

Appendix A: Traffic Analyses

Alternative 4



2010 AM Peak Traffic (Alt 4)											
Node #	Intersection	EB		WB		NB		SB		Overall	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
1	Monument & Main			C	27.5s	B	17.9s	B	15.4s	C	21.1s
2	First & Main	C	20.6s			A	1.8s	A	6.1s	B	10.4s
3	Monument & Wilkinson			A	7.4s	A	0.8s	A	0.0s	A	5.5s
4	Monument & Patterson			C	28.9s	B	11.3s	C	25.9s	C	23.0s
5	First & Wilkinson	A	2.0s			A	1.4s			A	1.8s
6	First & Patterson	A	7.0s			A	5.4s			A	6.2s
8	Second & Main	B	14.9s	A	8.4s	A	2.8s	A	0.5s	A	5.4s
22	Second & Perry	B	11.6s	A	8.6s			A	2.9s	A	8.5s
26	Second & Wilkinson	A	6.9s	A	6.6s	B	14.6s			A	9.7s
27	Monument & Ludlow			A	8.9s					A	8.9s
28	First & Ludlow	A	8.1s					A	5.4s	A	7.1s
30	Monument & Jefferson			A	8.6s	A	2.3s			A	6.9s
31	First & St. Clair	A	3.1s	C	22.3s			B	12.3s	A	8.8s
32	Monument & St. Clair			A	3.6s					A	3.6s
33	Second & Patterson	B	15.7s	B	15.3s	A	8.9s	B	13.1s	B	11.0s
48	First & Perry	B	14.1s					B	14.7s	B	14.2s
55	Second & Ludlow	A	4.3s	A	4.4s			B	10.3s	A	6.5s
56	First & Jefferson	A	8.2s	A	0.3s	C	22.9s			B	13.2s
57	Second & Jefferson	B	10.9s	B	14.7s	A	5.6s			A	9.1s

58	Second & St. Clair	A	3.3s	B	17.0s			A	6.9s	A	9.2s
63	Third & Main	C	23.3s	B	12.3s	A	0.7s	A	5.9s	B	10.8s
72	Third & Ludlow	A	8.7s	B	14.4s			B	10.6s	B	10.5s
75	Third & Jefferson	A	1.7s	A	4.3s	A	3.5s			A	3.2s
77	Third & St. Clair	C	25.5s	C	21.3s			B	11.7s	B	17.5s
82	Third & Patterson	B	12.6s	A	9.4s	B	16.3s			B	12.9s
85	Fourth & St. Clair	A	9.7s	A	3.3s			A	5.1s	A	4.8s
86	Third & Wayne	A	2.7s	B	13.2s	B	12.7s			A	9.3s
88	Fourth & Wayne	A	0.6s	B	20.0s	C	24.6s	C	29.0s	C	26.3s
90	Third & Wilkinson	A	6.4s	B	12.3s	B	15.4s			B	11.0s
94	Third & Perry	B	12.6s	A	9.7s			A	5.5s	B	10.6s
95	Fourth & Perry			B	11.1s			B	10.2s	B	10.5s
101	Jefferson & Patterson	B	19.0s	A	8.2s	B	15.3s			B	14.6s
103	Fourth & Main	A	4.3s	A	9.3s	B	14.5s	C	21.1s	B	14.3s
104	Fourth & Ludlow	A	6.4s	A	5.5s			A	9.6s	A	7.6s
105	Fourth & Jefferson	C	25.0s	B	12.0s	C	22.0s	B	10.2s	B	19.1s
106	Fourth & Patterson	C	27.0s	C	28.7s	A	6.1s			B	15.4s
107	Fifth & Perry	B	16.7s			A	0.4s	A	9.2s	A	8.8s
108	Fifth & Patterson	D	38.6s	B	18.2s	D/A	38.2s / 6.2s	A	7.8s	C	22.9s
113	Fifth & Jefferson	B	15.8s	A	3.0s	B	14.9s			B	13.4s
114	Fifth & Main	B	12.3s	A	7.5s	B	13.6s	A	1.3s	A	8.2s

115	Fifth & Ludlow	A	8.0s	B	14.8s			B	18.5s	B	14.6s
129	Main Market & Main					A	2.3s	A	5.1s	A	3.7s
135	111 N Main					A	7.7s	A	6.8s	A	7.2s
138	20 S Ludlow							A	8.2s	A	8.2s
141	123 N Ludlow							A	5.2s	A	5.2s
147	25 N Main					A	1.4s	A	3.4s	A	2.5s
150	30 W Third	B	10.6s	C	24.4s					B	15.7s
153	27 W First	A	9.0s							A	9.0s
158	Fifth & Wilkinson	A	5.8s	A	0.2s	B	16.5s			A	8.4s
160	Fourth & Wilkinson			A	4.3s	A	6.3s			A	5.4s

2010 PM Peak Traffic (Alt 4)

Node #	Intersection	EB		WB		NB		SB		Overall	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
1	Monument & Main			C	34.2s	B	18.2s	B	14.9s	C	24.4s
2	First & Main	C	23.5s			A	0.8s	A	6.3s	B	10.7s
3	Monument & Wilkinson			A	7.0s	A	3.4s			A	5.9s
4	Monument & Patterson			B	18.4s	A	8.2s	A	9.8s	A	11.8s
5	First & Wilkinson	A	4.4s			A	2.7s			A	3.8s
6	First & Patterson	C	20.1s			A	7.8s	A	5.3s	B	12.3s
8	Second & Main	B	11.6s	A	9.5s	C	29.1s	B	16.4s	B	17.8s
22	Second & Perry	B	11.1s	A	9.4s			A	3.4s	A	9.0s
26	Second & Wilkinson	A	8.5s	A	9.0s	B	12.9s			B	10.6s
27	Monument & Ludlow			B	10.9s					B	10.9s
28	First & Ludlow	A	6.9s					A	5.6s	A	6.4s
30	Monument & Jefferson			B	16.8s	A	0.5s			B	12.0s
31	First & St. Clair	B	11.8s	B	18.3s			B	14.3s	B	13.3s
32	Monument & St. Clair			A	3.4s					A	3.4s
33	Second & Patterson	B	13.2s	B	11.2s	B	11.3s	A	4.4s	B	11.0s
48	First & Perry	B	12.9s					A	9.9s	B	11.9s
55	Second & Ludlow	A	7.4s	A	7.7s			A	4.9s	A	6.7s
56	First & Jefferson	B	16.8s	A	0.1s	C	31.0s			C	21.0s
57	Second & Jefferson	A	8.7s	A	6.2s	A	7.5s			A	7.4s

58	Second & St. Clair	A	8.0s	B	12.7s			A	8.5s	A	9.4s
63	Third & Main	C	21.8s	B	13.6s	A	0.9s	A	7.0s	B	10.2s
72	Third & Ludlow	B	11.0s	B	15.0s			B	19.2s	B	14.9s
75	Third & Jefferson	A	1.5s	A	4.5s	A	3.3s			A	2.8s
77	Third & St. Clair	C	23.7s	C	22.2s			C	26.2s	C	24.7s
82	Third & Patterson	B	14.3s	B	10.4s	B	15.2s			B	13.6s
85	Fourth & St. Clair	C	35.0s	A	4.7s			A	5.1s	A	8.9s
86	Third & Wayne	A	3.3s	B	14.5s	B	13.7s			A	8.8s
88	Fourth & Wayne	A	0.6s			C	30.8s	C	25.8s	C	23.8s
90	Third & Wilkinson	A	6.8s	B	11.2s	A	6.3s			A	8.0s
94	Third & Perry	B	12.0s	A	8.2s			A	7.0s	A	10.0s
95	Fourth & Perry			A	8.7s			B	10.6s	A	9.8s
101	Jefferson & Patterson	B	15.7s	B	13.0s	B	16.2s			B	15.0s
103	Fourth & Main	B	11.1s	A	8.4s	B	18.9s	C	23.4s	B	15.6s
104	Fourth & Ludlow	A	9.3s	A	9.7s			A	9.9s	A	9.8s
105	Fourth & Jefferson	B	18.6s	B	18.4s	C	28.8s	A	4.0s	C	22.8s
106	Fourth & Patterson	C	21.8s	C	25.9s	A	8.2s			B	13.8s
107	Fifth & Perry	B	13.1s			A	2.7s	A	8.5s	A	9.4s
108	Fifth & Patterson	D	48.5s	B	16.7s	E/A	74.9s / 5.8s	A	9.5s	D	36.9s
113	Fifth & Jefferson	B	14.9s	A	1.6s	A	8.3s			B	11.0s
114	Fifth & Main	B	11.8s	A	5.0s	B	13.9s	A	6.4s	B	10.0s

115	Fifth & Ludlow	B	14.7s	B	18.3s			C	30.9s	C	24.4s
129	Main Market & Main					A	6.0s	A	5.5s	A	5.7s
135	111 N Main					A	3.6s	A	7.4s	A	5.4s
138	20 S Ludlow							A	8.5s	A	8.5s
141	123 N Ludlow							A	3.7s	A	3.7s
147	25 N Main					A	1.6s	A	4.6s	A	3.1s
150	30 W Third	B	10.1s	C	24.3s					B	15.2s
153	27 W First	B	10.8s							B	10.8s
158	Fifth & Wilkinson	A	6.6s	A	0.5s	B	13.8s			A	5.9s
160	Fourth & Wilkinson			A	7.3s	B	11.6s			A	9.9s

2030 AM Peak Traffic (Alt 4)

Node #	Intersection	EB		WB		NB		SB		Overall	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
1	Monument & Main			C	30.8s	B	16.9s	B	15.7s	C	22.4s
2	First & Main	C	23.0s			A	1.1s	A	5.3s	B	10.9s
3	Monument & Wilkinson			A	7.5s	A	2.5s			A	6.1s
4	Monument & Patterson			C	33.5s	A	9.8s	D	41.5s	C	28.9s
5	First & Wilkinson	A	4.0s			A	3.1s			A	3.8s
6	First & Patterson	B	17.1s			A	5.9s	A	4.9s	A	9.3s
8	Second & Main	B	13.7s	B	11.5s	A	8.2s	A	6.4s	A	9.4s
22	Second & Perry	B	12.0s	A	8.0s			A	4.3s	A	8.8s
26	Second & Wilkinson	A	8.6s	A	7.0s	B	18.6s			B	12.0s
27	Monument & Ludlow			A	7.9s					A	7.9s
28	First & Ludlow	A	7.8s					A	4.4s	A	6.5s
30	Monument & Jefferson			B	17.4s	A	4.4s			B	13.8s
31	First & St. Clair	A	9.4s	B	15.3s			B	11.7s	B	11.1s
32	Monument & St. Clair			A	3.6s					A	3.6s
33	Second & Patterson	C	20.5s	B	16.6s	A	9.3s	A	4.8s	B	11.1s
48	First & Perry	B	13.8s					B	15.5s	B	14.2s
55	Second & Ludlow	A	6.3s	A	4.9s			A	8.8s	A	6.7s
56	First & Jefferson	B	12.3s	A	0.0s	C	30.3s			B	18.4s
57	Second & Jefferson	B	11.5s	A	9.0s	A	6.8s			A	8.3s

58	Second & St. Clair	A	5.8s	B	13.1s			B	16.3s	B	13.3s
63	Third & Main	C	20.5s	B	12.7s	A	0.9s	A	5.5s	B	10.0s
72	Third & Ludlow	B	12.5s	B	15.0s			B	14.8s	B	13.8s
75	Third & Jefferson	A	2.8s	A	5.2s	A	3.1s			A	3.4s
77	Third & St. Clair	C	24.9s	C	22.7s			C	26.2s	C	25.0s
82	Third & Patterson	B	12.4s	B	10.0s	B	15.7s			B	12.9s
85	Fourth & St. Clair	B	13.7s	A	2.9s			A	4.8s	A	4.8s
86	Third & Wayne	A	2.6s	B	13.6s	B	12.7s			A	9.4s
88	Fourth & Wayne	A	0.6s	B	20.0s	C	24.3s	C	31.8s	C	28.3s
90	Third & Wilkinson	A	7.2s	A	9.1s	A	6.4s			A	7.3s
94	Third & Perry	B	13.2s	A	4.8s			A	3.9s	A	9.3s
95	Fourth & Perry			A	7.5s			B	10.5s	A	9.5s
101	Jefferson & Patterson	B	19.9s	B	10.1s	B	15.9s			B	15.5s
103	Fourth & Main	A	4.0s	A	4.3s	B	14.3s	C	26.2s	B	14.2s
104	Fourth & Ludlow	A	6.5s	A	3.4s			B	13.1s	A	8.5s
105	Fourth & Jefferson	C	22.3s	D	40.5s	D	41.6s	B	15.7s	D	40.1s
106	Fourth & Patterson	B	18.4s	C	29.5s	A	6.8s			B	15.6s
107	Fifth & Perry	B	16.9s			A	0.6s	A	9.6s	A	9.0s
108	Fifth & Patterson	D	39.0s	B	19.4s	D/A	51.6s / 6.8s	A	8.0s	C	27.5s
113	Fifth & Jefferson	B	16.2s	A	4.0s	B	16.7s			B	14.9s
114	Fifth & Main	B	12.3s	A	7.7s	B	14.0s	A	1.4s	A	8.5s

115	Fifth & Ludlow	A	8.0s	B	15.1s			C	26.0s	B	18.5s
129	Main Market & Main					A	3.1s	A	5.4s	A	4.3s
135	111 N Main					A	6.6s	A	7.5s	A	7.1s
138	20 S Ludlow							A	8.2s	A	8.2s
141	123 N Ludlow							A	5.2s	A	5.2s
147	25 N Main					A	1.4s	A	3.3s	A	2.4s
150	30 W Third	A	9.9s	C	24.0s					B	15.0s
153	27 W First	A	9.8s							A	9.8s
158	Fifth & Wilkinson	A	5.9s	A	0.2s	B	16.7s			A	8.5s
160	Fourth & Wilkinson			A	9.1s	A	7.6s			A	8.2s

2030 PM Peak Traffic (Alt 4)

Node #	Intersection	EB		WB		NB		SB		Overall	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
1	Monument & Main			D	39.0s	B	19.5s	B	15.3s	C	27.0s
2	First & Main	B	19.5s			A	6.8s	B	10.6s	B	12.5s
3	Monument & Wilkinson			A	9.8s	A	9.3s			A	9.6s
4	Monument & Patterson			B	19.3s	B	14.7s	B	11.6s	B	15.5s
5	First & Wilkinson	A	4.2s			A	3.5s			A	3.9s
6	First & Patterson	C	28.2s			A	10.0s	A	8.8s	B	17.0s
8	Second & Main	B	10.1s	B	11.1s	C	26.7s	B	12.2s	B	16.6s
22	Second & Perry	A	4.8s	A	6.4s			A	8.59s	A	6.4s
26	Second & Wilkinson	B	14.6s	B	13.0s	B	13.0s			B	13.2s
27	Monument & Ludlow			B	11.8s					B	11.8s
28	First & Ludlow	A	6.8s					A	7.2s	A	6.9s
30	Monument & Jefferson			B	17.6s	A	1.1s			B	12.8s
31	First & St. Clair	A	2.9s	C	22.9s			B	18.0s	B	10.8s
32	Monument & St. Clair			A	5.1s					A	5.1s
33	Second & Patterson	B	14.0s	B	11.4s	B	11.2s	A	1.2s	B	10.8s
48	First & Perry	B	11.8s					B	12.8s	B	12.2s
55	Second & Ludlow	A	5.4s	A	6.9s			A	5.7s	A	6.0s
56	First & Jefferson	B	11.8s	A	0.1s	C	33.6s			B	18.9s
57	Second & Jefferson	B	11.5s	A	6.4s	B	17.6s			B	13.5s

58	Second & St. Clair	A	8.5s	B	12.2s			A	9.8s	A	9.9s
63	Third & Main	C	22.0s	B	11.7s	A	1.7s	A	7.6s	B	10.4s
72	Third & Ludlow	B	13.1s	B	16.0s			B	18.9s	B	15.9s
75	Third & Jefferson	A	1.5s	A	5.3s	A	9.4s			A	5.1s
77	Third & St. Clair	C	23.1s	B	16.4s			C	25.6s	C	23.1s
82	Third & Patterson	B	14.8s	B	11.0s	B	13.9s			B	13.4s
85	Fourth & St. Clair	C	34.5s	A	6.2s			A	5.8s	A	9.6s
86	Third & Wayne	A	3.0s	B	15.7s	B	13.6s			A	8.9s
88	Fourth & Wayne	A	6.9s			B	16.0s	C	27.2s	B	19.8s
90	Third & Wilkinson	A	7.3s	A	8.9s	A	6.5s			A	7.6s
94	Third & Perry	B	12.4s	A	8.6s			A	5.3s	A	9.6s
95	Fourth & Perry			A	9.5s			B	11.2s	B	10.4s
101	Jefferson & Patterson	B	16.1s	B	18.4s	B	16.5s			B	17.1s
103	Fourth & Main	A	5.2s	B	12.4s	B	18.6s	C	22.3s	B	16.5s
104	Fourth & Ludlow	B	10.0s	B	10.1s			B	12.4s	B	11.4s
105	Fourth & Jefferson	C	21.0s	B	18.8s	C	27.2s	C	21.0s	C	23.0s
106	Fourth & Patterson	C	22.4s	C	26.4s	A	8.9s			B	14.4s
107	Fifth & Perry	B	14.0s			A	3.9s	A	8.6s	B	10.1s
108	Fifth & Patterson	D	52.8s	B	17.5s	F/A	111.9s / 6.3s	B	10.1s	D	48.4s
113	Fifth & Jefferson	B	15.3s	A	2.0s	A	8.6s			B	11.3s
114	Fifth & Main	A	9.6s	A	6.8s	B	14.2s	A	7.6s	A	10.0s

115	Fifth & Ludlow	B	16.6s	C	21.5s			C	30.8s	C	25.1s
129	Main Market & Main					A	3.7s	A	5.9s	A	4.7s
135	111 N Main					A	4.8s	A	6.4s	A	5.5s
138	20 S Ludlow							A	8.7s	A	8.7s
141	123 N Ludlow							A	3.8s	A	3.8s
147	25 N Main					A	1.7s	A	4.8s	A	3.2s
150	30 W Third	A	9.7s	C	25.4s					B	15.3s
153	27 W First	B	11.1s							B	11.1s
158	Fifth & Wilkinson	A	6.6s	A	0.6s	B	13.7s			A	6.0s
160	Fourth & Wilkinson			A	6.3s	B	14.9s			B	11.6s