
Memorandum

The City of Traverse City
Engineering Department



TO: Timothy J. Lodge, P.E., City Engineer *TL*
FROM: Jessica Cichowski, Engineering Technician *JC*
DATE: May 7, 2014
SUBJECT: VCalm Radar Speed Sign, Northbound Division, 300 Block

This memo is to formalize City Engineering's initial findings and observations with regard to the speeds of northbound 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 Tuesday, April 29, 2014 until Tuesday, May 6, 2014 on the 300 Block of Division, transition zone from a 40 mile per hour speed limit to a 30 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 140,000 vehicles were recorded with 85 percent of the vehicles traveling less than 44 miles per hour.

Summary:

- Speed Limit: 30 mph
- Number of Recorded Vehicles: 140,000
- Percentages
 - 85th Percentile 44 mph
 - 95th Percentile 47 mph
 - Vehicles Slowing, Initially Traveling Between:
 - 30 and 40 mph 54%
 - 40 and 50 mph 64%
 - 50 and 60 mph 63%

Encl: Northbound Division Stats

Northbound Division Radar Sign Statistics

4-29-2014 to 5-06-2014

General Statistics

Speed Limit: 30
 Total Samples : 14000
 Peak 50th: 40
 Peak 85th: 44
 Peak 95th: 47
 Low 50th: 33
 Low 85th: 37
 Low 95th: 42

Incremental Statistics

Of Vehicles Traveling Between 30 And 40 (6708)
 54% Slowed (3635)
Of Vehicles Traveling Between 40 And 50 (6336)
 64% Slowed (4073)
Of Vehicles Traveling Between 50 And 60 (133)
 63% Slowed (84)
Of Vehicles Traveling Between 60 And 70 (1)
 A vehicle Decelerated from 66 to 59 in 9 Seconds at 02:23:19 on 2014-05-02
Of Vehicles Traveling Between 70 And 80 (5)
 A vehicle Decelerated from 71 to 56 in 6 Seconds at 18:15:42 on 2014-05-06
Of Vehicles Traveling Between 80 And 90 (35)
 3% Slowed (1)
Of Vehicles Traveling Between 90 And 100 (20)
 10% Slowed (2)

The Fastest Vehicle Decelerated from 98 to 30 in 5 Seconds at 13:18:15 on 2014-04-29

