RESIDENTIAL SPEED HUMP CRITERIA
REVISED MAY 9, 1995

I. For Installation

1. Speed Humps will not be considered for installation on any street considered a collector as defined by an Average Daily Traffic (ADT) count of 3000 vehicles per day.

   Speed humps are generally installed on local streets and neighborhood or residential collectors. High volume alone should not disqualify an area for speed humps.

2. Complaints concerning an excess volume of traffic shall not be considered criteria for installation of speed control humps.

   Excess volume should be a consideration for speed hump installation. Cut through traffic should be investigated and quantified when determining if speed humps or other traffic calming measures are necessary.

3. A maximum of 10 speed humps per year may be installed. A budget item of $15,000 per year will need to be budgeted under CIP.

   Other means of traffic calming should be part of the program. Two common alternatives are regular speed radar trailer monitoring and permanent speed radar sign installation. Working with City Police for directed patrols in neighborhoods where a speeding problem has been observed is common with other municipalities. Both the Thornton and Commerce City use this as an option before the installation of speed humps.

4. A petition consisting of signatures from at least 95% of the homes abutting the location requesting the installation of the speed humps shall be required.

   The petition shall include a statement that all residents agree to installation of the humps or appurtenant signage in front of their residence. Signing and pavement markings will be standardized with no resident exceptions.

   A major issue with this process is that the only resident involvement consists of a petition process with an unrealistic percentage requirement. Many municipalities have implemented resident involvement programs that serve to educate the public. These programs range from a simple brochure that is given to residents to distribute to a program involving resident meeting to discuss the issues and possible solutions.

   This requirement also focuses only on residents that live on the street. Traffic problems like speeding and cut-through traffic should be looked at on a neighborhood wide basis to avoid simply moving a problem.

   Thornton requires 50% neighborhood participation in their iWatch program as well as multiple public meetings for the installation of traffic calming measures. Westminster's former program (terminated for lack of results) required 80% of neighborhood residents and all residents within 150' of a proposed speed bump location to sign a petition. Commerce City's tiered program is initiated by a single complaint and the petition process begins after a public meeting. Commerce City requires that 75% of residents in the neighborhood sign the petition, 85% of those being for the installation.

5. After petition is received, engineering staff will complete a neighborhood impact analysis to determine the extent of the problem as defined by routine traffic studies and any of the following information.

a. Street length must be in excess of 500 feet.
No minimum street length is explicitly recommended for a flat/straight roadway section.

b. Street geometry must safely allow installation of humps at intervals not to exceed 300 feet.
14-ft parabolic speed humps should be placed 260 to 500 ft apart if an 85th percentile speed between 25 and 30 mph is desired. This distance will varies based on speed hump type/size.

c. Consideration of any accident history showing speed related problems.
Three to five years of accident history should be examined to determine if speed humps may mitigate accident risk.

d. Street located within 1000 feet of a public school.
Proximity to a school can be a part of the evaluation process. This should only serve to elevate the request though, not to disqualify it.

e. Pedestrian crosswalk volume in excess of 25 per hour for peak hour.
This is not supported by the text or other city's policy. If this criteria is kept it should also only serve to elevate a request. Also, a sustained high pedestrian traffic volume would be a more useful metric.

f. Consider impact on drainage or other physical restrictions that may affect traffic safety.
Drainage should be considered, as well as grade, vertical and horizontal alignments, and sight distance. There was no evidence put forth that properly designed and installed speed humps would negatively affect safety.

g. If the 85th percentile speed, as calculated from a 24 hour speed survey by the City, is in excess of 35 mph it shall be considered a speeding problem. (85th percentile in this case means that 85% of the cars within the 24 hour period are traveling at less than 36 miles per hour.)
No minimum 85th percentile speed was given as a threshold to indicate the need for consideration. Commerce City's tiered program requires different actions based on the difference between the 85th percentile speed and the posted speed limit.

(<4 mph - over no significant action; 4-7 mph over - education and enforcement - signage review, brochures for residents, increased patrols; >7 mph over – education and enforcement like 4-7 but the process to install traffic control devices is initiated)

h. Review and comment by North Metro Fire & Northglenn Ambulance.
Transit routes should also be considered. Speed tables (22-ft) are recommended on bus routes.

Staff will present the results of the analysis to City Council and Council may decide if they wish to instruct staff to install the speed humps in accordance with the above criteria.

A list of criteria with specific numbers attached may not be adequate to determine the applicability of speed humps and speed humps should not be the only solution that is considered to resolve a speeding problem. An outline of a process with multiple options based on the severity of the traffic problem and the desire of the neighborhood residents may be more effective. Incorporating community outreach and education along with involvement of the police department should also be considered.

References

Institute of Transportation Engineers,. Guidelines For The Design And Application Of Speed Humps And Speed Tables. United States of America: Institute of Transportation Engineers, 2011. Print.