

AGENDA.DOC

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the Agenda Distribution.

Village Attorney X	Date
Village Director X	Date
Village Manager X	Date

Review (as necessary):

No direct cost

FISCAL IMPACT/FUNDING SOURCE:

Please see the attached recommendation from the Transportation and Safety Committee regarding a Village-wide Residential Speed Study.

BACKGROUND/POLICY IMPLICATIONS:

SUBMITTED BY:	Carl Goldsmith, Director of Public Works	
TITLE:	Village-Wide Residential Speed Limit	
DATE:	11/7/08	(COV) (B of T)
FROM:	David A. Hulserberg, Village Manager	
TO:	PRESIDENT AND BOARD OF TRUSTEES	
Resolution or Ordinance (Blue) _____ Waiver of First Requested Recommendations of Boards, Commissions & Committees (Green) Other Business (Pink)		

VILLAGE OF LOMBARD REQUEST FOR BOARD OF TRUSTEES ACTION

For Inclusion on Board Agenda

DISTRICT ALL
Legistar #080683



At the October 16, 2008 Board of Trustees meeting, staff was directed to present the attached three memos to the Transportation & Safety Committee to consider setting a speed limit of 25 mph for all residential areas. The memos discuss the legal, technical and practical aspects. Staff does not have a recommendation for this matter except to urge consideration of the points raised in the memos.

CG:dg 25 mph - Tres
attachments: memos from Public Works, Police and the Village Attorney

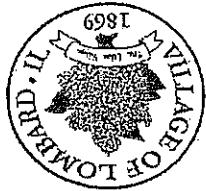
SUBJECT: Residential Area Speed Limit Reduction

DATE: October 24, 2008

FROM: Carl S. Goldsmith, Director of Public Works

TO: Transportation & Safety Committee

Memorandum



080683



attachments: 625 ILCS 5/11-604 (b) and IDOT Order 13-5 Worksheet

to 25 mph would likely be based on perceived safety rather than technical warranting. Staff believes that a Village-wide speed reduction to 25 mph would not meet the technical warrants of IDOT Order No. 13-5. Therefore, a decision to enact a Village-wide speed reduction would likely be based on perceived safety rather than technical warranting.

Recommendation:

According to a 1995 study by the European Transport Safety Council report entitled "Reducing Traffic Injuries Resulting from Excess and Inappropriate Speed", there is a dramatic increase in pedestrian fatality rates as vehicle speed increases. The rates are 5% at 20 mph, 45% at 30 mph and 85% at 40 mph. Therefore, there is a real safety benefit to reduced speeds.

Staff contacted a traffic engineer firm to determine the scope of work that would be required for a Village-wide speed reduction. Separate studies would be conducted in eleven zones in order to quantify the characteristics of all types of roadways and neighborhoods. This study would cost approximately \$20,000 and the new speed limit signs would cost \$70,000. Based on the prior studies in Lombard, staff believes that a Village-wide study would conclude that a speed reduction would not meet the technical warrants of Order No. 13-5.

Studies, the violation rate is predicted to be 60-90% if the speed limit were reduced to 25 mph. Staff concluded that a speed reduction to 25 mph was not warranted. Based on the graphs of those studies, the prevalence of potential speed reduction to 25 mph was not warranted.

The Illinois Vehicle Code 625 ILCS 5/11-604 (b) and IDOT Order No. 13-5 require that local authorities only alter a speed limit based on the prevailing speed, which is defined as the 85th percentile speed. However, the prevailing speed may be adjusted as shown in the attached worksheet based on the accident rate, access control, pedestrian activity and parking.

At the August 21, 2008 Board of Trustees meeting, staff was asked to provide information regarding the legal, technical and practical aspects of potentially reducing the speed limit to 25 mph in all residential areas. In addition to this memo, please refer to the Village Attorney's and Police Chief's memos.

Background:

SUBJECT: Residential Area Speed Limit Reduction

DATE: October 2, 2008

FROM: David P. Gorman, PE, Assistant Director of Public Works *DPG*

TO: David A. Hulseberg, Village Manager

Memorandum



Notes of Decisions

Construction and application 1
Electronic speed-detecting devices 2

Effect of former ch. 95½, § 146.02 was merely to suspend speed limit established in former § 146 and not to suspend application of former § 146 in its entirety. *Sphatt v. Tulley*, App. 1962, 38 Ill.App.2d 229, 186 N.E.2d 670.

1. Construction and application
§ 146.02 forbids use of electronic speed detecting devices within 500 feet of speed limit sign. Purpose of former ch. 95½, § 146.02, forbids use of electronic speed detecting devices within 500 feet of speed limit sign was to give driver time in which to adjust to new speed limit before subjecting him to radar detection and said section did not require use of a radar device more than 500 feet beyond any sign regardless of how many similar signs had preceded it and had been passed by motorist. *People v. Johannsen*, App. 1970, 126 Ill.App.2d 31, 261 N.E.2d 551. Automobiles 331.

2. Electronic speed-detecting devices

Notwithstanding provision of former ch. 95½, § 146.02 that electronic speed detecting devices should not be used within 500 feet beyond posted speed limit sign, motorist was not entitled to an acquittal because the radar device used to clock speed was within 500 feet of speed limit

sign where motorist before being clocked had passed a similar speed limit sign three-quarters of a mile away and was obviously informed of speed limit. *People v. Johannsen*, App. 1970, 126 Ill.App.2d 31, 261 N.E.2d 551. Automobiles 331.

Purpose of former ch. 95½, § 146.02, forbids use of electronic speed detecting devices within 500 feet of speed limit sign to give driver time in which to adjust to new speed limit before subjecting him to radar detection and said section did not require use of a radar device more than 500 feet beyond any sign regardless of how many similar signs had preceded it and had been passed by motorist. *People v. Johannsen*, App. 1970, 126 Ill.App.2d 31, 261 N.E.2d 551. Automobiles 331.

5/11-604. Alteration of limits by local authorities

§ 11-604. Alteration of limits by local authorities

(a) Subject to the limitations set forth in this Section, the county board of a county may establish absolute maximum speed limits on all county highways, township roads and district roads as defined in the Illinois Highway Code, except those under the jurisdiction of the Department or of the Illinois State Toll Highway Authority, as described in Sections 11-602 and 11-603 of this Chapter, and any park district, city, village, or incorporated town may establish absolute maximum speed limits on all streets which are within its corporate limits and which are not under the jurisdiction of the Department or of such Authority, and for which the county or a highway commissioner of such county does not have maintenance responsibility.

(b) Whenever any such park district, city, village, or incorporated town determines, upon the basis of an engineering or traffic investigation concerning a highway or street on which it is authorized by this Section to establish speed limits, that a maximum speed limit prescribed in Section 11-601 of this Chapter is greater or less than is reasonable or safe with respect to the conditions found to exist at any place or along any part of zone of such highway or street, the local authority or park district shall determine and declare by ordinance a reasonable and safe absolute maximum speed limit at such place or along such part or zone. However, the maximum speed limit shall not exceed 55 miles per hour. Upon receipt of an engineering study for the part or zone of highway in question from the county engineer, and notwithstanding any other provision of law, the county board of a county may determine and declare by ordinance a reduction in the maximum speed limit at any place or along any part or zone of a county highway whenever the county board, in its sole discretion, determines that the reduction in the maximum speed limit is reasonable and safe. The county board may post signs designating the new speed limit. The limit becomes effective, and suspends the application of the limit prescribed in Section 11-601 of this Chapter, when appropriate signs giving notice of the limit are erected at the proper place or along the proper part of the zone of the highway. Electronic speed-detecting devices shall not be used within 500 feet beyond any such sign in the direction of travel; if so used in violation of this Section, evidence obtained thereby shall be inadmissible in any prosecution for speeding. However, nothing in this Section prohibits the use of such electronic speed-detecting devices within 500 feet of a sign within a special school speed zone indicating such zone, conforming to the requirements of this Act, nor shall evidence obtained thereby be inadmissible in any prosecution for speeding provided the use of such device shall apply only to the

The park district, city, village, or incorporated town may make such limit applicable at all times or only during certain specified times. Not more than 6 such alterations shall be made per mile along a highway or street; and the difference in limit between adjacent altered speed zones shall not be more than 10 miles per hour.

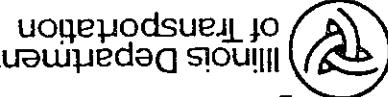
A limit so determined and declared by a park district, city, village, or incorporated town becomes effective, and suspends the application of the limit prescribed in Section 11-601 of this Chapter, when appropriate signs giving notice of the limit are erected at the proper place or along the proper part or zone of the highway or street. Electronic speed-detecting devices shall not be used within 500 feet beyond any such sign in the direction of travel; if so used in violation of this Section, evidence obtained thereby shall be inadmissible in any prosecution for speeding. However, nothing in this Section prohibits the use of such electronic speed-detecting devices within 500 feet of a sign within a special school speed zone indicating such zone, conforming to the requirements of this Act, nor shall evidence obtained thereby be inadmissible in any prosecution for speeding provided the use of such device shall apply only to the

(1) Decreases the limit within an urban district, but not to less than 20 miles per hour; or
(2) Increases the limit within an urban district, but not to more than 35 miles per hour; or
(3) Decreases the limit outside of an urban district, but not to less than 35 miles per hour, except as otherwise provided in subparagraph 4 of this

A POLICY ON ESTABLISHING AND POSTING SPEED LIMITS ON STREETS AND HIGHWAYS

JANUARY 1, 1977

ORDER 13-5



Departmental Orders

When based upon an engineering and traffic investigation, the Department and local agencies may alter statutory speed limits upon any street or highway for which they have jurisdiction and maintainence responsibility.

1. ORDER:

a. The Bureau of Traffic manual entitled: Policy on Establishing and Posting Speed Limits (January 1, 1977), is designated as Appendix I, Order 13-5.

2. GUIDELINES:

b. The manual discusses such topics as:

- (1) Statutory Speed Limits
- (2) Limits of Authority for Alteration of Statutory Limits
- (3) Criteria for Selecting Speed Limits
- (4) Procedures for Obtaining Prevailing Speed Data
- (5) Supplemental Policies
- (6) Posting of Altered Speed Limits on Nonaccess-Controlled Highways
- (7) School Speed Limits
- (8) Location of Statutory Speed Signs on Rural State-Maintained Highways

3. RESPONSIBILITIES:

The responsibilities of the Bureau of Traffic for developing and implementing a policy on establishing and posting speed limits are outlined in Appendix I to this Order.

Apdx. I

A Policy on Establishing and Posting Speed Limits (January 1, 1977)

ORDER 13-5
Apdx. 1
Atch. 2

JANUARY 1, 1977

ESTABLISHMENT OF SPEED ZONES
ZONE NO. _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE _____ FROM _____
TO _____ A DISTANCE OF _____ MILES
IN _____, COUNTRY _____
ACCESSES CONFLICTS
SMALL BUSINESS DRIVES _____ x 1.0 = _____
LARGE BUSINESS DRIVES _____ x 5.0 = _____
ACCESSES CONFLICTIC NUMBER TOTAL
(D.C.N.) = _____ MILES
CONFICT NO./MILE _____

I SPOT SPEED STUDIES (ATTACHED)
V ACCESS CONFLICTS
CHECK NO. 85th % 10 MPH PACC
UPPER LIMIT
RESIDENTIAL DRIVES _____ x 1.0 = _____
LARGE BUSINESS DRIVES _____ x 5.0 = _____
ACCESSES CONFLICTIC NUMBER TOTAL
RUN NO. AVERAGE SPEED MPH
NB or WB SB or EB
ROUTE _____
ACCIDENT RATE RATIO: _____
PEDESTRIAN VOLUME _____
TEST RUNS

ROUTE _____
ROUTE _____

VII PREVAILING SPEED ADJUSTMENT
ROUTE _____
ROUTE _____

VII PREVAILING SPEED ADJUSTMENT
ROUTE _____
ROUTE _____

III PREVAILING SPEED
ROUTE _____
ROUTE _____

IV EXISTING SPEED LIMITS
ROUTE _____

ZONE BEING STUDIED MPH	RECOMMENDED SPEED LIMIT MPH	ANTICIPATED VIOLATION RATE %	ORGANIZATION BY DATE	RECOMMENDED BY DATE	APPROVED BY DATE
ADJACENT ZONES N or W MPH	LENGTH MILES	VIOLATION RATE %	LENGTH MILES	S or E MPH	LENGTH MILES
VIII REVISED SPEED LIMIT MPH					

DRIVEWAY ADJUSTMENT %	PEDESTRIAN ADJUSTMENT %	PARKING ADJUSTMENT %	TOTAL (MAX 20%) %	PREVAILING SPEED MPH	ADJUSTED PREVAILING SPEED MPH
85th PERCENTILE AVG. MPH	TEST RUN AVG. MPH	PACE UPPER LIMIT AVG. MPH	PREVAILING SPEED MPH	TEST RUN AVG. MPH	ADJUSTED PREVAILING SPEED MPH
VII PREVAILING SPEED ADJUSTMENT					

DRIVEWAY ADJUSTMENT %	PEDESTRIAN ADJUSTMENT %	PARKING ADJUSTMENT %	TOTAL (MAX 20%) %	PREVAILING SPEED MPH	ADJUSTED PREVAILING SPEED MPH
85th PERCENTILE AVG. MPH	TEST RUN AVG. MPH	PACE UPPER LIMIT AVG. MPH	PREVAILING SPEED MPH	TEST RUN AVG. MPH	ADJUSTED PREVAILING SPEED MPH
VII PREVAILING SPEED ADJUSTMENT					

"Whenever any such park district, city, village or incorporated town determines, upon the basis of an engineering or traffic investigation concerning a highway or street on which it is authorized by this Section to establish speed limits, that a maximum speed limit prescribed in Section 11-601 of this Chapter is greater or less than is reasonable or safe with respect to the conditions found to exist at any place or along any part of such highway or street, the local authority or park district shall determine by ordinance a reasonable and safe absolute maximum speed limit at such place or along such part or zone, which:

1. Decreases the limit within an urban district, but not to less than 20 miles per hour; and

and highways under their jurisdiction subject to the requirements of 625 ILCS 5/1-604, pursuant to 625 ILCS 5/1-208, local authorities can alter the speed limits on streets above-captioned matter. In relation thereto, please be advised as follows:

Per our discussion on August 21, 2007, this memorandum is written in regard to the which provides in pertinent part as follows:

SUBJECT: Speed Limits - Residential Areas of the Village

FROM: Tom Bayer, Village Attorney
TO: William J. Mueller, Village President, Village of Lombard
DATE: August 21, 2007
Via e-mail and U.S. Mail

MEMORANDUM

JOSEPH O. ALBESIN	TERRENCE M. BARANICKIE	JAMES P. BAYER	THOMAS P. BAYER	GREGORY E. DEMPSEY	MICHAEL J. DUGGAN	SCOTT F. UHLER	RONALD E. RENNEMEYER	CHARLES G. WAGNER	CYNTHIA S. GRANDFIELD	KATHLEEN T. HENN	EVERTTE M. HILL, JR.	HOWARD C. JABLICKI	CHARLES A. JURUSIK	JACOB H. KARACZA	
RINDA Y. ALBESIN	LAW OFFICES	20 NORTH WACKER DRIVE	CHICAGO, ILLINOIS 60606-2903	TELEPHONE (312) 984-6400	TELEPHONE (312) 984-6444	FACSIMILE (312) 606-7077	FACSIMILE (312) 984-6444	TELEPHONE (312) 984-6400	15010 S. RAVINA AVE., SUITE 17	15010 S. RAVINA AVE., SUITE 17	ORLAND PARK, IL 60462-3162	TELEPHONE (708) 349-3888	FACSIMILE (708) 349-1506	OF COUNSEL	OF COUNSEL
LANCE C. MALINA	MICHAEL A. MARKS	THOMAS M. MELODY	JAMES G. WALSH	BRUCE A. ZOLNA	GEORGE A. WAGNER	ALLEN WALL	DENNIS G. WALSH	JAMES G. WARGO	CYNTHIA S. GRANDFIELD	KATHLEEN T. HENN	EVERTTE M. HILL, JR.	HOWARD C. JABLICKI	CHARLES A. JURUSIK	JACOB H. KARACZA	
PATRICK A. LUCANSKY	LANCE C. MALINA	JAMES G. MELODY	ALLEN WALL	BRUCE A. ZOLNA	GEORGE A. WAGNER	SCOTT F. UHLER	RONALD E. RENNEMEYER	CHARLES G. WAGNER	EVERTTE M. HILL, JR.	HOWARD C. JABLICKI	CHARLES A. JURUSIK	JACOB H. KARACZA	JACOB H. KARACZA		
20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE	20 NORTHERN DRIVE		
SUITE 1660	SUITE 1660	SUITE 1660	SUITE 1660	SUITE 1660	SUITE 1660	SUITE 1660	SUITE 1660	SUITE 1660	SUITE 1660	SUITE 1660	SUITE 1660	SUITE 1660	SUITE 1660		

Klein, Thorpe and Jenkins, LTD.

LAW OFFICES

cc: William T. Lichter, Village Manager (via e-mail only)

If there are any questions, please feel free to call.

Based on the foregoing, it would appear that, initially, the speed limit in the Village's residential areas would be 30 miles per hour. Based on the definitions of "residential district", it would appear that the Village's residential areas qualify as both a "residence district" and an "urban district". As such, provided than an engineering or traffic investigation has been undertaken relative to the street(s) in question, and provided that, based on said investigation has been undertaken relative to the street(s) in question, a speed limit of less than 30 miles per hour is reasonable or safe with respect to the conditions found to exist along said street(s), the speed limit on any street in the residential areas of the Village could be reduced to as low as 20 miles per hour.

Please note that the words "highway" and "street", as used in the above definitions, generally have the same definition. (See 625 ILCS 5/1-126 and 5/1-201.)

"The territory contiguous to and including any street which is built up with structures devoted to business, industry or dwelling houses situated at intervals of less than 100 feet for a distance of a quarter of a mile or more."

Pursuant to 625 ILCS 5/1-214, "urban district" is defined as follows:

For purposes of establishing maximum speed limits, a residence district shall be at least a quarter of a mile long with residences or buildings in use for use for businesses spaced no more than 300 feet apart.

"The territory contiguous to and including a highway not comprising a business district when the property on such highway for a distance of 300 feet or more is in the main improved with residences or residences and buildings in use for the main business.

Pursuant to 625 ILCS 5/1-172, "residence district" is defined as follows:

1. 30 miles per hour, . . .

"(c) Unless some other speed restriction is established under this Chapter, the maximum speed limit in an urban district for all vehicles is:

Please note that 625 ILCS 5/1-601, (the section referred to in the above quote), provides in pertinent part as follows:

4. Decreases the limit within a residence district, but not to less than 25 miles per hour, except as otherwise provided in subparagraph 1 of this paragraph." (emphasis added)

- Complaints about speeding in residential areas is a common and chronic complaint for all communities and police departments;
- I have asked Bruce Longino, our Accreditation Manager, to conduct research to see if the data relied upon in 2002 was still valid. His analysis is also attached for your review. In essence, he has discovered that the principles utilized in 2002 are still valid today. Some of the key points from both analyses are:
- Essentially, the recommendation was to follow what the state law required. Established engineering standards based upon accepted factors (referred to as warrants). Concluded with a recommendation not to reduce the speed limit unless justified by Dep. Chief Cuny's materials as background reference to this memorandum. The study included in this 2002 discussion was the concept of reducing speed limits. I am attaching Transportation and Safety Committee about residential traffic speeding and enforcement. This is not the first time that the police department has been asked to review this issue. In 2002, Dep. Chief Dane Cuny conducted research and made a presentation to the Transportation and Safety Committee about reducing speed limits to the study.

Background

This is not the first time that the police department has been asked to review this issue. In 2002, Dep. Chief Dane Cuny conducted research and made a presentation to the Transportation and Safety Committee about reducing speed limits to the study.

Village wide would require a comprehensive traffic study. Justify reducing the limit. As the Village Attorney has indicated, to reduce the speed limit on residential streets at 30 miles per hour unless a traffic study is conducted to limit on all streets. Not being a home rule community, Lombard is obligated to set the speed limit on residential streets at 30 miles per hour unless a traffic study is conducted to question of whether or not the Village should reduce the speed limit to 25 miles per hour vehicles in the Village, particularly in residential areas. Closely related to this issue is the question of whether or not the Village should reduce the speed limit to 25 miles per hour on all streets. Not being a home rule community, Lombard is obligated to set the speed limit on residential streets at 30 miles per hour unless a traffic study is conducted to

Introduction

Village Wide 25 Mile Per Hour Speed Limit

Re: Residential Speed Enforcement

From: Raymond J. Byrne
Chief of Police

To: David A. Hulseberg, AICP, ICMA-CM
Village Manager

Date: October 1, 2008

LOMBARD POLICE DEPARTMENT



Village has a viable and objective process in place to address the regulation of traffic. Traffic analysis does not justify lowering the speed limit; it will validate the fact that the number of requests to lower speed limits on random blocks throughout the Village. If the number is consistent with most of our surrounding municipalities. Second, it would reduce the some benefits. First, it would provide a uniform standard throughout the community that the speed limit village wide should be lowered to 25 miles per hour, here would be action might very well be to conduct a village wide traffic analysis. If the analysis shows in view of the convoluted process that has evolved from this issue, the prudent course of including speed limits.

The speed limit when not warranted has sometimes resulted in increased speeds. posted at 30 miles per hour. Finally, experience has shown us that artificially lowering posted at 25 miles per hour while residential side streets immediately adjacent to them even more confusing is the fact that some collector streets (ex. Maple, Madison) are now blocks are posted at 25 miles per hour while others remain at 30 miles per hour. Perhaps in spite of the traffic studies. The result has been a piecemeal approach where random and wishing to be responsible, often find themselves supporting the lowered speed limits the speed limit is not warranted. However, elected officials, responsible to their electorate years this process has proven problematic as traffic studies sometimes show that lowering recommends based upon the study and the applicable warrants. In the last few done and the results are presented to the Transportation and Safety Committee with a often asked to lower the speed limit on residential streets. Typically, a traffic study is As it relates to the Village of Lombard, the police department and elected officials are

Congressional factors (warrants) are present. Examples can include high accident rates or heavy traffic control devices (MUTCD). Deviations from these standards are allowed when all streets throughout the Village. These standards are found in the Manual on Uniform standards should be followed to provide for an orderly and safe movement of traffic on hour speed limit. Our position has always been that well established engineering vehicle volumes.

Analysis

- Studies have shown that motorists drive at speeds that they feel are reasonable, comfortable and safe, regardless of the posted speed limits.
- Studies show that reducing speed limits by five miles per hour brings about a 25% reduction in actual speeds. Put another way, lowering a speed limit from 30 miles per hour to 25 miles per hour will bring about an actual reduction in vehicle speeds of approximately 1.25 miles per hour;
- There are three factors that bear upon reducing speeding – engineering,
- enforcement and education (the three "E's");

cc:

Thomas P. Baye, Village Attorney
 Carl Goldsmith, Dir. Of Public Works
 David Gomman, P.E., Ass't Dir. of Public Works
 Dep. Chief Dane Cuny
 Dep. Chief Patrick Roalins
 Bruce Longino, Accreditation Manager

hesitate to contact me.

The Police department, in agreement with the Public Works Department recommends that the Village conduct a village wide traffic analysis to determine if a lowered limit is justified. This would be in accordance with state law and the opinion of the Village Attorney. Further recommendations can be made based upon the results of the study. If you should have any questions, or would like additional information, please do not hesitate to contact me.

Recommendation

An additional point to consider is the practical effect of any potential speed limit reduction. As mentioned earlier, lowering the speed limit by five miles per hour will effectively reduce the speed of vehicles by approximately 1.25 miles per hour. Speeding in residential areas is often influenced by perceptions that are not grounded in fact. As a result, even with a lowered speed limit village wide, complaints about speeding vehicles most likely will not be reduced for elected officials or the police department.

National studies have confirmed that motorists drive at speeds that they feel are reasonable, comfortable and safe, regardless of the posted speed limits. Travel speeds along residential streets should reflect the actual conditions that exist within a neighborhood and not necessarily the speed that the motorist feels is appropriate. Concerns about speeding in residential areas are a natural result of the dual role that neighborhood streets play in carrying motor vehicles as well as pedestrians and bicyclists. Resident complaints are likely to occur where incoming residents did not anticipate traffic densities and where traffic volumes have increased substantially over time.

A residential street is a place where children ride bicycles, cross the street to play with other children, joggers partake of healthful exercise activities, and neighbors visit neighbors. Vehicles received to be traveling too fast down a residential street adversely impact residential tranquility. It is difficult to prevent children from occasionally playing in the street or running into the street during the course of play. Parental concern over child safety has been the primary motivation for citizen's protests concerning speeding on residential streets and helps account for the political volatility of neighborhood traffic management issues.

Recommend the Village Board updating the Master Transportation Plan based on a village wide engineering study. The plan should study the need for establishing uniform speed limits throughout the Village's residential, collector and arterial streets. If the engineering studies justify the establishment of a residential speed limit of 25 mph, urge the village to commit the enforcement and educational resources necessary to ensure the maximum impact of the speed reductions.

BACKGROUND:

ACTION REQUESTED:

SUBJECT: Staff Report: 25 mph Residential Street Speed Limit

FROM: Bruce Longino Accreditation Manager

TO: Raymond Byme Chief of Police

DATE: September 22, 2008

LOMBARD POLICE DEPARTMENT MEMORANDUM

Edwards and Brackett (1978) noted, "The effectiveness of enforcement depends on increasing the drivers' belief that they may be apprehended if they speed, so that they will adjust their behavior and slow down." The goal is to make the "subjective

police enforcement, should be utilized if 25 mph residential speed limits are adopted. Of informing the public of the dangers of excessive speed and the likely presence of increased negative consequences of driving fast. Education, in the sense that slower speeds are appropriate and reasonable and, through enforcement, to increase the perceived effectiveness. This approach operates through education, to inform and educate drivers enforcement and public information have proven to have a modest but real effectiveness. Overall, speed control by reducing speed limits and providing a mix of education. Speed limits will typically decrease actual average vehicle speeds by only one-fourth of the limits alone have little effect on actual vehicle speeds. Reducing posted speed

the driver and the pedestrian would have had more time to perceive the risk and react." Pedestrians would be prevented entirely had the vehicles been traveling more slowly, since crashes than when struck by vehicles going more slowly. Also, many pedestrian vehicles. Pedestrians suffer much more serious injuries when struck by high-speed injuries. Pedestrians can have a very significant influence on pedestrian crashes and in vehicle speeds as traffic calming. The report goes on to recommend that "reductions generally known as traffic calming. Pedestrians share the roadway can be achieved through engineering approaches commonly used in neighborhoods where vehicles and pedestrians long-lasting speed reductions in neighborhoods where vehicles and pedestrians police enforcement of speed limits, and associated public information campaigns. More "Reducitions in vehicle travel speeds can be achieved through lowered speed limits, according to a 1999 report issued by the U.S. Department of Transportation;

An extensive review of the literature found many studies suggesting slower speeds save lives. According to the National Highway Traffic Safety Administration, a pedestrian struck at 30 mph is three times as likely to die as a pedestrian struck at 25 mph. Slower driving also helps drivers avoid accidents. According to the U.S. Department of Transportation, a car going 25 mph can stop for a child who jumps out 110 feet down the road; a car going 30 mph can't. Pedestrians are much more likely to be killed or seriously injured than younger pedestrians. National crash data strongly supports the conclusion that higher speeds for vehicles striking pedestrians result in more serious consequences.

DISCUSSION:

Repetited complaints of speeding vehicles and concerns for the safety of pedestrians from Lombard residents have again caused this issue to be addressed by elected officials. Their responsibility to determine policies, establish priorities and make choices concerning traffic planning and management ultimately will decide how this matter is resolved. They have requested input from the police department concerning the ramifications of establishing a 25 mph residential speed limit and adopting the use of traffic calming devices.

If, based on valid engineering studies, the Village Board establishes the 25 mph residential speed limit ordinance throughout the Village; the police department should develop a comprehensive program to ensure maximum compliance with the new regulation. Some of these measures to be considered include:

The Plan takes into account road upgrades, changes in intersection design, parking requirements, pedestrian needs and other modes of transportation. An updated plan based on a comprehensive engineering study of roadways and speed limits will assure the community that established speed regulations are based on sound scientific data and reasonable traffic safety principles.

- Ensure the wise use of public and private investments in transportation facilities walking, bicycle, public transit and private vehicles
- Provide for a complete transportation system that allows for choices of travel by environment
- Preserve the quality of life, area amenities, local neighborhoods and the natural and services
- Enable the safe, convenient and efficient movement of people and goods

An effective Master Transportation Plan is an opportunity for the community to anticipate travel needs for the next 20 years and to ensure that various modes of transportation are appropriately combined in a realistic plan. The plan should meet current and future transportation needs in ways that:

Over the years, the Village Board has authorized speed limit adjustments on a piecemeal basis. Motorists become confused and angry when they drive down collector streets and observe posted speed limits of 25 mph while living on residential streets posted at 30 mph. Also, with more than 30 north and west suburbs establishing 25 mph residential speed limits, Lombard residents can become frustrated because this policy has not been adopted by the Village.

Previous studies conducted by the Lombard Police Department discussed traffic calming measures, defined as a combination of non-physical and physical options that reduce the negative effects of motor vehicle use, alter driver behavior and improve road roundabouts, other horizontal traffic deflections and increased use of stop signs were concluded that the use of countermeasures including road humps, traffic circles and conditions for non-motorized street users. Studies in 2002 and in 2004 correctly concluded that the use of countermeasures such as traffic circles and roundabouts, other horizontal traffic deflections and increased use of stop signs were of questionable benefit, expensive to install and posed safety and response time issues for the police and fire departments. For these reasons, the department did not recommend the use of traffic calming devices on village streets. Few communities in the Chicagoland area have adopted traffic calming measures to address residential speed reduction except in instances where other countermeasures have proven unsuccessful. The department should continue to oppose these countermeasures as a viable option on residential streets.

Slowly no matter when or where they are driving, "probability" independent of time and place, so that drivers are encouraged to drive more

In conclusion, many of the principles, assumptions and recommendations reported in the 2002 and 2004 police department studies remain valid. What has changed is that despite the Department's best efforts at addressing the problem of residential speed issues, Village officials continue to be inundated with complaints from the community. Enacting the 25 mph residential speed limit is no guarantee the number of complaints from residents will be reduced or that driving speeds will be significantly lowered. Adopting the recommended strategies will demonstrate the fact that the Village's Board members and the departments are doing everything possible to ensure the safety of the residents of Lombard.

- Develop and efficient way to coordinate and follow-up on traffic complaints
- Create public awareness of enforcement campaigns
- Assign proactive targeted enforcement to specific neighborhoods
- Increase directed enforcement in continuing problem areas
- Increase the use of the speed trailer for community education
- Procure a stealth radar unit the department can utilize to ensure efficient personnel deployment
- Adopt the national "Keep Kids Alive Drive 25" safety campaign
- Post advisory speed limit signs at all points of entry to Lombard and post notice on the Village's web page
- Consider launching a Neighborhood Speed Watch program in response to residential speeding complaints
- Assign a sergeant to supervise and manage all of the department's traffic functions. The position as proposed in the Traffic Safety Unit, 2008 Workload Assessment, will coordinate the efficient deployment of TSU and patrol officers to enforce residential speed limits, coordinate education programs, liaison with the Transportation & Safety Committee, and become a single point of contact for the community to report neighborhood speed issues.

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- Deputy Chief Dane Cuny (2002). "Residential Traffic Speed and Enforcement." Lombard Police Department
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References

Overview of Issue

- Complaints of Speeding Autos Plague all Suburban Police Departments
- Efforts To Reduce Complaints Include
 - Lower Speed Limits
 - Traffic Calming Devices
 - Public Awareness Campaigns
 - Intensive Enforcement
- None of These Efforts Have Stopped Complaints

Presented by:
Deputy Chief Dan Cuny
Lombard Police Department



Residential Traffic Speed and Enforcement



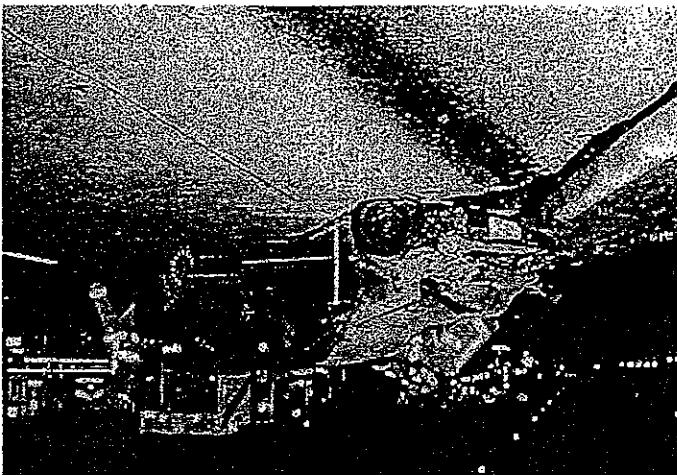
- 130 miles Patrolled by 46 sworn on 3 shifts
- Average of 8 Officers on Street at Any Time
- Answer 31,000- 911 calls Each Year
- Each Officer has about 16 Miles of Street to Patrol When not Handling Calls/Duties
- Minimal time for Enforcement
- Little Chance of Detection For Speeders

Why the Police Can't Be Everywhere

- Perception of Speeding Usually Caused by:
 - ↳ Residents Overestimating Vehicle Speeds
 - ↳ A Few Isolated Speeding Incidents Create the Impression That Many Vehicles Are Speeding

- Speed Studies Usually Show That Actual Speeds Don't Validate the Complaint

Perception of Speeding Problems



Why Is DUI So Important?

• DUI Arrests Last Year

• Issued 9,700 Traffic Tickets and Made 330

• With 175 Officers for 480 per Sworn (half)

• Compared With Naperville's 84,500 incidents

• Sworn Officer (70)

• Handled 59,321 Incidents in 2001 or 857 per

What Are The Police Doing?

• DUI Arrests Last Year

• Issued 9,700 Traffic Tickets and Made 330

• With 175 Officers for 480 per Sworn (half)

• Compared With Naperville's 84,500 incidents

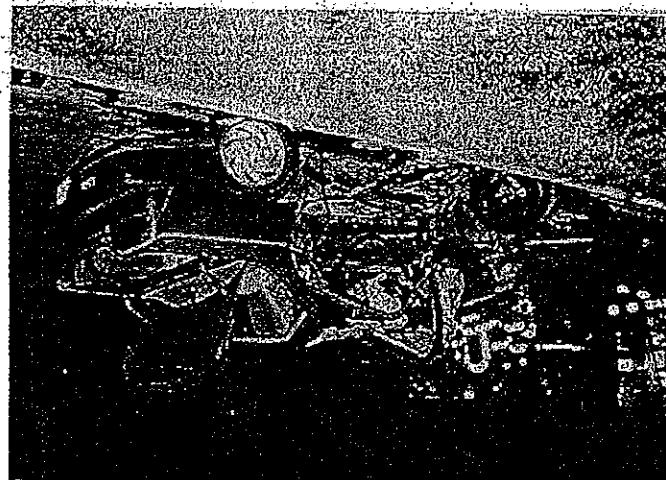
• Sworn Officer (70)

• Handled 59,321 Incidents in 2001 or 857 per

- Residents resent drivers speeding on "their" street
- It increases traffic noise levels - engine and tires
- It increases the risks of vehicle crashes
- Residents fear for children's safety

Important Issue

Why Residential Speeding is an



LEADS innocent People



Speeding Complaints Options Available for

Overwhelmed by Task

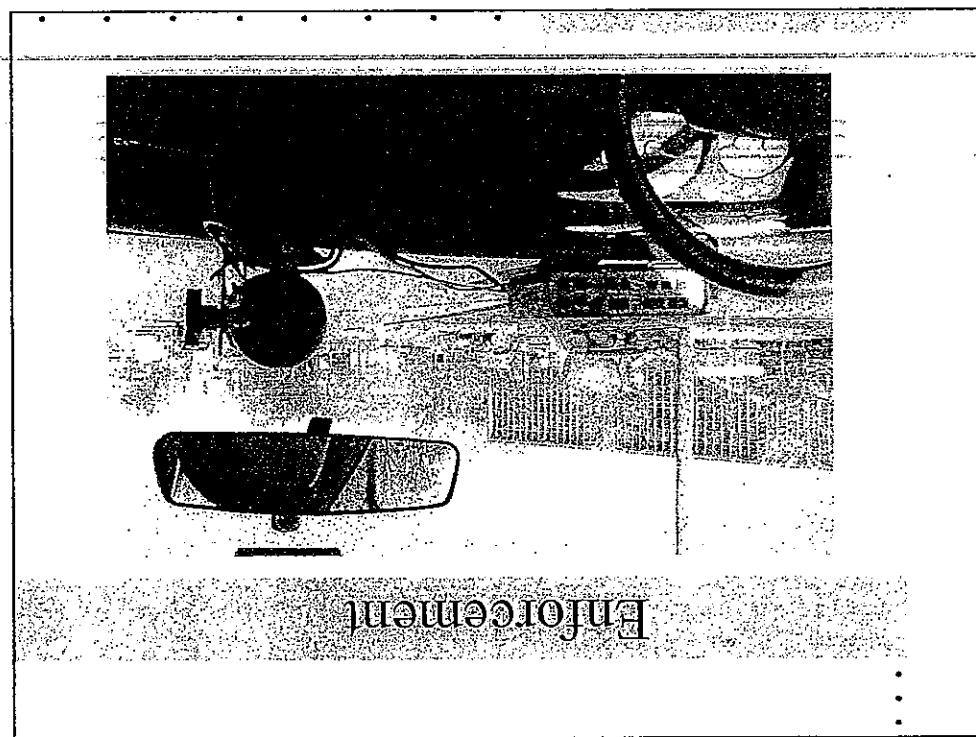
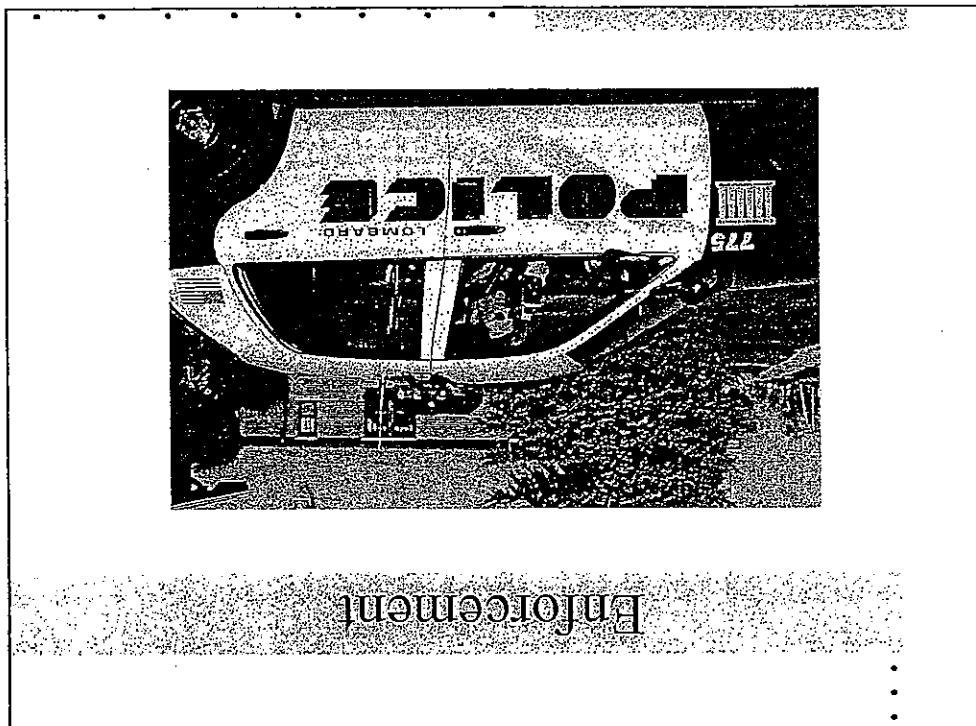
- Most Drivers Leaving Officers Not Wanting to Ticket Reasonable Drivers & Feeling
- Improper Limits Makes Speeders Out of Limits Cause Drivers to Ignore All Limits
- 1997 NHTSA Research-Inappropriate Speed
- 5 MPH Lowering equals 1.25 MPH Change
- Only Drops Actual Speed 25% of Reduction
- 1999 NHTSA Study-Reducing Posted Limits

Setting Speed Limits

- Can change drivers attitude when consistent and random
- Not always compatible with the Community and random
- Policing philosophy
- Is not effective at maintaining speeds at artificially low posted limits (55 mph limit on Tollways as an example)

Enforcement

Traffic Calming Devices	Implementation
• Limited Successes	• Installation
• Expensive- particularly if done for every one collision into their barriers)	• citing speed sometimes went up after Naperville just discontinued their program
• Possibly dangerous (Naperville experienced one collision into their barriers)	• Naperville just discontinued their program citing speed sometimes went up after installation
• Speeding complaint	•
• Naperville experienced one collision into their barriers)	•
• Naperville just discontinued their program	•
• Installation	•



- Speed Display Sign (Speed Trailer) - mobile and temporary locations
- Slow or Caution signs/markings at hazardous locations

Positioning Warning Signs/ Signals

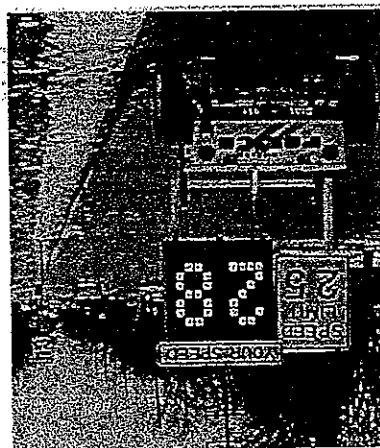


Enforcement

- Proved unsuccessful in Lombard in 1999
- Labor Intensive
- Limited long-term effect
- Generates public awareness of speed enforcement

Campaign

Anti-Speeding Public Awareness



Speed Trials

To Change The Perception
of the Public Through Education

Our Mission



Lombard's Anti-Speeding Public Awareness Campaign

- Enhancing and refining current speeding results
- Place more focus on traffic related issues including enforcement
- Provide the T & S Committee and Village Board with regular reports on complaints and

Will Do

What the Police Department

- Order traffic speed study if not already done
- Visible enforcement activities- Lights/Action
- Speed trailer & Decoy Squad
- Educating the citizen using hand held radar, Ride-a-long with officer to enhance speed enforcement understanding, and information tools like "The Truth About Speeding" brochure

Speed Reduction Program

Develop A Comprehensive

Conclusion

- Understand that a citizens complaint of speed limit may not always be valid although a real concern to the resident that needs attention
- Allow the enhanced efforts of the police department time to show results
- Do not reduce speed limits without cause
- Establishing speed limits
- Adopt & follow the IDOT policy on understanding speed limits

Recommendations

Residential Traffic Speed

Enforcement

and

Lombard Police Department

Deputy Chief Dane County

February, 2002



miles of roadway.

Lombard currently has 70 sworn police officers with 46 officers and supervisors assigned to the three patrol shifts. These 46 shift personnel must patrol the Village 24/7. That comes out to approximately 10 sworn officers on duty at any given time with 2 being supervisors, leaving 8 officers to patrol 130 miles of streets or about 16 miles per officer. Officers must respond to and handle 31,000 calls for service per year. This leaves little opportunity to actively patrol their 16 miles of roadway.

The Village of Lombard has over 130 miles of roadway, almost all being residential streets.

and therefore it must be addressed.

Experience has shown that a majority of the speeding auto complaints are not consistent with actual problems but rather a perception that speeding problems exist. These perceptions are typically created when residents overestimate the speed of traffic or a few isolated incidents of actual speeding are observed. Even though the problem is based upon a perception, the issue is real to the citizens

Although these steps may temporarily silence complaints at a particular location, they do not stifle

limits, installing traffic calming devices, public awareness campaigns, and intensive enforcement. Complaints from citizens with very limited success. These approaches include reducing speed limits no viable solutions have been found. Communities have tried various approaches to eliminate complaints of speeding autos have been a consistent problem for suburban police agencies and no

Overview

(Revised)

Residential Traffic Speed and Enforcement in Lombard

- Residents resent drivers speeding on "their" street
- It increases traffic noise levels- engine and tires
- It increases the risks of vehicle crashes
- Residents fear for children's safety

Why Residential Speeding is an Important Issue

for the 84,500 incidents generated in 2001. swom officer activity of 847. Naperville's 175 police officers had a per swom officer activity of 480 busier than many agencies, handling 59,321 activities in 2001. For comparison Lombard had a per consistently in the top 10 of Illinois police agencies for DUI arrests. Lombard officers are also issued just under 10,000 traffic citations and made over 300 DUI arrests in 2001. Lombard is Lombard officers do a fair amount of traffic enforcement. The Lombard Police Department reasonable and safe regardless of a posted speed limit.

judgement. Fortunately, studies have shown that over 85% of drivers will drive at a speed that is speed at which traffic flows on any given roadway is predominantly controlled by the drivers' self- vehicle speeding in any jurisdiction has little chance of being detected by police. Furthermore, the down a particular street, let alone conduct meaningful speed enforcement. The fact is that a speeding The point is that during the limited patrol time, there is minimal opportunity to even drive

Under this scenario, officers feel as if enforcement is meaningful and manageable. Limit plus 10-12% slightly above the limit but not at the level for reasonable enforcement action. Traffic is traveling within an acceptable range. This is made up of approximately 85% near the speed limit is legitimate set (85th percentile) our experience shows that over 95% of drivers (85th percentile) consider safe, the net effect is to cause many drivers to ignore those speed limits as well as other posted speed limits. This phenomenon has been named *The Tollway Effect* to describe the prevailing speed on area tollroads where the posted limit has been inappropriate to describe the prevailing speed on area tollroads where the posted limit has been inappropriate.

When a speed limit is legitimate set (85th percentile) our experience shows that over 95% of drivers (85th percentile) consider safe, the net effect is to cause many drivers to ignore those speed limits as well as other posted speed limits. This phenomenon has been named *The Tollway Effect* to describe the prevailing speed on area tollroads where the posted limit has been inappropriate to describe the prevailing speed on area tollroads where the posted limit has been inappropriate.

A study published by the National Highway Traffic Safety Administration (NHTSA) in 1999 found that reducing posted speed limits only decreases actual vehicle speeds by 25% of the reduction. That equates to 1.25-mph reduction on a 30-mph zone reduced to 25 mph. This is important because a 1997 study by NHTSA shows that when speeds are set lower than what most drivers (85th percentile) consider safe, the net effect is to cause many drivers to ignore those speed limits as well as other posted speed limits. This phenomenon has been named *The Tollway Effect* to describe the prevailing speed on area tollroads where the posted limit has been inappropriate to describe the prevailing speed on area tollroads where the posted limit has been inappropriate.

Setting Speed Limits

- Keeping up with other traffic
- Unaware of Speed limit
- Being late and making up for lost time

Based upon interviews of drivers who admitted speeding in residential areas:

Causes Cited for Speeding

a roadway.

speeding complaints, it is easier to change the resident's perception than the speed of vehicles upon

The good news is that, although the perception problem is responsible for the majority of the

speeding vehicles after a complaint is received.

has been consistently identified when speed studies and/or enforcement efforts discover few or no

occurs when a resident incorrectly judges that vehicles are traveling too fast. The perception issue

then comes to the conclusion that many vehicles are speeding on their street. The other scenario

centred on two scenarios. One being that a resident sees a few individual vehicles speeding and

resident's perception of a speeding problem rather than an actual problem. These perceptions are

Experience has shown that the most common speeding auto complaint is based upon

Citizen Perception

speed enforcement

traffic, causes drivers to want to disregard all speed limits, and diminishes the officers ability to do

In summary, reducing a speed limit outside the 85th percentile does not change the speed of

for driving 70 mph on the posted 55 mph Illinois Tollway?

insurmountable and unreasonable. To illustrate this: When was the last time someone got a ticket

has the psychological effect of making the officers view their job of controlling speeding as

citations to drivers who are driving at reasonable speeds but violating a posted speed sign. It also

inappropriate posted speed. This places police officers in an uncomfortable position of giving

fact that 85% of drivers will drive at a safe and reasonable speed and that speed is higher than the

When speed limits are set artificially low, the violation rate is 85% plus. This is due to the

- Provided unsuccesful in Lombard in 1999
 - Labor Intensive
 - Limited long-term effect
 - Generates public awareness of speed enforcement
- Anti-Speeding Public Awareness Campaign

- Slow or Caution signs/markings at hazardous locations
- Speed Display Sign (Speed Trilater)- mobile and temporary

Posting Warning Signs/Signals

- sometimes went up after their installation
- Naperville just discontinued their program citing speed sometime went down and possibly dangerous (Naperville experienced one collision into their barriers)
- Expensive- particularly if done for every speeding complaint
- Limited Successes

Traffic Calming Devices

Options Available for Speeding Complaints

complainants and results

- Provide the T & S Committee and Village Board with regular reports on
- Place more focus on traffic related issues including enforcement
- Enhancing and refining current speeding auto complaint protocol

What the Police Department Will Do

"Truth About Speeding" brochure

enhance speed enforcement understanding, and informational tools like "The

4. Educating the citizen using hand held radar, Ride-a-long with officer to

3. Speed trailer & Decoy Squad

2. Visible enforcement activities

1. Order traffic-speed study if not previously done

- ◆ Conducting a comprehensive speed reduction program that includes:

Changing Perception of Complaintant

limit on Tollways as an example)

- Is not effective at maintaining speeds at artificially low posted limits (5 mph)
- Not always compatible with the Community policing philosophy
- Can change drivers attitude when consistent and random

Enforcement

although a real concern to the resident

- Understand that a citizen's complaint of speeding may not always be valid
- Allow the enhanced efforts of the police department time to show results
- Do not reduce speed limits without cause
- Adopt & follow the IDOT policy on establishing speed limits

Recommendations

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