

Safety in Harris County Precinct 2: 1999-2001

The following information applies to safety within Precinct 2 of Harris County, which covers the southeastern part of the county, including the southeastern portion of the City of Houston, Pasadena, Galena Park, Jacinto City, La Porte, Deer Park, Baytown and Webster. 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 Harris County Precinct 2 Analysis

1. Between 1999 and 2001, there were 37,333 crashes within Harris County Precinct 2. These included 223 fatal crashes, 1,608 incapacitating injury crashes, 5,785 probable injury crashes, 17,005 possible injury crashes, and 12,712 serious property damage crashes. Figure 1 shows the location of crashes within Precinct 2.
2. Of the 37,333 crashes, 28,692 were with other vehicles, 6,125 were with fixed objects, 739 were with parked cars, 30 were with a train, 39 were with an animal, 513 were with a pedestrian, 352 were with bicyclists, and 135 were with other objects. 557 incidents occurred with the vehicle overturning, and 161 occurred for other reasons not identified.
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, 25 hot spots were identified that had 90 or more crashes. Figure 2 shows the location of crash hot spots within Precinct 2. These areas were:

- A. IH-45 North around its intersection with N. Main (331 crashes).
 - B. IH-45 South, just southeast of its intersection with IH- 610 Loop South (163 crashes).
 - C. IH-45 South just northeast of its intersection with NASA Road 1 (158 crashes).
 - D. IH-610 Loop North around its intersection with the Hardy Toll Road (145 crashes).
 - E. US 59 North between Navigation and Commerce (143 crashes).
 - F. IH-45 North between Link and Calvalcade (142 crashes).
 - G. The intersection of Park Place Blvd. and Broadway at IH-45 South (135 crashes).
 - H. IH-610 Loop South at Woodridge (135 crashes)
 - I. IH-45 South between Bellfort and Monroe (131 crashes).
 - J. IH-45 South just southeast of Park Place Blvd. (126 crashes).
 - K. IH-45 South just southeast of Monroe (122 crashes)
 - L. IH-10 East at N. Wayside (120 crashes)
 - M. IH-45 North at Crosstimbers (119 crashes)
 - N. IH-45 North just south of W. Patton (117 crashes)
 - O. IH-610 Loop North at Fulton (114 crashes)
 - P. East Beltway 8 at Spencer Highway (113 crashes)
 - Q. IH-10 East just west of Oates (111 crashes)
 - R. IH-45 North just north of IH-610 Loop North (108 crashes)
 - S. Shaver Road around its intersection with SH 225 (104 crashes)
 - T. IH-10 East just east of Garth Road (102 crashes)
 - U. IH-45 North just south of Crosstimbers (101 crashes)
 - V. IH-45 North just south of N. Main (95 crashes)
 - W. IH-10 East between San Jacinto and McKee (95 crashes)
 - X. IH-610 Loop South just west of Broadway (91 crashes)
 - Y. IH-610 Loop North at Irvington (91 crashes)
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 within Harris County Precinct 2 was 200.3 crashes per 100 million VMT. This is in-line with the regional average of 204 serious crashes per 100 million VMT.

Figure 1
Safety in Harris County Precinct 2: 1999-2001
Location of Crashes

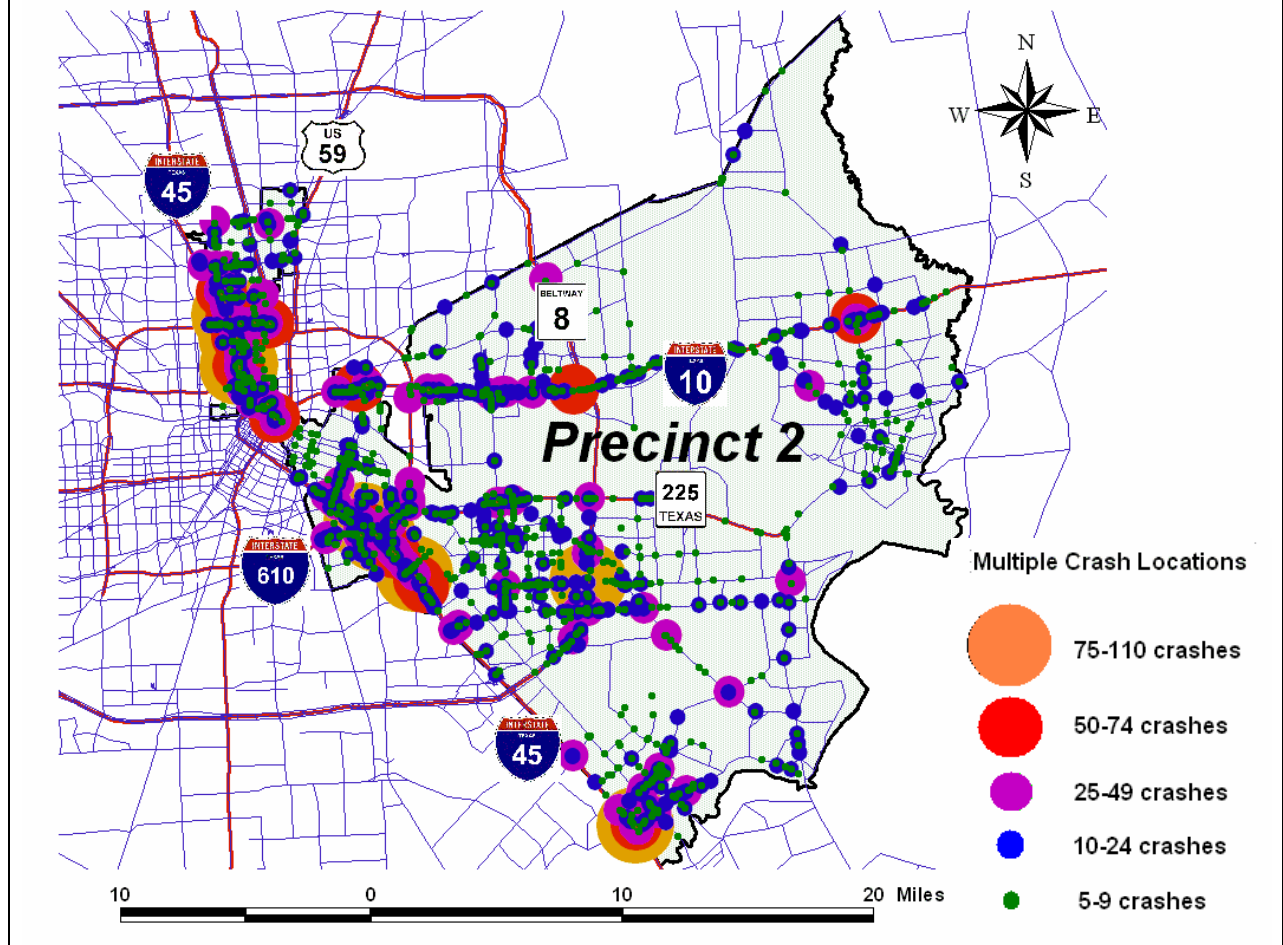


Figure 2
Safety in Harris County Precinct 2: 1999-2001
Crash Hot Spots

