

## **Safety on SH 288**

The following information applies to safety along SH 288 from US 59 W in Harris County to SH 36 in Brazoria County. First, there are some caveats about the data:

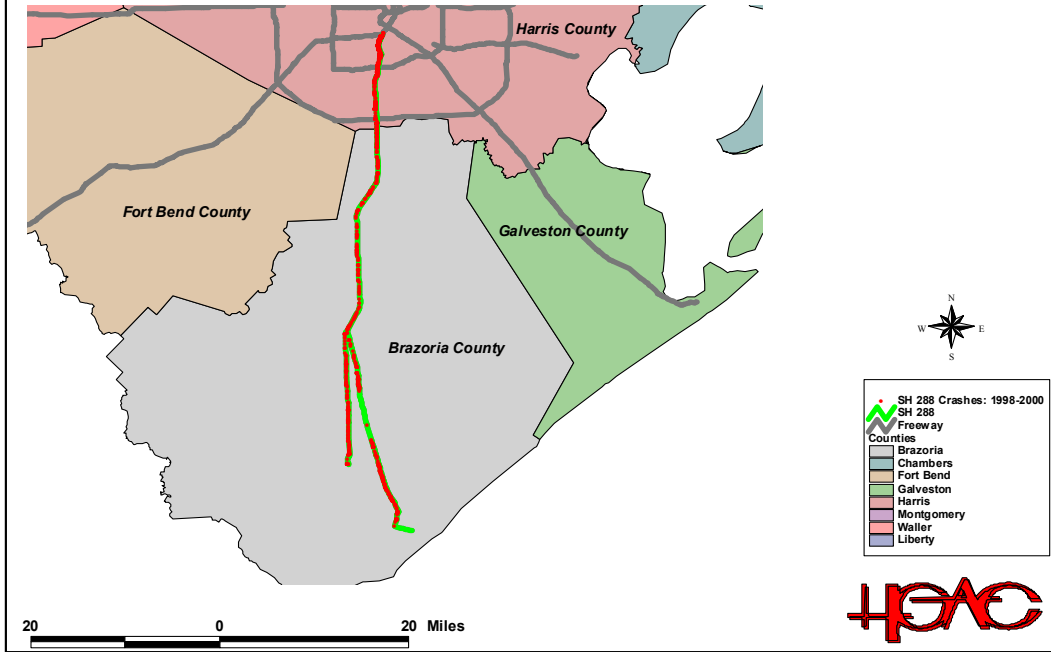
1. The data H-GAC has analyzed is distributed by the Accident Records Bureau of the Department of Public Safety. This is the state agency vested with documenting crashes for the State. Currently, their reporting requirements are that all fatal crashes, all injury crashes, and all property damage only (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 1998-2000 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.

The results of the analysis on SH 288 were as follows:

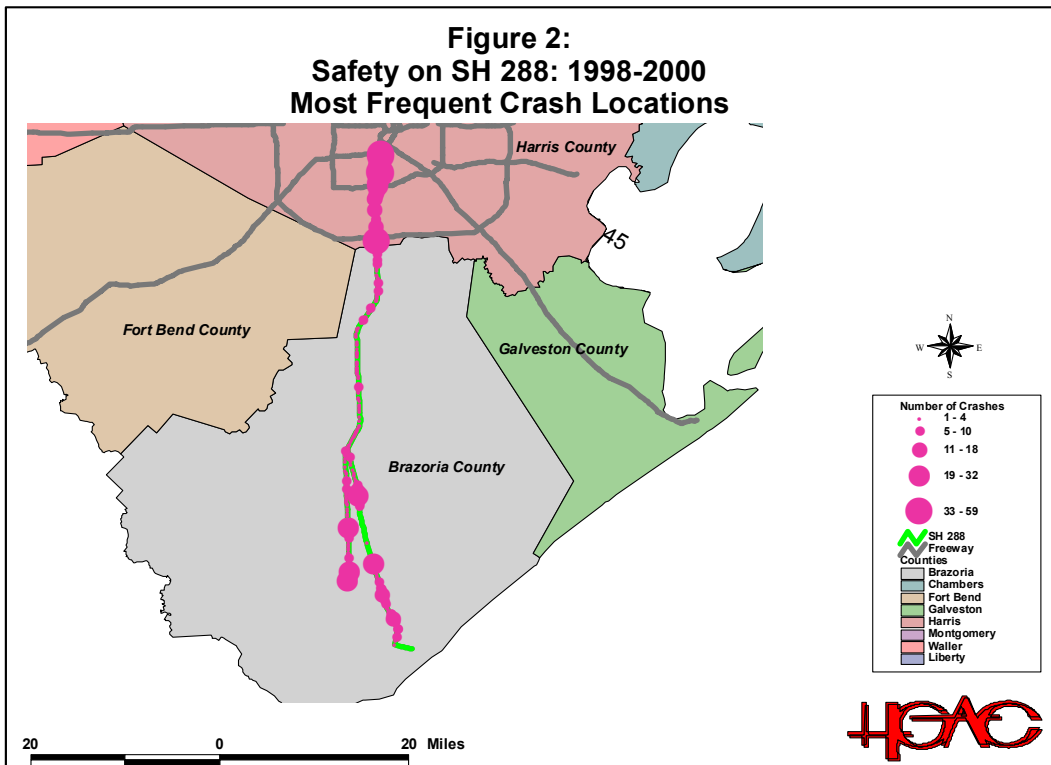
1. Between 1998 and 2000, there were 1955 crashes on SH 288 between US 59 W and SH 36. These included 18 fatal crashes, 106 incapacitating injury crashes, 308 non-incapacitating injury crashes, 901 possible injury crashes, and 622 serious property damage crashes. Figure 1 shows the location of crashes along SH 288.
2. Of the 1955 crashes, 1412 were with other vehicles, 353 were with fixed objects, 30 were with parked cars, 20 were with animals, 7 were with pedestrians, and 6 were with bicyclists.

3. Several locations had multiple crashes (Figure 2). Four locations on SH 288 had 40 or more crashes between 1998-2000. These were:
  - A. Just south of the intersection at East Wheeler Rd (59 crashes).
  - B. At the junction of Old Spanish Trail (47 crashes).
  - C. Just south of the junction with US-59 (43 crashes).
  - D. At the junction of Holcombe Rd. (41 crashes).
  
4. 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, eight hot spots were identified that had 50 or more crashes. These were clustered in central Houston. Figure 3 shows a map of these hot spots. The four most serious are:
  - A. A 0.26 mile stretch of SH 288 between Cleburn and Wheeler (153 crashes);
  - B. A 0.18 mile stretch of SH 288 at the junction with Old Spanish Trail (107crashes);
  - C. A .22 mile stretch of SH 288 at the junction with MacGregor (63 crashes); and
  - D. A 0.27 mile stretch of SH 288 between Wentworth and Oakdale (57 crashes).
  
5. 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 1998 and 2000, serious crash risk on SH 288 was 199 crashes per 100 million VMT. This is equal to the regional average of 199 serious crashes per 100 million VMT.
  
6. However, serious crash risk varies for different parts of SH 288. Within Harris County, serious crash risk is 212.3. Between the Harris County line and FM 1462, serious crash risk is only 76.4. Between FM 1462 and the end of SH 288 in Lake Jackson (SH 288) and Freeport (Business 288), serious crash risk was 266.1. The Brazoria County end of SH 288 has the highest crash risk followed by the section within IH 610. In other words, both 'ends' of SH 288 have the highest crash risk.

**Figure 1:  
Safety on SH 288: 1998-2000  
Location of Crashes**



**Figure 2:  
Safety on SH 288: 1998-2000  
Most Frequent Crash Locations**



**Figure 3:  
Safety on SH 288: 1998-2000  
Location of Crash Hot Spots**

