

- Hour-of-the-Week Crash Trends between the Years 2005-2010 for the Chicago, Illinois Region (*Parry Frank - Chicago Metropolitan Agency for Planning*)

Serious and fatal crash rates per VMT, from 2005 to 2010, varied by the hour of the week for the Chicago, Illinois region. A review of the trends in this variation over six years reveals the effects of the safety programs and can inform the deployment of safety enhancement resources. Over this period, the fatal and serious traffic crashes declined between 31% and 46% on the freeways and other roads while the regional VMT only fell by 3.1%. The largest proportional decrease in VMT occurred in the late night/early morning hours (up to 18%) which have the highest fatal crash rate per VMT.

The hourly serious and fatal crash rates per VMT have fallen for most times of the day, but on freeways, the late-night, weekend hours did not change much and have a similar fatality rate per VMT for both periods in the study. Serious crashes on the non-freeway roads are more likely to occur during the morning and evening peak periods, but the highest serious crash rate per VMT occurs in the post-midnight hours of the weekend. The highest number of hourly fatalities, as well as the highest rate per VMT, takes place during the post-midnight hours of the weekend. For 2009/2010, at the extremes, the highest late-night hourly fatality rate per VMT on the non-freeways is 68 times greater than the lowest hourly fatality rate. The ratio of late-night fatal crashes to serious crashes is more than twice the daytime ratio.