

Roadway Safety Foundation and Iowa State University – US Road Assessment Program

This paper summarizes and provides a snapshot of a proactive risk assessment conducted by the Road Safety Foundation and Iowa State University for the East End District. This was a collaborative effort to assess the 300 consecutive miles of primary and secondary roads in the District using the International Road Assessment Program (iRAP) Star Rating methodology and the United States Road Assessment Program (usRAP) innovative and proactive tool to assist in generating data-driven solutions for reducing fatalities or serious injuries related to hazards and crashes along business corridors within the District.

For more information, visit [iRAP](#) and [usRAP](#).

Star Ratings

The following chart illustrates the most at risk of fatal or serious injury in a crash as represented by iRAP's star ratings. The star ratings are reflected across four (4) categories (motorcyclists, vehicle occupants, pedestrians, and bicyclists). For the purpose of this overview, only 3 stars or lower are represented to focus attention on areas of concern.

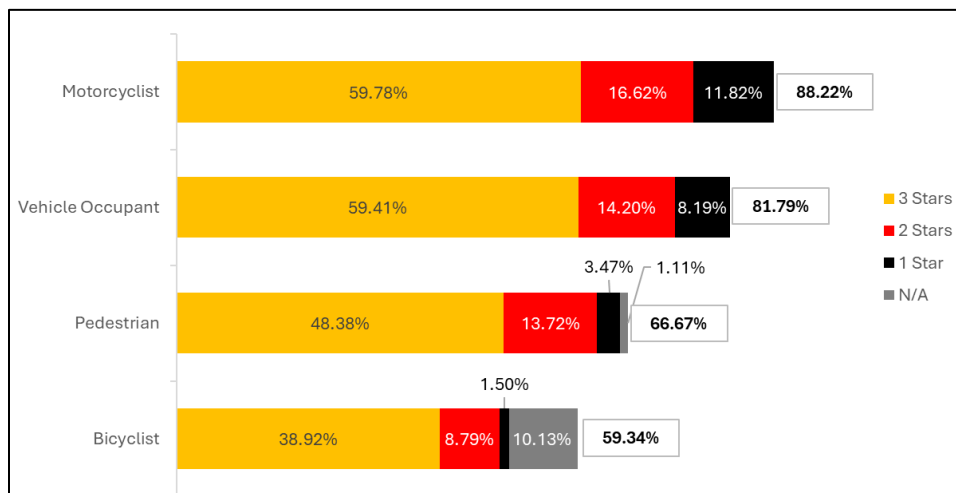
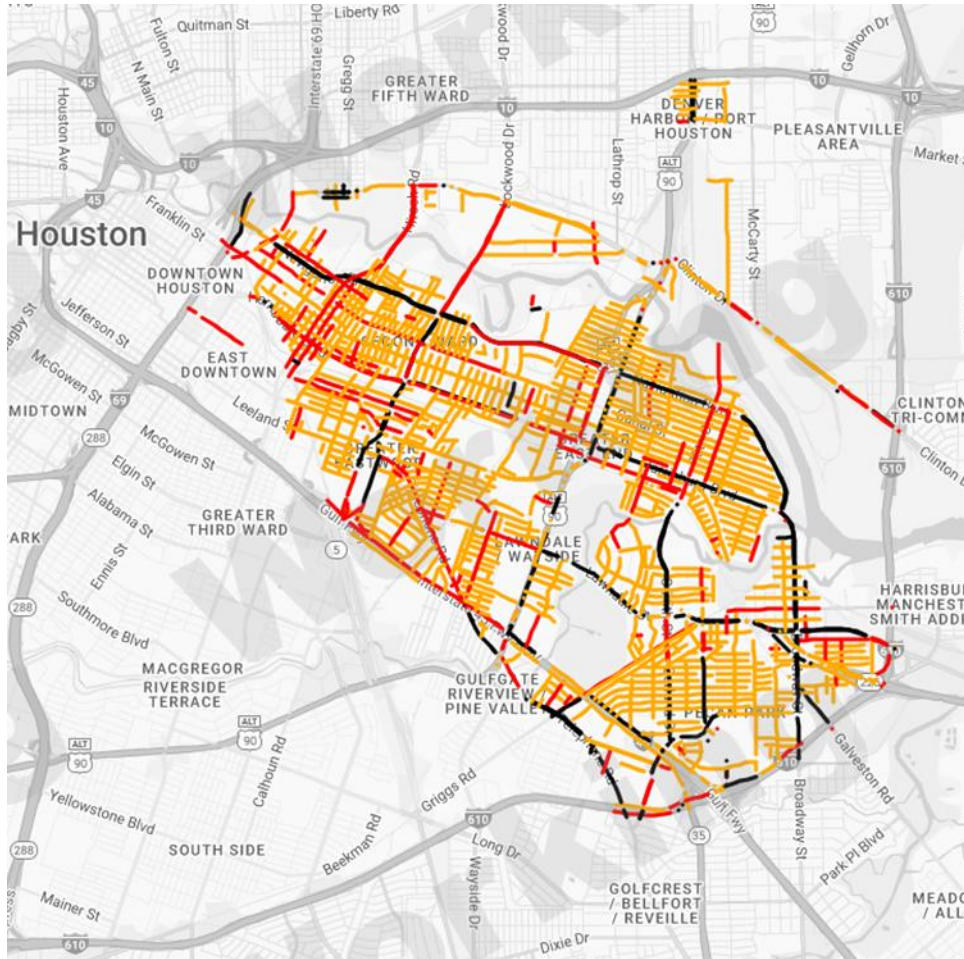


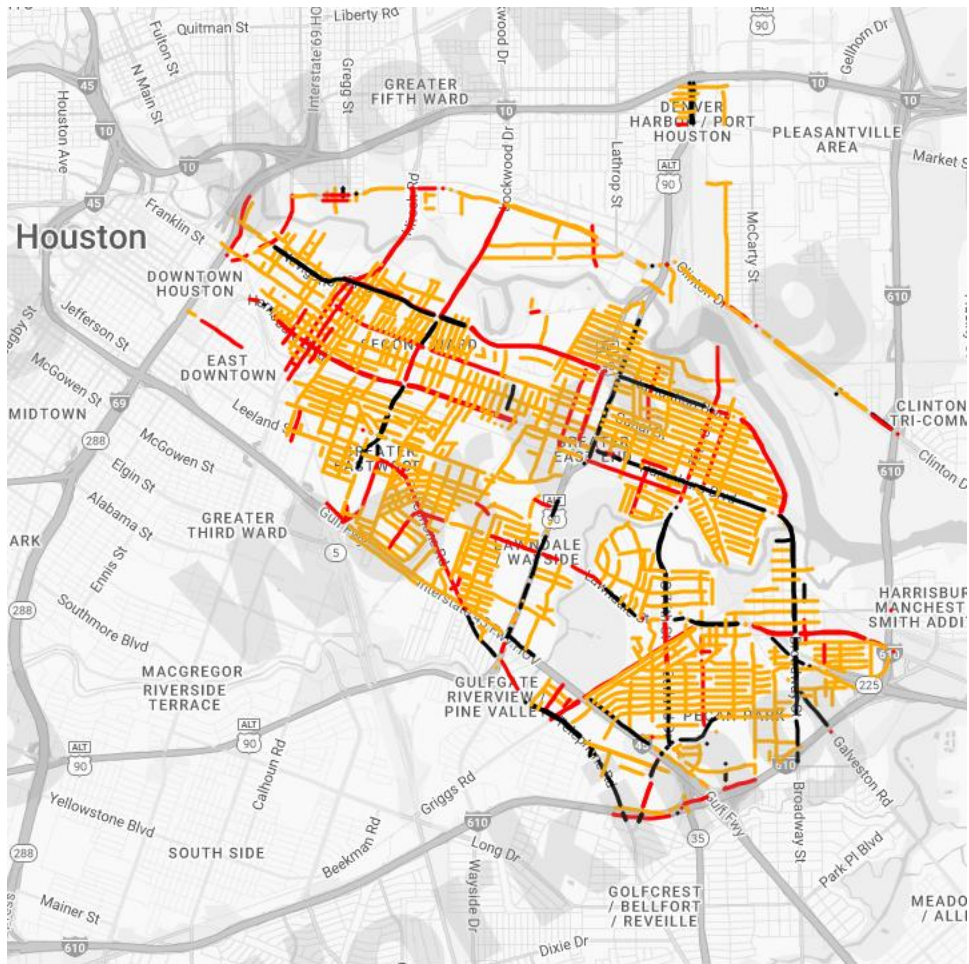
Figure 1 - Most at Risk of Fatal or Serious Injury

Following are maps that represent the areas of concern for each of the star rating categories.

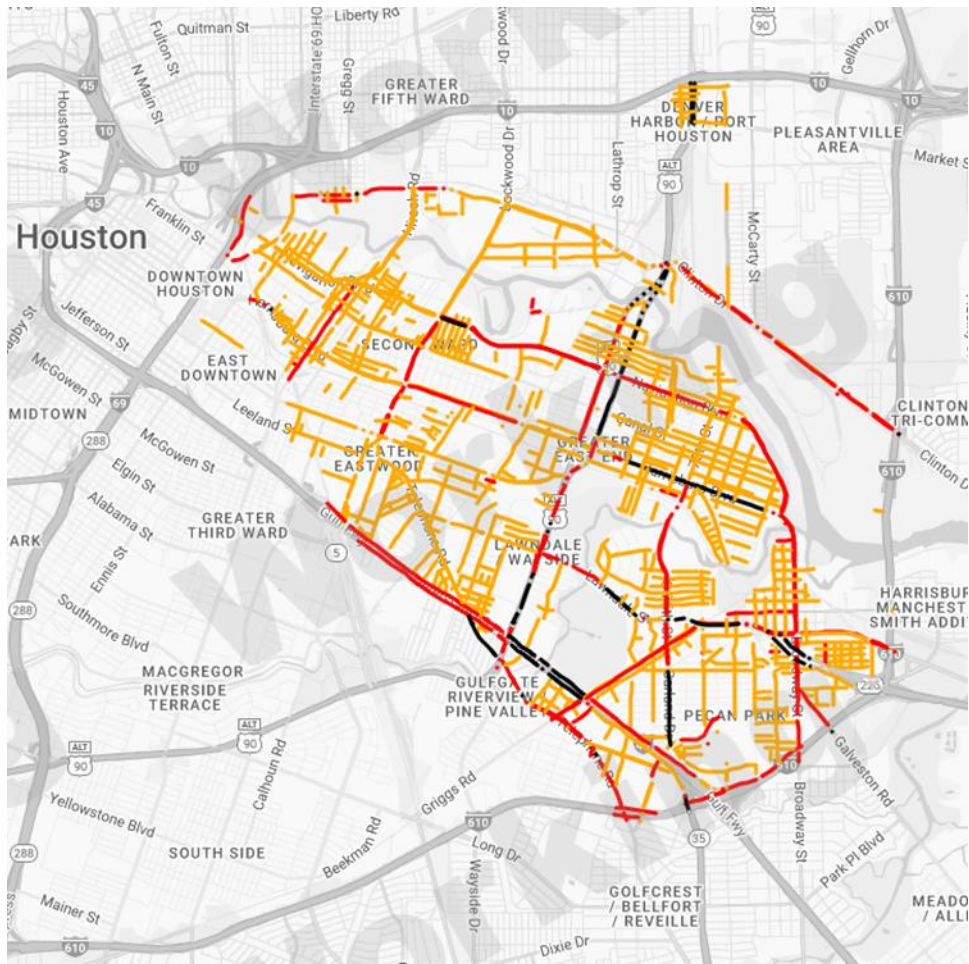
Motorcyclists



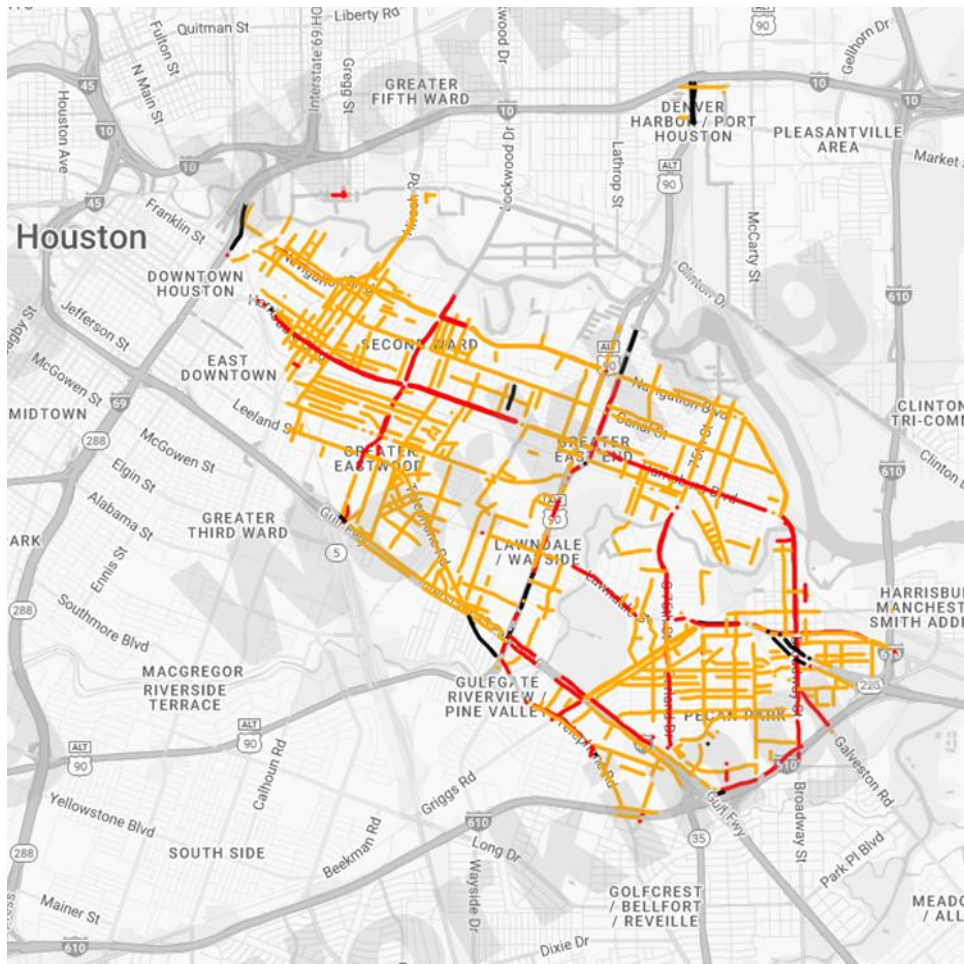
Vehicle Occupants



Pedestrians



Bicyclists



Fatal and Serious Injury Estimation

This table and map show the number of modeled fatal and serious injuries per year, excluding those categorized as “Other”.

Annual Fatal and Serious Injuries Per Year



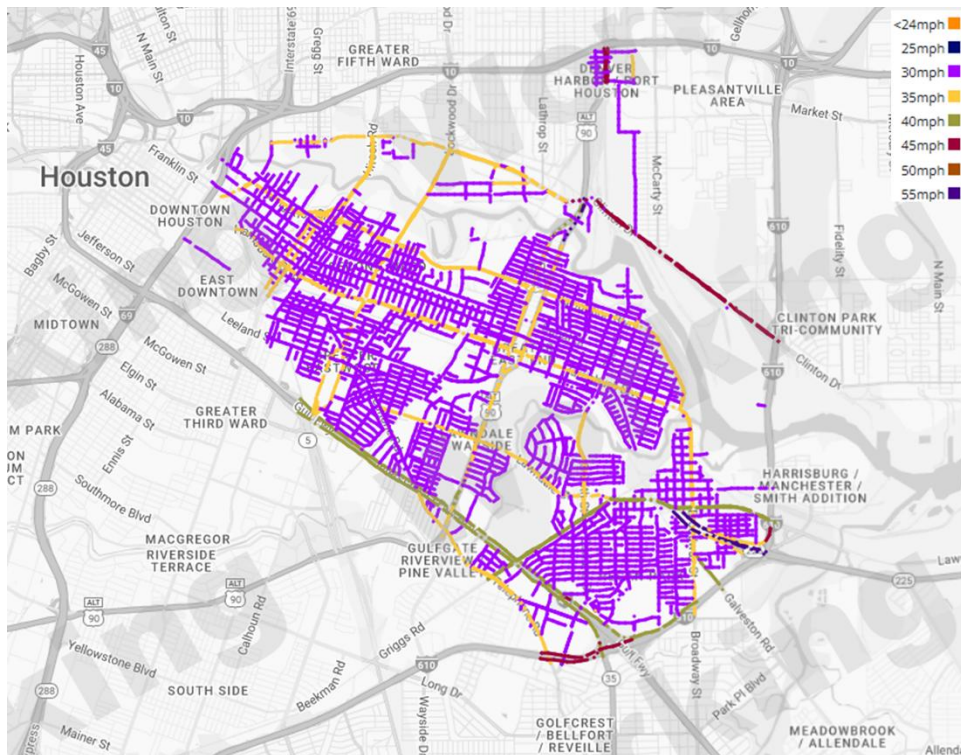
List of Top 10 Roadways by Fatal or Serious Injury

	Roadway Name	Estimated No. of Fatal/Serious Injuries
1	90 N WAYSIDE	4.1
2	TELEPHONE RD	1.8
3	90 S WAYSIDE	1.8
4	NAVIGATION	1.7
5	BROADWAY ST	1.7
6	HARRISBURG	1.7
7	225S	1.5
8	LAWNDALE	1.4
9	90 WAYSIDE	0.9
10	LOCKWOOD DR	0.8

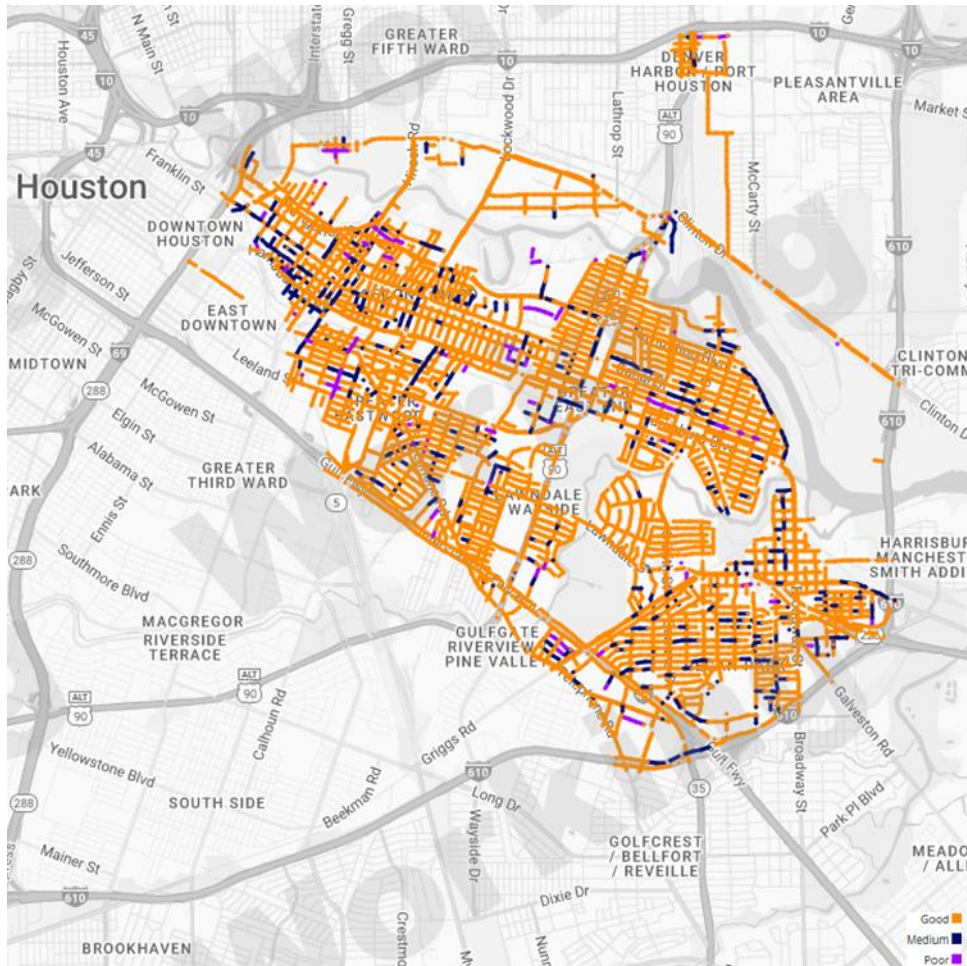
Road Attributes

The following data points reflect the assessment of the approximately 300 miles of roadway within the East End District. Three (3) additional key factors are highlighted in this section (speed, school zone warning, and road conditions).

Speed



The map below shows the road conditions rated as “good”, “medium”, or “poor”.



Supporting information

1. Of the 473.6km (294 miles) where pedestrians are present and traffic flows at 40km/h (25 mph) or more, 110.6km (69 miles) have no footpath.
2. Of the 430.4km (267 miles) of roads where bicyclists are present and traffic flows at 40km/h (25 mph) or more, 373.5km (232 miles) have no bicycle facilities.
3. There are no sections of road with high motorcycle flows ($\geq 20\%$ of total) and traffic flows at 60km/h (40 mph) or more.
4. Of the 16.5km (10 miles) of roads carrying traffic at 80km/h (50 mph) or more, 8.3km (5 miles) are undivided single carriageways.
5. Of the 2.4km (1.5 miles) of curves where traffic flows at 80km/h (50 mph) or more, 1.9km (1 mile) has hazardous roadsides.
6. Of the 660 intersection(s) where traffic flows at 60km/h or more, 515 have no roundabout, protected turn lane or interchange.