

FUNDING MECHANISMS FOR NORTH AMERICAN TRAFFIC CALMING* PROGRAMS

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1. Introduction

Traffic calming means improving neighborhood livability by reducing the impact of traffic on our neighborhoods by lowering cut-through traffic, speeding, reckless driving, and excessive noise. Speeding traffic hinders our ability to enjoy neighborhoods—creating noise and making it hard to walk, cycle or drive safely. Traffic calming makes streets more pleasant places by making cars more compatible with pedestrians, cyclists and other street users.

It is likely for a city to have more potential traffic calming projects than it has funding and staff capacity to implement them in a given year. A priority ranking of traffic calming projects is implemented by different cities to rank the projects. Now for most of the cities funding shortage for traffic calming has become a major concern. The ranking system allows projects to order them if available funding is fully expended during a given year on other higher ranked projects.

In respect of the funding shortage for transportation improvements, there is a need to supplement funding through alternative means. The structure of resource sharing arrangements may evolve over time in response to changing regional needs and changing relationships between city and residents. A more or less specific legal framework and planning guidelines are present in the countries that introduced traffic calming. The objective of this paper is to outline the funding mechanisms exercised in different North American communities which are expected to facilitate the funding attitudes in Japan as well in some communities where traffic calming process guiding principle for funding is not available. This research is based on questionnaire survey of North American (Department of Transportation) and some European communities (Department for Transport including some County Councils). Traffic calming exercises were reviewed from manuals and practices of different North American jurisdictions to have clear understanding of the process. A case study of typical funding practices from several jurisdictions is presented in this paper.

2. Literature Review

The prioritization process permits a fair and equitable assessment or ranking of the approved traffic management plans and allows staff to identify which problems should be addressed and in what order. A research by Nash¹ summarizes recent traffic calming experience in Zurich, Vienna, and Munich shows that adequate funding has not been available for traffic calming. Funding shortages have forced cities to implement less costly techniques than ideal and have reduced their ability to implement more effective areawide programs. Nash¹ has identified two ideas in his research for addressing the funding program: an experimental program for low-cost improvements in Zurich (which was unsuccessful), and coordinated implementation of traffic calming projects with other better funded programs.

A January 1999 survey of 44 local governments conducted by the PennDOT² (Pennsylvania Department of Transportation) found that the most prevalent funding sources for traffic calming programs were: capital improvement programs (used by 14 of the

* Keywords: traffic calming, funding, guiding principle.

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44 governments) or general funds (12 local governments). Six of the local governments required the community to pay for at least some of the costs of traffic calming measures.

Asha Weinstein and Elizabeth Deakin³ at the University of California conducted in-depth interviews with 63 local governments on funding sources for their traffic calming programs found that most traffic calming programs were paid for out of general revenues and State gas tax subsidies. Eighteen of the jurisdictions surveyed (29%) required residents to pay some or all of the costs of traffic calming.

Chris⁴ shows that the most common source of funding for implementation of traffic calming measures in Canada is capital funding from general municipal tax revenues.

(1) Funding size for City of West Palm Beach, FL

Total funding allocated for traffic calming projects through fiscal year 2000-2001 for city of West Palm Beach was \$4,083,952 (3,400,000\$ from 1998 Public Service Tax Bond, 283,952\$ from Local Gas Tax Revenue Fund and 400,000\$ from Capital Projects Fund FY 00/01). Of the \$3,400,000 from the Public Service Tax Bond proceeds, \$1,350,000 was allocated for 15 initial projects and the remaining \$2,050,000 was subsequently allocated to 26 additional projects.

3. Funding Strategies for Traffic Calming Devices in North America

Funding refers to a variety of arrangements by which transportation organizations collaborate to propose funding requests or develop different funding mechanisms. Traffic calming programs are usually implemented by Local Engineering Departments in USA and Canada. These programs involve educating planners and traffic engineers about traffic calming strategies, establishing policies and guidelines for implementing traffic calming projects, and developing funding sources.⁵

To fund traffic calming programs; cities generally allocate an annual budget. Usually Local Governments fund their traffic calming programs from capital improvement projects, general funds, moving violation revenue, or from State gas tax subsidies or from residents. Other examples of funding sources which have been used to fund traffic calming schemes include assessments or private funding as a donation and used the money for traffic calming in a neighborhood specified by the donor. Hence Local Governments have some preferences in selecting how to fund their programs.

(1) Case Study: Funding strategies of several North American jurisdictions

The study cites some common funding sources that have been used by several jurisdictions in USA.

- In Pennsylvania, PA liquid fuels funds are used for traffic calming measures. No money has been designated at the State or Federal level for implementation of traffic calming projects.
- In Livermore, CA the city funds the projects (through capital improvement projects) completely or partially (residents may contribute portion of the cost of construction and maintenance). The residents' share of the traffic calming project is collected through a lighting and landscaping assessment district or by creating a new assessment district.
- The single largest funding source for Portland, OR is revenue from the State Gas Tax. Other funding trends and opportunities are: general fund revenue, moving violation revenue, residential purchase projects and grants.
- For Peoria, AZ city pays (80-100%) and property owners pay (0-20%) of the projects.
- For City of La Mesa, CA all costs directly associated with the planning, design and implementation of the traffic management program is supported by the City. As an alternative residents may collect funds (for 100% of all construction cost) themselves.
- City of Roswell, GA applicant will be responsible for 25% of the total cost of the traffic calming device(s) and the city of Roswell for 75% of the total cost.
- West Jordan, UT has following funding options: traffic management plan funds, neighborhood matching grant funds or 100% neighborhood funding.
- Available funding sources for Dover, DE traffic calming projects may include the following: Federal and State Funds as appropriated through the Delaware Department of Transportation capital improvement program, suburban street funds, local/municipal funds, developer contributions, private/community contributions, and a combination of funding sources.
- For City of Township, PA the following are three potential funding structures for the installation and maintenance of traffic calming measures: Township installs and maintains, Township installs and residents maintain and residents install and Township

maintains.

- There are four main funding strategies that the City of Kamloops, BC considered in which to fund the traffic calming program are: funds from general revenues, dedicated reserve fund, specified area initiative plan, specified area petition plan.
- For Vancouver, BC funding for traffic calming programs come from General Revenues and Specified Area Petition Plan.

While the method of funding may vary between communities in Canada, most municipalities that have city-wide traffic calming policies fund their traffic calming programs through the appropriation of general revenues.

(2) The cost sharing concept of funding

In respect of the funding shortage for transportation improvements, there is a need to supplement funding through alternative means. However, few opportunities exist for cities to supplement or share traffic calming program funds. The structure of resource sharing arrangements may evolve over time in response to changing regional needs and changing relationships between agencies. If appropriate, participating public and private organizations may develop more formal sharing arrangements, including pooling of funds, grants and other resource. Funding is a powerful tool for promoting participation of different agencies as well as residents.

4. Survey 2004

A survey conducted in North America and some European communities in 2004 about the funding sources of traffic calming projects is summarized in the table 1. It can be seen from the questionnaire survey that the Local Government is the major source

Table1: Funding sources of traffic calming projects

Country, City	Funding source for traffic calming			Presence of fixed funding for tc.	
	Local Government	Residents	Other sources	yes	no
USA:					
Austin, TX	O			O	
Concord, NH	O				O
Delray Beach, FL	O	O		O	
Overland Park, KS	O				O
Sacramento, CA			Gas tax & transportation sales tax	O	O
Seattle, WS	O			O	
West Sacramento, CA	O			O	
Boulder, CO	O	O (50%)			O
Dover, DL			State DOT	O	
Redmond, WS	O (general taxes)			O	
San Mateo, CA		Traffic Impact Fees/Developers		O	
Largo, MD	O				O
Sarasota, FL	O				
Arlington, VR	O			O	
Stockton, CA	O			O	
Colorado Springs, CO	O				
Albuquerque, NM	O (bond funds)			O	
Richmond, VA			State funds (secondary highway system)	O	
Concord, WILMAPCO, N H	O		O		O
Canada					
Corporation of Delta, BC	O		O	O	
Vancouver, BC	O			O	
Saanich, BC	O				O
Europe					
Netherlands, Rotterdam	O		Subsidy by National Govt.	O	
UK, Berkshire	O				
Germany, Wiesbaden	O				O
Sweden	O				O

of funding for traffic calming as replied by 64% of the respondents. The survey shows that 62% of the cities have fixed budget for traffic calming projects while 38% do not have fixed budget for the traffic calming projects. From the survey it was found that for City of Boulder, CO if the street is classified as a local street, the neighborhood will pay for 50 percent of the total construction cost of the engineering treatment. For Delaware each legislator has \$300,000 per year for projects in their districts. For city of

Vancouver, BC the costs of preparing and implementing traffic calming plans can be funded from general tax revenues or through a local improvement levy. Saanich, BC does provide the option for a neighborhood to pay for a project if it doesn't meet their funding criteria. For city of Stockton, CA neighborhoods have a budget \$25,000 for traffic calming. City of Redmond, WS have a budget between \$100,000 and \$250,000 each year for traffic calming projects.

5. Discussion

The most common source of funding for Local Government to implement traffic calming measures is from capital improvement projects in USA. The method of funding may vary between communities but most municipalities that have city-wide traffic calming policies fund their traffic calming programs through the appropriation of general revenues in Canada. Every year North American cities deal with lot of traffic calming requests to improve the neighborhood safety while in Japan request for traffic calming is very much limited. In USA each Local Government delivers funding to the city or the Local Government collects funding by them for traffic calming programs. Then they prioritize the traffic calming candidates for funding the projects. There are lots of evidences that residents pay partially or fully for traffic calming projects due to local financial constraints in USA and Canada. While in Japan funding by residents for traffic calming programs is completely unusual.

There are lot of differences between USA and Japan regarding the funding mechanism of traffic calming programs. During the implementation of Community Street Schemes in Japan half of the funding is provided by National Government and half by Local Government. Neighborhood can propose National Government for the improvement of their area. If Local Government allows, National Government can fund half of the project cost. There are two difficulties for the Local Government during implementation of traffic calming projects - as which neighborhood should be improved first and the second is the shortage of budget. Local Government needs to persuade with different funding agencies to collect the fund; which is really time consuming. Although National Govt. of Japan has adequate funding for neighborhood safety programs but no sound process is present to deliver the fund to each city. This happens due to the lack of system for delivering budget for traffic safety/traffic calming projects. Inevitably each contributor has different agendas but there are also opportunities for pursuing common interests which are not always explored. When this happens delays occur; which may not always result in the best traffic calming solution. It is clear that relationships between Local Government and National Governments can result in inappropriate schemes, even when considerable funds are contributed. Hence Japan needs to establish a proper funding mechanism which may ensure collaboration among Local and National Governments along with residents and other possible funding agencies. The Japanese Local Government should ensure shortest time to secure funding. There is no process/system as to which neighborhood should be treated first while there is a lack of budget. It is therefore important for cities to adopt a rational and orderly planning process for funding the traffic calming programs if no policy is present as how to fund the programs.

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