CHARLOTTE

City Council
Follow-Up Report

May 2, 2012

April 23, 2012 - City Council Business Meeting

Road Humps

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At the April 23rd 2012 City Council meeting, Council asked for the pros and cons of road humps. The Charlotte Department of Transportation has provided information about road humps and their alternatives, a traffic calming program update, and information relative to the impact of road humps on emergency vehicles.

Charlotte City Council has been involved with residential traffic calming since around 1985. By 1996, the City's traffic calming program included speed limit reductions, turn restrictions, street closures, and multi-way stops. Turn restrictions and street closures proved very controversial, and residents oftentimes failed to garner sufficient neighborhood consensus for implementation.

By 1997, residents were still concerned about the safety and quality of life on their neighborhood streets due to speeding. In an effort to assist, City Council added road humps to the traffic calming toolbox along with traffic circles/roundabouts, and continued use of multi-way stops. Over the next 10 years, City Council reviewed and adjusted the traffic calming program (in 1999, 2000, and 2006) as the City, its experience and resident demand grew.

As the traffic calming wave spread across the nation, other traffic calming tools were developed, many of which the Charlotte Department of Transportation has considered, mainly:

1) Chicanes periodically narrow streets to one lane, and require a vehicle coming from one direction to stop and wait for a vehicle from the opposing direction to clear the choke point before it can proceed.
2) Impellors, which act like circles/roundabouts for a three-way intersection, but are shaped differently to create more deflection for better slowing of vehicles.
3) Curb extensions that narrow an intersection for slower vehicle movements and may create a protected vehicle parking area on a street.

When presented with differing traffic calming options, the CDOT has found most neighborhoods prefer road humps and/or multi-way stops. As a result, the CDOT receives numerous requests for road humps each year. In 2011, there were 136 requests for road humps, which the CDOT evaluated for eligibility. In recent years, on average, 70 requests for road humps are either on an approved list awaiting an annual construction contract, or in an evaluation phase. The City has installed road humps on approximately 35-40 streets a year since the program began.

The CDOT reviews emergency response times before accepting a street for road humps. If need be, the CDOT limits the number of road humps and mixes their use with multi-way stops to better assist emergency response times. If a street has a high call volume for emergency services, the request is denied.

Whether road humps are effective or not depends on what citizens are trying to achieve and what they define as a successful answer to traffic calming. If the goal is to lower speeds to the posted speed limit, road humps will not achieve it. If the goal is to lower speeds on a residential street below the pre-road hump speeds, then road humps may be considered to be successful. Road humps will reduce travel speeds on a street, and prevent the excessively high speeds (40 mph and above) driven by some motorists when there are no devices in the road.