
Memorandum

The City of Traverse City
Engineering Department



TO: Timothy J. Lodge, P.E., City Engineer
FROM: Abhishek Deora, Engineering Aide
DATE: September 8th, 2017
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 Friday, July 1st, 2016 until Wednesday, November 30th, 2016 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 264,003 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: 264,003
- Percentages
 - 85th Percentile 44 mph
 - 95th Percentile 48 mph
 - Vehicles Slowing, Initially Traveling Between:
 - 30 and 40 mph 58%
 - 40 and 50 mph 65%
 - 50 and 60 mph 66%

Encl: Northbound Division Stats

Northbound Division Radar Sign Statistics

07-01-2016 to 11-30-2016

General Statistics

Speed Limit: 30

Total Samples : 264003

Peak 50th: 40

Peak 85th: 44

Peak 95th: 48

Low 50th: 32

Low 85th: 37

Low 95th: 41

Incremental Statistics

Of Vehicles Traveling Between 30 And 40 (131905)

58% Slowed (76841)

Of Vehicles Traveling Between 40 And 50 (112670)

65% Slowed (73638)

Of Vehicles Traveling Between 50 And 60 (3867)

66% Slowed (2554)

Of Vehicles Traveling Between 60 And 70 (133)

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 (29)

21% Slowed (6)

Of Vehicles Traveling Between 80 And 90 (82)

26% Slowed (21)

Of Vehicles Traveling Between 90 And 100 (80)

28% Slowed (22)

The Fastest Vehicle Accelerated from 26 to 98 in 14 Seconds at 15:44:06 on 2016-07-30

