

Traffic Signal Removal Analysis S.W. 2nd Avenue & S.W. 4th Avenue Corridors

Four (4) existing traffic signals along S.W. 2nd Avenue and S.W. 4th Avenue were evaluated to determine if the traffic signals were warranted. None of the intersections demonstrated a traffic crash problem as evidenced in the Warrant 7 analysis in the attachments. The spreadsheet for each intersection is attached. An overview of each intersection along with the recommended action for each signal is detailed below:

1. S.W. 2nd Avenue & S.W. 10th Street

This intersection marginally meets the warrants for a traffic signal – only Warrants 2 & 3 are satisfied. Current operational problems are the lack of functioning vehicle detector loops. These loops and the phasing of the traffic signal contribute to significant side street delay. The current phasing of the intersection is:

- Movement 1 – East & West Left Turn Movements
- Movement 2 – East & West Through Movements with permissive left turns
- Movement 3 – North & South Traffic

It is recommended that the loops be replaced at this traffic signal and that the traffic signal be re-phased to eliminate eastbound and westbound left turn arrows. This will allow the traffic signal to be rephased to a simple 2-phase operation. This will allow us to operate the signal in such a manner as to reduce side street (10th Street) delay and pedestrian delay. This traffic signal will then operate in a fully actuated mode, including pedestrian signals.

2. S.W. 2nd Avenue & S.W. 12th Street

This intersection meets the warrants for a traffic signal – Warrants 1, 2 & 3 are satisfied. Current operational problems are the lack of functioning vehicle detector loops. These loops and the phasing of the traffic signal contribute to significant side street delay. The current phasing of the intersection is:

- Movement 1 – East & West Left Turn Movements
- Movement 2 – East & West Through Movements with permissive left turns
- Movement 3 – North & South Traffic

It is recommended that the loops be replaced at this traffic signal and that the traffic signal be re-phased to eliminate eastbound and westbound left turn arrows. This will allow the traffic signal to be rephased to a simple 2-phase operation. This will allow us to operate the signal in such a manner as to reduce side street (12th Street) delay and pedestrian delay. This traffic signal will then operate in a fully actuated mode, including pedestrian signals.

3. S.W. 4th Avenue & S.W. 10th Street

This intersection does not meet any of the warrants for a traffic signal. It is recommended that this traffic signal be removed in accordance with the procedures set forth by the Florida Department of Transportation. Because of site distance concerns, it is recommended that this intersection operate as an all-way stop. In conjunction with this, it is recommended that the

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existing traffic signal be converted to an all-way red flashing beacon. This will provide motorist adequate warning of the intersection along this corridor and also provide the mechanism for a traffic signal to be re-installed if it is deemed necessary in the future. The existing lane geometry will remain unchanged.

4. S.W. 4th Avenue & S.W. 12th Street

This intersection does not meet any of the warrants for a traffic signal. It is recommended that this traffic signal be removed in accordance with the procedures set forth by the Florida Department of Transportation. Because of site distance concerns, it is recommended that this intersection operate as an all-way stop. In conjunction with this, it is recommended that the existing traffic signal be converted to an all-way red flashing beacon. This will provide motorist adequate warning of the intersection along this corridor and also provide the mechanism for a traffic signal to be re-installed if it is deemed necessary in the future. The existing lane geometry will remain unchanged.

S.W. 2nd Avenue 10th Street

Time of Day	Major Street - S.W. 2nd Avenue		Minor Street - S.W. 10th Street		Warrant 1A Satisfied?	Warrant 1B Satisfied?	Combination of Warrants Satisfied?	Speed Reduced Warrant 1A Satisfied?	Speed Reduced Warrant 1B Satisfied?
	Westbound	Eastbound	Combined	Northbound					
12-1 AM	120	48	168	120	49	No	No	N/A	N/A
1-2 AM	90	25	115	45	34	No	No	N/A	N/A
2-3 AM	175	24	199	53	57	No	No	N/A	N/A
3-4 AM	36	10	46	23	21	No	No	N/A	N/A
4-5 AM	11	19	30	6	8	No	No	N/A	N/A
5-6 AM	22	29	51	18	2	No	No	N/A	N/A
6-7 AM	75	62	137	42	30	No	No	N/A	N/A
7-8 AM	180	126	306	149	102	No	No	N/A	N/A
8-9 AM	268	211	479	86	157	No	No	N/A	N/A
9-10 AM	330	204	534	5	126	No	No	N/A	N/A
10-11 AM	308	201	509	47	116	No	No	N/A	N/A
11-12 Noon	421	177	598	196	144	Yes	No	N/A	N/A
12-1 PM	496	212	708	305	171	Yes	No	N/A	N/A
1-2 PM	429	225	654	242	192	Yes	No	N/A	N/A
2-3 PM	435	227	662	289	229	Yes	No	N/A	N/A
3-4 PM	496	227	723	394	199	Yes	No	N/A	N/A
4-5 PM	464	205	669	357	182	Yes	No	N/A	N/A
5-6 PM	519	262	781	369	195	Yes	Yes	N/A	N/A
6-7 PM	288	210	498	223	131	No	No	N/A	N/A
7-8 PM	317	145	462	198	94	No	No	N/A	N/A
8-9 PM	310	94	404	130	101	No	No	N/A	N/A
9-10 PM	189	102	291	96	93	No	No	N/A	N/A
10-11 PM	143	89	232	129	74	No	No	N/A	N/A
11-12 Mid	102	74	176	97	45	No	No	N/A	N/A
Totals	6224	3208	9432	3619	2552	7	1	6	N/A
					Warrant Met:	No	No	No	N/A

Yes	Is Signal Warranted? # Warrants Met:	2
No	Is Speed Reduction Applicable? (85th% Greater than 40 mph)	
No	Is Warrant 1 Satisfied? (8 Hour Volumes)	
Yes	Is Warrant 2 Satisfied? (4 Hour Volumes)	
Yes	Is Warrant 3 Satisfied? (Peak Hour Volume)	
N/A	Is Warrant 4 Satisfied? (Pedestrian Volume)	
No	Is Warrant 5 Satisfied? (School Crossing)	
No	Is Warrant 6 Satisfied? (Coordinated Signal System)	
No	Is Warrant 7 Satisfied? (Crash Experience)	
No	Is Warrant 8 Satisfied? (Roadway Network)	

1 in 00 2 in 98 3 in 97

