

REPORT OF SPEED MONITORING

To: All Meadows-Ferndale HOA (MFHOA) Owners and Residents
From: MFHOA Board of Directors
Date: October 25, 2021
Subject: RESULTS OF VEHICLE SPEED MONITORING
Ref: FPD Case # 21F8888

INTROCUCTION

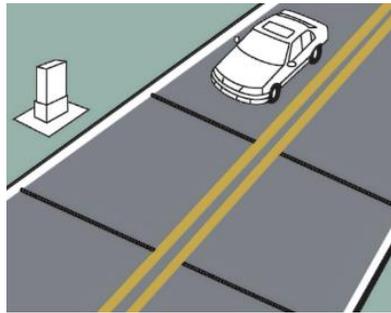
As previously announced in the Meadows Fall Newsletter, the Board is committed to ensuring the safety of our residents. In pursuit of this goal as it relates to traffic safety and in order to be responsive to complaints about speed on Monument Drive, the Board of Directors requested and received a vehicle speed monitoring review by the Ferndale Police Department (FPD). The results of that review are provided below.

SALIENT POINTS

1. The vehicular traffic issue in question was monitored by means of pneumatic road tubes across Monument Drive near where the walking trail crosses Monument Drive. See the figure below for an example of a typical installation.
2. The monitoring period was from 07:45 AM September 27th to 08:00 AM October 4th.
3. Traffic was monitored in both directions: northbound traffic (toward Thornton) and southbound traffic (toward Jenjar).
4. The total number of vehicles detected during the monitoring period:
 - a. Southbound: 2115
 - b. Northbound: 2110
 - c. Total: 4211
5. Average daily traffic:
 - a. Southbound: 301.3
 - b. Northbound: 300.3
 - c. Total: 601.6
6. The mean speed for all vehicles during the monitoring period was 23.9 MPH. Our speed limit is 25 MPH.
7. The major FPD decision criterion for determining if there is a speeding problem is the 85th percentile speed. If 85% or more of vehicles are traveling within the speed limit, then there is no problem by their criterion. Our 85th percentile speed for this monitoring session was 27.9%. This means that 85% of vehicles were traveling 27.9 MPH or less when they crossed the pneumatic detectors, but it also means that 15% of vehicles were traveling faster than 27.9 MPH. For reference, this chart displays other percentile speeds for our monitoring session.

Percentile	10	15	30	50	70	85	90
Speed	18.8	19.9	21.5	23.7	26.1	27.9	29.2

This figure illustrates a typical setup for pneumatic tube vehicle speed monitoring devices.



CONCLUSIONS

According to the FPD, *"The combined 85% was 27.9 MPH, which although is above the 25 MPH speed limit, it would appear that the bulk of residents are traveling at the speed limit, especially considering a slight grade in the area."* Additionally, *"The data suggests that you do NOT have a speeding problem. It does not appear that additional action is needed at this time."*

In our case, the fact that our 85th percentile point is 2.9 MPH over the 25 MPH speed limit appears to result in a conclusion by the FPD that our speeding "problem" is insignificant and not problematic..

More charts with more data and comments are provided below.

ADDITIONAL COMMENTS

Finally, although the Board may not agree with the FPD position on this issue, we accept it for now and will continue to monitor vehicle movement within the development. We will take appropriate action when needs and opportunities arise.

That being said, you (residents and owners) may report unsafe conditions, including speeding, directly to the police using the 911 system. If you are not reporting an actual emergency, announce this fact to the 911 operator who will then make a non-emergency report of your call. You may also ask to remain anonymous.

The Board hopes this helps you understand our vehicle speed situation.

For the Board of Directors,

Chuck Millard

**President
Meadows-Ferndale HOA**

CHART 1. Percent of vehicles versus speed (grouped into 5 MPH "bins"). This chart shows

- 64% of vehicles registered below the 25 MPH limit
- 36% of vehicles registered at or above 25.0 MPH and are technically speeding, although tickets are rarely given for speeds under 30 MPH
- 93% of vehicles registered at less than 30 MPH
- 7% of vehicles registered at or greater than 30 MPH

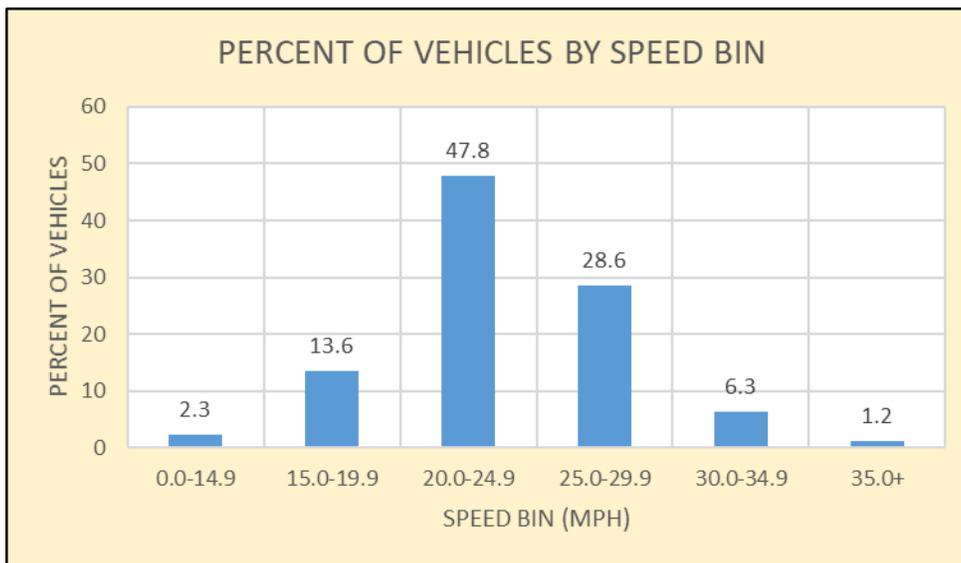


Chart 2. This chart is essentially the same as Chart 1, except it shows the average daily number of vehicles rather than percent of vehicles. It shows, for example, that the 47.8% of vehicles in the 20-24 MPH bin equates to an average of 287.6 actual vehicles out of the total of 601.6 vehicles ($601.6 \times 0.47.8 = 287.6$). And note that those 7% of vehicles (from Chart 1) that were going 30 MPH or faster accounted for 46 "hits" on the detectors.

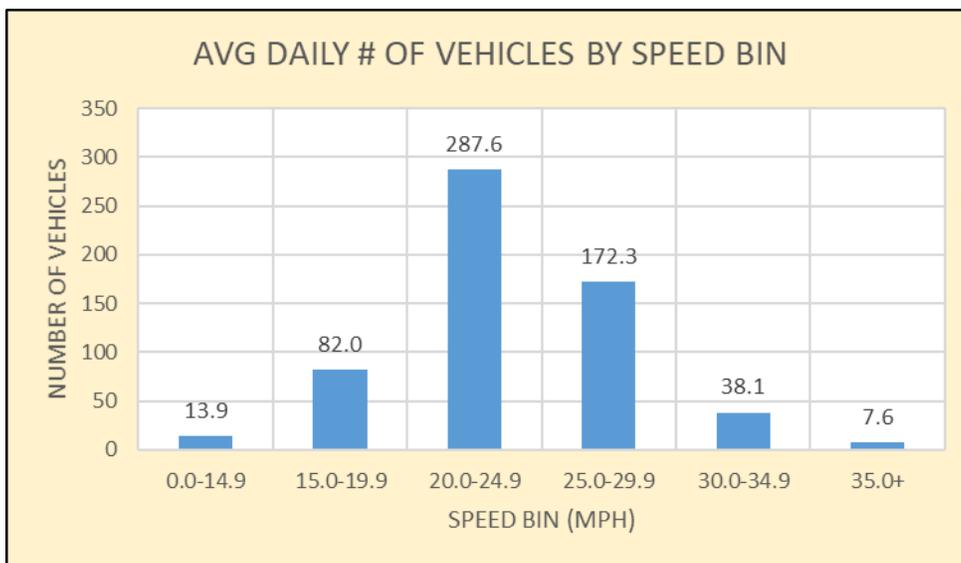


Chart 3. This chart displays the cumulative percent of vehicles by speed, showing that the 85th percentile speed is 27.9 (rounded to 28 in the chart) MPH. This provides the “decision point” for the FPD to decide whether we have a problem. Since 27.9 MPH is close to the speed limit and the sensors were near a downhill grade (of nearly 10%, or 4.5°, at its maximum) when traveling north, then their conclusion is that we DO NOT have a problem that requires action. We don’t necessarily agree with that conclusion, but it is their conclusion.

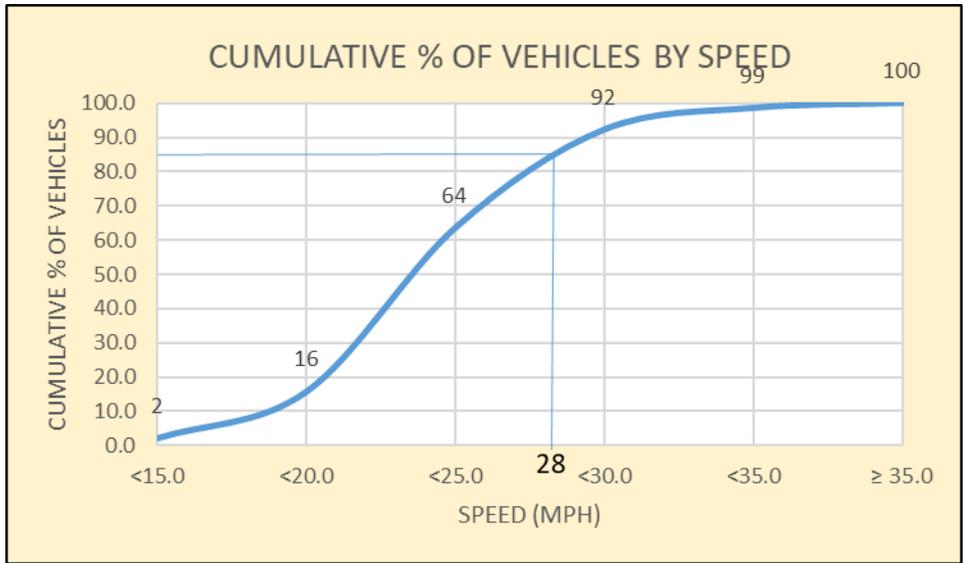


Chart 4. This chart shows the distribution of vehicles by time. Not surprisingly it reveals both morning and afternoon “rush hours”, with a good flow of traffic all afternoon and very little around the midnight hours.

