INTRODUCTION

Our paper is entitled “Traffic Calming - Beware of the Backlash.” As automobile travel increases, we find our communities becoming awash with traffic that can no longer be accommodated on the traditional arterial roadway system. We are finding traffic taking to the collector and local street system as a means of maintaining some degree of mobility. As this real and in many cases perceived growth in traffic flow through residential neighborhoods occur, a new term has entered our transportation vocabulary; Traffic Calming.

Traffic calming has become the latest buzz-word in our profession as well as in the media, with policymakers and with lawyers. The Institute selected the topic as its Hot Topic of 1997. Two issues of the Journal were devoted to the subject. Numerous technical papers were presented at ITE conferences from coast to coast; all with over-capacity crowds. Clearly, this issue has been brought before the membership like nothing else in recent memories.

Now, after several years of implementing “Traffic Calming” strategies on literally hundreds of streets and in hundreds of neighborhoods, we are beginning to see evidence of backlash.

Our paper looks at the various examples of backlash; from the petition drive to the ban of speed humps in Maryland, through the Judge’s order to remove speed “tables” in Florida, to the removal of speed humps and traffic circles in California. It is not our intention to demean or criticize traffic calming. We only intend to point out some difficulties that have been experienced in the hope that lessons can be learned from these experiences.

Our paper is divided into two distinct geographic regions; the east coast and the west coast, with some things in between.

Mr. Dabkowski will cover the east coast and Mr. Cline will talk about the west coast and things in between.

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The purpose of this paper is to review some case histories in which traffic calming strategies have not been as well received in the community as originally envisioned. Each of these case histories have come to our attention by either second-hand knowledge, review of documents, or personal experience. They will be summarized in alphabetical order.

**Alhambra, California - Mid ’80s**

Speed humps were installed on Westmont Avenue as a demonstration project. The location was selected as the result of a petition drive from abutting residences. Westmont Avenue is a typical residential street with some potential for “cut-through” traffic.

A series of typical Watts type speed humps were installed. They were tapered to join the street flow line at the edge of a three-foot wide concrete gutter panel.

In a relative short period of time, a counter-petition was received from the neighborhood to remove the humps. A review of the petition concluded that many residents signing the original petition are now requesting that the humps be removed. The basic reason for the reversal of the community’s sentiment about the humps was “gutter-running.” It appears that the extra-width gutter panel (three [3] foot) was the primary culprit in this case.

**Beverly Hills, California - Early ’90s**

Beverly Hills had adopted a program to install speed humps on residential streets. A Watts type design was selected using a 3½ inch profile. After several installations, the recipient communities began complaining about the noise associated with the 3½ inch humps.

As a result of these noise complaints, the City elected to experiment with a less severe hump. A profile less than 3 inches was selected.

It is our understanding that the City has removed the 3½ inch humps because of the noise factor and retained the less severe humps.

**Cota De Caza, California**

This gated community in Orange County has embraced a speed bump program to slow drivers on the private residential streets. The exact bump profile is unknown.

On October 7, 1998, the Los Angeles Times Orange County edition featured a front page article entitled “Controversy Putting Brakes On The Use of Speed Bumps.” Emergency response is the issue in this situation. According to the Times’ report, the Orange County Fire Authority is demanding the nearly 30 speed humps be removed from the “hilly” streets in the community. The article indicated that Berkeley, California, and Boulder, Colorado, have placed moratoriums on speed hump construction.
Emergency response has become a major issue in the speed hump/bump controversy. Portland, Oregon, has given considerable attention to the topic.

**Houston, Texas**

There appears to be a controversy brewing in Houston with respect to the speed hump program. According to reports, Houston has constructed more than 1600 humps. The emerging issue, according to recent worldwide-web postings, is that the City may be accused of using traffic calming to divide neighborhoods along lines of class and race. More will be included in the presentation as information becomes available.

**Montgomery County, Maryland**

Montgomery County, Maryland, has gained some degree of national attention with the apparent backlash from its speed hump program. According to reports, there are nearly 1200 humps on public roads in Montgomery County. Two backlash issues have emerged from their program.

First, the only known Americans With Disabilities Act (ADA) court case has been successfully defended by the County. As of this writing, the case is apparently going on to the Appeals Court.

Second, and possibly more significant, a petition drive to ban further speed hump construction and remove all in place was successful late last year. The petition drive, which included more than 10,000 signatures, intended to put the issue before voters on the November ballot. It is our understanding that a judge in Maryland decided against putting the matter on the ballot.

**San Luis Obispo, California**

Several years ago, at the urging of residents of Chorro Street, a series of traffic calming measures were installed to manage traffic flow on their street. Chorro Street is a 40-foot wide collector type street. Abutting properties are developed with single-family dwellings. The street is one of only a few streets which cross either under or over the U.S. 101 Freeway. Chorro Street becomes one of the principle east/west streets in the downtown area. Consequently, Chorro Street was found to carry daily volumes in excess of 10,000 vehicles.

Traffic calming on Chorro Street was comprised of speed humps at mid-block locations and a combination of chokers and circles at intersections. The chokers and circles were installed “temporarily” using striping, raised pavement markers, plastic delineators and used tires, painted white. To declare them “ugly” would be an understatement. They were, however, intended to be experimental.
These traffic calming efforts became controversial after a year or so in place. This controversy resulted in the removal of the speed hump, chokers, and circles. As an apparent concession to the community, multi-way stop controls were installed at a number of intersections along the controversial segment of Chorro Street.

Sarasota, Florida

In June of 1998, the Circuit Court in and for Sarasota County, Florida ruled that the City of Sarasota must remove speed humps and speed tables erected by the city on various streets. The court agreed with arguments made by residences of the city, that speed humps and tables were traffic control devices that must comply with the Manual on Uniform Traffic Control Devices (MUTCD) as directed by Florida statutes. The court’s review of the MUTCD revealed that it does not address speed humps or speed tables. Therefore, the court ruled that the traffic calming devices do not conform to the MUTCD and are in violation of Florida law. In making its decision, the court rejected arguments by experts testifying on the City’s behalf that speed humps and speed tables are not traffic control devices.

A summary of the Court’s decision is shown below:

On May 6, 1996, defendant approved implementation of Phase I of the South Sarasota Traffic Abatement Plan. Phase I included the construction of “speed humps” and “alternative paving” (referred to hereinafter as “speed tables”) on several city streets.

The speed humps and speed tables are devices erected by defendant for the purpose of regulating traffic by reducing the volume and speed of vehicles traveling on those streets. Defendant had authority to regulate traffic by means of official traffic control devices. Section 316.008(b), Florida Statutes. “Official Traffic Control Devices” are those “...not inconsistent with this chapter, placed or erected by authority of a public body or official having jurisdiction for the purpose of regulating, warning or guiding traffic.” Section 316.003(23), Florida Statutes.

Section 316.006(a), Florida Statutes, grants to defendant original jurisdiction over all streets and highways, except state roads, in the City of Sarasota. Pursuant to this grant of jurisdiction, defendant may erect and maintain traffic control devices which conform to the manual and specifications of the Department of Transportation.

The Department of Transportation has adopted the Federal Highway administration’s Manual on Uniform Traffic Control Devices (1988 Edition) as the manual governing installation and maintenance of traffic control devices in the State of Florida. This is a manual required to be compiled and published pursuant to Section 316.0745(2), Florida Statutes. The manual
does not address or recognize speed humps or speed tables. The speed humps and speed tables at issue in this case therefore cannot conform to the manual and specifications of the Department of Transportation.

This case is reminiscent of a California decision in the early 1980s where large planters were used to form diagonal diverters. The Court ruled that the planters were not “official traffic control” devices. California law was subsequently amended to include “…islands, curbs, traffic barriers, speed humps…” as roadway design features. The law, as amended, allows the use of these “roadway design features” to implement the circulation element of a General Plan.

Seattle, Washington

While on a self-guided tour of Seattle’s traffic calming program, Mr. Cline happened across several traffic circles which were under construction. These circles were constructed in the middle of uncontrolled four-way intersections in a residential area of grid-system streets. According to reports out of Seattle, there have been over 600 neighborhood intersection circles constructed over the last nearly 20 years.

His specific experience occurred on an east/west collector type street named John Street, if his recollection is correct. As he was preparing to add the new circle, complete with construction barricades and cones, to his 35mm slide collection, he decided to catch a late model Jeep Cherokee in the picture for perspective. As he completed the shot, the driver of the Cherokee stopped and shouted “Did you just take my picture driving around that stupid thing?” Since the Jeep was stopped out of harms way, Mr. Cline decided to develop some dialogue with the driver. As Mr. Cline approached the vehicle, the driver went into a tirade about the City’s reacting to a few bleeding heart residents, and using his taxes to construct these obstacles in the public street.

Since Mr. Cline had already concluded that the driver of this respectable-looking vehicle appeared to be reasonable and did not represent any personal danger, he introduced himself and explained the reason for the photograph. The driver was calm by now and reacted favorably to Mr. Cline’s offer to send him some information about traffic calming in general and Seattle’s Traffic Circle program. The driver offered his card; he is a lawyer. It is believed that he may not be alone in his opinion of traffic calming, particularly on collector type streets.

Toronto, Canada

Part of the Traffic Calming Tour in Toronto during the 68th Annual Meeting of the Institute included a trip down Merton Street. Traffic calming on Merton Street was comprised of chicanes causing a serpentine travel path for two-way traffic. The chicanes were constructed of raised islands placed in a staggered pattern to create the serpentine pattern.
According to information available during the Toronto tour, the chicanes on Merton Street were part of a controversial traffic calming program and scheduled for removal. While the basis for the controversy is unknown, Mr. Cline’s personal experience and discussions with City staff suggests that the traffic calming strategy may have been overly aggressive considering the volume of traffic on the street.

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These reports are not intended to say that traffic calming is wrong or inappropriate. In the case of Toronto, Merton Street represents a mere 5 percent of the streets with traffic calming. A 95 percent success rate in our profession is good.

These case histories appear to point to at least one common denominator: traffic volumes. Another common thread may be the severity of speed humps. A “right of passage” may also be an issue.

On the subject of traffic volumes, it appears that the San Luis Obispo experience was volume related. The San Luis Obispo project was located on a collector type street where there was little opportunity to take alternative routes. The Seattle experience, in our opinion, may have been the result of attempts to slow higher volumes of traffic on a collector type street. John Street is signalized at the nearby arterial intersection which may have caused the higher volumes of traffic on the collector. In Toronto, Merton Street was part of an area program which may have limited the opportunities for traffic to use suitable or appropriate alternative routes due to congestion on nearby parallel arterials.

Another related issue, at least with speed humps, is the Americans With Disabilities Act (ADA). While the road agency in Montgomery County has appeared to prevail in the only known ADA case that has progressed to Court, the potential is out there for more actions.

Mr. Cline’s personal experiences include two situations involving potential ADA issues. While not directly involved, he spent a considerable amount of telephone time with an individual in Berkeley on the topic. Apparently, this individual was challenging the City’s attempts to construct humps on the street leading to or on the street in front of their home. The person complained of a severe back injury.

During a recent decision to install speed humps in Agoura Hills, California, Mr. Cline encountered a concern from a resident with a back injury that the proposed humps would disrupt access to their home. ADA was cited in their letter of concern. The issue was mitigated by the strategic placement of the humps to provide reasonable access without encountering any speed humps.

Aside from these specific “documented” situations, our observations include a number of experiences where driving resentment is fairly prevalent. This resentment is most predominant on speed humps. The resentment takes the form of gutter-running, horn honking, and rubber burning. All of these behaviors appear to be directly proportional to
the severity of the hump. On humps with a maximum height of less than 3 inches, resentment is almost nonexistent. As the height increases, so does the resentment. Gutter-running and gouging is common as the humps approach 3½ inches. Four-inch humps and those more severe than 4 inches, collect a significant amount of tire marks. These tire marks are made from hard acceleration and, in our belief, are intended to disturb the tranquility of the neighborhood.

In conclusion, it appears that traffic calming is here to stay. It further appears that the backlash and resentment of traffic calming is related to the volume of traffic disrupted, the functional use of the street being calmed, and the severity of the strategy used.

It is our recommendation that Traffic Calming strategies be confined to strictly residential streets, that emergency service providers be consulted, that care be taken with respect to severity, and that ADA be considered with all projects during the development process. Don’t try to create 10 or 15 mph streets where a speed of 25 mph may be reasonable and lawful.

Another factor which may lead to a negative reaction to traffic calming is overly aggressive programs. As an example, there are projects out there where roadways have been narrowed through the use of chokers and chicanes to the point where there is only a single lane for two-way traffic. Any time drivers in opposing directions are required to compete for the same space in order to proceed, interesting sets of circumstance can arise. Who has the right-of-way? Our observations indicate that right-of-way is self-assigned by individual motorists. This can be rather scary. Momentum, size of vehicle, individual aggressiveness and frustration all go into the right-of-way assignment formula. In our opinion, these widely variable physical and human traits should not be the final factor during the decision as to which vehicle proceeds when opposing traffic approaches these one-lane situations simultaneously. The ultimate saving force in these situations should not be the individual’s self-preservation gene.

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