SPEED CONTROL IN RESIDENTIAL AREAS

PROBLEM STATEMENT

The perception of speeding on local streets is probably the most persistent problem facing residents as well as traffic officials. Residents observe vehicles traveling at speeds that they perceive are too fast and conclude that the speeds need to be decreased. Residents may offer suggestions that they think will solve the problem such as installing stop signs, "children at play" signs, diverting traffic to adjoining streets, lowering speed limits, installing speed bumps or other measures that *seem* to make sense. In reality, these measures do little or nothing to solve the problem. This disproves a common belief that speed violators are non-residents or persistent cut-through traffic.

WHAT CAN BE DONE?

The main focus of addressing residential traffic complaints is to implement "Traffic calming" strategies. *Traffic calming* is the combination of physical controls and community support to reduce the negative effects of motor vehicle use. Interestingly enough, about 70% of violators live on or within a *few blocks* of the street that they speed on! The goals of traffic calming are to alter driver behavior and improve conditions for non-motorized users (bicyclists and pedestrians). Some objectives of traffic calming may include:

- lowering driver's speeds
- reducing crashes
- discouraging cut-through traffic
- increasing safety

There is no single, simple solution to speeding problems that will satisfy residents, is effective, and meets good engineering practices and standards.

The first step to determining if a true traffic safety condition exists. When a resident calls to complain of a "speeding problem" on their street, the following procedures are typically implemented:

1. A traffic monitor is placed on the street for 24 hours. This device consists of 2 rubber tubes placed on the road and attached to a computerized traffic counting device. The counter records total traffic volumes, speeds of vehicles, and the time of day that generates the highest volumes. In addition, the counter will calculate the *85^{th} percentile speed*, which is the speed at which 85% of the traffic is traveling.

Average speeds in most residential areas are between 28-32 mph. Many studies show that posting signs with higher or lower limits does *not* significantly change 85th percentile speeds. Rather, it is a fact that the *driving environment is what mainly influences speed*. Hundreds of studies conducted over several decades in all parts of the country *clearly* show that a large majority of drivers tend to operate their vehicles at speeds that are reasonable and proper, *regardless* of the posted speeds. The remaining 15% consists of those drivers who travel at excessive speeds or at much lower speeds than the posted speed limit and remain the most difficult group of drivers to deter.

5. After the data from the traffic counter is downloaded into a computer and translated into charts and graphs, a determination is made as to the seriousness of the speeding or volume problem.

6. At this point, the Traffic Safety Officer may place the *speed-monitoring trailer* on the street. This radar-equipped trailer detects vehicle speeds as they approach and then displays it on a large LED monitor screen. By displaying the driver's speed, a visual reminder is created to alert the driver as to his or her speed and to slow down, if necessary.

7. If 85th percentiles exceed 33-34 mph, *selective enforcement* may be warranted. Selective enforcement simply means that a radar-equipped car will monitor speeds for 5 days on the street for about ½ hour per day during the "problem" times and hopefully, this will calm down the traffic speeds for a while.

8. After the study is completed, the resident will be notified as to our findings.

CONCLUSION

There is no "cure" for traffic problems in residential areas, only techniques to quiet the situation down for a period of time. Successful "traffic calming" strategies include speed studies, traffic crash data, volume counts and appropriate selective enforcement. These measures can help our residents by creating safer traffic conditions and making the neighborhood more livable.