

**City of Rochester Hills  
Department of Public Service**

**Traffic Study Summary  
For Valley Stream Drive  
No Left Turn Sign Installation at Livernois**

November 26, 2008

**Background**

At the August 14, 2007 Advisory Traffic and Safety Board (ATSB) meeting, City staff brought forth the request from the Valley Stream Homeowner's Association to install a "No Left Turn" (NLT) sign for eastbound Valley Stream Drive at Livernois. The request originated from concerns related to "cut-through" traffic resulting from the eastbound Walton Boulevard traffic turning left onto Rochdale Drive N to Greenleaf Drive to Valley Stream Drive to head north on Livernois Road. The HOA stated that vehicles use Rochdale Drive N to get to NB Livernois to avoid having to use the median island turnaround at Walton and Livernois.

Due to the construction work along University Drive in the City of Rochester, the ATSB, along with staff's recommendation, approved the installation of the NLT sign between 4PM and 7PM on temporary basis throughout duration of the construction project via TCO-25 (copy attached). The TCO was issued on July 11, 2007. At the August 14, 2007 ATSB meeting (copy of the minutes are attached), several requests were made to staff to complete prior to bringing this issue back to the board:

1. That a compliance study be done within the next two weeks.
2. Request enforcement by the Oakland County Sheriff's Department (OCSO).
3. The sign be installed until construction is completed on Walton Boulevard/University, approximately November 2008. At that point a review of the intersection and surrounding area is made to see if the traffic flow is working as expected. If not, the appropriate study is done to determine what will resolve the situation.
4. Gather the traffic crash data.
5. Verify that the sight distance at the intersection is adequate, as well, as for the crest in Livernois Road.

**Compliance Study (copies of reports attached)**

<b><u>Date/Time</u></b>	<b><u>LT Vehicles</u></b>	<b><u>RT Vehicles</u></b>	<b><u>Total Vehicles</u></b>
05/28/2008	30 <sup>A</sup> (40.5%)	44 <sup>A</sup> (59.5%)	74
11/11/2008	23 (41.8%)	32 (58.2%)	55

<sup>A</sup> Includes 1 Bus

OCSO has provided selective enforcement on a very limited basis due staffing levels and prioritization schedules. Traffic crash data was obtained from the Traffic Improvement Association (TIA) for the period of January 1, 2008 to August 31, 2008. The data revealed that two (2) crashes occurred in October of 2007 that were both attributed to animal collision. The intersection sight distance was investigated off Streamwood Drive looking north toward the crest in the hill along Livernois. The measured available safe sight distance was measured to be 503 feet (copy of map attached). The minimum required safe corner sight distance for a 2-lane road with a posted speed of 40 MPH is 445 feet. The 503 feet of available sight distance also meets the minimum safe sight distance for a 2-lane road with a posted speed 45 MPH at 500 feet.

Construction of University Drive concluded this past October. Recent traffic counts were taken during the period of Tuesday, November 11 to Thursday, November 14, 2008 (copy attached, including map).

<u>Location</u>	<u>EB (VPD)</u>	<u>WB (VPD)</u>
Green Leaf	310	108
Valley Stream Drive	328	243

### Summary

Based upon the high non-compliance rates for EB Valley Stream Drive vehicles complying with the “No Left Turn” restriction signage and the relatively low traffic volumes along Valley Stream when compared with those of other typical subdivisions, which may be as high as 1,500 VPD, staff recommends the removal of the NLT sign.

Staff did send out meeting agenda notices to all of the residences within Valley Stream Subdivision about the scheduled ATSB meeting. It should be noted that prior to its installation, staff did indicate to the HOA that the installation of traffic signage usually has minimal affect in changing driver behavior and often times is ignored. The effectiveness of signage invariably comes down to the level of enforcement, which the Oakland County Sheriff’s Department (OCSO) can realistically only be expected to enforce periodically due to staffing commitments and prioritizations. Staff has and continues to encourage the HOA to pursue the installation of speed humps, as these provide a permanent feature in roadway to help reduce speeds and potentially decrease cut-through traffic.

### Conclusion

Staff requests the Advisory Traffic and Safety Board to support rescinding **TCO TM-25**, and the Board recommends the City Council approve rescinding the TCO.

Paul G. Shumejko, P.E., PTOE  
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