

#### 4.4.2

### **Building an Enterprise GeoDatabase for a Service Oriented Spatial Architecture – The Virginia DOT Experience**

**Presenter**

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VDOT is in the middle of a three and a half year project (The Roadway Network System) that migrates its centralized highway data management and reporting system from a mainframe, hierarchical database application architecture to a web based, spatially enabled and relational database application architecture. This system manages the road network, traffic, crash, pavement, structures and highway performance monitoring data and reporting functions. Much has been accomplished to develop the proper data model design for this new system. This presentation will focus on the implementation of several key guiding principles, such as multiple location referencing methods, transactional editing and presentation and transactional database schemas, multi-modal support and enterprise geospatial application integration.