



**Summer Program on Transportation Statistics  
August 14-18, 2017**

**Lecture:** *Why Highway Crashes Have Recurring Patterns?*

**Speaker:** Roya Amjadi

**Abstract:**

Highway crash data with average of 39 thousand fatalities and 2.4 million nonfatal injuries per year have repetitive and predictable patterns, and may benefit from statistical predictive models to enhance highway safety and operation efforts to reduce crash fatalities/injuries. Highway crashes have patterns that repeat over fixed periods of time within the data set for crashes such as motorcycle, bicycles, pedestrians, nighttime, fixed object, weekend, and winter crashes. In some States, these crashes are weekly, monthly, or seasonally. Contributing factors such as: age category, light condition, weather, weekday, underlying state of the economy, and others impact these variations.