15	104	348	124	15	41	632
8:15-8:30	138	361	91	16	38	644
8:30-8:45	117	324	87	28	43	599
Total Peak Hr	466	1409	416	73	164	
Peak Hr Factor	0.84	0.94	0.84	0.65	0.95	

Time	Clinton Ave NB			Court St EB		Total
	NB Left	NB Thru	NB Right	EB Left	EB Thru	
4:45-5:00	13	268	42	23	73	419
5:00-5:15	29	243	76	34	127	509
5:15-5:30	14	247	40	28	89	418
5:30-5:45	14	224	40	21	52	351
Total Peak Hr	70	982	198	106	341	
Peak Hr Factor	0.60	0.92	0.65	0.78	0.67	

Midtown Redevelopment
Turning Movement Counts
September 23, 2010 7:45am-8:45am, 4:45pm-5:45pm

Clinton Ave / Broad St Intersection

Time	Clinton Ave NB		Broad St WB		Total
	NB Left	NB Thru	WB Thru	WB Right	
7:45-8:00	125	245	102	25	497
8:00-8:15	144	243	88	19	494
8:15-8:30	130	263	94	10	497
8:30-8:45	120	233	66	12	431
Total Peak Hr	519	984	350	66	
Peak Hr Factor	0.90	0.94	0.86	0.66	

Time	Clinton Ave NB		Broad St WB		Total
	NB Left	NB Thru	WB Thru	WB Right	
4:45-5:00	72	219	62	18	371
5:00-5:15	70	207	64	16	357
5:15-5:30	80	195	68	18	361
5:30-5:45	59	171	58	8	296
Total Peak Hr	281	792	252	60	
Peak Hr Factor	0.88	0.90	0.93	0.83	

Midtown Redevelopment
Turning Movement Counts
September 21, 2010 7:45am-8:45am, 4:45pm-5:45pm

Clinton Ave / Main St Intersection

Time	Clinton Ave NB Thru	Main St EB Thru	Main St WB Thru	Total
7:45-8:00	242	98	149	489
8:00-8:15	248	104	90	442
8:15-8:30	216	72	99	387
8:30-8:45	187	76	85	348
Total Peak Hr	893	350	423	
Peak Hr Factor	0.90	0.84	0.71	

Time	Clinton Ave NB Thru	Main St EB Thru	Main St WB Thru	Total
4:45-5:00	161	104	56	321
5:00-5:15	236	133	100	469
5:15-5:30	233	136	68	437
5:30-5:45	211	103	67	381
Total Peak Hr	841	476	291	
Peak Hr Factor	0.89	0.88	0.73	

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File Name : Main - East AM
Site Code : 00000000
Start Date : 9/30/2010
Page No : 1

Groups Printed- Unshifted - Bank 1

	FRANKLIN From North					MAIN From East					FRANKLIN From South					MAIN From West					
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	Int. Total
07:45 AM	6	15	1	12	34	3	91	0	51	145	0	20	0	4	24	23	71	1	4	99	302
Total	6	15	1	12	34	3	91	0	51	145	0	20	0	4	24	23	71	1	4	99	302
08:00 AM	4	16	0	15	35	3	102	0	54	159	2	15	3	8	28	15	58	0	0	73	295
08:15 AM	3	12	1	20	36	4	85	0	64	153	0	15	4	7	26	31	74	1	3	109	324
08:30 AM	12	13	0	15	40	1	67	0	53	121	0	10	1	9	20	21	61	1	4	87	268
Grand Total	25	56	2	62	145	11	345	0	222	578	2	60	8	28	98	90	264	3	11	368	1189
Apprch %	17.2	38.6	1.4	42.8		1.9	59.7	0	38.4		2	61.2	8.2	28.6		24.5	71.7	0.8	3		
Total %	2.1	4.7	0.2	5.2	12.2	0.9	29	0	18.7	48.6	0.2	5	0.7	2.4	8.2	7.6	22.2	0.3	0.9	31	
Unshifted	25	54	2	62	143	11	316	0	222	549	2	59	8	28	97	78	225	3	11	317	1106
% Unshifted	100	96.4	100	100	98.6	100	91.6	0	100	95	100	98.3	100	100	99	86.7	85.2	100	100	86.1	93
Bank 1	0	2	0	0	2	0	29	0	0	29	0	1	0	0	1	12	39	0	0	51	83
% Bank 1	0	3.6	0	0	1.4	0	8.4	0	0	5	0	1.7	0	0	1	13.3	14.8	0	0	13.9	7

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City of Rochester, NY

File Name : Main - East AM
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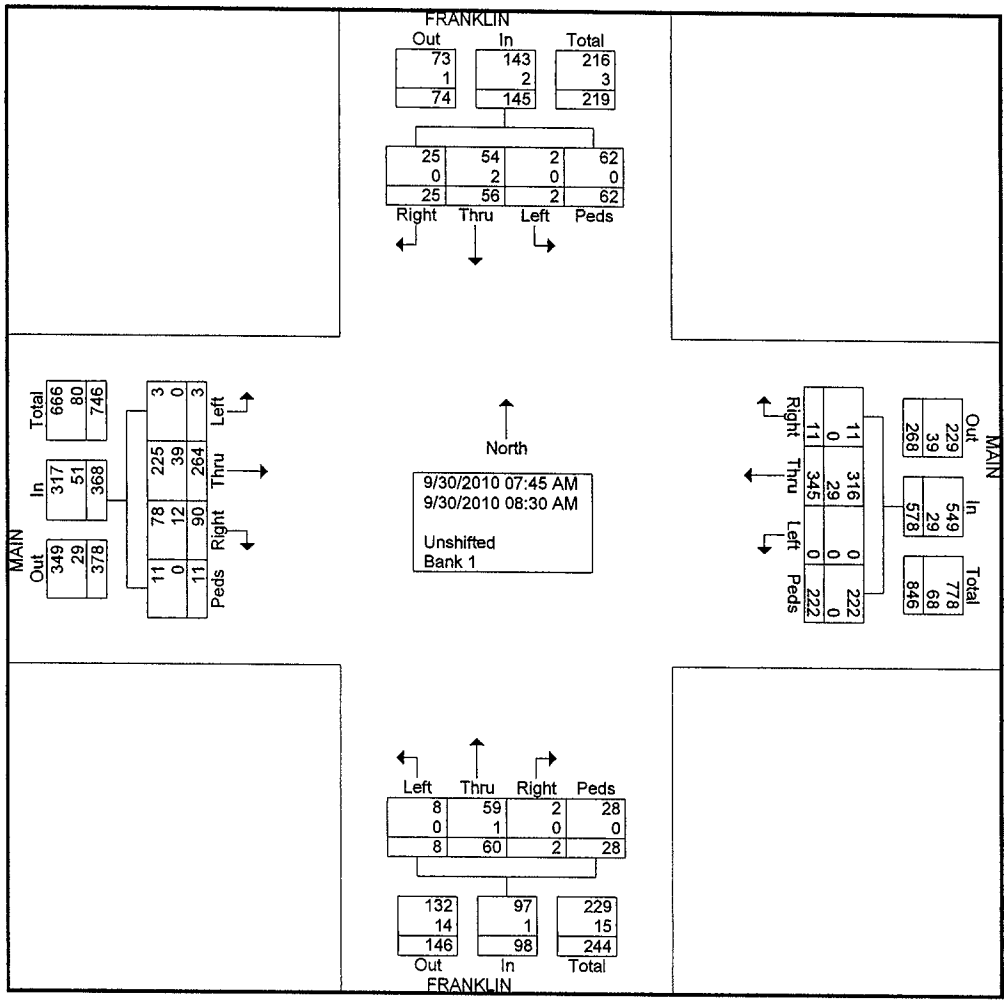

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File Name : Main - East PM
Site Code : 00000000
Start Date : 9/30/2010
Page No : 1

Groups Printed- Unshifted - Bank 1

	FRANKLIN From North					E MAIN From East					FRANKLIN From South					E MAIN From West					
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	Int. Total
04:45 PM	2	19	0	14	35	3	91	0	34	128	0	11	2	6	19	27	92	1	1	121	303
Total	2	19	0	14	35	3	91	0	34	128	0	11	2	6	19	27	92	1	1	121	303
05:00 PM	6	36	1	21	64	1	82	0	48	131	1	12	1	12	26	30	97	3	3	133	354
05:15 PM	6	28	1	15	50	2	87	0	19	108	1	21	2	11	35	35	118	3	5	161	354
05:30 PM	2	21	0	16	39	0	78	1	30	109	0	16	3	2	21	30	80	1	2	113	282
Grand Total	16	104	2	66	188	6	338	1	131	476	2	60	8	31	101	122	387	8	11	528	1293
Apprch %	8.5	55.3	1.1	35.1		1.3	71	0.2	27.5		2	59.4	7.9	30.7		23.1	73.3	1.5	2.1		
Total %	1.2	8	0.2	5.1	14.5	0.5	26.1	0.1	10.1	36.8	0.2	4.6	0.6	2.4	7.8	9.4	29.9	0.6	0.9	40.8	
Unshifted	15	97	2	66	180	6	303	1	131	441	2	60	8	31	101	120	348	8	11	487	1209
% Unshifted	93.8	93.3	100	100	95.7	100	89.6	100	100	92.6	100	100	100	100	100	98.4	89.9	100	100	92.2	93.5
Bank 1	1	7	0	0	8	0	35	0	0	35	0	0	0	0	0	2	39	0	0	41	84
% Bank 1	6.2	6.7	0	0	4.3	0	10.4	0	0	7.4	0	0	0	0	0	1.6	10.1	0	0	7.8	6.5
	0.67	0.72	0.5			0.5	0.93	0.25			0.5	0.71	0.67	0.70		0.87	0.82				

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File Name : Main - East PM
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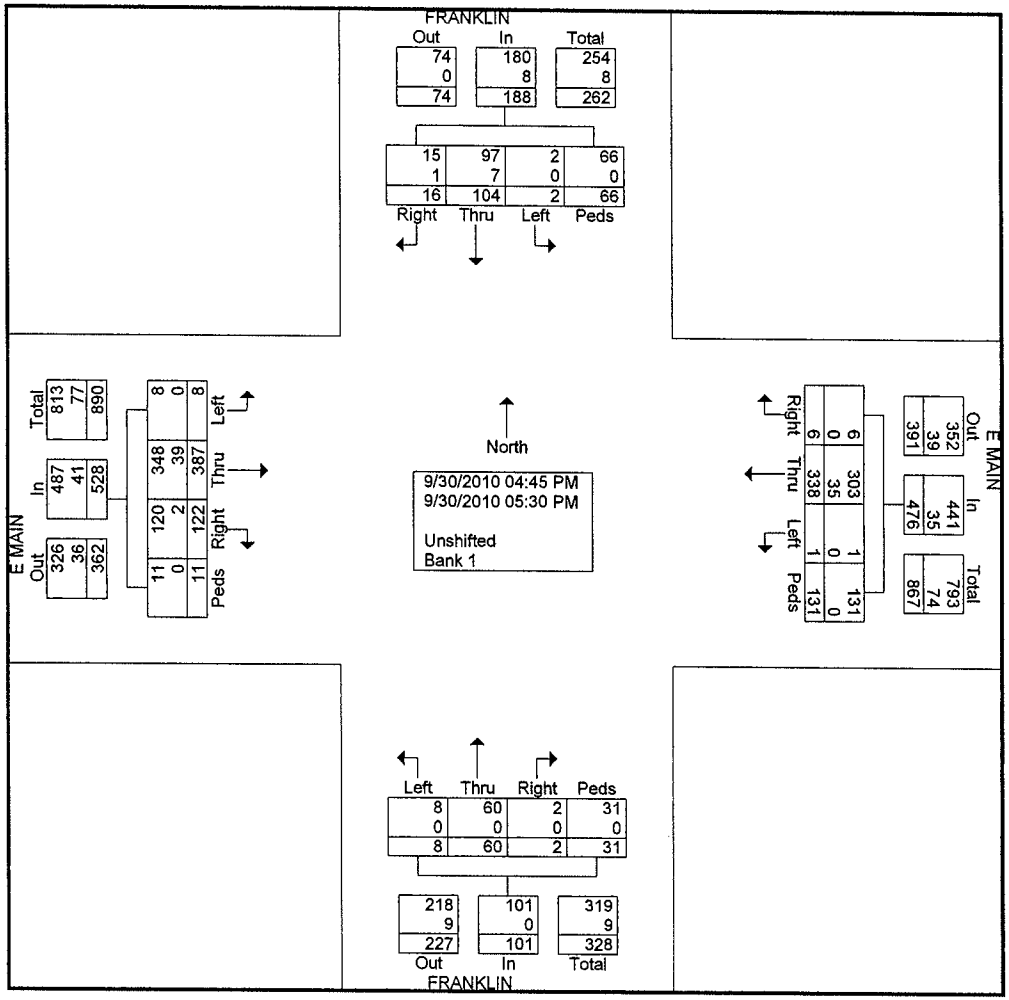

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File Name : Main - Chestnut AM
Site Code : 00000000
Start Date : 9/28/2010
Page No : 1

Groups Printed- Unshifted - Bank 1

	CHESTNUT From North					MAIN From East					CHESTNUT From South					MAIN From West					
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	Int. Total
07:45 AM	9	145	9	4	167	18	83	46	11	158	9	83	9	1	102	2	37	29	5	73	500
Total	9	145	9	4	167	18	83	46	11	158	9	83	9	1	102	2	37	29	5	73	500
08:00 AM	12	121	6	5	144	16	69	31	15	131	6	64	4	5	79	5	37	24	6	72	426
08:15 AM	12	100	12	3	127	15	64	25	13	117	5	57	11	10	83	3	31	21	6	61	388
08:30 AM	12	94	10	12	128	11	63	26	18	118	10	64	11	7	92	4	33	15	11	63	401
Grand Total	45	460	37	24	566	60	279	128	57	524	30	268	35	23	356	14	138	89	28	269	1715
Apprch %	8	81.3	6.5	4.2		11.5	53.2	24.4	10.9		8.4	75.3	9.8	6.5		5.2	51.3	33.1	10.4		
Total %	2.6	26.8	2.2	1.4	33	3.5	16.3	7.5	3.3	30.6	1.7	15.6	2	1.3	20.8	0.8	8	5.2	1.6	15.7	
Unshifted	35	458	36	24	553	60	267	126	57	510	27	259	30	23	339	10	114	74	28	226	1628
% Unshifted	77.8	99.6	97.3	100	97.7	100	95.7	98.4	100	97.3	90	96.6	85.7	100	95.2	71.4	82.6	83.1	100	84	94.9
Bank 1	10	2	1	0	13	0	12	2	0	14	3	9	5	0	17	4	24	15	0	43	87
% Bank 1	22.2	0.4	2.7	0	2.3	0	4.3	1.6	0	2.7	10	3.4	14.3	0	4.8	28.6	17.4	16.9	0	16	5.1

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Site Code : 00000000
Start Date : 9/28/2010
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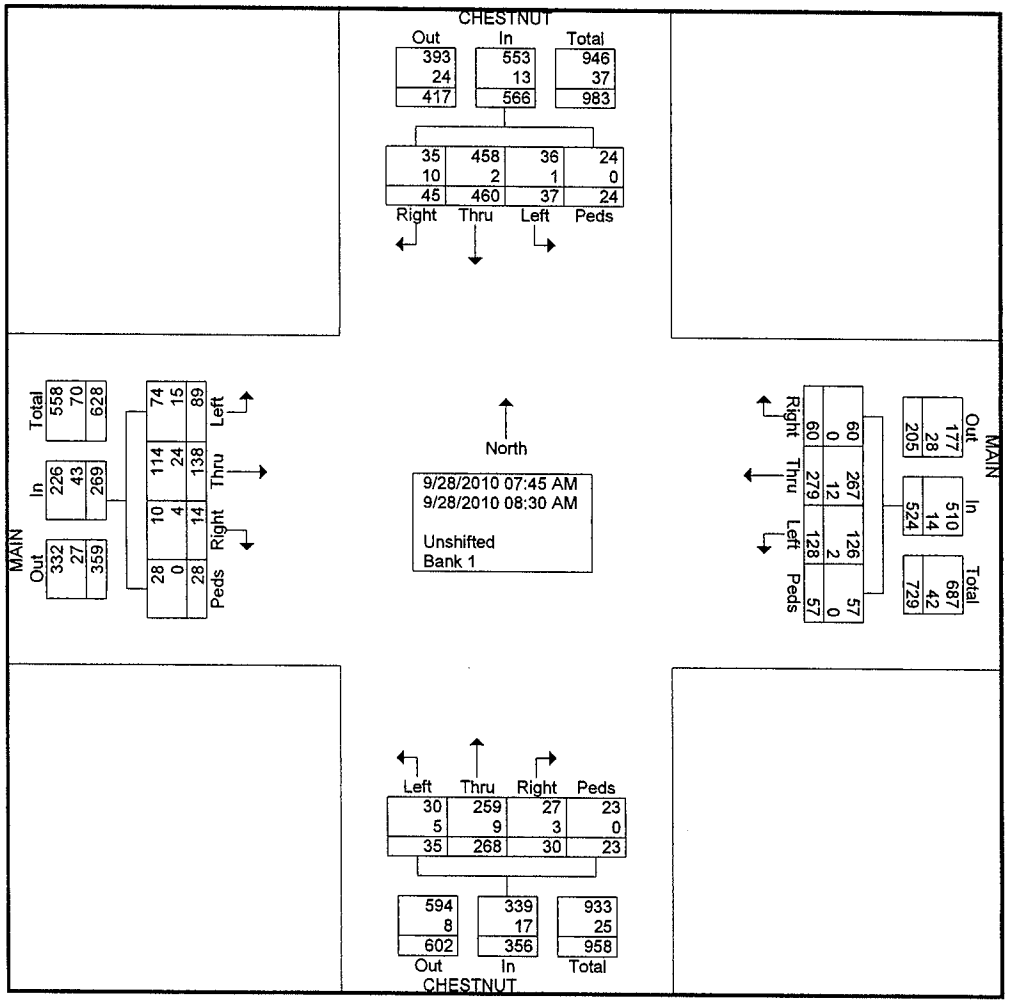

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File Name : Main - Chestnut PM
Site Code : 00000000
Start Date : 9/28/2010
Page No : 1

Groups Printed- Unshifted - Bank 1

	CHESTNUT From North					E MAIN From East					CHESTNUT From South					E MAIN From West					
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	Int. Total
04:45 PM	18	73	10	7	108	8	68	15	20	111	14	81	4	9	108	10	52	31	14	107	434
Total	18	73	10	7	108	8	68	15	20	111	14	81	4	9	108	10	52	31	14	107	434
05:00 PM	16	110	18	13	157	5	85	22	13	125	17	95	7	7	126	6	80	43	21	150	558
05:15 PM	11	77	17	6	111	13	53	31	24	121	20	123	8	5	156	7	69	37	7	120	508
05:30 PM	20	70	18	6	114	11	78	26	11	126	25	74	6	13	118	2	61	27	4	94	452
Grand Total	65	330	63	32	490	37	284	94	68	483	76	373	25	34	508	25	262	138	46	471	1952
Apprch %	13.3	67.3	12.9	6.5		7.7	58.8	19.5	14.1		15	73.4	4.9	6.7		5.3	55.6	29.3	9.8		
Total %	3.3	16.9	3.2	1.6	25.1	1.9	14.5	4.8	3.5	24.7	3.9	19.1	1.3	1.7	26	1.3	13.4	7.1	2.4	24.1	
Unshifted	52	327	63	32	474	36	266	93	68	463	74	373	20	34	501	21	235	129	46	431	1869
% Unshifted	80	99.1	100	100	96.7	97.3	93.7	98.9	100	95.9	97.4	100	80	100	98.6	84	89.7	93.5	100	91.5	95.7
Bank 1	13	3	0	0	16	1	18	1	0	20	2	0	5	0	7	4	27	9	0	40	83
% Bank 1	20	0.9	0	0	3.3	2.7	6.3	1.1	0	4.1	2.6	0	20	0	1.4	16	10.3	6.5	0	8.5	4.3

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File Name : Main - Chestnut PM
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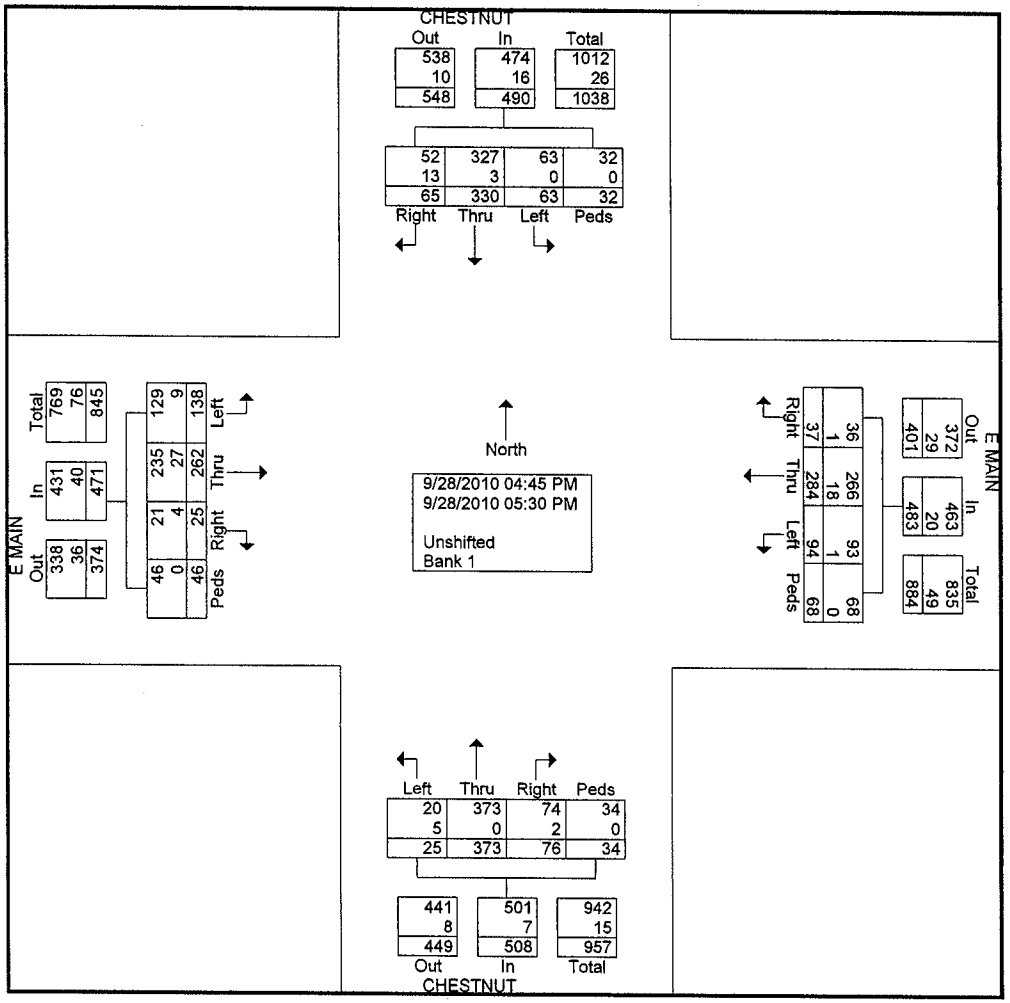


Midtown Redevelopment
Turning Movement Counts
September 22, 2010 7:45am-8:45am, 4:45pm-5:45pm

Chestnut St / East Ave Intersection

Time	Chestnut St NB			Chestnut St SB			East Ave EB			East Ave WB			Total
	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	
7:45-8:00	7	49	11	26	152	0	0	13	13	26	18	13	328
8:00-8:15	16	65	20	10	165	0	0	23	12	22	10	21	364
8:15-8:30	8	68	10	13	140	0	0	18	19	23	15	6	320
8:30-8:45	8	60	15	12	174	1	3	24	15	34	25	12	383
Total Peak Hr	39	242	56	61	631	1	3	78	59	105	68	52	
Peak Hr Factor	0.61	0.89	0.70	0.59	0.91	0.25	0.25	0.81	0.78	0.77	0.68	0.62	

Time	Chestnut St NB			Chestnut St SB			East Ave EB			East Ave WB			Total
	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	
4:45-5:00	6	86	23	14	101	2	1	28	21	21	10	7	320
5:00-5:15	5	114	34	11	130	2	0	46	29	28	16	17	432
5:15-5:30	8	110	27	14	115	1	1	32	20	25	13	11	377
5:30-5:45	3	84	18	14	66	0	1	30	14	13	13	4	260
Total Peak Hr	22	394	102	53	412	5	3	136	84	87	52	39	
Peak Hr Factor	0.69	0.86	0.75	0.95	0.79	0.63	0.75	0.74	0.72	0.78	0.81	0.57	

Midtown Redevelopment
Turning Movement Counts
September 28, 2010 7:45am-8:45am, 4:45pm-5:45pm

Chestnut St / Broad St Intersection

Time	Chestnut St NB		Chestnut St SB		Broad St WB			Total
	NB Left	NB Thru	SB Thru	SB Right	WB Left	WB Thru	WB Right	
7:45-8:00	19	103	148	58	10	32	1	371
8:00-8:15	25	94	118	53	4	29	0	323
8:15-8:30	24	80	111	43	8	30	1	297
8:30-8:45	27	88	96	35	7	28	0	281
Total Peak Hr	95	365	473	189	29	119	2	
Peak Hr Factor	0.88	0.89	0.80	0.81	0.73	0.93	0.50	

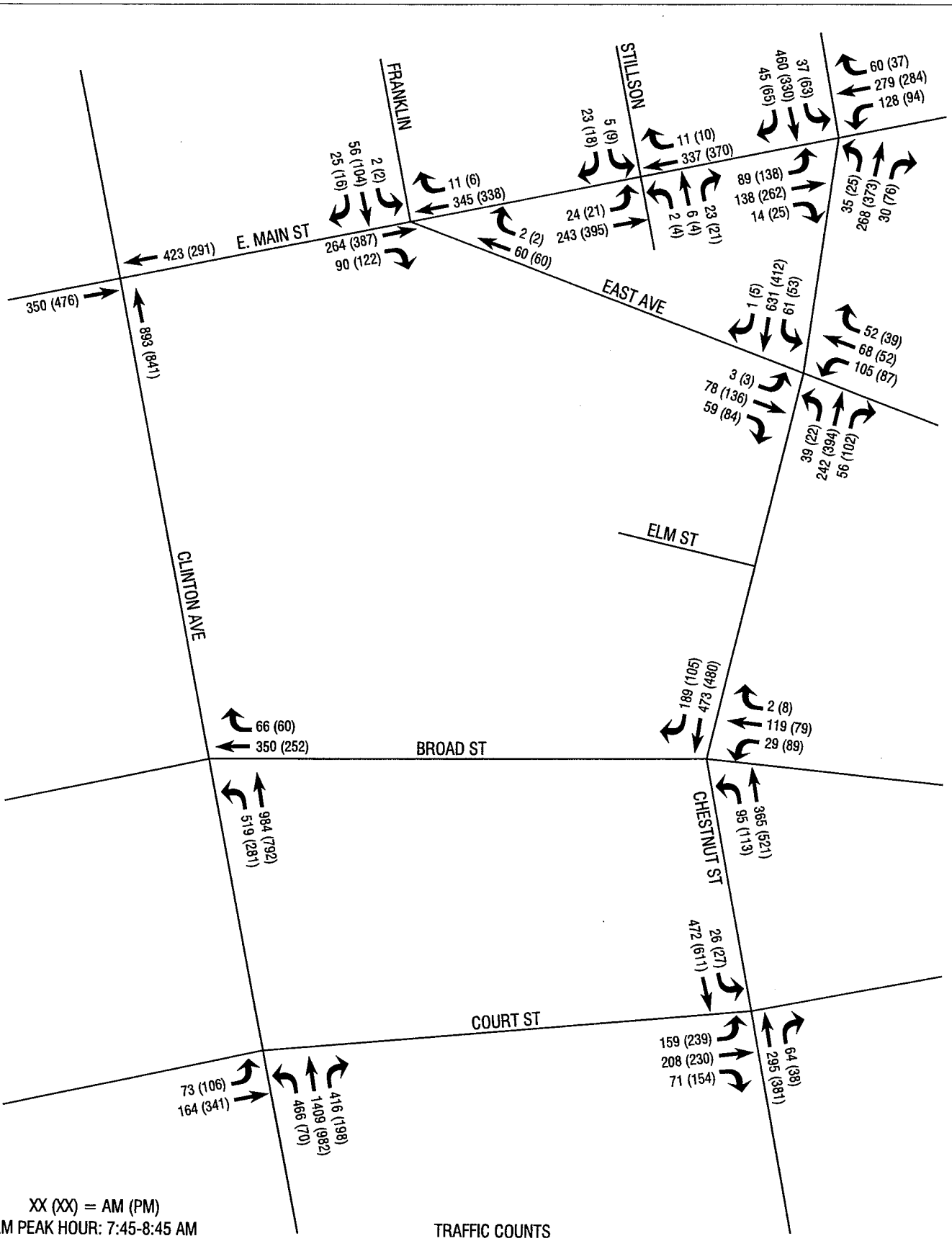
Time	Chestnut St NB		Chestnut St SB		Broad St WB			Total
	NB Left	NB Thru	SB Thru	SB Right	WB Left	WB Thru	WB Right	
4:45-5:00	23	121	104	22	22	13	0	305
5:00-5:15	39	125	160	21	30	21	5	401
5:15-5:30	27	154	125	32	21	30	3	392
5:30-5:45	24	121	91	30	16	15	0	297
Total Peak Hr	113	521	480	105	89	79	8	
Peak Hr Factor	0.72	0.85	0.75	0.88	0.74	0.66	0.40	

Midtown Redevelopment
Turning Movement Counts
September 30, 2010 7:45am-8:45am, 4:45pm-5:45pm

Chestnut St / Court St Intersection

Time	Chestnut St NB		Chestnut St SB		Court St EB			Total
	NB Thru	NB Right	SB Left	SB Thru	EB Left	EB Thru	EB Right	
7:45-8:00	83	14	4	120	32	53	12	318
8:00-8:15	73	14	2	118	41	59	28	335
8:15-8:30	69	16	10	122	44	46	11	318
8:30-8:45	70	20	10	112	42	50	20	324
Total Peak Hr	295	64	26	472	159	208	71	
Peak Hr Factor	0.89	0.80	0.65	0.97	0.90	0.88	0.63	

Time	Chestnut St NB		Chestnut St SB		Court St EB			Total
	NB Thru	NB Right	SB Left	SB Thru	EB Left	EB Thru	EB Right	
4:45-5:00	78	8	10	138	61	48	30	373
5:00-5:15	102	11	4	195	62	60	57	491
5:15-5:30	118	12	6	163	57	69	42	467
5:30-5:45	83	7	7	115	59	53	25	349
Total Peak Hr	381	38	27	611	239	230	154	
Peak Hr Factor	0.81	0.79	0.68	0.78	0.96	0.83	0.68	



XX (XX) = AM (PM)
AM PEAK HOUR: 7:45-8:45 AM
PM PEAK HOUR: 4:45-5:45 PM

TRAFFIC COUNTS
TAKEN IN SEPTEMBER 2010

N

N.T.S.

EXISTING TRAFFIC VOLUMES
AM & PM PEAK HOUR

MIDTOWN REDEVELOPMENT
CITY OF ROCHESTER, MONROE COUNTY

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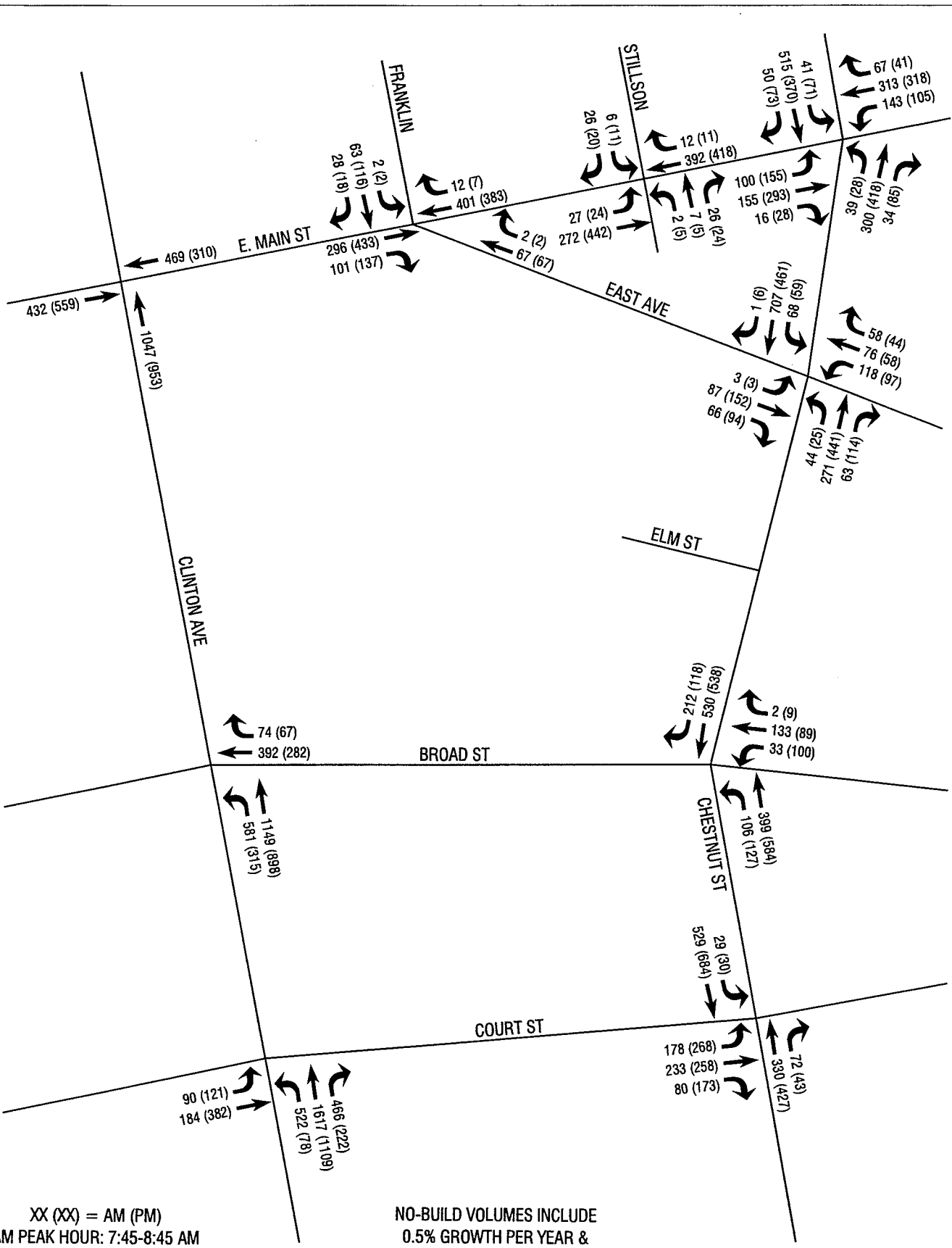

XX (XX) = AM (PM)
AM PEAK HOUR: 7:45-8:45 AM
PM PEAK HOUR: 4:45-5:45 PM

NO-BUILD VOLUMES INCLUDE
0.5% GROWTH PER YEAR &
RENAISSANCE SQUARE TRAFFIC VOLUMES

N

N.T.S.

NO-BUILD (YEAR 2032) TRAFFIC VOLUMES AM & PM PEAK HOUR

MIDTOWN REDEVELOPMENT
CITY OF ROCHESTER, MONROE COUNTY

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Rochester, NY 14614
585.454.6110

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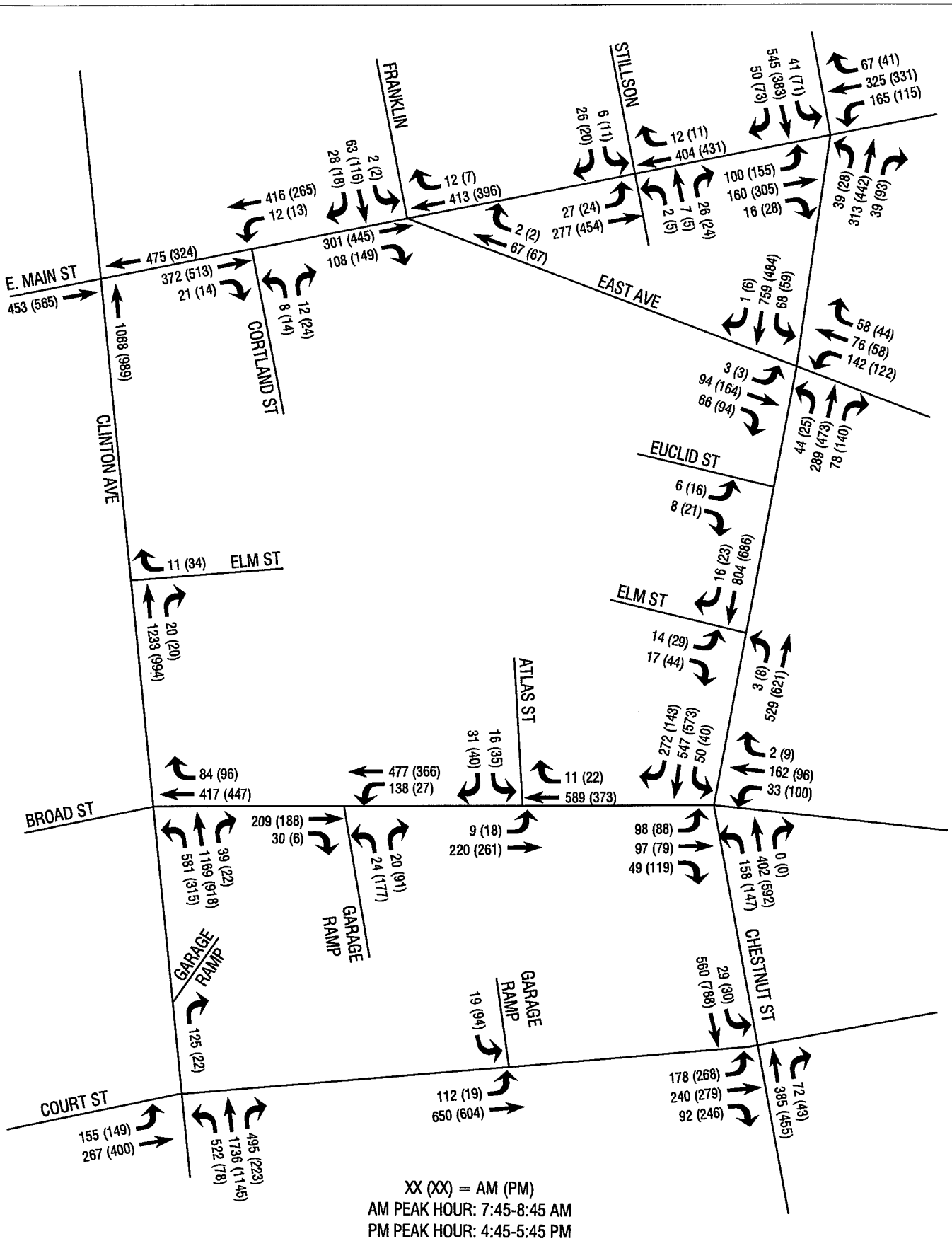

XX (XX) = AM (PM)
AM PEAK HOUR: 7:45-8:45 AM
PM PEAK HOUR: 4:45-5:45 PM

N

N.T.S.

FUTURE (YEAR 2032) TRAFFIC VOLUMES AM & PM PEAK HOUR

MIDTOWN REDEVELOPMENT
CITY OF ROCHESTER, MONROE COUNTY

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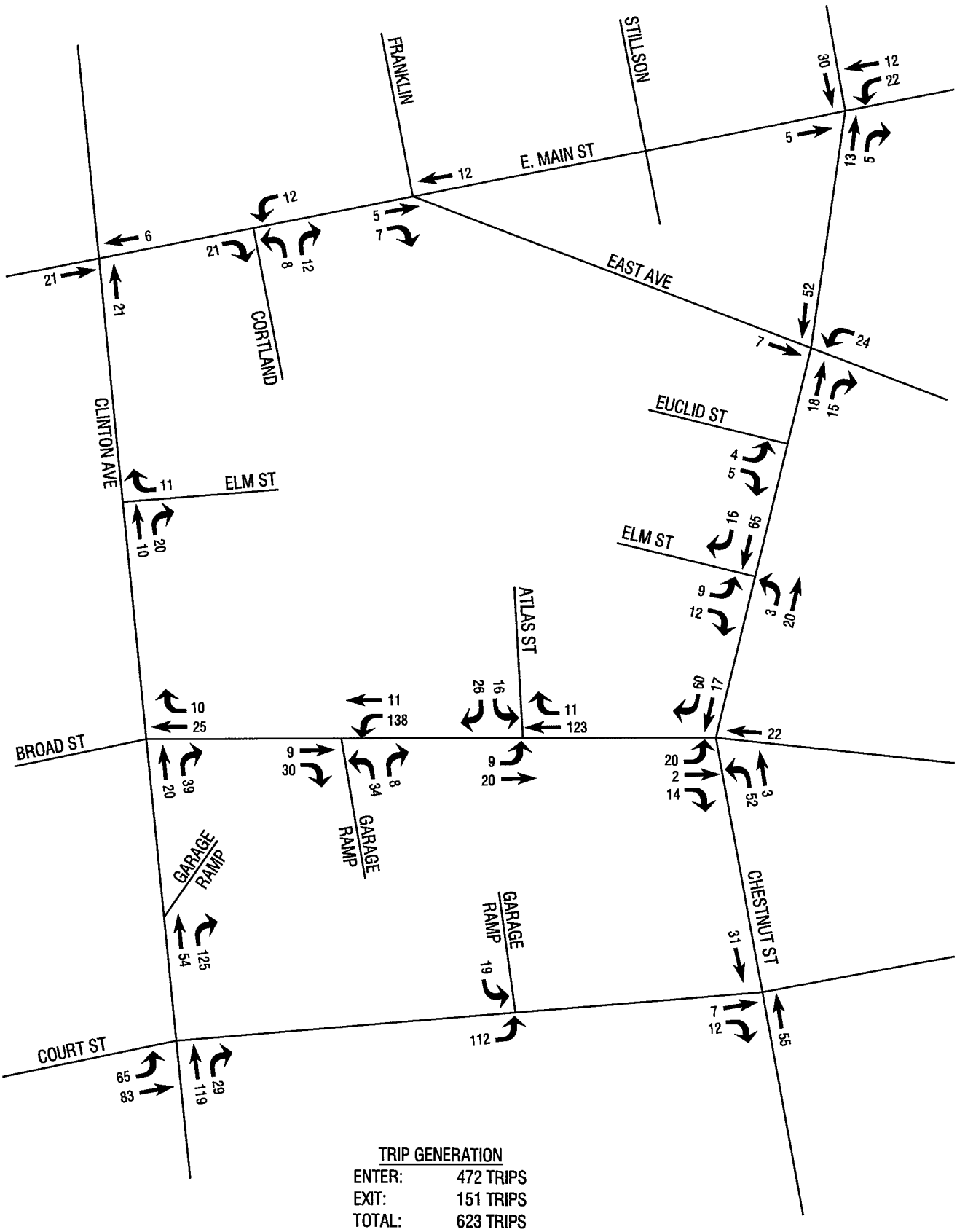

TRIP GENERATION

ENTER:	472 TRIPS
EXIT:	151 TRIPS
TOTAL:	623 TRIPS

N

N.T.S.

TOTAL TRIP GENERATION
AM PEAK HOUR

MIDTOWN REDEVELOPMENT
CITY OF ROCHESTER, MONROE COUNTY

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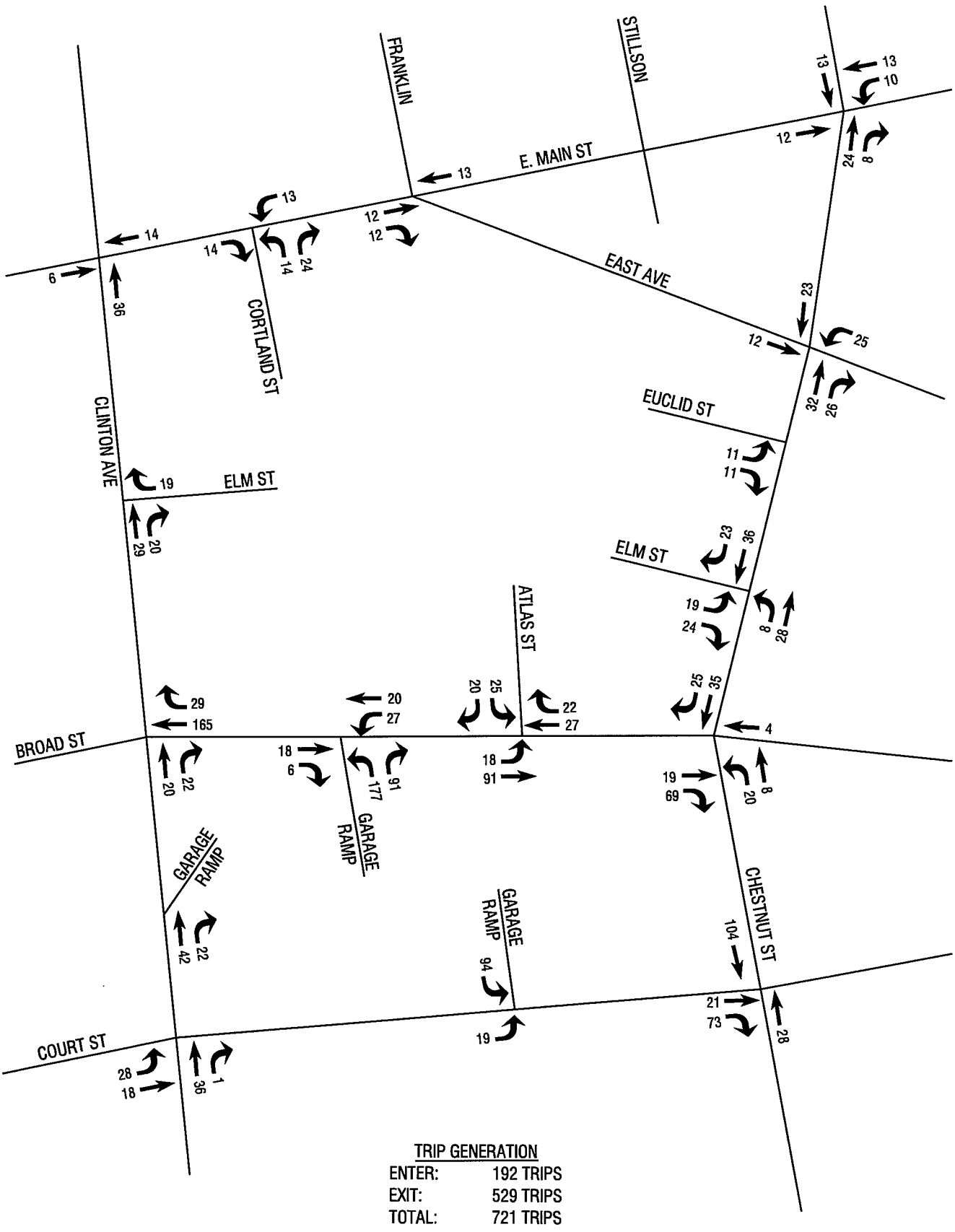


TRIP GENERATION

ENTER:	192 TRIPS
EXIT:	529 TRIPS
TOTAL:	721 TRIPS

N

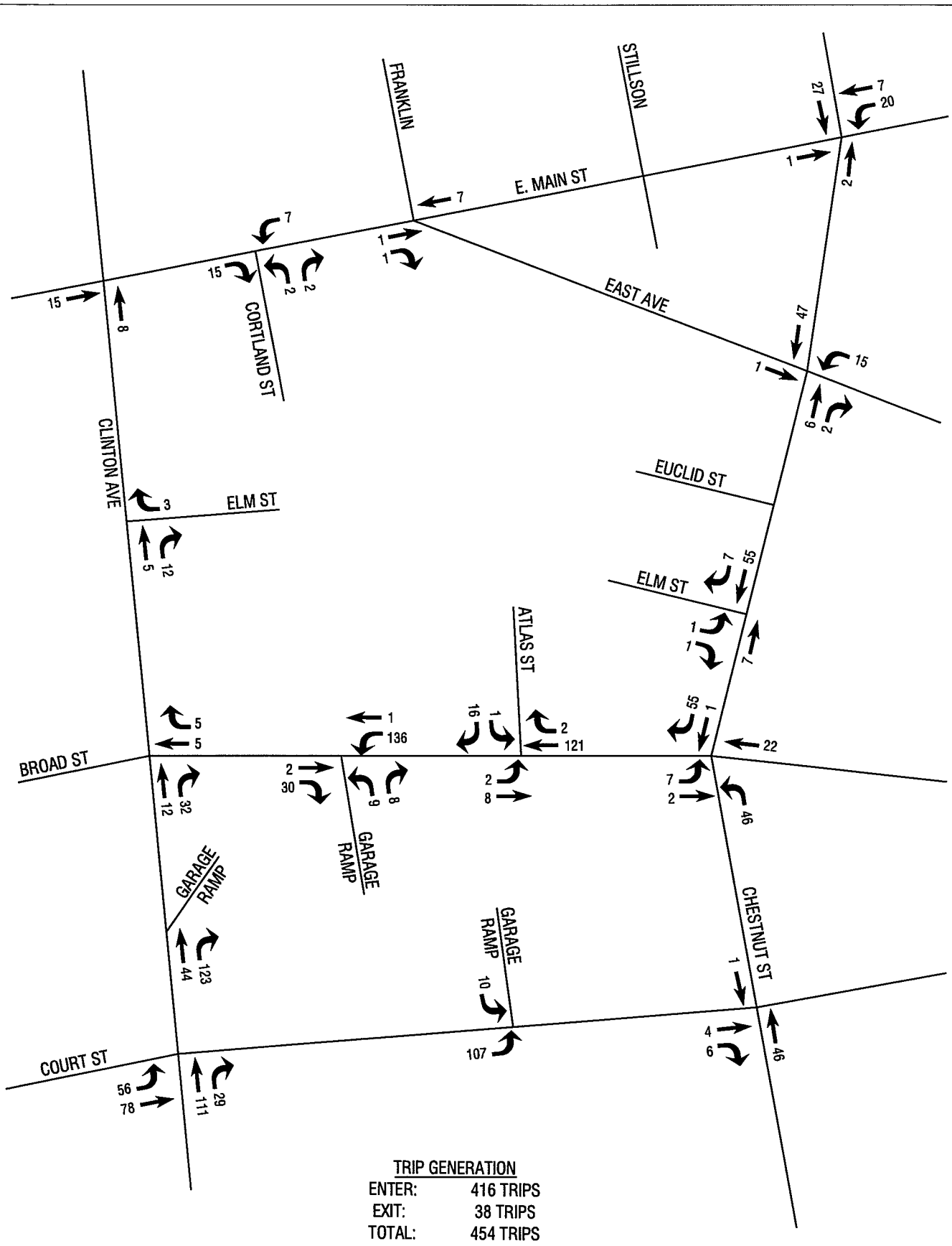
N.T.S.

TOTAL TRIP GENERATION
PM PEAK HOUR

MIDTOWN REDEVELOPMENT
CITY OF ROCHESTER, MONROE COUNTY

LABELLA Associates, P.C.
300 State Street
Rochester, NY 14614
585.454.6110

$FILE$
Default



TRIP GENERATION

ENTER:	416 TRIPS
EXIT:	38 TRIPS
TOTAL:	454 TRIPS

N

N.T.S.

TRIP GENERATION
PAETEC / GENERAL OFFICE COMPONENT
AM PEAK HOUR

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CITY OF ROCHESTER, MONROE COUNTY

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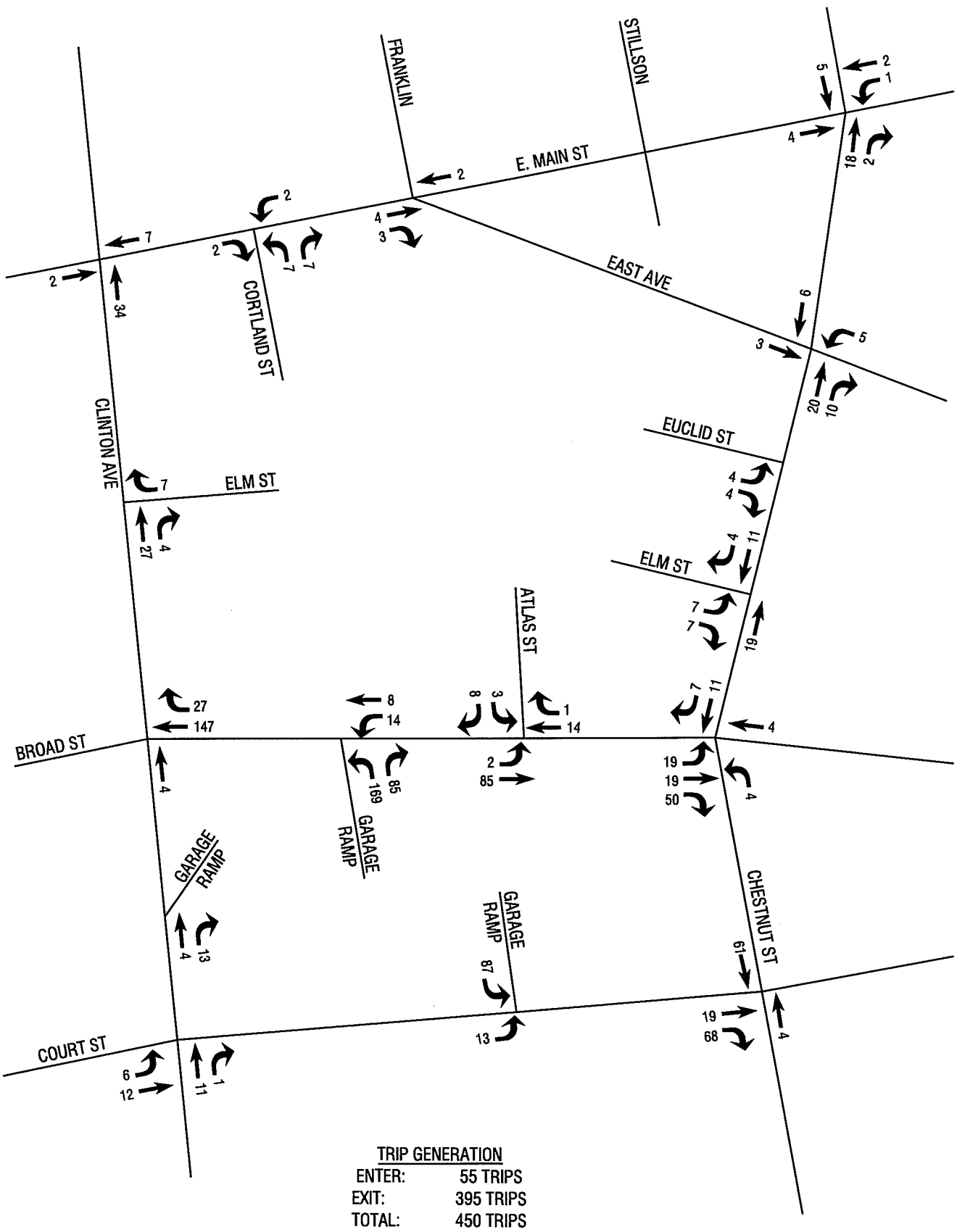

TRIP GENERATION

ENTER:	55 TRIPS
EXIT:	395 TRIPS
TOTAL:	450 TRIPS

N

N.T.S.

TRIP GENERATION
PAETEC / GENERAL OFFICE COMPONENT
PM PEAK HOUR

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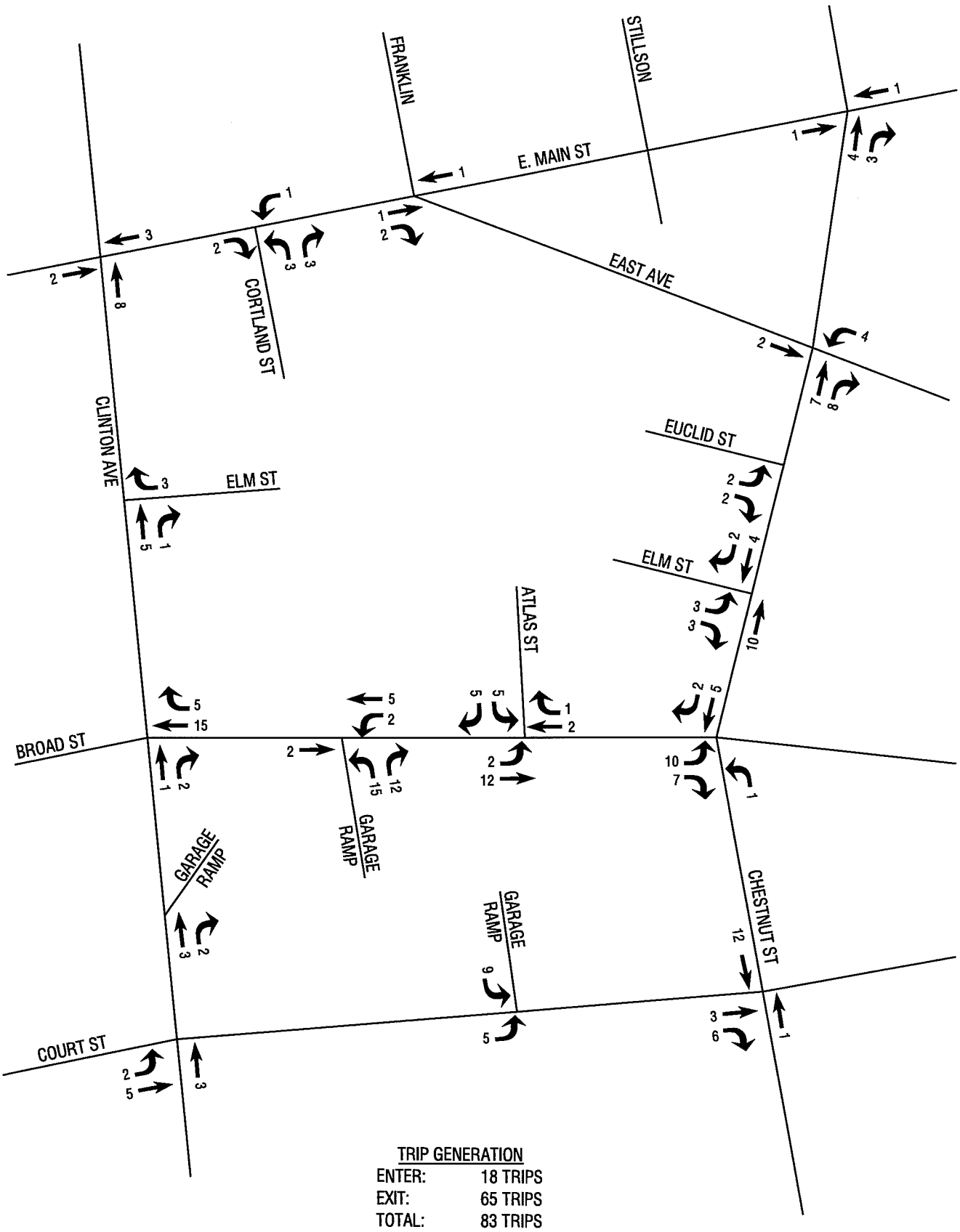

TRIP GENERATION

ENTER:	18 TRIPS
EXIT:	65 TRIPS
TOTAL:	83 TRIPS

N

N.T.S.

TRIP GENERATION
RESIDENTIAL COMPONENT
AM PEAK HOUR

MIDTOWN REDEVELOPMENT
CITY OF ROCHESTER, MONROE COUNTY

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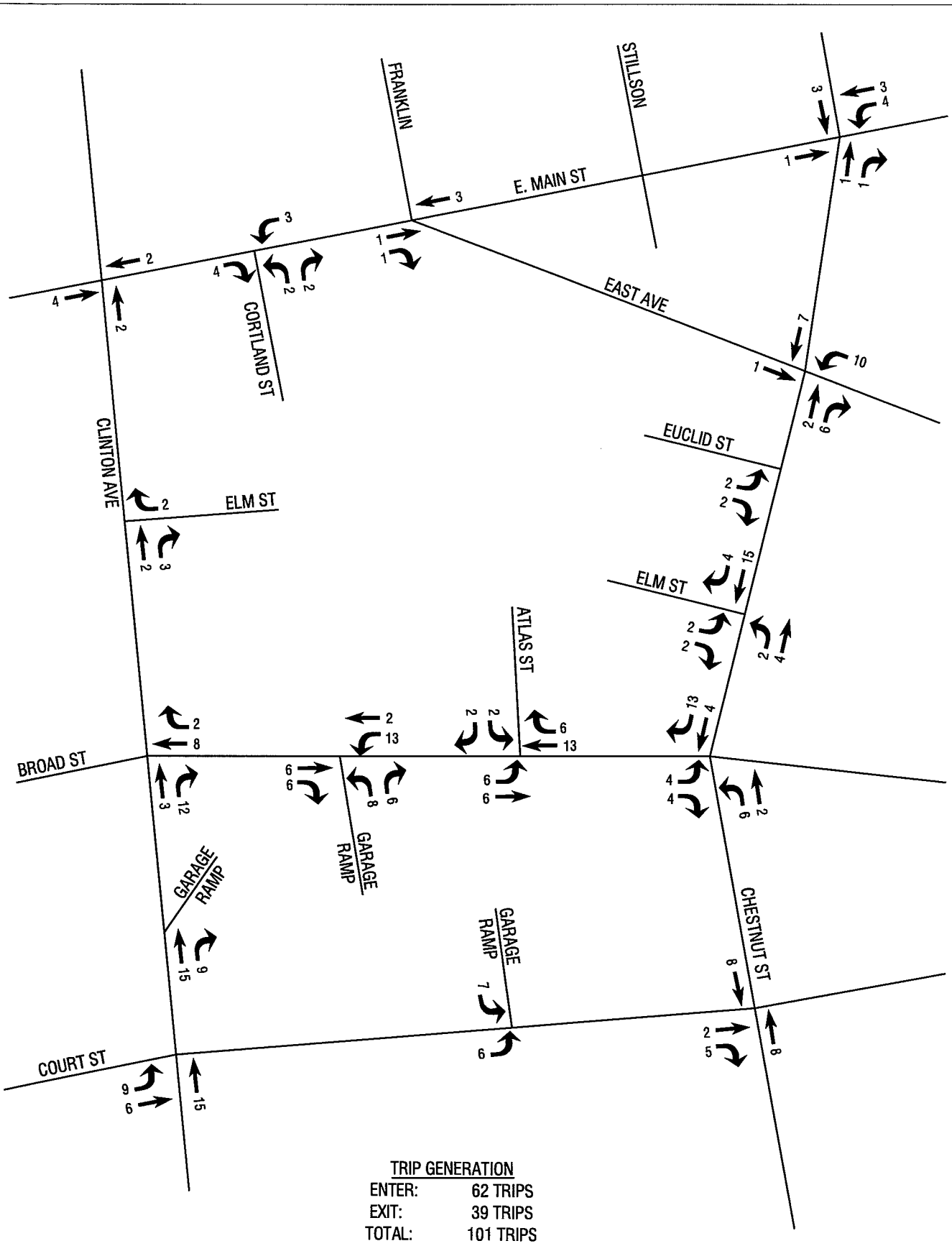

TRIP GENERATION

ENTER:	62 TRIPS
EXIT:	39 TRIPS
TOTAL:	101 TRIPS

N

N.T.S.

TRIP GENERATION
RESIDENTIAL COMPONENT
PM PEAK HOUR

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CITY OF ROCHESTER, MONROE COUNTY

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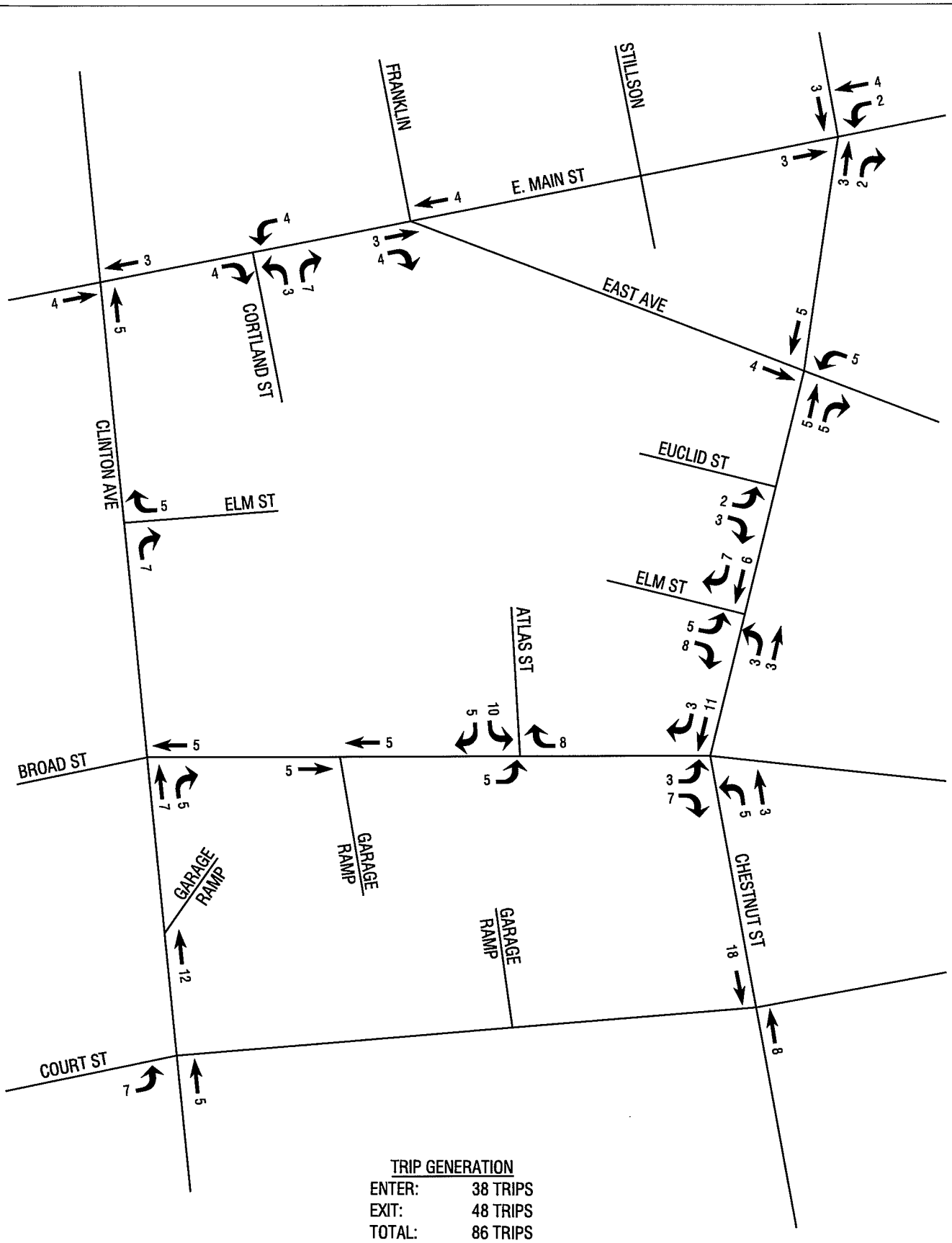

TRIP GENERATION

ENTER:	38 TRIPS
EXIT:	48 TRIPS
TOTAL:	86 TRIPS

N

N.T.S.

TRIP GENERATION
RETAIL COMPONENT
AM PEAK HOUR

MIDTOWN REDEVELOPMENT
CITY OF ROCHESTER, MONROE COUNTY

LABELLA Associates, P.C.
300 State Street
Rochester, NY 14614
585.454.6110

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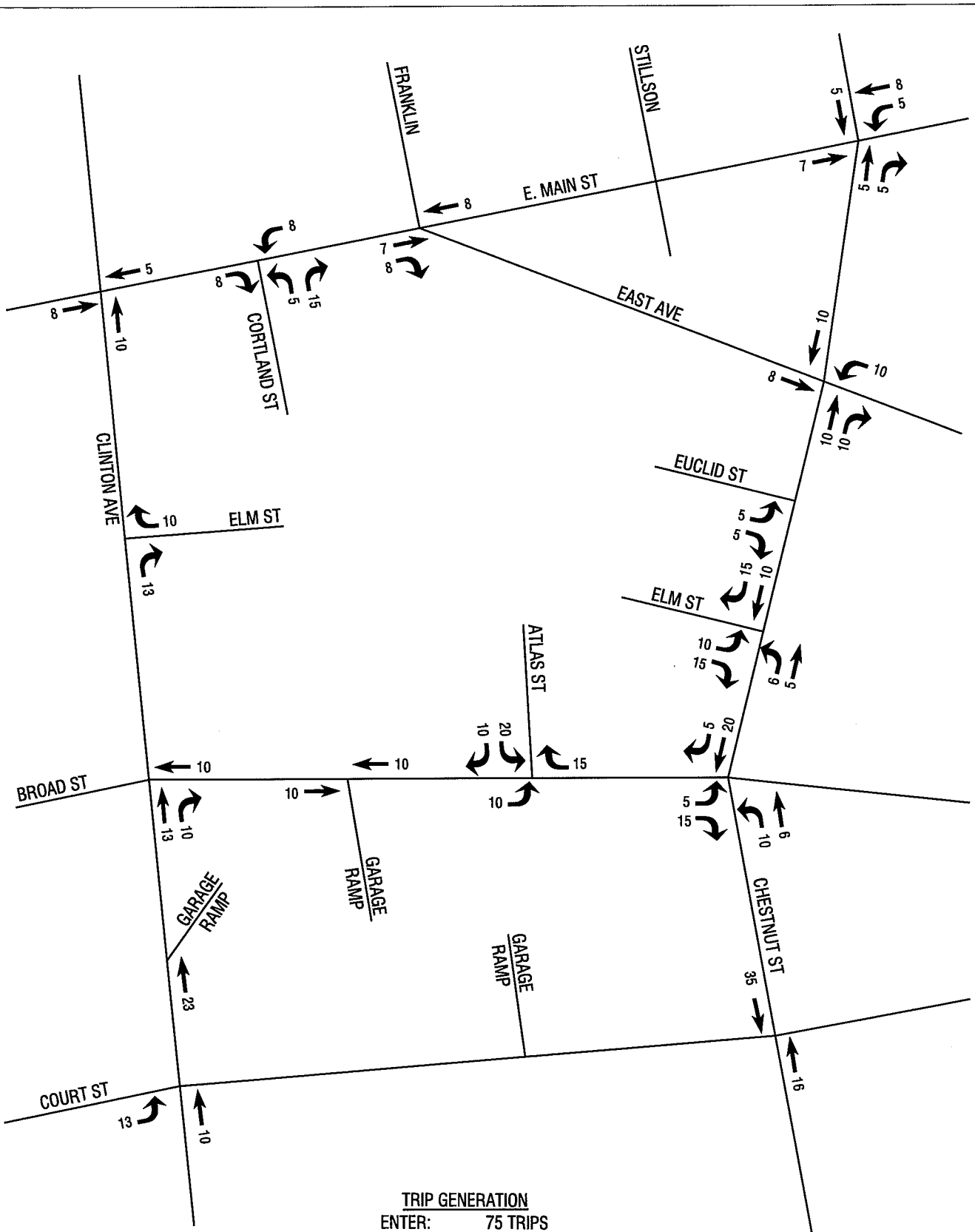

TRIP GENERATION

ENTER:	75 TRIPS
EXIT:	95 TRIPS
TOTAL:	170 TRIPS

N

N.T.S.

TRIP GENERATION
RETAIL COMPONENT
PM PEAK HOUR

MIDTOWN REDEVELOPMENT
CITY OF ROCHESTER, MONROE COUNTY

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Level of Service Analysis
Existing (2010) Condition
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1200	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0						3.0	3.0			
Lane Util. Factor		0.95						0.91	1.00			
Frpb, ped/bikes		1.00						1.00	0.89			
Flpb, ped/bikes		1.00						1.00	1.00			
Frt		1.00						1.00	0.85			
Flt Protected		0.98						0.99	1.00			
Satd. Flow (prot)		2192						5018	1401			
Flt Permitted		0.98						0.99	1.00			
Satd. Flow (perm)		2192						5018	1401			
Volume (vph)	73	164	0	0	0	0	466	1409	416	0	0	0
Peak-hour factor, PHF	0.65	0.95	0.90	0.90	0.90	0.90	0.84	0.94	0.84	0.90	0.90	0.90
Adj. Flow (vph)	112	173	0	0	0	0	555	1499	495	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	131	0	0	0
Lane Group Flow (vph)	0	285	0	0	0	0	0	2054	364	0	0	0
Confl. Peds. (#/hr)			60			64			84			15
Turn Type	Split						Split		Perm			
Protected Phases	2	2					1	1				
Permitted Phases									1			
Actuated Green, G (s)		31.0						59.0	59.0			
Effective Green, g (s)		33.0						61.0	61.0			
Actuated g/C Ratio		0.33						0.61	0.61			
Clearance Time (s)		5.0						5.0	5.0			
Lane Grp Cap (vph)		723						3061	855			
v/s Ratio Prot		c0.13						c0.41				
v/s Ratio Perm									0.35			
v/c Ratio		0.39						0.67	0.43			
Uniform Delay, d1		25.8						12.9	10.3			
Progression Factor		0.87						0.37	0.06			
Incremental Delay, d2		1.6						0.7	0.9			
Delay (s)		24.1						5.5	1.5			
Level of Service		C						A	A			
Approach Delay (s)		24.1			0.0			4.7			0.0	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 252: Court & Clinton

Lane Group	EBT	NBT	NBR
Lane Group Flow (vph)	285	2054	495
v/c Ratio	0.39	0.67	0.50
Control Delay	24.5	5.5	1.2
Queue Delay	1.8	0.5	0.5
Total Delay	26.3	6.0	1.7
Queue Length 50th (ft)	67	73	2
Queue Length 95th (ft)	100	82	m5
Internal Link Dist (ft)	124	352	
Turn Bay Length (ft)			
Base Capacity (vph)	724	3062	985
Starvation Cap Reductn	286	504	173
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.65	0.80	0.61

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0		3.0	3.0				
Lane Util. Factor					0.91		0.91	0.91				
Frpb, ped/bikes					0.98		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					4848		1610	3387				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					4848		1610	3387				
Volume (vph)	0	0	0	0	350	66	519	984	0	0	0	0
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.86	0.66	0.90	0.94	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	407	100	577	1047	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	98	1	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	507	0	460	1065	0	0	0	0
Confl. Peds. (#/hr)			94			55			94			52
Turn Type							Split					
Protected Phases					2		1	1				
Permitted Phases												
Actuated Green, G (s)					32.0		56.0	56.0				
Effective Green, g (s)					35.0		59.0	59.0				
Actuated g/C Ratio					0.35		0.59	0.59				
Clearance Time (s)					6.0		6.0	6.0				
Lane Grp Cap (vph)					1697		950	1998				
v/s Ratio Prot					c0.10		c0.35	0.31				
v/s Ratio Perm												
v/c Ratio					0.30		0.48	0.53				
Uniform Delay, d1					23.6		11.8	12.3				
Progression Factor					1.27		0.08	0.26				
Incremental Delay, d2					0.4		1.3	0.8				
Delay (s)					30.3		2.2	4.0				
Level of Service					C		A	A				
Approach Delay (s)		0.0			30.3			3.4			0.0	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 256: Broad & Clinton

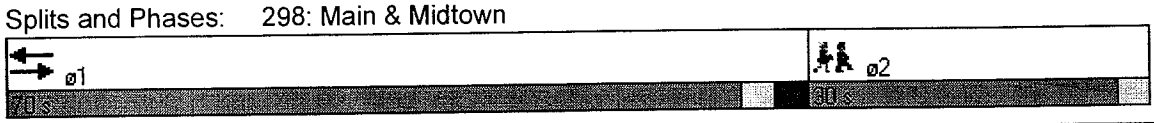
Lane Group	WBT	NBL	NBT
Lane Group Flow (vph)	507	558	1066
v/c Ratio	0.30	0.53	0.53
Control Delay	30.5	2.0	4.0
Queue Delay	0.0	0.3	0.3
Total Delay	30.5	2.3	4.3
Queue Length 50th (ft)	98	1	29
Queue Length 95th (ft)	123	1	34
Internal Link Dist (ft)	518		346
Turn Bay Length (ft)			
Base Capacity (vph)	1696	1048	2000
Starvation Cap Reductn	0	117	323
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.30	0.60	0.64

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0			3.0		
Lane Util. Factor	1.00			1.00		
Frpb, ped/bikes	1.00			1.00		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1658			1658		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	1658			1658		
Volume (vph)	350	0	0	423	0	0
Peak-hour factor, PHF	0.84	0.90	0.90	0.71	0.90	0.90
Adj. Flow (vph)	417	0	0	596	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	417	0	0	596	0	0
Confl. Peds. (#/hr)						250
Heavy Vehicles (%)	10%	10%	10%	10%	2%	2%
Bus Blockages (#/hr)	10	0	0	10	0	0
Turn Type						
Protected Phases	1			1		
Permitted Phases						
Actuated Green, G (s)	64.0			64.0		
Effective Green, g (s)	67.0			67.0		
Actuated g/C Ratio	0.67			0.67		
Clearance Time (s)	6.0			6.0		
Lane Grp Cap (vph)	1111			1111		
v/s Ratio Prot	0.25			c0.36		
v/s Ratio Perm						
v/c Ratio	0.38			0.54		
Uniform Delay, d1	7.3			8.5		
Progression Factor	0.00			0.26		
Incremental Delay, d2	0.7			1.8		
Delay (s)	0.7			4.0		
Level of Service	A			A		
Approach Delay (s)	0.7			4.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	2.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 298: Main & Midtown



Lane Group	EBT	WBT
Lane Group Flow (vph)	417	596
v/c Ratio	0.38	0.54
Control Delay	0.7	4.1
Queue Delay	0.4	0.8
Total Delay	1.1	4.9
Queue Length 50th (ft)	1	39
Queue Length 95th (ft)	0	40
Internal Link Dist (ft)	173	215
Turn Bay Length (ft)		
Base Capacity (vph)	1111	1111
Starvation Cap Reductn	282	24
Spillback Cap Reductn	0	251
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.50	0.69

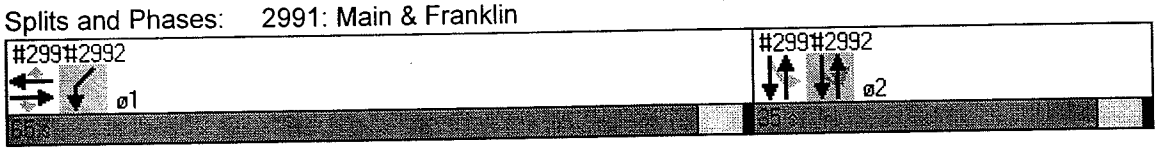
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		0.95			0.95	
Frpb, ped/bikes		1.00	0.69		1.00	0.75		0.98			0.90	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.99			0.94	
Flt Protected		1.00	1.00		1.00	1.00		1.00			1.00	
Satd. Flow (prot)		1727	1016		1727	1102		3422			2990	
Flt Permitted		1.00	1.00		1.00	1.00		1.00			0.95	
Satd. Flow (perm)		1727	1016		1727	1102		3422			2844	
Volume (vph)	0	264	90	0	345	11	0	60	2	2	56	25
Peak-hour factor, PHF	0.90	0.89	0.73	0.90	0.85	0.69	0.90	0.75	0.25	0.50	0.88	0.52
Adj. Flow (vph)	0	297	123	0	406	16	0	80	8	4	64	48
RTOR Reduction (vph)	0	0	47	0	0	6	0	5	0	0	33	0
Lane Group Flow (vph)	0	297	76	0	406	10	0	83	0	0	83	0
Confl. Peds. (#/hr)			249			194			167			106
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Turn Type			Perm			Perm				Perm		
Protected Phases		1			1			2			2	
Permitted Phases			1			1		2		2		
Actuated Green, G (s)		60.0	60.0		60.0	60.0		30.0			30.0	
Effective Green, g (s)		62.0	62.0		62.0	62.0		32.0			32.0	
Actuated g/C Ratio		0.62	0.62		0.62	0.62		0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)		1071	630		1071	683		1095			910	
v/s Ratio Prot		0.17			c0.24			0.03				
v/s Ratio Perm			0.12			0.01					c0.04	
v/c Ratio		0.28	0.12		0.38	0.01		0.08			0.09	
Uniform Delay, d1		8.7	7.8		9.4	7.3		23.7			23.8	
Progression Factor		0.42	0.23		0.48	0.31		0.96			0.22	
Incremental Delay, d2		0.6	0.4		1.0	0.0		0.1			0.2	
Delay (s)		4.3	2.2		5.5	2.3		22.9			5.3	
Level of Service		A	A		A	A		C			A	
Approach Delay (s)		3.7			5.4			22.9			5.3	
Approach LOS		A			A			C			A	

Intersection Summary			
HCM Average Control Delay	6.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 2991: Main & Franklin



Lane Group	EBT	EBR	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	297	123	406	16	88	116
v/c Ratio	0.28	0.18	0.38	0.02	0.08	0.12
Control Delay	4.4	0.9	5.7	1.1	21.0	3.4
Queue Delay	0.4	0.0	0.3	0.0	0.0	0.5
Total Delay	4.7	0.9	6.0	1.1	21.0	4.0
Queue Length 50th (ft)	22	0	43	0	16	0
Queue Length 95th (ft)	23	0	55	1	26	0
Internal Link Dist (ft)	215		231		494	98
Turn Bay Length (ft)						
Base Capacity (vph)	1071	677	1071	689	1100	943
Starvation Cap Reductn	375	0	251	0	0	557
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.18	0.50	0.02	0.08	0.30

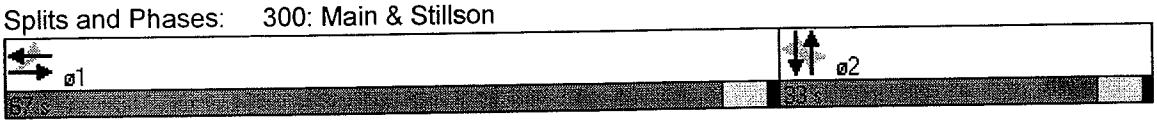
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.95			0.94	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			1.00			0.90			0.89	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		3267			3229			1586			1552	
Flt Permitted		0.90			1.00			0.99			0.97	
Satd. Flow (perm)		2958			3229			1580			1520	
Volume (vph)	24	243	0	0	337	11	2	6	23	5	0	23
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	270	0	0	374	12	2	7	26	6	0	26
RTOR Reduction (vph)	0	0	0	0	2	0	0	18	0	0	18	0
Lane Group Flow (vph)	0	297	0	0	384	0	0	17	0	0	14	0
Confl. Peds. (#/hr)			150			150			50			50
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Turn Type	Perm						Perm			Perm		
Protected Phases		1			1			2			2	
Permitted Phases	1						2			2		
Actuated Green, G (s)		62.0			62.0			28.0			28.0	
Effective Green, g (s)		64.0			64.0			30.0			30.0	
Actuated g/C Ratio		0.64			0.64			0.30			0.30	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		1893			2067			474			456	
v/s Ratio Prot					c0.12							
v/s Ratio Perm		0.10						c0.02			0.02	
v/c Ratio		0.16			0.19			0.04			0.03	
Uniform Delay, d1		7.2			7.4			24.8			24.7	
Progression Factor		0.30			0.45			1.00			1.00	
Incremental Delay, d2		0.2			0.2			0.1			0.1	
Delay (s)		2.3			3.5			24.9			24.8	
Level of Service		A			A			C			C	
Approach Delay (s)		2.3			3.5			24.9			24.8	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	4.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.15		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 300: Main & Stillson



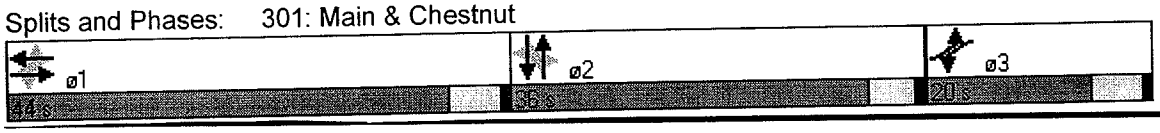
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	297	386	35	32
v/c Ratio	0.16	0.19	0.07	0.07
Control Delay	2.3	3.5	12.7	12.0
Queue Delay	0.0	0.3	0.0	0.0
Total Delay	2.3	3.8	12.7	12.0
Queue Length 50th (ft)	8	16	4	3
Queue Length 95th (ft)	11	25	27	24
Internal Link Dist (ft)	231	188	31	96
Turn Bay Length (ft)				
Base Capacity (vph)	1892	2068	492	474
Starvation Cap Reductn	0	1073	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.39	0.07	0.07

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1641	3179		1641	3142		1770	3461		1770	3492	
Flt Permitted	0.47	1.00		0.65	1.00		0.26	1.00		0.45	1.00	
Satd. Flow (perm)	817	3179		1115	3142		486	3461		835	3492	
Volume (vph)	89	138	14	128	279	60	35	268	30	37	460	45
Peak-hour factor, PHF	0.77	0.93	0.70	0.70	0.84	0.83	0.80	0.81	0.75	0.77	0.79	0.94
Adj. Flow (vph)	116	148	20	183	332	72	44	331	40	48	582	48
RTOR Reduction (vph)	0	9	0	0	16	0	0	9	0	0	6	0
Lane Group Flow (vph)	116	159	0	183	388	0	44	362	0	48	624	0
Confl. Peds. (#/hr)			78			60			32			10
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	3	1		3	1			2			2	
Permitted Phases	1			1			2			2		
Actuated Green, G (s)	53.0	46.0		53.0	46.0		31.0	31.0		31.0	31.0	
Effective Green, g (s)	58.0	48.5		58.0	48.5		33.0	33.0		33.0	33.0	
Actuated g/C Ratio	0.58	0.48		0.58	0.48		0.33	0.33		0.33	0.33	
Clearance Time (s)	5.5	5.5		5.5	5.5		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	552	1542		697	1524		160	1142		276	1152	
v/s Ratio Prot	0.02	0.05		c0.02	c0.13			0.11			c0.18	
v/s Ratio Perm	0.10			0.13			0.09			0.06		
v/c Ratio	0.21	0.10		0.26	0.25		0.28	0.32		0.17	0.54	
Uniform Delay, d1	9.6	14.0		9.9	15.1		24.7	25.1		23.8	27.3	
Progression Factor	2.15	1.88		0.39	0.30		0.47	0.47		0.35	0.37	
Incremental Delay, d2	0.1	0.1		0.1	0.4		4.2	0.7		1.3	1.7	
Delay (s)	20.7	26.4		3.9	5.0		15.8	12.5		9.6	11.9	
Level of Service	C	C		A	A		B	B		A	B	
Approach Delay (s)		24.1			4.6			12.9			11.7	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM Average Control Delay	11.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 301: Main & Chestnut



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	116	168	183	404	44	371	48	630
v/c Ratio	0.22	0.11	0.26	0.26	0.28	0.32	0.17	0.54
Control Delay	18.7	24.1	4.1	4.7	16.5	12.2	9.9	11.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.7	24.1	4.1	4.7	16.5	12.2	9.9	11.8
Queue Length 50th (ft)	49	32	17	10	10	41	9	94
Queue Length 95th (ft)	75	58	24	16	20	48	18	96
Internal Link Dist (ft)		188		225		289		561
Turn Bay Length (ft)	125		125		125		125	
Base Capacity (vph)	623	1551	769	1539	160	1152	276	1159
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.11	0.24	0.26	0.28	0.32	0.17	0.54

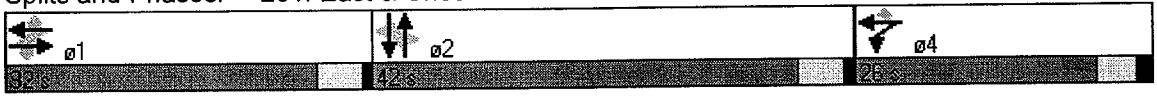
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.90		1.00	0.87	1.00	0.98		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected		0.99	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1852	1427		1811	1380	1770	3358		1770	3535	
Flt Permitted		0.96	1.00		0.78	1.00	0.26	1.00		0.49	1.00	
Satd. Flow (perm)		1796	1427		1459	1380	487	3358		904	3535	
Volume (vph)	3	78	59	105	68	52	39	242	56	61	631	1
Peak-hour factor, PHF	0.25	0.81	0.78	0.77	0.68	0.62	0.61	0.89	0.70	0.59	0.91	0.25
Adj. Flow (vph)	12	96	76	136	100	84	64	272	80	103	693	4
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	108	76	0	236	84	64	352	0	103	697	0
Confl. Peds. (#/hr)			65			87			52			52
Turn Type	Perm		Perm	pm+pt		Perm	Perm			Perm		
Protected Phases		1		4	1 4			2			2	
Permitted Phases	1		1	1 4		1 4	2			2		
Actuated Green, G (s)		38.0	38.0		48.0	53.0	37.0	37.0		37.0	37.0	
Effective Green, g (s)		40.0	40.0		52.0	55.0	39.0	39.0		39.0	39.0	
Actuated g/C Ratio		0.40	0.40		0.52	0.55	0.39	0.39		0.39	0.39	
Clearance Time (s)		5.0	5.0				5.0	5.0		5.0	5.0	
Vehicle Extension (s)		2.0	2.0				2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		718	571		801	759	190	1310		353	1379	
v/s Ratio Prot					c0.04			0.10			c0.20	
v/s Ratio Perm		0.06	0.05		c0.12	0.06	0.13			0.11		
v/c Ratio		0.15	0.13		0.29	0.11	0.34	0.27		0.29	0.51	
Uniform Delay, d1		19.2	19.0		13.6	10.8	21.4	20.8		21.0	23.2	
Progression Factor		1.59	1.60		0.85	0.85	0.77	0.76		0.41	0.40	
Incremental Delay, d2		0.4	0.5		0.1	0.0	4.6	0.5		1.9	1.2	
Delay (s)		30.9	30.8		11.7	9.2	21.1	16.3		10.5	10.5	
Level of Service		C	C		B	A	C	B		B	B	
Approach Delay (s)		30.9			11.0			17.0			10.5	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 261: East & Chestnut



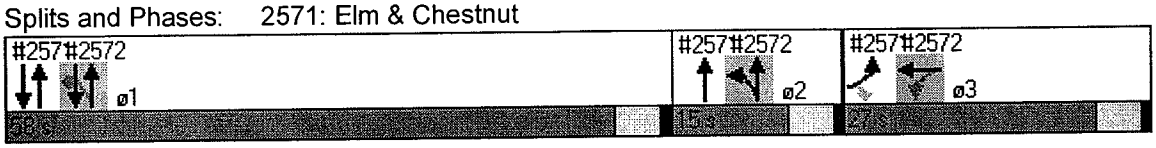
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	108	76	236	84	64	352	103	697
v/c Ratio	0.15	0.13	0.29	0.11	0.34	0.27	0.29	0.51
Control Delay	32.7	32.9	10.9	9.6	22.4	16.4	10.9	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	32.7	32.9	10.9	9.6	22.4	16.4	10.9	10.7
Queue Length 50th (ft)	59	42	65	21	23	65	20	71
Queue Length 95th (ft)	102	75	74	28	29	84	23	88
Internal Link Dist (ft)	494		594			382		289
Turn Bay Length (ft)					125		125	
Base Capacity (vph)	715	570	888	759	190	1310	352	1378
Starvation Cap Reductn	0	0	0	0	0	0	0	119
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.13	0.27	0.11	0.34	0.27	0.29	0.55

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	1770	1583		3539	3531	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	1770	1583		3539	3531	
Volume (vph)	150	100	0	454	660	10
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	167	111	0	504	733	11
RTOR Reduction (vph)	0	84	0	0	1	0
Lane Group Flow (vph)	167	27	0	504	743	0
Turn Type		Perm				
Protected Phases	3			1 2	1	
Permitted Phases		3				
Actuated Green, G (s)	22.0	22.0		68.0	53.0	
Effective Green, g (s)	24.0	24.0		70.0	55.0	
Actuated g/C Ratio	0.24	0.24		0.70	0.55	
Clearance Time (s)	5.0	5.0			5.0	
Vehicle Extension (s)	2.0	2.0			2.0	
Lane Grp Cap (vph)	425	380		2477	1942	
v/s Ratio Prot	c0.09			c0.14	c0.21	
v/s Ratio Perm		0.07				
v/c Ratio	0.39	0.07		0.20	0.38	
Uniform Delay, d1	31.9	29.4		5.2	12.8	
Progression Factor	1.00	1.00		0.50	0.40	
Incremental Delay, d2	2.7	0.4		0.2	0.5	
Delay (s)	34.6	29.7		2.8	5.7	
Level of Service	C	C		A	A	
Approach Delay (s)	32.7			2.8	5.7	
Approach LOS	C			A	A	

Intersection Summary			
HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 2571: Elm & Chestnut



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	167	111	504	744
v/c Ratio	0.39	0.24	0.20	0.38
Control Delay	35.2	7.4	2.8	5.7
Queue Delay	0.0	0.0	0.3	0.0
Total Delay	35.2	7.4	3.1	5.7
Queue Length 50th (ft)	90	0	19	44
Queue Length 95th (ft)	152	43	33	55
Internal Link Dist (ft)	133		153	382
Turn Bay Length (ft)				
Base Capacity (vph)	425	464	2477	1944
Starvation Cap Reductn	0	0	1317	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.39	0.24	0.43	0.38

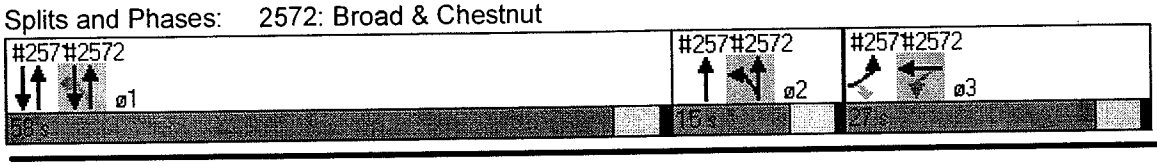
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0		3.0	3.0			3.0	3.0
Lane Util. Factor					0.91		1.00	0.95			0.95	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	0.96
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)					5005		1770	3539			3539	1513
Flt Permitted					0.99		0.38	1.00			1.00	1.00
Satd. Flow (perm)					5005		706	3539			3539	1513
Volume (vph)	0	0	0	29	119	2	95	365	0	0	473	189
Peak-hour factor, PHF	0.90	0.90	0.90	0.73	0.93	0.50	0.88	0.89	0.90	0.90	0.80	0.81
Adj. Flow (vph)	0	0	0	40	128	4	108	410	0	0	591	233
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	105
Lane Group Flow (vph)	0	0	0	0	170	0	108	410	0	0	591	128
Confl. Peds. (#/hr)			64			20			30			30
Turn Type				Perm			pm+pt					Perm
Protected Phases					3		2	1 2			1	
Permitted Phases				3			1 2					1
Actuated Green, G (s)					22.0		63.0	68.0			53.0	53.0
Effective Green, g (s)					24.0		67.0	70.0			55.0	55.0
Actuated g/C Ratio					0.24		0.67	0.70			0.55	0.55
Clearance Time (s)					5.0		5.0				5.0	5.0
Vehicle Extension (s)					2.0		2.0				2.0	2.0
Lane Grp Cap (vph)					1201		601	2477			1946	832
v/s Ratio Prot							0.02	c0.12			c0.17	
v/s Ratio Perm					0.03		0.10					0.15
v/c Ratio					0.14		0.18	0.17			0.30	0.15
Uniform Delay, d1					29.9		9.0	5.1			12.2	11.1
Progression Factor					1.11		0.32	0.23			0.22	0.02
Incremental Delay, d2					0.2		0.6	0.1			0.4	0.4
Delay (s)					33.4		3.5	1.3			3.0	0.6
Level of Service					C		A	A			A	A
Approach Delay (s)		0.0			33.4			1.8			2.3	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	5.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 2572: Broad & Chestnut



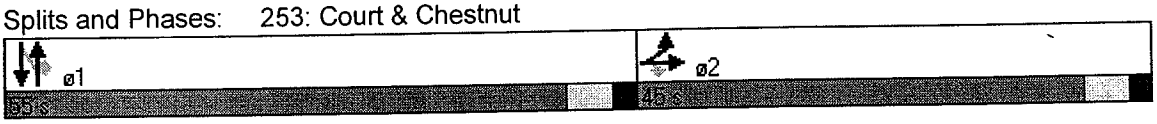
Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	172	108	410	591	233
v/c Ratio	0.14	0.18	0.17	0.30	0.25
Control Delay	33.0	2.4	1.3	3.1	0.6
Queue Delay	0.0	0.0	0.0	0.3	0.4
Total Delay	33.0	2.4	1.3	3.3	1.0
Queue Length 50th (ft)	36	3	6	17	0
Queue Length 95th (ft)	62	10	14	26	0
Internal Link Dist (ft)	614		255	153	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1205	601	2477	1946	937
Starvation Cap Reductn	0	0	0	695	340
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.14	0.18	0.17	0.47	0.39

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Util. Factor		0.95	1.00					0.95	1.00	1.00	0.95	
Frpb, ped/bikes		1.00	0.94					1.00	0.96	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.98	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3465	1489					3539	1518	1770	3539	
Flt Permitted		0.98	1.00					1.00	1.00	0.53	1.00	
Satd. Flow (perm)		3465	1489					3539	1518	986	3539	
Volume (vph)	159	208	71	0	0	0	0	295	64	26	472	0
Peak-hour factor, PHF	0.90	0.88	0.63	0.90	0.90	0.90	0.81	0.89	0.80	0.65	0.97	0.87
Adj. Flow (vph)	177	236	113	0	0	0	0	331	80	40	487	0
RTOR Reduction (vph)	0	0	66	0	0	0	0	0	38	0	0	0
Lane Group Flow (vph)	0	413	47	0	0	0	0	331	42	40	487	0
Confl. Peds. (#/hr)	7		34						24			12
Turn Type	Split		Perm						Perm	Perm		
Protected Phases	2	2						1			1	
Permitted Phases			2						1	1		
Actuated Green, G (s)		39.0	39.0					49.0	49.0	49.0	49.0	
Effective Green, g (s)		42.0	42.0					52.0	52.0	52.0	52.0	
Actuated g/C Ratio		0.42	0.42					0.52	0.52	0.52	0.52	
Clearance Time (s)		6.0	6.0					6.0	6.0	6.0	6.0	
Lane Grp Cap (vph)		1455	625					1840	789	513	1840	
v/s Ratio Prot		c0.12						0.09			c0.14	
v/s Ratio Perm			0.08						0.05	0.04		
v/c Ratio		0.28	0.08					0.18	0.05	0.08	0.26	
Uniform Delay, d1		19.1	17.4					12.7	11.8	12.0	13.4	
Progression Factor		1.16	1.47					0.85	1.33	1.04	0.95	
Incremental Delay, d2		0.4	0.2					0.2	0.1	0.3	0.3	
Delay (s)		22.6	25.8					11.0	15.8	12.8	13.0	
Level of Service		C	C					B	B	B	B	
Approach Delay (s)		23.3			0.0			11.9			13.0	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 253: Court & Chestnut



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	413	113	331	80	40	487
v/c Ratio	0.28	0.16	0.18	0.10	0.08	0.26
Control Delay	22.8	5.8	11.1	4.1	13.2	13.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	22.8	5.8	11.1	4.1	13.2	13.3
Queue Length 50th (ft)	95	6	64	5	9	60
Queue Length 95th (ft)	126	13	99	33	16	83
Internal Link Dist (ft)	452		376			255
Turn Bay Length (ft)					100	
Base Capacity (vph)	1455	691	1840	828	512	1840
Starvation Cap Reductn	0	0	0	0	0	591
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.16	0.18	0.10	0.08	0.39

Intersection Summary

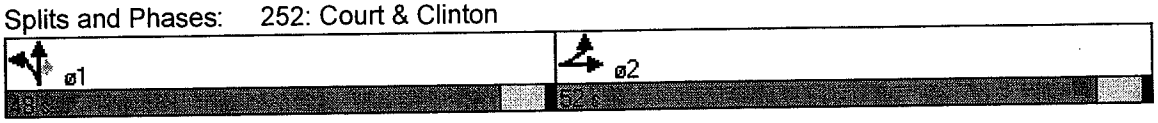
Level of Service Analysis
Existing (2010) Condition
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1200	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0						3.0	3.0			
Lane Util. Factor		0.95						0.91	1.00			
Frt		1.00						1.00	0.85			
Flt Protected		0.99						1.00	1.00			
Satd. Flow (prot)		2212						5060	1583			
Flt Permitted		0.99						1.00	1.00			
Satd. Flow (perm)		2212						5060	1583			
Volume (vph)	106	341	0	0	0	0	70	982	198	0	0	0
Peak-hour factor, PHF	0.78	0.67	0.90	0.90	0.90	0.90	0.60	0.92	0.65	0.90	0.90	0.90
Adj. Flow (vph)	136	509	0	0	0	0	117	1067	305	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	156	0	0	0
Lane Group Flow (vph)	0	645	0	0	0	0	0	1184	149	0	0	0
Turn Type	Split						Split		Perm			
Protected Phases	2	2					1	1				
Permitted Phases									1			
Actuated Green, G (s)		47.0						43.0	43.0			
Effective Green, g (s)		49.0						45.0	45.0			
Actuated g/C Ratio		0.49						0.45	0.45			
Clearance Time (s)		5.0						5.0	5.0			
Lane Grp Cap (vph)		1084						2277	712			
v/s Ratio Prot		c0.29						c0.23				
v/s Ratio Perm									0.19			
v/c Ratio		0.60						0.52	0.21			
Uniform Delay, d1		18.4						19.7	16.7			
Progression Factor		0.92						0.46	0.04			
Incremental Delay, d2		2.4						0.8	0.6			
Delay (s)		19.2						9.8	1.3			
Level of Service		B						A	A			
Approach Delay (s)		19.2			0.0			8.1			0.0	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM Average Control Delay	11.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 252: Court & Clinton



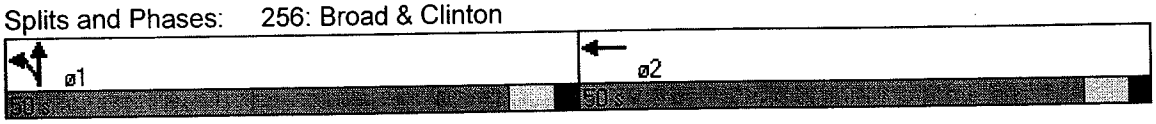
Lane Group	EBT	NBT	NBR
Lane Group Flow (vph)	645	1184	305
v/c Ratio	0.60	0.52	0.35
Control Delay	19.6	9.9	1.1
Queue Delay	4.7	0.1	0.0
Total Delay	24.3	10.0	1.1
Queue Length 50th (ft)	148	60	0
Queue Length 95th (ft)	143	69	0
Internal Link Dist (ft)	124	352	
Turn Bay Length (ft)			
Base Capacity (vph)	1084	2277	868
Starvation Cap Reductn	359	213	0
Spillback Cap Reductn	0	48	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.89	0.57	0.35

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0		3.0	3.0				
Lane Util. Factor					0.91		0.91	0.91				
Frpb, ped/bikes					0.97		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					4774		1610	3390				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					4774		1610	3390				
Volume (vph)	0	0	0	0	252	60	281	792	0	0	0	0
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.93	0.83	0.88	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	271	72	319	880	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	24	0	169	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	319	0	150	880	0	0	0	0
Confl. Peds. (#/hr)			99			96			105			96
Turn Type							Split					
Protected Phases					2		1	1				
Permitted Phases												
Actuated Green, G (s)					44.0		44.0	44.0				
Effective Green, g (s)					47.0		47.0	47.0				
Actuated g/C Ratio					0.47		0.47	0.47				
Clearance Time (s)					6.0		6.0	6.0				
Lane Grp Cap (vph)					2244		757	1593				
v/s Ratio Prot					c0.07		0.20	c0.26				
v/s Ratio Perm												
v/c Ratio					0.14		0.20	0.55				
Uniform Delay, d1					15.0		15.5	19.0				
Progression Factor					1.28		0.00	0.24				
Incremental Delay, d2					0.1		0.4	1.0				
Delay (s)					19.4		0.4	5.5				
Level of Service					B		A	A				
Approach Delay (s)		0.0			19.4			4.2			0.0	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	7.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 256: Broad & Clinton



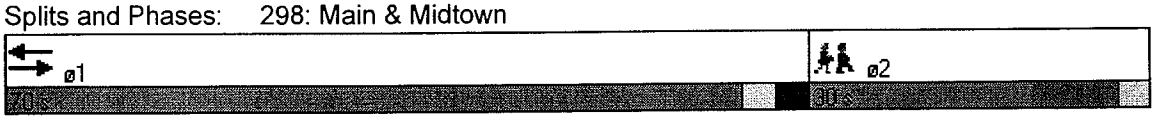
Lane Group	WBT	NBL	NBT
Lane Group Flow (vph)	343	319	880
v/c Ratio	0.15	0.34	0.55
Control Delay	16.9	0.8	5.6
Queue Delay	0.0	0.4	0.3
Total Delay	16.9	1.1	5.9
Queue Length 50th (ft)	43	0	37
Queue Length 95th (ft)	68	0	45
Internal Link Dist (ft)	518		346
Turn Bay Length (ft)			
Base Capacity (vph)	2269	926	1593
Starvation Cap Reductn	0	239	212
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.15	0.46	0.64

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0			3.0		
Lane Util. Factor	1.00			1.00		
Frpb, ped/bikes	1.00			1.00		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1863			1863		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	1863			1863		
Volume (vph)	476	0	0	291	0	0
Peak-hour factor, PHF	0.88	0.90	0.90	0.73	0.90	0.90
Adj. Flow (vph)	541	0	0	399	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	541	0	0	399	0	0
Confl. Peds. (#/hr)						250
Turn Type						
Protected Phases	1			1		
Permitted Phases						
Actuated Green, G (s)	64.0			64.0		
Effective Green, g (s)	67.0			67.0		
Actuated g/C Ratio	0.67			0.67		
Clearance Time (s)	6.0			6.0		
Lane Grp Cap (vph)	1248			1248		
v/s Ratio Prot	c0.29			0.21		
v/s Ratio Perm						
v/c Ratio	0.43			0.32		
Uniform Delay, d1	7.7			6.9		
Progression Factor	0.16			0.08		
Incremental Delay, d2	0.9			0.6		
Delay (s)	2.1			1.2		
Level of Service	A			A		
Approach Delay (s)	2.1			1.2	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	1.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 298: Main & Midtown



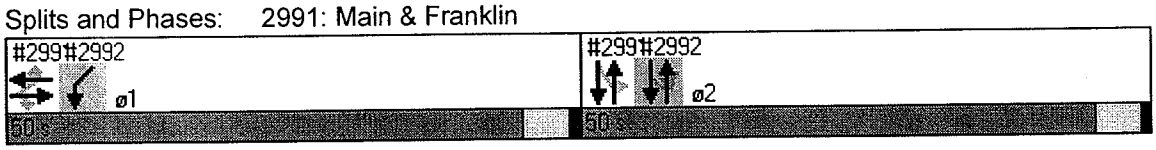
Lane Group	EBT	WBT
Lane Group Flow (vph)	541	399
v/c Ratio	0.43	0.32
Control Delay	2.1	1.2
Queue Delay	0.3	0.2
Total Delay	2.4	1.4
Queue Length 50th (ft)	11	7
Queue Length 95th (ft)	33	9
Internal Link Dist (ft)	173	215
Turn Bay Length (ft)		
Base Capacity (vph)	1248	1248
Starvation Cap Reductn	227	297
Spillback Cap Reductn	36	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.53	0.42

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑↑↱			↑↑↱	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		0.95			0.95	
Frpb, ped/bikes		1.00	0.97		1.00	0.91		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.99			0.98	
Flt Protected		1.00	1.00		1.00	1.00		1.00			1.00	
Satd. Flow (prot)		1862	1543		1863	1436		3507			3441	
Flt Permitted		1.00	1.00		1.00	1.00		1.00			0.95	
Satd. Flow (perm)		1858	1543		1863	1436		3507			3279	
Volume (vph)	4	387	122	0	338	6	0	60	2	2	104	16
Peak-hour factor, PHF	0.90	0.82	0.87	0.90	0.93	0.50	0.90	0.71	0.50	0.50	0.72	0.67
Adj. Flow (vph)	4	472	140	0	363	12	0	85	4	4	144	24
RTOR Reduction (vph)	0	0	74	0	0	6	0	2	0	0	13	0
Lane Group Flow (vph)	0	476	66	0	363	6	0	87	0	0	159	0
Confl. Peds. (#/hr)			11			66			31			11
Turn Type	Perm		Perm			Perm				Perm		
Protected Phases		1			1			2			2	
Permitted Phases	1		1			1		2		2		
Actuated Green, G (s)		45.0	45.0		45.0	45.0		45.0			45.0	
Effective Green, g (s)		47.0	47.0		47.0	47.0		47.0			47.0	
Actuated g/C Ratio		0.47	0.47		0.47	0.47		0.47			0.47	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)		873	725		876	675		1648			1541	
v/s Ratio Prot					0.19			0.03				
v/s Ratio Perm		c0.26	0.09			0.01					c0.05	
v/c Ratio		0.55	0.09		0.41	0.01		0.05			0.10	
Uniform Delay, d1		18.9	14.7		17.4	14.1		14.4			14.8	
Progression Factor		1.17	2.50		0.59	0.45		1.49			0.42	
Incremental Delay, d2		2.3	0.2		1.4	0.0		0.1			0.1	
Delay (s)		24.4	36.9		11.7	6.4		21.6			6.4	
Level of Service		C	D		B	A		C			A	
Approach Delay (s)		27.2			11.5			21.6			6.4	
Approach LOS		C			B			C			A	

Intersection Summary			
HCM Average Control Delay	19.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 2991: Main & Franklin



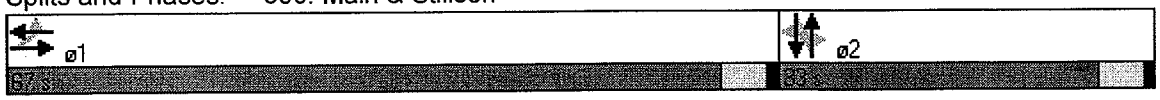
Lane Group	EBT	EBR	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	476	140	363	12	89	172
v/c Ratio	0.54	0.18	0.41	0.02	0.05	0.11
Control Delay	25.0	7.2	11.9	3.3	20.8	5.6
Queue Delay	0.8	0.0	0.6	0.0	0.0	0.6
Total Delay	25.8	7.2	12.6	3.3	20.8	6.2
Queue Length 50th (ft)	172	17	66	0	18	7
Queue Length 95th (ft)	200	35	82	1	24	13
Internal Link Dist (ft)	215		231		494	98
Turn Bay Length (ft)						
Base Capacity (vph)	874	799	876	681	1650	1554
Starvation Cap Reductn	170	0	231	0	0	1091
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.18	0.56	0.02	0.05	0.37

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.89			0.90	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			1.00			0.90			0.91	
Flt Protected		1.00			1.00			0.99			0.98	
Satd. Flow (prot)		3530			3491			1476			1497	
Flt Permitted		0.92			1.00			0.98			0.94	
Satd. Flow (perm)		3268			3491			1459			1435	
Volume (vph)	21	395	0	0	370	10	4	4	21	9	0	18
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	23	439	0	0	411	11	4	4	23	10	0	20
RTOR Reduction (vph)	0	0	0	0	2	0	0	16	0	0	14	0
Lane Group Flow (vph)	0	462	0	0	420	0	0	15	0	0	16	0
Confl. Peds. (#/hr)			150			150			125			125
Turn Type	Perm						Perm			Perm		
Protected Phases		1			1			2			2	
Permitted Phases	1						2			2		
Actuated Green, G (s)		62.0			62.0			28.0			28.0	
Effective Green, g (s)		64.0			64.0			30.0			30.0	
Actuated g/C Ratio		0.64			0.64			0.30			0.30	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		2092			2234			438			431	
v/s Ratio Prot					0.12							
v/s Ratio Perm		c0.14						c0.02			0.02	
v/c Ratio		0.22			0.19			0.03			0.04	
Uniform Delay, d1		7.5			7.4			24.8			24.8	
Progression Factor		0.02			0.14			1.00			1.00	
Incremental Delay, d2		0.2			0.2			0.1			0.2	
Delay (s)		0.4			1.2			24.9			24.9	
Level of Service		A			A			C			C	
Approach Delay (s)		0.4			1.2			24.9			24.9	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	2.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.17		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 300: Main & Stillson



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	462	422	31	30
v/c Ratio	0.22	0.19	0.07	0.07
Control Delay	0.4	1.2	13.1	14.1
Queue Delay	0.2	0.3	0.0	0.0
Total Delay	0.5	1.6	13.1	14.1
Queue Length 50th (ft)	1	4	4	5
Queue Length 95th (ft)	1	5	25	26
Internal Link Dist (ft)	231	188	31	96
Turn Bay Length (ft)				
Base Capacity (vph)	2091	2236	454	445
Starvation Cap Reductn	865	1227	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.38	0.42	0.07	0.07

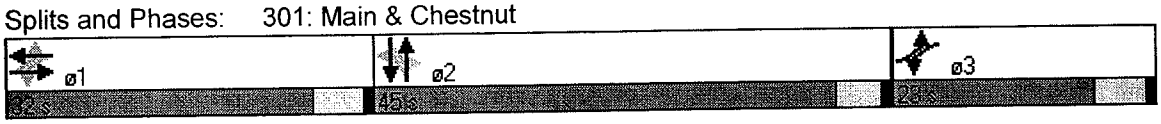
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3452		1770	3421		1770	3416		1770	3428	
Flt Permitted	0.46	1.00		0.48	1.00		0.38	1.00		0.34	1.00	
Satd. Flow (perm)	849	3452		891	3421		705	3416		625	3428	
Volume (vph)	138	262	25	94	284	37	25	373	76	63	330	65
Peak-hour factor, PHF	0.80	0.82	0.63	0.84	0.84	0.71	0.78	0.76	0.76	0.88	0.75	0.81
Adj. Flow (vph)	172	320	40	112	338	52	32	491	100	72	440	80
RTOR Reduction (vph)	0	9	0	0	10	0	0	17	0	0	15	0
Lane Group Flow (vph)	172	351	0	112	380	0	32	574	0	72	505	0
Confl. Peds. (#/hr)			46			68			34			32
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	3	1		3	1			2			2	
Permitted Phases	1			1			2			2		
Actuated Green, G (s)	44.0	36.2		44.0	36.2		40.0	40.0		40.0	40.0	
Effective Green, g (s)	49.0	38.7		49.0	38.7		42.0	42.0		42.0	42.0	
Actuated g/C Ratio	0.49	0.39		0.49	0.39		0.42	0.42		0.42	0.42	
Clearance Time (s)	5.5	5.5		5.5	5.5		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	511	1336		527	1324		296	1435		263	1440	
v/s Ratio Prot	c0.03	0.10		0.02	0.11			c0.17			0.15	
v/s Ratio Perm	c0.13			0.08			0.05			0.12		
v/c Ratio	0.34	0.26		0.21	0.29		0.11	0.40		0.27	0.35	
Uniform Delay, d1	14.6	20.9		14.0	21.1		17.6	20.2		19.0	19.7	
Progression Factor	1.51	1.33		0.35	0.31		0.41	0.36		0.56	0.57	
Incremental Delay, d2	0.1	0.5		0.1	0.5		0.7	0.8		2.5	0.7	
Delay (s)	22.2	28.3		5.0	7.0		7.9	8.0		13.2	11.8	
Level of Service	C	C		A	A		A	A		B	B	
Approach Delay (s)		26.3			6.6			8.0			12.0	
Approach LOS		C			A			A			B	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 301: Main & Chestnut



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	172	360	112	390	32	591	72	520
v/c Ratio	0.36	0.27	0.22	0.29	0.11	0.41	0.27	0.36
Control Delay	20.9	27.9	5.1	6.9	8.1	7.7	13.8	11.3
Queue Delay	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	21.0	28.4	5.1	6.9	8.1	7.9	13.8	11.3
Queue Length 50th (ft)	74	82	13	23	5	43	17	71
Queue Length 95th (ft)	85	85	21	31	10	44	27	51
Internal Link Dist (ft)		188		225		289		561
Turn Bay Length (ft)	125		125		125		125	
Base Capacity (vph)	599	1345	615	1335	297	1452	263	1455
Starvation Cap Reductn	14	577	0	0	0	269	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.47	0.18	0.29	0.11	0.50	0.27	0.36

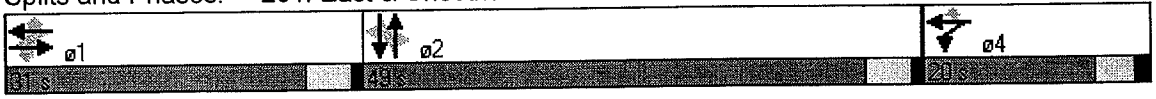
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.89		1.00	0.85	1.00	0.98		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected		1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1861	1406		1805	1342	1770	3342		1770	3525	
Flt Permitted		1.00	1.00		0.72	1.00	0.39	1.00		0.35	1.00	
Satd. Flow (perm)		1854	1406		1348	1342	721	3342		652	3525	
Volume (vph)	3	136	84	87	52	39	22	394	102	53	412	5
Peak-hour factor, PHF	0.75	0.74	0.72	0.78	0.81	0.57	0.69	0.86	0.75	0.95	0.79	0.63
Adj. Flow (vph)	4	184	117	112	64	68	32	458	136	56	522	8
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	188	117	0	176	68	32	594	0	56	530	0
Confl. Peds. (#/hr)			75			105			66			84
Turn Type	Perm		Perm	pm+pt		Perm	Perm			Perm		
Protected Phases		1		4	1 4			2			2	
Permitted Phases	1		1	1 4		1 4	2			2		
Actuated Green, G (s)		32.9	32.9		41.0	46.0	44.0	44.0		44.0	44.0	
Effective Green, g (s)		34.9	34.9		45.0	48.0	46.0	46.0		46.0	46.0	
Actuated g/C Ratio		0.35	0.35		0.45	0.48	0.46	0.46		0.46	0.46	
Clearance Time (s)		5.0	5.0				5.0	5.0		5.0	5.0	
Vehicle Extension (s)		2.0	2.0				2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		647	491		653	644	332	1537		300	1622	
v/s Ratio Prot					c0.03			c0.18			0.15	
v/s Ratio Perm		c0.10	0.08		0.09	0.05	0.04			0.09		
v/c Ratio		0.29	0.24		0.27	0.11	0.10	0.39		0.19	0.33	
Uniform Delay, d1		23.6	23.1		17.2	14.2	15.3	17.7		15.9	17.2	
Progression Factor		1.35	1.34		0.67	0.70	0.51	0.50		0.38	0.40	
Incremental Delay, d2		1.1	1.1		0.1	0.0	0.6	0.7		1.3	0.5	
Delay (s)		33.0	32.1		11.6	10.0	8.4	9.5		7.4	7.4	
Level of Service		C	C		B	A	A	A		A	A	
Approach Delay (s)		32.6			11.1			9.5			7.4	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 261: East & Chestnut



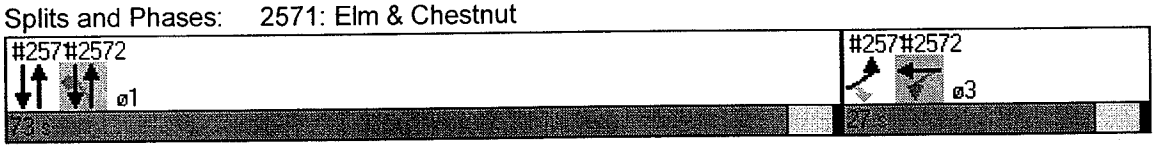
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	188	117	176	68	32	594	56	530
v/c Ratio	0.29	0.24	0.27	0.11	0.10	0.39	0.19	0.33
Control Delay	34.2	33.6	11.0	10.5	8.6	9.6	7.7	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.2	33.6	11.0	10.5	8.6	9.6	7.7	7.5
Queue Length 50th (ft)	119	73	37	14	7	66	9	49
Queue Length 95th (ft)	142	95	78	26	13	80	19	51
Internal Link Dist (ft)	494		594			382		289
Turn Bay Length (ft)					125		125	
Base Capacity (vph)	646	490	717	644	332	1538	300	1622
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.24	0.25	0.11	0.10	0.39	0.19	0.33

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	1770	1583		3539	3530	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	1770	1583		3539	3530	
Volume (vph)	150	100	0	529	580	10
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	167	111	0	588	644	11
RTOR Reduction (vph)	0	84	0	0	1	0
Lane Group Flow (vph)	167	27	0	588	654	0
Turn Type		Perm				
Protected Phases	3			1	1	
Permitted Phases		3				
Actuated Green, G (s)	22.0	22.0		68.0	68.0	
Effective Green, g (s)	24.0	24.0		70.0	70.0	
Actuated g/C Ratio	0.24	0.24		0.70	0.70	
Clearance Time (s)	5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	425	380		2477	2471	
v/s Ratio Prot	c0.09			0.17	c0.19	
v/s Ratio Perm		0.07				
v/c Ratio	0.39	0.07		0.24	0.26	
Uniform Delay, d1	31.9	29.4		5.4	5.5	
Progression Factor	1.00	1.00		0.18	0.69	
Incremental Delay, d2	2.7	0.4		0.2	0.3	
Delay (s)	34.6	29.7		1.2	4.1	
Level of Service	C	C		A	A	
Approach Delay (s)	32.7			1.2	4.1	
Approach LOS	C			A	A	

Intersection Summary			
HCM Average Control Delay	8.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	31.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 2571: Elm & Chestnut



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	167	111	588	655
v/c Ratio	0.39	0.24	0.24	0.26
Control Delay	35.2	7.4	1.2	4.1
Queue Delay	0.0	0.0	0.2	0.0
Total Delay	35.2	7.4	1.4	4.1
Queue Length 50th (ft)	90	0	9	52
Queue Length 95th (ft)	152	43	10	72
Internal Link Dist (ft)	133		153	382
Turn Bay Length (ft)				
Base Capacity (vph)	425	464	2477	2472
Starvation Cap Reductn	0	0	1104	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.39	0.24	0.43	0.26

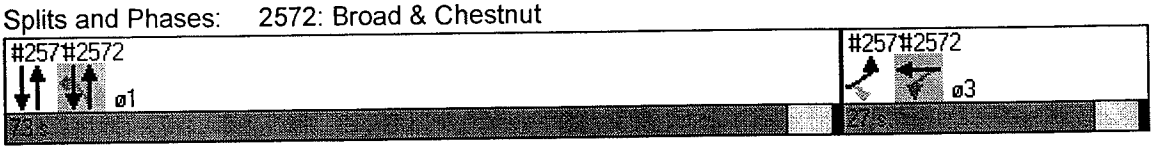
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0		3.0	3.0			3.0	3.0
Lane Util. Factor					0.91		1.00	0.95			0.95	1.00
Frpb, ped/bikes					0.98		1.00	1.00			1.00	0.76
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					0.98		0.95	1.00			1.00	1.00
Satd. Flow (prot)					4798		1770	3539			3539	1201
Flt Permitted					0.98		0.39	1.00			1.00	1.00
Satd. Flow (perm)					4798		719	3539			3539	1201
Volume (vph)	0	0	0	89	79	8	113	521	0	0	480	105
Peak-hour factor, PHF	0.90	0.90	0.90	0.74	0.66	0.40	0.72	0.85	0.75	0.90	0.75	0.88
Adj. Flow (vph)	0	0	0	120	120	20	157	613	0	0	640	119
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	13
Lane Group Flow (vph)	0	0	0	0	250	0	157	613	0	0	640	106
Confl. Peds. (#/hr)			64			210			158			211
Turn Type				Perm			Perm					Perm
Protected Phases					3			1			1	
Permitted Phases				3			1					1
Actuated Green, G (s)					22.0		68.0	68.0			68.0	68.0
Effective Green, g (s)					24.0		70.0	70.0			70.0	70.0
Actuated g/C Ratio					0.24		0.70	0.70			0.70	0.70
Clearance Time (s)					5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)					2.0		2.0	2.0			2.0	2.0
Lane Grp Cap (vph)					1152		503	2477			2477	841
v/s Ratio Prot								0.17			0.18	
v/s Ratio Perm					0.05		c0.22					0.10
v/c Ratio					0.22		0.31	0.25			0.26	0.13
Uniform Delay, d1					30.5		5.8	5.4			5.5	4.9
Progression Factor					0.85		1.98	1.81			0.31	0.15
Incremental Delay, d2					0.4		1.6	0.2			0.2	0.3
Delay (s)					26.3		12.9	10.1			2.0	1.0
Level of Service					C		B	B			A	A
Approach Delay (s)		0.0			26.3			10.7			1.8	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM Average Control Delay	9.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 2572: Broad & Chestnut



Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	260	157	613	640	119
v/c Ratio	0.22	0.31	0.25	0.26	0.14
Control Delay	25.1	13.6	10.2	2.0	0.8
Queue Delay	0.0	0.0	0.3	0.3	0.5
Total Delay	25.1	13.6	10.6	2.3	1.3
Queue Length 50th (ft)	43	42	85	14	0
Queue Length 95th (ft)	48	104	101	23	0
Internal Link Dist (ft)	614		255	153	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1160	503	2477	2477	854
Starvation Cap Reductn	0	0	1233	1123	455
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.22	0.31	0.49	0.47	0.30

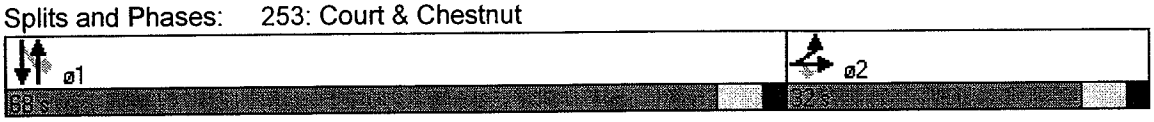
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Util. Factor		0.95	1.00					0.95	1.00	1.00	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.98	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3457	1583					3539	1583	1770	3539	
Flt Permitted		0.98	1.00					1.00	1.00	0.46	1.00	
Satd. Flow (perm)		3457	1583					3539	1583	863	3539	
Volume (vph)	239	230	154	0	0	0	0	381	38	27	611	0
Peak-hour factor, PHF	0.96	0.83	0.68	0.90	0.90	0.90	0.90	0.81	0.79	0.68	0.78	0.90
Adj. Flow (vph)	249	277	226	0	0	0	0	470	48	40	783	0
RTOR Reduction (vph)	0	0	160	0	0	0	0	0	17	0	0	0
Lane Group Flow (vph)	0	526	66	0	0	0	0	470	31	40	783	0
Turn Type	Split		Perm						Perm	Perm		
Protected Phases	2	2						1			1	
Permitted Phases			2						1	1		
Actuated Green, G (s)		26.0	26.0					62.0	62.0	62.0	62.0	
Effective Green, g (s)		29.0	29.0					65.0	65.0	65.0	65.0	
Actuated g/C Ratio		0.29	0.29					0.65	0.65	0.65	0.65	
Clearance Time (s)		6.0	6.0					6.0	6.0	6.0	6.0	
Lane Grp Cap (vph)		1003	459					2300	1029	561	2300	
v/s Ratio Prot		c0.15						0.13			c0.22	
v/s Ratio Perm			0.14						0.03	0.05		
v/c Ratio		0.52	0.14					0.20	0.03	0.07	0.34	
Uniform Delay, d1		29.7	26.3					7.1	6.2	6.4	7.9	
Progression Factor		0.91	0.68					0.99	1.53	0.63	0.59	
Incremental Delay, d2		1.7	0.6					0.2	0.1	0.2	0.4	
Delay (s)		28.9	18.4					7.2	9.6	4.3	5.0	
Level of Service		C	B					A	A	A	A	
Approach Delay (s)		25.7			0.0			7.4			5.0	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 253: Court & Chestnut



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	526	226	470	48	40	783
v/c Ratio	0.52	0.36	0.20	0.05	0.07	0.34
Control Delay	29.1	4.1	7.2	3.1	4.4	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	29.1	4.1	7.2	3.1	4.4	5.3
Queue Length 50th (ft)	129	5	41	0	6	68
Queue Length 95th (ft)	147	5	82	12	11	70
Internal Link Dist (ft)	452		376			255
Turn Bay Length (ft)					100	
Base Capacity (vph)	1003	620	2300	1046	560	2300
Starvation Cap Reductn	0	0	0	0	0	779
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.36	0.20	0.05	0.07	0.51

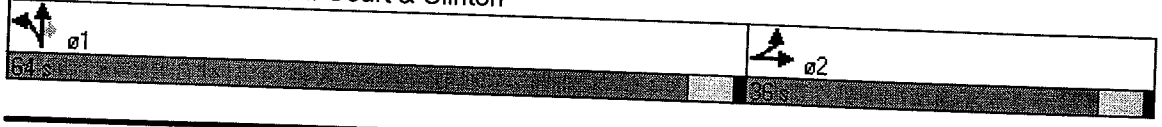
Intersection Summary

Level of Service Analysis
No-Build (2032) Condition
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1200	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0						3.0	3.0			
Lane Util. Factor		0.95						0.91	1.00			
Frpb, ped/bikes		1.00						1.00	0.89			
Flpb, ped/bikes		1.00						1.00	1.00			
Frt		1.00						1.00	0.85			
Flt Protected		0.98						0.99	1.00			
Satd. Flow (prot)		2190						5019	1401			
Flt Permitted		0.98						0.99	1.00			
Satd. Flow (perm)		2190						5019	1401			
Volume (vph)	90	184	0	0	0	0	522	1617	466	0	0	0
Peak-hour factor, PHF	0.65	0.95	0.90	0.90	0.90	0.90	0.84	0.94	0.84	0.90	0.90	0.90
Adj. Flow (vph)	138	194	0	0	0	0	621	1720	555	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	120	0	0	0
Lane Group Flow (vph)	0	332	0	0	0	0	0	2341	435	0	0	0
Confl. Peds. (#/hr)			60			64			84			15
Turn Type	Split						Split		Perm			
Protected Phases	2	2					1	1				
Permitted Phases									1			
Actuated Green, G (s)		31.0						59.0	59.0			
Effective Green, g (s)		33.0						61.0	61.0			
Actuated g/C Ratio		0.33						0.61	0.61			
Clearance Time (s)		5.0						5.0	5.0			
Lane Grp Cap (vph)		723						3062	855			
v/s Ratio Prot		c0.15						c0.47				
v/s Ratio Perm									0.40			
v/c Ratio		0.46						0.76	0.51			
Uniform Delay, d1		26.5						14.3	11.0			
Progression Factor		0.87						0.37	0.09			
Incremental Delay, d2		2.1						1.0	1.2			
Delay (s)		25.1						6.3	2.2			
Level of Service		C						A	A			
Approach Delay (s)		25.1			0.0			5.5			0.0	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	7.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	69.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 252: Court & Clinton



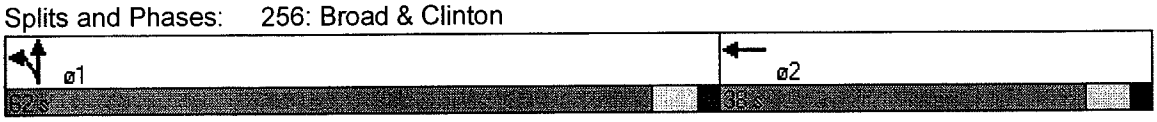
Lane Group	EBT	NBT	NBR
Lane Group Flow (vph)	332	2341	555
v/c Ratio	0.46	0.76	0.57
Control Delay	25.5	6.4	1.8
Queue Delay	2.3	0.7	0.5
Total Delay	27.8	7.1	2.3
Queue Length 50th (ft)	79	84	4
Queue Length 95th (ft)	115	93	m8
Internal Link Dist (ft)	124	352	
Turn Bay Length (ft)			
Base Capacity (vph)	723	3062	974
Starvation Cap Reductn	263	361	132
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.72	0.87	0.66

Intersection Summary
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0		3.0	3.0				
Lane Util. Factor					0.91		0.91	0.91				
Frpb, ped/bikes					0.98		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					4848		1610	3389				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					4848		1610	3389				
Volume (vph)	0	0	0	0	392	74	581	1149	0	0	0	0
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.86	0.66	0.90	0.94	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	456	112	646	1222	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	81	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	568	0	554	1233	0	0	0	0
Confl. Peds. (#/hr)			94			55			94			52
Turn Type							Split					
Protected Phases					2		1	1				
Permitted Phases												
Actuated Green, G (s)					32.0		56.0	56.0				
Effective Green, g (s)					35.0		59.0	59.0				
Actuated g/C Ratio					0.35		0.59	0.59				
Clearance Time (s)					6.0		6.0	6.0				
Lane Grp Cap (vph)					1697		950	2000				
v/s Ratio Prot					c0.12		c0.39	0.36				
v/s Ratio Perm												
v/c Ratio					0.33		0.58	0.62				
Uniform Delay, d1					23.9		12.8	13.2				
Progression Factor					1.24		0.07	0.26				
Incremental Delay, d2					0.5		1.7	0.9				
Delay (s)					30.3		2.6	4.4				
Level of Service					C		A	A				
Approach Delay (s)		0.0			30.3			3.8			0.0	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	10.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	61.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 256: Broad & Clinton



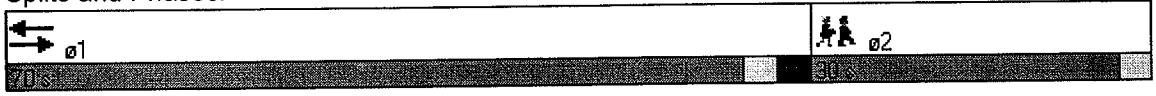
Lane Group	WBT	NBL	NBT
Lane Group Flow (vph)	568	635	1233
v/c Ratio	0.33	0.62	0.62
Control Delay	30.5	2.4	4.5
Queue Delay	0.0	0.5	0.4
Total Delay	30.5	2.9	4.9
Queue Length 50th (ft)	110	4	39
Queue Length 95th (ft)	136	6	58
Internal Link Dist (ft)	518		346
Turn Bay Length (ft)			
Base Capacity (vph)	1696	1031	2001
Starvation Cap Reductn	0	116	317
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.33	0.69	0.73

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0			3.0		
Lane Util. Factor	1.00			1.00		
Frpb, ped/bikes	1.00			1.00		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1658			1658		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	1658			1658		
Volume (vph)	432	0	0	469	0	0
Peak-hour factor, PHF	0.84	0.90	0.90	0.71	0.90	0.90
Adj. Flow (vph)	514	0	0	661	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	514	0	0	661	0	0
Confl. Peds. (#/hr)						250
Heavy Vehicles (%)	10%	10%	10%	10%	2%	2%
Bus Blockages (#/hr)	10	0	0	10	0	0
Turn Type						
Protected Phases	1			1		
Permitted Phases						
Actuated Green, G (s)	64.0			64.0		
Effective Green, g (s)	67.0			67.0		
Actuated g/C Ratio	0.67			0.67		
Clearance Time (s)	6.0			6.0		
Lane Grp Cap (vph)	1111			1111		
v/s Ratio Prot	0.31			c0.40		
v/s Ratio Perm						
v/c Ratio	0.46			0.59		
Uniform Delay, d1	7.9			9.1		
Progression Factor	0.08			0.35		
Incremental Delay, d2	0.7			2.3		
Delay (s)	1.3			5.4		
Level of Service	A			A		
Approach Delay (s)	1.3			5.4	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	3.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 298: Main & Midtown



Lane Group	EBT	WBT
Lane Group Flow (vph)	514	661
v/c Ratio	0.46	0.59
Control Delay	1.3	5.6
Queue Delay	0.6	2.0
Total Delay	2.0	7.6
Queue Length 50th (ft)	1	60
Queue Length 95th (ft)	m0	62
Internal Link Dist (ft)	173	215
Turn Bay Length (ft)		
Base Capacity (vph)	1111	1111
Starvation Cap Reductn	282	2
Spillback Cap Reductn	0	295
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.62	0.81

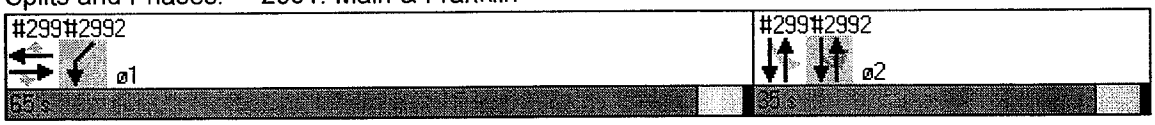
Intersection Summary
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱		↑↑↱			↑↑↱	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		0.95			0.95	
Frpb, ped/bikes		1.00	0.69		1.00	0.75		0.98			0.90	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.99			0.94	
Flt Protected		1.00	1.00		1.00	1.00		1.00			1.00	
Satd. Flow (prot)		1727	1016		1727	1102		3433			2988	
Flt Permitted		1.00	1.00		1.00	1.00		1.00			0.95	
Satd. Flow (perm)		1727	1016		1727	1102		3433			2843	
Volume (vph)	0	296	101	0	401	12	0	67	2	2	63	28
Peak-hour factor, PHF	0.90	0.89	0.73	0.90	0.85	0.69	0.90	0.75	0.25	0.50	0.88	0.52
Adj. Flow (vph)	0	333	138	0	472	17	0	89	8	4	72	54
RTOR Reduction (vph)	0	0	52	0	0	6	0	5	0	0	37	0
Lane Group Flow (vph)	0	333	86	0	472	11	0	92	0	0	93	0
Confl. Peds. (#/hr)			249			194			167			106
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Turn Type			Perm			Perm				Perm		
Protected Phases		1			1			2			2	
Permitted Phases			1			1		2		2		
Actuated Green, G (s)		60.0	60.0		60.0	60.0		30.0			30.0	
Effective Green, g (s)		62.0	62.0		62.0	62.0		32.0			32.0	
Actuated g/C Ratio		0.62	0.62		0.62	0.62		0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)		1071	630		1071	683		1099			910	
v/s Ratio Prot		0.19			c0.27			0.03				
v/s Ratio Perm			0.14			0.02					c0.05	
v/c Ratio		0.31	0.14		0.44	0.02		0.08			0.10	
Uniform Delay, d1		8.9	7.9		9.9	7.3		23.8			23.9	
Progression Factor		0.46	0.30		0.43	0.23		0.96			0.21	
Incremental Delay, d2		0.7	0.4		1.3	0.0		0.1			0.2	
Delay (s)		4.8	2.8		5.6	1.7		22.9			5.2	
Level of Service		A	A		A	A		C			A	
Approach Delay (s)		4.2			5.5			22.9			5.2	
Approach LOS		A			A			C			A	

Intersection Summary			
HCM Average Control Delay	6.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 2991: Main & Franklin



Lane Group	EBT	EBR	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	333	138	472	17	97	130
v/c Ratio	0.31	0.20	0.44	0.02	0.09	0.14
Control Delay	4.9	1.1	5.7	0.8	21.2	3.3
Queue Delay	0.4	0.0	0.3	0.0	0.0	0.5
Total Delay	5.3	1.1	6.0	0.8	21.2	3.8
Queue Length 50th (ft)	26	0	48	0	18	1
Queue Length 95th (ft)	39	0	57	0	28	0
Internal Link Dist (ft)	215		231		494	98
Turn Bay Length (ft)						
Base Capacity (vph)	1071	682	1071	690	1104	947
Starvation Cap Reductn	342	0	168	0	0	541
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.20	0.52	0.02	0.09	0.32

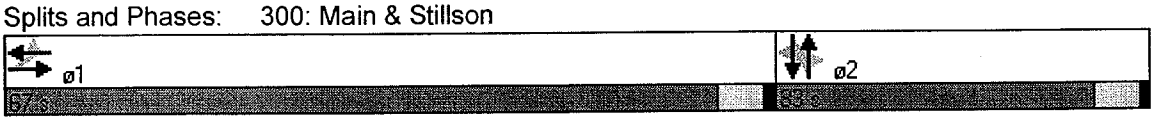
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.95			0.94	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			1.00			0.90			0.89	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		3267			3233			1586			1553	
Flt Permitted		0.89			1.00			0.99			0.97	
Satd. Flow (perm)		2928			3233			1580			1518	
Volume (vph)	27	272	0	0	392	12	2	7	26	6	0	26
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	30	302	0	0	436	13	2	8	29	7	0	29
RTOR Reduction (vph)	0	0	0	0	2	0	0	20	0	0	20	0
Lane Group Flow (vph)	0	332	0	0	447	0	0	19	0	0	16	0
Confl. Peds. (#/hr)			150			150			50			50
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Turn Type	Perm						Perm			Perm		
Protected Phases		1			1			2			2	
Permitted Phases	1						2			2		
Actuated Green, G (s)		62.0			62.0			28.0			28.0	
Effective Green, g (s)		64.0			64.0			30.0			30.0	
Actuated g/C Ratio		0.64			0.64			0.30			0.30	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		1874			2069			474			455	
v/s Ratio Prot					c0.14							
v/s Ratio Perm		0.11						c0.02			0.02	
v/c Ratio		0.18			0.22			0.04			0.03	
Uniform Delay, d1		7.3			7.5			24.8			24.8	
Progression Factor		0.30			0.46			1.00			1.00	
Incremental Delay, d2		0.2			0.2			0.2			0.1	
Delay (s)		2.4			3.7			24.9			24.9	
Level of Service		A			A			C			C	
Approach Delay (s)		2.4			3.7			24.9			24.9	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	5.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.17		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 300: Main & Stillson



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	332	449	39	36
v/c Ratio	0.18	0.22	0.08	0.08
Control Delay	2.4	3.7	12.4	11.7
Queue Delay	0.0	0.3	0.0	0.0
Total Delay	2.4	4.0	12.4	11.7
Queue Length 50th (ft)	9	20	4	3
Queue Length 95th (ft)	13	30	29	26
Internal Link Dist (ft)	231	188	31	96
Turn Bay Length (ft)				
Base Capacity (vph)	1873	2072	495	476
Starvation Cap Reductn	0	994	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.18	0.42	0.08	0.08

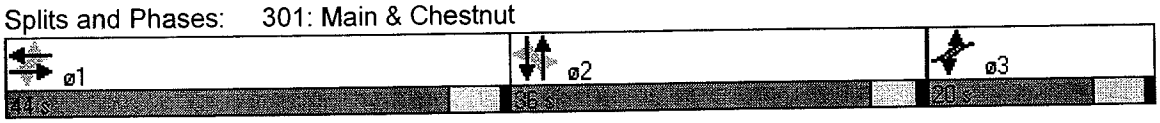
Intersection Summary

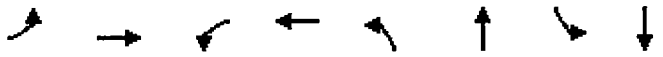
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1641	3177		1641	3141		1770	3461		1770	3493	
Flt Permitted	0.44	1.00		0.63	1.00		0.22	1.00		0.41	1.00	
Satd. Flow (perm)	760	3177		1091	3141		403	3461		768	3493	
Volume (vph)	100	155	16	143	313	67	39	300	34	41	515	50
Peak-hour factor, PHF	0.77	0.93	0.70	0.70	0.84	0.83	0.80	0.81	0.75	0.77	0.79	0.94
Adj. Flow (vph)	130	167	23	204	373	81	49	370	45	53	652	53
RTOR Reduction (vph)	0	9	0	0	16	0	0	9	0	0	6	0
Lane Group Flow (vph)	130	181	0	204	438	0	49	406	0	53	699	0
Confl. Peds. (#/hr)			78			60			32			10
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	3	1		3	1			2			2	
Permitted Phases	1			1			2			2		
Actuated Green, G (s)	53.0	45.7		53.0	45.7		31.0	31.0		31.0	31.0	
Effective Green, g (s)	58.0	48.2		58.0	48.2		33.0	33.0		33.0	33.0	
Actuated g/C Ratio	0.58	0.48		0.58	0.48		0.33	0.33		0.33	0.33	
Clearance Time (s)	5.5	5.5		5.5	5.5		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	527	1531		687	1514		133	1142		253	1153	
v/s Ratio Prot	0.02	0.06		c0.03	c0.14			0.12			c0.20	
v/s Ratio Perm	0.12			0.14			0.12			0.07		
v/c Ratio	0.25	0.12		0.30	0.29		0.37	0.36		0.21	0.61	
Uniform Delay, d1	9.7	14.2		10.1	15.6		25.6	25.4		24.1	28.1	
Progression Factor	2.20	1.90		0.39	0.31		0.47	0.48		0.42	0.45	
Incremental Delay, d2	0.1	0.2		0.1	0.5		7.6	0.9		1.8	2.2	
Delay (s)	21.5	27.2		4.0	5.3		19.7	13.1		11.9	14.9	
Level of Service	C	C		A	A		B	B		B	B	
Approach Delay (s)		24.9			4.9			13.8			14.7	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 301: Main & Chestnut





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	130	190	204	454	49	415	53	705
v/c Ratio	0.26	0.12	0.30	0.30	0.37	0.36	0.21	0.61
Control Delay	19.5	25.2	4.3	5.1	20.7	12.8	12.2	14.9
Queue Delay	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0
Total Delay	19.5	25.2	4.4	5.3	20.7	12.8	12.2	14.9
Queue Length 50th (ft)	57	38	19	18	12	47	11	132
Queue Length 95th (ft)	80	64	26	28	23	55	24	130
Internal Link Dist (ft)		188		225		289		561
Turn Bay Length (ft)	125		125		125		125	
Base Capacity (vph)	597	1542	754	1531	133	1152	254	1159
Starvation Cap Reductn	43	0	73	465	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.12	0.30	0.43	0.37	0.36	0.21	0.61

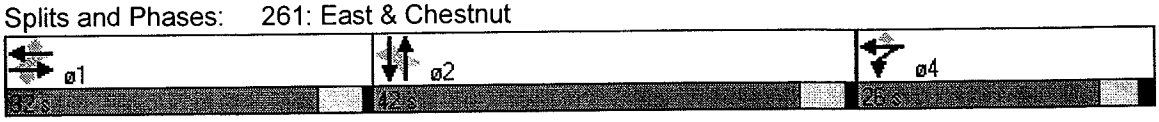
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.90		1.00	0.87	1.00	0.98		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected		0.99	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1853	1427		1810	1380	1770	3357		1770	3535	
Flt Permitted		0.97	1.00		0.77	1.00	0.22	1.00		0.45	1.00	
Satd. Flow (perm)		1798	1427		1438	1380	407	3357		845	3535	
Volume (vph)	3	87	66	118	76	58	44	271	63	68	707	1
Peak-hour factor, PHF	0.25	0.81	0.78	0.77	0.68	0.62	0.61	0.89	0.70	0.59	0.91	0.25
Adj. Flow (vph)	12	107	85	153	112	94	72	304	90	115	777	4
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	119	85	0	265	94	72	394	0	115	781	0
Confl. Peds. (#/hr)			65			87			52			52
Turn Type	Perm		Perm	pm+pt		Perm	Perm			Perm		
Protected Phases		1		4	1 4			2			2	
Permitted Phases	1		1	1 4		1 4	2			2		
Actuated Green, G (s)		37.2	37.2		48.0	53.0	37.0	37.0		37.0	37.0	
Effective Green, g (s)		39.2	39.2		52.0	55.0	39.0	39.0		39.0	39.0	
Actuated g/C Ratio		0.39	0.39		0.52	0.55	0.39	0.39		0.39	0.39	
Clearance Time (s)		5.0	5.0				5.0	5.0		5.0	5.0	
Vehicle Extension (s)		2.0	2.0				2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		705	559		795	759	159	1309		330	1379	
v/s Ratio Prot					c0.04			0.12			c0.22	
v/s Ratio Perm		0.07	0.06		c0.13	0.07	0.18			0.14		
v/c Ratio		0.17	0.15		0.33	0.12	0.45	0.30		0.35	0.57	
Uniform Delay, d1		19.8	19.7		13.9	10.9	22.6	21.1		21.5	23.9	
Progression Factor		1.63	1.64		0.85	0.85	0.80	0.76		0.41	0.39	
Incremental Delay, d2		0.5	0.6		0.1	0.0	8.8	0.6		2.5	1.5	
Delay (s)		32.8	32.7		12.0	9.2	26.9	16.5		11.3	10.8	
Level of Service		C	C		B	A	C	B		B	B	
Approach Delay (s)		32.8			11.2			18.1			10.9	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	66.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 261: East & Chestnut



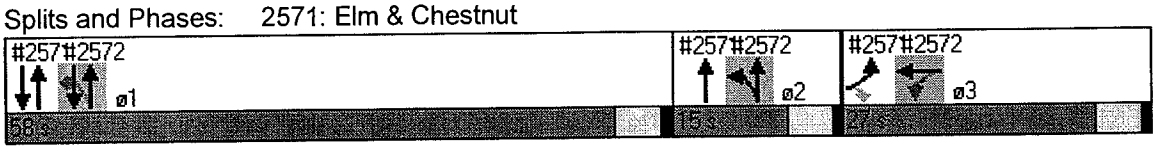
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	119	85	265	94	72	394	115	781
v/c Ratio	0.17	0.15	0.33	0.12	0.45	0.30	0.35	0.57
Control Delay	34.7	34.9	11.2	9.7	28.8	16.7	11.6	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	34.7	34.9	11.2	9.7	28.8	16.7	11.6	11.2
Queue Length 50th (ft)	67	48	74	24	25	72	22	80
Queue Length 95th (ft)	111	83	83	31	39	90	25	97
Internal Link Dist (ft)	494		594			382		289
Turn Bay Length (ft)					125		125	
Base Capacity (vph)	703	559	880	759	159	1310	330	1378
Starvation Cap Reductn	0	0	0	0	0	0	0	118
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.15	0.30	0.12	0.45	0.30	0.35	0.62

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	1770	1583		3539	3532	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	1770	1583		3539	3532	
Volume (vph)	150	100	0	509	739	10
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	167	111	0	566	821	11
RTOR Reduction (vph)	0	84	0	0	1	0
Lane Group Flow (vph)	167	27	0	566	831	0
Turn Type		Perm				
Protected Phases	3			1 2	1	
Permitted Phases		3				
Actuated Green, G (s)	22.0	22.0		68.0	53.0	
Effective Green, g (s)	24.0	24.0		70.0	55.0	
Actuated g/C Ratio	0.24	0.24		0.70	0.55	
Clearance Time (s)	5.0	5.0			5.0	
Vehicle Extension (s)	2.0	2.0			2.0	
Lane Grp Cap (vph)	425	380		2477	1943	
v/s Ratio Prot	c0.09			c0.16	c0.24	
v/s Ratio Perm		0.07				
v/c Ratio	0.39	0.07		0.23	0.43	
Uniform Delay, d1	31.9	29.4		5.4	13.2	
Progression Factor	1.00	1.00		0.49	0.39	
Incremental Delay, d2	2.7	0.4		0.2	0.6	
Delay (s)	34.6	29.7		2.8	5.7	
Level of Service	C	C		A	A	
Approach Delay (s)	32.7			2.8	5.7	
Approach LOS	C			A	A	

Intersection Summary			
HCM Average Control Delay	9.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	35.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 2571: Elm & Chestnut



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	167	111	566	832
v/c Ratio	0.39	0.24	0.23	0.43
Control Delay	35.2	7.4	2.9	5.8
Queue Delay	0.0	0.0	0.3	0.1
Total Delay	35.2	7.4	3.2	5.9
Queue Length 50th (ft)	90	0	22	50
Queue Length 95th (ft)	152	43	37	61
Internal Link Dist (ft)	133		153	382
Turn Bay Length (ft)				
Base Capacity (vph)	425	464	2477	1944
Starvation Cap Reductn	0	0	1240	160
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.39	0.24	0.46	0.47

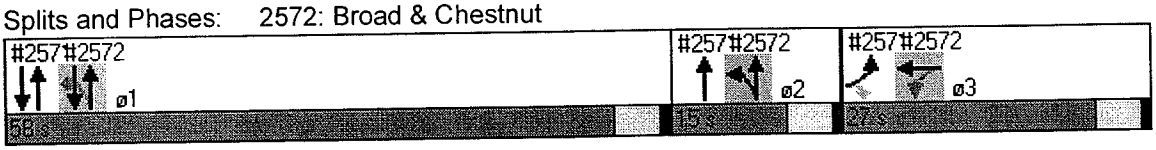
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0		3.0	3.0			3.0	3.0
Lane Util. Factor					0.91		1.00	0.95			0.95	1.00
Frpb, ped/bikes					1.00		1.00	1.00			1.00	0.96
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					1.00		1.00	1.00			1.00	0.85
Flt Protected					0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)					5007		1770	3539			3539	1513
Flt Permitted					0.99		0.34	1.00			1.00	1.00
Satd. Flow (perm)					5007		640	3539			3539	1513
Volume (vph)	0	0	0	33	133	2	106	399	0	0	530	212
Peak-hour factor, PHF	0.90	0.90	0.90	0.73	0.93	0.50	0.88	0.89	0.90	0.90	0.80	0.81
Adj. Flow (vph)	0	0	0	45	143	4	120	448	0	0	662	262
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	118
Lane Group Flow (vph)	0	0	0	0	190	0	120	448	0	0	662	144
Confl. Peds. (#/hr)			64			20			30			30
Turn Type				Perm			pm+pt					Perm
Protected Phases					3		2	1 2			1	
Permitted Phases				3			1 2					1
Actuated Green, G (s)					22.0		63.0	68.0			53.0	53.0
Effective Green, g (s)					24.0		67.0	70.0			55.0	55.0
Actuated g/C Ratio					0.24		0.67	0.70			0.55	0.55
Clearance Time (s)					5.0		5.0				5.0	5.0
Vehicle Extension (s)					2.0		2.0				2.0	2.0
Lane Grp Cap (vph)					1202		564	2477			1946	832
v/s Ratio Prot							0.03	c0.13			c0.19	
v/s Ratio Perm					0.04		0.12					0.17
v/c Ratio					0.16		0.21	0.18			0.34	0.17
Uniform Delay, d1					30.0		9.9	5.2			12.5	11.2
Progression Factor					1.11		0.41	0.26			0.20	0.01
Incremental Delay, d2					0.3		0.8	0.2			0.4	0.4
Delay (s)					33.6		4.9	1.5			3.0	0.5
Level of Service					C		A	A			A	A
Approach Delay (s)		0.0			33.6			2.2			2.3	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	5.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 2572: Broad & Chestnut



Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	192	120	448	662	262
v/c Ratio	0.16	0.21	0.18	0.34	0.28
Control Delay	33.3	3.3	1.5	3.0	0.7
Queue Delay	0.0	0.0	0.0	0.2	0.4
Total Delay	33.3	3.3	1.5	3.2	1.0
Queue Length 50th (ft)	41	5	8	18	0
Queue Length 95th (ft)	68	13	16	27	0
Internal Link Dist (ft)	614		255	153	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1203	564	2477	1946	950
Starvation Cap Reductn	0	0	0	585	307
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.21	0.18	0.49	0.41

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Util. Factor		0.95	1.00					0.95	1.00	1.00	0.95	
Frpb, ped/bikes		1.00	0.94					1.00	0.96	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.98	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3465	1489					3539	1518	1770	3539	
Flt Permitted		0.98	1.00					1.00	1.00	0.50	1.00	
Satd. Flow (perm)		3465	1489					3539	1518	935	3539	
Volume (vph)	178	233	80	0	0	0	0	330	72	29	529	0
Peak-hour factor, PHF	0.90	0.88	0.63	0.90	0.90	0.90	0.81	0.89	0.80	0.65	0.97	0.87
Adj. Flow (vph)	198	265	127	0	0	0	0	371	90	45	545	0
RTOR Reduction (vph)	0	0	74	0	0	0	0	0	43	0	0	0
Lane Group Flow (vph)	0	463	53	0	0	0	0	371	47	45	545	0
Confl. Peds. (#/hr)	7		34						24			12
Turn Type	Split		Perm						Perm	Perm		
Protected Phases	2	2						1			1	
Permitted Phases			2						1	1		
Actuated Green, G (s)		39.0	39.0					49.0	49.0	49.0	49.0	
Effective Green, g (s)		42.0	42.0					52.0	52.0	52.0	52.0	
Actuated g/C Ratio		0.42	0.42					0.52	0.52	0.52	0.52	
Clearance Time (s)		6.0	6.0					6.0	6.0	6.0	6.0	
Lane Grp Cap (vph)		1455	625					1840	789	486	1840	
v/s Ratio Prot		c0.13						0.10			c0.15	
v/s Ratio Perm			0.09						0.06	0.05		
v/c Ratio		0.32	0.09					0.20	0.06	0.09	0.30	
Uniform Delay, d1		19.4	17.4					12.9	11.9	12.1	13.6	
Progression Factor		1.16	1.49					0.87	1.26	1.07	0.98	
Incremental Delay, d2		0.5	0.2					0.2	0.1	0.4	0.4	
Delay (s)		23.0	26.2					11.5	15.1	13.4	13.8	
Level of Service		C	C					B	B	B	B	
Approach Delay (s)		23.7			0.0			12.2			13.8	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM Average Control Delay	16.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 253: Court & Chestnut

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	463	127	371	90	45	545
v/c Ratio	0.32	0.18	0.20	0.11	0.09	0.30
Control Delay	23.2	5.6	11.6	3.7	13.8	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	23.2	5.6	11.6	3.7	13.8	14.1
Queue Length 50th (ft)	108	7	72	5	11	71
Queue Length 95th (ft)	143	13	108	33	19	96
Internal Link Dist (ft)	452		376			255
Turn Bay Length (ft)					100	
Base Capacity (vph)	1455	699	1840	833	486	1840
Starvation Cap Reductn	0	0	0	0	0	529
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.18	0.20	0.11	0.09	0.42

Intersection Summary

Level of Service Analysis
No-Build (2032) Condition
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1200	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0						3.0	3.0			
Lane Util. Factor		0.95						0.91	1.00			
Frt		1.00						1.00	0.85			
Flt Protected		0.99						1.00	1.00			
Satd. Flow (prot)		2212						5061	1583			
Flt Permitted		0.99						1.00	1.00			
Satd. Flow (perm)		2212						5061	1583			
Volume (vph)	121	382	0	0	0	0	78	1109	222	0	0	0
Peak-hour factor, PHF	0.78	0.67	0.90	0.90	0.90	0.90	0.60	0.92	0.65	0.90	0.90	0.90
Adj. Flow (vph)	155	570	0	0	0	0	130	1205	342	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	131	0	0	0
Lane Group Flow (vph)	0	725	0	0	0	0	0	1335	211	0	0	0
Turn Type	Split						Split		Perm			
Protected Phases	2	2					1	1				
Permitted Phases									1			
Actuated Green, G (s)		47.0						43.0	43.0			
Effective Green, g (s)		49.0						45.0	45.0			
Actuated g/C Ratio		0.49						0.45	0.45			
Clearance Time (s)		5.0						5.0	5.0			
Lane Grp Cap (vph)		1084						2277	712			
v/s Ratio Prot		c0.33						c0.26				
v/s Ratio Perm									0.22			
v/c Ratio		0.67						0.59	0.30			
Uniform Delay, d1		19.3						20.5	17.4			
Progression Factor		0.92						0.55	0.06			
Incremental Delay, d2		3.3						1.0	1.0			
Delay (s)		21.0						12.3	2.1			
Level of Service		C						B	A			
Approach Delay (s)		21.0			0.0			10.2			0.0	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 252: Court & Clinton

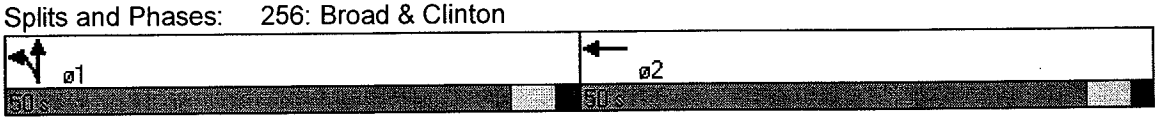
Lane Group	EBT	NBT	NBR
Lane Group Flow (vph)	725	1335	342
v/c Ratio	0.67	0.59	0.41
Control Delay	21.5	12.4	1.7
Queue Delay	9.8	0.1	0.1
Total Delay	31.3	12.5	1.9
Queue Length 50th (ft)	170	112	0
Queue Length 95th (ft)	161	156	0
Internal Link Dist (ft)	124	352	
Turn Bay Length (ft)			
Base Capacity (vph)	1083	2277	844
Starvation Cap Reductn	328	190	84
Spillback Cap Reductn	0	55	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.96	0.64	0.45

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0		3.0	3.0				
Lane Util. Factor					0.91		0.91	0.91				
Frpb, ped/bikes					0.97		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					4772		1610	3390				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					4772		1610	3390				
Volume (vph)	0	0	0	0	282	67	315	898	0	0	0	0
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.93	0.83	0.88	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	303	81	358	998	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	17	0	190	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	367	0	168	998	0	0	0	0
Confl. Peds. (#/hr)			99			96			105			96
Turn Type							Split					
Protected Phases					2		1	1				
Permitted Phases												
Actuated Green, G (s)					44.0		44.0	44.0				
Effective Green, g (s)					47.0		47.0	47.0				
Actuated g/C Ratio					0.47		0.47	0.47				
Clearance Time (s)					6.0		6.0	6.0				
Lane Grp Cap (vph)					2243		757	1593				
v/s Ratio Prot					c0.08		0.22	c0.29				
v/s Ratio Perm												
v/c Ratio					0.16		0.22	0.63				
Uniform Delay, d1					15.2		15.7	19.9				
Progression Factor					1.20		0.00	0.33				
Incremental Delay, d2					0.2		0.5	1.5				
Delay (s)					18.4		0.6	8.1				
Level of Service					B		A	A				
Approach Delay (s)		0.0			18.4			6.1			0.0	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	8.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 256: Broad & Clinton



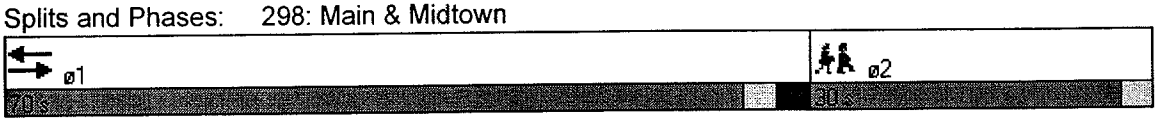
Lane Group	WBT	NBL	NBT
Lane Group Flow (vph)	384	358	998
v/c Ratio	0.17	0.38	0.63
Control Delay	17.0	0.9	8.2
Queue Delay	0.0	0.4	0.1
Total Delay	17.0	1.3	8.3
Queue Length 50th (ft)	50	0	43
Queue Length 95th (ft)	75	0	51
Internal Link Dist (ft)	518		346
Turn Bay Length (ft)			
Base Capacity (vph)	2259	946	1593
Starvation Cap Reductn	0	216	82
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.17	0.49	0.66

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0			3.0		
Lane Util. Factor	1.00			1.00		
Frpb, ped/bikes	1.00			1.00		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			1.00		
Flt Protected	1.00			1.00		
Satd. Flow (prot)	1863			1863		
Flt Permitted	1.00			1.00		
Satd. Flow (perm)	1863			1863		
Volume (vph)	559	0	0	310	0	0
Peak-hour factor, PHF	0.88	0.90	0.90	0.73	0.90	0.90
Adj. Flow (vph)	635	0	0	425	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	635	0	0	425	0	0
Confl. Peds. (#/hr)						250
Turn Type						
Protected Phases	1			1		
Permitted Phases						
Actuated Green, G (s)	64.0			64.0		
Effective Green, g (s)	67.0			67.0		
Actuated g/C Ratio	0.67			0.67		
Clearance Time (s)	6.0			6.0		
Lane Grp Cap (vph)	1248			1248		
v/s Ratio Prot	c0.34			0.23		
v/s Ratio Perm						
v/c Ratio	0.51			0.34		
Uniform Delay, d1	8.3			7.1		
Progression Factor	0.15			0.08		
Incremental Delay, d2	1.0			0.7		
Delay (s)	2.2			1.3		
Level of Service	A			A		
Approach Delay (s)	2.2			1.3	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	1.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 298: Main & Midtown



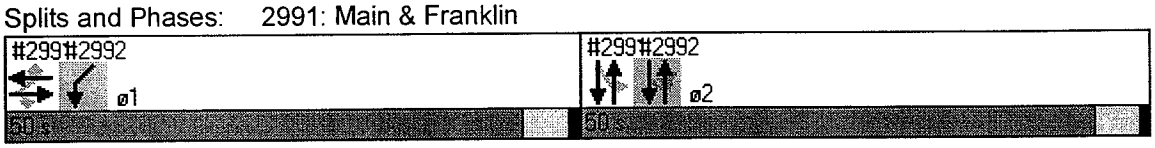
Lane Group	EBT	WBT
Lane Group Flow (vph)	635	425
v/c Ratio	0.51	0.34
Control Delay	2.3	1.3
Queue Delay	0.4	0.2
Total Delay	2.7	1.4
Queue Length 50th (ft)	12	7
Queue Length 95th (ft)	38	9
Internal Link Dist (ft)	173	215
Turn Bay Length (ft)		
Base Capacity (vph)	1248	1248
Starvation Cap Reductn	227	237
Spillback Cap Reductn	47	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.62	0.42

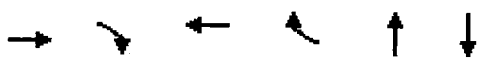
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		0.95			0.95	
Frpb, ped/bikes		1.00	0.97		1.00	0.91		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.99			0.98	
Flt Protected		1.00	1.00		1.00	1.00		1.00			1.00	
Satd. Flow (prot)		1862	1543		1863	1436		3510			3440	
Flt Permitted		1.00	1.00		1.00	1.00		1.00			0.95	
Satd. Flow (perm)		1858	1543		1863	1436		3510			3279	
Volume (vph)	4	433	137	0	383	7	0	67	2	2	116	18
Peak-hour factor, PHF	0.90	0.82	0.87	0.90	0.93	0.50	0.90	0.71	0.50	0.50	0.72	0.67
Adj. Flow (vph)	4	528	157	0	412	14	0	94	4	4	161	27
RTOR Reduction (vph)	0	0	83	0	0	7	0	2	0	0	13	0
Lane Group Flow (vph)	0	532	74	0	412	7	0	96	0	0	179	0
Confl. Peds. (#/hr)			11			66			31			11
Turn Type	Perm		Perm			Perm				Perm		
Protected Phases		1			1			2			2	
Permitted Phases	1		1			1		2		2		
Actuated Green, G (s)		45.0	45.0		45.0	45.0		45.0			45.0	
Effective Green, g (s)		47.0	47.0		47.0	47.0		47.0			47.0	
Actuated g/C Ratio		0.47	0.47		0.47	0.47		0.47			0.47	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)		873	725		876	675		1650			1541	
v/s Ratio Prot					0.22			0.03				
v/s Ratio Perm		c0.29	0.10			0.01					c0.06	
v/c Ratio		0.61	0.10		0.47	0.01		0.06			0.12	
Uniform Delay, d1		19.7	14.8		18.0	14.1		14.4			14.9	
Progression Factor		1.14	2.59		0.58	0.46		1.48			0.46	
Incremental Delay, d2		3.0	0.3		1.8	0.0		0.1			0.2	
Delay (s)		25.5	38.5		12.2	6.5		21.5			7.0	
Level of Service		C	D		B	A		C			A	
Approach Delay (s)		28.5			12.0			21.5			7.0	
Approach LOS		C			B			C			A	

Intersection Summary			
HCM Average Control Delay	20.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 2991: Main & Franklin





Lane Group	EBT	EBR	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	532	157	412	14	98	192
v/c Ratio	0.61	0.19	0.47	0.02	0.06	0.12
Control Delay	26.1	7.1	12.4	3.1	20.8	6.2
Queue Delay	0.9	0.4	0.6	0.0	0.0	0.7
Total Delay	27.0	7.6	13.1	3.1	20.8	6.9
Queue Length 50th (ft)	194	19	75	0	20	11
Queue Length 95th (ft)	227	39	91	1	26	15
Internal Link Dist (ft)	215		231		494	98
Turn Bay Length (ft)						
Base Capacity (vph)	874	808	876	682	1652	1554
Starvation Cap Reductn	132	346	189	0	0	1077
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.34	0.60	0.02	0.06	0.40

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.89			0.90	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			1.00			0.91			0.91	
Flt Protected		1.00			1.00			0.99			0.98	
Satd. Flow (prot)		3530			3493			1498			1505	
Flt Permitted		0.92			1.00			0.98			0.93	
Satd. Flow (perm)		3240			3493			1473			1431	
Volume (vph)	24	442	0	0	418	11	5	5	24	11	0	20
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	491	0	0	464	12	6	6	27	12	0	22
RTOR Reduction (vph)	0	0	0	0	2	0	0	19	0	0	15	0
Lane Group Flow (vph)	0	518	0	0	474	0	0	20	0	0	19	0
Confl. Peds. (#/hr)			150			150			125			125
Turn Type	Perm						Perm			Perm		
Protected Phases		1			1			2			2	
Permitted Phases	1						2			2		
Actuated Green, G (s)		62.0			62.0			28.0			28.0	
Effective Green, g (s)		64.0			64.0			30.0			30.0	
Actuated g/C Ratio		0.64			0.64			0.30			0.30	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		2074			2236			442			429	
v/s Ratio Prot					0.14							
v/s Ratio Perm		c0.16						c0.03			0.02	
v/c Ratio		0.25			0.21			0.05			0.04	
Uniform Delay, d1		7.7			7.5			24.8			24.8	
Progression Factor		0.10			0.13			1.00			1.00	
Incremental Delay, d2		0.3			0.2			0.2			0.2	
Delay (s)		1.1			1.2			25.0			25.0	
Level of Service		A			A			C			C	
Approach Delay (s)		1.1			1.2			25.0			25.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	2.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.20		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 300: Main & Stillson

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	518	476	39	34
v/c Ratio	0.25	0.21	0.08	0.08
Control Delay	1.1	1.2	13.3	14.2
Queue Delay	0.2	0.3	0.0	0.0
Total Delay	1.3	1.5	13.3	14.2
Queue Length 50th (ft)	7	4	5	5
Queue Length 95th (ft)	9	6	30	28
Internal Link Dist (ft)	231	188	31	96
Turn Bay Length (ft)				
Base Capacity (vph)	2075	2237	461	445
Starvation Cap Reductn	825	1156	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.41	0.44	0.08	0.08

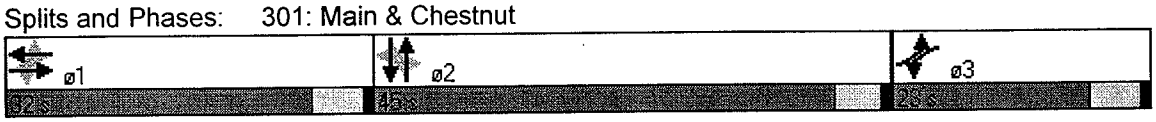
Intersection Summary

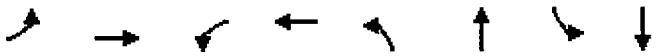
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3453		1770	3421		1770	3416		1770	3428	
Flt Permitted	0.42	1.00		0.45	1.00		0.34	1.00		0.30	1.00	
Satd. Flow (perm)	781	3453		830	3421		634	3416		551	3428	
Volume (vph)	155	293	28	105	318	41	28	418	85	71	370	73
Peak-hour factor, PHF	0.80	0.82	0.63	0.84	0.84	0.71	0.78	0.76	0.76	0.88	0.75	0.81
Adj. Flow (vph)	194	357	44	125	379	58	36	550	112	81	493	90
RTOR Reduction (vph)	0	8	0	0	11	0	0	17	0	0	15	0
Lane Group Flow (vph)	194	393	0	125	426	0	36	645	0	81	568	0
Confl. Peds. (#/hr)			46			68			34			32
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	3	1		3	1			2			2	
Permitted Phases	1			1			2			2		
Actuated Green, G (s)	44.0	35.7		44.0	35.7		40.0	40.0		40.0	40.0	
Effective Green, g (s)	49.0	38.2		49.0	38.2		42.0	42.0		42.0	42.0	
Actuated g/C Ratio	0.49	0.38		0.49	0.38		0.42	0.42		0.42	0.42	
Clearance Time (s)	5.5	5.5		5.5	5.5		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	490	1319		508	1307		266	1435		231	1440	
v/s Ratio Prot	c0.04	0.12		0.03	0.13			c0.19			0.17	
v/s Ratio Perm	c0.15			0.09			0.06			0.15		
v/c Ratio	0.40	0.30		0.25	0.33		0.14	0.45		0.35	0.39	
Uniform Delay, d1	14.8	21.5		14.1	21.8		17.8	20.7		19.7	20.2	
Progression Factor	1.43	1.25		0.40	0.36		0.41	0.36		0.61	0.59	
Incremental Delay, d2	0.2	0.6		0.1	0.7		1.0	1.0		4.1	0.8	
Delay (s)	21.5	27.5		5.8	8.5		8.3	8.5		16.0	12.7	
Level of Service	C	C		A	A		A	A		B	B	
Approach Delay (s)		25.6			7.9			8.5			13.1	
Approach LOS		C			A			A			B	

Intersection Summary					
HCM Average Control Delay	13.6	HCM Level of Service		B	
HCM Volume to Capacity ratio	0.43				
Actuated Cycle Length (s)	100.0	Sum of lost time (s)		9.0	
Intersection Capacity Utilization	63.6%	ICU Level of Service		B	
Analysis Period (min)	15				

c Critical Lane Group

Splits and Phases: 301: Main & Chestnut





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	194	401	125	437	36	662	81	583
v/c Ratio	0.43	0.30	0.26	0.33	0.14	0.46	0.35	0.40
Control Delay	20.6	27.4	5.9	8.4	8.6	8.2	16.9	12.3
Queue Delay	0.0	0.5	0.0	0.3	0.0	0.2	0.0	0.0
Total Delay	20.6	28.0	5.9	8.8	8.6	8.4	16.9	12.3
Queue Length 50th (ft)	79	86	16	31	6	51	24	102
Queue Length 95th (ft)	91	91	26	41	11	51	45	57
Internal Link Dist (ft)		188		225		289		561
Turn Bay Length (ft)	125		125		125		125	
Base Capacity (vph)	575	1327	593	1317	266	1452	231	1455
Starvation Cap Reductn	2	536	0	409	0	224	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.51	0.21	0.48	0.14	0.54	0.35	0.40

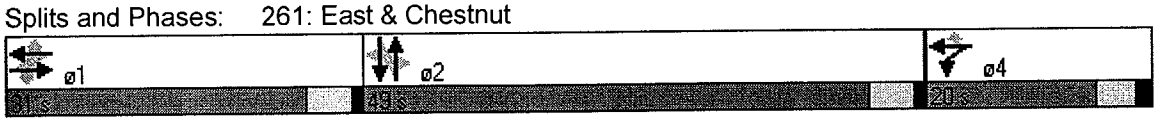
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.89		1.00	0.85	1.00	0.98		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected		1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1861	1406		1806	1342	1770	3343		1770	3523	
Flt Permitted		1.00	1.00		0.67	1.00	0.35	1.00		0.31	1.00	
Satd. Flow (perm)		1855	1406		1253	1342	652	3343		581	3523	
Volume (vph)	3	152	94	97	58	44	25	441	114	59	461	6
Peak-hour factor, PHF	0.75	0.74	0.72	0.78	0.81	0.57	0.69	0.86	0.75	0.95	0.79	0.63
Adj. Flow (vph)	4	205	131	124	72	77	36	513	152	62	584	10
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	209	131	0	196	77	36	665	0	62	594	0
Confl. Peds. (#/hr)			75			105			66			84
Turn Type	Perm		Perm	pm+pt		Perm	Perm			Perm		
Protected Phases		1		4	1 4			2			2	
Permitted Phases	1		1	1 4		1 4	2			2		
Actuated Green, G (s)		32.4	32.4		41.0	46.0	44.0	44.0		44.0	44.0	
Effective Green, g (s)		34.4	34.4		45.0	48.0	46.0	46.0		46.0	46.0	
Actuated g/C Ratio		0.34	0.34		0.45	0.48	0.46	0.46		0.46	0.46	
Clearance Time (s)		5.0	5.0				5.0	5.0		5.0	5.0	
Vehicle Extension (s)		2.0	2.0				2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		638	484		622	644	300	1538		267	1621	
v/s Ratio Prot					c0.03			c0.20			0.17	
v/s Ratio Perm		c0.11	0.09		0.11	0.06	0.06			0.11		
v/c Ratio		0.33	0.27		0.32	0.12	0.12	0.43		0.23	0.37	
Uniform Delay, d1		24.2	23.7		17.6	14.3	15.4	18.2		16.3	17.5	
Progression Factor		1.35	1.33		0.68	0.70	0.52	0.50		0.38	0.40	
Incremental Delay, d2		1.4	1.4		0.1	0.0	0.8	0.9		1.9	0.6	
Delay (s)		34.0	33.0		12.0	10.1	8.8	10.0		8.1	7.6	
Level of Service		C	C		B	B	A	B		A	A	
Approach Delay (s)		33.6			11.5			10.0			7.7	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 261: East & Chestnut



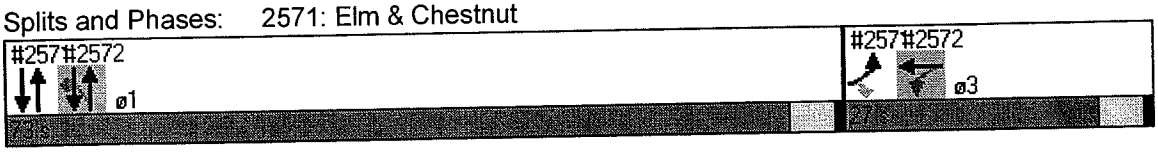
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	209	131	196	77	36	665	62	594
v/c Ratio	0.33	0.27	0.32	0.12	0.12	0.43	0.23	0.37
Control Delay	35.3	34.5	11.5	10.6	9.2	10.1	8.4	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	35.3	34.5	11.5	10.6	9.2	10.1	8.4	7.9
Queue Length 50th (ft)	134	83	42	16	7	73	10	56
Queue Length 95th (ft)	156	104	86	28	14	87	21	57
Internal Link Dist (ft)	494		594			382		289
Turn Bay Length (ft)					125		125	
Base Capacity (vph)	637	483	681	644	300	1538	267	1620
Starvation Cap Reductn	0	0	0	0	0	0	0	338
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.27	0.29	0.12	0.12	0.43	0.23	0.46

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	1770	1583		3539	3531	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	1770	1583		3539	3531	
Volume (vph)	150	100	0	593	650	10
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	167	111	0	659	722	11
RTOR Reduction (vph)	0	84	0	0	1	0
Lane Group Flow (vph)	167	27	0	659	732	0
Turn Type		Perm				
Protected Phases	3			1	1	
Permitted Phases		3				
Actuated Green, G (s)	22.0	22.0		68.0	68.0	
Effective Green, g (s)	24.0	24.0		70.0	70.0	
Actuated g/C Ratio	0.24	0.24		0.70	0.70	
Clearance Time (s)	5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	425	380		2477	2472	
v/s Ratio Prot	c0.09			0.19	c0.21	
v/s Ratio Perm		0.07				
v/c Ratio	0.39	0.07		0.27	0.30	
Uniform Delay, d1	31.9	29.4		5.5	5.7	
Progression Factor	1.00	1.00		0.20	0.68	
Incremental Delay, d2	2.7	0.4		0.3	0.3	
Delay (s)	34.6	29.7		1.3	4.2	
Level of Service	C	C		A	A	
Approach Delay (s)	32.7			1.3	4.2	
Approach LOS	C			A	A	

Intersection Summary			
HCM Average Control Delay	7.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Splits and Phases: 2571: Elm & Chestnut



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	167	111	659	733
v/c Ratio	0.39	0.24	0.27	0.30
Control Delay	35.2	7.4	1.4	4.2
Queue Delay	0.0	0.0	0.2	0.0
Total Delay	35.2	7.4	1.6	4.2
Queue Length 50th (ft)	90	0	11	61
Queue Length 95th (ft)	152	43	12	80
Internal Link Dist (ft)	133		153	382
Turn Bay Length (ft)				
Base Capacity (vph)	425	464	2477	2474
Starvation Cap Reductn	0	0	989	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.39	0.24	0.44	0.30

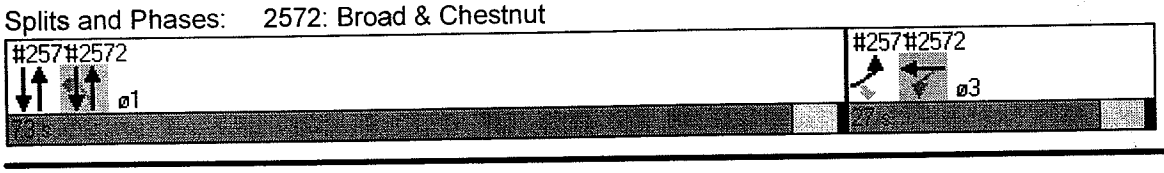
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0		3.0	3.0			3.0	3.0
Lane Util. Factor					0.91		1.00	0.95			0.95	1.00
Frpb, ped/bikes					0.98		1.00	1.00			1.00	0.76
Flpb, ped/bikes					1.00		1.00	1.00			1.00	1.00
Frt					0.99		1.00	1.00			1.00	0.85
Flt Protected					0.98		0.95	1.00			1.00	1.00
Satd. Flow (prot)					4801		1770	3539			3539	1201
Flt Permitted					0.98		0.35	1.00			1.00	1.00
Satd. Flow (perm)					4801		656	3539			3539	1201
Volume (vph)	0	0	0	100	89	9	127	584	0	0	538	118
Peak-hour factor, PHF	0.90	0.90	0.90	0.74	0.66	0.40	0.72	0.85	0.75	0.90	0.75	0.88
Adj. Flow (vph)	0	0	0	135	135	22	176	687	0	0	717	134
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	0	0	0	283	0	176	687	0	0	717	122
Confl. Peds. (#/hr)			64			210			158			211
Turn Type				Perm			Perm					Perm
Protected Phases					3			1			1	
Permitted Phases				3			1					1
Actuated Green, G (s)					22.0		68.0	68.0			68.0	68.0
Effective Green, g (s)					24.0		70.0	70.0			70.0	70.0
Actuated g/C Ratio					0.24		0.70	0.70			0.70	0.70
Clearance Time (s)					5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)					2.0		2.0	2.0			2.0	2.0
Lane Grp Cap (vph)					1152		459	2477			2477	841
v/s Ratio Prot								0.19			0.20	
v/s Ratio Perm					0.06		c0.27					0.11
v/c Ratio					0.25		0.38	0.28			0.29	0.15
Uniform Delay, d1					30.7		6.2	5.6			5.6	5.0
Progression Factor					0.87		1.95	1.75			0.29	0.14
Incremental Delay, d2					0.5		2.4	0.3			0.3	0.4
Delay (s)					27.2		14.3	10.0			1.9	1.1
Level of Service					C		B	B			A	A
Approach Delay (s)		0.0			27.2			10.9			1.8	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 2572: Broad & Chestnut



Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	292	176	687	717	134
v/c Ratio	0.25	0.38	0.28	0.29	0.16
Control Delay	26.2	15.3	10.1	1.9	0.9
Queue Delay	0.0	0.0	0.4	0.3	0.5
Total Delay	26.2	15.3	10.5	2.2	1.4
Queue Length 50th (ft)	49	82	93	15	0
Queue Length 95th (ft)	54	116	110	24	0
Internal Link Dist (ft)	614		255	153	
Turn Bay Length (ft)		125			
Base Capacity (vph)	1161	459	2477	2477	852
Starvation Cap Reductn	0	0	1195	1007	433
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.38	0.54	0.49	0.32

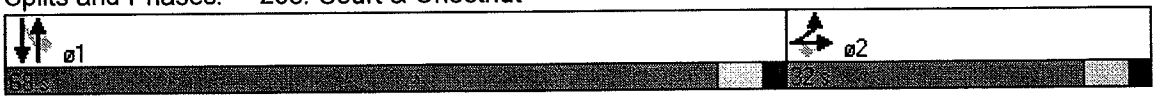
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Util. Factor		0.95	1.00					0.95	1.00	1.00	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.98	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3457	1583					3539	1583	1770	3539	
Flt Permitted		0.98	1.00					1.00	1.00	0.43	1.00	
Satd. Flow (perm)		3457	1583					3539	1583	806	3539	
Volume (vph)	268	258	173	0	0	0	0	427	43	30	684	0
Peak-hour factor, PHF	0.96	0.83	0.68	0.90	0.90	0.90	0.90	0.81	0.79	0.68	0.78	0.90
Adj. Flow (vph)	279	311	254	0	0	0	0	527	54	44	877	0
RTOR Reduction (vph)	0	0	132	0	0	0	0	0	19	0	0	0
Lane Group Flow (vph)	0	590	122	0	0	0	0	527	35	44	877	0
Turn Type	Split		Perm						Perm	Perm		
Protected Phases	2	2						1			1	
Permitted Phases			2						1	1		
Actuated Green, G (s)		26.0	26.0					62.0	62.0	62.0	62.0	
Effective Green, g (s)		29.0	29.0					65.0	65.0	65.0	65.0	
Actuated g/C Ratio		0.29	0.29					0.65	0.65	0.65	0.65	
Clearance Time (s)		6.0	6.0					6.0	6.0	6.0	6.0	
Lane Grp Cap (vph)		1003	459					2300	1029	524	2300	
v/s Ratio Prot		c0.17						0.15			c0.25	
v/s Ratio Perm			0.16						0.03	0.05		
v/c Ratio		0.59	0.27					0.23	0.03	0.08	0.38	
Uniform Delay, d1		30.4	27.3					7.2	6.3	6.5	8.1	
Progression Factor		0.87	0.65					1.00	1.48	0.62	0.58	
Incremental Delay, d2		2.1	1.2					0.2	0.1	0.3	0.5	
Delay (s)		28.6	18.9					7.4	9.3	4.3	5.2	
Level of Service		C	B					A	A	A	A	
Approach Delay (s)		25.6			0.0			7.6			5.1	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Splits and Phases: 253: Court & Chestnut



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	590	254	527	54	44	877
v/c Ratio	0.59	0.43	0.23	0.05	0.08	0.38
Control Delay	28.9	7.5	7.5	2.8	4.5	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	28.9	7.5	7.5	2.8	4.5	5.5
Queue Length 50th (ft)	141	18	48	0	7	77
Queue Length 95th (ft)	158	20	93	12	12	78
Internal Link Dist (ft)	452		376			255
Turn Bay Length (ft)					100	
Base Capacity (vph)	1003	591	2300	1048	525	2300
Starvation Cap Reductn	0	0	0	0	0	682
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.43	0.23	0.05	0.08	0.54

Intersection Summary

Level of Service Analysis
Future (2032) Condition
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1200	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0						3.0	3.0			
Lane Util. Factor		0.95						0.91	1.00			
Frpb, ped/bikes		1.00						1.00	0.89			
Flpb, ped/bikes		1.00						1.00	1.00			
Frt		1.00						1.00	0.85			
Flt Protected		0.98						0.99	1.00			
Satd. Flow (prot)		2185						5022	1401			
Flt Permitted		0.98						0.99	1.00			
Satd. Flow (perm)		2185						5022	1401			
Volume (vph)	155	267	0	0	0	0	522	1736	495	0	0	0
Peak-hour factor, PHF	0.65	0.95	0.90	0.90	0.90	0.90	0.84	0.94	0.84	0.90	0.90	0.90
Adj. Flow (vph)	238	281	0	0	0	0	621	1847	589	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	84	0	0	0
Lane Group Flow (vph)	0	519	0	0	0	0	0	2468	505	0	0	0
Confl. Peds. (#/hr)			60			64			84			15
Turn Type	Split						Split		Perm			
Protected Phases	2	2					1	1				
Permitted Phases									1			
Actuated Green, G (s)		31.0						59.0	59.0			
Effective Green, g (s)		33.0						61.0	61.0			
Actuated g/C Ratio		0.33						0.61	0.61			
Clearance Time (s)		5.0						5.0	5.0			
Lane Grp Cap (vph)		721						3063	855			
v/s Ratio Prot		c0.24						c0.49				
v/s Ratio Perm									0.42			
v/c Ratio		0.72						0.81	0.59			
Uniform Delay, d1		29.4						15.0	11.9			
Progression Factor		0.92						0.37	0.17			
Incremental Delay, d2		6.1						1.3	1.7			
Delay (s)		33.2						6.9	3.7			
Level of Service		C						A	A			
Approach Delay (s)		33.2			0.0			6.3			0.0	
Approach LOS		C			A			A			A	

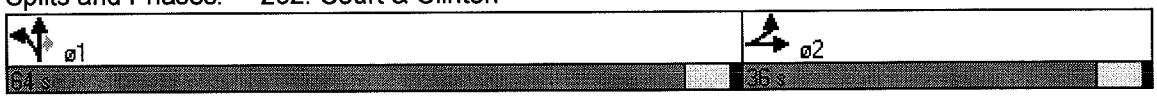
Intersection Summary			
HCM Average Control Delay	10.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	NBT	NBR
Lane Configurations			
Volume (vph)	267	1736	495
Lane Group Flow (vph)	519	2468	589
Turn Type			Perm
Protected Phases	2	1	
Permitted Phases			1
Minimum Split (s)	28.0	30.0	30.0
Total Split (s)	36.0	64.0	64.0
Total Split (%)	36.0%	64.0%	64.0%
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0
Lead/Lag	Lag	Lead	Lead
Lead-Lag Optimize?			
v/c Ratio	0.72	0.81	0.63
Control Delay	33.7	7.0	3.1
Queue Delay	37.9	0.8	0.6
Total Delay	71.7	7.9	3.6
Queue Length 50th (ft)	139	89	20
Queue Length 95th (ft)	192	98	27
Internal Link Dist (ft)	124	352	
Turn Bay Length (ft)			
Base Capacity (vph)	721	3065	939
Starvation Cap Reductn	231	300	105
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.06	0.89	0.71

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 23 (23%), Referenced to phase 1:NBTL, Start of Green
Natural Cycle: 65
Control Type: Pretimed

Splits and Phases: 252: Court & Clinton



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0		3.0	3.0				
Lane Util. Factor					0.95		0.91	0.91				
Frpb, ped/bikes					0.98		1.00	0.99				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.97		1.00	0.99				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					3366		1610	3346				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					3366		1610	3346				
Volume (vph)	0	0	0	0	417	84	581	1169	39	0	0	0
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.86	0.66	0.90	0.94	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	485	127	646	1244	43	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	73	2	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	612	0	573	1285	0	0	0	0
Confl. Peds. (#/hr)			94			55			94			52
Turn Type							custom					
Protected Phases					2		1	1				
Permitted Phases					2		1	1				
Actuated Green, G (s)					32.0		56.0	56.0				
Effective Green, g (s)					35.0		59.0	59.0				
Actuated g/C Ratio					0.35		0.59	0.59				
Clearance Time (s)					6.0		6.0	6.0				
Lane Grp Cap (vph)					1178		950	1974				
v/s Ratio Prot					c0.18		c0.40	0.38				
v/s Ratio Perm												
v/c Ratio					0.52		0.60	0.65				
Uniform Delay, d1					25.8		13.1	13.6				
Progression Factor					1.19		0.15	0.36				
Incremental Delay, d2					1.5		1.7	1.0				
Delay (s)					32.3		3.6	5.8				
Level of Service					C		A	A				
Approach Delay (s)		0.0			32.3			5.1			0.0	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBT	NBL	NBT
Lane Configurations			
Volume (vph)	417	581	1169
Lane Group Flow (vph)	612	646	1287
Turn Type		custom	
Protected Phases	2	1	1
Permitted Phases	2	1	1
Minimum Split (s)	29.0	28.0	28.0
Total Split (s)	38.0	62.0	62.0
Total Split (%)	38.0%	62.0%	62.0%
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lead/Lag	Lag	Lead	Lead
Lead-Lag Optimize?			
v/c Ratio	0.52	0.63	0.65
Control Delay	32.7	3.2	5.9
Queue Delay	0.2	0.8	0.7
Total Delay	32.9	4.0	6.6
Queue Length 50th (ft)	170	14	54
Queue Length 95th (ft)	220	m23	63
Internal Link Dist (ft)	104		346
Turn Bay Length (ft)			
Base Capacity (vph)	1178	1022	1977
Starvation Cap Reductn	0	142	336
Spillback Cap Reductn	109	5	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.57	0.73	0.78

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

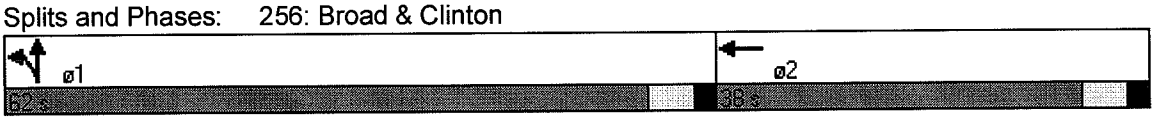
Offset: 36 (36%), Referenced to phase 1:NBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 256: Broad & Clinton



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.90	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.92	
Flt Protected	1.00	1.00		1.00	0.98	
Satd. Flow (prot)	1658	1468		1656	1518	
Flt Permitted	1.00	1.00		0.99	0.98	
Satd. Flow (perm)	1658	1468		1636	1518	
Volume (vph)	372	21	12	416	8	12
Peak-hour factor, PHF	0.84	0.80	0.80	0.71	0.80	0.80
Adj. Flow (vph)	443	26	15	586	10	15
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	443	26	0	601	25	0
Confl. Peds. (#/hr)						100
Heavy Vehicles (%)	10%	10%	10%	10%	2%	2%
Bus Blockages (#/hr)	10	0	0	10	0	0
Turn Type		Perm	Perm			
Protected Phases	1			1	8	
Permitted Phases		1	1			
Actuated Green, G (s)	64.0	64.0		64.0	25.0	
Effective Green, g (s)	67.0	67.0		67.0	27.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.27	
Clearance Time (s)	6.0	6.0		6.0	5.0	
Lane Grp Cap (vph)	1111	984		1096	410	
v/s Ratio Prot	0.27				c0.02	
v/s Ratio Perm		0.02		c0.37		
v/c Ratio	0.40	0.03		0.55	0.06	
Uniform Delay, d1	7.4	5.5		8.6	27.1	
Progression Factor	0.00	0.00		0.30	1.00	
Incremental Delay, d2	0.5	0.0		1.9	0.3	
Delay (s)	0.5	0.0		4.4	27.4	
Level of Service	A	A		A	C	
Approach Delay (s)	0.5			4.4	27.4	
Approach LOS	A			A	C	

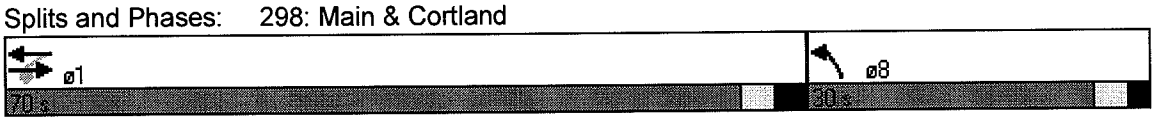
Intersection Summary			
HCM Average Control Delay	3.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Volume (vph)	372	21	12	416	8
Lane Group Flow (vph)	443	26	0	601	25
Turn Type		Perm	Perm		
Protected Phases	1			1	8
Permitted Phases		1	1		
Minimum Split (s)	25.0	25.0	25.0	25.0	30.0
Total Split (s)	70.0	70.0	70.0	70.0	30.0
Total Split (%)	70.0%	70.0%	70.0%	70.0%	30.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	3.0	3.0	3.0	3.0	2.0
Lead/Lag					
Lead-Lag Optimize?					
v/c Ratio	0.40	0.03		0.55	0.06
Control Delay	0.5	0.0		4.5	27.8
Queue Delay	0.8	0.0		1.8	0.0
Total Delay	1.3	0.0		6.4	27.8
Queue Length 50th (ft)	0	0		43	12
Queue Length 95th (ft)	m0	m0		45	29
Internal Link Dist (ft)	173			215	84
Turn Bay Length (ft)					
Base Capacity (vph)	1111	984		1097	410
Starvation Cap Reductn	386	0		5	0
Spillback Cap Reductn	0	0		326	0
Storage Cap Reductn	0	0		0	0
Reduced v/c Ratio	0.61	0.03		0.78	0.06

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 3 (3%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 60
Control Type: Pretimed
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 298: Main & Cortland



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		0.95			0.95	
Frpb, ped/bikes		1.00	0.69		1.00	0.75		0.98			0.90	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.99			0.94	
Flt Protected		1.00	1.00		1.00	1.00		1.00			1.00	
Satd. Flow (prot)		1727	1016		1727	1102		3433			2988	
Flt Permitted		1.00	1.00		1.00	1.00		1.00			0.95	
Satd. Flow (perm)		1727	1016		1727	1102		3433			2843	
Volume (vph)	0	301	108	0	413	12	0	67	2	2	63	28
Peak-hour factor, PHF	0.90	0.89	0.73	0.90	0.85	0.69	0.90	0.75	0.25	0.50	0.88	0.52
Adj. Flow (vph)	0	338	148	0	486	17	0	89	8	4	72	54
RTOR Reduction (vph)	0	0	56	0	0	6	0	5	0	0	37	0
Lane Group Flow (vph)	0	338	92	0	486	11	0	92	0	0	93	0
Confl. Peds. (#/hr)			249			194			167			106
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Turn Type			Perm			Perm			Perm			
Protected Phases		1			1			2			2	
Permitted Phases			1			1		2		2		
Actuated Green, G (s)		60.0	60.0		60.0	60.0		30.0			30.0	
Effective Green, g (s)		62.0	62.0		62.0	62.0		32.0			32.0	
Actuated g/C Ratio		0.62	0.62		0.62	0.62		0.32			0.32	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)		1071	630		1071	683		1099			910	
v/s Ratio Prot		0.20			c0.28			0.03				
v/s Ratio Perm			0.15			0.02					c0.05	
v/c Ratio		0.32	0.15		0.45	0.02		0.08			0.10	
Uniform Delay, d1		9.0	7.9		10.0	7.3		23.8			23.9	
Progression Factor		0.55	0.40		0.40	0.17		0.99			0.21	
Incremental Delay, d2		0.7	0.5		1.4	0.0		0.1			0.2	
Delay (s)		5.6	3.6		5.4	1.3		23.6			5.2	
Level of Service		A	A		A	A		C			A	
Approach Delay (s)		5.0			5.3			23.6			5.2	
Approach LOS		A			A			C			A	

Intersection Summary			
HCM Average Control Delay	6.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

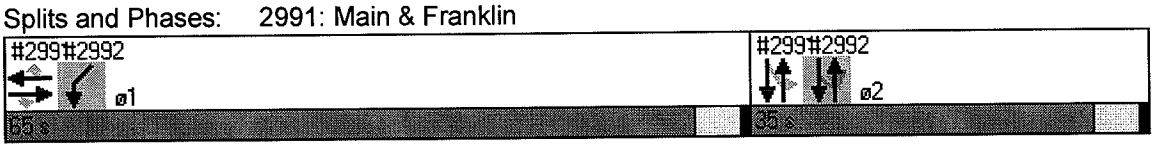
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	301	108	413	12	67	2	63
Lane Group Flow (vph)	338	148	486	17	97	0	130
Turn Type		Perm		Perm		Perm	
Protected Phases	1		1		2		2
Permitted Phases		1		1	2	2	
Minimum Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (s)	65.0	65.0	65.0	65.0	35.0	35.0	35.0
Total Split (%)	65.0%	65.0%	65.0%	65.0%	35.0%	35.0%	35.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?							
v/c Ratio	0.32	0.22	0.45	0.02	0.09		0.14
Control Delay	5.8	1.2	5.5	0.7	21.9		3.3
Queue Delay	0.4	0.0	0.2	0.0	0.0		0.5
Total Delay	6.2	1.2	5.7	0.7	21.9		3.8
Queue Length 50th (ft)	32	0	47	0	18		1
Queue Length 95th (ft)	52	0	54	0	31		0
Internal Link Dist (ft)	215		231		494		98
Turn Bay Length (ft)							
Base Capacity (vph)	1071	686	1071	690	1104		947
Starvation Cap Reductn	350	0	150	0	0		541
Spillback Cap Reductn	0	0	0	0	0		0
Storage Cap Reductn	0	0	0	0	0		0
Reduced v/c Ratio	0.47	0.22	0.53	0.02	0.09		0.32

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 3 (3%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 2991: Main & Franklin



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.95			0.94	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			1.00			0.90			0.89	
Flt Protected		1.00			1.00			1.00			0.99	
Satd. Flow (prot)		3267			3234			1586			1553	
Flt Permitted		0.89			1.00			0.99			0.97	
Satd. Flow (perm)		2927			3234			1580			1518	
Volume (vph)	27	277	0	0	404	12	2	7	26	6	0	26
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	30	308	0	0	449	13	2	8	29	7	0	29
RTOR Reduction (vph)	0	0	0	0	2	0	0	20	0	0	20	0
Lane Group Flow (vph)	0	338	0	0	460	0	0	19	0	0	16	0
Confl. Peds. (#/hr)			150			150			50			50
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Turn Type	Perm						Perm			Perm		
Protected Phases		1			1			2			2	
Permitted Phases	1						2			2		
Actuated Green, G (s)		62.0			62.0			28.0			28.0	
Effective Green, g (s)		64.0			64.0			30.0			30.0	
Actuated g/C Ratio		0.64			0.64			0.30			0.30	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		1873			2070			474			455	
v/s Ratio Prot					c0.14							
v/s Ratio Perm		0.12						c0.02			0.02	
v/c Ratio		0.18			0.22			0.04			0.03	
Uniform Delay, d1		7.3			7.6			24.8			24.8	
Progression Factor		0.31			0.46			1.00			1.00	
Incremental Delay, d2		0.2			0.2			0.2			0.1	
Delay (s)		2.5			3.7			24.9			24.9	
Level of Service		A			A			C			C	
Approach Delay (s)		2.5			3.7			24.9			24.9	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	5.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

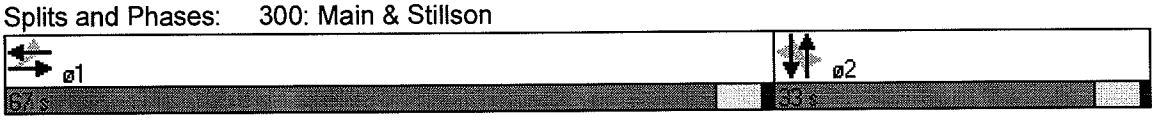
c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	27	277	404	2	7	6	0
Lane Group Flow (vph)	0	338	462	0	39	0	36
Turn Type	Perm			Perm		Perm	
Protected Phases		1	1		2		2
Permitted Phases	1			2		2	
Minimum Split (s)	27.0	27.0	27.0	33.0	33.0	33.0	33.0
Total Split (s)	67.0	67.0	67.0	33.0	33.0	33.0	33.0
Total Split (%)	67.0%	67.0%	67.0%	33.0%	33.0%	33.0%	33.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?							
v/c Ratio		0.18	0.22		0.08		0.08
Control Delay		2.5	3.7		12.4		11.7
Queue Delay		0.0	0.3		0.0		0.0
Total Delay		2.5	4.0		12.4		11.7
Queue Length 50th (ft)		10	21		4		3
Queue Length 95th (ft)		13	31		29		26
Internal Link Dist (ft)		231	188		31		96
Turn Bay Length (ft)							
Base Capacity (vph)		1873	2073		495		476
Starvation Cap Reductn		0	969		0		0
Spillback Cap Reductn		0	0		0		0
Storage Cap Reductn		0	0		0		0
Reduced v/c Ratio		0.18	0.42		0.08		0.08

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 6 (6%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 300: Main & Stillson



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1641	3180		1641	3146		1770	3454		1770	3495	
Flt Permitted	0.43	1.00		0.63	1.00		0.19	1.00		0.39	1.00	
Satd. Flow (perm)	742	3180		1083	3146		363	3454		735	3495	
Volume (vph)	100	160	16	165	325	67	39	313	39	41	545	50
Peak-hour factor, PHF	0.77	0.93	0.70	0.70	0.84	0.83	0.80	0.81	0.75	0.77	0.79	0.94
Adj. Flow (vph)	130	172	23	236	387	81	49	386	52	53	690	53
RTOR Reduction (vph)	0	9	0	0	16	0	0	11	0	0	5	0
Lane Group Flow (vph)	130	186	0	236	452	0	49	427	0	53	738	0
Confl. Peds. (#/hr)			78			60			32			10
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	3	1		3	1			2			2	
Permitted Phases	1			1			2			2		
Actuated Green, G (s)	53.0	45.2		53.0	45.2		31.0	31.0		31.0	31.0	
Effective Green, g (s)	58.0	47.7		58.0	47.7		33.0	33.0		33.0	33.0	
Actuated g/C Ratio	0.58	0.48		0.58	0.48		0.33	0.33		0.33	0.33	
Clearance Time (s)	5.5	5.5		5.5	5.5		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	523	1517		686	1501		120	1140		243	1153	
v/s Ratio Prot	0.03	0.06		c0.04	0.15			0.13			c0.21	
v/s Ratio Perm	0.12			c0.16			0.13			0.07		
v/c Ratio	0.25	0.12		0.34	0.30		0.41	0.37		0.22	0.64	
Uniform Delay, d1	9.7	14.5		10.3	16.0		25.9	25.6		24.2	28.5	
Progression Factor	2.16	1.86		0.42	0.35		0.41	0.42		0.45	0.48	
Incremental Delay, d2	0.1	0.2		0.1	0.5		9.8	0.9		2.0	2.6	
Delay (s)	21.1	27.2		4.5	6.1		20.3	11.7		12.9	16.4	
Level of Service	C	C		A	A		C	B		B	B	
Approach Delay (s)		24.8			5.5			12.6			16.2	
Approach LOS		C			A			B			B	

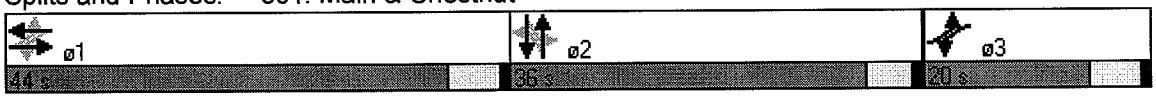
Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	100	160	165	325	39	313	41	545
Lane Group Flow (vph)	130	195	236	468	49	438	53	743
Turn Type	pm+pt		pm+pt		Perm		Perm	
Protected Phases	3	1	3	1		2		2
Permitted Phases	1		1		2		2	
Detector Phases	3	1	3	1	2	2	2	2
Minimum Initial (s)	6.0	7.0	6.0	7.0	6.0	6.0	6.0	6.0
Minimum Split (s)	12.0	28.0	12.0	28.0	29.0	29.0	29.0	29.0
Total Split (s)	20.0	44.0	20.0	44.0	36.0	36.0	36.0	36.0
Total Split (%)	20.0%	44.0%	20.0%	44.0%	36.0%	36.0%	36.0%	36.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag		Lead		Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?								
Recall Mode	None	C-Max	None	C-Max	Max	Max	Max	Max
v/c Ratio	0.26	0.13	0.35	0.31	0.41	0.38	0.22	0.64
Control Delay	19.1	25.4	4.9	5.9	21.4	11.4	13.3	16.4
Queue Delay	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0
Total Delay	19.1	25.4	5.0	6.1	21.4	11.4	13.3	16.4
Queue Length 50th (ft)	61	41	25	23	10	43	13	152
Queue Length 95th (ft)	81	66	32	34	21	50	25	146
Internal Link Dist (ft)		188		225		289		561
Turn Bay Length (ft)	125		125		125		125	
Base Capacity (vph)	590	1525	750	1515	120	1150	243	1158
Starvation Cap Reductn	36	0	56	458	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.13	0.34	0.44	0.41	0.38	0.22	0.64

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 10 (10%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 301: Main & Chestnut



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.90		1.00	0.87	1.00	0.98		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1854	1427		1807	1380	1770	3336		1770	3535	
Flt Permitted		0.97	1.00		0.74	1.00	0.19	1.00		0.42	1.00	
Satd. Flow (perm)		1798	1427		1376	1380	357	3336		788	3535	
Volume (vph)	3	94	66	142	76	58	44	289	78	68	759	1
Peak-hour factor, PHF	0.25	0.81	0.78	0.77	0.68	0.62	0.61	0.89	0.70	0.59	0.91	0.25
Adj. Flow (vph)	12	116	85	184	112	94	72	325	111	115	834	4
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	128	85	0	296	94	72	436	0	115	838	0
Confl. Peds. (#/hr)			65			87			52			52
Turn Type	Perm		Perm	pm+pt		Perm	Perm			Perm		
Protected Phases		1		4	1 4			2			2	
Permitted Phases	1		1	1 4		1 4	2			2		
Actuated Green, G (s)		36.4	36.4		48.0	53.0	37.0	37.0		37.0	37.0	
Effective Green, g (s)		38.4	38.4		52.0	55.0	39.0	39.0		39.0	39.0	
Actuated g/C Ratio		0.38	0.38		0.52	0.55	0.39	0.39		0.39	0.39	
Clearance Time (s)		5.0	5.0				5.0	5.0		5.0	5.0	
Vehicle Extension (s)		2.0	2.0				2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		690	548		774	759	139	1301		307	1379	
v/s Ratio Prot					c0.05			0.13			c0.24	
v/s Ratio Perm		0.07	0.06		c0.15	0.07	0.20			0.15		
v/c Ratio		0.19	0.16		0.38	0.12	0.52	0.34		0.37	0.61	
Uniform Delay, d1		20.4	20.2		14.4	10.9	23.3	21.4		21.8	24.4	
Progression Factor		1.65	1.65		0.85	0.85	0.92	0.85		0.42	0.40	
Incremental Delay, d2		0.6	0.6		0.1	0.0	13.0	0.7		2.9	1.7	
Delay (s)		34.3	33.9		12.3	9.3	34.4	18.8		12.0	11.5	
Level of Service		C	C		B	A	C	B		B	B	
Approach Delay (s)		34.2			11.6			21.0			11.6	
Approach LOS		C			B			C			B	

Intersection Summary			
HCM Average Control Delay	16.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		

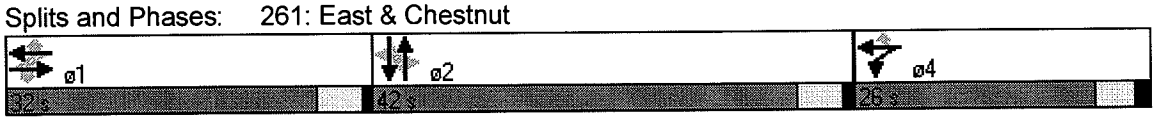
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Volume (vph)	3	94	66	142	76	58	44	289	68	759
Lane Group Flow (vph)	0	128	85	0	296	94	72	436	115	838
Turn Type	Perm		Perm	pm+pt		Perm	Perm		Perm	
Protected Phases		1		4	1 4			2		2
Permitted Phases	1		1	1 4		1 4	2		2	
Detector Phases	1	1	1	4	1 4	1 4	2	2	2	2
Minimum Initial (s)	7.0	7.0	7.0	6.0			6.0	6.0	6.0	6.0
Minimum Split (s)	27.0	27.0	27.0	15.0			30.0	30.0	30.0	30.0
Total Split (s)	32.0	32.0	32.0	26.0	58.0	58.0	42.0	42.0	42.0	42.0
Total Split (%)	32.0%	32.0%	32.0%	26.0%	58.0%	58.0%	42.0%	42.0%	42.0%	42.0%
Yellow Time (s)	4.0	4.0	4.0	3.5			4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.5			1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lead	Lead				Lag	Lag	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	Min			Max	Max	Max	Max
v/c Ratio		0.19	0.16		0.39	0.12	0.51	0.34	0.37	0.61
Control Delay		36.3	36.3		11.7	9.7	36.8	19.0	12.4	11.6
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.2
Total Delay		36.3	36.3		11.7	9.7	36.8	19.0	12.4	11.9
Queue Length 50th (ft)		73	48		84	24	28	88	23	88
Queue Length 95th (ft)		117	83		92	31	54	115	26	106
Internal Link Dist (ft)		494			594			164		289
Turn Bay Length (ft)							125		125	
Base Capacity (vph)		688	548		845	759	140	1301	307	1378
Starvation Cap Reductn		0	0		0	0	0	0	0	115
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.19	0.16		0.35	0.12	0.51	0.34	0.37	0.66

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 22 (22%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 261: East & Chestnut



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		3.0	3.0	3.0	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.93		1.00	1.00	1.00	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1639		1770	3539	3529	
Flt Permitted	0.98		0.31	1.00	1.00	
Satd. Flow (perm)	1639		573	3539	3529	
Volume (vph)	14	17	3	529	804	16
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	19	3	588	893	18
RTOR Reduction (vph)	18	0	0	0	1	0
Lane Group Flow (vph)	17	0	3	588	910	0
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Turn Type			Perm			
Protected Phases	3			1	1	
Permitted Phases			1			
Actuated Green, G (s)	4.5		85.5	85.5	85.5	
Effective Green, g (s)	6.5		87.5	87.5	87.5	
Actuated g/C Ratio	0.06		0.88	0.88	0.88	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	107		501	3097	3088	
v/s Ratio Prot	c0.02			0.17	c0.26	
v/s Ratio Perm			0.01			
v/c Ratio	0.16		0.01	0.19	0.29	
Uniform Delay, d1	44.2		0.8	0.9	1.1	
Progression Factor	1.00		0.46	0.45	3.74	
Incremental Delay, d2	0.7		0.0	0.1	0.2	
Delay (s)	44.9		0.4	0.6	4.1	
Level of Service	D		A	A	A	
Approach Delay (s)	44.9			0.6	4.1	
Approach LOS	D			A	A	

Intersection Summary			
HCM Average Control Delay	3.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	34.4%	ICU Level of Service	A
Analysis Period (min)	15		

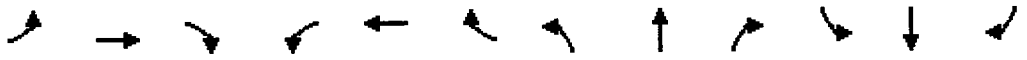
c Critical Lane Group

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Volume (vph)	14	3	529	804
Lane Group Flow (vph)	35	3	588	911
Turn Type		Perm		
Protected Phases	3		1	1
Permitted Phases		1		
Detector Phases	3	1	1	1
Minimum Initial (s)	6.0	17.0	17.0	17.0
Minimum Split (s)	27.0	33.0	33.0	33.0
Total Split (s)	27.0	73.0	73.0	73.0
Total Split (%)	27.0%	73.0%	73.0%	73.0%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	C-Max	C-Max	C-Max
v/c Ratio	0.21	0.01	0.18	0.28
Control Delay	25.7	0.7	0.6	4.5
Queue Delay	0.0	0.0	0.2	0.2
Total Delay	25.7	0.7	0.8	4.8
Queue Length 50th (ft)	10	0	10	172
Queue Length 95th (ft)	39	m1	16	228
Internal Link Dist (ft)	133		153	138
Turn Bay Length (ft)				
Base Capacity (vph)	408	470	3209	3200
Starvation Cap Reductn	0	0	1800	1401
Spillback Cap Reductn	1	0	0	229
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.09	0.01	0.42	0.51

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 1:NBSB, Start of Green, Master Intersection
Natural Cycle: 60
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2571: Elm & Chestnut



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.90	1.00	1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00		1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1422	1770	1855		1770	3539		1770	3282	
Flt Permitted	0.50	1.00	1.00	0.63	1.00		0.20	1.00		0.48	1.00	
Satd. Flow (perm)	934	1863	1422	1182	1855		370	3539		889	3282	
Volume (vph)	98	97	49	33	162	2	158	402	0	50	547	272
Peak-hour factor, PHF	0.90	0.90	0.90	0.73	0.93	0.50	0.88	0.89	0.90	0.90	0.80	0.81
Adj. Flow (vph)	109	108	54	45	174	4	180	452	0	56	684	336
RTOR Reduction (vph)	0	0	41	0	1	0	0	0	0	0	60	0
Lane Group Flow (vph)	109	108	13	45	177	0	180	452	0	56	960	0
Confl. Peds. (#/hr)			64			20			30			30
Turn Type	Perm		Perm	Perm			pm+pt			Perm		
Protected Phases		3			3		2	1 2			1	
Permitted Phases	3		3	3			1 2			1		
Actuated Green, G (s)	22.0	22.0	22.0	22.0	22.0		63.0	68.0		53.0	53.0	
Effective Green, g (s)	24.0	24.0	24.0	24.0	24.0		67.0	70.0		55.0	55.0	
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.24		0.67	0.70		0.55	0.55	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0			5.0	5.0	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0			2.0	2.0	
Lane Grp Cap (vph)	224	447	341	284	445		416	2477		489	1805	
v/s Ratio Prot		0.06			0.10		c0.05	0.13			c0.31	
v/s Ratio Perm	c0.12		0.04	0.04			0.24			0.06		
v/c Ratio	0.49	0.24	0.04	0.16	0.40		0.43	0.18		0.11	0.53	
Uniform Delay, d1	32.7	30.7	29.1	30.0	31.9		18.4	5.2		10.8	14.3	
Progression Factor	1.07	1.08	1.23	1.12	1.12		0.80	0.31		1.09	0.87	
Incremental Delay, d2	7.4	1.3	0.2	1.2	2.6		3.2	0.2		0.5	1.1	
Delay (s)	42.5	34.3	36.0	34.8	38.3		18.0	1.7		12.3	13.6	
Level of Service	D	C	D	C	D		B	A		B	B	
Approach Delay (s)		37.9			37.6			6.4			13.6	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM Average Control Delay	16.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

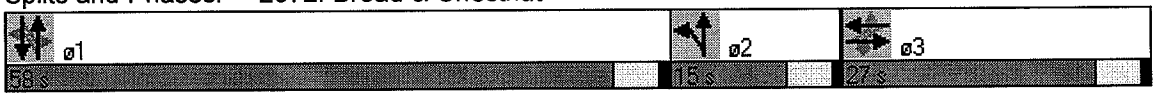
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	98	97	49	33	162	158	402	50	547
Lane Group Flow (vph)	109	108	54	45	178	180	452	56	1020
Turn Type	Perm		Perm	Perm		pm+pt		Perm	
Protected Phases		3			3	2	1 2		1
Permitted Phases	3		3	3		1 2		1	
Detector Phases	3	3	3	3	3	2	1 2	1	1
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	4.0		17.0	17.0
Minimum Split (s)	27.0	27.0	27.0	27.0	27.0	14.0		33.0	33.0
Total Split (s)	27.0	27.0	27.0	27.0	27.0	15.0	73.0	58.0	58.0
Total Split (%)	27.0%	27.0%	27.0%	27.0%	27.0%	15.0%	73.0%	58.0%	58.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lead/Lag						Lag		Lead	Lead
Lead-Lag Optimize?									
Recall Mode	Max	Max	Max	Max	Max	Max		C-Max	C-Max
v/c Ratio	0.49	0.24	0.14	0.16	0.40	0.43	0.18	0.11	0.55
Control Delay	43.8	34.8	11.6	35.6	38.7	12.4	1.8	12.7	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Total Delay	43.8	34.8	11.6	35.6	38.7	12.4	1.8	12.7	16.0
Queue Length 50th (ft)	62	58	2	27	110	17	12	11	96
Queue Length 95th (ft)	m117	m105	m31	52	185	75	17	37	169
Internal Link Dist (ft)		142			614		255		153
Turn Bay Length (ft)						125			
Base Capacity (vph)	224	447	382	283	446	416	2477	489	1866
Starvation Cap Reductn	0	0	0	0	0	0	0	0	744
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.24	0.14	0.16	0.40	0.43	0.18	0.11	0.91

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 47 (47%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2572: Broad & Chestnut



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Util. Factor		0.95	1.00					0.95	1.00	1.00	0.95	
Frpb, ped/bikes		1.00	0.94					1.00	0.96	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.98	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3466	1489					3539	1518	1770	3539	
Flt Permitted		0.98	1.00					1.00	1.00	0.46	1.00	
Satd. Flow (perm)		3466	1489					3539	1518	861	3539	
Volume (vph)	178	240	92	0	0	0	0	385	72	29	560	0
Peak-hour factor, PHF	0.90	0.88	0.63	0.90	0.90	0.90	0.81	0.89	0.80	0.65	0.97	0.87
Adj. Flow (vph)	198	273	146	0	0	0	0	433	90	45	577	0
RTOR Reduction (vph)	0	0	85	0	0	0	0	0	43	0	0	0
Lane Group Flow (vph)	0	471	61	0	0	0	0	433	47	45	577	0
Confl. Peds. (#/hr)	7		34						24			12
Turn Type	Split		Perm						Perm	Perm		
Protected Phases	2	2						1			1	
Permitted Phases			2						1	1		
Actuated Green, G (s)		39.0	39.0					49.0	49.0	49.0	49.0	
Effective Green, g (s)		42.0	42.0					52.0	52.0	52.0	52.0	
Actuated g/C Ratio		0.42	0.42					0.52	0.52	0.52	0.52	
Clearance Time (s)		6.0	6.0					6.0	6.0	6.0	6.0	
Lane Grp Cap (vph)		1456	625					1840	789	448	1840	
v/s Ratio Prot		c0.14						0.12			c0.16	
v/s Ratio Perm			0.10						0.06	0.05		
v/c Ratio		0.32	0.10					0.24	0.06	0.10	0.31	
Uniform Delay, d1		19.5	17.5					13.1	11.9	12.2	13.8	
Progression Factor		1.04	1.09					0.89	1.15	1.00	0.98	
Incremental Delay, d2		0.5	0.3					0.3	0.1	0.4	0.4	
Delay (s)		20.7	19.5					12.0	13.8	12.6	13.9	
Level of Service		C	B					B	B	B	B	
Approach Delay (s)		20.4			0.0			12.3			13.8	
Approach LOS		C			A			B			B	

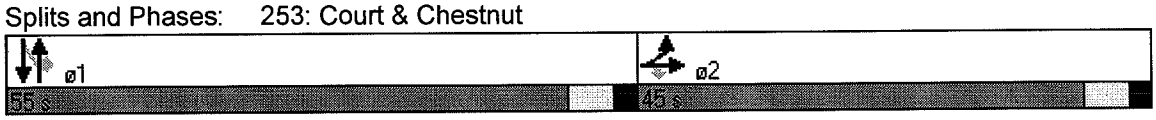
Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	240	92	385	72	29	560
Lane Group Flow (vph)	471	146	433	90	45	577
Turn Type		Perm		Perm	Perm	
Protected Phases	2		1			1
Permitted Phases		2		1	1	
Minimum Split (s)	29.0	29.0	31.0	31.0	31.0	31.0
Total Split (s)	45.0	45.0	55.0	55.0	55.0	55.0
Total Split (%)	45.0%	45.0%	55.0%	55.0%	55.0%	55.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead
Lead-Lag Optimize?						
v/c Ratio	0.32	0.21	0.24	0.11	0.10	0.31
Control Delay	20.9	4.0	12.1	3.4	13.0	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	20.9	4.0	12.1	3.4	13.0	14.3
Queue Length 50th (ft)	100	4	84	4	15	102
Queue Length 95th (ft)	130	7	123	30	18	98
Internal Link Dist (ft)	178		376			255
Turn Bay Length (ft)					100	
Base Capacity (vph)	1455	710	1840	833	448	1840
Starvation Cap Reductn	0	0	0	0	0	593
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.21	0.24	0.11	0.10	0.46

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 40 (40%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 60
Control Type: Pretimed

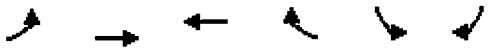
Splits and Phases: 253: Court & Chestnut



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	11	1233	20	0	0
Peak Hour Factor	0.90	0.80	0.90	0.80	0.90	0.90
Hourly flow rate (vph)	0	14	1370	25	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			366			393
pX, platoon unblocked						
vC, conflicting volume	1382	698			1395	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1382	698			1395	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	96			100	
cM capacity (veh/h)	135	383			486	

Direction, Lane #	WB 1	NB 1	NB 2
Volume Total	14	913	482
Volume Left	0	0	0
Volume Right	14	0	25
cSH	383	1700	1700
Volume to Capacity	0.04	0.54	0.28
Queue Length 95th (ft)	3	0	0
Control Delay (s)	14.7	0.0	0.0
Lane LOS	B		
Approach Delay (s)	14.7	0.0	
Approach LOS	B		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	9	220	589	11	16	31
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	11	275	736	14	20	39
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		376	222			
pX, platoon unblocked	0.88				0.88	0.88
vC, conflicting volume	750				1041	743
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	715				1046	707
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				91	90
cM capacity (veh/h)	776				219	382

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	11	275	750	59
Volume Left	11	0	0	20
Volume Right	0	0	14	39
cSH	776	1700	1700	304
Volume to Capacity	0.01	0.16	0.44	0.19
Queue Length 95th (ft)	1	0	0	18
Control Delay (s)	9.7	0.0	0.0	19.6
Lane LOS	A			C
Approach Delay (s)	0.4		0.0	19.6
Approach LOS				C

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	41.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	6	8	0	411	967	0
Peak Hour Factor	0.70	0.70	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	11	0	457	1074	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				218	244	
pX, platoon unblocked	0.81	0.81	0.81			
vC, conflicting volume	1303	537	1074			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1142	200	861			
tC, single (s)	6.9	7.0	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	98	100			
cM capacity (veh/h)	154	649	631			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	20	228	228	537	537
Volume Left	9	0	0	0	0
Volume Right	11	0	0	0	0
cSH	273	1700	1700	1700	1700
Volume to Capacity	0.07	0.13	0.13	0.32	0.32
Queue Length 95th (ft)	6	0	0	0	0
Control Delay (s)	19.2	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	19.2	0.0		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	36.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	209	30	138	477	24	20
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	261	38	172	596	30	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	184			414		
pX, platoon unblocked					0.93	
vC, conflicting volume			299		1221	280
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			299		1239	280
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			86		81	97
cM capacity (veh/h)			1262		155	759

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	299	172	596	55
Volume Left	0	172	0	30
Volume Right	38	0	0	25
cSH	1700	1262	1700	243
Volume to Capacity	0.18	0.14	0.35	0.23
Queue Length 95th (ft)	0	12	0	21
Control Delay (s)	0.0	8.3	0.0	24.1
Lane LOS		A		C
Approach Delay (s)	0.0	1.9		24.1
Approach LOS				C

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	35.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	112	650	0	0	19	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	140	812	0	0	24	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		274	258			
pX, platoon unblocked						
vC, conflicting volume	0				551	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				551	0
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	91				94	100
cM capacity (veh/h)	1622				424	1084

Direction, Lane #	EB 1	EB 2	EB 3	SB 1
Volume Total	302	325	325	24
Volume Left	140	0	0	24
Volume Right	0	0	0	0
cSH	1622	1700	1700	424
Volume to Capacity	0.09	0.19	0.19	0.06
Queue Length 95th (ft)	7	0	0	4
Control Delay (s)	3.8	0.0	0.0	14.0
Lane LOS	A			B
Approach Delay (s)	1.2			14.0
Approach LOS				B

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	24.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0						3.0	
Lane Util. Factor	1.00	1.00		1.00	0.95						1.00	
Frpb, ped/bikes	1.00	0.93		1.00	0.96						0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00						1.00	
Frt	1.00	0.94		1.00	0.97						0.95	
Flt Protected	0.95	1.00		0.95	1.00						0.99	
Satd. Flow (prot)	1770	1633		1770	3290						1709	
Flt Permitted	0.13	1.00		0.52	1.00						0.99	
Satd. Flow (perm)	238	1633		960	3290						1709	
Volume (vph)	147	200	131	111	922	280	0	0	0	5	5	6
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	184	250	164	139	1152	350	0	0	0	6	6	8
RTOR Reduction (vph)	0	8	0	0	14	0	0	0	0	0	8	0
Lane Group Flow (vph)	184	406	0	139	1488	0	0	0	0	0	12	0
Confl. Peds. (#/hr)			68			62			1			22
Turn Type	pm+pt			Perm						Perm		
Protected Phases	2	1 2			1						3	
Permitted Phases	1 2	1 2		1	1					3		
Actuated Green, G (s)	80.8	85.8		70.1	70.1						3.7	
Effective Green, g (s)	84.8	87.8		72.1	72.1						6.2	
Actuated g/C Ratio	0.85	0.88		0.72	0.72						0.06	
Clearance Time (s)	5.0			5.0	5.0						5.5	
Vehicle Extension (s)	2.0			2.0	2.0						5.0	
Lane Grp Cap (vph)	396	1434		692	2372						106	
v/s Ratio Prot	c0.06	0.25			c0.46							
v/s Ratio Perm	0.33			0.14							0.01	
v/c Ratio	0.46	0.28		0.20	0.63						0.12	
Uniform Delay, d1	13.5	1.0		4.6	7.1						44.3	
Progression Factor	0.79	0.24		0.92	0.92						1.00	
Incremental Delay, d2	0.3	0.0		0.6	1.2						1.0	
Delay (s)	11.0	0.3		4.8	7.7						45.4	
Level of Service	B	A		A	A						D	
Approach Delay (s)		3.6			7.5			0.0			45.4	
Approach LOS		A			A			A			D	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		

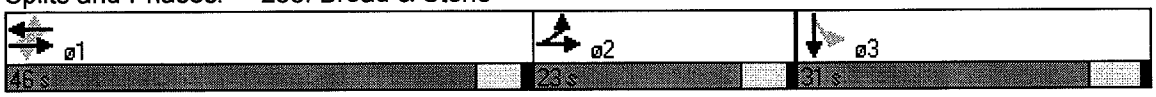
c Critical Lane Group

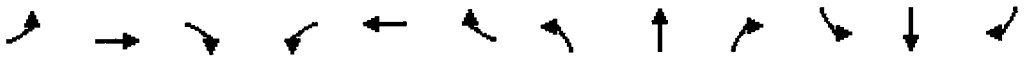
Lane Group	EBL	EBT	WBL	WBT	SBT
Lane Configurations					
Volume (vph)	147	200	111	922	5
Lane Group Flow (vph)	184	414	139	1502	20
Turn Type	pm+pt		Perm		
Protected Phases	2	1 2		1	3
Permitted Phases	1 2	1 2	1	1	
Detector Phases	2	1 2	1	1	3
Minimum Initial (s)	3.0		13.0	13.0	6.0
Minimum Split (s)	12.0		28.0	28.0	30.0
Total Split (s)	23.0	69.0	46.0	46.0	31.0
Total Split (%)	23.0%	69.0%	46.0%	46.0%	31.0%
Yellow Time (s)	4.0		4.0	4.0	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0
Lead/Lag	Lag		Lead	Lead	
Lead-Lag Optimize?					
Recall Mode	None		C-Max	C-Max	None
v/c Ratio	0.52	0.27	0.23	0.60	0.10
Control Delay	12.5	0.6	6.6	8.1	29.4
Queue Delay	0.0	0.0	0.0	0.7	0.0
Total Delay	12.5	0.6	6.6	8.8	29.4
Queue Length 50th (ft)	61	0	13	85	7
Queue Length 95th (ft)	m94	17	66	353	25
Internal Link Dist (ft)		285		249	648
Turn Bay Length (ft)	30				
Base Capacity (vph)	477	1544	609	2494	484
Starvation Cap Reductn	0	161	0	566	0
Spillback Cap Reductn	0	47	0	0	30
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.30	0.23	0.78	0.04

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 10 (10%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 255: Broad & Stone





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0				
Lane Util. Factor	1.00	1.00			0.95		0.91	0.91				
Frpb, ped/bikes	1.00	1.00			0.98		1.00	0.99				
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00				
Frt	1.00	1.00			0.97		1.00	0.99				
Flt Protected	0.95	1.00			1.00		0.95	1.00				
Satd. Flow (prot)	1770	1863			3366		1610	3340				
Flt Permitted	0.29	1.00			1.00		0.95	1.00				
Satd. Flow (perm)	533	1863			3366		1610	3340				
Volume (vph)	20	273	0	0	417	84	581	1173	59	0	0	0
Peak-hour factor, PHF	0.80	0.90	0.90	0.90	0.86	0.66	0.90	0.94	0.90	0.90	0.90	0.90
Adj. Flow (vph)	25	303	0	0	485	127	646	1248	66	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	4	0	0	0	0
Lane Group Flow (vph)	25	303	0	0	612	0	637	1319	0	0	0	0
Confl. Peds. (#/hr)			94			55			94			52
Turn Type	Perm						Split					
Protected Phases		2			2		1	1				
Permitted Phases	2	2			2							
Actuated Green, G (s)	32.0	32.0			32.0		56.0	56.0				
Effective Green, g (s)	35.0	35.0			35.0		59.0	59.0				
Actuated g/C Ratio	0.35	0.35			0.35		0.59	0.59				
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0				
Lane Grp Cap (vph)	187	652			1178		950	1971				
v/s Ratio Prot		0.16			c0.18		0.40	c0.40				
v/s Ratio Perm	0.05											
v/c Ratio	0.13	0.46			0.52		0.67	0.67				
Uniform Delay, d1	22.2	25.2			25.8		13.9	13.9				
Progression Factor	1.15	1.18			1.15		0.31	0.30				
Incremental Delay, d2	1.5	2.3			1.6		2.3	1.1				
Delay (s)	27.0	32.2			31.2		6.6	5.2				
Level of Service	C	C			C		A	A				
Approach Delay (s)		31.8			31.2			5.7			0.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Volume (vph)	20	273	417	581	1173
Lane Group Flow (vph)	25	303	612	637	1323
Turn Type	Perm			Split	
Protected Phases		2	2	1	1
Permitted Phases	2	2	2		
Minimum Split (s)	29.0	29.0	29.0	28.0	28.0
Total Split (s)	38.0	38.0	38.0	62.0	62.0
Total Split (%)	38.0%	38.0%	38.0%	62.0%	62.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?					
v/c Ratio	0.13	0.46	0.52	0.67	0.67
Control Delay	28.1	32.8	31.5	6.8	5.3
Queue Delay	0.0	2.6	0.3	1.0	0.6
Total Delay	28.1	35.4	31.8	7.9	5.9
Queue Length 50th (ft)	13	174	186	69	42
Queue Length 95th (ft)	33	252	223	m134	90
Internal Link Dist (ft)		249	104		346
Turn Bay Length (ft)					
Base Capacity (vph)	187	652	1178	950	1975
Starvation Cap Reductn	0	234	0	126	291
Spillback Cap Reductn	0	0	152	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.13	0.72	0.60	0.77	0.79

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

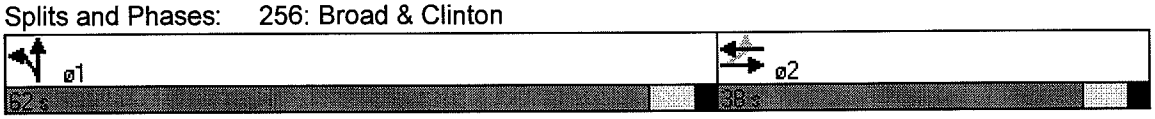
Offset: 16 (16%), Referenced to phase 1:NBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 256: Broad & Clinton



Level of Service Analysis
Future (2032) Condition
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1200	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0						3.0	3.0			
Lane Util. Factor		0.95						0.91	1.00			
Frt		1.00						1.00	0.85			
Flt Protected		0.99						1.00	1.00			
Satd. Flow (prot)		2209						5061	1583			
Flt Permitted		0.99						1.00	1.00			
Satd. Flow (perm)		2209						5061	1583			
Volume (vph)	149	400	0	0	0	0	78	1145	223	0	0	0
Peak-hour factor, PHF	0.78	0.67	0.90	0.90	0.90	0.90	0.60	0.92	0.65	0.90	0.90	0.90
Adj. Flow (vph)	191	597	0	0	0	0	130	1245	343	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	122	0	0	0
Lane Group Flow (vph)	0	788	0	0	0	0	0	1375	221	0	0	0
Turn Type	Split						Split		Perm			
Protected Phases	2	2					1	1				
Permitted Phases									1			
Actuated Green, G (s)		47.0						43.0	43.0			
Effective Green, g (s)		49.0						45.0	45.0			
Actuated g/C Ratio		0.49						0.45	0.45			
Clearance Time (s)		5.0						5.0	5.0			
Lane Grp Cap (vph)		1082						2277	712			
v/s Ratio Prot		c0.36						c0.27				
v/s Ratio Perm									0.22			
v/c Ratio		0.73						0.60	0.31			
Uniform Delay, d1		20.2						20.8	17.6			
Progression Factor		1.01						0.56	0.08			
Incremental Delay, d2		4.3						1.1	1.1			
Delay (s)		24.6						12.8	2.5			
Level of Service		C						B	A			
Approach Delay (s)		24.6			0.0			10.8			0.0	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	NBT	NBR
Lane Configurations			
Volume (vph)	400	1145	223
Lane Group Flow (vph)	788	1375	343
Turn Type			Perm
Protected Phases	2	1	
Permitted Phases			1
Minimum Split (s)	28.0	30.0	30.0
Total Split (s)	52.0	48.0	48.0
Total Split (%)	52.0%	48.0%	48.0%
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0
Lead/Lag	Lag	Lead	Lead
Lead-Lag Optimize?			
v/c Ratio	0.73	0.60	0.41
Control Delay	25.3	12.9	1.9
Queue Delay	18.2	0.1	0.1
Total Delay	43.5	13.1	2.1
Queue Length 50th (ft)	193	142	6
Queue Length 95th (ft)	173	185	0
Internal Link Dist (ft)	124	352	
Turn Bay Length (ft)			
Base Capacity (vph)	1082	2277	834
Starvation Cap Reductn	300	182	82
Spillback Cap Reductn	0	27	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.01	0.66	0.46

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 30 (30%), Referenced to phase 1:NBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 252: Court & Clinton

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.0		3.0	3.0				
Lane Util. Factor					0.95		0.91	0.91				
Frpb, ped/bikes					0.97		1.00	0.99				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.97		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					3338		1610	3358				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					3338		1610	3358				
Volume (vph)	0	0	0	0	447	96	315	918	22	0	0	0
Peak-hour factor, PHF	0.80	0.80	0.90	0.90	0.93	0.83	0.88	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	481	116	358	1020	24	0	0	0
RTOR Reduction (vph)	0	0	0	0	16	0	153	2	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	581	0	205	1042	0	0	0	0
Confl. Peds. (#/hr)			99			96			105			96
Turn Type							Split					
Protected Phases					2		1	1				
Permitted Phases												
Actuated Green, G (s)					44.0		44.0	44.0				
Effective Green, g (s)					47.0		47.0	47.0				
Actuated g/C Ratio					0.47		0.47	0.47				
Clearance Time (s)					6.0		6.0	6.0				
Lane Grp Cap (vph)					1569		757	1578				
v/s Ratio Prot					c0.18		0.22	c0.31				
v/s Ratio Perm												
v/c Ratio					0.37		0.27	0.66				
Uniform Delay, d1					17.0		16.1	20.4				
Progression Factor					1.09		0.00	0.38				
Incremental Delay, d2					0.7		0.7	1.7				
Delay (s)					19.2		0.7	9.5				
Level of Service					B		A	A				
Approach Delay (s)		0.0			19.2			7.2			0.0	
Approach LOS		A			B			A			A	

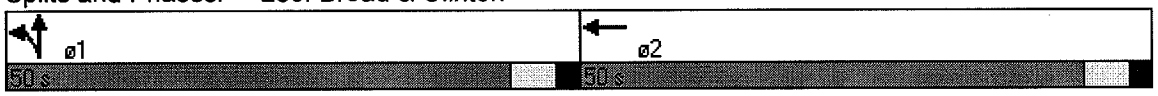
Intersection Summary			
HCM Average Control Delay	10.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

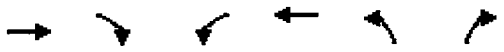
Lane Group	WBT	NBL	NBT
Lane Configurations			
Volume (vph)	447	315	918
Lane Group Flow (vph)	597	358	1044
Turn Type		Split	
Protected Phases	2	1	1
Permitted Phases			
Minimum Split (s)	29.0	28.0	28.0
Total Split (s)	50.0	50.0	50.0
Total Split (%)	50.0%	50.0%	50.0%
Yellow Time (s)	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0
Lead/Lag	Lag	Lead	Lead
Lead-Lag Optimize?			
v/c Ratio	0.38	0.39	0.66
Control Delay	18.5	1.0	9.6
Queue Delay	0.0	0.3	0.2
Total Delay	18.5	1.3	9.7
Queue Length 50th (ft)	124	0	52
Queue Length 95th (ft)	163	0	61
Internal Link Dist (ft)	114		346
Turn Bay Length (ft)			
Base Capacity (vph)	1585	909	1580
Starvation Cap Reductn	0	184	80
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.38	0.49	0.70

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 40 (40%), Referenced to phase 1:NBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 256: Broad & Clinton





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.82	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.92	
Flt Protected	1.00	1.00		1.00	0.98	
Satd. Flow (prot)	1863	1583		1859	1366	
Flt Permitted	1.00	1.00		0.98	0.98	
Satd. Flow (perm)	1863	1583		1819	1366	
Volume (vph)	513	14	13	265	14	24
Peak-hour factor, PHF	0.88	0.90	0.90	0.73	0.80	0.80
Adj. Flow (vph)	583	16	14	363	18	30
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	583	16	0	377	48	0
Confl. Peds. (#/hr)						250
Turn Type		Perm	Perm			
Protected Phases	1			1	2	
Permitted Phases		1	1			
Actuated Green, G (s)	64.0	64.0		64.0	27.0	
Effective Green, g (s)	67.0	67.0		67.0	27.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.27	
Clearance Time (s)	6.0	6.0		6.0	3.0	
Lane Grp Cap (vph)	1248	1061		1219	369	
v/s Ratio Prot	c0.31				c0.04	
v/s Ratio Perm		0.01		0.21		
v/c Ratio	0.47	0.02		0.31	0.13	
Uniform Delay, d1	7.9	5.5		6.9	27.6	
Progression Factor	0.15	0.27		0.08	1.00	
Incremental Delay, d2	0.8	0.0		0.6	0.7	
Delay (s)	2.1	1.5		1.2	28.3	
Level of Service	A	A		A	C	
Approach Delay (s)	2.0			1.2	28.3	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	3.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Volume (vph)	513	14	13	265	14
Lane Group Flow (vph)	583	16	0	377	48
Turn Type		Perm	Perm		
Protected Phases	1			1	2
Permitted Phases		1	1		
Minimum Split (s)	25.0	25.0	25.0	25.0	30.0
Total Split (s)	70.0	70.0	70.0	70.0	30.0
Total Split (%)	70.0%	70.0%	70.0%	70.0%	30.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	3.0	3.0	3.0	3.0	0.0
Lead/Lag	Lead	Lead	Lead	Lead	Lag
Lead-Lag Optimize?					
v/c Ratio	0.47	0.02		0.31	0.13
Control Delay	2.1	1.5		1.2	28.9
Queue Delay	0.5	0.0		0.2	0.1
Total Delay	2.6	1.5		1.4	29.0
Queue Length 50th (ft)	11	0		6	23
Queue Length 95th (ft)	35	m1		8	46
Internal Link Dist (ft)	173			215	84
Turn Bay Length (ft)					
Base Capacity (vph)	1248	1061		1218	369
Starvation Cap Reductn	298	0		289	0
Spillback Cap Reductn	118	0		33	61
Storage Cap Reductn	0	0		0	0
Reduced v/c Ratio	0.61	0.02		0.41	0.16

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

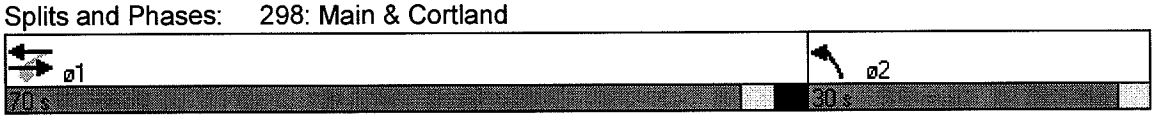
Offset: 0 (0%), Referenced to phase 1:EBWB, Start of Green

Natural Cycle: 60

Control Type: Pretimed

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 298: Main & Cortland



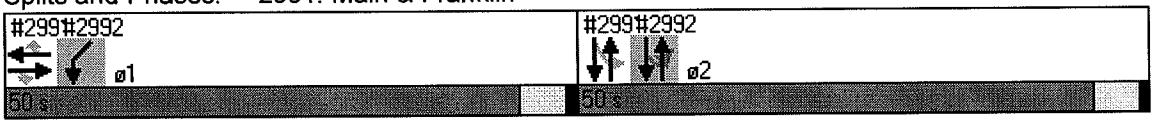
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0		3.0			3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00		0.95			0.95	
Frpb, ped/bikes		1.00	0.97		1.00	0.91		1.00			0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	
Frt		1.00	0.85		1.00	0.85		0.99			0.98	
Flt Protected		1.00	1.00		1.00	1.00		1.00			1.00	
Satd. Flow (prot)		1863	1543		1863	1436		3510			3440	
Flt Permitted		1.00	1.00		1.00	1.00		1.00			0.95	
Satd. Flow (perm)		1863	1543		1863	1436		3510			3279	
Volume (vph)	0	445	149	0	396	7	0	67	2	2	116	18
Peak-hour factor, PHF	0.90	0.82	0.87	0.90	0.93	0.50	0.90	0.71	0.50	0.50	0.72	0.67
Adj. Flow (vph)	0	543	171	0	426	14	0	94	4	4	161	27
RTOR Reduction (vph)	0	0	91	0	0	7	0	2	0	0	13	0
Lane Group Flow (vph)	0	543	80	0	426	7	0	96	0	0	179	0
Confl. Peds. (#/hr)			11			66			31			11
Turn Type			Perm			Perm				Perm		
Protected Phases		1			1			2			2	
Permitted Phases			1			1		2		2		
Actuated Green, G (s)		45.0	45.0		45.0	45.0		45.0			45.0	
Effective Green, g (s)		47.0	47.0		47.0	47.0		47.0			47.0	
Actuated g/C Ratio		0.47	0.47		0.47	0.47		0.47			0.47	
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Lane Grp Cap (vph)		876	725		876	675		1650			1541	
v/s Ratio Prot		c0.29			0.23			0.03				
v/s Ratio Perm			0.11			0.01					c0.06	
v/c Ratio		0.62	0.11		0.49	0.01		0.06			0.12	
Uniform Delay, d1		19.8	14.8		18.2	14.1		14.4			14.9	
Progression Factor		1.19	2.89		0.56	0.42		1.51			0.46	
Incremental Delay, d2		3.1	0.3		1.9	0.0		0.1			0.2	
Delay (s)		26.6	43.1		12.0	6.0		21.9			7.0	
Level of Service		C	D		B	A		C			A	
Approach Delay (s)		30.6			11.8			21.9			7.0	
Approach LOS		C			B			C			A	

Intersection Summary			
HCM Average Control Delay	21.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBT	WBR	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	445	149	396	7	67	2	116
Lane Group Flow (vph)	543	171	426	14	98	0	192
Turn Type		Perm		Perm		Perm	
Protected Phases	1		1		2		2
Permitted Phases		1		1	2	2	
Minimum Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (s)	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?							
v/c Ratio	0.62	0.21	0.49	0.02	0.06		0.12
Control Delay	27.3	7.7	12.3	3.0	21.1		6.2
Queue Delay	1.1	0.4	0.6	0.0	0.0		0.7
Total Delay	28.4	8.2	12.9	3.0	21.1		6.9
Queue Length 50th (ft)	206	19	74	0	20		11
Queue Length 95th (ft)	256	46	92	1	27		15
Internal Link Dist (ft)	215		231		494		98
Turn Bay Length (ft)							
Base Capacity (vph)	876	816	876	682	1652		1554
Starvation Cap Reductn	142	332	175	0	0		1077
Spillback Cap Reductn	0	0	0	0	0		0
Storage Cap Reductn	0	0	0	0	0		0
Reduced v/c Ratio	0.74	0.35	0.61	0.02	0.06		0.40

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 4 (4%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 2991: Main & Franklin



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.89			0.90	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			1.00			0.91			0.91	
Flt Protected		1.00			1.00			0.99			0.98	
Satd. Flow (prot)		3530			3494			1498			1505	
Flt Permitted		0.92			1.00			0.98			0.93	
Satd. Flow (perm)		3240			3494			1473			1431	
Volume (vph)	24	454	0	0	431	11	5	5	24	11	0	20
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	504	0	0	479	12	6	6	27	12	0	22
RTOR Reduction (vph)	0	0	0	0	2	0	0	19	0	0	15	0
Lane Group Flow (vph)	0	531	0	0	489	0	0	20	0	0	19	0
Confl. Peds. (#/hr)			150			150			125			125
Turn Type	Perm						Perm			Perm		
Protected Phases		1			1			2			2	
Permitted Phases	1						2			2		
Actuated Green, G (s)		62.0			62.0			28.0			28.0	
Effective Green, g (s)		64.0			64.0			30.0			30.0	
Actuated g/C Ratio		0.64			0.64			0.30			0.30	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		2074			2236			442			429	
v/s Ratio Prot					0.14							
v/s Ratio Perm		c0.16						c0.03			0.02	
v/c Ratio		0.26			0.22			0.05			0.04	
Uniform Delay, d1		7.7			7.5			24.8			24.8	
Progression Factor		0.01			0.14			1.00			1.00	
Incremental Delay, d2		0.2			0.2			0.2			0.2	
Delay (s)		0.3			1.3			25.0			25.0	
Level of Service		A			A			C			C	
Approach Delay (s)		0.3			1.3			25.0			25.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	2.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.20		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	24	454	431	5	5	11	0
Lane Group Flow (vph)	0	531	491	0	39	0	34
Turn Type	Perm			Perm		Perm	
Protected Phases		1	1		2		2
Permitted Phases	1			2		2	
Minimum Split (s)	27.0	27.0	27.0	33.0	33.0	33.0	33.0
Total Split (s)	67.0	67.0	67.0	33.0	33.0	33.0	33.0
Total Split (%)	67.0%	67.0%	67.0%	33.0%	33.0%	33.0%	33.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?							
v/c Ratio		0.26	0.22		0.08		0.08
Control Delay		0.3	1.3		13.3		14.2
Queue Delay		0.3	0.3		0.0		0.0
Total Delay		0.6	1.6		13.3		14.2
Queue Length 50th (ft)		0	4		5		5
Queue Length 95th (ft)		1	7		30		28
Internal Link Dist (ft)		231	188		31		96
Turn Bay Length (ft)							
Base Capacity (vph)		2072	2237		461		445
Starvation Cap Reductn		863	1133		0		0
Spillback Cap Reductn		0	0		0		0
Storage Cap Reductn		0	0		0		0
Reduced v/c Ratio		0.44	0.44		0.08		0.08

Intersection Summary

Cycle Length: 100

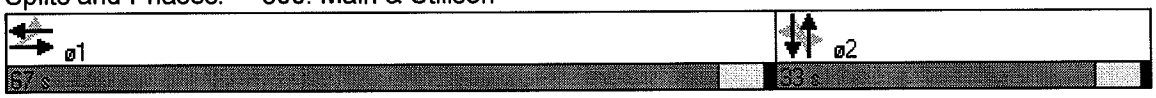
Actuated Cycle Length: 100

Offset: 7 (7%), Referenced to phase 1:EBWB, Start of Green

Natural Cycle: 60

Control Type: Pretimed

Splits and Phases: 300: Main & Stillson



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3456		1770	3425		1770	3413		1770	3431	
Flt Permitted	0.41	1.00		0.43	1.00		0.33	1.00		0.27	1.00	
Satd. Flow (perm)	759	3456		807	3425		615	3413		510	3431	
Volume (vph)	155	305	28	115	331	41	28	442	93	71	383	73
Peak-hour factor, PHF	0.80	0.82	0.63	0.84	0.84	0.71	0.78	0.76	0.76	0.88	0.75	0.81
Adj. Flow (vph)	194	372	44	137	394	58	36	582	122	81	511	90
RTOR Reduction (vph)	0	8	0	0	10	0	0	17	0	0	15	0
Lane Group Flow (vph)	194	408	0	137	442	0	36	687	0	81	587	0
Confl. Peds. (#/hr)			46			68			34			32
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	3	1		3	1			2			2	
Permitted Phases	1			1			2			2		
Actuated Green, G (s)	44.0	35.4		44.0	35.4		40.0	40.0		40.0	40.0	
Effective Green, g (s)	49.0	37.9		49.0	37.9		42.0	42.0		42.0	42.0	
Actuated g/C Ratio	0.49	0.38		0.49	0.38		0.42	0.42		0.42	0.42	
Clearance Time (s)	5.5	5.5		5.5	5.5		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	484	1310		502	1298		258	1433		214	1441	
v/s Ratio Prot	c0.04	0.12		0.03	0.13			c0.21			0.18	
v/s Ratio Perm	c0.15			0.10			0.06			0.16		
v/c Ratio	0.40	0.31		0.27	0.34		0.14	0.48		0.38	0.41	
Uniform Delay, d1	14.9	21.9		14.3	22.1		17.9	21.1		20.0	20.3	
Progression Factor	1.32	1.14		0.44	0.39		0.41	0.36		0.63	0.60	
Incremental Delay, d2	0.2	0.6		0.1	0.7		1.1	1.1		4.9	0.8	
Delay (s)	19.8	25.6		6.4	9.4		8.3	8.6		17.5	13.0	
Level of Service	B	C		A	A		A	A		B	B	
Approach Delay (s)		23.7			8.7			8.6			13.6	
Approach LOS		C			A			A			B	

Intersection Summary			
HCM Average Control Delay	13.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

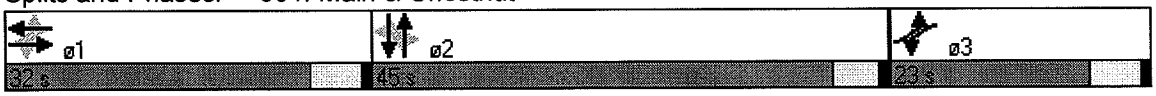
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	155	305	115	331	28	442	71	383
Lane Group Flow (vph)	194	416	137	452	36	704	81	601
Turn Type	pm+pt		pm+pt		Perm		Perm	
Protected Phases	3	1	3	1		2		2
Permitted Phases	1		1		2		2	
Detector Phases	3	1	3	1	2	2	2	2
Minimum Initial (s)	6.0	7.0	6.0	7.0	6.0	6.0	6.0	6.0
Minimum Split (s)	12.0	28.0	12.0	28.0	29.0	29.0	29.0	29.0
Total Split (s)	23.0	32.0	23.0	32.0	45.0	45.0	45.0	45.0
Total Split (%)	23.0%	32.0%	23.0%	32.0%	45.0%	45.0%	45.0%	45.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag		Lead		Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?								
Recall Mode	None	C-Max	None	C-Max	Max	Max	Max	Max
v/c Ratio	0.43	0.32	0.29	0.35	0.14	0.49	0.38	0.41
Control Delay	19.1	25.6	6.5	9.4	8.6	8.4	18.5	12.7
Queue Delay	0.0	0.6	0.0	0.4	0.0	0.2	0.0	0.0
Total Delay	19.1	26.1	6.5	9.8	8.6	8.6	18.5	12.7
Queue Length 50th (ft)	70	80	19	35	5	53	28	118
Queue Length 95th (ft)	85	88	30	67	11	52	74	59
Internal Link Dist (ft)		188		225		289		561
Turn Bay Length (ft)	125		125		125		125	
Base Capacity (vph)	568	1318	586	1308	258	1451	214	1456
Starvation Cap Reductn	5	522	0	405	0	191	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.52	0.23	0.50	0.14	0.56	0.38	0.41

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 10 (10%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 301: Main & Chestnut



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.89		1.00	0.85	1.00	0.98		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1861	1406		1801	1342	1770	3321		1770	3524	
Flt Permitted		1.00	1.00		0.58	1.00	0.33	1.00		0.28	1.00	
Satd. Flow (perm)		1855	1406		1087	1342	622	3321		514	3524	
Volume (vph)	3	164	94	122	58	44	25	473	140	59	484	6
Peak-hour factor, PHF	0.75	0.74	0.72	0.78	0.81	0.57	0.69	0.86	0.75	0.95	0.79	0.63
Adj. Flow (vph)	4	222	131	156	72	77	36	550	187	62	613	10
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	226	131	0	228	77	36	737	0	62	623	0
Confl. Peds. (#/hr)			75			105			66			84
Turn Type	Perm		Perm	pm+pt		Perm	Perm			Perm		
Protected Phases		1		4	1 4			2			2	
Permitted Phases	1		1	1 4		1 4	2			2		
Actuated Green, G (s)		31.4	31.4		41.0	46.0	44.0	44.0		44.0	44.0	
Effective Green, g (s)		33.4	33.4		45.0	48.0	46.0	46.0		46.0	46.0	
Actuated g/C Ratio		0.33	0.33		0.45	0.48	0.46	0.46		0.46	0.46	
Clearance Time (s)		5.0	5.0				5.0	5.0		5.0	5.0	
Vehicle Extension (s)		2.0	2.0				2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		620	470		572	644	286	1528		236	1621	
v/s Ratio Prot					c0.05			c0.22			0.18	
v/s Ratio Perm		0.12	0.09		c0.13	0.06	0.06			0.12		
v/c Ratio		0.36	0.28		0.40	0.12	0.13	0.48		0.26	0.38	
Uniform Delay, d1		25.3	24.5		18.4	14.3	15.5	18.7		16.6	17.7	
Progression Factor		1.25	1.23		0.71	0.73	0.65	0.62		0.38	0.41	
Incremental Delay, d2		1.6	1.5		0.2	0.0	0.9	1.1		2.5	0.7	
Delay (s)		33.1	31.5		13.2	10.5	11.0	12.8		8.8	7.8	
Level of Service		C	C		B	B	B	B		A	A	
Approach Delay (s)		32.5			12.5			12.7			7.9	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

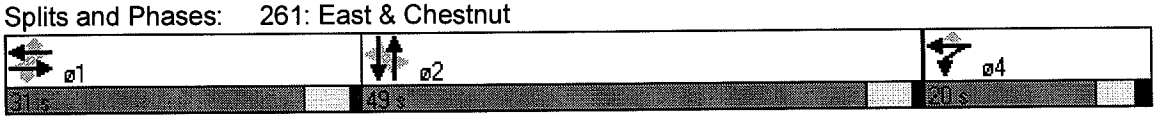
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Volume (vph)	3	164	94	122	58	44	25	473	59	484
Lane Group Flow (vph)	0	226	131	0	228	77	36	737	62	623
Turn Type	Perm		Perm	pm+pt		Perm	Perm		Perm	
Protected Phases		1		4	1 4			2		2
Permitted Phases	1		1	1 4		1 4	2		2	
Detector Phases	1	1	1	4	1 4	1 4	2	2	2	2
Minimum Initial (s)	7.0	7.0	7.0	6.0			6.0	6.0	6.0	6.0
Minimum Split (s)	27.0	27.0	27.0	15.0			30.0	30.0	30.0	30.0
Total Split (s)	31.0	31.0	31.0	20.0	51.0	51.0	49.0	49.0	49.0	49.0
Total Split (%)	31.0%	31.0%	31.0%	20.0%	51.0%	51.0%	49.0%	49.0%	49.0%	49.0%
Yellow Time (s)	4.0	4.0	4.0	3.5			4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.5			1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lead	Lead				Lag	Lag	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	C-Max	C-Max	C-Max	Min			Max	Max	Max	Max
v/c Ratio		0.37	0.28		0.41	0.12	0.13	0.48	0.26	0.38
Control Delay		34.5	33.1		12.9	11.1	11.4	12.9	9.3	7.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.2
Total Delay		34.5	33.1		12.9	11.1	11.4	12.9	9.3	8.1
Queue Length 50th (ft)		143	81		53	17	9	98	10	59
Queue Length 95th (ft)		160	99		99	29	18	127	23	61
Internal Link Dist (ft)		494			594			174		289
Turn Bay Length (ft)							125		125	
Base Capacity (vph)		618	469		623	643	286	1528	236	1622
Starvation Cap Reductn		0	0		0	0	0	0	0	318
Spillback Cap Reductn		0	0		0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0
Reduced v/c Ratio		0.37	0.28		0.37	0.12	0.13	0.48	0.26	0.48

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 8 (8%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 261: East & Chestnut



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		3.0	3.0	3.0	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.92		1.00	1.00	1.00	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1630		1770	3539	3522	
Flt Permitted	0.98		0.35	1.00	1.00	
Satd. Flow (perm)	1630		648	3539	3522	
Volume (vph)	29	44	8	621	686	23
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	32	49	9	690	762	26
RTOR Reduction (vph)	45	0	0	0	1	0
Lane Group Flow (vph)	36	0	9	690	787	0
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Turn Type			Perm			
Protected Phases	3			1	1	
Permitted Phases			1			
Actuated Green, G (s)	6.7		83.3	83.3	83.3	
Effective Green, g (s)	8.7		85.3	85.3	85.3	
Actuated g/C Ratio	0.09		0.85	0.85	0.85	
Clearance Time (s)	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	142		553	3019	3004	
v/s Ratio Prot	c0.05			0.19	c0.22	
v/s Ratio Perm			0.01			
v/c Ratio	0.26		0.02	0.23	0.26	
Uniform Delay, d1	42.6		1.1	1.3	1.4	
Progression Factor	1.00		0.47	0.34	1.62	
Incremental Delay, d2	1.0		0.1	0.2	0.2	
Delay (s)	43.6		0.6	0.6	2.5	
Level of Service	D		A	A	A	
Approach Delay (s)	43.6			0.6	2.5	
Approach LOS	D			A	A	

Intersection Summary			
HCM Average Control Delay	3.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	31.4%	ICU Level of Service	A
Analysis Period (min)	15		

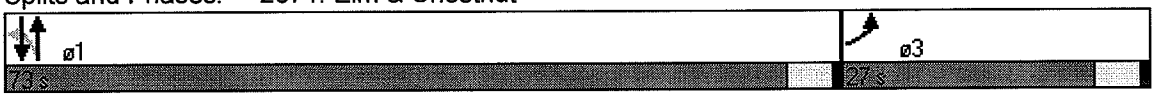
c Critical Lane Group

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Volume (vph)	29	8	621	686
Lane Group Flow (vph)	81	9	690	788
Turn Type		Perm		
Protected Phases	3		1	1
Permitted Phases		1		
Detector Phases	3	1	1	1
Minimum Initial (s)	6.0	17.0	17.0	17.0
Minimum Split (s)	27.0	33.0	33.0	33.0
Total Split (s)	27.0	73.0	73.0	73.0
Total Split (%)	27.0%	73.0%	73.0%	73.0%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	C-Max	C-Max	C-Max
v/c Ratio	0.40	0.02	0.22	0.26
Control Delay	20.8	0.9	0.7	2.8
Queue Delay	0.0	0.0	0.3	0.0
Total Delay	20.8	0.9	1.0	2.8
Queue Length 50th (ft)	19	0	7	53
Queue Length 95th (ft)	62	m1	23	100
Internal Link Dist (ft)	133		153	129
Turn Bay Length (ft)				
Base Capacity (vph)	428	523	3076	3062
Starvation Cap Reductn	0	0	1633	0
Spillback Cap Reductn	0	0	0	9
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.19	0.02	0.48	0.26

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2571: Elm & Chestnut



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.90	1.00	0.96		1.00	1.00		1.00	0.93	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1422	1770	1752		1770	3539		1770	3203	
Flt Permitted	0.52	1.00	1.00	0.65	1.00		0.27	1.00		0.36	1.00	
Satd. Flow (perm)	972	1863	1422	1214	1752		508	3539		673	3203	
Volume (vph)	88	79	119	100	96	9	147	592	0	40	573	143
Peak-hour factor, PHF	0.80	0.80	0.80	0.74	0.66	0.40	0.72	0.85	0.75	0.80	0.75	0.88
Adj. Flow (vph)	110	99	149	135	145	22	204	696	0	50	764	162
RTOR Reduction (vph)	0	0	86	0	5	0	0	0	0	0	11	0
Lane Group Flow (vph)	110	99	63	135	162	0	204	696	0	50	915	0
Confl. Peds. (#/hr)			64			210			158			211
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		3			3			1			1	
Permitted Phases	3	3	3	3	3		1			1		
Actuated Green, G (s)	22.0	22.0	22.0	22.0	22.0		68.0	68.0		68.0	68.0	
Effective Green, g (s)	24.0	24.0	24.0	24.0	24.0		70.0	70.0		70.0	70.0	
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.24		0.70	0.70		0.70	0.70	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	233	447	341	291	420		356	2477		471	2242	
v/s Ratio Prot		0.05			0.10			0.20			0.29	
v/s Ratio Perm	c0.11		0.10	0.11			c0.40			0.07		
v/c Ratio	0.47	0.22	0.19	0.46	0.38		0.57	0.28		0.11	0.41	
Uniform Delay, d1	32.6	30.5	30.2	32.5	31.8		7.5	5.6		4.9	6.3	
Progression Factor	1.01	1.01	1.03	0.89	0.88		1.92	1.51		0.80	0.76	
Incremental Delay, d2	6.7	1.1	1.2	5.2	2.7		6.3	0.3		0.4	0.5	
Delay (s)	39.6	31.9	32.4	34.1	30.5		20.7	8.7		4.3	5.3	
Level of Service	D	C	C	C	C		C	A		A	A	
Approach Delay (s)		34.5			32.1			11.4			5.3	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM Average Control Delay	14.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		

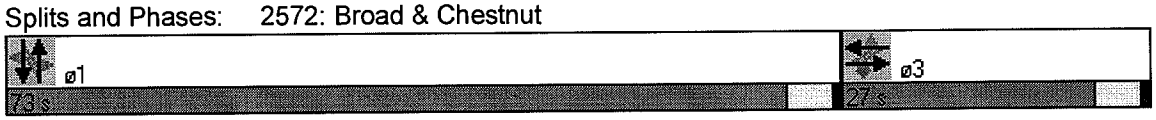
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	88	79	119	100	96	147	592	40	573
Lane Group Flow (vph)	110	99	149	135	167	204	696	50	926
Turn Type	Perm		Perm	Perm		Perm		Perm	
Protected Phases		3			3		1		1
Permitted Phases	3	3	3	3	3	1		1	
Detector Phases	3	3	3	3	3	1	1	1	1
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	17.0	17.0	17.0	17.0
Minimum Split (s)	27.0	27.0	27.0	27.0	27.0	33.0	33.0	33.0	33.0
Total Split (s)	27.0	27.0	27.0	27.0	27.0	73.0	73.0	73.0	73.0
Total Split (%)	27.0%	27.0%	27.0%	27.0%	27.0%	73.0%	73.0%	73.0%	73.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	Max	Max	Max	Max	Max	C-Max	C-Max	C-Max	C-Max
v/c Ratio	0.47	0.22	0.35	0.46	0.39	0.57	0.28	0.11	0.41
Control Delay	40.8	32.4	12.6	34.8	29.9	23.2	8.8	4.5	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.8
Total Delay	40.8	32.4	12.6	34.8	29.9	23.2	9.1	4.5	6.0
Queue Length 50th (ft)	62	52	20	69	80	114	84	7	75
Queue Length 95th (ft)	m102	m86	56	100	99	156	98	15	88
Internal Link Dist (ft)		132			614		255		153
Turn Bay Length (ft)						125			
Base Capacity (vph)	233	447	427	292	426	356	2477	470	2254
Starvation Cap Reductn	0	0	0	0	0	0	1106	0	951
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.22	0.35	0.46	0.39	0.57	0.51	0.11	0.71

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 30 (30%), Referenced to phase 1:NBSB, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2572: Broad & Chestnut



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Util. Factor		0.95	1.00					0.95	1.00	1.00	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.98	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3461	1583					3539	1583	1770	3539	
Flt Permitted		0.98	1.00					1.00	1.00	0.41	1.00	
Satd. Flow (perm)		3461	1583					3539	1583	773	3539	
Volume (vph)	268	279	246	0	0	0	0	455	43	30	788	0
Peak-hour factor, PHF	0.96	0.83	0.68	0.90	0.90	0.90	0.90	0.81	0.79	0.68	0.78	0.90
Adj. Flow (vph)	279	336	362	0	0	0	0	562	54	44	1010	0
RTOR Reduction (vph)	0	0	100	0	0	0	0	0	19	0	0	0
Lane Group Flow (vph)	0	615	262	0	0	0	0	562	35	44	1010	0
Turn Type	Split		Perm						Perm	Perm		
Protected Phases	2	2						1			1	
Permitted Phases			2						1	1		
Actuated Green, G (s)		26.0	26.0					62.0	62.0	62.0	62.0	
Effective Green, g (s)		29.0	29.0					65.0	65.0	65.0	65.0	
Actuated g/C Ratio		0.29	0.29					0.65	0.65	0.65	0.65	
Clearance Time (s)		6.0	6.0					6.0	6.0	6.0	6.0	
Lane Grp Cap (vph)		1004	459					2300	1029	502	2300	
v/s Ratio Prot		0.18						0.16			c0.29	
v/s Ratio Perm			0.23						0.03	0.06		
v/c Ratio		0.61	0.57					0.24	0.03	0.09	0.44	
Uniform Delay, d1		30.6	30.2					7.3	6.3	6.5	8.6	
Progression Factor		0.87	0.79					1.00	1.44	0.85	0.79	
Incremental Delay, d2		2.5	4.6					0.3	0.1	0.3	0.6	
Delay (s)		29.1	28.4					7.5	9.1	5.8	7.3	
Level of Service		C	C					A	A	A	A	
Approach Delay (s)		28.8			0.0			7.7			7.3	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	279	246	455	43	30	788
Lane Group Flow (vph)	615	362	562	54	44	1010
Turn Type		Perm		Perm	Perm	
Protected Phases	2		1			1
Permitted Phases		2		1	1	
Minimum Split (s)	29.0	29.0	31.0	31.0	31.0	31.0
Total Split (s)	32.0	32.0	68.0	68.0	68.0	68.0
Total Split (%)	32.0%	32.0%	68.0%	68.0%	68.0%	68.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead
Lead-Lag Optimize?						
v/c Ratio	0.61	0.65	0.24	0.05	0.09	0.44
Control Delay	29.4	20.1	7.6	2.7	6.0	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	29.4	20.1	7.6	2.7	6.0	7.7
Queue Length 50th (ft)	145	70	52	0	10	126
Queue Length 95th (ft)	184	75	100	11	15	135
Internal Link Dist (ft)	178		376			255
Turn Bay Length (ft)					100	
Base Capacity (vph)	1004	559	2300	1048	502	2300
Starvation Cap Reductn	0	0	0	0	0	620
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.65	0.24	0.05	0.09	0.60

Intersection Summary

Cycle Length: 100

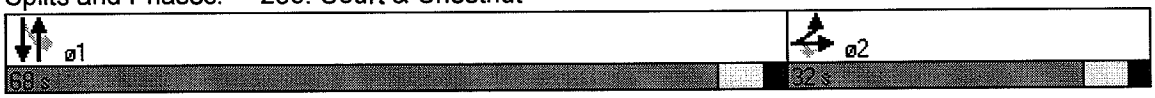
Actuated Cycle Length: 100

Offset: 25 (25%), Referenced to phase 1:NBSB, Start of Green

Natural Cycle: 60

Control Type: Pretimed

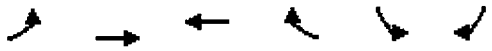
Splits and Phases: 253: Court & Chestnut



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	34	994	20	0	0
Peak Hour Factor	0.90	0.80	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	42	1104	22	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			375			384
pX, platoon unblocked						
vC, conflicting volume	1116	563			1127	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1116	563			1127	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	91			100	
cM capacity (veh/h)	202	469			616	

Direction, Lane #	WB 1	NB 1	NB 2
Volume Total	42	736	390
Volume Left	0	0	0
Volume Right	42	0	22
cSH	469	1700	1700
Volume to Capacity	0.09	0.43	0.23
Queue Length 95th (ft)	7	0	0
Control Delay (s)	13.4	0.0	0.0
Lane LOS	B		
Approach Delay (s)	13.4	0.0	
Approach LOS	B		

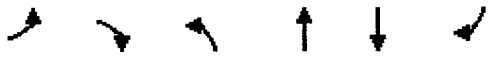
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	38.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	18	261	373	22	35	40
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	22	326	466	28	44	50
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		386	212			
pX, platoon unblocked	0.97				0.97	0.97
vC, conflicting volume	494				851	480
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	478				847	464
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				86	91
cM capacity (veh/h)	1052				316	580

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	22	326	494	94
Volume Left	22	0	0	44
Volume Right	0	0	28	50
cSH	1052	1700	1700	417
Volume to Capacity	0.02	0.19	0.29	0.22
Queue Length 95th (ft)	2	0	0	21
Control Delay (s)	8.5	0.0	0.0	16.1
Lane LOS	A			C
Approach Delay (s)	0.5		0.0	16.1
Approach LOS				C

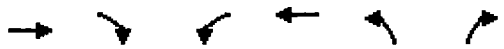
Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	32.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	16	21	0	640	700	0
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70
Hourly flow rate (vph)	23	30	0	914	1000	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				209	254	
pX, platoon unblocked	0.90	0.89	0.89			
vC, conflicting volume	1457	500	1000			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1301	310	873			
tC, single (s)	6.9	7.0	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	83	95	100			
cM capacity (veh/h)	134	601	682			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	53	457	457	500	500
Volume Left	23	0	0	0	0
Volume Right	30	0	0	0	0
cSH	240	1700	1700	1700	1700
Volume to Capacity	0.22	0.27	0.27	0.29	0.29
Queue Length 95th (ft)	20	0	0	0	0
Control Delay (s)	24.2	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	24.2	0.0		0.0	
Approach LOS	C				

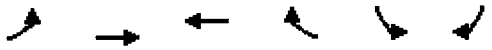
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	29.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	188	6	27	366	177	91
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	235	8	34	458	221	114
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	194			404		
pX, platoon unblocked						
vC, conflicting volume			242		764	239
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			242		764	239
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			97		39	86
cM capacity (veh/h)			1324		363	800

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	242	34	458	335
Volume Left	0	34	0	221
Volume Right	8	0	0	114
cSH	1700	1324	1700	445
Volume to Capacity	0.14	0.03	0.27	0.75
Queue Length 95th (ft)	0	2	0	157
Control Delay (s)	0.0	7.8	0.0	33.8
Lane LOS		A		D
Approach Delay (s)	0.0	0.5		33.8
Approach LOS				D

Intersection Summary			
Average Delay	10.8		
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	19	604	0	0	94	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	24	755	0	0	118	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		274	258			
pX, platoon unblocked						
vC, conflicting volume	0				299	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				299	0
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				82	100
cM capacity (veh/h)	1622				658	1084

Direction, Lane #	EB 1	EB 2	EB 3	SB 1
Volume Total	175	302	302	118
Volume Left	24	0	0	118
Volume Right	0	0	0	0
cSH	1622	1700	1700	658
Volume to Capacity	0.01	0.18	0.18	0.18
Queue Length 95th (ft)	1	0	0	16
Control Delay (s)	1.1	0.0	0.0	11.7
Lane LOS	A			B
Approach Delay (s)	0.2			11.7
Approach LOS				B

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	23.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0						3.0	
Lane Util. Factor	1.00	1.00		1.00	0.95						1.00	
Frpb, ped/bikes	1.00	0.92		1.00	0.98						0.88	
Flpb, ped/bikes	1.00	1.00		1.00	1.00						1.00	
Frt	1.00	0.96		1.00	0.99						0.90	
Flt Protected	0.95	1.00		0.95	1.00						0.99	
Satd. Flow (prot)	1770	1643		1770	3427						1459	
Flt Permitted	0.17	1.00		0.59	1.00						0.99	
Satd. Flow (perm)	323	1643		1097	3427						1459	
Volume (vph)	94	170	54	68	1013	68	0	0	0	50	16	172
Peak-hour factor, PHF	0.80	0.90	0.80	0.80	0.90	0.80	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	118	189	68	85	1126	85	0	0	0	56	18	191
RTOR Reduction (vph)	0	9	0	0	4	0	0	0	0	0	106	0
Lane Group Flow (vph)	118	248	0	85	1207	0	0	0	0	0	159	0
Confl. Peds. (#/hr)			129			128			51			130
Turn Type	pm+pt			Perm						Perm		
Protected Phases	2	1 2			1						3	
Permitted Phases	1 2	1 2		1	1					3		
Actuated Green, G (s)	67.8	72.8		62.6	62.6						16.7	
Effective Green, g (s)	71.8	74.8		64.6	64.6						19.2	
Actuated g/C Ratio	0.72	0.75		0.65	0.65						0.19	
Clearance Time (s)	5.0			5.0	5.0						5.5	
Vehicle Extension (s)	2.0			2.0	2.0						5.0	
Lane Grp Cap (vph)	336	1229		709	2214						280	
v/s Ratio Prot	c0.03	0.16			c0.35							
v/s Ratio Perm	0.23			0.08							0.18	
v/c Ratio	0.35	0.20		0.12	0.55						0.57	
Uniform Delay, d1	13.7	3.7		6.8	9.7						36.6	
Progression Factor	0.83	0.30		0.85	0.87						1.00	
Incremental Delay, d2	0.2	0.0		0.3	0.9						4.3	
Delay (s)	11.6	1.1		6.1	9.4						40.9	
Level of Service	B	A		A	A						D	
Approach Delay (s)		4.4			9.2			0.0			40.9	
Approach LOS		A			A			A			D	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

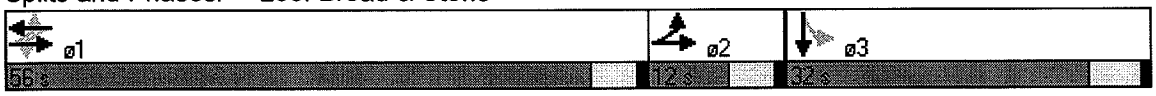
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	SBT
Lane Configurations					
Volume (vph)	94	170	68	1013	16
Lane Group Flow (vph)	118	257	85	1211	265
Turn Type	pm+pt		Perm		
Protected Phases	2	1 2		1	3
Permitted Phases	1 2	1 2	1	1	
Detector Phases	2	1 2	1	1	3
Minimum Initial (s)	3.0		13.0	13.0	6.0
Minimum Split (s)	12.0		28.0	28.0	30.0
Total Split (s)	12.0	68.0	56.0	56.0	32.0
Total Split (%)	12.0%	68.0%	56.0%	56.0%	32.0%
Yellow Time (s)	4.0		4.0	4.0	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0
Lead/Lag	Lag		Lead	Lead	
Lead-Lag Optimize?					
Recall Mode	None		C-Max	C-Max	None
v/c Ratio	0.41	0.21	0.12	0.55	0.68
Control Delay	13.2	1.6	8.1	10.6	21.0
Queue Delay	0.0	0.2	0.0	0.9	0.0
Total Delay	13.2	1.8	8.1	11.5	21.0
Queue Length 50th (ft)	11	0	18	201	79
Queue Length 95th (ft)	37	69	48	324	148
Internal Link Dist (ft)		285		249	648
Turn Bay Length (ft)					
Base Capacity (vph)	318	1266	683	2214	516
Starvation Cap Reductn	0	457	0	655	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.37	0.32	0.12	0.78	0.51

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 21 (21%), Referenced to phase 1:EBWB, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 255: Broad & Stone



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0				
Lane Util. Factor	1.00	1.00			0.95		0.91	0.91				
Frpb, ped/bikes	1.00	1.00			0.97		1.00	0.99				
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00				
Frt	1.00	1.00			0.97		1.00	0.99				
Flt Protected	0.95	1.00			1.00		0.95	1.00				
Satd. Flow (prot)	1770	1863			3338		1610	3344				
Flt Permitted	0.35	1.00			1.00		0.95	1.00				
Satd. Flow (perm)	656	1863			3338		1610	3344				
Volume (vph)	20	173	0	0	447	96	315	923	42	0	0	0
Peak-hour factor, PHF	0.80	0.90	0.90	0.90	0.93	0.83	0.88	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	25	192	0	0	481	116	358	1026	47	0	0	0
RTOR Reduction (vph)	0	0	0	0	16	0	0	3	0	0	0	0
Lane Group Flow (vph)	25	192	0	0	581	0	358	1070	0	0	0	0
Confl. Peds. (#/hr)			99			96			105			96
Turn Type	Perm						Split					
Protected Phases		2			2		1	1				
Permitted Phases	2											
Actuated Green, G (s)	44.0	44.0			44.0		44.0	44.0				
Effective Green, g (s)	47.0	47.0			47.0		47.0	47.0				
Actuated g/C Ratio	0.47	0.47			0.47		0.47	0.47				
Clearance Time (s)	6.0	6.0			6.0		6.0	6.0				
Lane Grp Cap (vph)	308	876			1569		757	1572				
v/s Ratio Prot		0.10			c0.18		0.22	c0.32				
v/s Ratio Perm	0.04											
v/c Ratio	0.08	0.22			0.37		0.47	0.68				
Uniform Delay, d1	14.6	15.7			17.0		18.1	20.7				
Progression Factor	1.09	1.11			1.07		0.26	0.36				
Incremental Delay, d2	0.5	0.6			0.7		1.7	2.0				
Delay (s)	16.4	18.0			18.9		6.4	9.3				
Level of Service	B	B			B		A	A				
Approach Delay (s)		17.8			18.9			8.6			0.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Volume (vph)	20	173	447	315	923
Lane Group Flow (vph)	25	192	597	358	1073
Turn Type	Perm			Split	
Protected Phases		2	2	1	1
Permitted Phases	2				
Minimum Split (s)	29.0	29.0	29.0	28.0	28.0
Total Split (s)	50.0	50.0	50.0	50.0	50.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?					
v/c Ratio	0.08	0.22	0.38	0.47	0.68
Control Delay	16.9	18.3	18.2	6.5	9.4
Queue Delay	0.0	0.9	0.1	0.3	0.2
Total Delay	16.9	19.2	18.2	6.8	9.6
Queue Length 50th (ft)	10	73	127	30	45
Queue Length 95th (ft)	m21	110	164	41	53
Internal Link Dist (ft)		249	114		346
Turn Bay Length (ft)					
Base Capacity (vph)	308	876	1585	757	1574
Starvation Cap Reductn	0	452	0	98	76
Spillback Cap Reductn	0	0	187	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.08	0.45	0.43	0.54	0.72

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 40 (40%), Referenced to phase 1:NBTL, Start of Green

Natural Cycle: 60

Control Type: Pretimed

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 256: Broad & Clinton