RE: SUBDIVISION TRAFFIC CALMING PACKET

Dear Knox County Resident:

Thank you for your interest in Knox County’s Traffic Calming program for neighborhood streets. Several subdivisions have successfully undertaken this process in their neighborhoods to address traffic safety concerns such as excessive speeds and cut-through traffic.

The first step is to identify a contact person who will champion the effort for your subdivision. This may be yourself or someone else, however the contact person must be an owner of property in the subdivision or neighborhood. Often a homeowners’ association officer or representative will take on this role to take advantage of their name recognition by the subdivision residents. The contact person likely will want to enlist a committee to assist them in the second step of circulating the Proceed with Design Petition by which 50% of the neighborhood must agree to move ahead with investigating the traffic calming measures. Finally, the contact person will need to arrange a meeting place where residents can discuss and finalize the preliminary traffic calming plan that we will prepare.

The time frame to go through the traffic calming process varies but generally takes at least four months, including an eight-week balloting period. This time allows communication to happen, and communication is one of the keys to a successful effort. All of the residents need to know what they can expect if the traffic calming measures are undertaken. Also, it is important to note that the process is neighborhood-driven. Knox County facilitates the process and provides technical guidance, but the subdivision chooses whether to move ahead or not. I will be glad to meet with the subdivision or homeowners’ association board to explain the process more fully if needed.

Please have the contact person complete the enclosed Subdivision Traffic Calming Application Form and return it to me. That will get the process moving. Do not hesitate to call me at 215-5860 if you have any questions.

Sincerely,

John Sexton, P.E.
Staff Transportation Engineer

Rev. September 2018
SUBDIVISION TRAFFIC CALMING APPLICATION FORM

Contact Name: ___________________________  Day Phone: __________
Address: ________________________________  Date: ________________
City/State/Zip: __________________________
Email Address: __________________________
Subdivision Name: _______________________

Optional:
Street location(s) of concern:

What traffic problems have you identified at the above location(s)?

How many households do you expect to be in the affected area?

Please return the completed Subdivision Traffic Calming Application Form to:

Traffic Engineering
Knox County Dept. of Engineering
205 W. Baxter Ave.
Knoxville, TN 37917
Subdivision Traffic Calming Procedure for Implementation in Knox County, TN

Receive Complaint

If Returned
Application and Proceed with Design Petition (50% of Influence Area)

Not Returned
End

Design Preliminary Plan

Public Meeting

Finalize Plan

Mail Ballots

If at least 70% of returned ballots Approve

Implement Plan

If more than 30% of returned ballots Disapprove
KNOX COUNTY SUBDIVISION TRAFFIC CALMING PROCEDURE

STEP ONE:

- Return Subdivision Traffic Calming Application Form to Knox County Engineering.

STEP TWO:

- Knox County Engineering will review the Subdivision Traffic Calming Application Form and determine the influence area for the subdivision.
- Knox County Engineering will provide a Proceed with Design Petition which the subdivision must complete. 50% of the influence area must approve the subdivision’s intent to go through the Traffic Calming Program. (The number of non-resident owned lots will be deducted for this step because it may be difficult to contact such owners.)

STEP THREE:

- Upon successful completion of Proceed with Design Petition, Knox County Engineering will conduct any traffic studies they deem necessary and will prepare a preliminary traffic calming design plan.

STEP FOUR:

- Knox County Engineering will conduct at least one design meeting with the subdivision. The time and location for the meeting will be coordinated with the neighborhood contact person.

STEP FIVE

- Based on input at the design meeting, Knox County Engineering will finalize the traffic calming design plan. Ballots will be mailed to property owners within the influence area.

BALLOTING

- Installation of traffic calming devices requires at least 70.0% approval by the returned ballots.
- Only property owners may vote.
- One vote per parcel.
- Deadline for returning the ballots will be stated on the ballot.
- The balloting period is typically eight weeks in length.
Speed Hump Design

This...

3” High

14” in length

Speed Bump Cross Section

Not this

3”-6” High

18”-24” in length

Speed Bump Cross Section
There are positive and negative impacts of speed humps

- Effects on speed and access (from ITE-http://www.ite.org/traffic/hump.asp)
  - No effect on non-emergency access.
  - Speed impact determined by height and spacing; speeds between humps have been observed to be reduced between 20 and 25 percent on average.
  - Typical crossing speed (85th percentile) of 21 MPH for our design.
  - Speeds have been observed to rise to 27 MPH within 200’ downstream (not a cure-all).
- Adverse impacts (from ITE)
  - Possible increase in traffic noise from braking and acceleration of vehicles, particularly buses and trucks.
  - Concern over jarring of emergency vehicles. Approximate delay of 3 to 5 seconds per hump for fire trucks and up to 10 seconds for ambulance with patient.
- Other questions sometimes raised
  - What is impact on snow plows- County typically does not clear subdivision streets. We do well to be able to get to arterials and collectors. If a plow does go through a subdivision and the driver cannot see the hump, the plow probably will pop a piece of the speed hump loose, and we will repair it.
  - What is impact on bicycles and wheelchairs? Speed hump is traversable by both.
  - Is speed “hump” different from speed “bump”? Yes: 14’ X 3” vs. 2’ X 3” or more.
  - What is cost? None to subdivision. $285/hump for asphalt and striping, $75/sign plus labor for County (2009 costs).
  - What about web-based horror stories? Need to consider: What was the device? What was the design? What was the vehicle speed?
- Factors raised but not documented conclusively
  - Damage to vehicles
  - Impact on property values
  - Impacts on persons with spinal injuries or disease
- You make the decision based on your perception of the need and impacts.