

970007

To: Stan Rickard, Public Works Director
From: John Johnson, Technical Services Supervisor JJ
Date: September 30, 1997
Subject: Request for Traffic Control at Liberty Ln. and Adams St.

Mr. Marvin Carlson, of 725 Liberty Ln., contacted Public Works with traffic concerns at this intersection. Attached for your review are the traffic analyzer reports and a diagram of the intersection.

There were no reported accidents at this intersection between January 1993 and December 1995.

The Traffic analyzers recorded a low traffic volume and a lower average speed though this area.

A traffic study was performed at the intersection with findings of some deficiencies. The corners have some significant sight distance restrictions as indicated on the drawing. The C.A.S. (Critical Approach Speed) is 10 and 13 mph based on the obstructions. A yield sign is warranted when C.A.S. are between 10 and 15 mph and a stop sign is warranted when speeds are lower than 10 mph.

On the basis of the above information, I would recommend installing a stop sign for southbound Liberty Ln. at Adams St.

JJ

cc: John Jaugilas, Trustee - District 4
Paul Kufirin, Trustee - District 6
Mr. Marvin Carlson, 725 Liberty Ln.
Transportation and Safety Committee

NU-METRICS Traffic Analyzer Study
Computer Generated Summary Report
Route: EB ADAMS
Location: LIBERTY

STUDY

A survey of vehicle traffic was conducted with HISTAR unit number 432. The survey was done in the 1 lane on EB ADAMS in Lombard, IL in DuPage county. The survey lasted for 48 hours and began on Tuesday, April 15, 1997 at 2:00pm and ended on Thursday, April 17, 1997 at 2:00pm. Data were recorded in 60 minute time periods. The total recorded volume of traffic showed 576 vehicles passed through the location with a peak volume of 40 on Tuesday, April 15, 1997 at 5:00pm and a minimum volume of 0 on Wednesday, April 16, 1997 at 12:00am.

SPEED

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

=====
Chart 1
=====
Speed Bins (mph)

10	13	15	18	20	23	25	28	30	33	35	38	40	43	45
3		11		50		89		46		13		11		5
	5		32		115		123		53		13		2	

=====
Half of the vehicles were traveling at 25.1 mph or lower speed. The average speed for all classified vehicles was 26.23 mph with 16.99 percent exceeding the posted speed of 30 mph. The HI-STAR found 0.00 percent of the vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 28 mph and the 85th percentile was 31.1 mph.

CLASS

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

=====
Chart 2
=====
Class Bins (feet)

<19	30	40	50	60	70	0	0>
548	17	4	0	1	1	0	0

=====

Most of the vehicles were passenger cars with a total count of 548. This represents 98.95 percent of the classified vehicles. The truck percentage is 1.05 percent of the classified vehicles.

HEADWAY

During the peak time period, on Tuesday, April 15, 1997 at 5:00pm the average headway between the vehicles was 90.00 seconds. The slow period occurred on Wednesday, April 16, 1997 at 12:00am and the headway between the vehicles 0 seconds (No vehicles recorded).

WEATHER

The roadway surface temperature over the period of the study varied between 39 degrees Fahrenheit and 86 degrees Fahrenheit. The HI-STAR analyzer determined that the roadway surface was DRY 100.00 percent of the time.

NU-METRICS Traffic Analyzer Study
Computer Generated Summary Report
Route: WB ADAMS
Location: CONCORD

STUDY

A survey of vehicle traffic was conducted with HISTAR unit number 433. The survey was done in the 1 lane on WB ADAMS in Lombard, IL in DuPage county. The survey lasted for 48 hours and began on Tuesday, April 15, 1997 at 2:00pm and ended on Thursday, April 17, 1997 at 2:00pm. Data were recorded in 60 minute time periods. The total recorded volume of traffic showed 499 vehicles passed through the location with a peak volume of 40 on Thursday, April 17, 1997 at 8:00am and a minimum volume of 0 on Tuesday, April 15, 1997 at 10:00pm.

SPEED

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

=====
Chart 1
=====

Speed Bins (mph)														
10	13	15	18	20	23	25	28	30	33	35	38	40	43	45
17		10		22		62		70		12		14		11
	7		23		45		113		68		17		5	

=====

Half of the vehicles were traveling at 27.1 mph or lower speed. The average speed for all classified vehicles was 27.61 mph with 25.60 percent exceeding the posted speed of 30 mph. The HI-STAR found 0.00 percent of the vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 28 mph and the 85th percentile was 32.8 mph.

CLASS

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

=====
Chart 2
=====

Class Bins (feet)							
<19	30	40	50	60	70	0	0>
468	21	4	2	1	0	0	0

=====

Most of the vehicles were passenger cars with a total count of 468. This represents 98.59 percent of the classified vehicles. The truck percentage is 1.41 percent of the classified vehicles.

HEADWAY

During the peak time period, on Thursday, April 17, 1997 at 8:00am the average headway between the vehicles was 90.00 seconds. The slow period occurred on Tuesday, April 15, 1997 at 10:00pm and the headway between the vehicles 0 seconds (No vehicles recorded).

WEATHER

The roadway surface temperature over the period of the study varied between 41 degrees Fahrenheit and 84 degrees Fahrenheit. The HI-STAR analyzer determined that the roadway surface was DRY 100.00 percent of the time.

NU-METRICS Traffic Analyzer Study
Computer Generated Summary Report
Route: SB LIBERTY
Location: ADAMS

STUDY

A survey of vehicle traffic was conducted with HISTAR unit number 3796. The survey was done in the 1 lane on SB LIBERTY in Lombard, IL in DuPage county. The survey lasted for 48 hours and began on Tuesday, April 15, 1997 at 2:00pm and ended on Thursday, April 17, 1997 at 2:00pm. Data were recorded in 60 minute time periods. The total recorded volume of traffic showed 333 vehicles passed through the location with a peak volume of 28 on Tuesday, April 15, 1997 at 5:00pm and a minimum volume of 0 on Tuesday, April 15, 1997 at 10:00pm.

SPEED

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

=====
Chart 1
=====

Speed Bins (mph)	10	13	15	18	20	23	25	28	30	33	35	38	40	43	45
Volume	34	98	97	63	15	1	6	1	0	0	0	0	0	0	0

=====
=====

Half of the vehicles were traveling at 14.0 mph or lower speed. The average speed for all classified vehicles was 14.93 mph with 0.00 percent exceeding the posted speed of 30 mph. The HI-STAR found 0.00 percent of the vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 13 mph and the 85th percentile was 17.3 mph.

CLASS

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

=====
Chart 2
=====

Class Bins (feet)	<19	30	40	50	60	70	0	0>
Volume	265	49	1	0	0	0	0	0

=====
=====

Most of the vehicles were passenger cars with a total count of 265. This represents 99.68 percent of the classified vehicles. The truck percentage is 0.32 percent of the classified vehicles.

HEADWAY

During the peak time period, on Tuesday, April 15, 1997 at 5:00pm the average headway between the vehicles was 128.57 seconds. The slow period occurred on Tuesday, April 15, 1997 at 10:00pm and the headway between the vehicles 0 seconds (No vehicles recorded).

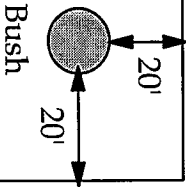
WEATHER

The roadway surface temperature over the period of the study varied between 43 degrees Fahrenheit and 88 degrees Fahrenheit. The HI-STAR analyzer determined that the roadway surface was DRY. 100.00 percent of the time.

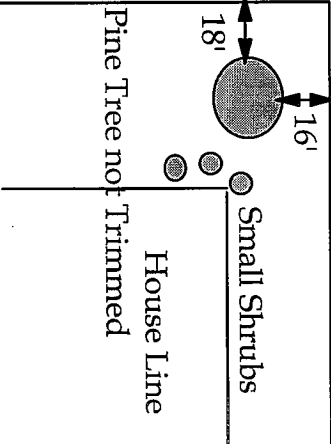
Street Light

Adams St.

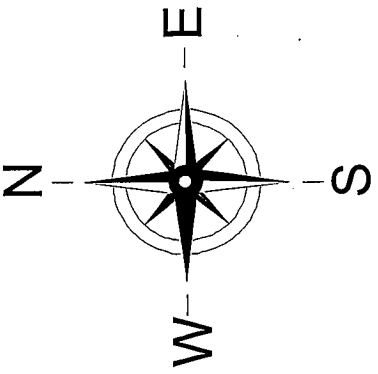
C.A.S.
13 Mph



C.A.S.
10 Mph



Liberty Ln.



C.A.S. = Critical Approach Speed

9/29/97