

### 5.1.1 Measuring and GIS-referencing of Network-level Pavement Deterioration in Post-Katrina Louisiana

**Presenter**

Allan Venema  
Roadware Group, Inc.  
[avenema@roadware.com](mailto:avenema@roadware.com)

**Co-Presenter**

Jason Trotter  
Roadware Group, Inc.

Understanding whether pavement deterioration was accelerated by Hurricane Katrina in the affected areas of Louisiana was critical for the state's Department of Transportation and Development (LADOTD). Roadware was uniquely-positioned to assist as a result of its long track record of measuring and GIS-referencing of the state's pavement condition on 35,000 miles of the road network. District 02, which includes the City of New Orleans, was collected twice after Katrina, both times earlier than it would have otherwise been scheduled by the state's well-developed pavement management program. The data was used to identify areas where greater than expected deterioration had occurred and where further study of the causes may be needed.

Several ARAN vehicles participated in the complete inventory of pavement distresses. Each vehicle was equipped with an ApplAnix POS/LV system, which provided submeter geo-locating accuracy for all measurements along the roadway. Condition ratings from before the hurricane, as well as both subsequent collection passes, are shown in a GIS environment to illustrate the changes.