

## **CITY OF ABILENE ROAD HUMP PROGRAM SUMMARY**

Road humps are a roadway geometric design feature intended to physically reduce the speed of vehicles. They have been designed, unlike the traditional “speed bump”, to achieve a specific result on vehicle operations without imposing an unreasonable or unacceptable safety risk.

A road hump is a gradual rise and fall of the pavement surface across the width of the roadway. Within typical residential speed ranges, humps create a rocking motion that causes some driver discomfort. At higher speeds, humps jolt the vehicle suspension and its occupants or cargo.

Road humps result in a speed reduction to about 20 miles per hour in the immediate vicinity of the hump. Speeds often increase downstream of a hump as motorists attempt to make up for lost time. Therefore, road humps are most effective when installed in a series.

Traffic volume is sometimes reduced on streets with road humps as the lowered operating speed causes some drivers to divert to other streets. This traffic diversion would be viewed as a benefit by residents along the street with road humps. However, it can cause a negative impact if it simply moves to an adjacent local residential street.

Other possible negative impacts include:

- The visual impact of the hump and the associated signs and pavement markings
- Increased noise in the vicinity of the hump, especially if there are trucks
- Being perceived as the cause of vehicular damage
- Increased travel time for buses (both transit vehicles and school buses)
- Increased response time of emergency service vehicles (up to 10 seconds)

In order for road hump installation to be effective, their use should be in accordance with established transportation engineering criteria and documented facts. Proper installation will encourage compliance and safe driving practices. The program provides criteria and procedures for installation of safe and effective road humps.

### **ELIGIBILITY REQUIREMENTS**

All of the following criteria must be satisfied for a street to be considered eligible for road hump installation.

- The adjacent land use must be primarily low density residential dwellings.
- The primary function of the street must be to provide access to abutting properties and internal circulation for residential neighborhoods. Streets designated as arterials or collectors on the Thoroughfare Plan are not eligible.

- The street must not be a primary route for emergency vehicles.
- The street must not be a public transit system bus route.
- The street must have no more than one moving lane of traffic in each direction.
- Traffic volumes must be between 500 and 4,000 vehicles per day.
- The posted or prima facie speed limit must be 30 mph or less.
- The speed of the traffic must be greater than 5 mph above the speed limit.
- There must be adequate sight distances to safely accommodate the hump as determined by the Traffic Engineer.
- There must be no curves or grades that prevent safe placement of humps.
- Pavement rehabilitation must not be scheduled within the next three years.
- Property adjacent to a hump location must be above the top of curb.
- Road humps must not be detrimental to the conveyance of stormwater as determined by the City Engineer.

## REQUEST

The initial request for the installation of road humps must be in writing and include the name, address, phone number, and signature of at least five (5) residents (one per residence) along the street segment upon which road hump installation is requested. The request must also designate a representative (the applicant). The request must be submitted to the following address:

Traffic Engineering Division  
 City of Abilene  
 P. O. Box 60  
 Abilene, Texas 79604

## DETERMINATION OF ELIGIBILITY

The Traffic Engineering Division will conduct the necessary transportation engineering studies and solicit comments and recommendations of other agencies to determine the street's eligibility for road hump installation. This determination of eligibility will be made in a timely manner.

## PETITION OF SUPPORT

If the street is determined to be eligible for road hump installation, then the applicant must submit a petition of support for the installation of road humps. The petition must document that a minimum of 70% of the residential dwellings in the petition area support the installation of road humps. Also, a minimum of 50% of the residential dwellings in the petition area must authorize placement of the road humps in front of or adjacent to their property.

The applicant and the staff will meet to define the approximate road hump location range and the petition area. The applicant must make at least two attempts on separate days to contact the owner or occupant of every residential dwelling on the abutting properties in the petition area. If the applicant is unable to contact a resident, this will be noted on the petition with the days and times that contact was attempted.

Only petition forms supplied by the City of Abilene or exact duplicates will be accepted. The petition must be completed and returned within 90 days. If it is not, then a new petition will be required.

## INPUT FROM IMPACTED AREA

If the required percentages are met on the petition, the staff will determine the location of proposed road humps and determine the properties that will likely be impacted by the road humps. These properties define the notification area.

The City will determine the notification fee (\$25.00 plus \$.50 per address in the notification area) and notify the applicant. After the notification fee is paid, the City will send notices to owners of real property within the notification area. The notice will include a return form to indicate support of or objection to the proposed installation.

If owners of 20 percent or more of the real property within the notification area object to the proposed road humps within 30 days of the notice, then no further action will be taken on the road hump installation unless the applicant requests a public hearing before the City Council. The request for a public hearing must be accompanied by payment of a second notification fee. Notification of the hearing will include the owners of real property within the notification area.

If objections are received from less than 20 percent of the real property within the notification area or the City Council approves the installation after a public hearing, then the street will be placed on a list of streets approved for road hump installation.

## INSTALLATION OF ROAD HUMPS

The minimum road hump installation fee will be \$1,500.00 per hump. Additional cost may be incurred due to the specific characteristics at the hump location. The City will send a statement for the road hump installation fee to the applicant. After receipt of full

payment of the installation fee from the applicant, the humps will be installed as scheduling permits.

Full payment of the installation fee must be received within one year from the statement date. If it is not, the street will be removed from the list of streets approved for road hump installation and further consideration of road humps will require reapplication.

Annually during the budget process, the City will consider funding of the road hump installation costs for eligible streets in Community Development Block Grant designated areas.

## DESIGN AND LOCATION STANDARDS

For most installations, road humps will be 12 feet in travel length with a maximum height of three (3) to four (4) inches.

The City will determine the final location of all road humps. Road humps will usually be placed 200 to 600 feet apart.

Road humps will not be installed at the following locations:

- In front of driveways;
- Over manholes, monitoring wells, or water valves;
- Adjacent to fire hydrants;
- Near drainage inlets, if they will hinder drainage;
- On a vertical grade greater than 5%;
- In horizontal or vertical curves nor on approaches to these curves where visibility of the road hump is limited;
- Within 500 feet of a traffic signal, 200 feet of a stop sign or yield sign, or 100 feet of an uncontrolled intersection;
- In front of a property if the occupant objects to its placement.

Each road hump will be identified with appropriate traffic control devices. These include pavement markings on each hump, warning signs at each hump, and warning signs for each street segment with humps.