

CITY OF ROCHESTER HILLS
DPS/Engineering Department

June 5, 2018

Judson Park Subdivision
Traffic Cut Through and Speed Concerns
Section 5 – Intersection of Tienken Road and Adams Road

Background

In November of 2017 the DPS, Traffic Division received a Traffic Information Study from the Judson Park Subdivision Homeowners Association regarding their concerns about the speed of traffic cutting through their subdivision. At that point in time a speed study was performed, placing a set of tubes in four locations within the subdivision. The results from that study indicated that all four locations were above the 85th percentile threshold and met warrants for speed humps or some other traffic calming device.

The results of this study were presented at the February 13th Advisory Traffic Safety Board for review and direction. Members of the Judson Park Subdivision HOA were present at this meeting. The results were reviewed and one of the homeowners pointed out that the subdivision does not have the funds to install speed humps at this time. The second homeowner brought up their concern about the cut through traffic and the belief that the Premier Academy development planned across Tienken Road from their subdivision was going to cause the cut through traffic to increase.

Because the main concern voiced in the Traffic Information Study seemed to be speed, a cut through study was not performed. The Board decided to hold off on pursuing any form of traffic calming until a cut through study had been done.

Existing Conditions

The results of the speed study were reviewed and the following information was collected at that time:

Tallahassee Drive – Counter #6044*:

Average Speed = 27 MPH (WB = 27 MPH; EB = 26 MPH)
85th Percentile Speed = 32 MPH (WB = 32 MPH; EB = 31 MPH)
ADT = 268 vehicles (WB = 165 vehicles; EB = 103 vehicles)

Roseview Drive – Counter #6045*:

Average Speed = 26 MPH (WB = 27 MPH; EB = 25 MPH)
85th Percentile Speed = 32 MPH (WB = 32 MPH; EB = 30 MPH)
ADT = 273 vehicles (WB = 155 vehicles; EB = 118 vehicles)

Potomac Drive - Counter #6046*:

Average Speed = 24 MPH (SB = 24 MPH; NB = 24 MPH)
85th Percentile Speed = 29 MPH (SB = 31 MPH; NB = 29 MPH)
ADT = 601 vehicles (SB = 354 vehicles; NB = 247 vehicles)

Potomac Drive – Counter #6047*:

Average Speed = 26 MPH (SB = 27 MPH; NB = 25 MPH)
85th Percentile Speed = 31 MPH (SB = 32 MPH; NB = 30 MPH)
ADT = 4521 vehicles (SB = 236 vehicles; NB = 216 vehicles)

(* See count point map for locations)

Per the request of one of the HOA members two additional tube speed counters were placed in locations that residents felt should have been included. The results for these are as follows:

Shenandoah Drive - Counter #6075:**

Average Speed = 26 MPH (SB = 25 MPH; NB = 27 MPH)
85th Percentile Speed = 31 MPH (SB = 30 MPH; NB = 33 MPH)
ADT = 425 vehicles (SB = 233 vehicles; NB 192 vehicles)

Mohawk Drive – Counter #6076:**

Average Speed = 26 MPH (WB = 27 MPH; EB = 26 MPH)
85th Percentile Speed = 32 MPH (WB = 32 MPH; EB = 32 MPH)
ADT = 338 vehicles (WB = 135 vehicles; EB = 203 vehicles)

(**See second count point map for locations)

Traffic Study

The DPS/Engineering Department performed a License Plate Study on Wednesday, May 16. There were two Observers at each of the five entrances to the subdivision, one collecting the numbers of the incoming vehicles and the other the outgoing vehicles. The data was collected from 6:30 AM until 8:30 AM and again from 1:30 PM until 3:30 PM. The complete data was compiled and is attached. The overall results indicate that there is definitely a cut through problem in this subdivision, with the morning hours being worse than the afternoon. During the AM hours 386 vehicles entered the subdivision, with 319, or 83% of them being identified as cutting through the subdivision. During the afternoon there were 219 vehicles, 105, or 48% of which were shown to be cut through traffic.

Discussion and Options

From the traffic count data collected and the results of the license plate study; It is very clear that the residents of Judson Park are correct in their assessment of the traffic in their subdivision. It seems that the root cause of these two problems is the flow of traffic and the lack of capacity on Tienken and Adams Roads. The backup of westbound Tienken Road due to the inability to turn left onto Adams Road, and the backup of Adams Road due to the slow left turns onto eastbound Tienken Road causes drivers during peak hours to try and find alternate routes in order to avoid this intersection. There are no road improvements scheduled for Tienken or Adams Roads at this time. Changes being made to the access points to the Adams High School parking lot may improve the flow somewhat, but until the intersection is improved it will most likely continue to be a problem.

Action Requested