Virginia Road Centerline Data Standard

Agenda

Draft Data Standard Charter
RCL Overview
Existing VBMP RCL Data Standards
Draft Data Standard TOC
Next Steps

Draft Data Standard Charter

Develop a workgroup that will:

- Create a formal data standard for the most common data elements

- Ensure data interoperability through common and accessible technology

- Ensure that the data needs of Next Generation 9-1-1 technology are met

Draft Data Standard Charter

Develop a workgroup that will:

- Ensure that the data needs of the Virginia Department of Transportation are met

- Identify educational opportunities for localities in the utilization of the road centerline data

- Address data sharing concerns and identify solutions

Draft Data Standard Charter

Priorities for Implementation:

- Identify and document the data standard element needs for:
  o Next Generation 9-1-1
  o Virginia Department of Transportation

- Create a formal data standard following the process identified by VITA's Administrative Boundaries geospatial data standard

Draft Data Standard Charter

Initiative Tasks:

- Establish a stakeholder driven Workgroup for this initiative with appropriate representation from all identified groups

- Identify and document data standard element requirements from
  - o NENA
  - o VDOT
  - o VGIN
  - o Localities

Draft Data Standard Charter

Initiative Tasks:

- Identify and document most common data elements from all stakeholder groups

- Create a draft road centerline data standard that meets the most common needs

- Follow VITA's formal data standard process

RCL Program Overview

- RCL program began in 2003 with Virginia 911 Wireless Board funding to create a statewide, seamless RCL layer for GIS & 911 purposes

- Road centerlines are a geospatial layer in the Virginia Base Mapping Program (VBMP)

- RCL was originally designed for locality and VDOT geometry consumption and to support geocoding

- Adopted as centerline:
  - Locality adopted VBMP
  - VBMP Adopted Locality
  - VDOT

RCL Program Overview

- VGIN began program maintenance in Summer of 2007 and has been updating and delivering quarterly data to participants

- VGIN migrated from custom update tools to COTS ESRI solution

- In conjunction with local and commercial participants, VGIN is implementing routing information inside the RCL

- Regional and statewide centerline products available provide a routable centerline

- VBMP RCL geometry and attributes are public domain and freely available through the VGIN Clearinghouse

Existing VBMP RCL Data Standards

Schema

- Follows industry standards for Address parsing
- Follows industry standards for Street Name parsing
- Field Naming convention standardized

Attributes

- "Mixed Bag" of street name standards due to many locality sources
- Many different address entry methodologies and best practices locally

Existing VBMP RCL Data Standards

Geometry

- Many standards for directionality

- Many standards for segmentation (single/dual carriageways, intersections, overpasses, etc.)

- Industry best practices for Topology

- Edge Matching beginning to use snap points, historically major participants were priority

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1) **Developing Road Centerlines**
   a) Road Centerline Schema
   b) Road Centerline Attributes

2) **Road Centerline Field Standardization**
   a) Addressing Standards For Road Centerline
   b) Road Name Standards for Road Centerline
   c) Roadway Characteristics from VDOT and Localities

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3) **Road Centerline Data Quality**

   a) Attributes

   b) Geometry

   c) Road Centerline Topology

4) **Edge Matching Road Centerlines Across the Commonwealth**

   a) Snap To Points

5) **NG911 Compatibility**

6) **Metadata**

Next Steps

- Deeper Dive into
  - Schema
  - Attributes
  - VGIN – VDOT Common Data Model
  - NoVa RRCL Data Model
- Next Meeting Date