

PUBLIC WORKS DEPARTMENT DIVISION OF ROADS

TRAFFIC CALMING POLICY

A policy governing the implementation of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non-motorized users.

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Background

Speeding, cut-thru and other inappropriate behaviour patterns by motorists on Cayman's residential streets continue to grow. Traffic in subdivisions is having a negative effect on children, pedestrians and cyclists. Use of calming devices continues on some private roads by private developers and has spawned widespread requests for calming devices on other residential streets as well. The Public Works Roads Division is hesitant to respond to these requests not having a clear and definitive legal basis for implementing control measures that hinder a motorists right of passage via a public road.

This policy serves to introduce traffic calming measures as a legal means for making subdivisions more livable by discouraging cut through traffic and reducing traffic speeds.

Purpose

Use of calming measures continues mainly on private streets in a piecemeal fashion. The most popular method of street calming has been speed bumps (aka sleeping policemen). Speed bumps are most controversial because their installations have not been to any specific standard. Complaints from citizens are typically with regard to the frustrations and hazards caused from negotiating them. Incorrectly installed speed humps also constitute a major safety hazard.

The main issues of consideration for traffic calming projects include:

- The need to implement sound calming policies to protect against liability
- The need for calming projects to be non-detrimental to Fire/EMS, and other agency safety issues.

- Avoid ad-hoc, uncontrolled, and un-standardized implementation of calming measures on residential streets.
- Establish guidelines for speed humps, traffic circles and other common traffic calming measures. Especially those that are most controversial.
- Establish traffic engineering criteria for determining the need and priority for traffic calming projects.
- Test calming measures prior to permanent installation.
- Collection and analysis of speed, volume and accident data on all traffic calming measures (after installation) in order to assess their effectiveness.

The purpose of this policy is to;

- 1. Highlight alternative methods of traffic calming
- 2. Establish criteria and methodology for the implementation of calming measures

Policy

It is the policy of the Public Works Roads Division to make subdivision streets and other local streets more livable by minimizing the negative impacts associated with cut-thru traffic and speeding, especially within residential neighborhoods and near schools by applying education, enforcement and sound engineering solutions developed through strong community involvement.

Traffic Calming Services

A. Requests for Traffic Calming

Persons concerned about speeding and/or cut-thru traffic on a local residential street should contact the Chief Engineer at the Public Works Department (PWD) to request a traffic calming analysis.

B. Services and Schedules

PWD upon receiving a traffic calming request will perform necessary traffic engineering studies or analyses that address the particular concern and situation. Expect a four to six week period for completion of engineering studies. Some devices may require the approval of the Traffic Advisory Panel (TAP), which will extend the time before installation.

Traffic Calming services including any needed traffic control devices (signs or markings) will normally be completed as soon as possible after the engineering study warrants its use. Projects approved for Traffic Calming will be subject to availability of funding.

Comprehensive Traffic Calming Projects

A. Initiation of Traffic Calming Projects

The Public Works Department may program a comprehensive traffic calming analysis whenever an adverse traffic condition warrants an analysis. A comprehensive traffic calming project is generally the construction of a roadway design feature(s) that is intended to reduce vehicular speeds or volume of traffic.

B. Petition of Process

The PWD reserves the right to decline a traffic calming project on the basis of traffic engineering analyses, lack of funding or other circumstances. If PWD declines to perform a traffic calming project the project may be initiated through a petition process. The petition should be made in writing to the Chief Engineer, PWD and have the support at least 75% of the households on the section of the street(s) in the project area.

Under no circumstances will a traffic calming project be approved if it is deemed detrimental (by traffic engineering analyses) to the public. It is important to make the distinction between whether a calming device is 'detrimental' or an 'annoyance'. While members of the public have a right to use the roadways without obstruction and interruption, this right is subject to the power of the Government under the Traffic Law to impose reasonable restrictions for the protection of the public; Adherence to the speed limit is one such reasonable restriction. The maximum speed limit on all local and residential streets is 25 mph. A physical measure such as a speed hump is so designed by PWD that it prevents the motorists from violating that speed limit and endangering pedestrians and motorists alike. Properly designed speed humps, chicanes, calming circles etc. are no more of an annoyance or hindrance than a pothole in the road.

C. Level 1 Traffic Calming Project and Schedule

A LEVEL 1 project is a traffic Calming project intended to address pedestrian safety, speeding, cut thru traffic or other inappropriate driver behaviour with basic traffic calming devices and except for calming circles or humps does not require the approval of the Traffic Advisory Panel. Examples of such devices are detailed in the *Division of Roads Traffic Calming Guidelines*. These include calming circles, road humps, medians, chokers, etc. PWD will work with interested parties to gain community input on a

proposed traffic calming plan. Substantial community support (either in the form of petitions, meetings or other means) may most often be needed to finalize a traffic calming plan.

Most Level 1 traffic calming projects may be permanently installed following finalization of the plan, without a trial installation. PWD will make a determination as to which plans require a trial installation. Trial installations may occur for a period of three or more months but not exceeding more than six months.

Level 1 traffic calming projects except humps and calming circles, do not require the approval of the Traffic Advisory Panel.

D. Level 2 Traffic Calming Project and Schedule

A level 2 traffic calming project is intended to redirect traffic in order to address excessive traffic volumes or to restrict traffic all together. Examples of traffic calming projects that fall into this category include full or partial street closures, traffic diversion islands, and changing the direction of travel on a street, and conversion from two-way to one-way travel on a street.

All Level 2 calming projects require the approval of the Traffic Advisory Panel, and in some cases the support of the affected residents and property owners. At least 75% support of the households within the project study area must approve of a level 2 traffic calming plan.

Prioritization of Traffic Calming Projects

In general, traffic calming projects will be initiated in the order of the date programmed by PWD. The Chief Engineer or his designate may give a project priority attention in consideration of one or more of the following factors:

- <u>Crash Experience</u> A 12 month crash history with special emphasis on crashes involving pedestrians or cyclists.
- Excessive Speeding High percentage of vehicles exceeding the speed limit.
- <u>School Safety</u> Immediate safety concerns
- <u>Pedestrian and Cyclists safety</u> High percentage of vehicle and pedestrian conflict. Especially on streets that attract joggers and cyclists.
- <u>Traffic Volumes</u> Traffic volumes that are significantly higher than on similar residential streets within the district.
- <u>Unusual conditions</u> Streets with an unusual physical configuration or motorist behaviour.
- <u>Changing conditions</u> Streets projected to experience an adverse traffic impact as a result of a new development, change in land use, etc.

Addressing Traffic Calming from the Design Stage

Ideally many of the needs of traffic calming can be addressed long beforehand in the neighbourhood planning and design process. For that reason PWD and the Planning Department will review all private and public development proposals for potential traffic calming issues, and a study will be required if deemed necessary. It is the intent of this involvement that the development will be designed so that traffic calming conditions will be placed upon the developer to eliminate or minimize potential adverse impacts on the development. The *PWD Traffic Calming Guidelines* incorporated with sound access management techniques ensure that subdivisions can be designed in such a way that they never encourage cut-through traffic or speeding from the on-set.

Removal of Traffic Calming Devices

PWD reserves the right to remove a traffic calming device if it is has (1) not been approved via the process established by this policy and/or has been constructed contrary to the *PWD Traffic Calming Guidelines*.

Traffic Calming devices may also be removed via one of the following:

- 1. A petition process. The petition should be made in writing to the Chief Engineer, PWD and have the support at least 75% of the households on the section of the street(s) in the project area.
- 2. Sufficient evidence that the calming device constitutes a severe personal injury risk.

The case for removal must be extremely strong especially for those traffic calming devices that were initially installed with public and police support.

Coordination

Level 1 and Level 2 traffic calming projects will be coordinated with existing transportation policies, emergency medical services, utilities, and related services. Solicitation of police input on traffic and crime prevention issues is important particularly to ensure that traffic calming efforts are a help and not a hindrance to police efforts.

LEVEL I CALMING PROJECTS On local access roads only	LEVEL II CALMING PROJECTS
✓ T.A.P. approval necessary for humps and calming circles.	✓ T.A.P. approval necessary
PHYSICAL MEASURES:	Full or partial street closures
> Humps	Change of two-way street to one way street
➤ Calming circles	Change of direction of travel on a one-way street.
➤ Lateral shifts/chicanes	Semi & full traffic diverters
> Turn restriction signs	Crosswalks (aka pedestrian crossings)
Median barriers	
➤ Warning signs	
> Street Narrowing	

Figure 1 – Level I & II Calming programming comparisons