# CITY OF FORT LAUDERDALE SPEED HUMP INSTALLATION POLICY

# **Definition of a Speed Hump**

Speed humps are raised areas in the roadway pavement surface extending across the roadway. Speed humps are roadway geometric design features that create a gentle vehicle rocking motion that causes most vehicles to slow to approximately 15 miles per hour (MPH) or less at each hump, and approximately 25 MPH to 30 MPH between properly spaced humps. Speeds humps should not be confused with speed bumps which cause discomfort to motorists and a shock to vehicles only at low speeds. Typical speed humps that are deployed within the City are of the following type:

- a. Parabolic/Rounded Top Speed Hump An asphalt hump that is 12 feet length and has nominal height of 3 1/2 "at its highest height (Exhibit 1-a).
- b. Flat Top Speed Hump/Table An asphalt hump that is 22 feet length (consisting of 6' inclined ramp, 10" flat raised flat section and 6' declining ramp section) and has nominal height of 4" at its highest height (Exhibit 1-b).
- c. Speed Cushion An asphalt hump that is 6.5' length and 6.75' in width with incline/ramp of 24" and a nominal height of 3". Cushions are placed along the roadway in pairs with a separation of 24" to accommodate vehicles with a wide wheel axle base e.g. boat trailers and cyclist (Exhibit 1-c).

# Eligibility Criteria

#### Survey

A notification will be mailed out to neighbors who would be directly impacted by the installation of speed humps on the roadway, to ascertain their preference for speed humps. The City utility billing address database will be used to determine who will be notified. The neighbors contacted will be able to respond via City website or by phone. The City will require 60% of neighbors (property owners and/or occupants) responding as minimum support to progress with the speed hump process. A 60% favorable support is the same threshold required for utility undergrounding. If the responses do not meet the minimum support threshold, the City will coordinate with proper entities that requested the installation of speed humps.

#### **Engineering Study**

Since speed humps may divert traffic to other street facilities, an estimate of the amount and location of that diversion will be made so that the potential impacts of the proposed humps can be fully considered. If the humps are expected to create equal or greater traffic problems on another residential street, they will either not be installed, or humps will be considered for the other impacted facilities.

#### **Street Classification and Use**

Speed humps will not be installed on any "Collector" roads that carry more than 6,000 vehicles per day (vpd), and will not be installed on any higher category roads than "Collectors." Speed humps will not usually be installed on any cul-de-sacs; however, because of the differing types of land uses found on some cul-de-sacs, the Commission may consider the installation of speed humps on

a case-by-case basis.

# **Street Width and Number of Lanes**

Speed humps will be used only on streets with no more than two travel lanes, or where the overall Pavement width is not greater than 40 feet. In addition, the pavement shall have good surface and drainage qualities. Speed humps are generally placed in a series of 250 to 500 feet apart, at property lines, to minimize noise.

#### **Street Grades**

Speed humps will only be considered for use on streets with grades of 8-percent or less approaching the hump. When installed on streets with significant down-grades, special care shall be taken to ensure that vehicles will not approach the humps at excessive speed.

#### **Horizontal and Vertical Curves**

Speed humps will not be placed within severe sharp horizontal or vertical curves that might result in substantial lateral or vertical forces on a vehicle traversing the hump. Humps will be avoided within horizontal curves of less than 300 feet centerline radius and on vertical curves with less than the minimum safe stopping sight distance. If possible, humps will be located on tangent rather than curve sections.

## **Sight Distance**

Speed humps will generally be installed only where the minimum safe stopping sight distance (as defined in AASHTO's "A Policy on Geometric Design of Streets") can be provided.

#### **Traffic Speeds.**

Speed humps will generally be installed only on streets where the posted speed limit is 35-mph or less. Speed humps will be carefully considered on streets where the majority of vehicles travel at relatively fast speeds, such as 45-mph or greater. Installation of speed humps will be considered on roads where the 85<sup>th</sup> percentile speed (average of both directions) is at least 10-mph above the posted speed limit.

Funding may be extended to include roads which are expected to have traffic diverted to them as a result of speed hump installation.

#### **Traffic Volumes**

Rounded profile (TRRL) or "flat top" speed humps will be considered for installation on streets with an average daily traffic volume of between 500 to 3,000 vehicles per day (vpd). Only "flat-top" speed humps will be installed on roads with a traffic volume of between 3,000 and 6,000 vehicles per day (maximum volume).

#### **Traffic Safety**

Proposed speed hump locations will be evaluated to determine that such an installation will not Introduce increased accident potential for the subject street.

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#### **Vehicle Mix**

Speed humps will not normally be installed on streets that carry significant volumes (greater than five (5%) percent) of long wheel-base vehicles or emergency routes unless there is a reasonable alternative route for those vehicles. Special consideration will also be given to motorcycles, bicycles and other types of special vehicles that use the street. The impacts that speed humps might have on these individual vehicle types will be considered in the decision to install humps, and ultimately considered in their design and location.

### **Transit Routes**

Speed humps will not generally be installed along streets with established transit routes.

## **Schools and Parks**

If the street is immediately adjacent to a school or public park, at least 30% of the traffic must be traveling at or above the posted speed limit and the 85th Percentile Speed (average of both directions) is at least 6-mph above the posted speed limit.

# **Neighbor Support**

Neighbor support for the installation of speed humps shall be documented by a City-conducted notification of all properties with addresses on the road and, when appropriate, the surrounding neighborhood.

## Payment for Speed Hump Installation

Speed Humps that meet the criteria will be funded based on available City funding.

#### **Emergency Response**

If the street is a primary or secondary route for emergency response vehicles, the Fire-Rescue Department will be contacted. If the Fire-Rescue Department objects to the installation of speed humps on the street, the City Manager shall make the final decision.

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