

Date: Mon, Feb 25, 2008 9:28 am

To: "info@beep4bumps.com" <info@beep4bumps.com>

John,

You asked that I summarize what I found in the data that was taken by the county and utilized by the RSAC to justify the installation of "Speed Calming" devices in the Hansville area. So, I would like to start by making some general observations regarding the methodology utilized to establish the studies.

It is quite obvious that the RSAC did not establish a protocol to collect the data in a way that direct comparisons could be made. There are at least (8) baseline studies incorporating anywhere from the (5) locations that the speed tables were installed to (3) additional locations that were added ad-hoc from study to study. For example, Cliffside, Bridgeview, and "non-tabled" Hood Canal and Twin Spits locations were added and deleted from different studies without much thought given to the impact on the data collection plan. This makes it very difficult to draw valid conclusions from the studies.

As well, the data is not given as discrete pieces of data. It has been grouped into ranges of speeds being traveled. This does not invalidate the data but does increase the uncertainty of the analysis that was performed by RSAC. It also allows more discretion than would normally be acceptable when trying to prove or disprove a hypothesis.

That being said, here is what the data says regarding assertions & promises made by the RSAC:

Assertion 1: There are too many people travelling at excessive rates of speed on Hood Canal Drive, Twin Spits Rd and Bridgeview.

Data analysis:

Between .2% and 5% of the people drive in a range that would be considered to be "excessively fast" (3 standard deviations above the average speed) in a data set that has a target but does not have a tolerance zone. This range of excessive speeders is the same as the range of people that were be traveling at speeds well below what would be considered normal behavior (4 to 15 mph), or, "excessively slow" (3 standard deviations below the average speed).

This is typical of a normal distribution of data and is expected human behavior. The assertion/hypothesis being made needs to be compared to the other collector roads in the county to determine if this behavior is out of the ordinary.

Assertion 2: Education and enforcement efforts did not reduce the speeds from 2006 to 2007 on Hood Canal, Hansville and Twin Spits Roads.

Data analysis:

In the Hood Canal Rd., Hansville Rd. and Bridgeview locations that the Speed Tables were eventually placed, there was no statistical significance in the change in speeds from 2006 to 2007.

However, the data on Twin Spits Rd taken in January of 2006 and May of 2007 shows a (11.5) mph decrease in average speed.

The assertion/hypothesis that education and enforcement programs were not working is not supported by the data.

Assertion 3: The Speed Tables will be able to be traversed safely at the posted speed limits.

Data Analysis:

- There has been a 558% increase in the number of people unable to traverse the thoroughfare at the legally posted speed limit on Hansville Rd
- There has been a 142% increase in the number of people unable to traverse the thoroughfare at the legally posted speed limit on Twin Spits Rd
- There has been a 468% increase in the number of people unable to traverse the thoroughfare at the legally posted speed limit on Hood Canal South
- There has been a 460% increase in the number of people unable to traverse the thoroughfare at the legally posted speed limit on Hood Canal North
- There has been a 164% increase in the number of people unable to traverse the thoroughfare at the legally posted speed limit on Bridgeview

(Ironically, on Bridgeview, the data actually shows that the number of people that are speeding 2 to 3 standard deviations above the average speed has grown by 14%)

In summary, the data was not collected in an organized manner, the assertions that were made to justify the speed tables were not data driven and it appears that emotional responses to perceived issues were used to support a stratified view of the data taken by the county. In fact, when you add in the federal and state guidelines for classification of hazardous roads and intersections, the areas that the speed tables were placed in Hansville have such a low hazard rating that they do not appear on the listing.

Should you have any questions or concerns about the above data review, let me know.

Thank you,

Frank Fox SSBB

