

050317

To: Wes Anderson, Director of Public Works

From: Justine Gembala, PE, Civil Engineer *JG*

Date: June 1, 2005

Subject: Request for Traffic Control at Morris Avenue and Church Avenue

Jan Parzgnat, 0S635 Church Avenue, contacted Public Works requesting the installation of stop signs at Morris Avenue and Church Avenue. In addition, a letter was sent to Public Works from residents in the vicinity of the intersection.

Morris Avenue and Church Avenue are narrow, unimproved streets, 22 feet and 20 feet wide respectively. The playground for Trinity Lutheran School and Church is on the southwest corner. There are school speed limit signs on Morris Avenue east and west of the school. This intersection is a designated school crossing without sidewalks. The Village sidewalk policy is to install sidewalks on one side of the street within three blocks of a school property on improved roadways. Since this roadway is unimproved, sidewalks will not be installed until there is a street improvement project consisting of the installation of curb and gutter, roadway pavement, streetlights and sidewalk. The Trinity Lutheran School and Church property, including the intersection of Morris Avenue and Church Avenue was annexed into the Village in April 2002. Therefore, this area will be considered in a future capital improvement program as a proposed street improvement project.

The traffic analyzer summary reports indicated that the volume of traffic on Morris Avenue traveling eastbound and westbound is 271 and 248 vehicles per day, respectively. Some of these vehicles may be turning north on Luther Avenue from Roosevelt Road to avoid the traffic signal at Westmore-Meyers Road. However, these volumes are reasonable for a residential roadway. In addition, Church Avenue 225 feet north of Roosevelt Road is one way southbound. This minimizes the number of vehicles using Morris Avenue at Church Avenue. The volume of traffic on Church Avenue traveling northbound and southbound is 58 and 64 vehicles per day, respectively.

Regarding stop signs, the volumes on Morris Avenue are below the nationally recognized minimum requirements warranting the installation of multi-way stop controls. On the southeast corner there is a very large, dense bush. This creates a CAS (Critical Approach Speed) of 13 MPH. The northeast corner has a cluster of lilac bushes, creating a CAS of 20 MPH. When a CAS is under 10 MPH, stop signs should be used to control traffic. When a CAS is between 10 – 15 MPH, yield signs should be used to control traffic.

The traffic analyzer 48-hour speed surveys revealed that most motorists are traveling at a speed of 33 MPH or less when traveling on Morris Avenue.

Accident reports were run from January 2003 through December 2004. No accidents occurred at this intersection.

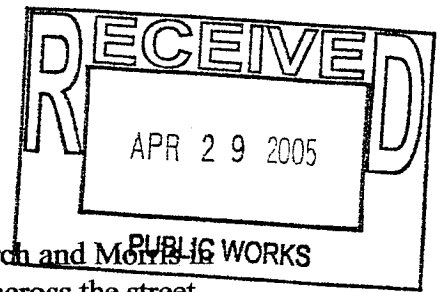
Based on the above information, it is recommended to assign right of way to Morris Avenue at Church Avenue and install stop signs on Church Avenue. Normally yield signs would be recommended; however, since this intersection is a designated school crossing with no sidewalks and children very close to moving traffic, the enhanced traffic control is warranted. It is recommended to stop Church Avenue because when a two-way stop control is installed, the street carrying the lowest volume of traffic should be stopped.

In addition, it is recommended to install school advance warning signs on Morris Avenue in advance of the school speed limit signs east and west of the school and school crosswalk warning signs at the school crossing. Since Morris Avenue east of Church Avenue is in York Township, approval was received from Dick Schroeder, Highway Commissioner, to install the school advance warning sign.

This item will be on the June 6, 2005 Transportation and Safety Committee agenda. The meeting is held at the Village Hall in the Community Room at 7:30 PM. This is a public meeting and public participation is encouraged.

JG/jj

cc: Jan Parzgnat, 0S635 Church Avenue, Lombard
Ms. Steben, 1146 S. Church Avenue, Lombard
Ms. Huizenga, 0S625 S. Church Avenue, Lombard
Mr. Krohse, 1008 E. Roosevelt Road, Lombard
Ms. Thompson, 1145 S. Meyers Road, Lombard
Steve Seby, Trustee, District 4
Rick Soderstrom, Trustee, District 6
Transportation and Safety Committee
Dick Schroeder, Highway Commissioner, York Township



To whom it may concern,

We think that a stop sign is needed at the intersection of Church and Morris Lombard. There are 18 children on our small block and a few more across the street. Some children cross the street to go to Trinity Lutheran School.

Cars cut through this neighborhood to avoid the light at Roosevelt Rd. If there were a stop sign it would slow the traffic down and give them more of a chance to see children crossing. There is a lot more cars during A.M. and P.M. rush hour. That is where we feel it is most dangerous. I have watched the cars speed by during the day, when the kids are on the playground. If there were a stop sign, cars would have a better chance at stopping when a ball goes across the street and a child follows. We feel that having a stop sign installed would increase the safety of all the children in the neighborhood and in the school. Thank you for considering this.

Lath Steben
1146 S. Church

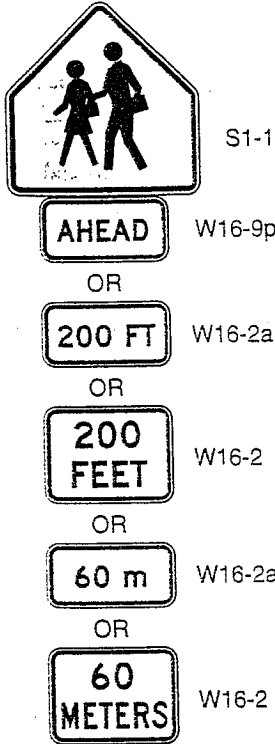
Ernoch Thompson
1145 S Meyers Rd

Aisa Heujenop
05625 Church Ave.
(This is also my kids bus stop)

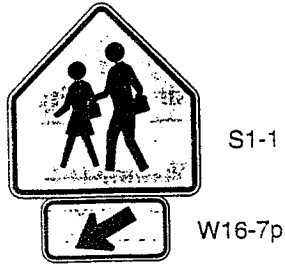
Ken Krause
1005 E. Roosevelt

Figure 7B-1. School Area Signs

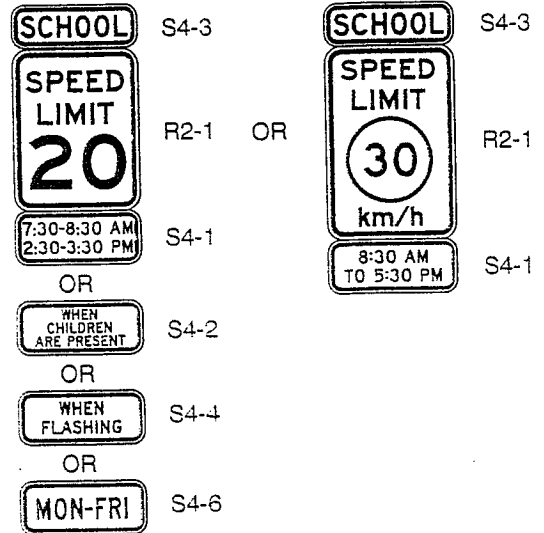
School Advance Warning Assembly



School Crosswalk Warning Assembly



School Speed Limit Assembly



S3-1



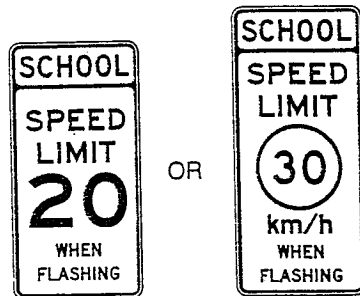
S4-5



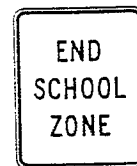
S4-5a



OR



S5-1



S5-2

**Nu-Metrics Traffic Analyzer Study
Computer Generated Summary Report
City: Lombard
Street: EB Morris at Church**

A study of vehicle traffic was conducted with HI-STAR unit number 2962. The study was done in the lane on EB Morris at Church in Lombard, IL in DuPage county. The study began on 04/26/2005 at 11:00 AM and concluded on 04/28/2005 at 11:00 AM, lasting a total of 48 hours. Data was recorded in 60 minute time periods. The total recorded volume of traffic showed 542 vehicles passed through the location with a peak volume of 36 on 04/26/2005 at 05:00 PM and a minimum volume of 0 on 04/27/2005 at 02:00 AM. The AADT Count for this study was 271.

SPEED

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

Chart 1

0	10	15	20	25	30	35	40	45	50	55	60	65	70	75
to	to	to	to	to	to	to	to	to	to	to	to	to	to	>
9	14	19	24	29	34	39	44	49	54	59	64	69	74	
0	15	130	141	155	62	22	7	1	2	1	0	0	3	1

At least half of the vehicles were traveling in the 20 - 24 mph range or a lower speed. The average speed for all classified vehicles was 25 mph with 18.3 percent exceeding the posted speed of 30 mph. The HI-STAR found 0.93 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 25 mph and the 85th percentile was 31.45 mph.

CLASSIFICATION

Chart 2 lists the values of the eight classification bins and the total traffic volume accumulated for each bin.

Chart 2

0	21	28	40	50	60	70	80
to	to	to	to	to	to	to	>
20	27	39	49	59	69	79	
512	19	4	2	1	0	1	1

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 531 which represents 98.30 percent of the total classified vehicles. The number of Small Trucks in the study was 4 which represents 0.70 percent of the total classified vehicles. The number of Trucks/Buses in the study was 2 which represents 0.40 percent of the total classified vehicles. The number of Tractor Trailers in the study was 3 which represents 0.60 percent of the total classified vehicles.

HEADWAY

During the peak time period, on 04/26/2005 at 05:00 PM the average headway between the vehicles was 97.3 seconds. The slowest traffic period was on 04/27/2005 at 02:00 AM. During this slowest period, the average headway was 3600.0 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 50 and 91 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

Time/Speed Report

HI-Star ID: 2962	Begin: 04/26/2005 11:00 AM	End: 04/28/2005 11:00 AM
Street: EB Morris at Church	Lane:	Hours: 48:00
State: IL	Oper: EP	Period: 60
City: Lombard	Posted: 30	Raw Count: 542
County: DuPage	AADT Factor: 1	AADT Count: 271

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 >	Total
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04/26/2005

[11:00 AM-12:00 PM]	0	0	1	2	3	2	0	0	0	0	0	0	0	0	0	8
[12:00 PM-01:00 PM]	0	0	3	2	1	1	0	0	0	0	0	0	0	1	0	8
[01:00 PM-02:00 PM]	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	5
[02:00 PM-03:00 PM]	0	0	3	8	1	0	1	0	0	0	0	0	0	0	0	13
[03:00 PM-04:00 PM]	0	0	8	5	3	2	0	0	0	0	0	0	0	0	0	18
[04:00 PM-05:00 PM]	0	0	2	2	7	3	2	1	0	0	0	0	0	0	0	17
[05:00 PM-06:00 PM]	0	0	5	14	9	6	2	0	0	0	0	0	0	0	0	36
[06:00 PM-07:00 PM]	0	2	2	5	8	1	1	0	0	0	0	0	0	0	0	19
[07:00 PM-08:00 PM]	0	0	3	9	7	1	0	0	0	1	1	0	0	0	0	22
[08:00 PM-09:00 PM]	0	0	10	2	5	1	1	0	0	0	0	0	0	0	0	19
[09:00 PM-10:00 PM]	0	2	2	3	7	1	2	0	0	0	0	0	0	0	0	17
[10:00 PM-11:00 PM]	0	0	2	3	3	1	0	0	0	0	0	0	0	0	0	9
[11:00 PM-12:00 AM]	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	4	41	57	58	19	9	1	0	1	1	0	0	1	0	192

Daily Totals:	0	4	41	57	58	19	9	1	0	1	1	0	0	1	0	192
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04/27/2005

Time/Speed Report

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 >	Total
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04/27/2005

[12:00 AM-01:00 AM]	0	0	0	0	1	2	0	1	0	0	0	0	0	0	0	4
[01:00 AM-02:00 AM]	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	4
[02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[03:00 AM-04:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[04:00 AM-05:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
[05:00 AM-06:00 AM]	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
[06:00 AM-07:00 AM]	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	4
[07:00 AM-08:00 AM]	0	0	5	2	4	0	0	0	0	0	0	0	0	0	0	11
[08:00 AM-09:00 AM]	0	0	2	6	3	1	0	1	0	0	0	0	0	0	0	13
[09:00 AM-10:00 AM]	0	1	3	6	3	4	0	0	0	0	0	0	0	0	0	17
[10:00 AM-11:00 AM]	0	0	0	2	2	2	1	0	0	0	0	0	0	0	0	7
[11:00 AM-12:00 PM]	0	0	4	7	4	1	0	0	0	0	0	0	0	0	0	16
[12:00 PM-01:00 PM]	0	0	7	4	3	1	0	0	0	0	0	0	0	0	0	15
[01:00 PM-02:00 PM]	0	1	4	5	3	0	3	0	0	0	0	0	0	0	0	16
[02:00 PM-03:00 PM]	0	1	7	6	5	2	0	1	0	0	0	0	0	1	0	23
[03:00 PM-04:00 PM]	0	2	4	10	12	3	1	0	0	0	0	0	0	0	0	32
[04:00 PM-05:00 PM]	0	0	9	6	2	0	0	0	0	0	0	0	0	0	0	17
[05:00 PM-06:00 PM]	0	1	4	2	6	5	0	0	0	0	0	0	0	0	0	18
[06:00 PM-07:00 PM]	0	1	2	0	6	4	3	0	0	0	0	0	0	0	0	16
[07:00 PM-08:00 PM]	0	0	4	4	7	2	0	0	0	0	0	0	0	0	0	17
[08:00 PM-09:00 PM]	0	0	3	1	2	3	3	0	0	0	0	0	0	0	1	13
[09:00 PM-10:00 PM]	0	1	2	5	11	3	0	0	0	0	0	0	0	0	0	22
[10:00 PM-11:00 PM]	0	0	1	2	3	1	0	0	0	0	0	0	0	0	0	7
[11:00 PM-12:00 AM]	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4
	0	8	64	71	80	36	12	4	0	1	0	0	0	2	1	279

Daily Totals: 0 8 64 71 80 36 12 4 0 1 0 0 0 2 1 279

04/28/2005

[12:00 AM-01:00 AM]	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
[01:00 AM-02:00 AM]	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
[02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[03:00 AM-04:00 AM]	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
[04:00 AM-05:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[05:00 AM-06:00 AM]	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
[06:00 AM-07:00 AM]	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	3
[07:00 AM-08:00 AM]	0	1	7	2	1	1	0	0	0	0	0	0	0	0	0	12
[08:00 AM-09:00 AM]	0	1	10	7	5	1	1	1	0	0	0	0	0	0	0	26
[09:00 AM-10:00 AM]	0	0	2	0	4	3	0	0	0	0	0	0	0	0	0	9
[10:00 AM-11:00 AM]	0	0	2	1	5	2	0	1	0	0	0	0	0	0	0	11
	0	3	25	13	17	7	1	2	1	0	0	0	0	0	0	69

Daily Totals: 0 3 25 13 17 7 1 2 1 0 0 0 0 0 0 69

Time/Speed Report

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to >	Total
NC97 - mph																
Report Totals:	0	130	155	22	1	1	0	3	1							
		15	141	62	7	2	0	540								
Report Percentages:	0.00%	24.07%	28.70%	4.07%	0.19%	0.19%	0.00%	0.19%								
		2.78%	26.11%	11.48%	1.30%	0.37%	0.00%	0.56%								

**Nu-Metrics Traffic Analyzer Study
Computer Generated Summary Report
City: Lombard
Street: WB Morris at Church**

A study of vehicle traffic was conducted with HI-STAR unit number 799. The study was done in the lane on WB Morris at Church in Lombard, IL in DuPage county. The study began on 04/26/2005 at 11:00 AM and concluded on 04/28/2005 at 11:00 AM, lasting a total of 48 hours. Data was recorded in 60 minute time periods. The total recorded volume of traffic showed 495 vehicles passed through the location with a peak volume of 58 on 04/26/2005 at 05:00 PM and a minimum volume of 0 on 04/26/2005 at 10:00 PM. The AADT Count for this study was 248.

SPEED

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

Chart 1

0	10	15	20	25	30	35	40	45	50	55	60	65	70	75
to	to	to	to	to	to	to	to	to	to	to	to	to	to	>
9	14	19	24	29	34	39	44	49	54	59	64	69	74	
0	20	49	108	172	80	23	15	9	2	5	0	3	2	1

At least half of the vehicles were traveling in the 25 - 29 mph range or a lower speed. The average speed for all classified vehicles was 28 mph with 28.6 percent exceeding the posted speed of 30 mph. The HI-STAR found 2.25 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 25 mph and the 85th percentile was 34.17 mph.

CLASSIFICATION

Chart 2 lists the values of the eight classification bins and the total traffic volume accumulated for each bin.

Chart 2

0	21	28	40	50	60	70	80
to	to	to	to	to	to	to	>
20	27	39	49	59	69	79	
468	14	7	0	0	0	0	0

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 482 which represents 98.60 percent of the total classified vehicles. The number of Small Trucks in the study was 7 which represents 1.40 percent of the total classified vehicles. The number of Trucks/Buses in the study was 0 which represents 0.00 percent of the total classified vehicles. The number of Tractor Trailers in the study was 0 which represents 0.00 percent of the total classified vehicles.

HEADWAY

During the peak time period, on 04/26/2005 at 05:00 PM the average headway between the vehicles was 61.02 seconds. The slowest traffic period was on 04/26/2005 at 10:00 PM. During this slowest period, the average headway was 3600.0 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 50 and 78 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

Time/Speed Report

HI-Star ID: 799	Begin: 04/26/2005 11:00 AM	End: 04/28/2005 11:00 AM
Street: WB Morris at Church	Lane:	Hours: 48:00
State: IL	Oper: EP	Period: 60
City: Lombard	Posted: 30	Raw Count: 495
County: DuPage	AADT Factor: 1	AADT Count: 248

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 >	Total
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04/26/2005

[11:00 AM-12:00 PM]	0	2	2	5	0	2	1	0	0	0	0	0	0	0	0	12
[12:00 PM-01:00 PM]	0	1	1	3	5	4	0	1	1	0	0	0	0	0	0	16
[01:00 PM-02:00 PM]	0	0	0	1	4	4	0	1	0	0	0	0	0	0	0	10
[02:00 PM-03:00 PM]	0	0	0	3	9	1	0	2	1	1	0	0	0	0	0	17
[03:00 PM-04:00 PM]	0	1	3	4	18	10	2	0	0	0	0	0	0	0	0	38
[04:00 PM-05:00 PM]	0	3	0	12	18	9	2	3	1	0	1	0	0	0	0	49
[05:00 PM-06:00 PM]	0	0	5	15	25	8	2	1	0	0	1	0	1	0	0	58
[06:00 PM-07:00 PM]	0	0	1	0	0	0	2	0	1	0	0	0	0	0	0	4
[07:00 PM-08:00 PM]	0	1	0	2	0	0	0	0	2	0	0	0	1	0	0	6
[08:00 PM-09:00 PM]	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
[09:00 PM-10:00 PM]	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	3
[10:00 PM-11:00 PM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[11:00 PM-12:00 AM]	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
	0	8	12	45	82	40	9	9	6	1	2	0	2	0	0	216

Daily Totals:	0	8	12	45	82	40	9	9	6	1	2	0	2	0	0	216
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04/27/2005

Time/Speed Report

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 >	Total
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04/27/2005

[12:00 AM-01:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[01:00 AM-02:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[03:00 AM-04:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[04:00 AM-05:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[05:00 AM-06:00 AM]	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
[06:00 AM-07:00 AM]	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
[07:00 AM-08:00 AM]	0	0	3	2	1	1	0	0	0	0	0	0	0	0	0	7
[08:00 AM-09:00 AM]	0	1	2	0	3	0	1	0	0	0	0	0	0	1	0	8
[09:00 AM-10:00 AM]	0	0	0	1	3	0	1	0	0	0	0	0	0	0	0	5
[10:00 AM-11:00 AM]	0	0	0	1	0	1	0	1	0	0	0	0	0	0	1	4
[11:00 AM-12:00 PM]	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	3
[12:00 PM-01:00 PM]	0	1	1	1	6	4	0	0	0	0	0	0	0	0	0	13
[01:00 PM-02:00 PM]	0	2	3	2	1	2	1	0	0	0	0	0	0	0	0	11
[02:00 PM-03:00 PM]	0	1	3	6	4	1	1	0	0	0	1	0	0	0	0	17
[03:00 PM-04:00 PM]	0	1	7	9	2	6	1	1	1	0	0	0	0	0	0	28
[04:00 PM-05:00 PM]	0	0	1	10	25	5	3	1	0	0	0	0	1	1	0	47
[05:00 PM-06:00 PM]	0	0	4	14	15	5	4	0	0	1	0	0	0	0	0	43
[06:00 PM-07:00 PM]	0	0	2	11	10	8	1	1	0	0	0	0	0	0	0	33
[07:00 PM-08:00 PM]	0	0	4	1	4	1	0	0	0	0	0	0	0	0	0	10
[08:00 PM-09:00 PM]	0	0	2	3	4	1	0	0	0	0	0	0	0	0	0	10
[09:00 PM-10:00 PM]	0	0	2	1	0	1	0	0	1	0	0	0	0	0	0	5
[10:00 PM-11:00 PM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[11:00 PM-12:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	8	34	63	78	36	13	5	2	1	2	0	1	2	1	246

Daily Totals: 0 8 34 63 78 36 13 5 2 1 2 0 1 2 1 246

04/28/2005

[12:00 AM-01:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[01:00 AM-02:00 AM]	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
[02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[03:00 AM-04:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[04:00 AM-05:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[05:00 AM-06:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[06:00 AM-07:00 AM]	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
[07:00 AM-08:00 AM]	0	0	2	0	3	0	0	0	0	0	0	0	0	0	0	5
[08:00 AM-09:00 AM]	0	1	0	0	2	2	1	0	1	0	0	0	0	0	0	7
[09:00 AM-10:00 AM]	0	1	1	0	3	0	0	1	0	0	1	0	0	0	0	7
[10:00 AM-11:00 AM]	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	5
	0	4	3	0	12	4	1	1	1	0	1	0	0	0	0	27

Daily Totals: 0 4 3 0 12 4 1 1 1 0 1 0 0 0 0 27

Time/Speed Report

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 >	Total	
NC97 - mph																	
Report Totals:	0	49	172	23	9	5	3	1									489
		20	108	80	15	2	0	2									
Report Percentages:	0.00%	10.02%	35.17%	4.70%	1.84%	1.02%	0.61%	0.20%									
		4.09%	22.09%	16.36%	3.07%	0.41%	0.00%	0.41%									

**Nu-Metrics Traffic Analyzer Study
Computer Generated Summary Report
City: Lombard
Street: SB Church at Morris**

A study of vehicle traffic was conducted with HI-STAR unit number 6779. The study was done in the lane on SB Church at Morris in Lombard, IL in DuPage county. The study began on 04/26/2005 at 11:00 AM and concluded on 04/28/2005 at 11:00 AM, lasting a total of 48 hours. Data was recorded in 60 minute time periods. The total recorded volume of traffic showed 127 vehicles passed through the location with a peak volume of 9 on 04/26/2005 at 04:00 PM and a minimum volume of 0 on 04/26/2005 at 10:00 PM. The AADT Count for this study was 64.

SPEED

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

Chart 1

0	10	15	20	25	30	35	40	45	50	55	60	65	70	75	75
to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	>
9	14	19	24	29	34	39	44	49	54	59	64	69	74	74	
0	21	68	16	10	2	0	4	0	1	0	0	2	0	0	0

At least half of the vehicles were traveling in the 15 - 19 mph range or a lower speed. The average speed for all classified vehicles was 20 mph with 7.26 percent exceeding the posted speed of 30 mph. The HI-STAR found 1.61 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 15 mph and the 85th percentile was 25.20 mph.

CLASSIFICATION

Chart 2 lists the values of the eight classification bins and the total traffic volume accumulated for each bin.

Chart 2

0	21	28	40	50	60	70	80
to	to	to	to	to	to	to	>
20	27	39	49	59	69	79	
109	6	8	0	1	0	0	0

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 115 which represents 92.70 percent of the total classified vehicles. The number of Small Trucks in the study was 8 which represents 6.50 percent of the total classified vehicles. The number of Trucks/Buses in the study was 0 which represents 0.00 percent of the total classified vehicles. The number of Tractor Trailers in the study was 1 which represents 0.80 percent of the total classified vehicles.

HEADWAY

During the peak time period, on 04/26/2005 at 04:00 PM the average headway between the vehicles was 360.0 seconds. The slowest traffic period was on 04/26/2005 at 10:00 PM. During this slowest period, the average headway was 3600.0 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 48 and 89 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

Time/Speed Report

HI-Star ID: 6779	Begin: 04/26/2005 11:00 AM	End: 04/28/2005 11:00 AM
Street: SB Church at Morris	Lane:	Hours: 48:00
State: IL	Oper: EP	Period: 60
City: Lombard	Posted: 30	Raw Count: 127
County: DuPage	AADT Factor: 1	AADT Count: 64

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 >	Total
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04/26/2005

[11:00 AM-12:00 PM]	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
[12:00 PM-01:00 PM]	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
[01:00 PM-02:00 PM]	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
[02:00 PM-03:00 PM]	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
[03:00 PM-04:00 PM]	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
[04:00 PM-05:00 PM]	0	0	8	1	0	0	0	0	0	0	0	0	0	0	0	9
[05:00 PM-06:00 PM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
[06:00 PM-07:00 PM]	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
[07:00 PM-08:00 PM]	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
[08:00 PM-09:00 PM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
[09:00 PM-10:00 PM]	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
[10:00 PM-11:00 PM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[11:00 PM-12:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	2	18	7	2	0	0	1	0	0	0	0	0	0	0	30

Daily Totals: 0 2 18 7 2 0 0 1 0 0 0 0 0 0 0 30

04/27/2005

Time/Speed Report

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 >	Total
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04/27/2005

[12:00 AM-01:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[01:00 AM-02:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[03:00 AM-04:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[04:00 AM-05:00 AM]	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
[05:00 AM-06:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[06:00 AM-07:00 AM]	0	2	3	1	0	1	0	0	0	0	0	0	0	0	0	7
[07:00 AM-08:00 AM]	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6
[08:00 AM-09:00 AM]	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	6
[09:00 AM-10:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[10:00 AM-11:00 AM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
[11:00 AM-12:00 PM]	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
[12:00 PM-01:00 PM]	0	1	1	1	1	0	0	1	0	0	0	0	1	0	0	6
[01:00 PM-02:00 PM]	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
[02:00 PM-03:00 PM]	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	4
[03:00 PM-04:00 PM]	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
[04:00 PM-05:00 PM]	0	1	3	1	1	0	0	0	0	0	0	0	1	0	0	7
[05:00 PM-06:00 PM]	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	6
[06:00 PM-07:00 PM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
[07:00 PM-08:00 PM]	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
[08:00 PM-09:00 PM]	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
[09:00 PM-10:00 PM]	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
[10:00 PM-11:00 PM]	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
[11:00 PM-12:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	17	34	5	3	2	0	1	0	1	0	0	2	0	0	65

Daily Totals: 0 17 34 5 3 2 0 1 0 1 0 0 2 0 0 65

04/28/2005

[12:00 AM-01:00 AM]	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
[01:00 AM-02:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[03:00 AM-04:00 AM]	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
[04:00 AM-05:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[05:00 AM-06:00 AM]	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
[06:00 AM-07:00 AM]	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
[07:00 AM-08:00 AM]	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
[08:00 AM-09:00 AM]	0	0	4	2	0	0	0	1	0	0	0	0	0	0	0	7
[09:00 AM-10:00 AM]	0	0	6	0	1	0	0	1	0	0	0	0	0	0	0	8
[10:00 AM-11:00 AM]	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
	0	2	16	4	5	0	0	2	0	0	0	0	0	0	0	29

Daily Totals: 0 2 16 4 5 0 0 2 0 0 0 0 0 0 0 29

Time/Speed Report

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 >	Total
NC97 - mph																
Report Totals:	0	21	68	16	10	2	0	4	0	1	0	0	2	0	0	124
Report Percentages:	0.00%	16.94%	54.84%	12.90%	8.06%	1.61%	0.00%	3.23%	0.00%	0.81%	0.00%	0.00%	1.61%	0.00%	0.00%	0.00%

**Nu-Metrics Traffic Analyzer Study
Computer Generated Summary Report
City: Lombard
Street: NB Church at Morris**

A study of vehicle traffic was conducted with HI-STAR unit number 6759. The study was done in the lane on NB Church at Morris in Lombard, IL in DuPage county. The study began on 04/26/2005 at 11:00 AM and concluded on 04/28/2005 at 11:00 AM, lasting a total of 48 hours. Data was recorded in 60 minute time periods. The total recorded volume of traffic showed 116 vehicles passed through the location with a peak volume of 11 on 04/27/2005 at 05:00 PM and a minimum volume of 0 on 04/26/2005 at 11:00 AM. The AADT Count for this study was 58.

SPEED

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

Chart 1

0	10	15	20	25	30	35	40	45	50	55	60	65	70	75
to	to	to	to	to	to	to	to	to	to	to	to	to	to	>
9	14	19	24	29	34	39	44	49	54	59	64	69	74	
0	23	59	22	3	1	3	0	1	0	0	0	0	0	0

At least half of the vehicles were traveling in the 15 - 19 mph range or a lower speed. The average speed for all classified vehicles was 19 mph with 4.46 percent exceeding the posted speed of 30 mph. The HI-STAR found 0.00 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 15 mph and the 85th percentile was 23.00 mph.

CLASSIFICATION

Chart 2 lists the values of the eight classification bins and the total traffic volume accumulated for each bin.

Chart 2

0	21	28	40	50	60	70	80
to	to	to	to	to	to	to	>
20	27	39	49	59	69	79	
97	8	6	0	0	1	0	0

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 105 which represents 93.80 percent of the total classified vehicles. The number of Small Trucks in the study was 6 which represents 5.40 percent of the total classified vehicles. The number of Trucks/Buses in the study was 0 which represents 0.00 percent of the total classified vehicles. The number of Tractor Trailers in the study was 1 which represents 0.90 percent of the total classified vehicles.

HEADWAY

During the peak time period, on 04/27/2005 at 05:00 PM the average headway between the vehicles was 300.0 seconds. The slowest traffic period was on 04/26/2005 at 11:00 AM. During this slowest period, the average headway was 3600.0 seconds.

WEATHER

The roadway surface temperature over the period of the study varied between 48 and 89 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

Time/Speed Report

HI-Star ID: 6759	Begin: 04/26/2005 11:00 AM	End: 04/28/2005 11:00 AM
Street: NB Church at Morris	Lane:	Hours: 48:00
State: IL	Oper: EP	Period: 60
City: Lombard	Posted: 30	Raw Count: 116
County: DuPage	AADT Factor: 1	AADT Count: 58

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 >	Total
NC97 - mph																

04/26/2005

[11:00 AM-12:00 PM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[12:00 PM-01:00 PM]	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
[01:00 PM-02:00 PM]	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
[02:00 PM-03:00 PM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
[03:00 PM-04:00 PM]	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5
[04:00 PM-05:00 PM]	0	6	1	0	0	0	1	0	0	0	0	0	0	0	0	8
[05:00 PM-06:00 PM]	0	3	3	3	0	0	1	0	0	0	0	0	0	0	0	10
[06:00 PM-07:00 PM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[07:00 PM-08:00 PM]	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	5
[08:00 PM-09:00 PM]	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
[09:00 PM-10:00 PM]	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
[10:00 PM-11:00 PM]	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
[11:00 PM-12:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	15	17	7	0	0	2	0	0	0	0	0	0	0	0	41

Daily Totals: 0 15 17 7 0 0 2 0 0 0 0 0 0 0 0 41

04/27/2005

Time/Speed Report

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 >	Total
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04/27/2005

[12:00 AM-01:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[01:00 AM-02:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[03:00 AM-04:00 AM]	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
[04:00 AM-05:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[05:00 AM-06:00 AM]	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
[06:00 AM-07:00 AM]	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
[07:00 AM-08:00 AM]	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
[08:00 AM-09:00 AM]	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
[09:00 AM-10:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[10:00 AM-11:00 AM]	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
[11:00 AM-12:00 PM]	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
[12:00 PM-01:00 PM]	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	5
[01:00 PM-02:00 PM]	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
[02:00 PM-03:00 PM]	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
[03:00 PM-04:00 PM]	0	0	4	4	0	1	0	0	0	0	0	0	0	0	0	9
[04:00 PM-05:00 PM]	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
[05:00 PM-06:00 PM]	0	0	7	1	2	0	0	0	1	0	0	0	0	0	0	11
[06:00 PM-07:00 PM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[07:00 PM-08:00 PM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
[08:00 PM-09:00 PM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[09:00 PM-10:00 PM]	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
[10:00 PM-11:00 PM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[11:00 PM-12:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	7	28	13	3	1	1	0	1	0	0	0	0	0	0	54

Daily Totals: 0 7 28 13 3 1 1 0 1 0 0 0 0 0 0 54

04/28/2005

[12:00 AM-01:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[01:00 AM-02:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[03:00 AM-04:00 AM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
[04:00 AM-05:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[05:00 AM-06:00 AM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
[06:00 AM-07:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[07:00 AM-08:00 AM]	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
[08:00 AM-09:00 AM]	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
[09:00 AM-10:00 AM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
[10:00 AM-11:00 AM]	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
	0	1	14	2	0	0	0	0	0	0	0	0	0	0	0	17

Daily Totals: 0 1 14 2 0 0 0 0 0 0 0 0 0 0 0 17

Time/Speed Report

	0 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 >	Total
NC97 - mph	0	23	59	22	3	1	3	0	1	0	0	0	0	0	0	112

Report Totals: 0 59 3 3 1 0 0 0 0 0 0 0 0 0 112

Report Percentages: 0.00% 52.68% 2.68% 2.68% 0.89% 0.00% 0.00% 0.00% 0.00%
 20.54% 19.64% 0.89% 0.00% 0.00% 0.00% 0.00%