Outdoor Advertising Association of America

Summary of Past Traffic Safety Research Studies

- **Other Studies Not on Point**

Dozens of studies have examined driver distraction, including the role of signs. However, the body of research cited by Jerry Wachtel is primarily comprised of reports not specifically focused on digital billboards. In fact in a companion research project, the FHWA's literature review of these studies has determined that these studies are "inconclusive." These studies look at:

- On-premise signs
  On-premise digital signs can flash, feature full motion video, and scroll text under U.S. regulations. Roadside digital billboards operate under tougher regulations than on-premise signs.
  1. Beijer (2002) (Canada)
  2. Smiley (2005) (Canada)
  3. Wisconsin DOT study of the Milwaukee Stadium sign (1994) (U.S.)

- Simulators
  According to Jerry Wachtel, studies using simulators to examine the effects of digital signs are not reliable due to the inherent limitations of the simulator environment.
  1. Finnish Road Administration (2004) (Finland)
  2. Brunel University (2007) (England)
  3. Young and Mahfoud (2007) (England)
  4. Edquist (2009) (Australia)
  5. Fisher (2009) (U.S.)

- Literature reviews (No research completed)
  1. Wachtel and Netherton (1980) (U.S.)
  2. Farbry (2001) (U.S.)
  3. CTC & Associates (2003) (U.S.)
  4. SWOV Institute for Road Safety Research (2006) (Dutch)
  5. SRF Consulting Group (2007)
  6. FWHA (2009) (U.S.)

- **Driver Distraction/inattention**

Research by government and the insurance industry has identified many factors that distract drivers, as well as conditions related to accidents. In 2006, the National Highway Traffic Safety Administration released a comprehensive report known at the "100-Car Crash Study" which found that:

- Drowsiness increases the risk of accidents 4-6 times
- Distraction or inattention was estimated to cause more than 23% of all crashes and near crashes
- Glances totaling more than 2 seconds increase near-crash/crash risk by at least two times (A typical glance at a digital billboard is less than one second)
- Short, brief glances away from the roadway for the purpose of scanning the driving environment are safe and actually decrease near-crash/crash risk