

Safety on SH 99 - Section G

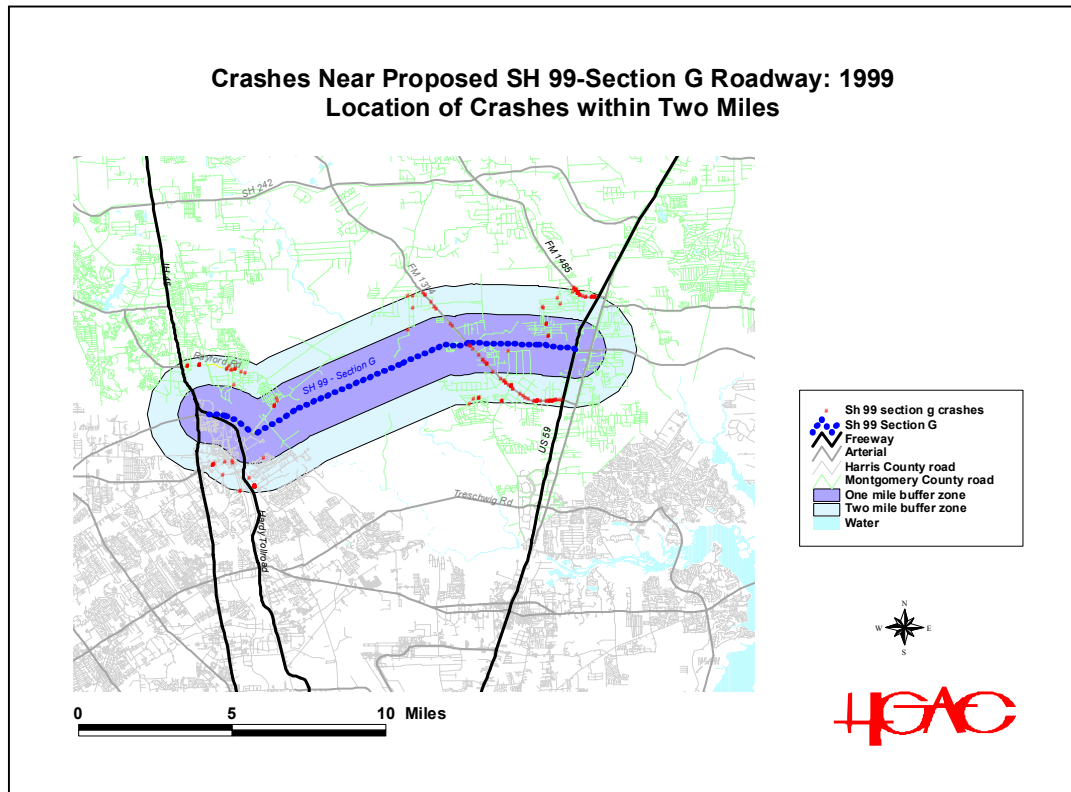
The following information is about safety along SH 99 between IH 45 N and US 59 N at the edge of Harris County and Montgomery County. This section is known as ‘Section G’ of the Grand Parkway. There are several caveats to the data and analysis that you should be aware of:

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. We’ve 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 only geocoded crashes for 1999. 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 conclusions are as follows:

1. In 1999, there were 218 crashes within a two-mile buffer of Section G between IH 45 N and US 59 N. These do not include crashes occurring on IH 45 N, the Hardy Toll Road, or US 59 N. The 218 crashes included 1 fatal, 13 incapacitating injury crashes (Type A), 53 non-incapacitating injury crashes (Type B), 76 possible injury crashes (Type C), and 75 property damage only crashes where one or more vehicles was towed.

2. Of the 218 serious crashes, 169 were with another motor vehicle, 30 were with a fixed object, 2 were with pedestrians, 2 were with a bicycle, 2 were with parked cars, 3 were with an animal, and for 10 the type of object hit was not identified.
3. Figure 1 below shows a map of the distribution of crashes occurring within a one-mile and a two-mile buffer of Section G. Each crash location is represented by a red dot. At any one location, there may be more than one crash. However, since the program plots the crashes on top of each other, multiple crashes cannot be identified from this map.



4. Because there currently is not a Section G roadway, hot spot analysis is not reliable. However, three east-west streets are seen as having a substantial number of crashes. Eighty-one of the crashes occurred on FM 1314, thirty-seven of the crashes occurred on FM 1485, and twenty-one of the crashes occurred on Rayford Road in Montgomery County.
5. Based on estimates of VMT from our modeling group, *serious crash risk* was calculated on all roads within a two mile buffer zone around the proposed Section G *excluding* IH 45, Hardy Toll Road, and US 59. This is the number of serious crashes per 100 million vehicle miles traveled (VMT). In 1999, crash risk on the roads within a two mile Section G was

247 crashes per 100 million VMT. This is higher than the regional average of 199 crashes per 100 million VMT. Compared to the region as a whole, crash risk is high. Further, our region is the worst in the State of Texas and is one of the worst in the country. Consequently, the crash risk within the two-mile buffer zone around the proposed Section G has to be considered severe by national standards.