

Staff Responses to Council Questions

9/7/2021

Active Agenda Item A. Motion: Direct Staff to Construct Traffic Safety Improvements at the Intersection of Prairie Avenue and Forest Avenue

Do we have any ability to require the trimming/removal of trees as it pertains to the house on the SW corner (picture below)? Given that it is a corner lot I would assume that there would be some recourse here to require more visibility to this area? But much of it is also on private property...

Yes, pursuant to Section 24.104 F of the Municipal Code, the Village may require the owner of trees and shrubs on private property which create a public safety concern to prune the vegetation. As part of the improvements to this intersection, staff will determine if privately owned vegetation should be pruned to improve visibility of motor vehicle operators.

Could temporary traffic calming measures (ie speed bumps) be added to Forest leading up to the stop sign, and if so what would they be?

The Village owns temporary speed humps that could be installed on Forest Ave. Based on FHWA guidance regarding spacing and distance from an intersection, only one speed hump could be placed along this block of Forest, roughly in the middle of the block, and its effectiveness would be limited. Single installations primarily slow cars down only in the immediate vicinity of the speed hump and generally do not change traffic patterns. Consistent speed and traffic volume reduction is not typically seen unless several speed humps are placed in a series. They can also impede emergency vehicles (an ambulance transporting a patient can be delayed by up to 10 seconds) and can create noise with cars and trucks decelerating and accelerating.

Could temporary bump outs, lane narrowing be installed? By "could" I mean, is that a practice we would use for testing measures (similar to the divider)?

Yes, staff could install devices that would narrow lane widths on a temporary basis. It is likely that lane narrowing would be accomplished with a center median. The center median could be designed to prohibit certain turning movements in a manner similar to the one installed a few months ago, if so directed by the Council. Alternatively, it could be shorter than the one previously installed such that it would not affect turning movements. Temporary bump outs are likely to affect stormwater drainage and plow operations, could impede bicycle traffic, and can be challenging to properly install and maintain.

If we were to close off the street temporarily, what metrics could we use to determine success, besides reduction in accidents? I would think things like dispersal to other streets, speed on other streets. Could we define those metrics up front?

The primary objective of this effort is to reduce the frequency and severity of vehicle crashes. The Council may choose to evaluate the effectiveness of the

temporary improvements based on factors such as traffic volumes and speeds on nearby streets. Once temporary changes are made to the intersection, staff will gather and assess the following data at several streets and locations near the intersection.

- Vehicle Volume (number of vehicles per day)
- Vehicle Speed
- Vehicular Crashes
- Pedestrian and Bicycle Crashes

There was a percentage mentioned about what percentage of accidents occur at this intersection in relation to the other intersections on prairie. Can you remind me what that is and/or share any of the data for this section of prairie (including main/prairie of available)?

From 2015 through 2020, an estimated 40% of the accidents along Prairie Ave, from Pershing Ave. to Forest Ave, occurred at the intersection of Prairie and Forest. Detailed accident data was not compiled for this estimate. However, according to the IDOT compiled GIS accident data for this stretch of Prairie Avenue, a total of 58 accidents occurred during this timeframe. If a more detailed and accurate analysis of accidents is desired, staff would need to compile and analyze all crash reports on Prairie Ave. for this timeframe, which will require additional time and effort. Accidents at Belmont Rd. and at Main St. were not included in this estimation, as these intersections are signalized and carry a significantly higher volume of traffic.

Of the accidents that have occurred at this intersection since 2015, and if the data is available, can you provide the breakdown of by month/year?

Vehicle Crashes by Month, 2015 to 2021

	2015	2016	2017	2018	2019	2020	2021 YTD	Total
Jan	--	1	--	--	--	--	1	2
Feb	--	--	--	--	--	1	1	2
Mar	1	--	--	--	--	--	--	1
Apr	--	1	--	1	--	--	2	4
May	--	--	--	--	--	--	--	0
Jun	1	1	--	--	--	1	1	4
Jul	--	--	--	--	--	--	--	0
Aug	--	1	--	--	1	1	1	4
Sep	--	--	--	1	1	--	NA	2

Oct	2	1	--	--	2	1	NA	6
Nov	--	--	--	--	--	--	NA	0
Dec	2	--	--	--	--	--	NA	2
Total	6	5	0	2	4	4	6	27

What was the most recent street closure in the village and (briefly) what was the impetus for that closure?

In conjunction with the reconstruction and widening of 55th Street completed by DuPage County, the Village directed that the north leg of the intersection of Webster and 55th Street be closed. It was closed because the sight distance for southbound Webster Street traffic for left, through and right turn movements was less than the minimum recommended.