

VILLAGE OF DOWNERS GROVE
Report for the Village
4/5/2022

SUBJECT:	SUBMITTED BY:
Speed Reduction Measures on 4800 Block of Forest Avenue	Andy Sikich Public Works Director

SYNOPSIS

A discussion of various potential speed reduction measures on the 4800 block of Forest Avenue.

STRATEGIC PLAN ALIGNMENT

The goals for 2021-2023 include *Top Quality Infrastructure* and *Exceptional Municipal Services*.

FISCAL IMPACT

N/A

RECOMMENDATION

UPDATE & RECOMMENDATION

This item was discussed at the Village Council meeting on March 15th, 2022. The main motion, *Direct Staff to Install Chicanes without Centerline Striping*, was tabled. The Council directed staff to provide information about:

- The effectiveness of chicanes without centerline striping
- Use of Speed Humps

After the meeting, staff received a Council question about the effectiveness of traffic calming improvements on Claremont Drive. The Background section of this report has been updated to include the information requested.

Staff recommends action at the discretion of the Village Council on the April 5th, 2022 Active Agenda.

BACKGROUND

NEW INFORMATION

Use of Chicanes without Centerline Striping

Staff is not aware of any research specifically done on the effectiveness of chicanes without centerline striping. However, the guidance from the Federal Highway Administration (FHWA), located [here](#), indicates that:

“The typical chicane separates opposing traffic by means of double solid yellow lines with recessed pavement markers. Even this may not be enough to discourage some motorists from cutting across the centerline to minimize deflection. To discourage this behavior, a raised median may be installed. The median may be narrow and mountable without landscaping. An alternative, if right-of-way permits, is to provide a wider and landscaped median.”

It is staff’s opinion that a chicane without centerline striping or a center median would not be as effective in reducing speeds. In addition, striping or a median should be provided upon exiting a chicane to direct drivers to shift back or they may end up driving head-on in the opposing lane.

Below are several possible alternatives regarding the use of chicanes.

Chicanes with Centerline Striping for the Entire Block



This is the option originally presented by staff, and remains the preferred approach. Two pairs of chicanes would be constructed as shown in the image, with centerline striping used for the entire block to define the travel lanes in each direction and provide visual lane narrowing. White parking box striping would be used to define the parking areas and support the lane narrowing effect for southbound traffic when no vehicles are parked there.

Chicanes with Partial striping (Through Chicanes Only)



This option would be similar to that above, however centerline striping would only be used through the chicanes. Parking box striping would not be used with this option.

Chicanes with Mountable Median in Lieu of Striping (Through Chicanes Only)



This option would be similar to that above, however in lieu of centerline striping through the chicanes,



narrow mountable concrete medians would be used to define the travel lanes. These would provide the visual cue necessary to keep motorists in their proper lanes. They would also help to dissuade motorists

from crossing the centerline to avoid slowing down, but could easily be driven over by emergency service vehicles without impacting their response time.

Use of Speed Humps

Information provided by the FHWA, located [here](#), indicates that speed humps should be placed at a midblock location, at least 150 feet from an unsignalized intersection, with a spacing between 260 and 500 feet. With the short length of the block in question (roughly 500'), these guidelines would result in one speed hump roughly in the middle of the block.

The FHWA guidance also indicates that speed humps can have an impact on emergency service response, and cites a typical delay for a fire truck between 3 and 5 seconds, and as much as 10 seconds for an ambulance carrying a patient.

It should be noted that the reduction in emergency response time is relatively minor for an individual speed hump. If multiple speed humps were to be installed on a more widespread basis around the Village, there could be a cumulative impact on overall emergency response times.

Effectiveness of Traffic Calming Improvements on Claremont Drive

In 2009, the Village made the following traffic calming improvements on Claremont Drive:

- Center Medians on the East and West Legs of the Osage Intersection
- Two Curb Bump Outs West of Grand
- Center Median on the West Leg of the Blackburn Intersection
- Two Curb Bump Outs East of the North Leg of the Lyman Intersection
- One Curb Bump Out at the South Leg of the Lyman Intersection
- One Speed Hump West of the Clayton Court Intersection
- One Speed Hump East of the Parkview Intersection

Traffic speeds were measured before the improvements were installed, and then again after installation in 2010 and 2012. The 85% speeds on the blocks with the speed humps dropped between 4 and 9 mph. These speeds ranged from 35-40 mph before the improvements were installed, and 30-35 mph after installation. Staff does not have any data regarding impact to emergency services as a result of these speed humps.

Previously Provided Information

During the discussion of the proposed improvements at the intersection of Prairie Avenue and Forest Avenue, residents on the 4800 block of Forest Avenue, between Franklin Street and Prairie Avenue, provided public comments regarding excessive vehicle speeds on this block. As a result, the Village Council requested that staff provide recommendations for speed reduction on Forest Ave. between Franklin St. and Prairie Ave.

Recent traffic counts, taken after the installation of the all-way stop sign at the intersection of Forest Ave. and Prairie Ave., indicate that this block of Forest Ave. carries between 1,400 and 1,500 vehicles per day, with an 85% speed between 32 and 33 mph. The current speed limit is posted at 20 mph. Previous traffic counts on this block indicate that it has historically carried between 1,600 and 2,300 vehicles per day.

Staff recommendations are as follows:

- Change speed limit to 25 mph to match the surrounding streets. This will allow the Police Department to enforce the speed limit effectively on this block. Per the Illinois Compiled Statutes (625 ILCS 5/11-604(b)), evidence obtained by speed detection devices used within 500 feet of a reduction in the speed limit is inadmissible in any prosecution for speeding. As this block is only about 500 feet long, and has existing 25 mph speed limits on either side of it, the police cannot currently enforce the 20 mph speed limit on this block with the use of radar detection equipment.
- Eliminate the existing parking restriction, which currently prohibits parking from 4 to 6 p.m. Parked cars physically and visually narrow lane widths, and generally help to reduce travel speeds.
- Add a double-yellow centerline stripe and white parking box striping to visually reduce lane widths and indicate parking areas. Narrowed lane widths generally help to reduce travel speeds.
- Consider adding chicanes by constructing curb bump outs at several locations along this block. Chicanes create a meandering travel path, which generally reduces travel speeds.

The Transportation and Parking Commission reviewed these recommendations at its meeting on January 12, 2022. At that meeting public comments were received from several residents on this block. None of the residents in attendance were in favor of the striping or chicanes, however they generally were in favor of removing the 4pm to 6pm parking restriction (so long as the 2-hour parking restriction remains in place) and several residents requested that parking be allowed on both sides of the street in lieu of the striping and chicanes.

Several of the residents in attendance also were not in favor of the speed limit adjustment to 25 mph. Instead, they asked if the 20 mph speed limit could be extended on Forest Avenue from Franklin Street to Warren Avenue.

The TaP Commission made a recommendation as follows:

- Remove the 4pm to 6pm parking restriction
- Allow parking on both sides of the street
- Reduce the speed limit to 20 mph on Forest between Franklin and Warren.

The TaP Commission did not recommend the addition of striping or chicanes.

Staff would support the parking restriction changes recommended by TaP, should the Council decide not to proceed with the recommended striping or chicanes. There are other residential Village streets of similar width, with curb & gutter, where parking is allowed on both sides of the street.

Staff does not support reducing the speed limit on Forest Avenue between Warren Avenue and Franklin Street. Staff recommends raising the speed limit on Forest between Franklin and Prairie to 25 mph to match the surrounding streets. However, if the Council desires to change the speed limit on Forest Avenue between Franklin and Warren, staff recommends that this specific item be returned to the TaP Commission so that the property owners along that block can be notified of the potential change and provide input prior to the Council approving said change.

ATTACHMENTS

Draft Meeting Minutes - TaP Commission January 12, 2022

VILLAGE OF DOWNERS GROVE
COUNCIL ACTION SUMMARY

INITIATED: Public Works DATE: April 5, 2022
(Name)

RECOMMENDATION FROM: _____ FILE REF: _____
(Board or Department)

NATURE OF ACTION:

STEPS NEEDED TO IMPLEMENT ACTION:

Ordinance

Motion to direct staff to (option a-b) :

Resolution

a. Install permanent centerline striping and chicanes on Forest Avenue between Franklin and Prairie Avenue.

Motion

b. Install permanent chicanes without centerline striping on Forest Avenue between Franklin and Prairie Avenue.

Other

SUMMARY OF ITEM:

Adoption of this motion shall direct staff to install certain traffic control measures on Forest Avenue.

RECORD OF ACTION TAKEN:

DRAFT

TRANSPORTATION AND PARKING COMMISSION
Minutes – January 12, 2022
Council Chambers – Village Hall
801 Burlington Avenue, Downers Grove

Chairman Carter called the January 12, 2022 meeting of the Transportation and Parking Commission to order at 7:00 P.M. and led the recitation of the Pledge of Allegiance.

ROLL CALL

Present: Chairman Carter, Commissioners Heverin, Lincoln, McDonough, Novak, O'Malley, Shiliga

Absent:

Staff: Public Works Director Andy Sikich, Transportation Manager Mike Tuman, and CSO Supervisor Jim Hartleb

Visitor Roster: Tom Schroder, Angie Winslow, Vito Siciliano, Sharon Siciliano, Steve Scarlati, Brian Erickson

A quorum was established.

Chairman Carter reviewed the procedures to be followed for the meeting, explaining that the Commission will forward a recommendation to the Village Council for approval.

APPROVAL OF SEPTEMBER 22, 2021 MINUTES
COMMISSIONER NOVAK MOVED TO ACCEPT MEETING MINUTES AS PRESENTED. COMMISSIONER SHILIGA SECONDED THE MOTION.

ALL IN FAVOR. THE MOTION PASSED UNANIMOUSLY BY VOICE VOTE 7:0.

PUBLIC COMMENT ON NON-AGENDA ITEMS

No public comment on non-agenda items.

File #1-22 4800 Block of Forest Speed Reduction Improvements

Public Works Director Andy Sikich presented information regarding this item. This block is located just west of Main St between Franklin St & Prairie Ave; posted speed limit of 20 mph; 2-hour parking on west side of street. Last year, The Transportation and Parking Commission (TaP) reviewed options for reducing the frequency and severity of accidents at the intersection of Forest & Prairie. Village Council subsequently deliberated and there is currently a temporary all-way stop at that intersection. Village Council has now requested that staff and TaP review options for reducing speeds on this block of Forest.

DRAFT

Traffic counts on this block were taken in December 2021, roughly two months after installation of the temporary all-way stop. The daily traffic volume is between 1,400-1,500 vehicles per day with the 85 percentile speeds at 32-33 mph.

There are 63 known street segments around the Village that are similar residential streets to Forest Ave., with traffic volumes over 1,400 vehicles per day, and 85 percentile speeds greater than or equal to 33 mph. While each street is unique, many have similar attributes regarding traffic volumes and speeds, and staff will continue to receive requests for speed reductions in other similar locations. The entire system must be kept in mind as recommendations are made.

Staff recommendations are as follows:

- Change the speed limit to 25 mph to match the surrounding streets. This will allow the Police Department to enforce the speed limit effectively on this block.
- Eliminate the existing parking restriction, which currently prohibits parking from 4-6pm.
- Add a double-yellow centerline stripe and white parking box striping to visually reduce lane widths and indicate parking areas.
- Consider adding chicanes by constructing curb bump outs at several locations along this block.

The Commission could include chicanes in their recommendation to be constructed as soon as practicable, or could recommend that they be constructed at a later date should the other recommendations not result in the desired effect.

Images of striping and chicanes were included in the presentation. Ballpark costs were given; \$1,000 for striping and \$25,000 for chicanes.

Mr. Sikich stated that, after the Agenda was published staff received two emails and one phone call from residents on this block. All three residents were opposed to staff's recommendations.

CHAIRMAN CARTER OPENED UP THE PUBLIC COMMENT PERIOD

PUBLIC COMMENT ON FILE #1-22

Steve Scarlati of 4811 Forest

- In favor of reducing volume, speed, & eliminating cut-through traffic
- Requests that TaP's recommendation to Council include a resolution of the volume issue.
- Not in favor of speed bumps, stripes, or Chicanes.\
- In favor of reducing traffic volume on Forest to reduce speed.

Angie Winslow of 4816 Forest

- In favor of reduction of volume and speed on Forest.
- Not in favor of changing speed limit, bumps outs and striping which will change the aesthetic of the block. Change restrictive parking hours.

Vito Siciliano of 4808 Forest

- Agrees with everything said by Steve Scarlati and Angie Winslow

DRAFT

- Requests: Westbound Franklin traffic to be addressed; for parking to be allowed on both sides of Forest; for speeds and volume to be reduced.
- Not in favor of centerline and roadway striping.

Brian Erickson of 4805 Forest

- Agrees with Mr. Siciliano's point and requests for parking to be allowed on both sides of Forest.
- In favor of reducing volumes by restricting cut-through traffic.
- In favor of shrinking roadway width by 8-10'.
- Not in favor of striping.

Tom Schroder of 4815 Forest

- Requests both speed and volume issues be addressed, and for the elimination of cut-through traffic. Requests right-turn only for northbound traffic on Forest at Franklin.
- In favor of lowering the speed limit south of Franklin to 20 mph, lifting parking restriction limitations, and allowing parking on both sides of Forest.
- Not in favor of raising the speed limit to 25 mph, roadway striping, or Chicanes.

CHAIRMAN CARTER CLOSED THE PUBLIC COMMENT

Chairman Carter: This is a tough situation, but the Village is willing to listen and make changes in response to residents. He understands the importance of a neighborhood to the residents. Shifting the problem to another street is not a viable solution.

Commissioner Novak: Understands resident stress and concerns. Asked the following questions.

- Can the timing of traffic signals on Main be improved?
- Can something be done at Forest and Warren to encourage motorists to use Warren rather than go northbound on Forest?

Mr. Sikich responded that the goal of the signal timing on Main St. is to optimize traffic flow on Main St. This helps keep drivers from diverting off of Main St. by reducing traffic back-ups. Any additional green time given to Franklin would create additional back-ups on Main. Warren has a significant traffic volume already. Adding more traffic to eastbound Warren would not be advisable, as the signal at Warren and Main gets preempted frequently by the train.

Commissioner Shiliga: Understands residents are against striping. Asked the following questions.

- Is there data showing that striping equates to slower or safer driving?
- Is there a difference in timing of the traffic signals at Prairie & Belmont and Prairie & Main?
- He is in favor of removing the 4-6 pm parking restrictions, but does staff know why this restriction was created?
- Is the street wide enough for parking on both sides?

DRAFT

Mr. Sikich responded that the FHWA has quite a bit of data on all of the common speed reduction measures. The signal timings at Belmont and at Main are different. Belmont has an all-pedestrian preemption at certain times when it is red in all directions, and there is much more traffic on Belmont than on Main. Staff would have to assess whether there is enough room for emergency response vehicles with two cars parked across from one another. And, he does not know why the 4-6pm restriction was created, but staff does not believe it is beneficial.

Commissioner Heverin: Requested a review of east-side parking restrictions. May be an option to try first before other recommendations.

Commissioner O'Malley: Parked cars on both sides of the street would act as a Chicane. Agrees with the resident's recommendation of allowing parking on both sides.

Commissioner Lincoln: Has family that lives on a street with similar circumstances to Forest. Chicanes were installed and made a large positive difference. Would like to see if allowing cars to park on both sides of the street is feasible as a no cost alternative to chicanes.

CHAIRMAN CARTER ALLOWED ADDITIONAL PUBLIC COMMENT

Brian Erickson of 4805 Forest

- Based on the presentation illustration, there is room for parking on both sides of the street and a lane in the center for emergency vehicles to pass through.

Steve Scarlotti of 4811 Forest

- Slowing traffic without reducing volume will turn Forest into a parking lot. Requests that volume reduction be used as a tool on a trial basis to control speed by requiring right-turn only for northbound vehicles at Franklin.

Tom Schroder of 4815 Forest

- Believes that parking on both sides of the street will still allow for passage of emergency vehicles. Also stated that there was no back up at tracks during closure of Forest.

CHAIRMAN CARTER REOPENED DISCUSSION AMONGST THE COMMISSION

Commissioner McDonough: Asked if eliminating parking restrictions would cause concern for commuters parking there.

Mr. Sikich: Stated it would remain restricted to 2-hour parking.

Mr. Carter: Asked if the right-turn only may be added to recommendations.

Mr. Sikich: The Commission can make any recommendations, however at this time Council has requested recommendations concerning speed reduction.

Chairman Carter: Closing off Forest caused issues on other streets. Believes changing the parking restrictions may be the most effective solution. Has seen double-yellow lines in the area to slow traffic and believes that should be looked at.

DRAFT

Commissioner Shiliga: Asked what direction the majority of the traffic is.

Mr. Sikich: Replied that the majority of the traffic is northbound.

Commissioner Novak: Recommends extending 20 mph speed limit south of Franklin rather than raising this section to 25 mph. Not in favor of yellow centerline striping or chicanes.

Commissioner Lincoln: Asked how reducing speeds on a roadway affects volume.

Mr. Sikich: FHWA data varies. Sometimes speed reduction results in a volume reduction, but other times it does not.

Commissioner O'Malley: Believes lowering speed further south on Franklin could help.

Commissioner Lincoln: Supports extending the 20 mph speed limit further south on Franklin.

Chairman Carter: Asked PD if extension of 20 mph speed limit will help.

Mr. Hartleb: PD cannot enforce 20 mph with current length of street, because they can't enforce it within 500' of the speed limit change. Extending the 20 mph speed zone would allow for some additional enforcement.

Commissioner Heverin: Asked if Commission can recommend lowering the speed limit to 20 mph another block south.

Commissioner Lincoln: Would prefer to increase speed limit to 25 mph, but if it remains at 20 mph he would support reducing the speed limit to 20 mph south of Franklin to improve enforceability.

Chairman Carter: Asked Mr. Sikich how long until the street will be repaved, and could it be temporarily striped.

Mr. Sikich: The street is not scheduled to be repaved in the near future, and temporary striping with tape could be done, but is not advisable.

Commissioner Shiliga: Does not support chicanes due to resident feedback. In favor of trying parking on both sides of the street first.

Commissioner Lincoln: Believes chicanes would be effective, but is in favor of allowing parking on both sides of the street to see if that can get the same effect with lower cost.

DRAFT

WITH RESPECT TO FILE #1-22, MR. SHILIGA MOVED TO MAKE A MOTION TO RECOMMEND TO VILLAGE COUNCIL TO KEEP THE 20 MPH SPEED LIMIT ON FOREST AND EXTEND IT SOUTH ON FOREST TO WARREN; ELIMINATE THE 4-6PM PARKING RESTRICTION; AND ALLOW PARKING ON BOTH SIDES OF THE STREET. SECONDED BY MR. LINCOLN.

IN FAVOR: CHAIRMAN CARTER; COMMISSIONERS: HEVERIN, LINCOLN, MCDONOUGH, O'MALLEY & SHILIGA

NOT IN FAVOR: COMMISSIONER NOVAK

THE MOTION PASSED 6:1.

DISCUSSION OF OLD BUSINESS

No old business at this time.

COMMUNICATIONS

No communications at this time.

Commissioner Carter adjourned the meeting at 8:31 P.M.

Respectfully submitted,

/s/ Andrea Banke
Recording Secretary