

### 5.3.3 Navigating the Potholes of Implementing and Integrating Virginia DOT's Roadway Network System Program

#### **Presenter**

Bryan Kelley  
RNS/GIS Program Manager  
Virginia Department of Transportation, IT Div.  
[bryan.kelley@vdot.virginia.gov](mailto:bryan.kelley@vdot.virginia.gov)

#### **Co-Presenter**

Archer Carr  
RNS Program Technical Manager  
Virginia Department of Transportation, IT Div.  
[archer.carr@vdot.virginia.gov](mailto:archer.carr@vdot.virginia.gov)

It started as a relatively simple upgrade project in 2003: Take Virginia DOT's Highway Traffic Records Information System from an ADABAS mainframe to an Oracle database. This epic journey of replacing a 20 year old mainframe with a web-based and geo-enabled system is nearly complete. The 'upgrade project' morphed into the Roadway Network System Program, which now provides the means of maintaining and managing Virginia's road inventory and business event data in a tabular, linear, and geospatial context. With the completion of the Roadway Inventory Management System (RIMS), Highway Performance Monitoring System (HPMS), and Centerline Transition (VGIN CL) projects; this enterprise evolution has fundamentally changed how VDOT conducts and operates the business of managing the nation's 3rd largest state-maintained highway system from both a technological and business process perspective, which has been a journey full of adventure.

\* Editors note: Three components referenced in the abstract (RIMS, and Centerline Transition projects) will be 'in-production' as of February 2012, before the GIS-T conference. The RNS Program has seven existing components already in production.