
Memorandum

The City of Traverse City
Engineering Department



TO: Timothy J. Lodge, P.E., City Engineer *TJL*
FROM: Jessica Cichowski, Engineering Technician *JC*
DATE: May 7, 2014
SUBJECT: VCalm Radar Speed Sign, Southbound Division, 400 Block

This memo is to formalize City Engineering's initial findings and observations with regard to the speeds of southbound vehicles and the slowing tendencies of drivers as a reaction to the VCalm Radar Speed Sign on Division.

City Engineering performed 24/7 speed count beginning Wednesday, April 9, 2014 until Wednesday, May 7, 2014 on the 400 Block of Division, transition zone from a 30 mile per hour speed limit to a 40 mile per hour speed limit.

The data was gathered using a VCalm Radar Speed Sign which collected speed data, volume data, and data on the slowing of vehicles based on initial speed. This information was stored on an SD card and downloaded onto a computer. This data was then uploaded onto the Fortel Traffic (the speed sign developers), analyzed, and presented graphically as well as in the form of a spread sheet.

During the study 215,002 vehicles were recorded with 85 percent of the vehicles traveling less than 41 miles per hour.

Summary:

- Speed Limit: 40 mph
- Number of Recorded Vehicles: 215,002
- Percentages
 - 85th Percentile 41 mph
 - 95th Percentile 72 mph
 - Vehicles Slowing, Initially Traveling Between:
 - 40 and 50 mph 24%
 - 50 and 60 mph 14%
 - 60 and 70 mph 14%

Encl: Southbound Division Stats

Southbound Division Radar Sign Statistics

4-09-2014 to 5-07-2014

General Statistics

Speed Limit: 40
 Total Samples : 215002
 Peak 50th: 34
 Peak 85th: 41
 Peak 95th: 74
 Low 50th: 32
 Low 85th: 38
 Low 95th: 72

Incremental Statistics

Of Vehicles Traveling Between 40 And 50 (12589)
 24% Slowed (3035)
Of Vehicles Traveling Between 50 And 60 (4286)
 14% Slowed (618)
Of Vehicles Traveling Between 60 And 70 (10836)
 14% Slowed (1522)
Of Vehicles Traveling Between 70 And 80 (11741)
 16% Slowed (1882)
Of Vehicles Traveling Between 80 And 90 (4047)
 44% Slowed (1782)
Of Vehicles Traveling Between 90 And 100 (2463)
 29% Slowed (703)

The Fastest Vehicle Decelerated from 98 to 23 in 4 Seconds at 11:39:46 on 2014-04-13

