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# Memorandum

The City of Traverse City  
Engineering Department



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TO: Timothy J. Lodge, P.E., City Engineer  
FROM: John Zarafonitis, Seasonal Engineering Aide  
DATE: Monday, August 18, 2014  
SUBJECT: 7 Day Speed Study of E. Eighth Street, 300 Block between Lake Ave. and Boardman Ave.

City Engineering performed an on-site 7 day speed count beginning Thursday, August 7, 2014 at 9 am until Thursday, August 14, 2014 at 11 am on the 300 block of E. Eighth St. This memo is to formalize City Engineering's initial findings and observations with regard to the speeds of vehicles on the 300 block of E. Eighth St.

The data was gathered using a Jamar Radar Recorder which collected traffic data, including vehicle speed, for each lane of traffic (eastbound and westbound). This information was then analyzed and the data for each lane compiled into one report, regardless of direction, using TraxPro. The TraxPro report organized the speeds of the vehicles into groups based on 5 mile per hour increments, starting with 0-15 miles per hour. The report shows how many vehicles were within the specified speed range during the time indicated by the report.

During the 7 day study, 105,948 vehicles were recorded on this section of E. Eighth St. with about 58 percent of eastbound vehicles traveling between 27 and 36 miles per hour with an average speed of 30 miles per hour. Westbound vehicles had an average speed of 24 miles per hour, with about 57 percent traveling between 22 and 31 miles per hour. 44,593 eastbound vehicles were recorded going speeds over the posted speed limit of 25 miles per hour, 15,317 more than recorded westbound vehicles. The percentage of eastbound vehicles recorded at speeds over 25 miles per hour was about 29 percent higher than the around 53 percent of westbound vehicles traveling at speeds over the posted speed limit. The percentage of eastbound enforceable violations was about 55 percent, while the percentage for westbound traffic was only around 14 percent.

## Summary:

- Speed Limit: 25 mph
- Number of Recorded Vehicles (7 days): 105, 948
- Total Percentage Above Speed Limit 35.2 %

Traffic Direction	Percent Over Speed Limit (%)	Average Speed (mph)	10 Mile Per Hour Pace Speed (mph)	85 <sup>th</sup> Percentile Speed (mph)
Westbound	52.7	24	22-31	30
Eastbound	81.5	30	27-36	36

Encl.: Detailed TraxPro Speed Report (Not Combined)