

### 3.2.2

#### Centerline and Urban Data Conflation at Virginia DOT

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The Virginia Department of Transportation (VDOT) and a team led by Transcend Spatial Solutions are working on a project that will provide the agency with a consolidated road centerline network of all public roads in Virginia and a new street based linear referencing system for all roads in the Commonwealth. The main project tasks include:

- Data standardization effort to normalize statewide street centerline road names and VDOT's existing urban street name databases into a NENA-compliant format. The resulting output will provide a single source of street names for VDOT and a reliable database for maintaining street names across the agency.
- Conflation of the Virginia Geographic Information Network (VGIN) statewide E-911 road centerline network to a common VDOT GIS data model. The resulting network will use VGIN's geometry, conformed to VDOT's business rules, and will include attributes from both input sources. Using automated conflation tools and data replication between the two organizations, the Transcend team will conflate 135 localities and over 650,000 road edges into the common data model.
- Conflation of locality urban street event data currently managed in the Urban Maintenance Inventory System (UMIS) against the results of the road centerline conversion. The result of this effort will be UMIS segments referenced to the road network that preserves the integrity of the route measures from UMIS.

This presentation will discuss the overall project goals and objectives, parallel and dependent projects, the project status and lessons learned.