



Improving Safety in School Zones Using Speed Radar Displays

November 11, 2013

Paul Shumejko, P.E., PTOE
City of Rochester Hills

Purpose

“The purpose of this innovative program is twofold. To improve the safety of our pedestrians, especially near our schools, and to help us better utilize our limited policing resources. Thus far, we have seen a positive impact since installing the radar speed signs”

Mayor Bryan K. Barnett



Grant Funding

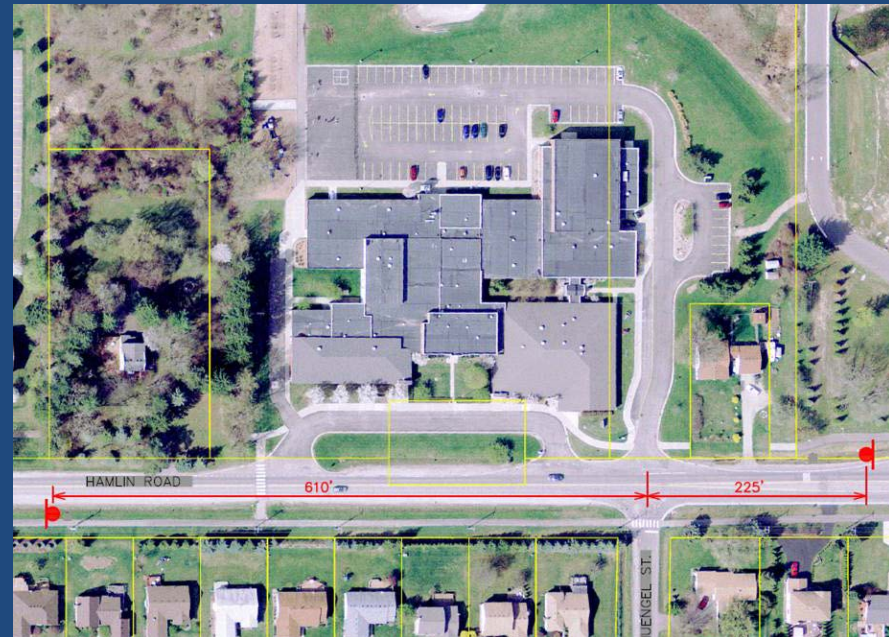
- \$305,000 grant from Community Oriented Policing Services (COPS)
- Collaboration between City of Rochester Hills and Oakland County Sheriff's Office Rochester Hills Substation
- Grants used to help community policing keep America safe and appropriately allocate limited enforcement resources



Locations

- Avondale & Rochester Community Districts
- 13 Elementary & Middle school locations
- 2 signs per school speed zone (26 total)

- ❖ Avondale Upper Middle
- ❖ Brewster Elementary
- ❖ Brooklands Elementary
- ❖ Deerfield Elementary
- ❖ Hamlin Elementary
- ❖ Hampton Elementary
- ❖ Hart Middle/Sheldon Road
- ❖ Hart Middle/Clear Creek Drive
- ❖ Holy Family Regional
- ❖ Musson Elementary
- ❖ Reuther Middle
- ❖ Van Hoosen Middle
- ❖ West Middle



How They Work

- Daily from 6:00 AM – 9:00 PM
- Programmed with normal & school speed limits
- Display flashes > 1 mph above speed limit
- Strobe light flashes > 6 mph above speed limit
- Records traffic data



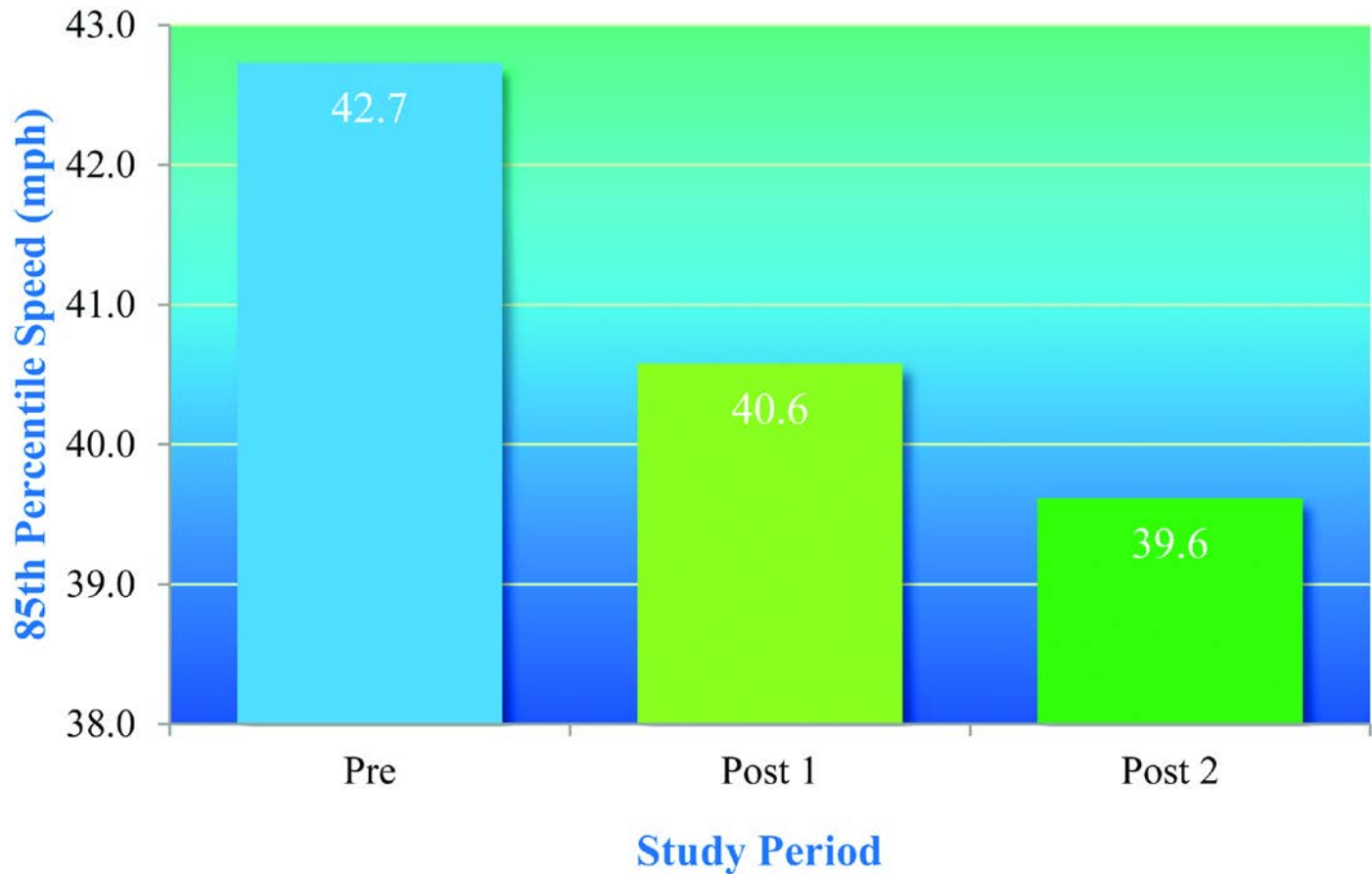
Evaluation

- Pre-Study
 - Before installation
- First Post-Study
 - Shortly after installation
- Second Post-Study
 - 6 months after installation



Road Tube Data

- Summary of all Study Locations



Public Outreach

- Distributed brochures & poster boards to schools for on-site display
- Promotional videos on RHTV
- Discussed during elementary school tours at City Hall
- Raised visual awareness of motorists speeds within school zones



Brochure




SAFETY NEAR SCHOOLS






"The purpose of this innovative program is twofold. To improve the safety of our pedestrians, especially near our schools, and to help us better utilize our limited policing resources. Thus far, we have seen a positive impact since installing the radar speed signs." states Mayor Bryan K. Barnett

This project was supported by Grant No. 2009CKWX0359, awarded by the U.S. Department of Justice, Office of Community Oriented Policing Services. The opinions contained herein are those of the author(s) and do not necessarily represent the office position or policies of the U.S. Department of Justice. References to specific agencies, companies, products or services should not be considered an endorsement by the author(s) or the U.S. Department of Justice. Rather, the references are illustrations to supplement discussion of the issues.




City of Rochester Hills
1000 Rochester Hills Drive
Rochester Hills, MI 48309


COPS
COMMUNITY ORIENTED POLICING SERVICES


HUBBELL, BOTT & CLARK, INC.
Consulting Engineers



For More Information, please contact:
Paul Shumejko, P.E., PTOE
(248) 656-4640
shumejkop@rochesterhills.org



RADAR SPEED DISPLAYS



**MAYOR
BRYAN K. BARNETT**




The City of Rochester Hills has installed Radar Speed Displays at 13 locations in established school speed zones. The speed displays enhance driver awareness, prompting them to slow down when children are present and where safety is most critical.

These solar powered display units reduce operating costs and operate daily from 6:00 AM to 9:00 PM. During school arrival and dismissal times, speed limits in the speed zones are reduced for safety reasons. The display flashes if a vehicle is traveling 1 mile per hour above the normal speed limit or reduced school speed limit. A strobe light flashes if a vehicle is traveling 6 miles per hour over the normal speed limit or reduced school speed limit.

GRANT FUNDED


The project was funded by a \$305,000 grant from the Community Oriented Policing Services (COPS) from the U.S. Department of Justice through the efforts of the City of Rochester Hills and the Oakland County Sheriff's Office Rochester Hills Substation.

COPS Grants help community policing keep America safe. Community policing is a philosophy that promotes organizational strategies, which support the systematic use of partnerships and problem-solving techniques, to proactively address the immediate conditions that give rise to public safety issues such as crime, social disorder, and fear of crime.



The grant is for a turn-key project which includes pre and post-engineering studies, procurement and installations of equipment and an evaluation as to the effectiveness of the displays on speed compliance and enhanced safety.

SCHOOL LOCATIONS




The 13 Radar Speed Displays were installed in speed zones in the Avondale and Rochester Community School Districts for elementary and middle schools. Many of these schools are located on roads with speed limits of up to 50 mph so compliance with the reduced school speed limits is a concern. **Speed sign locations include:**

- Avondale Upper Middle School
- Brewster Elementary School
- Brooklands Elementary School
- Deerfield Elementary School
- Hamlin Elementary School
- Hampton Elementary School
- Hart Middle School/Sheldon Road
- Hart Middle School/Clear Creek Drive
- Holy Family Regional School
- Musson Elementary School
- Reuther Middle School
- Van Hoesen Middle School
- West Middle School




Poster Board







City of Rochester Hills Radar Speed Displays



ROCHESTER
HILLS
MICHIGAN
MAYOR BRYAN K. BARNETT



OPERATION SLOW DOWN



How do we promote safe speeds in school zones?

- Engineering
- Enforcement
- Education
- The City installs radar speed displays that tell people when they are driving too fast.

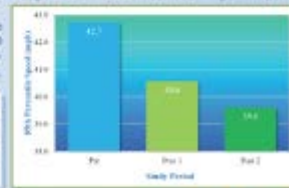
SAFETY FIRST

The City of Rochester Hills has installed radar speed displays in 13 school speed zones all around the City. The display flashes if a car or truck is traveling 1 mile per hour above the normal speed limit or reduced school speed limit. A strobe light flashes if a car or truck is traveling 5 miles per hour over the normal speed limit or reduced school speed limit.






The radar speed display is working every day from 6:00 AM to 9:00 PM to warn drivers to drive the speed limit even though the school zones times are just a few hours during the week. Remind adults to watch out for school kids and drive safely in school speed zones.

For more information, contact Mr. Paul Shumajko of Rochester Hills City Hall at (248) 656-4643.

The project was supported by Grant No. 2009K00W02059, awarded by the U.S. Department of Justice, Office of Community Oriented Policing Services. The opinions contained herein are those of the author(s) and do not necessarily represent the official position or policies of the U.S. Department of Justice. Reference to specific agencies, companies, products or services should not be considered an endorsement by the author(s) or the U.S. Department of Justice. Rather, the references are illustrative to supplement discussion of the issues.



Time of Day	% of through speed limit
PM	42.5
PM 1 Study Period	30.0
PM 2	34.5

DON'T SPEED



Program Benefits

- Public feedback has been all positive
- Use of solar powered units proved to be successful
- Modified several school zone limits
- Revisit 85th percentile speeds at certain locations for possible speed limit modifications
- Raised awareness for safe speeds in school zones





Questions?