

3.1.1

A SOA-based Web Map Road Network System Application

Presenter

Archer Carr
Roadway Network Manager
VDOT
Archer.Carr@VDOT.Virginia.gov

Co-Presenter

Jamie Christensen
Applications Manager
WorldView Solutions, Inc.

The Virginia DOT developed and integrated an ArcGIS Server based web route selection tool within its Road Network System (RNS) program service oriented architecture (SOA). The RNS Map Viewer leverages route measure [m-]values and VDOT's linear referencing system (LRS) to automatically and/or interactively render user and system specified route measures as well as visualize and associate route events, such as crashes, with their appropriate on- or off-route locations. This application is integrated and synchronized with other RNS Section web services, including RNS Search and the Straight Line Diagram. Additional opportunities are anticipated for integration with other VDOT systems and web services. The RNS Viewer operates on ESRI's ArcGIS Server 9.3.1 .NET platform, with an optimized third party application development framework (ADF) from MapsDirect resting atop the ArcGIS Server Web ADF. This platform's functionality was implemented and further enhanced with specialized customizations developed by VDOT partner WorldView Solutions.