

Part 1: TRAFFIC CALMING OVERVIEW

A problem in our neighborhoods. "*Speed Kills!*" It's a mantra we have all heard for decades. But we often think of "speeding" as taking place on large highways at speeds of 80 mph and above. Consider this: Traveling at only 40 mph, the average driver who sights a pedestrian in the road 100 feet ahead will still be traveling 38 mph on impact; driving at 25 mph, the driver will have stopped before the pedestrian is struck. That is *why* the speed limit is set at 25 mph in neighborhoods, and one reason *why* measures are being taken in communities all over the country to combat speeders.

Another reason speeders and large volumes of traffic are being targeted by neighborhood groups is that this type of transportation activity greatly reduces the residential quality of life. Safety. Noise. Pollution. Trash. People simply don't want walk (or live) along streets with voluminous amounts fast moving traffic. People tend to move away from such areas, or at least move off the front porch and retreat to the somewhat quieter backyard. The result of this is that they have less contact with their neighbors. Community cohesiveness suffers. As the fabric of a town's communities begins to fray, the town suffers as well. Oh yes, there may be more cars and more stores, and municipal coffers may temporarily benefit. But over time, the livability of the town dies...and people move on.

Proven solutions. "Traffic Calming" is a traffic engineering-proven road design and enforcement strategy that helps to reduce vehicle speeds and volume. Programs generally include the three components necessary to successfully reduce speeding: *education, engineering* and *enforcement*. In general, traffic calming programs promote driver care, yield safer streets and divert inappropriate traffic away from residential neighborhoods. Traffic calming projects can range from a few minor changes along neighborhood streets to a major rebuilding of a network of streets. Impacts range from moderate speed reductions to a significant reduction in vehicular accidents. From an engineering standpoint, the official Institute of Transportation Engineers definition reads as follows:

Traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users.

Results that fit our goals. Many of the goals that the Residential Traffic Task Force committee has set forth for the Town can be achieved through an aggressive and intelligent application of traffic calming measures adapted to our unique needs. By reducing the volume and speed of vehicles in neighborhoods, we can help bring about a safe, balanced and varied transportation network. We can protect the quality of life in our neighborhoods and thus strengthen our communities. The entire Town, including the business community, will benefit. As traffic patterns change, we can reassess our transportation priorities and better allocate our funding.

History of traffic calming. European traffic calming began as a grassroots movement in the late 1960's. Angry residents of the Dutch city of Delft fought cut-through traffic by turning their streets into "woonerven," or "living yards." What were once channels for the movement of cars became shared areas, outfitted with tables, benches, and sand boxes jutting into the street. The effect was to turn the street into an obstacle course for motor vehicles, and an extension of home for residents. By 1976 "woonerven" was officially adopted by the Dutch government. Communities all over the world have now adopted the practice in one form or another.

Although the use of street closures as a calming measure in Montclair, NJ dates back to the late 1940s, it was not until the late 1970s that the modern practice of traffic calming began to be practiced in the U.S. These early programs helped adapt the European methods to America's unique culture. The passage of the ISTEA and TEA-21 federal legislation has helped promote safer, calmer streets across America. Today traffic calming programs are wide spread. Citizens, like those in Leesburg, are calling on their local governments to step up to the challenge of traffic calming.

Lessons learned. The Dutch quickly learned that woonerven in its original form was too severe. Over time the sandboxes and lawn furniture developed into today's modern engineering solutions of traffic calming devices. A balance between the needs of drivers and those of residents slowly began to be struck.

Although there have been some failures with traffic calming, for the most part the devices work as advertised when applied properly. Seattle's traffic calming program, for example, involved the installation of traffic circles. It produced a 77 to 91 percent reduction in traffic collisions. Portland, Oregon also constructed traffic circles and experienced a 58 percent reduction in the number of reported crashes. In numerous places it has been shown that "road diets" (reducing the number of traffic lanes) decreased both the volume *and* speed of vehicles in areas. The results of this combination are safer streets, safer sidewalks, and a better quality of life for citizens.

In the Mid-Atlantic region Maryland has been at the forefront of traffic calming. Montgomery County, MD just to our north has been successfully applying a residential traffic calming program for some time. The Virginia Department of Transportation now has its own program that follows national standards adopted by other states. (VDOT's *Residential Traffic Calming Guide* is found in Appendix C.) Local programs have been implemented in Fairfax and Prince William counties with VDOT approval. Municipalities such as Virginia Beach, Falls Church and Manassas have implemented their own traffic calming programs.

The Task Force recommends that Leesburg join these forwarding-looking communities and adopt the plan we set out in this report.