The outdoor advertising industry’s foundation (Foundation for Outdoor Advertising Research and Education) has pioneered research on digital billboards and traffic safety, commissioning top experts to study driver behavior and also to analyze crash data. An initial study, released in 2007, was based on “human factors” such as drivers’ eye glances. Meanwhile, engineering experts have analyzed accident reports provided by state and local authorities in jurisdictions across the country.

Human Factors Research

- **Virginia Tech Transportation Institute (2007)**
  - This study used an instrumented vehicle to measure eye glances in the presence of off-premise digital billboards and conventional billboards (*The pending FHWA study relies on eye-glance methodology*)

- **Findings of industry research:**
  - Drivers did not glance more frequently in the direction of digital billboards than in the direction of other event types
  - The mean glance towards digital billboards was less than one second

Accident Analysis

- **Tantala Associates, LLC**
  - Cleveland, OH (2007 and updated in 2009)
  - Rochester, MN (2009)
  - Albuquerque, NM (2010)
  - Reading, PA (2010)
  - Richmond, VA (2010)
    - Each of these studies analyzed crash data before and after deployment of digital billboards. Research in Reading, PA and Richmond, VA, also used a contemporary AASHTO-approved method known as Bayes Analysis (with and without billboards)

- **Findings:**
  - The accident data does not show a statistical relationship between vehicular accidents and billboards (conventional and digital billboards)
  - The number or rate of vehicular accidents didn’t increase after the installation of off-premise digital billboards
  - The accident statistics near billboards are comparable to the accident statistics on similar sections of highway without billboards
  - Accidents occur with or without billboards (digital or conventional)