

## Safety in Montgomery County

The following information applies to safety in Montgomery County from 1998 through 2000. First, there are some caveats about the data:

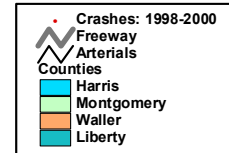
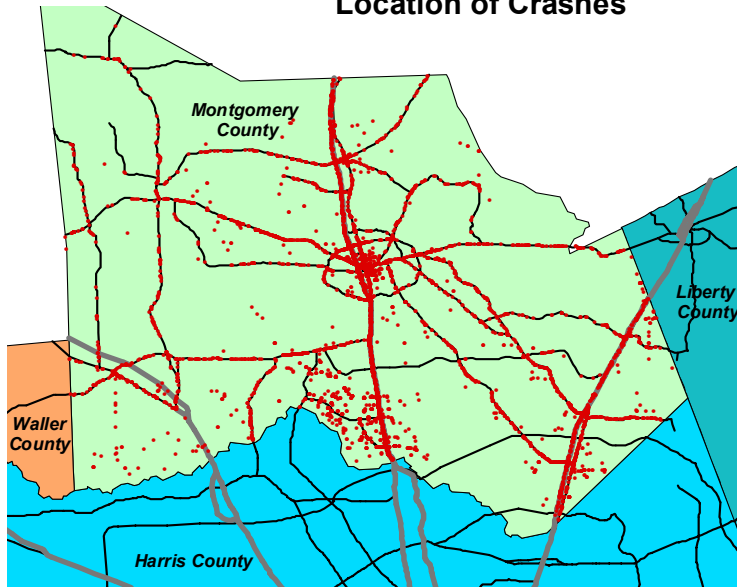
1. The data H-GAC has analyzed is distributed by the Accident Records Bureau of the Department of Public Safety. This is the state agency vested with documenting crashes for the State. Currently, their reporting requirements are that all fatal crashes, all injury crashes, and all property damage only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

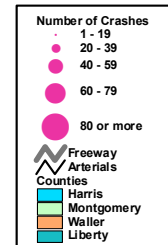
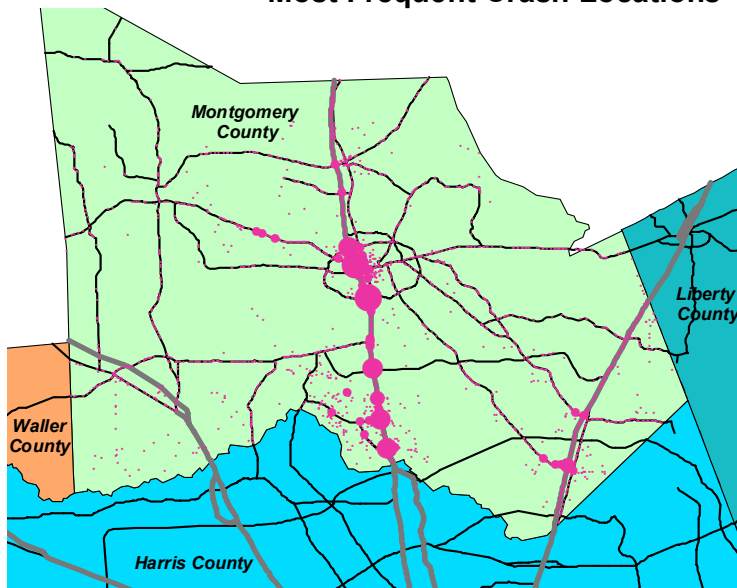
1. Between 1998 and 2000, there were 11,560 crashes in Montgomery County. These included 152 fatal, 681 incapacitating injury, 2,343 probable injury, 3,446 possible injury, and 4,938 serious property damage only crashes. Figure 1 shows the location of crashes in Montgomery County.
2. Of the 11,560 crashes, 7,561 were with other vehicles, 2,727 were with fixed objects, 158 were with animals, 138 were with parked cars, 101 were with pedestrians, 70 were with bicyclists, and 725 involved commercial trucks,
3. In terms of improper driving, 4,882 crashes involved speeding, 1,929 involved failure to yield, 824 involved failure to stop, 787 involved following too close, and 468 involved running a red light, and 1,351 crashes involved Driving Under the Influence (DUI).
4. Of the drivers, 3,190 (or 28%) involved teenage drivers while 1,043 (or 9%) involved elderly drivers.
5. Several locations had multiple crashes (Figure 2). Six locations in Montgomery County had 65 or more crashes between 1998-2000. These were:
  - A. At the junction of IH-45 and south SL 336 (95 crashes).
  - B. At the junction of IH-45 and FM 2854 (86 crashes).
  - C. At the junction of IH-45 and Woodlands Parkway (78crashes).

- D. Just north of the junction with IH-45 and SH 242 (78 crashes).
  - E. Just north of the junction with IH-45 and north SL 336 (73 crashes).
  - F. At the junction of IH-45 and Rayford/Sawdust Drive (65crashes).
6. 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, five hot spots were identified that had 400 or more crashes. These were clustered in central and south Montgomery County. Figure 3 shows a map of these hot spots. The five most serious are:
- A. A 2.97 mile stretch of IH-45 between SL 336 and FM 1484 (1098 crashes);
  - B. A 3.09 mile stretch of IH-45 between Wellman Pkwy and Woodlands Pkwy (605 crashes);
  - C. A 2.66 mile stretch of IH-45 between Woodlands Pkwy and the Montgomery County line (488 crashes);
  - D. A 2.74 mile stretch of IH-45 just south of SL 336 between Gladstell and Creighten Rd. (423 crashes); and
  - E. A 2.73 mile stretch of IH-45 between FM 2854 and SL 336 (418 crashes).
7. 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 in Montgomery County was 149 crashes per 100 million VMT. This is lower than the regional average of 197 serious crashes per 100 million VMT and about the same as the statewide average of 150 per 100 million VMT.
8. However, serious crash risk varies for different parts of Montgomery County. Along IH-45, serious crash risk was 234, higher than the regional or state average. Between IH-45 and the county line on the west (excluding IH-45), the crash risk was 56, much lower than the county, regional or state average. However, between IH-45 and the county line on the east (excluding IH-45) the crash risk was 256. The crash risk along IH-45 and to the east is higher than the regional average and much higher than the statewide average.
9. Among cities, the City of Conroe has a serious crash risk of 245, which is higher than the regional average of 197 serious crashes per 100 million VMT.

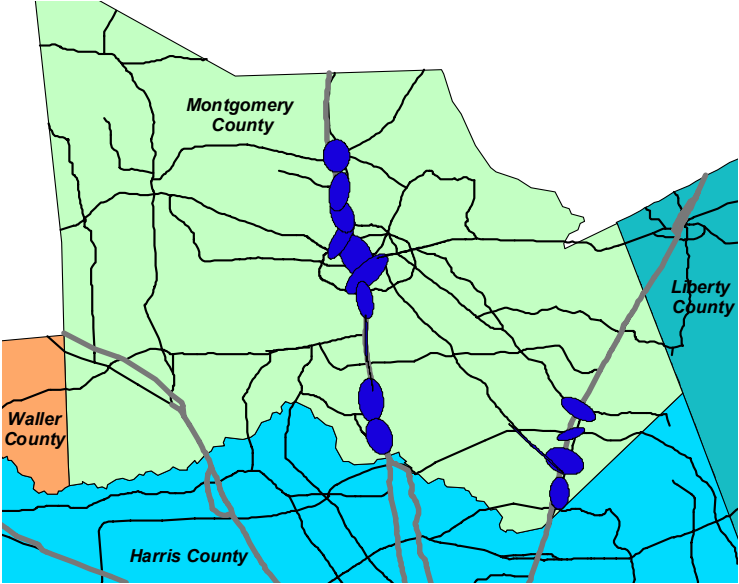
**Figure 1:  
Safety in Montgomery County  
Location of Crashes**



**Figure 2:  
Safety in Montgomery County  
Most Frequent Crash Locations**



**Figure 3:  
Safety in Montgomery County  
Location of Crash Hot Spots**



- Crash Hot Spots
- Freeway
- Arterials
- Countries
- Harris
- Montgomery
- Waller
- Liberty

