

City of Rochester Ped/Bike Safety Projects



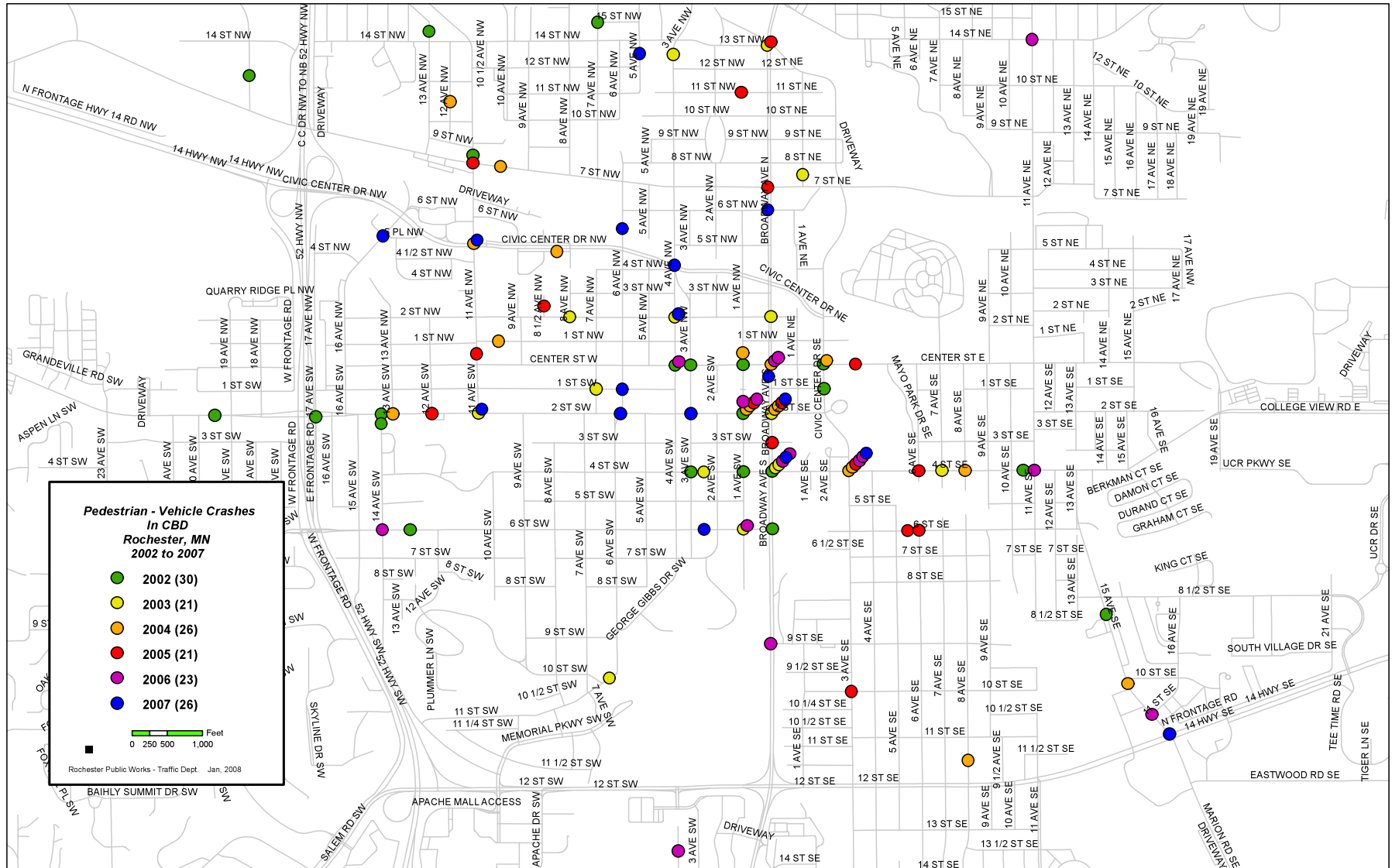
2008 Pedestrian Safety Study Findings

- There are an average of **22 pedestrians** hit in Rochester per year, and an average of **one pedestrian fatality per year**
- Most crashes happen during the weekday Peak Travel Times (AM & PM)
- Over representation of Pedestrians between 55 to 65 yrs. in Pedestrian Crashes
- The majority of the Pedestrian crashes happen in the CBD
- There are an average of 20 **bicyclists** hit in Rochester per year, with one of them resulting in a fatality (one fatality over the 6 year study period)
- Bad behavior was observed for cars, bikes and pedestrians

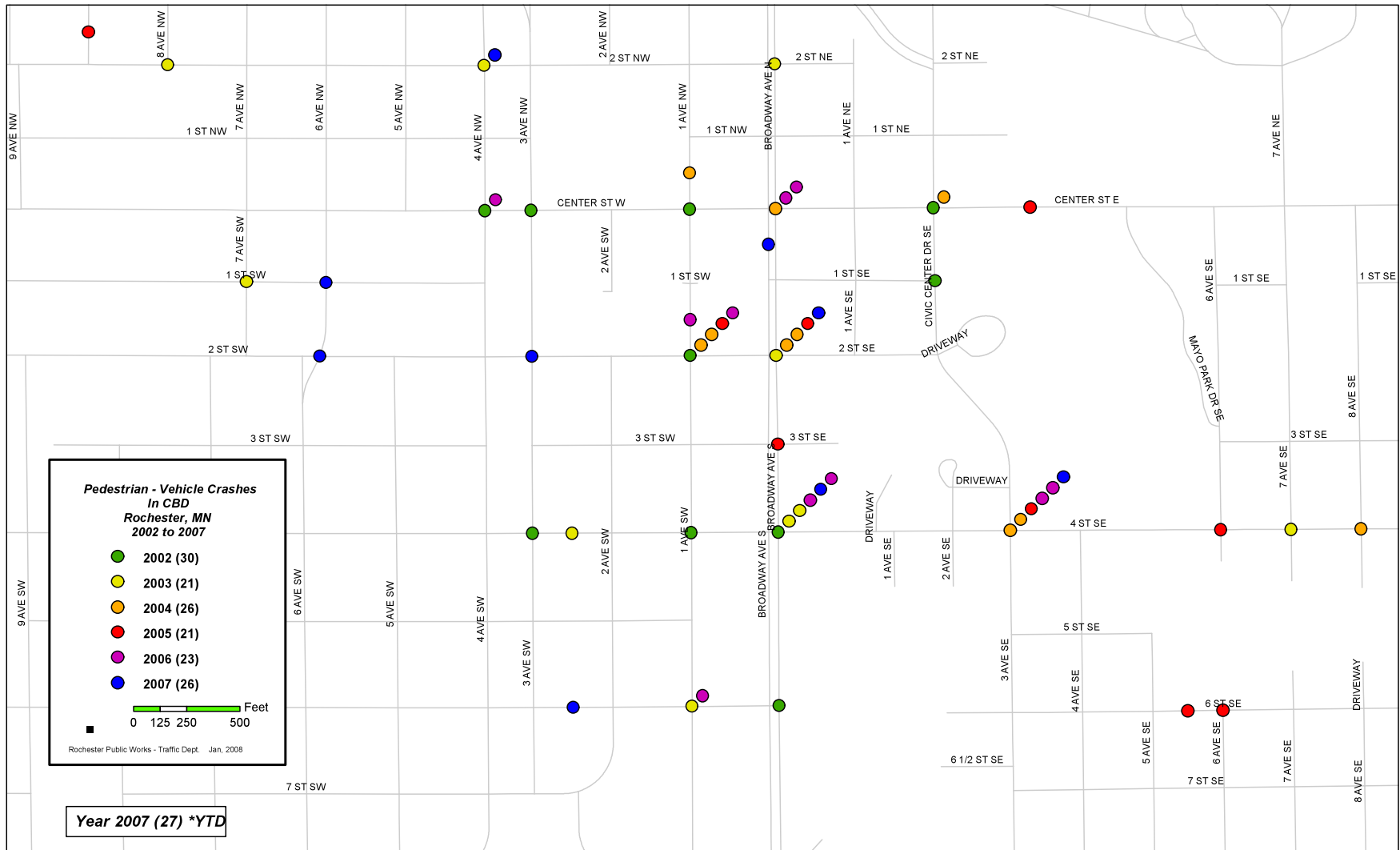
Safety Improvement Effort Approach:

- Engineering Projects
- Enforcement
- Education

PEDESTRIAN CRASHES 2002 - 2007 IN CORE AREA



PEDESTRIAN CRASHES 2002 - 2007 IN CBD



Projects Undertaken

- Reviewed the Traffic Signal operation in the CBD
 - Timing changes for Pedestrian walk time
 - Signal Phasing for Cars
 - Pedestrian count down timer indications
 - Crosswalk enhancements
- Safety Projects at 5 Schools
- Grant funding sought for a Public Awareness campaign

Pedestrian Timing Criteria

**Based on: Street Width
Walking Speed**

Item	Minimum Requirement	City of Rochester
"Walk" Phase	4 seconds	4 seconds minimum, CBD time based on pedestrian volumes
Flashing walk "Crossing time"	To the middle of farthest lane when green for opposing traffic	To cross entire street
Walk speed used	4 feet per second	3.5 feet per second

Table 2-6 50th Percentile Walking, Running, and Roller Blading Speeds (ft/sec) for Pedestrians of Various Ages

Age (years)	Males		Females	
	Walking	Running	Walking	Running
2	2.8	5.6	3.4	5.7
3	3.5	8.9	3.4	8.1
4	4.1	10.4	4.1	9.8
5	4.6	11.2	4.5	11.0
6	4.8	12.9	5.0	11.7
7	5.0	13.2	5.0	12.6
8	5.0	14.3	5.3	12.6
9	5.1	15.1	5.4	14.3
10	5.5	15.4	5.4	14.3
11	5.2	15.4	5.2	15.7
12	5.8	13.3	5.7	14.1
13	5.3	14.5	5.6	12.8
14	5.1	14.6	5.3	12.3
15	5.6	14.4	5.3	12.5
16	5.2	14.6	5.4	12.3
17	5.2	14.9	5.4	12.7
18	4.9	15.1	—*	—
20s	5.7	—	5.4	—
30s	5.4	—	5.4	—
40s	5.1	—	5.3	—
50s	4.9	—	5.0	—
60+	4.1	—	4.1	—
Roller Bladers				
<20		17.1		16.2
20-39		11.9		11.5
40-59		12.5		11.3

* Indicates insufficient or no data.

1 ft/sec = 0.305 m/sec

Source: J.J. Eubanks and P.L. Hill, *Pedestrian Accident Reconstruction and Litigation*, 2nd ed., Tucson, Ariz.: Lawyers & Judges Publishing Co., 1999.



Ped Activated In-Street Crosswalk Flashers



Ped Activated School Crossing Flashers



Speed Feed-Back Sign for School Zone



Bump-outs and Raised Pedestrian Crossing (Speed Table)



Myths and facts about pedestrian safety

<u>Myth</u>	<u>Fact</u>
A green light means it is safe to cross.	A green light means you should look for traffic and only cross if it's safe. Be sure to keep looking for cars coming or turning while you are crossing.
You are safe in a crosswalk.	Sometimes drivers make mistakes. Always make sure it is safe to cross, even at a crosswalk.
If you see the driver, the driver sees you.	The driver may not see you. Make sure the driver sees you and stops before you cross in front of the car. Try to make eye contact with the driver.
The driver will always stop if you are in a crosswalk or at a green light.	The driver may not see you. The driver's view may be blocked. The driver may go through a red light. The driver may turn and not look for pedestrians.
White clothes at night make it easy for drivers to see you.	White clothes can be hard to see too. Carry a flashlight. Wear retroreflective clothing. Walk facing traffic .

Bike Lanes on West River Road



Camera Detection Added for Bike Lanes



NEXT STEPS

- Considering changes to traffic signals to favor pedestrians in the Central Business District
 - Advance Pedestrian Walk Phase
 - Prohibiting right turns on red at high pedestrian volume intersections
 - Changes to signal cycle lengths and timing splits
- Continue to monitor the conditions

QUESTIONS?