

Safety in the City of Old River-Winfree

The following information applies to safety in the City of Old River-Winfree located in Chambers County.

Caveats about the Data

First, there are some caveats about the data:

1. The data come from 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. We have 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. We were able to geocode about 82% of all crashes in the DPS data set with about 90% accuracy on average.
3. To date, we have geocoded crashes for 1998 through 2000. Thus, any conclusions about location are only applicable for those years.
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

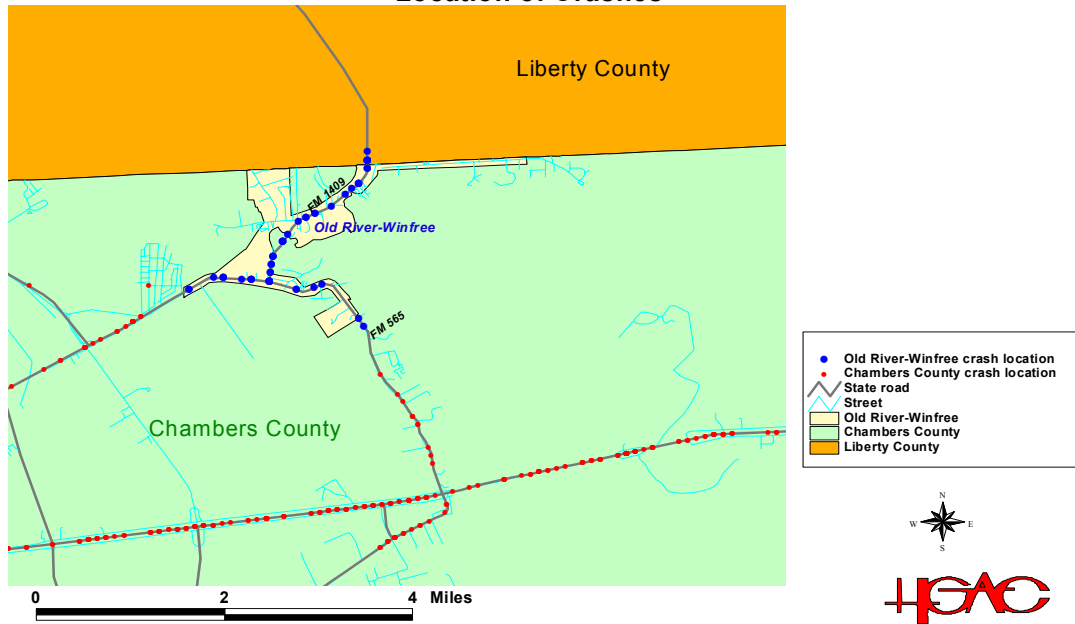
The results of the analysis in the City of Old River-Winfree were as follows:

1. Between 1998 and 2000, there were 50 *serious* crashes that occurred within the boundaries of the City of Old River-Winfree and 7 crashes that occurred just outside the city boundaries (figure 1).
2. Of the 57 crashes, 37 were with other vehicles, 15 were with fixed objects, 1 was with an animal, and for 4 the type of collision was not specified.
3. There was 1 fatal, 4 incapacitating injury (Type A), 10 non-incapacitating injury (Type B) and 15 possible injury crashes (Type C). There were also 27 serious PDO crashes. As mentioned above, this is only a sub-set of all PDO crashes.
4. In addition, 22 crashes involved speeding, 11 involved failure to yield, 1 involved failure to stop, and 11 crashes involved Driving Under the Influence (DUI).

5. Of the drivers, 20 involved teenage drivers and 3 involved elderly drivers.
6. Of the vehicles, 42 involved a truck of some sort, but only 1 was a commercial vehicle. Thirty-three were pickup trucks, 6 were SUV's, and 4 were panel vans.
7. Based on the estimate of vehicle miles traveled (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 the City of Old River-Winfree was 255 per 100 million VMT. This is much higher than the regional average of 197 serious crashes per 100 million VMT and the statewide average of 150 per 100 million VMT. Even if only the 50 crashes within the city boundaries are included, crash risk would be 224. Since our region is the most severe in Texas, safety is a very serious problem in Old River-Winfree.
8. Specific analysis was conducted of 1998-2000 crashes on FM 565 and FM 1409 inside the City of Old River-Winfree. The results were as follows:
 - A. There were 31 crashes that occurred on FM 1409 (exclusive of the intersection with FM 565) within the City of Old River-Winfree, including two just outside the city boundary. This roadway has a substantial number of crashes that occur all along its length in both Chambers and Liberty counties. Crash risk along this roadway (again, excluding the intersection with FM 565) was 383. This is a very high risk road;
 - B. There were 16 crashes that occurred on FM 565 (exclusive of the intersection with FM 1409) within the City, including one just outside the city boundary. This roadway has a substantial number of crashes that occur all along its length in both Chambers and Liberty counties. Crash risk along this roadway (again, excluding the intersection with FM 1409) was 207. Crash risk along this roadway is about the same as the regional average. Compared to the state average, however, there is substantial risk on it; and
 - C. There were 10 crashes that occurred at the intersection of FM 1409 and FM 565 within the City. Crash risk at the intersection was 630. This is substantially higher than the statewide average of 134 for intersections with principal arterials. This intersection is very unsafe.
9. Several locations had multiple crashes between 1998 and 2000 (Figure 2):
 - A. The intersection of FM 1409 and FM 565, where there were 10 crashes, as noted above;
 - B. The northern edge of the city along FM 1409 at the border with Liberty County, where there were 5 crashes;

- C. A location on FM 1409 about half way between Porter and Meyer, where there were 4 crashes;
- D. Four locations had three crashes each; and
- E. Seven locations had two crashes each during the period.

**Figure 1:
Safety in Old River-Winfree: 1998-2000
Location of Crashes**



**Figure 2:
Safety in Old River-Winfree: 1998-2000
Number of Crashes**

