Safety on Fairmont Parkway: 1999-2001

Limitations of the Data

The following information applies to safety along Fairmont Parkway from Shaver St on the Houston-Pasadena border on the west to Park St in the City of La Porte on the east. First, there are some caveats about the data:

1. The data H-GAC has analyzed is distributed by the Crash 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 1999-2001 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 Crash 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

1. Between 1999 and 2001, there were 826 serious crashes on Fairmont Parkway from Shaver St on the Houston-Pasadena border on the west to Park St in the City of La Porte on the east (Figure 1). These included 3 fatal crashes, 49 incapacitating injury crashes, 182 probable injury crashes, 320 possible injury crashes, and 272 serious property damage crashes. Figure 1 shows the location of crashes along Fairmont Parkway.

    A. Note that 540 of these crashes occurred between Beltway 8 (SL 8) on the west and Park St in La Porte on the east while the remaining 286 were west of Beltway 8.

2. Of the 826 crashes, 759 were with other vehicles, 46 were with fixed objects, 2 were with parked cars, 1 was with a pedestrian, 1 was with a bicyclist, and there was no information for 17.

3. Twelve locations on Fairmont Parkway had 20 or more crashes between 1999 and 2001 (Figure 2). These were:

    A. A half mile stretch between just east of Beltway 8 (SL 8) and just east of Nations Lane/Country Rd (85 crashes)

B. The intersection with Beltway 8 (60 crashes)

C. The intersection with Red Bluff (54 crashes)

D. The intersection with Pansy St (43 crashes)

E. The intersection with Jana Lane (33 crashes)

F. The intersection with Center St (32 crashes)

G. The intersection with Burke Rd (26 crashes)

H. The intersection with Preston (24 crashes)

I. The intersection with Shaver St (23 crashes)

J. The intersection with Farrington Blvd (21 crashes)

K. The intersection with SH 146 (21 crashes)

L. The intersection with Yuma Trail (20 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 on Fairmont Parkway was 382 crashes per 100 million VMT. This is significantly higher than the average of 247 for Harris County urban principal arterials and certainly much higher than regional average for all roads of 204 serious crashes per 100 million VMT.

5. Nevertheless, in spite of a high crash risk on Fairmont Parkway, the risk varies for different sections of the roadway. Figure 3 shows the relative crash risk along Fairmont Parkway. Higher risk is seen in dark red while low risk is not seen. The crash risks on Fairmont Parkway around Beltway 8 and around Red Bluff are much higher than other segments. The crash risk around SH 146 is relatively high, though not as much as near Beltway 8.

Figure 1:

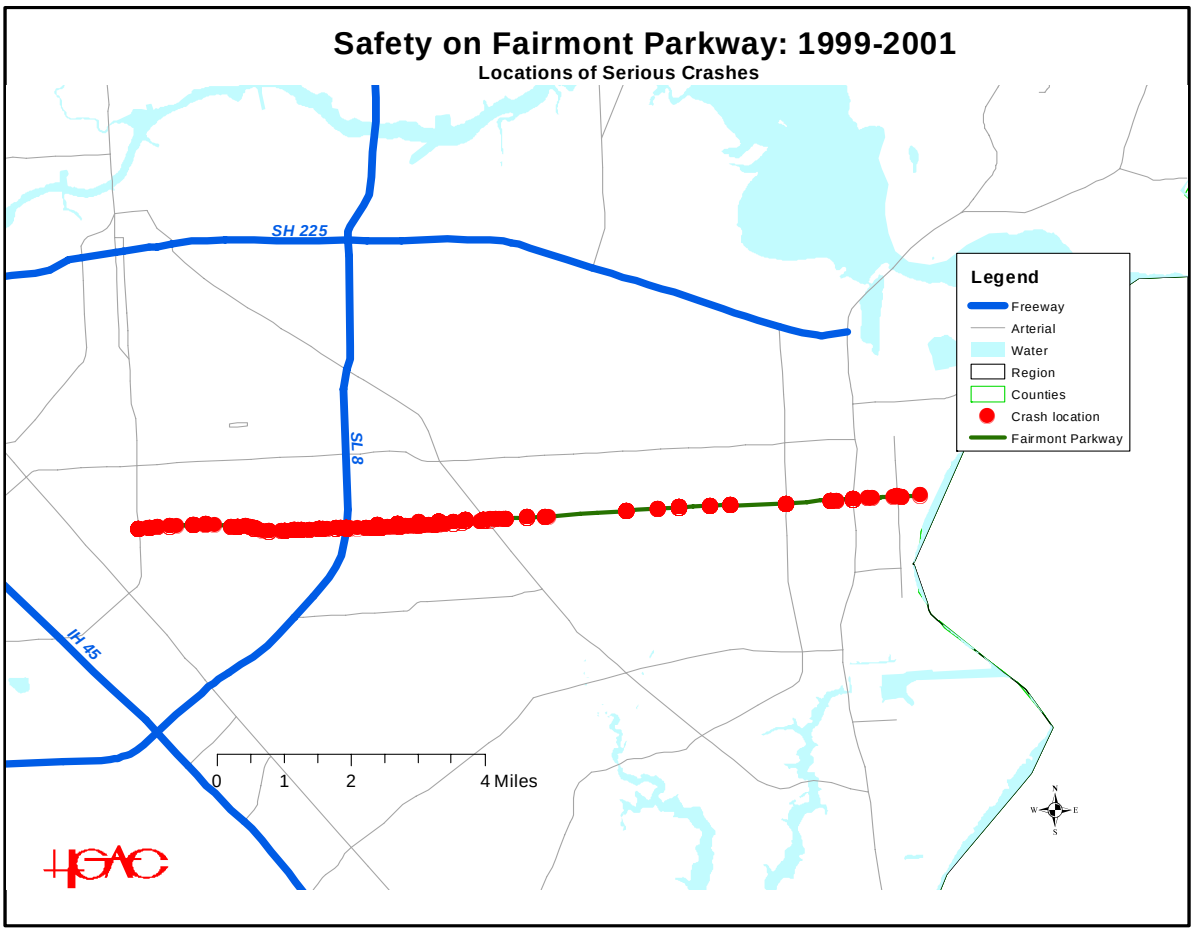

Safety on Fairmont Parkway: 1999-2001
Locations of Serious Crashes
SH 225
SL 8
IH 45
Legend
Freeway
Arterial
Water
Region
Counties
Crash location
Fairmont Parkway
0
1
2
4 Miles

Figure 2:

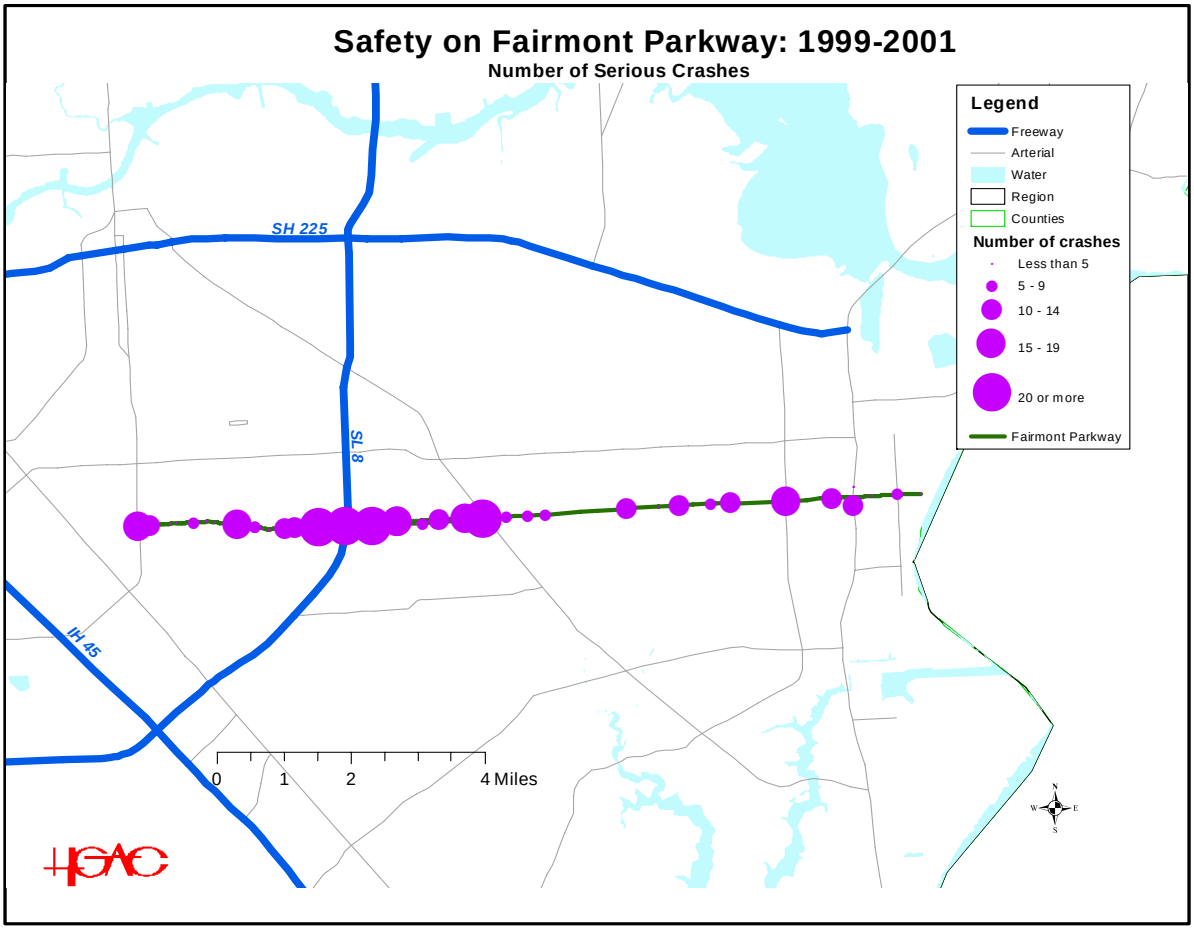
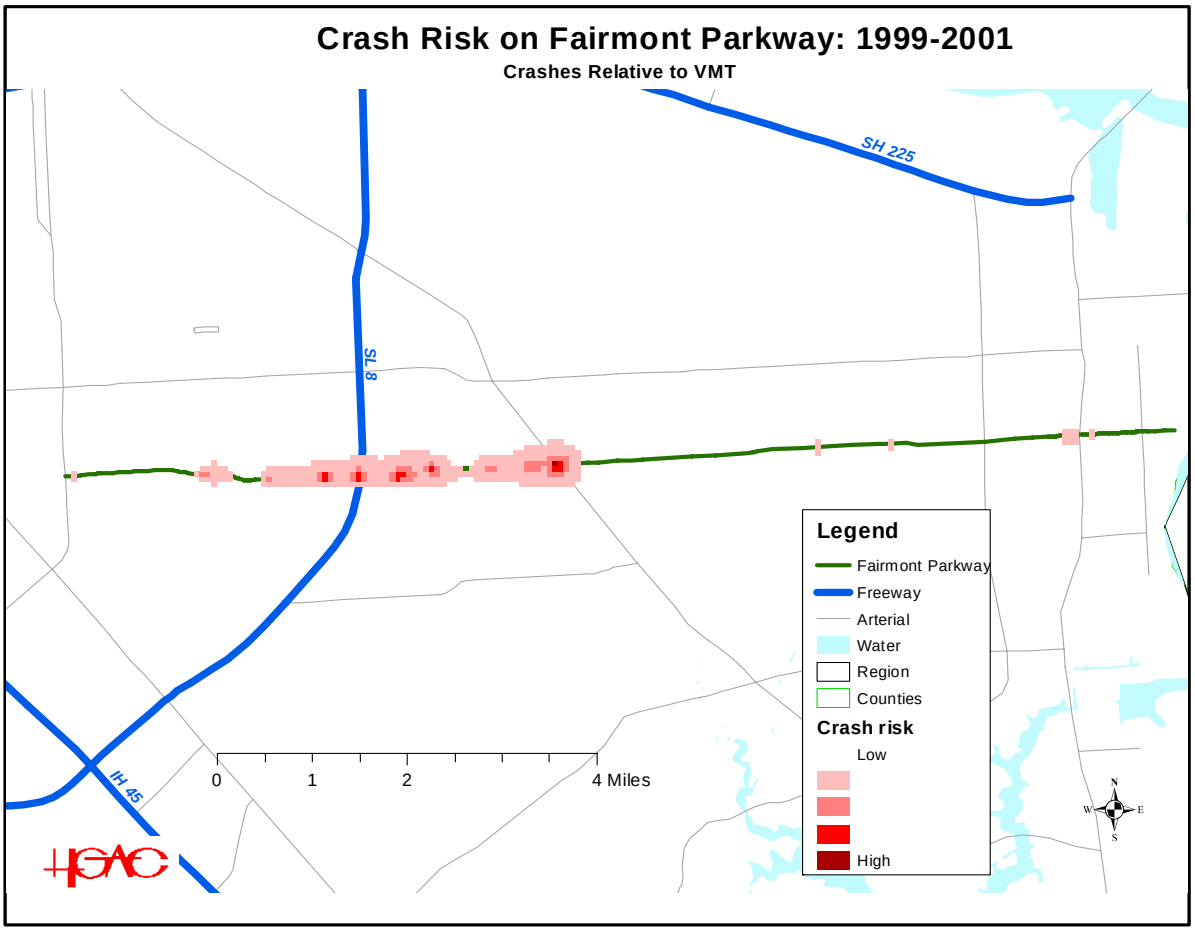

Safety on Fairmont Parkway: 1999-2001
Number of Serious Crashes
Legend
Freeway
Arterial
Water
Region
Counties
Number of crashes
Less than 5
5 - 9
10 - 14
15 - 19
20 or more
Fairmont Parkway
SH 225
SL 8
IH 45
0
1
2
4 Miles
N
W
E
S
H-GAC

Figure 3:


Crash Risk on Fairmont Parkway: 1999-2001
Crashes Relative to VMT
SH 225
SL 8
IH 45
0
1
2
4 Miles
Legend
Fairmont Parkway
Freeway
Arterial
Water
Region
Counties
Crash risk
Low
High
N
W
E
S
H-GAC