## POLITICS OF TRAFFIC CALMING PROJECTS

## **By Kathleen Calongne** Boulder, CO January 2003

Debate over the installation of traffic calming devices is dividing communities across the United States. Deflection devices, such as speed humps and traffic circles are appearing on streets around the country under the guise of improving safety. To the contrary, research reveals that traffic calming projects are often motivated by individuals in our federal and local governments willing to *sacrifice* safety in an effort to discourage travel by car.

Deflection devices such as speed humps and traffic circles are experimental in the United States. There is no official sanction for their use.<sup>1</sup> The United States Department of Transportation (USDOT) defines traffic calming devices *geometric design features of the roadway* rather than *traffic control devices*. The USDOT has established standards for the design and warrants for the recommended use of devices that are approved traffic control devices in the federal Manual on the Uniform Traffic Control Devices (MUTCD).<sup>2</sup> The absence of standards and warrants for the installation of traffic calming devices allows decisions over their placement and design to fall to local governments

The USDOT is a well-funded and supported agency of the U.S. government. Emergency rescue services are controlled locally. The imbalance in power has allowed individuals untrained in the fields of emergency rescue and fire suppression to make decisions about the significance of delay to emergency response to the protection of lives and property. Fire chiefs, as city appointees, are being persuaded to accept delays to their tax-funded response services to accommodate city staff and city council members who want to build deflection devices. Central to the debate is whether communities are more in danger from speeding cars or from delays to emergency response. An analysis that compares these risks was developed by Ronald Bowman, a scientist from Boulder, Colorado. The results of the analysis show that residents are in far greater risk from even minor delays to emergency response caused by delay inducing calming devices than from vehicles, speeding or not. The analysis has been verified by a professional mathematician and can be viewed online at http://members.aol.com/raybowman/risk97/eval1.html. The Assistant Fire Chief of Austin Texas, Les Bunte, applied the Bowman analysis to Austin with similar results, which can be viewed online at http://members.aol.com/ihbook/tfc\_calm.htm.

Members of city councils and transportation divisions who want to build traffic calming devices use the numbers of devices in other countries as support for their success. They fail to acknowledge the differences in our political systems which have driven devices onto streets in other countries, and the problems experienced in these countries from their long term use.

There has never been a democratic process for the installation of calming devices in other countries. In Leicester, England a protest petition of 500 signatures from 700 homes submitted to a local council was insufficient to halt an installation of speed humps.<sup>3</sup> The U.K. Transport Research Laboratory (TRL) which developed the design for the speed "hump" (in contrast to the speed "bump") softened its support for the device in 1999. Responding to complaints of excessive noise, foundation-damaging vibrations, increased vehicle emissions, complaints from people with disabilities and increase in cyclist and

<sup>&</sup>lt;sup>1</sup> Traffic Calming: State of the Practice, ITE/FHWA, Reid Ewing, 1999, pp. 13 - 14

<sup>&</sup>lt;sup>2</sup> Manual on the Uniform Traffic Control Devices, Millennium Edition, USDOT/FHWA, 2000

<sup>&</sup>lt;sup>3</sup> "Council Jumps the Gun," Claire Jones, LEICESTER MERCURY, Feb. 6, 1999

motorcycle accidents, they now recommend road authorities consider other solutions to slow traffic.<sup>4</sup> Councils around England are to spend millions of English pounds either lowering or removing humps to adhere to new disability regulations for lower bus floors to allow wheelchair access into buses.<sup>5</sup> Sigurd Reinton, Chairman of London Ambulance Service, states speed humps are killing hundreds of Londoners each year by delaying 999 crews. He states ambulances must slow almost to a "walking pace, or slower" when carrying an injured patient and the *twenty to thirty thousand speed humps*, plus the thousands of chicanes, ramps and barriers have resulted in some of the lowest survival rates for Londoners who suffer cardiac arrest.<sup>6</sup> In Australia, complaints from drivers and passengers of buses prompted the state office in charge of administering the Occupational Health and Safety Act to re-route the buses.<sup>7</sup> The Canadian Safety Council published opposition to the use of all devices that delay emergency response after devices used to block access to a street hindered the rescue of twelve people caught in a fire.<sup>8</sup> The Ontario, Canada Professional Fire Fighters Association joined other rescue provider unions in opposing deflection devices because of delays as well as injuries to fire fighters.<sup>9</sup> Injuries, including vertebral compression, are occurring to firefighters in the U.S. as well. At least two of these injuries have resulted in permanent disability.<sup>10</sup>

Devices designed to impose deflection on vehicles and vehicle passengers raise legal and ethical questions. Drivers in the United States have lost control over the devices, landing them in hospitals. Devices are damaging vehicles, increasing pollution,<sup>11</sup> increasing gas consumption and injuring persons with disabilities. The Americans with Disabilities Act (ADA) guarantees disabled persons equal access to public facilities. The Department of Justice regulations for Title II of the ADA defines "facility" to include "roads." There are no studies showing deflection devices are safe for disabled occupants of vehicles. Federal agencies responsible for enforcing the ADA have received significant testimony from persons with disabilities who describe injury and lasting pain from deflection devices.<sup>12</sup> Some devices have been removed because of problems experienced by disabled people.<sup>13</sup> A web site addressing these problems can be viewed at: www.digitalthreads.com/rada.

The legal system of the United States guarantees a higher level of protection for the individual than the systems of other countries. A commercial product known to have a fraction of the risks identified with speed humps and other deflection devices would not be allowed on the American market. There is sufficient data to make installation of vertical deflection devices on public streets illegal. If the USDOT does not acknowledge the dangers associated with these experimental devices, it is likely our courts will.

<sup>&</sup>lt;sup>4</sup> "Road humps can damage houses," Transport Correspondent, THE SUNDAY TIMES, London, 12/28/97

<sup>&</sup>lt;sup>5</sup> "Councils to spend millions lowering road humps," David Bamber, ELECTRONIC TELEGRAPH, 2/27/00

<sup>&</sup>lt;sup>6</sup> "999 patients 'killed by speed bumps'," Joe Murphey, THE EVENING STANDARD, London, 01/27/03

<sup>&</sup>lt;sup>7</sup> "<u>Public transport and emergency services: problems caused by traffic calming</u>," TRL Report #307, Webster and Boulter, 1998

<sup>&</sup>lt;sup>8</sup> "We told you so – Traffic Calming Jeopardizes Public Safety," Canada Safety Council, News Release, July 16, 1999

<sup>&</sup>lt;sup>9</sup> "Traffic Calming Devices, Why firefighters have given them a rough ride," IAFF (International Association of Firefighters) Canadian Journal, January 2000

<sup>&</sup>lt;sup>10</sup> "<u>Traffic Calming Programs and Emergency Response</u>," Les Bunte, Assistant Fire Chief Austin TX, May 2000

<sup>&</sup>lt;sup>11</sup> <u>Traffic Calming and Vehicle Emissions,: A literature review</u>, TRL (Transport Research Laboratory) Report 307, United Kingdom, P.G. Boulter and D.C. Webster, 1997

<sup>&</sup>lt;sup>12</sup> <u>Building a True Community</u>, Final Report, U.S. Access Board, Public Rights-of-Way Access Advisory Committee, January 2001

<sup>&</sup>lt;sup>13</sup> "Disabled woman wins fight to remove speed humps on her street," Kristen Green, THE SAN DIEGO UNION TRIBUNE, May 12, 2000

Lauding the use of "low-tech" devices as a magic bullet to control vehicle speeds is a short-sighted and irresponsible use of taxpayer dollars. High-tech "active suspension systems" that counter the effects of deflection are already available in top-of-the line luxury cars. Less expensive systems are being designed that will eventually allow most cars to travel smoothly over the devices.<sup>14</sup>

The problem of traffic and speeding in our communities is purported to be a livability issue in traffic calming literature. However, people are extremely divided about whether deflection devices increase or decrease livability. Projects proceed largely because their processes are biased toward those who want the devices. Residents downstream from the devices, whose emergency response will also be affected by an installation and who must also travel over the devices daily to reach their homes, are eliminated from the process. Once a project begins, the devices proliferate at alarming speed, as residents on parallel streets attempt to protect themselves from the diversion of traffic which always accompanies an installation. As a result, projects typically end in full or partial moratorium.

People around the country are calling for an end to the installation of all deflection devices that impede emergency services, harm residents with disabilities, damage vehicles and increase pollution and disharmony in our communities. A truly independent and scientific cost/benefit analysis of the data available on the issue from this country and abroad should be conducted by an agency of the U.S. government to determine which, if any, devices can be safely used in our communities and what standards for the design and placement of the devices must be required of our local governments.

A cost/benefit analysis should include an assessment of the following:

- Risk to resident lives from delays to emergency response, using the analysis developed by scientist, Ronald Bowman of Boulder, Colorado
- Effect on driver, motorcyclist, bicyclist and pedestrian safety
- Potential effects on patients with varying medical conditions transported to local hospitals by emergency vehicles
- Effect on disabled drivers
- Damage to emergency vehicles and commercial vehicles as well as damage to sensitive equipment transported by such vehicles
- Increased auto emissions and fuel consumption from repeated deceleration and acceleration to negotiate devices
- Increased noise on residential streets
- Decreased property values on residential blocks where speed humps installed
- Potential legal liability to cities for injuries caused by foreseeable hazards related to placement of obstructions on public streets
- Impact of conflict over desirability of devices on the harmony of American neighborhoods

The political movement behind building traffic calming devices in communities across the United States should be of immediate concern to our federal government. Lacking investigation, the political agendas of individuals in our local and federal governments will continue to suppress all meaningful consideration of the impact of traffic calming projects on the safety and well being of our communities.

Kathleen Calongne CalongneK@aol.com

<sup>&</sup>lt;sup>14</sup> "Chips in Charge," Ivan Amato, DISCOVER MAGAZINE, December 1999