

Legislation Text

File #: 19-1121, Version: 1

TRANSPORTATION ADVISORY BOARD AGENDA ITEM**ACTION REQUESTED:**

Approve a recommendation to establish a 35 MPH speed limit for 91st Street between Normantown Road and Schoger Drive.

DEPARTMENT: Transportation, Engineering and Development

SUBMITTED BY: Ray Fano, P.E.

BACKGROUND:

91st Street is a two-lane collector street located in the south part of Naperville. It is bounded by Normantown Road to the west, Carillon Club Subdivision to the south, Schoger Drive to the east, and Wheatland Township to the north. Prior to 2019, the stretch of 91st Street between Wolf's Crossing Road and Schoger Drive was only two lanes with ditches on both sides. In the summer of 2019, it was improved to city standards with new pavement, curb and gutter, sidewalk, storm sewers, and lighting.

DISCUSSION:

When the road was brought up to city standards, staff received speeding concern and a request from a nearby resident to install a speed limit sign along the roadway. As a result, the Transportation, Engineering and Development Business Group (TED) investigated the need to establish a speed limit at 91st Street.

The study warrants used to establish speed limits are in Section B of the Illinois Department of Transportation (IDOT) "Policy on Establishing and Posting Speed Limits" and the Illinois Vehicle Code. The 85th percentile speed and the upper 10 MPH pace speed for 91st Street were measured from September 5 to September 13, 2019. The 85th percentile speed average for 91st Street is 36 MPH. The top of pace average is 38 MPH. The prevailing speed is the average of the 85th percentile speed average and the top of pace average, which equates to 37 MPH.

Section B of the IDOT manual allows for adjustments when altering a speed limit due to road factors. Those factors/conflicts include the presence and/or number of driveways, pedestrians, crashes, and parking. The following are the allowable conflict reductions:

1. 10% for driveways - 91st Street has a total of 320 driveways and street intersection conflicts per mile.
2. 0% for pedestrians - 91st Street has a continuous separated sidewalk on the south side of the road and is not a designated school walk route.
3. 0% for crashes - The crash rate, determined by comparing the amount of crashes on a given road to the citywide average per year, for 91st Street is currently at zero. In order to receive a

reduction, the crash rate must be greater than 1.5.

4. 0% for parking - On-street parking is not allowed on 91st Street.

Taking all the allowable reductions, the adjusted prevailing speed is calculated to be 33.3 MPH for 91st Street. The adjusted prevailing speed is set to the nearest 5 MPH increment, which establishes a speed limit of 35 MPH as the lowest possible speed limit in accordance with the IDOT manual and the Illinois Vehicle Code. The speed study worksheet illustrating the allowable reductions and location map are attached.