Safety on Greens Road: 1999-2001

The following information applies to safety along the section of Greens Road from Aldine-Westfield to John F. Kennedy Boulevard. First, there are some caveats about the data:

1. The data H-GAC has analyzed is distributed by the Accident Records Bureau of the Department of Public Safety. This is the state agency vested with documenting crashes for the State. Currently, their reporting requirements are that all fatal crashes, all injury crashes, and all property damage only (PDO) crashes in which one or more vehicles were towed be reported. Thus, they do not include the typical 'fender bender' in which no one is injured and all vehicles are driven away from the crash scene. In other words, the data we have represent the more serious crashes.

2. H-GAC has geocoded the crashes. However, because the data are kept in a very old information system by DPS in which road names are represented either by five-digit codes, the first five letters of the road name, or control-section numbers (for rural state roads), there is inevitably some geocoding error. H-GAC was able to geocode about 82% of all crashes in the DPS data set with about 90% accuracy on average.

3. To date, crashes for 1998-2001 have been geocoded. Thus, any conclusions about location are only tentative.

4. Spatial accuracy is within 50-100 yards. One would need actual crash diagrams to have more accuracy.

5. Please cite the Accident Records Bureau of the Texas Department of Public Safety as the source for the crash data and cite the Houston-Galveston Area Council as the source for the crash analysis.

Results of the Greens Road Analysis

1. Between 1999 and 2001, there were 128 crashes on Greens Road from Aldine-Westfield to John F. Kennedy Boulevard. There were no fatal crashes. However, there were 11 incapacitating injury crashes, 21 probable injury crashes, 62 possible injury crashes, and 34 serious property damage crashes. Figure 1 shows the location of crashes along Greens Road.

2. Of the 128 crashes, 123 were with other vehicles, 2 were with fixed objects, and 3 occurred with the vehicle overturning.

3. Crash hot spots are small areas where there is a concentration of crashes. They are a better indicator of hazard than a single location since they consider the interaction of several roads in affecting safety. Using the *CrimeStat* program, only one hot spot, the section of Greens Road within 0.1 mile of the intersection with John F. Kennedy, was identified to have 86 crashes. This represents more than two-thirds of the crashes on the 1.6-mile section under study.

4. Based on the estimate of VMT from our modeling group, *serious crash risk* was calculated. This is the number of serious crashes per 100 million vehicle miles traveled (VMT). Between 1999 and 2001, the serious crash risk on this section of Greens Road was 591.9 crashes per 100 million VMT. This is significantly higher than the regional average of 204 serious crashes per 100 million VMT.

Figure 1
Safety on Greens Road Between
Aldine-Westfield and John F. Kennedy: 1999-2001
Location of Crashes