

Ground-breaking Studies Determine Accidents Not More Likely To Occur Because of Digital Billboards

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Washington, D.C., July 11, 2007 – The combined results of two separate studies that examine crash causation and statistical data and driver performance in relation to digital billboards were released today. The research offers conclusive evidence that traffic accidents are no more likely to happen in the presence of digital billboards than in their absence.

The crash causation and statistical data study was conducted by Tantala Associates, a multi-disciplined, professional, consulting-engineering firm. The researchers conducted both a temporal and spatial analysis of the statistics of traffic and accident data near all seven existing digital billboards on Interstate routes in Cuyahoga County, Ohio, in periods of 18 months before and after the billboards were converted from conventional to digital.

"The analysis and statistics in Cuyahoga County demonstrate that digital billboards have no statistically significant relationship with the occurrence of accidents," said Albert M. Tantala, P.E. "Accidents are no more likely to occur near digital billboards than on highway sections without them."

The temporal analysis, or the incidence of traffic accidents near the digital billboards, was examined for an equal length of time before and after the billboards were converted to digital. The purpose was to establish if traffic accidents occurred more or less frequently with the presence of digital billboards.

The spatial analysis established statistical measures of the association, based on their locations, between two sets of data, in this case accidents and digital billboards. The results were analyzed for a variety of scenarios relating the number of accidents to the number of billboards and the distance from a billboard that a driver is potentially within the influence of a billboard. ([Follow this link to see the full Tantala study.](#))

The human factors study was conducted by the Center for Automotive Safety Research at Virginia Tech's Transportation Institute (VTI), one of the nation's premier research institutions on transportation and driving performance. This research concluded that driving performance measures in the presence of digital billboards are comparable with those associated with everyday driving. These performance measures included eyeglance patterns, speed maintenance and lane keeping.

"The digital billboards we studied can be considered safety-neutral in design and operations from a human factors perspective," according to Dr. Suzanne Lee of VTTI, the project's principal investigator. "The findings were consistent across several measures."

The VTTI study was conducted in Cleveland, Ohio. It followed the model of a previous study conducted by VTTI in 2004 which showed no measurable effects of conventional billboards on eyeglance patterns, speed maintenance or lane keeping. In the current study, 36 drivers, unaware of the purpose of the study, drove an instrumented vehicle on a 50-mile loop route along interstates and surface (non-interstate) streets in Cleveland. Along the route, participants encountered digital billboards, conventional billboards, comparison sites (those you might encounter in everyday driving, such as on-premise signs located at businesses) and baseline sites with no signs.

Eyeglance results showed no differences in the overall glance patterns or frequency of glances between the sites, but drivers did take longer glances in the direction of digital billboards. However, the mean glance length towards the digital billboards was less than one second, which

is generally considered to be an acceptable amount of time for a glance away from the forward roadway.

Some participants returned for a nighttime session to explore the potential effects of the digital billboards at night. The findings were very similar to the daytime results. ([Follow this link to see the full VTTI study.](#))

Both studies were commissioned by the Foundation for Outdoor Advertising Research and Education (FOARE). "The industry and the public needed a targeted, empirical assessment to determine if digital billboards impact driver performance," said FOARE Chairman Paul Cook. "FOARE undertook these studies because no other government or private research exists that specifically examines a cause and effect link between outdoor digital billboards and driver behavior."

About VTTI

The Virginia Tech Transportation Institute is the largest university-level research center at Virginia Tech and is dedicated to the development and dissemination of advanced transportation knowledge. Research is focused on evaluation and deployment of advanced technology in areas of safety and human factors driving, among others. VTTI employs over 225 research faculty, staff and students and serves as the largest supporter of undergraduate and graduate students at Virginia Tech. The Institute is one of the country's three Federal Highway Administration Intelligent Transportation Systems research centers of excellence. To read more about the VTTI head of research, [click here](#)

About Tantara Associates

Tantara Associates is a multi-disciplined, professional, consulting-engineering firm with an established practice for more than 40 years. The firm provides a unique union of research, consulting and design solutions, offering expertise in numerous practice areas encompassing civil engineering, transportation and risk management. The firm provides research and engineering to a diverse clientele spanning government, industry and academe. To read more about the Tantara researchers, [click here](#).

About FOARE

The Foundation for Outdoor Advertising Research and Education is a 501(c)(3) charitable foundation. FOARE supports research and provides an educational forum and structure to assess new and emerging issues related to the outdoor advertising industry. The foundation also provides academic scholarships for students enrolled in undergraduate and graduate-level studies based on economic need, academic standing and field of study.