

Suburban Hills Traffic Calming Program
Information Sheet
December 3, 2008

Suburban Hills subdivision will soon be voting on whether or not to approve the installation of traffic calming devices (speed humps) on neighborhood streets. This is under the guidance of Knox County's Department of Engineering and Public Works' Traffic Calming Program. Briefly, here are the steps involved in the process:

- The subdivision submitted a traffic calming application to initiate the process (January 22, 2008).
- The subdivision circulated a Proceed with Design petition by which more than 50% of the residents approved of proceeding with the traffic calming process (returned October 27).
- Knox County prepared a preliminary traffic calming plan and presented this plan to the subdivision. (December 1). The meeting attendees modified the preliminary plan to its current form (discussed in more detail below).
- Ballots will be mailed shortly after New Year's Day to affected property owners for voting (70% approval by returned ballots is required for installation).

The subdivision went through the traffic calming process in 2003-04 in response to residents' concerns over speeding and cut-through traffic on neighborhood streets. At that time the measures failed by a narrow margin. What has changed since the 2003-04 traffic calming process?

- Knox County revised its policy on the ballot requirements. Specifically, in the past it was required that 70% of the total number of residences in an impacted area approve of the traffic calming measures to implement them. That policy was revised in 2007 to require that 70% of the returned ballots approve. In other words, a non-vote is no longer considered a "NO" vote. A super-majority is already required, and it does not seem reasonable to count the votes of those who choose not to submit a ballot.
- The proposed traffic calming plan for the subdivision has been scaled back from that of 2003-04. Some of the speed humps proposed at that time on lesser-traveled or cul-de-sac streets may not be necessary.

In contrast to the above changes, traffic conditions in the neighborhood have not changed substantially since 2003. Knox County conducted a speed and volume study in 2003 and follow-up studies at three locations earlier this year (see figure, "2003 Study"). The comparative results are presented below.

Location	Operating speed		Daily traffic volume	
	2003	2008	2003	2008
204 Suburban Road	35 MPH	35 MPH	1442	1474
8616 Wimbledon Drive	38 MPH	37 MPH	673	625
216 Highfield Road	34 MPH	34 MPH	244	179

Today's speeds and traffic volumes appear to be generally the same as in 2003 throughout the subdivision. The improvements currently under construction at the intersection of Gallaher View Road and Gleason Drive may reduce the volume of cut-through traffic in Suburban Hills, but it is not expected that operating speeds in the subdivision will change as a result of that construction.

The next step in the traffic calming process is voting by secret ballot. As noted above, ballots will be mailed early in 2009 to all property owners with access to the internal subdivision streets. (See figure, "Suburban Hills Subdivision Traffic Calming, 2008 Influence Area". There are some homes included in the Suburban Hills subdivision with driveways on Gleason Drive. These will not be included in the balloting since they are not directly affected.) There will be an eight-week balloting period with the closing date clearly marked on the ballot. Ballot totals will be updated weekly on Knox County's Engineering and Public Works web page (www.knoxcounty.org/epw). Also, Knox County will provide upon request at any time during the balloting

period a list of persons from whom ballots have not been received. However, the County will not release individual voter information. All balloting will be confidential.

Knox County's speed hump design is illustrated in the figure "Speed Hump Design". The length of the hump is 14 feet from the leading edge to the trailing edge. The cross-section is a parabolic curve three inches high at the middle. A one-foot gap will be left between the outside edges of the hump and the curb so as not to impede stormwater runoff. There will be white reflective pavement markings on each hump to make them clearly visible to approaching drivers, and warning signs will be required to inform drivers of the presence of the speed humps. Several criteria dictate where speed humps may be installed as follows:

- On a grade of 8% or less (change in elevation of no more than eight feet over a distance of 100 feet);
- Outside of curves 300 feet or less in radius;
- 200 feet from the STOP-controlled approach to major intersections;
- 200 feet of centerline visibility beyond the curb line;
- 25 feet from driveways;
- Avoid catch basins; and
- 300- to 600-foot spacing when consecutive speed humps are placed in a series.

The approximate speed hump and sign locations are presented in the figure "Suburban Hills speed hump and sign locations", and these have also been marked with white paint on the pavement for your reference. Eight humps and 12 signs are included in the plan.

There are both positive and negative impacts of speed humps. Here is a summary of those impacts (from Institute of Transportation Engineers, www.ite.org/traffic/index.asp):

- No effect on non-emergency access;
- Speeds over the humps are determined by height and spacing; speeds between humps have been observed to be reduced between 20 and 25 percent on average;
- Based on a limited sample of sites, the typical crossing speed is 21 MPH for Knox County's design; speeds have been observed to rise to 27 MPH within 200' downstream;
- There is a possible increase in traffic noise from braking and acceleration of vehicles, particularly buses and trucks; and
- Speed humps cause jarring of emergency vehicles. The nationwide average impact is an approximate delay of between 3 and 5 seconds per hump for fire trucks and up to 10 seconds per hump for an ambulance with a patient on board.

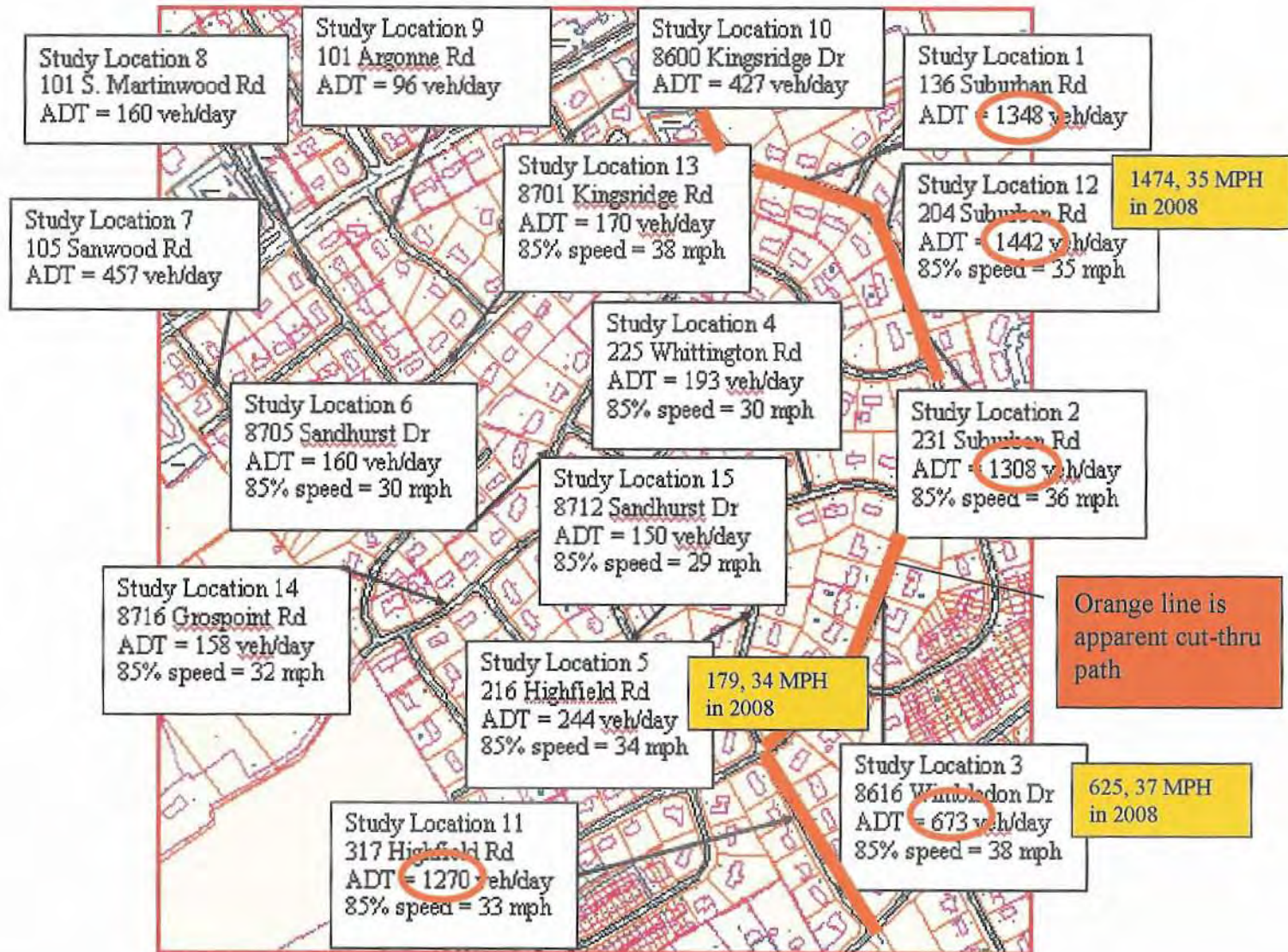
Other issues that have been raised but for which no conclusive data have been identified include damage to vehicles, impact on property values and impacts on persons with spinal injuries or disease.

In order for you to make an informed decision on whether or not to approve the proposed traffic calming plan, you are encouraged to test-drive locations in west Knox County where speed humps have been installed. One such location is Concord Park Road at Lakeside Tavern. Since this is not in a residential subdivision, it is a suitable location to determine the comfortable crossing speed for yourself as you traverse the two speed humps. Nearby residential neighborhoods that have had traffic calming devices installed include Kensington subdivision on Northshore Drive west of Rocky Hill, Crestwood Hills subdivision northwest of Sam's Club/Wal-Mart, Cedar Bluff subdivision south of Cedar Springs Presbyterian Church, and Boxwood Hills subdivision south of Parkside Drive and east of Lovell Road. Please demonstrate appropriate Golden-rule courtesy when driving through the residential subdivisions.

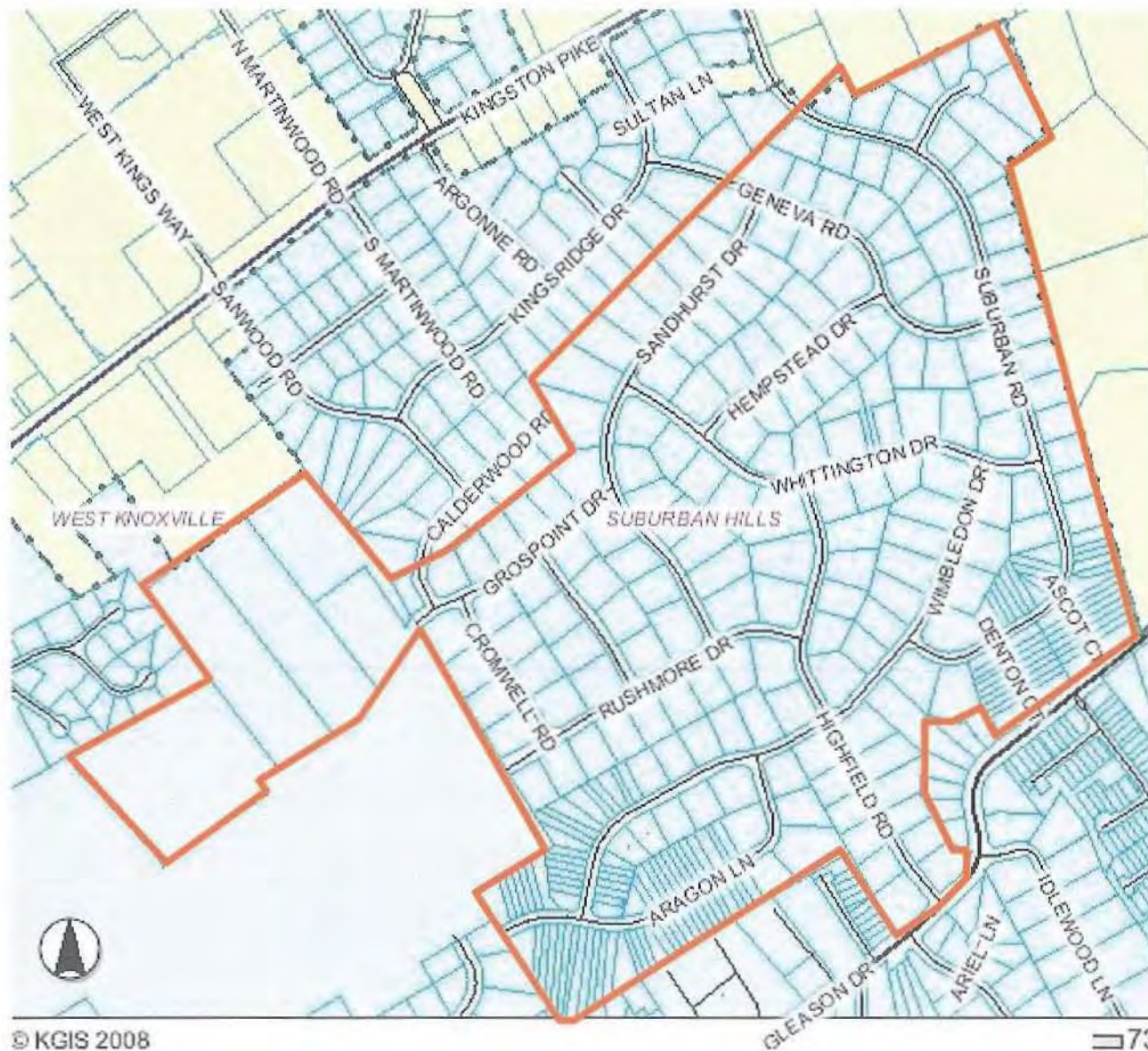
If you have questions you may contact:

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2003 study

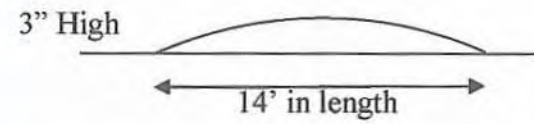


Suburban Hills Subdivision Traffic Calming 2008 Influence Area



Speed Hump Design

Cross Section



Suburban Hills speed hump and sign locations

