



To: Stan Rickard, Director of Public Works

From: John Johnson, Technical Services Supervisor

Date: November 21, 2001

Subject: Request for a Multi-Way Stop at Grove and Elizabeth

At the November 5, 2001 Transportation and Safety Committee meeting Mr. Steven Horvath, 314 W. Grove St. requested a multi-way stop at Elizabeth and Grove. Mr. Horvath was concerned with vehicles leaving the roadway and hitting light poles and fire hydrants. Attached for your review are the traffic analyzer reports and accident reports for the past 2 years.

The analyzer reports show that the majority of the drivers are operating their vehicles safely. There are a small percentage of drivers exceeding 30 MPH and not heeding the posted advisory speed of 20 MPH between Lincoln and Elizabeth and 10 MPH between Elizabeth and West. The Village has posted advance-warning signage with supplementary speed plates to help the driver negotiate the curves. When drivers fail to recognize these warning signs or are under the influence of drugs and alcohol, the signage is not the an issue

The accident reports show two areas of concern. Drivers are not stopping on Grove at Park and drivers are loosing control of their vehicles due to speed and sharp curves on Grove between Elizabeth and West . There were 4 mid block accidents, 1 allegedly driving under the influence of alcohol (left roadway twice), 2 backing into parked vehicles and 1 sideswipe due to snow.

Currently Elizabeth stops at Grove. The traffic volumes at Elizabeth and Grove do not meet the minimum warrant for a multi-way stop. There were no reported accidents at Elizabeth and Grove for the past 2 years.

Based on the above information, I would not recommend converting Elizabeth St. and Grove St. to a multi-way stop. I would recommend installing chevron signs at the curves on Grove St. between Elizabeth and West Rd. to better delineate the roadway. On Grove St. at Park Ave., I would recommend a new product, a highly reflective red strip that is attached to the stop sign post to add more visibility to the stop sign.

cc: Rick Stoderstrom, Trustee, District 6
Joan DeStephano, Trustee, District 1
Mr. Steven Horvath, 314 W. Grove St.
Transportation and Safety Committee

**Nu-Metrics Traffic Analyzer Study
Computer Generated Summary Report
City: LOMBARD
Street: N.B. Elizabeth@Grove**

A study of vehicle traffic was conducted with HI-STAR unit number 809. The study was done in the lane on N.B. Elizabeth@Grove in LOMBARD, IL in DUPAGE county. The study began on 11/13/2001 at 11:00 AM and concluded on 11/15/2001 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 642 vehicles passed through the location with a peak volume of 42 on 11/13/2001 at 05:00 PM and a minimum volume of 0 on 11/14/2001 at 02:00 AM. The AADT Count for this study was 321.

SPEED

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

Chart 1

0	11	16	21	26	31	36	41	46	51	56	60	65	70	75
to	to	to	to	to	to	to	to	to	to	to	to	to	to	>
10	15	20	25	30	35	40	45	50	55	59	64	69	74	
0	158	392	67	4	1	2	7	0	0	0	0	2	0	1

At least half of the vehicles were traveling in the 16 - 20 mph range or a lower speed. The average speed for all classified vehicles was 16 mph with 2.05 percent exceeding the posted speed of 30 mph. The HI-STAR found 2.05 percent of the total vehicles were traveling in excess of 30 mph. The mode speed for this traffic study was 16 mph and the 85th percentile was 16.36 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	69	81
to	to	to	to	to	to	to	>
20	27	39	49	59	68	80	
599	26	6	3	0	0	0	0

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 625 which represents 98.60 percent of the total classified vehicles. The number of Small Trucks in the study was 6 which represents 0.90 percent of the total classified vehicles. The number of Trucks/Busses in the study was 3 which represents 0.50 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 11/13/2001 at 05:00 PM the average headway between the vehicles was 83.72 seconds. The slowest traffic period was on 11/14/2001 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 52 and 76 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

Time/Speed Report

HI-Star ID: 809 Street: N.B. Elizabeth@Grove State: IL City: LOMBARD County: DUPAGE	Begin: 11/13/2001 11:00 AM Lane: Oper: EP Posted: 30 AADT Factor: 1	End: 11/15/2001 11:00 AM Hours: 48:00 Period: 60 Raw Count: 642 AADT Count: 321
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NC97 - mph	0	11	16	21	26	31	36	41	46	51	56	60	65	70	75	
Date & Time Range	to	to	to	to	to	to	to	to	to	to	to	to	to	to	>	Total
	10	15	20	25	30	35	40	45	50	55	59	64	69	74		
11/13/2001 [11:00 AM-12:00 PM]	0	4	10	3	0	1	0	0	0	0	0	0	0	0	0	18
11/13/2001 [12:00 PM-01:00 PM]	0	2	9	2	0	0	0	0	0	0	0	0	0	0	0	13
11/13/2001 [01:00 PM-02:00 PM]	0	3	4	3	1	0	1	5	0	0	0	0	1	0	0	18
11/13/2001 [02:00 PM-03:00 PM]	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	4
11/13/2001 [03:00 PM-04:00 PM]	0	4	21	3	0	0	0	1	0	0	0	0	0	0	0	29
11/13/2001 [04:00 PM-05:00 PM]	0	10	23	1	0	0	0	0	0	0	0	0	0	0	0	34
11/13/2001 [05:00 PM-06:00 PM]	0	9	31	2	0	0	0	0	0	0	0	0	0	0	0	42
11/13/2001 [06:00 PM-07:00 PM]	0	13	7	1	0	0	0	0	0	0	0	0	0	0	0	21
11/13/2001 [07:00 PM-08:00 PM]	0	5	11	3	1	0	0	0	0	0	0	0	0	0	0	20
11/13/2001 [08:00 PM-09:00 PM]	0	4	16	1	0	0	0	0	0	0	0	0	0	0	0	21
11/13/2001 [09:00 PM-10:00 PM]	0	3	7	0	0	0	0	0	0	0	0	0	0	0	0	10
11/13/2001 [10:00 PM-11:00 PM]	0	5	3	1	0	0	0	0	0	0	0	0	0	0	0	9
11/13/2001 [11:00 PM-12:00 AM]	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Daily Totals:	0		145		2		1		0		0		0	1		0
		64		21		1		7		0		0		0		242
11/14/2001 [12:00 AM-01:00 AM]	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11/14/2001 [01:00 AM-02:00 AM]	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11/14/2001 [02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2001 [03:00 AM-04:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2001 [04:00 AM-05:00 AM]	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11/14/2001 [05:00 AM-06:00 AM]	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
11/14/2001 [06:00 AM-07:00 AM]	0	3	6	0	0	0	0	0	0	0	0	0	0	0	0	9
11/14/2001 [07:00 AM-08:00 AM]	0	7	17	3	0	0	0	0	0	0	0	0	0	0	0	27
11/14/2001 [08:00 AM-09:00 AM]	0	4	12	2	0	0	0	0	0	0	0	0	0	0	0	18
11/14/2001 [09:00 AM-10:00 AM]	0	3	5	2	0	0	0	0	0	0	0	0	0	0	0	10
11/14/2001 [10:00 AM-11:00 AM]	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	11
11/14/2001 [11:00 AM-12:00 PM]	0	2	6	3	0	0	0	0	0	0	0	0	0	0	0	11
11/14/2001 [12:00 PM-01:00 PM]	0	3	11	3	1	0	0	0	0	0	0	0	0	0	0	18
11/14/2001 [01:00 PM-02:00 PM]	0	1	12	3	0	0	0	0	0	0	0	0	0	0	0	16
11/14/2001 [02:00 PM-03:00 PM]	0	2	13	3	1	0	0	0	0	0	0	0	1	0	0	20
11/14/2001 [03:00 PM-04:00 PM]	0	8	15	5	0	0	0	0	0	0	0	0	0	0	0	28
11/14/2001 [04:00 PM-05:00 PM]	0	5	20	2	0	0	0	0	0	0	0	0	0	0	0	27
11/14/2001 [05:00 PM-06:00 PM]	0	7	20	4	0	0	0	0	0	0	0	0	0	0	0	31
11/14/2001 [06:00 PM-07:00 PM]	0	2	12	1	0	0	0	0	0	0	0	0	0	0	0	15
11/14/2001 [07:00 PM-08:00 PM]	0	2	17	3	0	0	0	0	0	0	0	0	0	0	0	22
11/14/2001 [08:00 PM-09:00 PM]	0	8	16	0	0	0	0	0	0	0	0	0	0	0	0	24
11/14/2001 [09:00 PM-10:00 PM]	0	4	8	1	0	0	0	0	0	0	0	0	0	0	0	13
11/14/2001 [10:00 PM-11:00 PM]	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	6

Time/Speed Report

HI-Star ID: 809 Street: N.B. Elizabeth@Grove State: IL City: LOMBARD County: DUPAGE	Begin: 11/13/2001 11:00 AM Lane: Oper: EP Posted: 30 AADT Factor: 1	End: 11/15/2001 11:00 AM Hours: 48:00 Period: 60 Raw Count: 642 AADT Count: 321
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NC97 - mph	0	11	16	21	26	31	36	41	46	51	56	60	65	70	75	
Date & Time Range	to	to	to	to	to	to	to	to	to	to	to	to	to	to	>	Total
	10	15	20	25	30	35	40	45	50	55	59	64	69	74		

11/14/2001 [11:00 PM-12:00 AM]	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
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Daily Totals:	0	203		2		0		0		0		0		1	0	318
		74		38		0		0		0		0		0		

11/15/2001 [12:00 AM-01:00 AM]	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5
11/15/2001 [01:00 AM-02:00 AM]	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
11/15/2001 [02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/15/2001 [03:00 AM-04:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/15/2001 [04:00 AM-05:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/15/2001 [05:00 AM-06:00 AM]	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
11/15/2001 [06:00 AM-07:00 AM]	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	6
11/15/2001 [07:00 AM-08:00 AM]	0	5	16	4	0	0	0	0	0	0	0	0	0	0	0	25
11/15/2001 [08:00 AM-09:00 AM]	0	4	7	1	0	0	0	0	0	0	0	0	0	0	1	13
11/15/2001 [09:00 AM-10:00 AM]	0	2	5	2	0	0	0	0	0	0	0	0	0	0	0	9
11/15/2001 [10:00 AM-11:00 AM]	0	4	7	1	0	0	0	0	0	0	0	0	0	0	0	12

Daily Totals:	0	44		0		1		0		0		0		0	1	74
		20		8		0		0		0		0		0		

Report Totals:	0	392		4		2		0		0		2		1		634
		158		67		1		7		0		0		0		

Report Percentages:	0.00%	61.83%		0.63%		0.32%		0.00%		0.00%		0.32%		0.16%		
		24.92%		10.57%		0.16%		1.10%		0.00%		0.00%		0.00%		

**Nu-Metrics Traffic Analyzer Study
Computer Generated Summary Report
City: LOMBARD
Street: S.B. Elizabeth@Grove**

A study of vehicle traffic was conducted with HI-STAR unit number 9245. The study was done in the lane on S.B. Elizabeth@Grove in LOMBARD, IL in DUPAGE county. The study began on 11/13/2001 at 11:00 AM and concluded on 11/15/2001 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 447 vehicles passed through the location with a peak volume of 26 on 11/13/2001 at 06:00 PM and a minimum volume of 0 on 11/14/2001 at 12:00 AM. The AADT Count for this study was 224.

SPEED

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

Chart 1

0 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 55	56 to 59	60 to 64	65 to 69	70 to 74	75 >
43	36	243	22	1	0	0	0	0	0	0	0	0	0	0

At least half of the vehicles were traveling in the 16 - 20 mph range or a lower speed. The average speed for all classified vehicles was 15 mph with 0.00 percent exceeding the posted speed of 30 mph. The HI-STAR found 0.00 percent of the total vehicles were traveling in excess of 30 mph. The mode speed for this traffic study was 16 mph and the 85th percentile was 15.91 mph.

CLASSIFICATION

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

Chart 2

0 to 20	21 to 27	28 to 39	40 to 49	50 to 59	60 to 68	69 to 80	81 >
318	10	14	3	0	0	0	0

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 328 which represents 95.10 percent of the total classified vehicles. The number of Small Trucks in the study was 14 which represents 4.10 percent of the total classified vehicles. The number of Trucks/Busses in the study was 3 which represents 0.90 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 11/13/2001 at 06:00 PM the average headway between the vehicles was 133.33 seconds. The slowest traffic period was on 11/14/2001 at 12:00 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 52 and 72 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

Time/Speed Report

HI-Star ID: 9245 Street: S.B. Elizabeth@Grove State: IL City: LOMBARD County: DUPAGE	Begin: 11/13/2001 11:00 AM Lane: Oper: EP Posted: 30 AADT Factor: 1	End: 11/15/2001 11:00 AM Hours: 48:00 Period: 60 Raw Count: 447 AADT Count: 224
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NC90A - mph	0	11	16	21	26	31	36	41	46	51	56	60	65	70	75		Total
Date & Time Range	to	to	to	to	to	to	to	to	to	to	to	to	to	to	>		
	10	15	20	25	30	35	40	45	50	55	59	64	69	74			
11/13/2001 [11:00 AM-12:00 PM]	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11/13/2001 [12:00 PM-01:00 PM]	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	9
11/13/2001 [01:00 PM-02:00 PM]	3	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	10
11/13/2001 [02:00 PM-03:00 PM]	2	4	10	2	0	0	0	0	0	0	0	0	0	0	0	0	18
11/13/2001 [03:00 PM-04:00 PM]	2	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	12
11/13/2001 [04:00 PM-05:00 PM]	1	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	9
11/13/2001 [05:00 PM-06:00 PM]	2	2	7	2	0	0	0	0	0	0	0	0	0	0	0	0	13
11/13/2001 [06:00 PM-07:00 PM]	9	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	19
11/13/2001 [07:00 PM-08:00 PM]	2	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	10
11/13/2001 [08:00 PM-09:00 PM]	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11/13/2001 [09:00 PM-10:00 PM]	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
11/13/2001 [10:00 PM-11:00 PM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11/13/2001 [11:00 PM-12:00 AM]	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily Totals:	22		72		0		0		0		0		0		0		116
		15		7		0		0		0		0		0		0	
11/14/2001 [12:00 AM-01:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2001 [01:00 AM-02:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2001 [02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2001 [03:00 AM-04:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2001 [04:00 AM-05:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2001 [05:00 AM-06:00 AM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11/14/2001 [06:00 AM-07:00 AM]	0	2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	12
11/14/2001 [07:00 AM-08:00 AM]	0	1	15	1	0	0	0	0	0	0	0	0	0	0	0	0	17
11/14/2001 [08:00 AM-09:00 AM]	1	1	13	0	0	0	0	0	0	0	0	0	0	0	0	0	15
11/14/2001 [09:00 AM-10:00 AM]	2	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	9
11/14/2001 [10:00 AM-11:00 AM]	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	6
11/14/2001 [11:00 AM-12:00 PM]	0	0	11	0	1	0	0	0	0	0	0	0	0	0	0	0	12
11/14/2001 [12:00 PM-01:00 PM]	1	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	13
11/14/2001 [01:00 PM-02:00 PM]	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
11/14/2001 [02:00 PM-03:00 PM]	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
11/14/2001 [03:00 PM-04:00 PM]	1	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	13
11/14/2001 [04:00 PM-05:00 PM]	0	2	11	1	0	0	0	0	0	0	0	0	0	0	0	0	14
11/14/2001 [05:00 PM-06:00 PM]	0	3	9	1	0	0	0	0	0	0	0	0	0	0	0	0	13
11/14/2001 [06:00 PM-07:00 PM]	1	3	8	1	0	0	0	0	0	0	0	0	0	0	0	0	13
11/14/2001 [07:00 PM-08:00 PM]	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
11/14/2001 [08:00 PM-09:00 PM]	4	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	10
11/14/2001 [09:00 PM-10:00 PM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11/14/2001 [10:00 PM-11:00 PM]	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Time/Speed Report

HI-Star ID: 9245	Begin: 11/13/2001 11:00 AM	End: 11/15/2001 11:00 AM
Street: S.B. Elizabeth@Grove	Lane:	Hours: 48:00
State: IL	Oper: EP	Period: 60
City: LOMBARD	Posted: 30	Raw Count: 447
County: DUPAGE	AADT Factor: 1	AADT Count: 224

NC90A - mph	0	11	16	21	26	31	36	41	46	51	56	60	65	70	75		Total
Date & Time Range	to	to	to	to	to	to	to	to	to	to	to	to	to	to	>		
	10	15	20	25	30	35	40	45	50	55	59	64	69	74			

11/14/2001 [11:00 PM-12:00 AM] 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1

Daily Totals: 16 133
 17 9 0 0 0 0 0 0 0 176

11/15/2001 [12:00 AM-01:00 AM] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

11/15/2001 [01:00 AM-02:00 AM] 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 1

11/15/2001 [02:00 AM-03:00 AM] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

11/15/2001 [03:00 AM-04:00 AM] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

11/15/2001 [04:00 AM-05:00 AM] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

11/15/2001 [05:00 AM-06:00 AM] 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 1

11/15/2001 [06:00 AM-07:00 AM] 1 0 9 0 0 0 0 0 0 0 0 0 0 0 0 0 10

11/15/2001 [07:00 AM-08:00 AM] 1 1 14 3 0 0 0 0 0 0 0 0 0 0 0 0 19

11/15/2001 [08:00 AM-09:00 AM] 1 1 6 1 0 0 0 0 0 0 0 0 0 0 0 0 9

11/15/2001 [09:00 AM-10:00 AM] 0 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 6

11/15/2001 [10:00 AM-11:00 AM] 2 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 7

Daily Totals: 5 38 0 0 0 0 0 0 0 0 0 0 0 0 0 53
 4 6 0 0 0 0 0 0 0 53

Report Totals: 43 243 1 0 0 0 0 0 0 0 0 0 0 0 0 345
 36 22 0 0 0 0 0 0 0 345

Report Percentages: 12.46% 70.43% 0.29% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%
 10.43% 6.38% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%

**Nu-Metrics Traffic Analyzer Study
Computer Generated Summary Report
City: LOMBARD
Street: E.B. Grove@Elizabeth**

A study of vehicle traffic was conducted with HI-STAR unit number 8230. The study was done in the lane on E.B. Grove@Elizabeth in LOMBARD, IL in DUPAGE county. The study began on 11/13/2001 at 11:00 AM and concluded on 11/15/2001 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 439 vehicles passed through the location with a peak volume of 35 on 11/14/2001 at 07:00 AM and a minimum volume of 0 on 11/14/2001 at 12:00 AM. The AADT Count for this study was 220.

SPEED

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

Chart 1

0	11	16	21	26	31	36	41	46	51	56	60	65	70	75
to	to	to	to	to	to	to	to	to	to	to	to	to	to	>
10	15	20	25	30	35	40	45	50	55	59	64	69	74	
0	22	72	140	131	44	13	8	2	0	4	1	1	0	0

At least half of the vehicles were traveling in the 21 - 25 mph range or a lower speed. The average speed for all classified vehicles was 24 mph with 16.6 percent exceeding the posted speed of 30 mph. The HI-STAR found 16.6 percent of the total vehicles were traveling in excess of 30 mph. The mode speed for this traffic study was 21 mph and the 85th percentile was 27.33 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	69	81
to	to	to	to	to	to	to	>
20	27	39	49	59	68	80	
393	32	8	3	0	1	1	0

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 425 which represents 97.00 percent of the total classified vehicles. The number of Small Trucks in the study was 8 which represents 1.80 percent of the total classified vehicles. The number of Trucks/Busses in the study was 3 which represents 0.70 percent of the total classified vehicles. The number of Tractor Trailers in the study was 2 which represents 0.50 percent of the total classified vehicles.

HEADWAY

During the peak time period, on 11/14/2001 at 07:00 AM the average headway between the vehicles was 100.0 seconds. The slowest traffic period was on 11/14/2001 at 12:00 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 68 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

Time/Speed Report

HI-Star ID: 8230 Street: E.B. Grove@Elizabeth State: IL City: LOMBARD County: DUPAGE	Begin: 11/13/2001 11:00 AM Lane: Oper: EP Posted: 30 AADT Factor: 1	End: 11/15/2001 11:00 AM Hours: 48:00 Period: 60 Raw Count: 439 AADT Count: 220
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NC97 - mph	0	11	16	21	26	31	36	41	46	51	56	60	65	70	75	
Date & Time Range	to	to	to	to	to	to	to	to	to	to	to	to	to	to	>	Total
	10	15	20	25	30	35	40	45	50	55	59	64	69	74		
11/13/2001 [11:00 AM-12:00 PM]	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	7
11/13/2001 [12:00 PM-01:00 PM]	0	0	0	5	5	2	1	0	0	0	0	0	0	0	0	13
11/13/2001 [01:00 PM-02:00 PM]	0	0	3	2	3	1	0	0	0	0	0	0	0	0	0	9
11/13/2001 [02:00 PM-03:00 PM]	0	0	3	7	5	0	0	1	0	0	0	0	0	0	0	16
11/13/2001 [03:00 PM-04:00 PM]	0	0	6	9	5	3	0	0	1	0	0	0	0	0	0	24
11/13/2001 [04:00 PM-05:00 PM]	0	0	1	6	5	3	0	0	0	0	0	1	0	0	0	16
11/13/2001 [05:00 PM-06:00 PM]	0	0	6	5	3	1	0	0	0	0	1	0	0	0	0	16
11/13/2001 [06:00 PM-07:00 PM]	0	1	1	2	2	0	0	0	0	0	0	0	0	0	0	6
11/13/2001 [07:00 PM-08:00 PM]	0	0	2	2	2	1	0	2	0	0	0	0	0	0	0	9
11/13/2001 [08:00 PM-09:00 PM]	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	4
11/13/2001 [09:00 PM-10:00 PM]	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3
11/13/2001 [10:00 PM-11:00 PM]	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
11/13/2001 [11:00 PM-12:00 AM]	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Daily Totals:	0	3	25	42	38	13	1	3	1	0	1	1	0	0	0	128
11/14/2001 [12:00 AM-01:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2001 [01:00 AM-02:00 AM]	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11/14/2001 [02:00 AM-03:00 AM]	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11/14/2001 [03:00 AM-04:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2001 [04:00 AM-05:00 AM]	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11/14/2001 [05:00 AM-06:00 AM]	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
11/14/2001 [06:00 AM-07:00 AM]	0	2	2	1	0	1	0	0	0	0	0	0	0	0	0	6
11/14/2001 [07:00 AM-08:00 AM]	0	0	4	12	14	2	2	0	0	0	1	0	0	0	0	35
11/14/2001 [08:00 AM-09:00 AM]	0	0	1	4	10	1	1	1	0	0	0	0	0	0	0	18
11/14/2001 [09:00 AM-10:00 AM]	0	1	3	8	1	0	0	0	0	0	1	0	0	0	0	14
11/14/2001 [10:00 AM-11:00 AM]	0	4	1	3	2	1	0	0	0	0	0	0	0	0	0	11
11/14/2001 [11:00 AM-12:00 PM]	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	6
11/14/2001 [12:00 PM-01:00 PM]	0	2	4	5	2	0	0	0	0	0	0	0	0	0	0	13
11/14/2001 [01:00 PM-02:00 PM]	0	1	7	8	1	0	1	0	0	0	0	0	0	0	0	18
11/14/2001 [02:00 PM-03:00 PM]	0	0	1	5	1	5	2	0	0	0	0	0	0	0	0	14
11/14/2001 [03:00 PM-04:00 PM]	0	1	4	4	8	1	1	0	0	0	0	0	0	0	0	19
11/14/2001 [04:00 PM-05:00 PM]	0	2	2	9	7	3	0	0	0	0	0	0	0	0	0	23
11/14/2001 [05:00 PM-06:00 PM]	0	0	4	5	3	0	0	0	0	0	0	0	0	0	0	12
11/14/2001 [06:00 PM-07:00 PM]	0	1	2	7	4	2	0	0	0	0	0	0	1	0	0	17
11/14/2001 [07:00 PM-08:00 PM]	0	0	1	4	3	0	0	0	0	0	0	0	0	0	0	8
11/14/2001 [08:00 PM-09:00 PM]	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	5
11/14/2001 [09:00 PM-10:00 PM]	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
11/14/2001 [10:00 PM-11:00 PM]	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	4

Time/Speed Report

HI-Star ID: 8230	Begin: 11/13/2001 11:00 AM	End: 11/15/2001 11:00 AM
Street: E.B. Grove@Elizabeth	Lane:	Hours: 48:00
State: IL	Oper: EP	Period: 60
City: LOMBARD	Posted: 30	Raw Count: 439
County: DUPAGE	AADT Factor: 1	AADT Count: 220

NC97 - mph	0	11	16	21	26	31	36	41	46	51	56	60	65	70	75	
Date & Time Range	to	to	to	to	to	to	to	to	to	to	to	to	to	to	>	Total
	10	15	20	25	30	35	40	45	50	55	59	64	69	74		

11/14/2001 [11:00 PM-12:00 AM]	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
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Daily Totals:	0	15	38	80	66	17	11	1	0	0	2	0	1	0	0	0	231
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11/15/2001 [12:00 AM-01:00 AM]	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11/15/2001 [01:00 AM-02:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/15/2001 [02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/15/2001 [03:00 AM-04:00 AM]	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11/15/2001 [04:00 AM-05:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/15/2001 [05:00 AM-06:00 AM]	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
11/15/2001 [06:00 AM-07:00 AM]	0	0	2	1	5	2	0	0	1	0	0	0	0	0	0	0	11
11/15/2001 [07:00 AM-08:00 AM]	0	1	3	5	7	3	0	1	0	0	1	0	0	0	0	0	21
11/15/2001 [08:00 AM-09:00 AM]	0	1	3	7	11	1	1	1	0	0	0	0	0	0	0	0	25
11/15/2001 [09:00 AM-10:00 AM]	0	1	0	2	1	4	0	1	0	0	0	0	0	0	0	0	9
11/15/2001 [10:00 AM-11:00 AM]	0	0	1	2	2	3	0	1	0	0	0	0	0	0	0	0	9

Daily Totals:	0	4	9	18	27	14	1	4	1	0	1	0	0	0	0	0	79
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Report Totals:	0	22	72	140	131	44	13	8	2	0	4	1	1	0	0	0	438
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Report Percentages:	0.00%	16.44%	29.91%	2.97%	0.46%	0.91%	0.23%	0.00%	0.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
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**Nu-Metrics Traffic Analyzer Study
Computer Generated Summary Report
City: LOMBARD
Street: W.B. Grove@Elizabeth**

A study of vehicle traffic was conducted with HI-STAR unit number 811. The study was done in the lane on W.B. Grove@Elizabeth in LOMBARD, IL in DUPAGE county. The study began on 11/13/2001 at 11:00 AM and concluded on 11/15/2001 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 618 vehicles passed through the location with a peak volume of 32 on 11/13/2001 at 04:00 PM and a minimum volume of 0 on 11/14/2001 at 03:00 AM. The AADT Count for this study was 309.

SPEED

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

Chart 1

0 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 55	56 to 59	60 to 64	65 to 69	70 to 74	75 >
0	102	210	171	62	21	16	5	9	4	4	6	1	3	1

At least half of the vehicles were traveling in the 16 - 20 mph range or a lower speed. The average speed for all classified vehicles was 21 mph with 11.3 percent exceeding the posted speed of 30 mph. The HI-STAR found 11.3 percent of the total vehicles were traveling in excess of 30 mph. The mode speed for this traffic study was 16 mph and the 85th percentile was 24.71 mph.

CLASSIFICATION

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

Chart 2

0 to 20	21 to 27	28 to 39	40 to 49	50 to 59	60 to 68	69 to 80	81 >
564	35	13	2	0	1	0	0

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 599 which represents 97.40 percent of the total classified vehicles. The number of Small Trucks in the study was 13 which represents 2.10 percent of the total classified vehicles. The number of Trucks/Busses in the study was 2 which represents 0.30 percent of the total classified vehicles. The number of Tractor Trailers in the study was 1 which represents 0.20 percent of the total classified vehicles.

HEADWAY

During the peak time period, on 11/13/2001 at 04:00 PM the average headway between the vehicles was 109.09 seconds. The slowest traffic period was on 11/14/2001 at 03:00 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 52 and 72 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

Time/Speed Report

HI-Star ID: 811 Street: W.B. Grove@Elizabeth State: IL City: LOMBARD County: DUPAGE	Begin: 11/13/2001 11:00 AM Lane: Oper: EP Posted: 30 AADT Factor: 1	End: 11/15/2001 11:00 AM Hours: 48:00 Period: 60 Raw Count: 618 AADT Count: 309
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NC97 - mph	0	11	16	21	26	31	36	41	46	51	56	60	65	70	75	
Date & Time Range	to	to	to	to	to	to	to	to	to	to	to	to	to	to	>	Total
	10	15	20	25	30	35	40	45	50	55	59	64	69	74		

11/13/2001 [11:00 AM-12:00 PM]	0	3	2	4	4	0	2	1	0	0	0	0	0	0	0	16
11/13/2001 [12:00 PM-01:00 PM]	0	1	3	3	4	1	0	0	0	0	0	0	0	0	0	12
11/13/2001 [01:00 PM-02:00 PM]	0	1	3	4	1	2	1	0	0	0	0	1	0	0	0	13
11/13/2001 [02:00 PM-03:00 PM]	0	10	8	6	0	1	0	0	0	0	0	0	0	0	0	25
11/13/2001 [03:00 PM-04:00 PM]	0	7	13	6	1	1	0	0	1	0	0	0	0	0	0	29
11/13/2001 [04:00 PM-05:00 PM]	0	5	15	7	5	0	0	0	0	0	0	0	0	0	0	32
11/13/2001 [05:00 PM-06:00 PM]	0	5	7	10	4	4	1	0	0	0	0	0	0	0	0	31
11/13/2001 [06:00 PM-07:00 PM]	0	1	10	11	0	0	0	0	1	0	0	0	0	0	0	23
11/13/2001 [07:00 PM-08:00 PM]	0	3	9	8	1	1	1	0	0	0	0	0	0	1	0	24
11/13/2001 [08:00 PM-09:00 PM]	0	1	7	3	2	0	0	0	0	0	0	0	0	0	0	13
11/13/2001 [09:00 PM-10:00 PM]	0	9	6	2	3	1	0	0	1	0	1	1	0	0	0	24
11/13/2001 [10:00 PM-11:00 PM]	0	2	0	6	2	1	0	0	0	0	0	0	0	0	0	11
11/13/2001 [11:00 PM-12:00 AM]	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2

Daily Totals: 0 49 84 70 27 12 5 1 3 0 1 2 0 1 0 255

11/14/2001 [12:00 AM-01:00 AM]	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
11/14/2001 [01:00 AM-02:00 AM]	0	0	3	1	0	0	0	0	1	0	0	0	0	0	0	5
11/14/2001 [02:00 AM-03:00 AM]	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
11/14/2001 [03:00 AM-04:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2001 [04:00 AM-05:00 AM]	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	2
11/14/2001 [05:00 AM-06:00 AM]	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	4
11/14/2001 [06:00 AM-07:00 AM]	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	8
11/14/2001 [07:00 AM-08:00 AM]	0	1	10	9	0	0	1	1	1	0	0	1	1	1	0	26
11/14/2001 [08:00 AM-09:00 AM]	0	0	2	4	1	0	1	0	1	2	0	0	0	0	1	12
11/14/2001 [09:00 AM-10:00 AM]	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	6
11/14/2001 [10:00 AM-11:00 AM]	0	6	4	1	0	0	0	0	0	0	0	0	0	0	0	11
11/14/2001 [11:00 AM-12:00 PM]	0	4	6	2	0	1	0	0	1	0	0	0	0	0	0	14
11/14/2001 [12:00 PM-01:00 PM]	0	0	4	3	0	1	0	0	1	0	0	0	0	0	0	9
11/14/2001 [01:00 PM-02:00 PM]	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	5
11/14/2001 [02:00 PM-03:00 PM]	0	2	4	4	2	0	1	1	0	0	0	0	0	0	0	14
11/14/2001 [03:00 PM-04:00 PM]	0	2	4	7	2	0	0	0	0	0	1	0	0	0	0	16
11/14/2001 [04:00 PM-05:00 PM]	0	1	10	6	3	1	2	0	0	0	0	1	0	0	0	24
11/14/2001 [05:00 PM-06:00 PM]	0	2	7	11	2	0	1	1	0	0	0	1	0	0	0	25
11/14/2001 [06:00 PM-07:00 PM]	0	2	10	6	1	1	0	0	0	0	0	0	0	0	0	20
11/14/2001 [07:00 PM-08:00 PM]	0	3	4	1	1	0	1	0	0	0	1	0	0	0	0	11
11/14/2001 [08:00 PM-09:00 PM]	0	3	10	0	0	0	0	0	0	0	0	0	0	0	0	13
11/14/2001 [09:00 PM-10:00 PM]	0	4	5	3	2	1	0	0	0	0	0	0	0	0	0	15
11/14/2001 [10:00 PM-11:00 PM]	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	5

Time/Speed Report

HI-Star ID: 811 Street: W.B. Grove@Elizabeth State: IL City: LOMBARD County: DUPAGE	Begin: 11/13/2001 11:00 AM Lane: Oper: EP Posted: 30 AADT Factor: 1	End: 11/15/2001 11:00 AM Hours: 48:00 Period: 60 Raw Count: 618 AADT Count: 309
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NC97 - mph	0	11	16	21	26	31	36	41	46	51	56	60	65	70	75	
Date & Time Range	to	to	to	to	to	to	to	to	to	to	to	to	to	to	>	Total

11/14/2001 [11:00 PM-12:00 AM]	0	1	6	1	1	0	0	0	0	0	0	0	0	0	0	9
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Daily Totals:	0	37	103	65	19	6	9	3	5	2	2	4	1	1		258
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11/15/2001 [12:00 AM-01:00 AM]	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4
11/15/2001 [01:00 AM-02:00 AM]	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	3
11/15/2001 [02:00 AM-03:00 AM]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/15/2001 [03:00 AM-04:00 AM]	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11/15/2001 [04:00 AM-05:00 AM]	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11/15/2001 [05:00 AM-06:00 AM]	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	4
11/15/2001 [06:00 AM-07:00 AM]	0	3	3	3	2	0	0	1	0	0	0	0	0	0	0	12
11/15/2001 [07:00 AM-08:00 AM]	0	4	9	10	6	2	0	0	0	1	0	0	0	0	0	32
11/15/2001 [08:00 AM-09:00 AM]	0	5	4	4	2	0	0	0	0	0	0	0	0	0	0	15
11/15/2001 [09:00 AM-10:00 AM]	0	0	3	6	2	1	2	0	0	1	1	0	0	1	0	17
11/15/2001 [10:00 AM-11:00 AM]	0	1	3	7	2	0	0	0	0	0	0	0	0	0	0	13

Daily Totals:	0	16	23	36	16	3	2	1	1	1	0	0	0	0		102
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Report Totals:	0	102	210	171	62	21	16	5	9	4	6	1	3	1		615
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Report Percentages:	0.00%	34.15%	10.08%	2.60%	1.46%	0.65%	0.16%	0.16%	16.59%	27.80%	3.41%	0.81%	0.65%	0.98%	0.49%	
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October 14, 2001

In light of the increasing vehicle speeding and accident activity, we the people of Grove and Elizabeth streets are strongly urging the City of Lombard to install two more stop signs at the Grove and Elizabeth street intersection to make it a controlled intersection. We are also recommending more warning signage along Grove to reduce speed and any other methods to reduce the excess speeding and increase the overall safety of Grove and Elizabeth streets.

Signature

Address

Emil C. Harper

320 W. GROVE

[Signature]

314 W. GROVE

Edna Howarth

314 W Grove St.

Marie Croni

350 N. Grove St.

[Signature]

336 W. GROVE

Robert Edward

348 W Grove

Virginia E. Foster

360 W. Grove St.

Ben West

370 W GROVE ST

[Signature]

380 W. GROVE ST

[Signature]

375 W. GROVE

James P. Ladd

365 W. GROVE

[Signature]

325 W. Grove

John Sandi Kraml

307 W. Grove St.

Jean Hamilton

88 N. Elizabeth

October 14, 2001

In light of the increasing vehicle speeding and accident activity, we the people of Grove and Elizabeth streets are strongly urging the City of Lombard to install two more stop signs at the Grove and Elizabeth street intersection to make it a controlled intersection. We are also recommending more warning signage along Grove to reduce speed and any other methods to reduce the excess speeding and increase the overall safety of Grove and Elizabeth streets.

Signature

Address

Lynn Jenkins

80 N. ELIZABETH

DJ Ryan

93 N Elizabeth

Mary Hemmick

11341 Elizabeth ST

John J. Ginski

95 N. E Elizabeth St.
