



Agenda Item Summary

File #: MOT 23-58, **Version:** 1

Submitted By

Ron Burke, Transportation Commission Chairperson
Village Engineer

Bill McKenna,

Reviewed By

A.M. Zayyad, Deputy Village Manager

Agenda Item Title

A Motion to Concur with the Transportation Commission's Recommendations for Traffic Calming at the Erie Street and Lombard Avenue Intersection with the Installation of Temporary Bump Outs on the Southern and Western Legs of Erie Street and Lombard Avenue Using Delineator Posts and Paint

Overview

At the April 11th Transportation Commission (TC) meeting, the TC reviewed a petition from the 200 block of North Lombard Avenue for traffic calming to address vehicles traveling at excessive speeds on the block, drivers using the block as a bypass to Austin Boulevard as well as motorists disregarding the STOP signs on Lombard Avenue at Erie Street. The petitioning block is one block to the east of Beye Elementary School campus. The TC recommended installing temporary bump-outs using delineator posts and paint on the southern and western legs of the Lombard Avenue and Erie Street intersection.

Recommendation

Approve the Motion.

Staff Recommendation

Staff supports the recommendation for the installation of the temporary bump-outs crossing Lombard Avenue on the southern leg of the intersection since this is the safe route to school crossing of a higher volume roadway. Staff does not support the recommendation for the additional bump outs on the west side of Erie Street since these are not part of the designated walking route to Beye Elementary School, Erie is not Stop controlled, and children can safely cross Erie at Harvey one-half block to the west adjacent to the school which is protected with all-way STOP signs.

Fiscal Impact

Staff estimates it will cost between \$5,000 and \$10,000 to implement the temporary bump-outs using the paint and post treatments. There are no available funds in the FY23 Budget for this work. The FY23 Budget includes \$55,000 in the Capitol Improvement Fund (CIP), Public Works - Engineering, Traffic Calming Improvements, account no. 3095-43780-101-570955 which are planned to be used for previously approved traffic calming measures.

Pending Village Board approval, staff will include the costs for these temporary bump-outs as part of an

upcoming Budget Amendment to transfer funds from savings in the CIP Fund account for local street resurfacing to the CIP Fund account for traffic calming. Public Works staff will purchase and install the delineator posts and the pavement markings will be installed as part of the 23-2 Resurfacing of Various Streets project.

Background

On September 8, 2019, residents submitted a traffic calming petition and letter of explanation for the 200 block of North Lombard Avenue. Ultimately, residents representing 55.81% of the street frontage for the 200 block of North Lombard Avenue signed the petition. The petition was certified as a valid petition.

Reasons provided for the petition include: unsafe driving on the block, motorists using the block as a bypass to Austin Boulevard traveling at excessive speeds, drivers disregard the STOP signs on Lombard Avenue at Erie Street, and proximity to Beye Elementary School.

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 this petition.

Included in Attachment C is an aerial image of the petitioning block and surrounding area as well as Beye School's traffic safety plan.

The petition was reviewed by the Transportation Commission at its March 14, 2023 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 item. After hearing Staff's presentation and public testimony, the Transportation Commission agreed to table the item until staff can bring back additional options at the next meeting on the item. The minutes for the approved March 14, 2023, Transportation Commission meeting are included as Attachment I.

Staff brought the item back to the Transportation Commission at its April 11, 2023 meeting. At that meeting, staff presented a recommendation of temporary bump outs on the southern leg of Erie Street and Lombard Avenue using paint and post-treatment (Option 2 in Attachment D). This treatment is desirable because of the rapid implementation of the temporary calming device with a minimum amount of capital investment. With the temporary bump-outs, staff will be able to evaluate the calming measure's effectiveness at the intersection before investing in constructing the more expensive, permanent bump-outs. Please see Attachment E for more information on this temporary intersection traffic calming option.

At the April 11, 2023 meeting, the Transportation Commission voted five to zero in favor of the following recommendations for the intersection of Erie Street and Lombard Avenue: 1) temporary bump outs on the southern and western legs of the Erie Street and Lombard Avenue intersection via the paint and post-treatment as shown in Option 1 in Attachment D, and 2) deploy temporary speed radar signs as they are available on the 200 block of North Lombard Avenue.

Staff supports the recommendation for the installation of the temporary bump-outs crossing Lombard Avenue on the southern leg of the intersection since this is the safe route to school crossing of a higher volume roadway. Staff does not support the recommendation for the additional bump outs on the west side of Erie Street since these are not part of the designated walking route to Beye Elementary School, Erie is not Stop controlled, and children can safely cross Erie at Harvey one-half block to the west adjacent to the school which is protected with all-way STOP signs. Pending Village Board approval, pavement markings will be installed as part of the 23-2 Resurfacing of Various Streets project, and Public Works staff will purchase and install the delineator posts. Staff will evaluate the effectiveness and any operational impacts associated with these

temporary pinch points using posts and paint. Pending any concerns, staff will upgrade these to permanent concrete curbs and sidewalks when the street is next resurfaced in the future. Should there be any concerns associated with these temporary bump-outs staff will bring an item to the Transportation Commission to review alternate options to consider to achieve the same goal of improving pedestrian safety and traffic calming.

Analysis Section

Traffic Study - Volume and Speed (Attachment F)

A directional twenty-four-hour traffic volume and speed study was conducted on Wednesday, November 9, 2022, for the 200 and 300 blocks of North Lombard and North Taylor Avenues and the 300 block of North Harvey Avenue. See Attachment F for a summary of the results of the study.

Reviewing the 24-hour volumes for the blocks studied; the two-way average daily traffic (ADT) for the blocks ranged between 681 vehicles and 1,477 vehicles. Volumes for the Harvey and Taylor blocks fall at or below the 800 to 1,200 vehicle range for typical daily volumes on residential blocks within the Village of Oak Park. Vehicle volume results for both Lombard blocks studied are above the 1,200 vehicles per day threshold. However, Lombard Avenue is classified as a collector street in the Village. Collector streets serve as a feeder from the less-frequently traveled residential blocks to the more heavily traveled arterial roads and are expected to carry more traffic than residential blocks. Therefore, vehicle volume results for the 200 and 300 blocks of North Lombard Avenue are not considered excessive. Based on the collected traffic data, it does not appear there is an issue with the volume of vehicles traveling on the petitioning block.

Regarding vehicular speeds, it is an accepted traffic engineering practice to set the speed limit to the 5 mile per hour (mph) 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 mph 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 in the 5 mph increment below the 85th percentile speed.

Based on the review of the vehicle speed data from the traffic study results, the 85th percentile speeds for all blocks studied ranged between 26.2 mph and 29.8 mph. Consequently, the 85th percentile speeds collected in this 2022 traffic study are a little higher than expected for blocks with a 25 mph speed limit. Based on the data collected, it appears there is a slight speeding issue on the 200 block of North Lombard Avenue.

Traffic Study - Turning Movement Counts (Attachment G)

Turning movement data was collected on Wednesday, November 9, 2022, for the AM and PM peak hours as well as the afternoon (see Attachment G). The data provided is for the AM and PM peak hours of vehicle travel as well as during arrival and dismissal periods of Beye Elementary School. Results include both vehicle movements and pedestrian counts.

Crash History - Collision Diagrams (Attachment H)

Forty-eight months of vehicle crash reports covering the period of March 1, 2019, through May 28, 2023, were reviewed for the two intersections at either end of the 200 block of North Lombard Avenue: Erie Street & Lombard Avenue and Ontario Street & Lombard Avenue. Please see Attachment H for the collision diagrams.

The number of reported crashes that occurred at the Erie Street and Lombard Avenue intersection totaled two crashes. Both were right-angle collisions at the intersection. The average daily traffic (ADT) for the intersection as determined as part of the Village's 1997 area-wide traffic study was 2,194 vehicles. From this data, the 2023 crash rate for the intersection of Erie Street & Lombard Avenue is calculated to be 0.624 accidents per million entering vehicles (Acc/MEV).

The Erie Street & Lombard Avenue intersection was part of the north middle section of the Village's 1997 areawide traffic study (from Augusta Street to South Boulevard between Harlem Avenue and Austin Boulevard). The critical crash rate for the north middle section was calculated to be 0.860 Acc/MEV. The significance of the critical crash rate is 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. This intersection's 2023 crash rate is below the critical crash rate calculated for the north middle section of the Village.

For the Ontario Street & Lombard Avenue intersection, the number of reported crashes that occurred totaled three. One crash was a right-angle collision while the two other crashes were sideswipes of parked vehicles. The average daily traffic (ADT) for the intersection as determined as part of the Village's 1997 area-wide traffic study was 3,202 vehicles. From this data, the 2023 crash rate for the intersection of Ontario Street & Lombard Avenue is calculated to be 0.642 Acc/MEV which is again below the area's critical crash rate.

In conclusion, there does not seem to be a problem with vehicle crashes at either of the studied intersections.

Alternatives

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

Previous Board Action

N/A.

Citizen Advisory Commission Action

At its April 11, 2023 meeting, the Transportation Commission recommended the following:

1. Implement temporary bump outs on the southern and western legs of the Erie Street and Lombard Avenue intersection via the paint and post-treatment as shown in Option 1 in Attachment D, and
2. Deploy temporary speed radar signs as they are available on the 200 block of North Lombard Avenue.

The motion passed five to zero.

Anticipated Future Actions/Commitments

Pending Village Board approval, staff will include the costs for these temporary bump-outs as part of an upcoming Budget Amendment to transfer funds from savings in the CIP Fund account for local street resurfacing to the CIP Fund account for traffic calming.

Intergovernmental Cooperation Opportunities

None at this time.