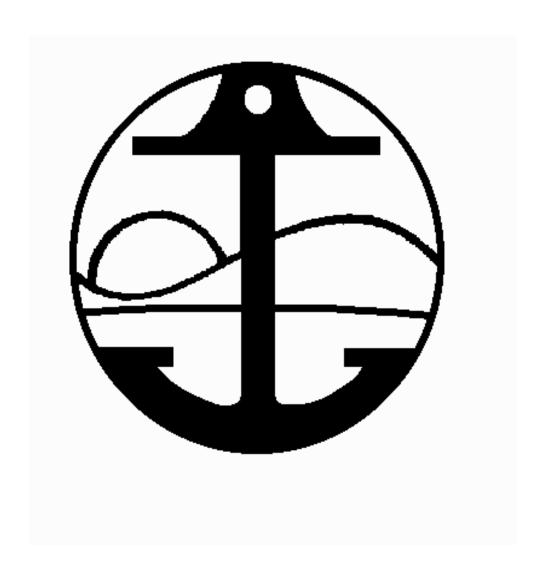
# **CITY OF PITTSBURG**

# TRAFFIC CALMING POLICY

Adopted June 4, 2001 Revised May 17, 2004



### **Introduction:**

This document contains the City of Pittsburg's policy for implementing traffic calming strategies on City streets, including the installation and removal of speed humps.

The immediate purpose of traffic calming is to reduce the vehicular speed and volume on neighborhood streets (in residential and business districts) to acceptable levels. It involves the use of law enforcement, speed displays, community programs/campaigns, traffic control devices (e.g. roadway signs and pavement markings), street alignment changes, barriers, and other physical measures such as speed humps to reduce traffic speeds and cut-through vehicle volumes in the interest of street safety and livability.

It is the City's intention to use a "toolbox" approach to address citizens concerns over speeding and cut-through traffic on neighborhood streets. City staff shall listen closely to these concerns and work with the neighborhoods to find the best approach to address them. A "toolbox" of traffic calming strategies have been compiled by the City and shall be used as a way to generate ideas on specific strategies to "calm" the traffic (i.e. lowering speed and volumes) in a particular location or neighborhood. The City realizes that a traffic calming strategy that is successful in one neighborhood or location may not be successful in another.

### **Traffic Calming Strategies:**

Tables 1 and 2 list several traffic calming strategies followed by Figures 1 – 10, which illustrate some typical examples of them. Although these figures do not show pedestrian and bicycle travel, accommodations must be provided. Table 1 is a list of traffic calming strategies used predominately to control speeding on a neighborhood street. And Table 2 is a list of strategies used predominately to control the volume of traffic using a neighborhood street. They are to be utilized for generating ideas to create specific traffic calming strategies for specific situations and locations. They are in no particular order. Further, the strategies listed may not be appropriate for all situations. The lists are to be considered as a "toolbox" from which to use the "tools" listed in solving neighborhood concerns of speeding and cut through traffic on their streets. The strategy or combination of strategies chosen for a particular situation will be based upon sound engineering practice and judgement, neighborhood input, safety of all roadway users, and cost.

## **Speed Humps:**

Speed humps have been shown to lower average vehicle speeds in neighborhoods. They achieve this by creating a gentle vehicle rocking motion that causes the driver to instinctively slow the vehicle before crossing the hump to minimize the discomfort. The decision to utilize speed humps as a traffic calming strategy shall not be made before at least two other traffic calming strategies, including enforcement of traffic laws, are deemed to be ineffective.

A speed hump is a raised area in the roadway pavement surface extending transversely across the travel way. The City has determined an optimum height for speed humps to be 3.5 inches.. The travel length of a typical hump is dependent on the existing roadway characteristics. On residential streets with a posted speed limit of 25 mph, the travel length of a typical hump is 14 feet. On residential collector streets with a posted speed limit of 30 mph, the travel length of a typical hump is 22 feet.

Speed humps have generally been found to be effective at controlling vehicle speeds without increasing accident rates. The policies and procedures in this document are designed to deal with some of the disadvantages of speed humps by limiting their use to specific streets with a significant and documented speeding problem and appropriate traffic volumes.

### **Speed Hump Installation Warrants:**

- 1. The street or street segment shall be a two lane residential local or collector street where the primary function is to provide access to residential dwellings.
- 2. The street or the street segment shall be improved with curb and gutter.
- 3. The street or the street segment shall not be a part of a transit route.
- 4. The measured 85<sup>th</sup> percentile speed (the "critical speed") of the street or street segment shall be six miles per hour or greater than the posted speed limit.
- 5. At least 67% of households with side or front yards on the proposed street and within 100' of the outside limits of the proposed speed humps shall approve of speed hump installations.
- 6. For 14' speed humps, the street shall have a posted speed limit of 25 mph. For 22' speed humps, the street shall have a posted speed limit of 30 mph.
- 7. The street or street segment shall be at least 750 feet long.
- 8. The installation of speed humps shall not unduly affect response times of emergency services. This shall be determined by staff in conjunction with the affected emergency services.

- 9. The average daily traffic (ADT) shall be no less than 500 vehicles per day and no more than 3000 vehicles per day.
- 10. Speed humps shall not be installed on streets with a grade greater than 5 percent.
- 11. Speed humps shall not be installed on streets with more than one through travel lane per direction.

### **Speed Hump Location Criteria:**

*The speed hump installations shall generally conform to the following:* 

- 1. Speed humps are kept 20 feet from driveways.
- 2. Speed humps are kept at least 100 feet from traffic control devices.
- 3. Speed humps are not located over manholes, water valves, or street monumentation or within 25 feet of fire hydrants.
- 4. Speed humps are located on property lines whenever possible.
- 5. Speed humps are located near streetlights when possible in order to illuminate them at night.
- 6. Speed humps are not located on sharp horizontal curves due to visibility and motorcycle and bicycle stability problems.
- 7. The exact spacing between humps is determined on an individual basis based on engineering judgment and the following formula:

$$S = V^2 - 350$$

S = the optimal spacing (in feet) between speed humps, and

V = the desired 85<sup>th</sup> percentile speed between humps (in mph)

### **Speed Hump Evaluation Procedure:**

1. A citizen or a citizen's group residing within the proposed speed hump location limits (the "petitioner") shall initiate the request for speed humps. A standard speed hump request form, a fact sheet about speed humps, and a petition form will be sent to the petitioner for review. The fact sheet shall include the characteristics of speed humps and installation requirements.

- 2. The petitioner will be required to collect the signatures from 10 households or 10% of the households (whichever is greater), with side or front yards on the proposed street and within 100' of the outside limits of the proposed speed humps, who approve of the proposed speed humps before the City will begin the evaluation process. Only one signature per address will be allowed. This is the initial speed hump petition.
- 3. The petitioner shall return the completed request form and initial petition form to the City's Engineering Department for evaluation.
- 4. When the City is in receipt of the completed speed hump request and initial petition, staff shall verify signatures on the initial petition and conduct a traffic and engineering study of the street or street segment. The study will include a speed hump warrant analysis that includes traffic counts, a speed survey, and an evaluation of the existing traffic control devices.
- 5. If staff determines that speed humps are appropriate and warranted for a street or street segment they will inform the petitioner, who will then be required to collect additional signatures of residents who approve of speed humps to total 67% of the households with side or front yards on the proposed street and within 100' of the outside limits of the proposed speed humps. Only one signature per address will be allowed. This is the final speed hump petition.
- 6. After the petitioner submits a final speed hump petition, staff will verify the signatures and present a report and recommendation to the Community Advisory Commission (CAC) regarding speed hump installation at a specific location.
- 7. The Community Advisory Commission, in turn, shall review staff's recommendation and make its recommendation to the City Council for approval or disapproval of the speed hump installation at a specific location.
- 8. Funding for the speed hump installation shall typically be provided from existing and/or future Capital Improvement Program funds as available.
- 9. If a petitioner requests additional speed humps on a street segment that has existing speed humps, the installation warrants must be met again for the street segment with speed humps (e.g. critical speed between speed humps must be 6 mph or greater than the posted speed limit).

### **Prioritizing Approved Speed Hump Locations:**

1. After speed humps have been approved by the City for a specific location, the location will be added to a list of approved speed hump locations. The list will be maintained and updated by staff. The list will be prioritized based upon the following formula (the higher the Priority Score, the higher the priority):

# PS = V + AR

PS = speed hump location's Priority Score

V = no. of mph the critical speed of street (segment) is over posted speed limit AR = Accident Rate (average number of reported accidents/year occurring within street segment for last 3 years)

2. Speed humps will be installed in the priority order established as funding allows. **Speed Hump Removal Warrants:** 

- 1. A petition by at least 67% of street households with side or front yards on the proposed street and within 100' of the outside limits of speed humps shall approve of the speed hump(s) removal.
- 2. The speed hump(s) shall have been installed for at least 12 months. **Speed Hump Removal Procedure:**
- 1. The requestor shall obtain a petition with at least 67% of street households with side or front yards on the street and within 100' of the outside limits of speed humps who approve of their removal and submit the petition to the City's Engineering Department.
- 2. The speed humps must have been installed for at least 12 months before any petition is considered.
- 3. City staff will present a report and recommendation to the Community Advisory Commission(CAC). The CAC shall make a recommendation to the City Council for approval or disapproval of the speed hump removal.
- 4. Funding for the speed hump removal shall typically be provided from existing and/or future Capital Improvement Program funds as available.