



## Memorandum

TO: Transportation & Safety Committee

FROM: Alex Ariniello, Public Works & Utilities Director

DATE: June 5, 2017

RE: Weldona Discussion

### **Background**

Residents who live in the vicinity of Weldona Lane and Weldona Way have had a longstanding concern about the volume and speed of traffic in those areas. Weldona, originally designed for local traffic, has become a short-cut route for vehicles traveling between 88<sup>th</sup> Street and S. Coal Creek Drive.

In 1999, the Rock Creek Metro District conducted a survey of residents regarding various street closure and traffic calming options to address this concern. After considering survey results and public comments from public meetings, the Town of Superior Board of Trustees decided to post stop signs at two locations on Weldona Way. The Board has continued to discuss this issue in the years since these measures were taken.

In 2006, at the direction of the Town Board, a temporary closure of Weldona Way at Akron Street was implemented. After a three month trial period, the Town Board decided to remove the closure since there was little decrease in traffic volume and speeds on Weldona Way, while traffic on Coal Creek Drive and on 88<sup>th</sup> Street increased significantly. (An evaluation of that temporary closure along with the minutes of the Board's meeting in 2006 are attached)

### **2017 Survey Questionnaire**

In preparation for this evening's meeting, staff sent a survey questionnaire to over 400 homes in the area. As of 3 pm on June 2, 84 survey forms and e-mails were received.

## Traffic & Safety Data

The 88<sup>th</sup>/Weldona intersection had 7 reported crashes during the 2011-2016 time period, along with 2 reported crashes on Weldona Way/Lane.

Traffic data include counts of:

- 676 vehicles per day (vpd) taken in May, 2006 on Weldona Way, east of Idalia Ct.
- 1,194 vpd taken in May, 2015 on Weldona Way, just west of 88<sup>th</sup> St.
- 655 vpd on Akron Place taken in January, 2017

The Town's speed radar trailer also collected speed data in early May, 2017. Depending on day of week, the 85<sup>th</sup> percentile speeds ranged from 21 to 29 mph. The speed profile graphs are attached.

## Weldona Options Descriptions/Discussion

The questionnaire included four options for Weldona along with room for residents' suggestions for other options. Staff has compiled the following information on technical considerations, effectiveness and costs of these options.

1. **Close Weldona at 88<sup>th</sup> Street:** A temporary closure could be accomplished with concrete barriers and signing at a cost less than \$10,000. A permanent closure would entail removal of asphalt, construction of a small turn-around, landscaping, signing, warning devices, etc. at a cost of \$40,000 to \$80,000. This closure would be effective in eliminating cut-through traffic on Weldona. Actual traffic volumes at various locations on Weldona could be more or less than existing traffic volumes due to the elimination of one of the exit/entry points to the neighborhood and redistribution of local traffic. Implementing the closure at 88<sup>th</sup> would eliminate the turning issues at the 88<sup>th</sup>/Weldona intersection which lacks turn lanes on 88<sup>th</sup> St.

Variants of this option include:

- Close Weldona at Akron: Same characteristics as closing at 88<sup>th</sup> St. except the 88<sup>th</sup>/Weldona intersection would remain open.
  - Close Weldona somewhere in the middle: Same characteristics as closing at 88<sup>th</sup> St. except the 88<sup>th</sup>/Weldona intersection would remain open. With two exit/entry points remaining open, traffic volumes along all of Weldona would probably be less than existing.
2. **Restrict the Weldona/88<sup>th</sup> Street intersection to right-in/right-out only:** A temporary closure could be accomplished with signing, a small island and delineators installed in the middle of 88<sup>th</sup> St. for a cost less than \$15,000. A permanent closure would entail construction of a median on 88<sup>th</sup> St. at a cost of \$50,000 to \$100,000. This closure would be partially effective in eliminating cut-through traffic on Weldona. Actual traffic volumes at various locations on Weldona could be more or less than existing traffic volumes due to the elimination of one of the exit/entry points to the neighborhood and redistribution of local traffic. Implementing the closure at 88<sup>th</sup> would eliminate the left-turning issues at the 88<sup>th</sup>/Weldona intersection which lacks turn lanes on 88<sup>th</sup> St.

3. **Construct raised pedestrian crossings or speed humps at several locations:** The Town discourages the use of vertical traffic calming measures such as speed bumps or humps due their impact on emergency vehicles, noise, and potential vehicle damage. There is a trail that intersects Weldona between 88<sup>th</sup> St and Boyero Ct. This trail exits onto Weldona near storm inlets so construction of a raised pedestrian crossing would be costly (\$30,000 to \$40,000) to accommodate the inlet openings. Raised pedestrian crossings at other locations would be complicated by all the driveways located along the south side of Weldona and the need to provide on-street parking. Speed tables (with 8 ft. wide flat top) or speed humps, which are not constructed across the entire street, could be constructed without affecting drainage, driveways or on-street parking. Cost for each hump could be in the \$10,000 to \$15,000 range. To be effective, a minimum of 3 humps may be needed. This measure may divert 20 to 50% of cut-through traffic from Weldona.
4. **Install Traffic Signal at 88<sup>th</sup>/Weldona:** A traffic signal would cost about \$200,000 plus additional ongoing maintenance costs. At 88<sup>th</sup>/Weldona, a northbound left-turn lane (cost about \$50,000) would need to be added so that left-turning vehicles don't block through vehicles. This may induce more traffic on Weldona.
5. **Install Traffic Signal at Coal Creek Drive/Rock Creek Parkway:** A traffic signal would cost about \$300,000 (4-leg intersection with wider approaches than 88<sup>th</sup> St).
6. **Install camera at Weldona stop signs and issue tickets for running the stop signs:** Could cost \$50,000 per intersection. Staff hasn't researched whether other jurisdictions have such installations. There would be issues with determining when a violation occurs. This could discourage cut-through traffic on Weldona.
7. **Install gate at Weldona way/Akron:** Cost: \$30,000 to \$50,000, with high ongoing maintenance costs. There would be issues with administering the issuance of resident cards. Alternative would be to allow access to all vehicles, with the gate serving as a traffic calming measure. This could discourage cut-through traffic on Weldona.
8. **Paint "Stop" in the street at the stop signs:** Easily implemented at a cost of about \$800 per intersection. May decrease speeds but may have little impact on cut-through traffic.
9. **Install Speed Radar:** Cost of about \$7,000 per installation. May decrease speeds but may have little impact on cut-through traffic
10. **More Patrols:** Sheriff can address.
11. **Reduce speed limit to 15 mph:** Cost about \$100 per sign. Inconsistent with other speed limits within the Town limits.

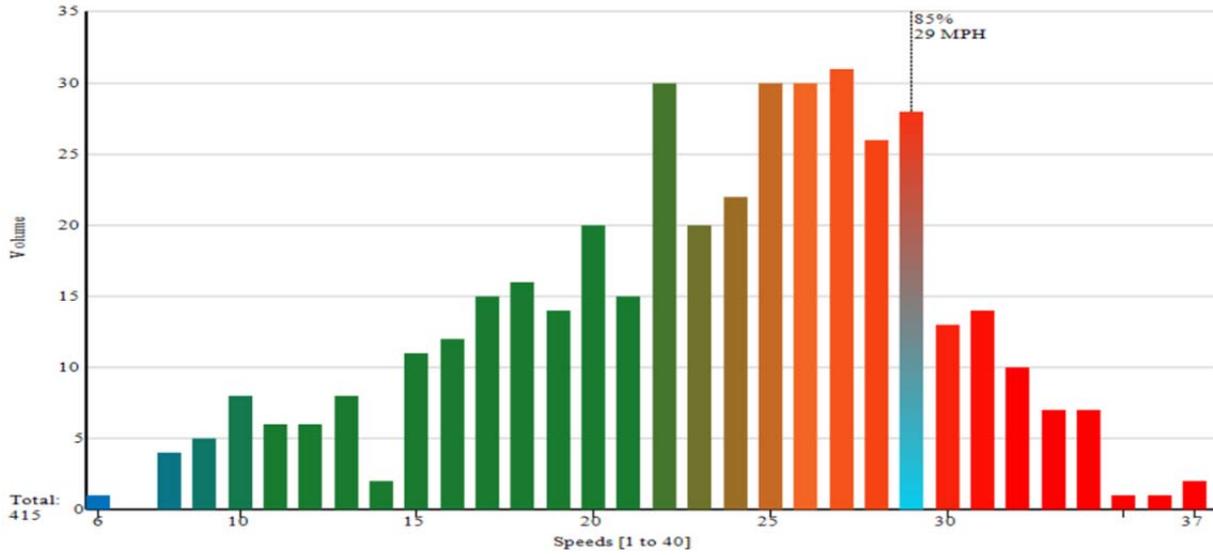
# Weldona EB

nth Percentile 85  
 Ruled Graph  
 Highlight Pace

5/8/2017 to 5/8/2017  
 Monday Monday

0 to 24

Selected Speeds  
 1 to 40



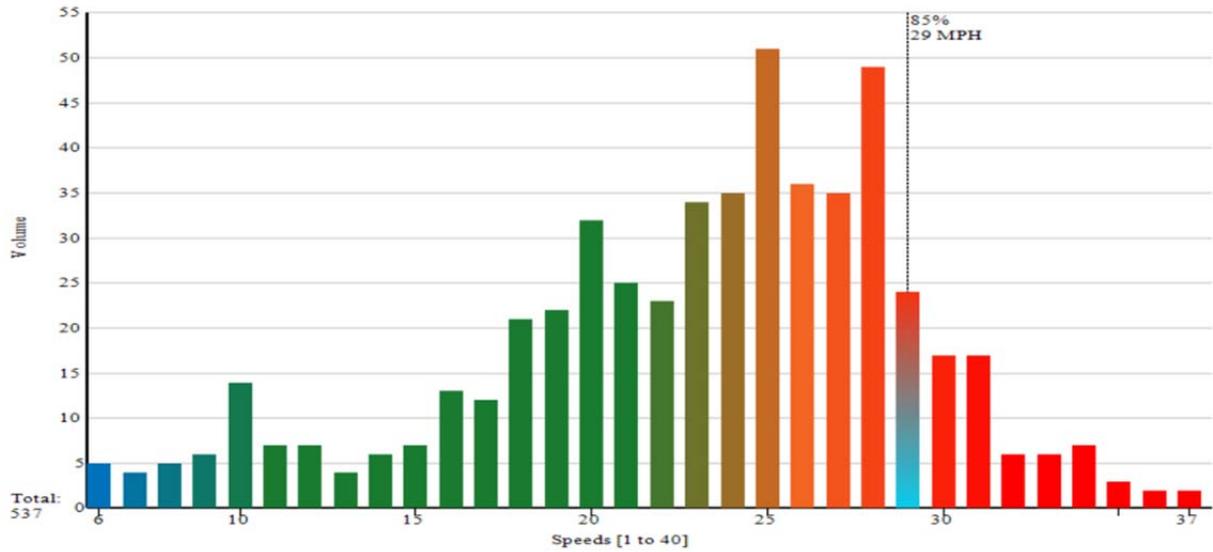
Avg Speed: 23 MPH  
 85<sup>th</sup> Percentile: 29MPH

nth Percentile 85  
 Ruled Graph  
 Highlight Pace

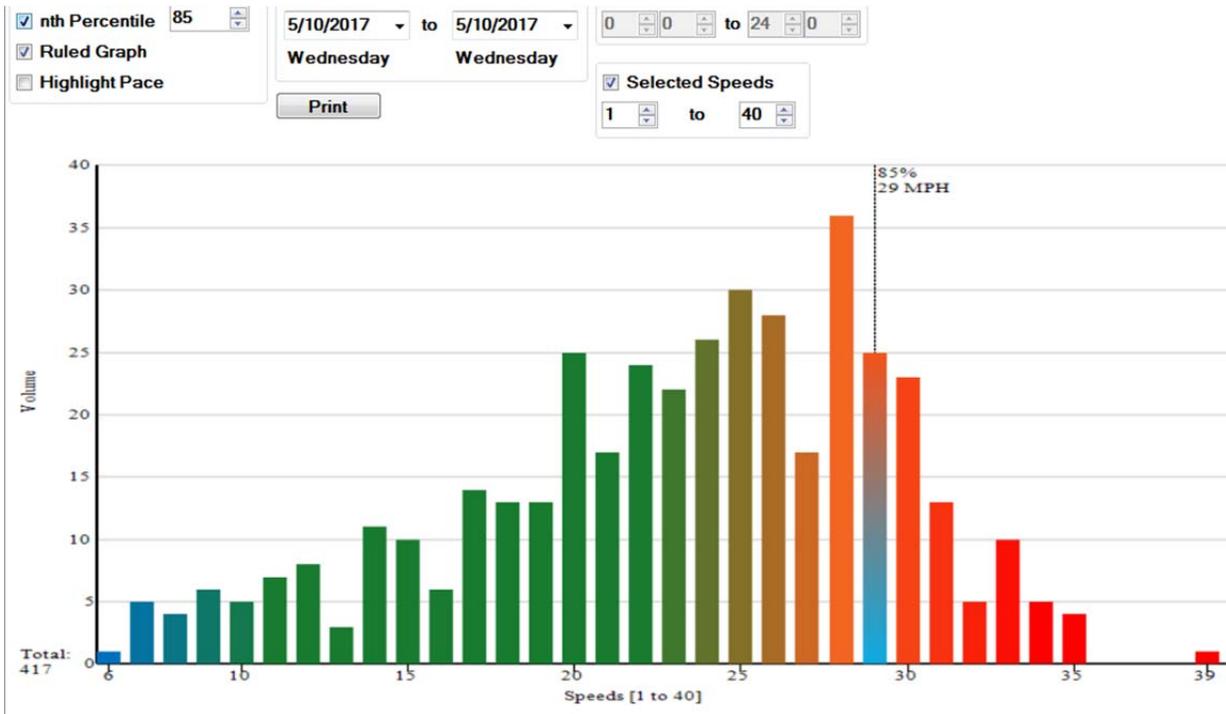
5/9/2017 to 5/9/2017  
 Tuesday Tuesday

0 to 24

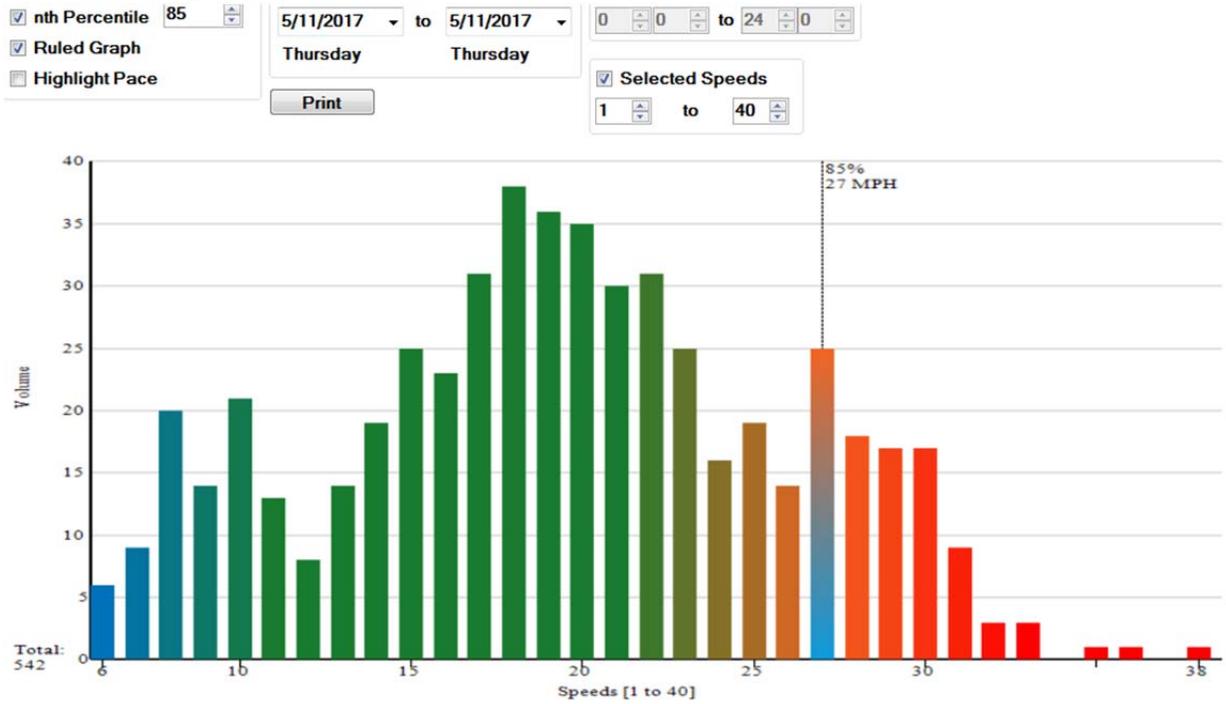
Selected Speeds  
 1 to 40



Avg Speed: 23 MPH  
 85<sup>th</sup> Percentile: 29 MPH



Avg Speed: 23 MPH  
 85<sup>th</sup> Percentile: 29 MPH



Avg Speed: 19 MPH  
 85<sup>th</sup> Percentile: 27 MPH

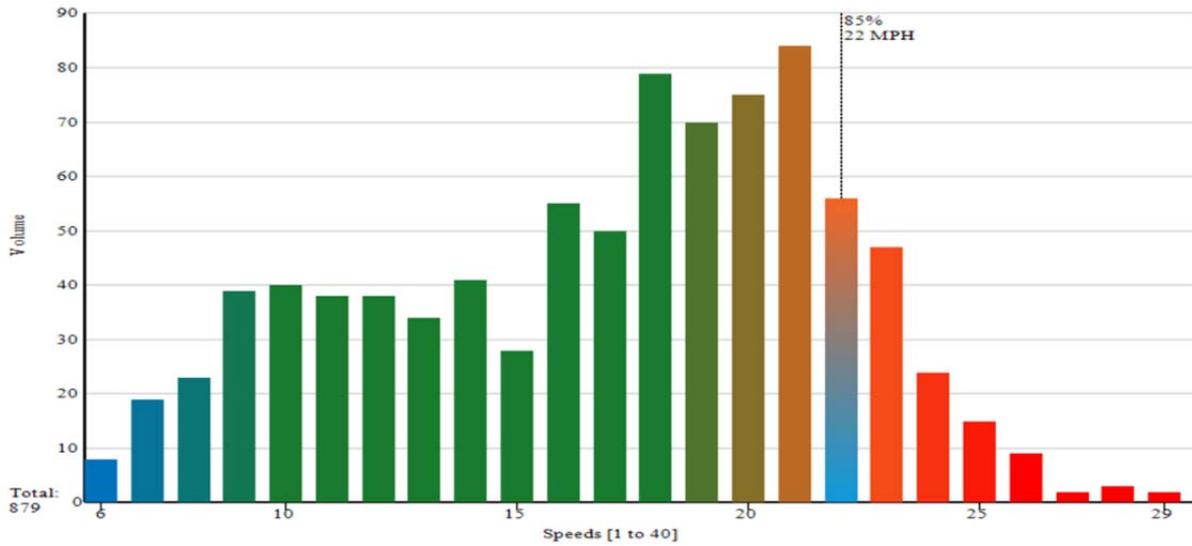
nth Percentile 85  
 Ruled Graph  
 Highlight Pace

5/12/2017 to 5/12/2017  
 Friday Friday

0 0 to 24 0

Selected Speeds  
 1 to 40

Print



Avg Speed: 18 MPH  
 85<sup>th</sup> Percentile: 22 MPH

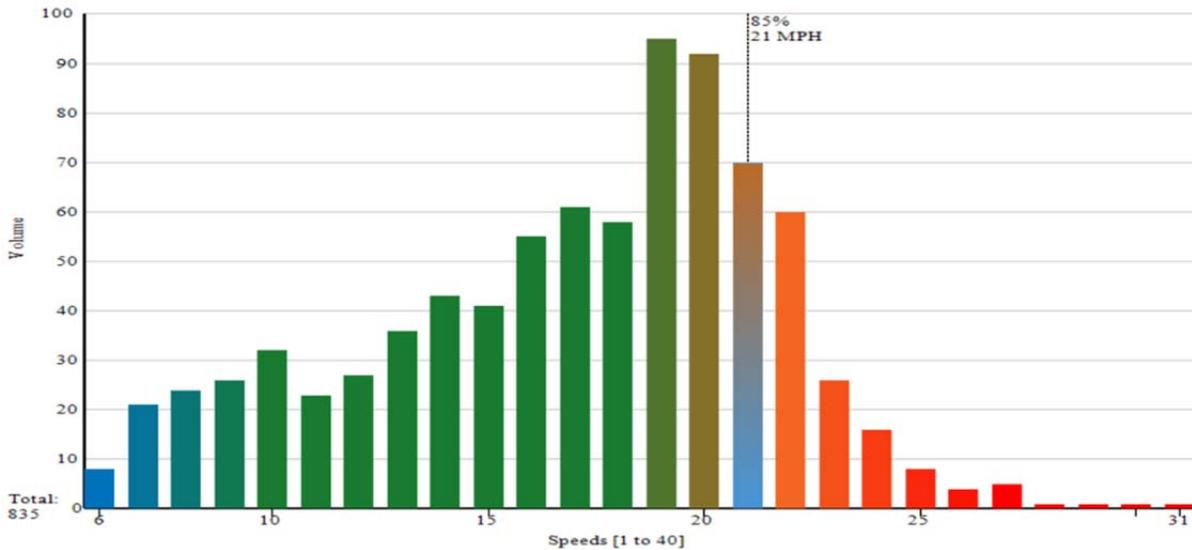
nth Percentile 85  
 Ruled Graph  
 Highlight Pace

5/13/2017 to 5/13/2017  
 Saturday Saturday

0 0 to 24 0

Selected Speeds  
 1 to 40

Print



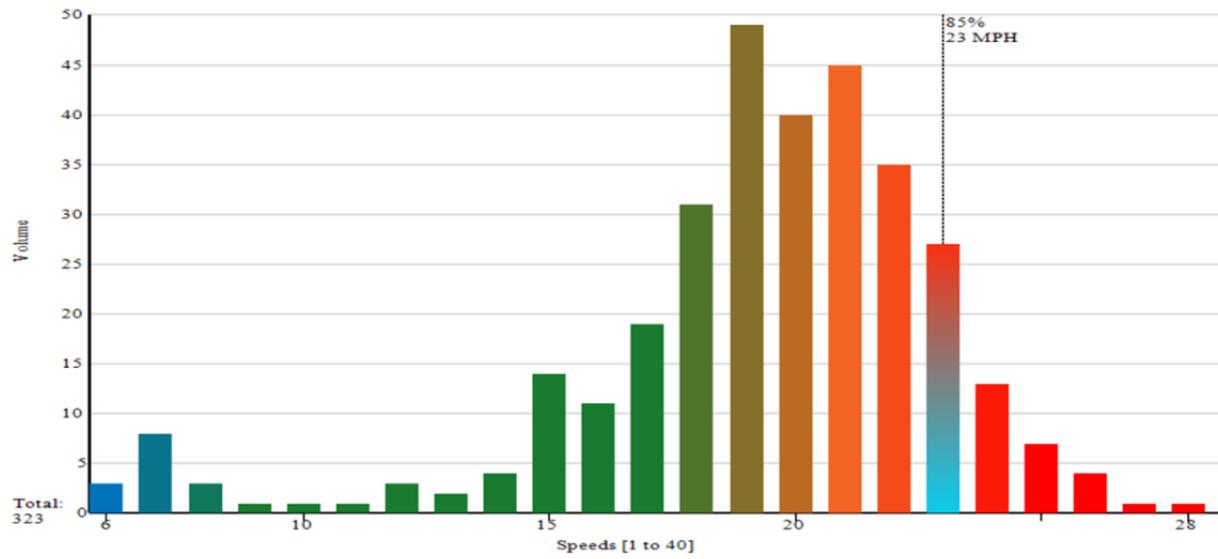
Avg Speed: 16 MPH  
 85<sup>th</sup> Percentile: 21 MPH

nth Percentile 85  
 Ruled Graph  
 Highlight Pace

5/14/2017 to 5/14/2017  
 Sunday Sunday

0 0 to 24 0

Selected Speeds  
 1 to 40



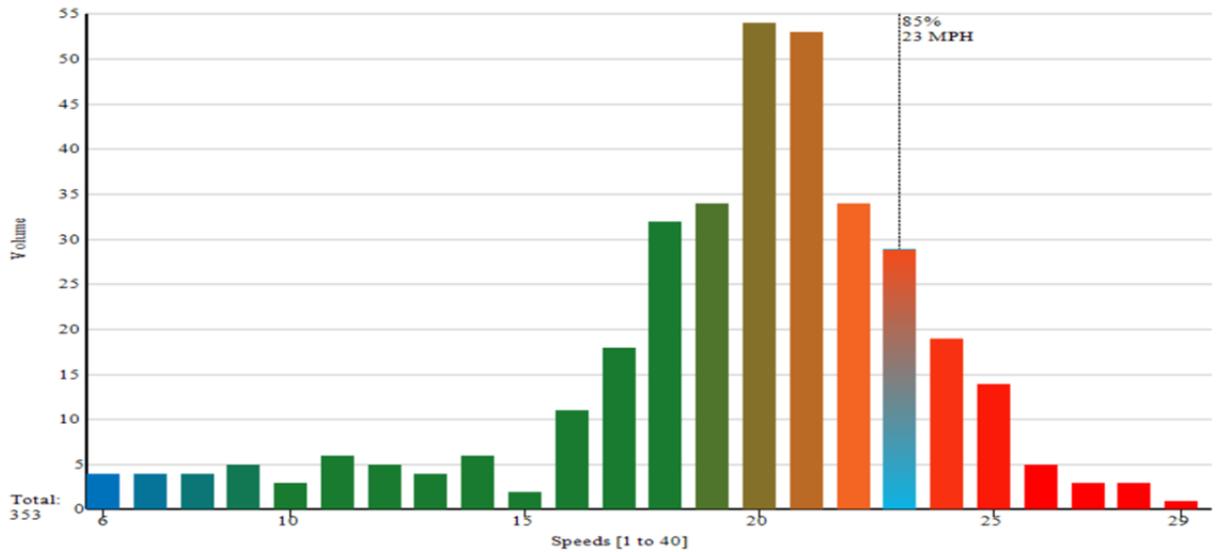
Avg Speed: 15 MPH  
 85<sup>th</sup> Percentile: 23 MPH

nth Percentile 85  
 Ruled Graph  
 Highlight Pace

5/15/2017 to 5/15/2017  
 Monday Monday

0 0 to 24 0

Selected Speeds  
 1 to 40



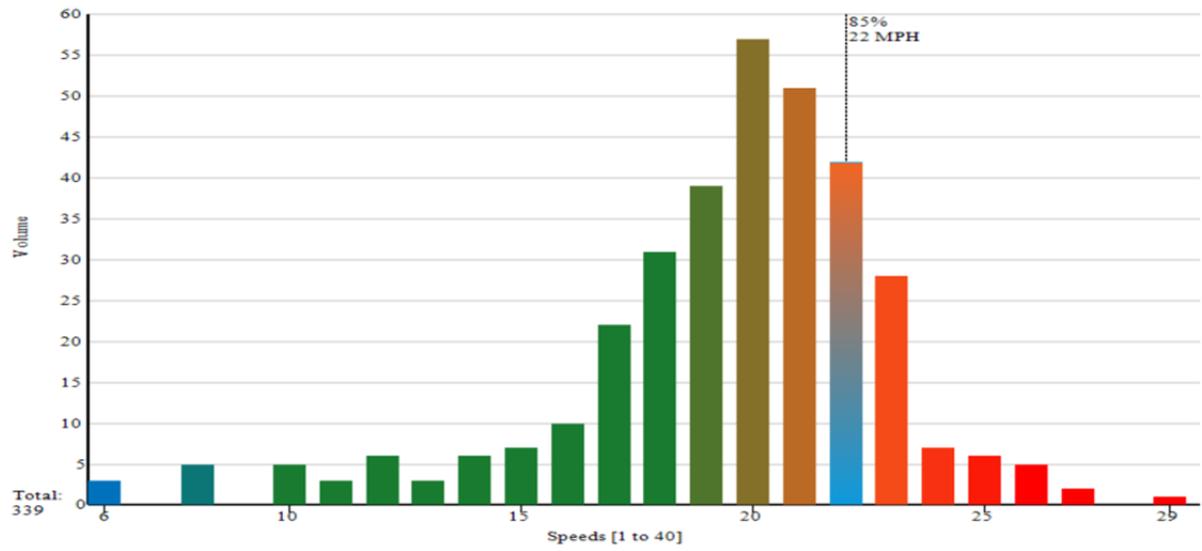
Avg Speed: 19 MPH  
 85<sup>th</sup> Percentile: 23 MPH

nth Percentile 85  
 Ruled Graph  
 Highlight Pace

5/16/2017 to 5/16/2017  
 Tuesday Tuesday

0 to 24

Selected Speeds  
 1 to 40



Avg Speed: 19 MPH  
 85<sup>th</sup> Percentile: 22 MPH

Response #	Street Number	Street	Close Weldona at 88th St.	Restrict 88th/Weldona to RTO	Speed Humps	Do Nothing	Other	Other-Comment
1	1144	Akron Pl					1	Close halfway up Weldona or at Weldona/Akron
2	1164	Akron Pl			1			
3	1211	Amherst St			1			
4	1358	Amherst St			1			
5	1408	Amherst St		1				
6	1458	Amherst St				1		
7	1463	Amherst St				1		
8	1533	Amherst St			1			
9	1191	Amherst Way		1		1		
10	1215	Boyero			1			
11	1220	Boyero				1	1	Light at 88th/Weldona
12	1230	Boyero					1	Close Weldona at Akron
13	1235	Boyero			1			
14	1240	Boyero		1	1	1		
15	1245	Boyero			1	1		
16	1250	Boyero			1	1		
17	1250	Boyero			1			
18	1260	Boyero				1		
19	1305	Boyero			1		1	Camera at Weldona stop sign & mail tickets. Speed bump or trim pine tree at corner of Boyero & Weldona
20	1310	Boyero					1	
21	1325	Boyero				1		
22	1330	Boyero			1			
23	1335	Boyero				1		
24	1228	Elmoro Ct					1	Install gate at Weldona Way/Akron with access to residents only
25	1233	Elmoro Ct	1	1	1		1	Light at Coal Creek/Rock Creek
26	1328	Elmoro Ct			1		1	Light at Weldona & 88th, extend sidewalk down the east side of 88th, remove crosswalk on 88th north of Weldona
27	1278	Elmoro Ct			1			
28	1559	Hillrose Ln			1			
29	1236	Idalia Ct			1		1	Paint "Stop" in the street at the stop signs
30	1246	Idalia Ct	1					
31	1251	Idalia Ct			1			
32	1286	Idalia Ct			1	1		
33	1311	Idalia Ct	1					
34	1321	Idalia Ct	1					
35	1326	Idalia Ct			1			
36	1059	Iliff Way			1			
37	947	Karval Pl			1	1		
38	987	Karval Pl		1				
39	907	Kirk Way	1					
40	1237	Mesa Ct				1		
41	1257	Mesa Ct				1		
42	1262	Mesa Ct		1	1			
43	1277	Mesa Ct			1	1		
44	1202	Montgomery			1	1	1	Install speed radar
45	1204	Montgomery			1			
46	None	None				1		
47	None	None				1		
48	None	None				1		
49	None	None				1		
50	1506	Proctor Ct		1		1		
51	1514	Proctor Ct			1			
52	1047	Raymer lane			1			
53	1087	Raymer lane				1		
54	1204	Riverbend Ct				1		
55	1207	Riverbend Ct		1				
56	1662	Riverbend Ln	1					
57	920	Riverbend St				1		
58	925	Riverbend St			1			
59	940	Riverbend St		1		1		
60	970	Riverbend St				1	1	More patrols
61	1171	Riverbend St		1		1		
62	1172	Riverbend St					1	Install radar speed signs
63	1467	Riverbend St				1		
64	1086	Roggen Way			1	1		
65	1106	Roggen Way		1				
66	None	Roggen Way					1	Block at Akron or 88th
67	1504	Seibert Ct		1				
68	1200	Snyder Way				1		
69	1224	Synder Way				1		
70	1025	Stoneham St				1		
71	1065	Stoneham St			1		1	More patrols at morning rush
72	1125	Stoneham St			1	1		
73	1375	Stoneham St				1		
74	1425	Stoneham St	1	1				
75	1450	Stoneham St						
76	1505	Stoneham St	1				1	Construct road to connect 88th Street and Coal Creek Dr.
77	1409	Union Ct				1		
78	1504	Vona Ct		1				
79	1506	Vona Ct			1			
80	1204	Weldona Ln	1					
81	1209	Weldona Ln	1	1				
82	1234	Weldona Ln	1		1			
83	1244	Weldona Ln				1		
84	1249	Weldona Ln			1			
85	1254	Weldona Ln	1	1				
86	1264	Weldona Ln	1					
87	1274	Weldona Ln	1		1		1	Reduce speed limit to 15 mph
88	1289	Weldona Ln			1			
89	1319	Weldona Ln	1					
90	1339	Weldona Ln		1	1			
91	1349	Weldona Ln		1	1			
92	1384	Weldona Way	1					
93	1404	Weldona Way	1					
94	1414	Weldona Way		1				
95	1434	Weldona Way				1		
96	1464	Weldona Way	1					
97	1474	Weldona Way	1					
98	1504	Weldona Way	1					
99	1514	Weldona Way	1					
100	1554	Weldona Way	1					
101	1584	Weldona Way	1					
		<b>Total</b>	<b>23</b>	<b>19</b>	<b>39</b>	<b>37</b>	<b>16</b>	
			17%	14%	29%	28%	12%	

# Weldona Survey Results

Town of Superior  
6/12/17

- Close Weldona at 88th
- Restrict to RTO
- Speed Humps
- ☑ No Change
- Other
- ✚ Close/Other
- ✚ RTO/Other
- ✚ Speed Hump/Other

