



Traffic Engineering and Parking Divisions

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September 7, 2007

Re: 2007 Draft Traffic Signal Priority List

The schedule for the 2007 Traffic Signal Priority List (TSPL) is planned as follows:

- September 25 Initial discussion with the Pedestrian/Bicycle/Motor Vehicle Commission introducing the 2007 Traffic Signal Priority List schedule.
- October 23 **Opportunity offered at Pedestrian/Bicycle/Motor Vehicle Commission (PBMVC) meeting for presentation of comments (written or oral) from interested residents. Room 260, Madison Municipal Building, 215 Martin Luther King Jr. Blvd, at 5 p.m.**
PBMVC review/discussion of 2007 Traffic Signal Priority List.
Additional data needs to be identified.
- December __* Final 2007 Signal Priority List and Action Plan reviewed and adopted by PBMVC.
(* the PBMVC currently does not have a meeting scheduled in December 2007)

Please note the October 23 meeting is your opportunity to offer comments on specific intersections.

Signal warrants are the framework for analyzing and comparing the need for traffic signal control at intersections. Madison's Priority List is an annual effort to evaluate relative needs for traffic signal control at major unsignalized intersections. While all of the data on the Priority List is valuable, additional factors are also considered and evaluated before decisions to install signals are made. For example, an intersection with volumes somewhat below the minimum volumes to meet a signal warrant may still be a prime candidate for signals if volumes are expected to increase significantly in the immediate future. On the flip side, intersections with volumes above the threshold for traffic signals may not be recommended for signals when crash rates or congestion are expected to worsen with signal control.

A copy of last year's 2006 TSPL is enclosed along with the detailed descriptions of the signal warrants. This information is also available on our web page: <http://www.cityofmadison.com/transp/trindex.html>

Brian Smith, Traffic Engineer (261-9625), can respond to your questions or comments regarding technical aspects of the priority list.

Sincerely,

David Dryer, P.E.
City Traffic Engineer and Parking Manager

Enclosures

2006 TRAFFIC SIGNAL PRIORITY LIST

In accordance with criteria adopted by the transportation commission and common council

	Location	Overall % Below Warrant	WARRANT 1-A		WARRANT 1-B		CRASHES			Pedestrian Warrant	Peak Hour Warrant A	Peak Hour Warrant B	4 Hour Warrant	Comments				
			Major Street		Minor Street		# With Property Damage Only	# With Personal Injuries	Crash Rate									
			# Hrs.	% Met	# Hrs.	% Met	# Hrs.	% Met	# Hrs.						% Met			
Side Street Stop Controlled Intersections Studied but Not Meeting the Minimum Numerical Requirements of either Warrant 1-A or Warrant 1-B.																		
1	Manchester & McKee (PD)	-9	17	290	1+	46	18	193	7+	91	0	1	0.15	N	-	Y	Y-5 HRS	EF
2	Commerce & Watts	-13	12	128	0	62	5	87	8+	137	1	1	0.37	N	-	N	N-2 HRS	DF
3	Junction and Driveway at Target	-15	13	119	0	85	9	83	10	187	2	0	0.32	N	-	N	Y-7 HRS	
4	Edgewood & Monroe	-19	14	239	0	41	13	159	3	81	0	0	0	N	-	N	N-1 HRS	ABCEF
5	Fordem & Sherman	-21	12	119	1	43	4	109	6+	79	2	2	0.72	N	-	N	N-1 HRS	ACE
6	Old Sauk & Westfield	-25	12	148	0	38	7	99	1	76	0	2	0.36	N	N-0.77	N	N-0 HRS	F
7	Gammon, McKenna & New Washburn	-30	16	208	0	35	12	139	1	70	0	1	0.12	N	-	N	N-0 HRS.	C
8	Bedford & North Shore	-31	14	240	0	35	12	160	3	69	0	0	0	N	-	N	N-2 HRS	DE
9	Franklin & Johnson	-33	17	263	0	34	14	175	0	67	0	0	0	N	-	N	N-0 HRS	
10	Nakoma, Seminole, Yuma	-34	8	110	0	49	2	66	5+	111	0	0	0	N	N-1.08	N	N-0 HRS	F
11	Segoe & Sheboygan	-36	6	98	1+	67	0	64	11+	133	0	0	0	N	-	N	N-0 HRS	A E F
12	Milwaukee & Schenk	-37	15	102	0	33	11	100	6	63	1	0	0.15	N	-	N	N-2 HRS	E
13	High Point & Star Grass	-38	5	100	2+	50	1	62	8	237	0	0	0	N	-	N	N-2 HRS	
14	Colony & Gammon	-39	14	197	0	31	11	131	2	61	0	0	0	N	-	N	N-1 HRS	E
15	Elderberry & Junction	-39	14	217	0	31	12	145	0	61	0	0	0	N	-	N	N-0 HRS	E
16	Knickerbocker & Monroe	-39	12	197	0	31	12	131	0	61	0	1	0.09	N	-	N	N-0 HRS	ADE
17	Butler & Gorham	-39	17	209	0	31	14	139	1	61	0	0	0	N	-	N	N-1 HRS	B
18	Atwood, Miller & Waubesa	-39	15	158	0	31	13	105	0	61	1	0	0.13	N	-	N	N-0 HRS	AE
19	Appleton & Fish Hatchery	-40	16	281	0	30	15	187	1	60	0	0	0	N	-	N	N-0 HRS	A E F
20	Haywood & Park	-40	18	423	0	30	18	282	0	60	2	0	0.12	N	N-0.70	N	N-0 HRS	ADE
21	Gammon, Longmeadow & Stonefield	-40	14	139	0	34	8	93	3	67	0	0	0	N	-	N	N-2 HRS	DE
22	Norman & University (MS)	-42	16	325	0	29	16	216	1	58	0	0	0	N	-	N	N-1 HRS	ACE
23	Mineral Point & Yellowstone	-43	16	466	0	29	14	311	0	57	4	0	0.34	N	N-1.59	N	N-0 HRS	AB E F
24	Ray-O-Vac & Schroeder	-44	9	96	0	46	0	64	5	92	0	0	0	N	-	N	N-0 HRS	
25	Old Middleton & Rosa	-44	11	110	2	58	5	73	6+	42	0	0	0	N	-	N	N-2 HRS	
26	Milwaukee & Waubesa	-44	11	128	0	38	3	84	3	72	0	0	0	N	-	N	N-0 HRS	
27	Johnson, Randall & Engineering Drive	-47	13	146	0	53	5	97	5+	42	0	0	0	-	-	N	N-0 HRS	ABCDEF
28	Cottage Grove (BB) & Thompson	-47	12	133	0	37	4	83	4	70	1	2	0.57	N	-	N	N-0 HRS	
29	Odana & Medical Circle	-48	14	220	0	26	11	147	0	52	0	0	0	N	-	N	N-0 HRS	D
30	Milwaukee & Oak	-48	9	119	0	37	2	79	4	73	0	0	0	N	N-0.94	N	N-0 HRS	F
31	Hammersley & Whitney Way	-50	14	144	1	42	6	96	4+	54	8	0	1.02	N	-	Y	N-1 HRS	
32	Gammon & Tree	-51	14	215	0	30	11	148	1	49	0	3	0.39	N	-	N	N-0 HRS	EF
33	Knutson-Northport	-52	13	197	0	24	13	131	0	48	0	0	0	N	-	N	N-0 HRS	EF
34	Dickinson & East Washington	-52	19	777	0	24	18	518	0	58	2	0	0.1	N	-	N	N-0 HRS	AE
35	Monona (BB), Panther & Tompkins	-52	16	259	0	24	14	173	0	48	1	0	0.12	N	-	N	N-0 HRS	AB E F
36	Sherman & Trailsway	-53	13	142	0	25	8	105	0	47	1	0	0.18	N	-	N	N-0 HRS	
37	Commercial & Nakoosa	-54	0	46	7+	114	0	33	8+	178	0	0	0	N	-	N	N-0 HRS	
38	Bassett & Dayton	-54	2	84	0	44	0	58	6+	88	1	0	0.25	N	-	N	N-1 HRS	E
39	Northport & School	-54	16	416	0	23	15	277	0	46	2	1	0.3	N	-	N	N-0 HRS	BE
40	Heartland & Old Sauk	-55	4	67	4+	68	1	45	6+	300	2	0	0.5	N	-	N	N-2 HRS	
41	Hughes & Park	-55	17	303	0	23	16	202	0	45	1	0	0.08	N	-	N	N-0 HRS	ACDEF
42	Carver & Fish Hatchery (D)	-56	16	282	0	22	14	188	0	44	0	0	0	N	N-0.47	N	N-0 HRS	D
43	Milwaukee & Wittwer	-57	16	149	0	27	7	103	3	43	0	0	0	N	-	N	N-1 HRS	
44	Gilman & Wisconsin	-57	0	65	2	54	0	43	8+	108	0	2	0.18	N	-	N	N-0 HRS	E
45	Prairie & Raymond	-61	14	177	0	24	6	86	2	53	1	1	0.3	N	-	N	N-1 HRS	F
46	Odana Lane & Odana Rd	-61	14	149	0	20	11	99	0	40	0	0	0	N	-	N	N-0 HRS	
47	Packers & Sixth	-61	17	213	0	21	13	131	0	39	1	0	0.12	N	-	N	N-0 HRS	E
48	Blount & Williamson	-62	16	232	0	19	13	154	2	38	0	0	0	N	-	N	N-1 HRS	A E F
49	Plaza & Watts	-64	4	98	0	38	0	65	2	60	2	1	0.9	N	-	N	N-0 HRS	
50	Main & Webster	-65	11	121	0	28	5	80	0	55	0	0	0	N	-	Y	N-3 HRS	EF

	Location	Overall % Below Warrant	WARRANT 1-A				WARRANT 1-B				CRASHES			Pedestrian Warrant	Peak Hour Warrant A	Peak Hour Warrant B	4 Hour Warrant	Comments	
			Major Street		Minor Street		Major Street		Minor Street		# With Property Damage Only	# With Personal Injuries	Crash Rate						
			# Hrs.	% Met	# Hrs.	% Met	# Hrs.	% Met	# Hrs.	% Met									
51	Odana & West Platte	-66	15	267	0	17	14	178	0	34	1	0	0.08	N	-	N	N-0 HRS	ABDEF	
52	Carroll & Doly	-66	11	144	0	34	5	96	1	37	0	0	0	N	-	Y	N-3 HRS	E	
53	Big Sky, Mineral Point & Tree	-68	16	400	0	16	16	267	0	32	1	0	0.09	N	-	N	N-0 HRS	ACEF	
54	Gorham & Henry	-69	16	229	0	16	15	153	0	31	0	0	0	N	-	N	N-0 HRS	E	
55	Mineral Point & Owens	-70	15	181	0	15	11	121	0	30	1	2	0.47	N	-	N	N-0 HRS	ABE	
56	Gilbert & Whitney	-73	16	192	0	13	12	128	0	27	0	0	0	N	-	N	N-0 HRS	ADEF	
57	Aberg & Huxley	-74	11	133	0	23	2	78	0	48	0	0	0	N	-	N	N-0 HRS	F	
58	Johnson & Sixth	-75	9	92	0	31	2	62	1+	63	0	0	0	N	-	N	N-0 HRS		
59	Packers & Schlimgen	-75	19	412	0	13	18	274	0	25	0	0	0	N	-	N	N-0 HRS	CEF	
60	Few & Williamson	-76	15	171	0	18	10	114	0	25	0	0	0	N	-	N	N-0 HRS	AE	
61	MLK Jr. & Wilson	-76	4	69	0	39	0	46	4	78	0	0	0	N	-	N	N-0 HRS		
62	Mineral Point & Westmorland	-77	15	177	0	12	12	118	0	23	0	0	0	N	-	N	N-0 HRS		
63	American Pkwy & American Family Dr	-78	5	153	0	14	3	60	2	62	0	2	0.34	N	-	N	N-0 HRS		
64	Kelab & Segoe	-79	8	99	0	22	0	66	0	44	0	0	0	N	-	N	N-0 HRS	EF	
65	Cottage Grove (BB) & Mc Lean	-80	6	89	0	31	1	59	2	61	0	0	0	N	-	N	N-0 HRS		
66	Blue Ridge & Old Sauk	-80	9	161	0	20	2	70	0	42	0	0	0	N	-	N	N-0 HRS		
67	Cottage Grove & Ellen	-81	6	83	0	29	2	70	6	49	0	0	0	N	-	N	N-0 HRS		
68	Carroll & Dayton	-82	9	110	0	18	1	74	0	27	0	0	0	N	-	N	N-0 HRS	EF	
69	Blackhawk, Erdman & University (MS)	-82	19	671	0	9	17	447	0	18	0	1	0.06	N	-	N	N-0 HRS	ADEF	
70	East Pass, Maple Grove & Westin	-83	0	47	0	43	0	31	4	86	2	0	0.86	N	-	N	N-0 HRS		
71	Scott & Packers (CV)	-84	13	130	0	15	4	87	0	29	0	0	0	N	-	N	N-0 HRS		
72	Milwaukee & Swanton	-85	10	108	0	15	2	72	0	31	1	1	0.28	N	N-2.5	N	N-0 HRS	AEF	
73	Hammersley & McKenna	-85	11	153	0	7	8	102	0	15	0	0	0	N	N-1.00	N	N-0 HRS	F	
74	Roth & Sherman	-86	14	121	0	7	11	107	0	14	0	0	0	N	-	N	N-0 HRS	F	
75	Cottage Grove & McClellan (BB)	-90	8	135	0	10	1	64	0	31	0	0	0	N	-	N	N-0 HRS		
76	Buckeye (AB) & Thompson	-95	3	53	0	30	0	30	6	75	0	0	0	N	-	N	N-0 HRS		
77	Corporate Dr & Blettner	-95	3	68	0	30	0	45	3	60	0	0	0	N	-	N	N-0 HRS		
78	Mineral Point (S) & South Point	-98	7	99	0	3	3	66	0	6	0	0	0	N	-	N	N-0 HRS		
79	Mayfield & Sherman	-132	1	64	0	4	0	40	0	13	0	0	0	N	-	N	N-0 HRS		
80	Midtown, Hawks Landing & Hawks Ridge	Counts to be collected when after area develops										0	0	0					
ALL-WAY STOP INTERSECTIONS STUDIED																			
1	Highland, Regent & Speedway	27	13	141	11	127	5	94	16	254	1	1	0.28	N	-	Y	Y-9 HRS	BC	
2	Raymond & Whitney	4	8	104	14	133	4	69	8+	265	1	1	0.42	N	Y-10.85	Y	Y-8 HRS		
3	Old Middleton & Old Sauk	-17	11	119	4	83	3	79	8+	165	0	0	0	N	-	Y	Y-4 HRS	BF	
4	Swanton & Thompson	-22	2	78	8+	153	0	52	8+	307	0	0	0	N	-	Y	Y-4 HRS	C	
6	High Point & Midtown	-34	6	69	8+	97	1	52	8+	216	0	0	0	N	-	Y	N-3 HRS		
6	American Pkwy, Hoepker & Rattman	-45	2	74	6+	81	0	44	8+	180	0	1	0.23	N	-	Y	N-3 HRS		
7	Milwaukee-Sprecher	-45	4	94	2	56	0	55	8+	143	0	0	0	N	-	N	N-0 HRS		
8	Buckeye (AB) & Vondron	-50	5	70	3	70	0	50	7+	124	0	0	0	N	-	N	N-0 HRS		
TWO-WAY STOP INTERSECTIONS STUDIED AND MEETING THE MINIMUM NUMERICAL REQUIREMENTS OF EITHER WARRANT 1-A OR WARRANT 1-B.																			
1	Carroll & Gorham	17	17	239	0	59	15	159	11	117	0	1	0.16	N	-	Y	Y-7 HRS	EF	
2	McKee (PD) & Muir Field	16	15	172	8+	78	13	116	8+	119	0	0	0	N	-	Y	Y-5 HRS	F	
3	Sixth & East Washington (projected)	13		100+		56		100+		113	1	0	0.5	N		Y	Y		

Warrant 1-A: Eight-Hour Vehicular Volume: Condition A-Minimum Vehicular Volume

Warrant 1-B: Eight-Hour Vehicular Volume: Condition B-Interruption of Continuous Traffic

Y=Yes N=No

Accident Rate: Number of accidents "preventable" with traffic signals per million entering vehicles.

Peak Hour Warrant A: Total vehicle hours of delay is listed for intersections where delay data was collected.

4-Hour Warrant: Number of hours shown are those that exceed the volume thresholds.

The intersections that do not meet the minimum numerical Warrant are listed in order of "closeness" to meeting either Warrant 1-A or Warrant 1-B.

Both the Major and Minor street volumes must meet 100% of the minimum Warrant in order to be classified as "meeting the minimum numerical Warrant."

* Projected 4-Way volumes with Walls Road extension expected in 2003 used for High Point-Watts

Key to Comments:

A = Signal coordination problems

B = Geometric problems

C = Intersection reconstruction needs to be considered.

D = Part of cost could be assessed to benefiting property owners.

E = Coordination with adjacent signals is necessary.

F = "Side Street" volumes adjusted for high right-turn percentage.