

Memorandum

To: Todd Blomstrom, City Engineer, City of Arden Hills
Mike Mroska, Community Development Manager, City of Arden Hills

From: Sean Delmore, PE, PTOE
Erik Seiberlich, Senior Project Manager

Date: January 8, 2020

Re: School Zone Speed Limit on Lake Valentine Road for Mounds View High School
WSB Project No. 014908-000

PURPOSE AND BACKGROUND

The Minnesota Department of Transportation (MnDOT) provides School Zone Speed Limit guidance to determine the need for a modified speed limit based on hazards near a school site in accordance with Minnesota Statute 169.14 Subdivision 5a. A Hazard Identification evaluation was completed for the Mounds View High School site. This memo is part of an overall traffic and pedestrian study for the school and Lake Valentine Road in the City of Arden Hills.

MOUNDS VIEW HIGH SCHOOL HAZARD IDENTIFICATION

The nine items within the MnDOT School Zone Speed Limit guidance are as follows:

1. **Roadway Information** – Lake Valentine Road is approximately 44 feet wide with one lane in each direction, a two-way left-turn lane, and no shoulders within the study area. Two crosswalk locations exist, one at each intersection of Lake Valentine Road and the parking lot north of Lake Valentine Road.
2. **Traffic Volumes** – Based on data collection from September 2019, there were 288 eastbound and 500 westbound vehicles entering the school site on Lake Valentine Road during the AM peak hour (7:40-8:40 AM). During the PM peak hour (3:00-4:00 PM) there were 197 westbound and 348 eastbound vehicles departing the school site on Lake Valentine Road.
3. **Pedestrian Volumes** – Based on data collection from September 2019, there were 312 pedestrians in the AM peak hour and 269 pedestrians in the PM peak hour crossing Lake Valentine Road within the school site.
4. **Parking and Loading Zone** – The two main vehicle parking lots for Mounds View High School include the lot north of Lake Valentine Road, and the furthest lot to the east. The other lot east of the high school is mainly used for bus parking. The drop-off/pick up zone is a two-lane loop with one-way traffic in front of the main entrance to the high school. Parking is currently not allowed along Lake Valentine Road within the school study area, as No Parking signs are consistently posted along the road.
5. **Traffic Control Devices** – Existing signage (as well as proposed signage) and striping are shown in **Figure 1**; existing crosswalk locations are described under Roadway

Information. School patrols/police officers currently patrol the west crossing location during both peak hours, and the bus access during the PM peak hour.

6. **Sidewalk Information** – A sidewalk on the south side of Lake Valentine Road exists from west of the site to the end of the parking lot furthest east. The width of the sidewalk varies between 5 and 10 feet. No sidewalk currently exists on the north side of Lake Valentine Road.
7. **Fencing Information** – Fencing currently existing on the north and south side of the roadway between the two crossing locations.
8. **Crash History Information** – Using the Minnesota Crash Mapping Analysis Tool (MnCMAT) from MnDOT, only two crashes were found to be reported between January 1, 2006 and December 31, 2015. Neither crash involved a pedestrian but did involve a teenage driver of high school age (17 and 18 years old) during school peak hours.
9. **Speed Zones Information** – Existing posted 35 mph speed limit signs are shown in **Figure 1**.

RECOMMENDATIONS

Based on the existing hazards and proposed improvements as described in the traffic study, it is recommended that the posted speed be reduced from 35 mph to 25 mph during school peak hours when children are present. The proposed school speed zone signage is shown in **Figure 1**. All new signing and pavement markings shall be in accordance with the Minnesota Manual on Uniform Traffic Control Devices (MnMUTCD).