

970017

To:

Stan Rickard, Public Works Director

From:

John Johnson, Technical Services Supervisor

Date:

July 28, 1997

Subject:

Request for Multiway Stop at Grace St. and Central Ave.

Mr. Steve VanDenBerg, of 472 E. Central, requested that Grace St. and Central Ave. be converted to a 4-way stop intersection. Attached are the traffic analyzer studies and accident data for this intersection.

According to the Manual on Uniform Traffic Control Devices, certain conditions must be met to warrant a multiway stop. The following are the conditions to be met:

1. An accident problem, as indicated by five or more reported accidents of a type susceptible of correction by a multiway stop installation in a 12-month period. Such accidents include right and left turn collisions as well as right-angle collisions.

2. Minimum traffic volumes:

- The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour for any 8 hours of an average day, and
- The combined vehicular and pedestrian volume from the minor street must average at least 200 units per hour for the same 8 hours.

The average vehicle count from all approaches for eight hours is 259 vehicles. The combined vehicle and pedestrian count for the same eight hours is 84, (74 actual vehicle, estimated 10 for pedestrians).

The LARS (Local Accident Reporting System) reports were retrieved from January 1993, through December 1995. There was one accident in the three year period.

The Village has since installed crosswalk and stop bar pavement markings on Grace St. and Central. Advance "Play Ground" warning signs have been installed for east and westbound Central Ave. and southbound Grace St.

On the basis of the above information, I would not recommend converting Grace St. and Central Ave. to a multiway stop.

IJ

cc: John Jaugilas, Trustee - District 4
Paul Kufrin, Trustee - District 6
Transportation and Safety Committee

NU-METRICS Traffic Analyzer Study Computer Generated Summary Report

Route: NB GRACE Location: CENTRAL

A survey of vehicle traffic was conducted with HISTAR unit number 427. The survey was done in the 0 lane on NB GRACE in LOMBARD, IL, in DUPAGE county. The survey lasted for 48.0 hours and began on Wednesday, May 28, 1997 at 10:00am and ended on Friday, May 30, 1997 at 10:00am. Data were recorded in 60 minute time periods. The total recorded volume of traffic showed 428 vehicles passed through the location with a peak volume of 44 on Wednesday, May 28, 1997 at 6:00pm and a minimum volume of 0 on Thursday, May 29, 1997 at 1:00am.

SPEED

Chart 1 lists the values of the speed bins and the total volume for each bin.

speed Bins

Half of the vehicles were traveling at 20 Mph or lower speed. The average speed for all classified vehicles was 21.1 Mph with 74.0 percent exceeding the posted speed of 15 Mph. The HI-STAR found 0.0 percent of the vehicles were traveling in excess of 55 Mph. The mode speed for this traffic study was 18.4 Mph and the 85th percentile was 24.6 Mph.

CLASS

Chart 2 lists the values of the 8 class bins and the total volume for each bin.

class Bins (ft)

Most of the vehicles were passenger cars with a total count of 389. This represents 97.25 percent of the classified vehicles. The truck percentage is 2.75 percent of the classified vehicles.

HEADWAY

During the peak time period, on Wednesday, May 28, 1997 at 6:00pm the average headway between the vehicles was 81.82 seconds. The slow period occurred on Thursday, May 29, 1997 at 1:00am and the headway between the vehicles averaged 0.00 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 57 degrees Fahrenheit and 86 degrees Fahrenheit. The HI-STAR analyzer determined that the roadway surface was WET 55 percent of the time.

Begin: 05/28/97 10:00 End: 05/30/97 10:00 Lane: 0 Hours: 48.0 HISTAR ID: 427

Route: NB GRACE Loc/Sta: CENTRAL City: LOMBARD

County: DUPAGE

Lane: 0 Oper: EP

Period: 60 min Posted: 15 MPH Raw Count: 428 AADT Count: AADT Factor: 1.00 214

-- DATE/TIME/VOLUME/AVG SPEED/TEMP Report --

DATE/TIME/VOLUME/AVG SPEED/TEMP REPORT						
DATE	TIME	VOLUME	AVG SPEED	TEMP	Wx	
05/28/97	10:00	9	19	70 F	Dry	
05/28/97	11:00	12	20	70 F	Dry	•
05/28/97	12:00	13	17	82 F	Dry	
05/28/97	13:00 1	16	17	86 F	Dry	
05/28/97	14:00 156	13	20	78 F	Dry	
05/28/97	15:00	12	18	72 F	Dry	
05/28/97	16:00	12	20	72 F	Dry	
05/28/97	17:00	30	23	68 F	Dry	
05/28/97	18:00	44	23	66 F	Dry	
05/28/97	19:00	8	21	64 F	Dry	
05/28/97	20:00	4	20	64 F	Dry	
05/28/97	21:00	6	25	63 F	Dry	
05/28/97	22:00	2	20	63 F	Dry	
05/28/97	23:00	7	22	63 F	Dry	
05/29/97	0:00	1	20	63 F	Dry	
05/29/97	1:00	0	0	63 F	Dry	
05/29/97	2:00	0	0	63 F	Dry	
05/29/97	3:00	0	0	61 F	Dry	
05/29/97	4:00	1	20	61 F	Dry	
05/29/97	5:00	1	20	61 F	Dry	
05/29/97	6:00	6	22	63 F	Dry	
05/29/97	7:00	8	25	61 F	Wet	
05/29/97	8:00	7 -	21	63 F	Wet	
05/29/97	9:00	7	18	70 F	Wet	
05/29/97	10:00	7	18	72 F	Wet	
05/29/97	11:00	9	23	78 F	Wet	
05/29/97	12:00	12	15	72 F	Dry	
05/29/97	13:00	9	19	74 F	Wet	
05/29/97	14:00	11	19	70 F	Wet	
05/29/97	15:00	16 .	19	70 F	Wet	
05/29/97	16:00	21	22 .	72 F	Wet	
05/29/97	17:00	21	21	68 F	Wet	
05/29/97	18:00	19	23	66 F	Wet	
05/29/97	19:00	34	21	63 F	Wet	·
05/29/97	20:00	7	25	63 F	Wet	
05/29/97	21:00	7	24	61 F	Wet	
05/29/97	22:00	3	32	63 F	Wet	
05/29/97	23:00	1	30	. 61 F	Wet	
05/30/97	0:00	1	30	61 F	Wet	



August 5, 1997

Mr. Paul Kufrin, Village Trustee Village of Lombard 255 E. Wilson Lombard, IL 60148

Dear Paul,

Pursuant to our discussion of this date, please consider this correspondence as formal request for the provision of a four-way stop intersection at the corners of Grace Street and Central Avenue. While I understand that this issue has previously been brought before the Safety Committee, the design and use of Southland has since been altered to include a parking lot and playground on the east side of the property. These two elements have contributed to increased vehicular traffic as well as foot traffic through the intersection.

While we are pleased with the recreational and passive use within the park site, there is a concern relative to safety. The general safety and well being of the park patrons of all ages would be further enhanced and better protected with the addition of two stop signs. I know that we would all be remiss in our respective duties should it take the life of a youngster to convince us that this is a feasible and worthy venture.

Thank you for your consideration in this matter. If I can be of any further assistance, please feel free to call me at 953-6110.

Sincerely,

Michael A. Fugiel Executive Director

