



Agenda Item Summary

File #: MOT 22-70, **Version:** 1

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Agenda Item Title

A Motion to Concur with the Transportation Commission's Recommendations, as Amended by Staff, to Implement Portable Speed Radar Signs or Speed Wagons on an Intermittent Basis on the 500 and 600 Blocks of North Taylor Avenue and to Install Rumble Strips on Taylor by the Alley North of Chicago Avenue

Overview

The Village of Oak Park received petitions to install traffic calming devices on the 500 and 600 blocks of North Taylor Avenue. At its June 14, 2022 meeting, the Transportation Commission voted to recommend deploying portable speed wagons as well as speed radar signs, installing a rumble strip across Taylor Ave south of the alley north of Chicago Ave, and eliminating the Taylor Avenue driveway into the BP gas station. Staff has amended the commission's recommendations to not include the recommendation regarding removing BP's driveway since it is not an approved tool available to the commission for traffic calming petitions and is not feasible as this driveway is needed in order for the gas station to have deliveries of fuel.

Recommendation

Approve the Motion.

Fiscal Impact

There is no fiscal impact to installing the portable speed radar signs, speed wagon, or targeted police enforcement. The Village already owns all of the equipment listed.

Staff estimates it will cost approximately \$1,000 to install temporary rumble strips across Taylor. Prefabricated rumble strips will be used on Taylor which are applied to the existing pavement surface like tape but will likely not last through the winter due to snow plow damage. A permanent rumble strip will be cut into the existing asphalt as a part of a 2023 resurfacing construction project. Costs for the permanent rumble strips are estimated at approximately \$1,000. There are available funds in the FY22 Budget in the Capital Improvement Fund, Public Works - Engineering, Traffic Calming Improvements, account no. 3095-43780-101-570955 for this work.

Background

On March 2, 2022, the Village of Oak Park received a petition to install traffic calming devices on the 500 and 600 blocks of North Taylor Avenue. Residents representing 80.59% and 69.51% of the street frontage on the

petitioning blocks signed the petition. The petition was certified as a valid petition.

Reasons provided for the petition include: the neighborhood has many children on the block and Whittier School is two blocks away. Being the first north-south street west of Austin Boulevard from Augusta Street to Chicago Avenue and the gas station at Taylor Avenue and Chicago Avenue attracts additional traffic which results in an increased volume of traffic with speeding cars and causing accidents. A belief that passing traffic has been responsible for recent gunshots in the neighborhood. On August 1, 2021 (after midnight) and August 18, 2021 (1:30 pm) gunshots were fired from vehicles on the 500 block of North Taylor Avenue. And a belief the increased traffic and traffic generated by the BP gas station has contributed to the gunshot problem. See Attachment A for a copy of the letter of explanation. See Attachment B for copies of the written public testimony received by the Village for these petitions.

The petition was reviewed by the Transportation Commission at its June 14, 2022, virtual meeting. Staff gave a presentation on the issues including: background on the petition, history of the area, analysis of the collected traffic data, and collision diagrams.

The organizers of the petitions provided public testimony on the items. After hearing the Staff's presentation and public testimony, the Transportation Commission deliberated on the item. The draft minutes for the June 14, 2022, Transportation Commission meeting are included as Attachment F.

At the June 14, 2022 meeting, the Transportation Commission voted four to zero in favor of the following recommendations: 1) to add to staff's recommendation of deploying portable speed wagons as well as speed radar signs that can be installed onto light poles on an intermittent basis to bring down the speeds along those blocks, and 2) install a rumble strip across North Taylor Avenue in the section between Chicago Avenue and the east-west alley north of Chicago Avenue. Staff has amended the commission's recommendations to not include the recommendation regarding removing BP's driveway since it is not an approved tool available to the commission for traffic calming petitions and is not feasible as this driveway is needed in order for the gas station to have deliveries of fuel.

Analysis Section

Traffic Study - Volume and Speed (Attachment C)

A directional, 48-hour traffic volume and speed study was conducted on Tuesday and Wednesday, May 24 and 25, 2022 for the 400, 500, and 600 blocks of North Taylor Avenue and North Lombard Avenue. The results were analyzed and summarized (see Attachment C). Peak hour turning movement counts (TMC) were also collected on Tuesday, May 24, 2022, for the three BP gas station driveways. Two of the driveways are located on Chicago Avenue and the third is located on Taylor Avenue.

Reviewing the 48-hour volumes for the three Taylor blocks studied, the two-way average daily traffic (ADT) ranged from a low of 893 vehicles to a high of 1040 vehicles. The volumes for the Taylor blocks fall within the 800 to 1,200 vehicle range for typical daily volume on residential blocks within the Village of Oak Park.

Reviewing the 48-hour volumes for the three Lombard blocks studied, the two-way ADT volumes ranged from a low of 1730 vehicles to a high of 2070 vehicles. Per the Village's Comprehensive Plan,

Lombard Avenue is classified as a collector street. Collector streets serve as feeders from the less-frequently used residential blocks to the more heavily traveled arterial streets. Consequently, it is expected that vehicle volumes on the collector streets would be higher. Therefore, the ADT volumes on Lombard Avenue are within the expected range for collector streets in the Village.

Based on the collected traffic data, it does not appear there is an excessive volume of vehicles traveling on the petitioning blocks.

Regarding vehicular speeds, it is an accepted traffic engineering practice to set the speed limit to the 5-mile per hour increment above or below the 85th percentile speed. Village Staff holds the opinion that the majority of drivers will drive at or near the posted speed limit. In addition, it is an accepted fact that the speed indicated on speedometers can vary up to 2 percent above or below the actual speed of the vehicle.

By definition, the 85th percentile speed is the speed at which 85 percent of the vehicles are traveling at or less than. Conversely, 15 percent of the vehicles will be traveling faster than the 85th percentile speed. It has already been stated that speed limits are typically set to the 5-mile per hour increment above or below the 85th percentile speed. This implies that it is expected that approximately 15 percent of vehicles will be traveling faster than the speed limit if the speed limit is the 5 mile per hour (mph) increment below the 85th percentile speed.

Next is the review of the vehicle speed data from the May 24 and 25, 2022 traffic study results for the 400, 500, and 600 blocks of North Taylor and North Lombard Avenues. The 85th percentile speeds for all blocks ranged between 24 mph and 29 mph.

The first day of data collection, five of the six blocks had 85th percentile speeds above 25 mph (ranging from 26 mph to 29 mph). While on the second day, only two of the six blocks had 85th percentile speeds that remained over the posted speed limit. The two blocks are the 600 block of North Taylor Avenue and the 400 block of North Lombard Avenue.

As previously mentioned, it's expected that the majority of motorists will drive at or close to the speed limit and that speeds indicated on speedometers can vary above or below the actual speed of the vehicle. Consequently, the 85th percentile speeds calculated in this 2022 traffic study for the petitioning blocks is what staff would consider marginally elevated when compared to the 25 mph speed limit.

Based on the traffic studies conducted in 2022, there appears to be a slight speeding issue on the 500 and 600 blocks of North Taylor Avenue.

Crash History - Collision Diagrams (Attachment D)

Collision diagrams for the intersections of Taylor Avenue and Augusta Street, Taylor Avenue and Iowa Street, and Taylor Avenue and Chicago Avenue were generated (see Attachment D).

The number of reported crashes that occurred at the Taylor Avenue and Augusta Street intersection for the thirty-six months ended May 31, 2022, totaled two. One crash involved striking a fence while the other involved a left-turning vehicle striking a bicyclist.

The driver stated they waited for an eastbound car to pass before turning left but did not see the eastbound bicyclist that was right behind the car. The average daily traffic (ADT) for the intersection as determined as part of the Village's 1997 area-wide traffic study was 4,998 vehicles. From this data, the 2022 crash rates for the Taylor Avenue and Augusta Street intersection are calculated to be 0.365 accidents per million entering vehicles (Acc/MEV).

The Taylor Avenue and Augusta Street intersection was part of the north section of the Village (from Augusta Street to North Avenue between Harlem Avenue and Austin Boulevard) as determined in the area-wide traffic study of 1997 (0.686 Acc/MEV). If an actual crash rate exceeds the critical crash rate then it is highly probable that the accidents were caused by factors other than chance. The crash rate for the Taylor Avenue and Augusta Street intersection is not above this section's critical crash rate.

The number of reported crashes that occurred at the intersection of Taylor Avenue and Iowa Street was zero crashes for the three-year period ending May 31, 2022. The crash rate for the Taylor Avenue and Iowa Street intersection is calculated to be 0.000 Acc/MEV.

The Taylor Avenue and Iowa Street intersection was part of the north-middle section of the Village (from South Boulevard to just south of Augusta Street between Harlem Avenue and Austin Boulevard) as determined in the area-wide traffic study of 1998 (0.860 Acc/MEV). The crash rate for the Taylor Avenue and Iowa Street intersection is not above this section's critical crash rate.

Lastly, the number of reported crashes that occurred at the Taylor Avenue and Chicago Avenue intersection for the thirty-six months ended May 31, 2022, totaled 10 crashes. The ADT for the intersection as determined as part of the Village's 1998 area-wide traffic study was 14,668 vehicles. From this data, the 2022 crash rate for the Taylor Avenue and Chicago Avenue intersection is calculated to be 0.623 Acc/MEV which are again lower than the critical crash rate (0.860 Acc/MEV) for the area.

In conclusion, there does not seem to be a problem with vehicle crashes on the 500 and 600 blocks of North Taylor Avenues.

Alternatives

The alternative to this recommendation could be to delay action to gain additional information.

Previous Board Action

At the March 21, 2022, Village Board meeting, the Village Board requested staff prepare a motion to amend the Transportation Commission's 2022 work plan to review the traffic calming petition for the 500 and 600 blocks of North Taylor Avenue ahead of the backlog of other petitions due to the concerns regarding recent crime in the area.

At the April 4, 2022, Village Board meeting, the Village Board Amended the Transportation Commission's 2022 Work Plan to Include the Review of the Traffic Calming Petition for the 500 and 600 Blocks of North Taylor and to Review this Petition Ahead of Other Petitions.

Citizen Advisory Commission Action

At its June 14, 2022 meeting, the Transportation Commission recommended the following:

1. Support the Staff recommendation to implement portable speed radar signs or speed wagons on an intermittent basis on the 800 blocks of North Cuyler Avenue and North Harvey Avenue.
2. Install a rumble strip across North Taylor Avenue in the section between Chicago Avenue and the east-west alley north of Chicago Avenue

The motion passed four to zero.

Anticipated Future Actions/Commitments

None at this time.

Intergovernmental Cooperation Opportunities

None at this time.