The Baltimore Region Combined Addressing Project

December 2014

Overview

- Baltimore Metropolitan Council
- BRGISC
- Origins and objectives
- Data replication
- Data model
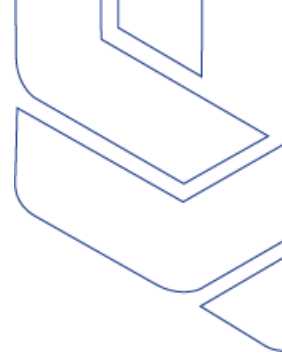- Centerline conflation
- Data access
- Next steps

Baltimore Metropolitan Council

- **Baltimore Regional Transportation Board (MPO)**
- Transportation programs
- Travel Demand Model
- Demographic research
- GIS mapping and analysis
- Environmental programs
- Cooperative purchasing
- Rideshare
- Emergency management and support
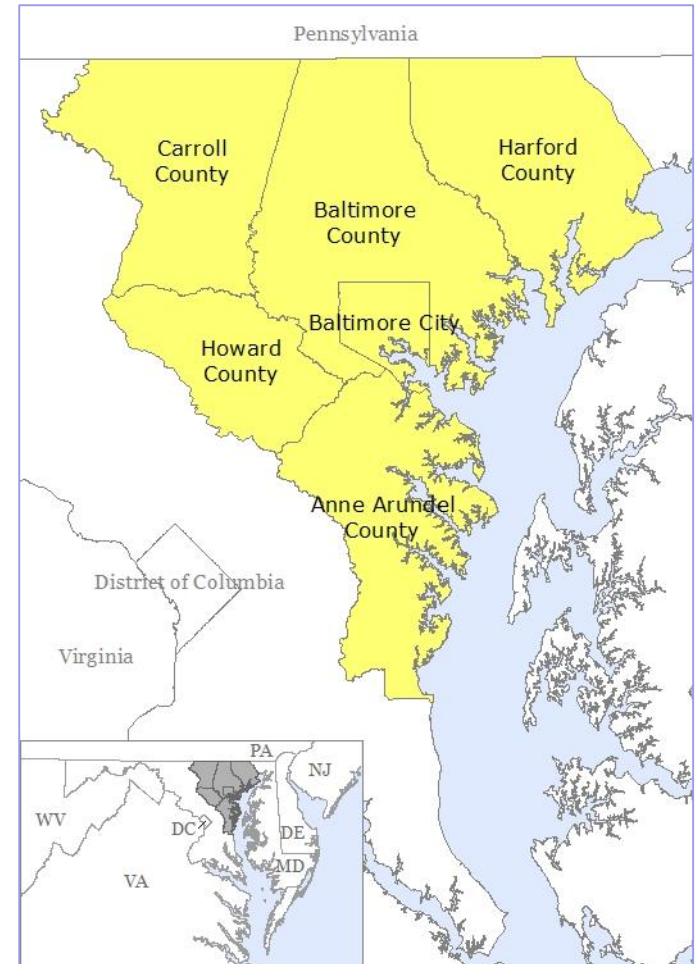
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- Region is small enough to be responsive to individual jurisdictions

- Region is large enough to take advantage of pooled resources

- BMC provides common leadership, resources, and advocacy for GIS staff in our member jurisdictions

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BRGISC

- Baltimore Region GIS Committee
- Discuss state activities
- Coordinate on regional projects
- Provide networking opportunities
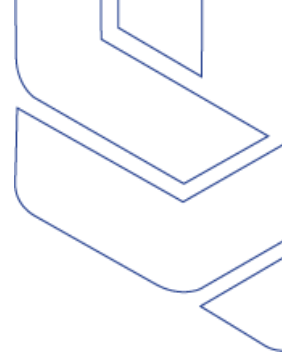- GIS training for BRGISC members

BRGISC

- Orthoimagery
- Hurricane Sandy GIS after-action report
- GDX and RAMONA
- National datum modernization for 2022
- Census and USPS addressing pilot

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Combined Addressing Project

- 911 systems and emergency management
- Jurisdictions use address data outside their boundaries
- Each dataset has a different schema
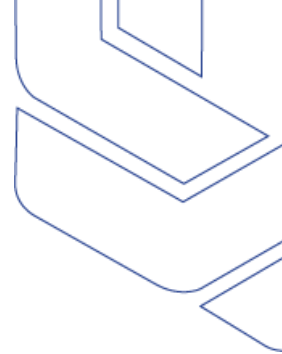- Centerline mismatch at boundaries

Objectives

- Single regional address point layer
- Single seamless, routable centerline layer
- Form the basis for creating other regional data sets, with priority given to emergency management needs
- Local and authoritative GIS data

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Combined Addressing Project

- Voluntary
- Local GIS staff are final authority
- BMC provides technical assistance and coordination

Anne Arundel County

Annapolis

Baltimore County

City of Baltimore

Carroll County

Harford County
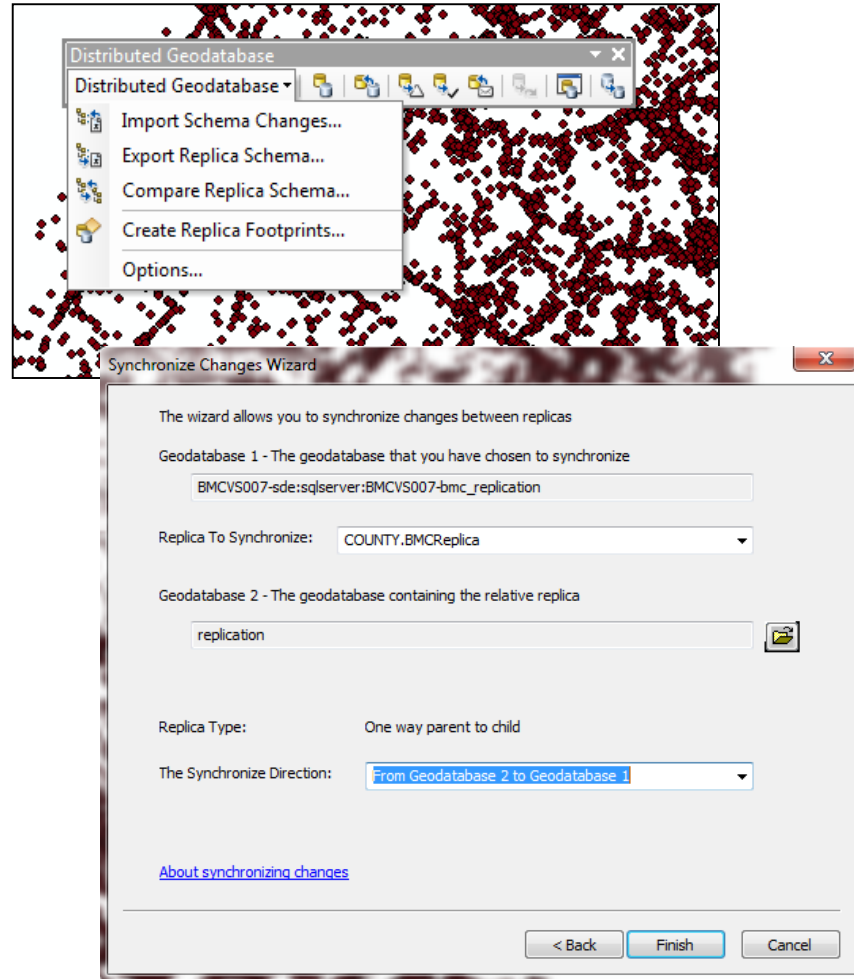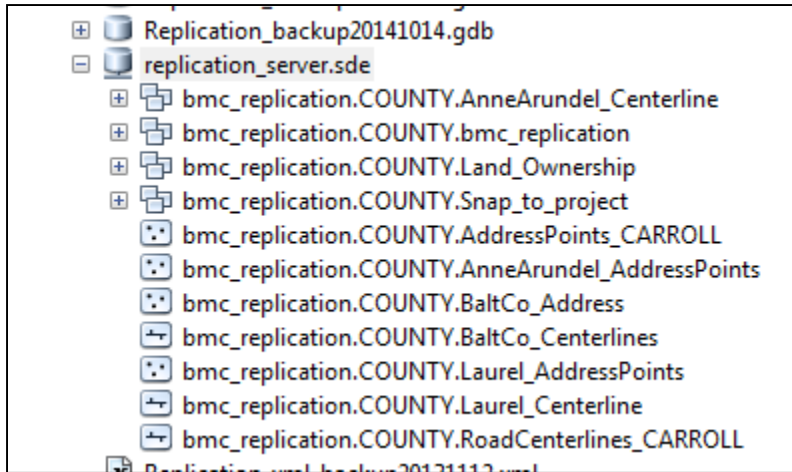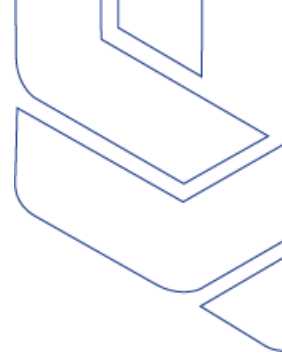
Howard County

City of Laurel

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Data Replication

- Distributed geodatabase
- Synchronize changes only
- Connect through a web service
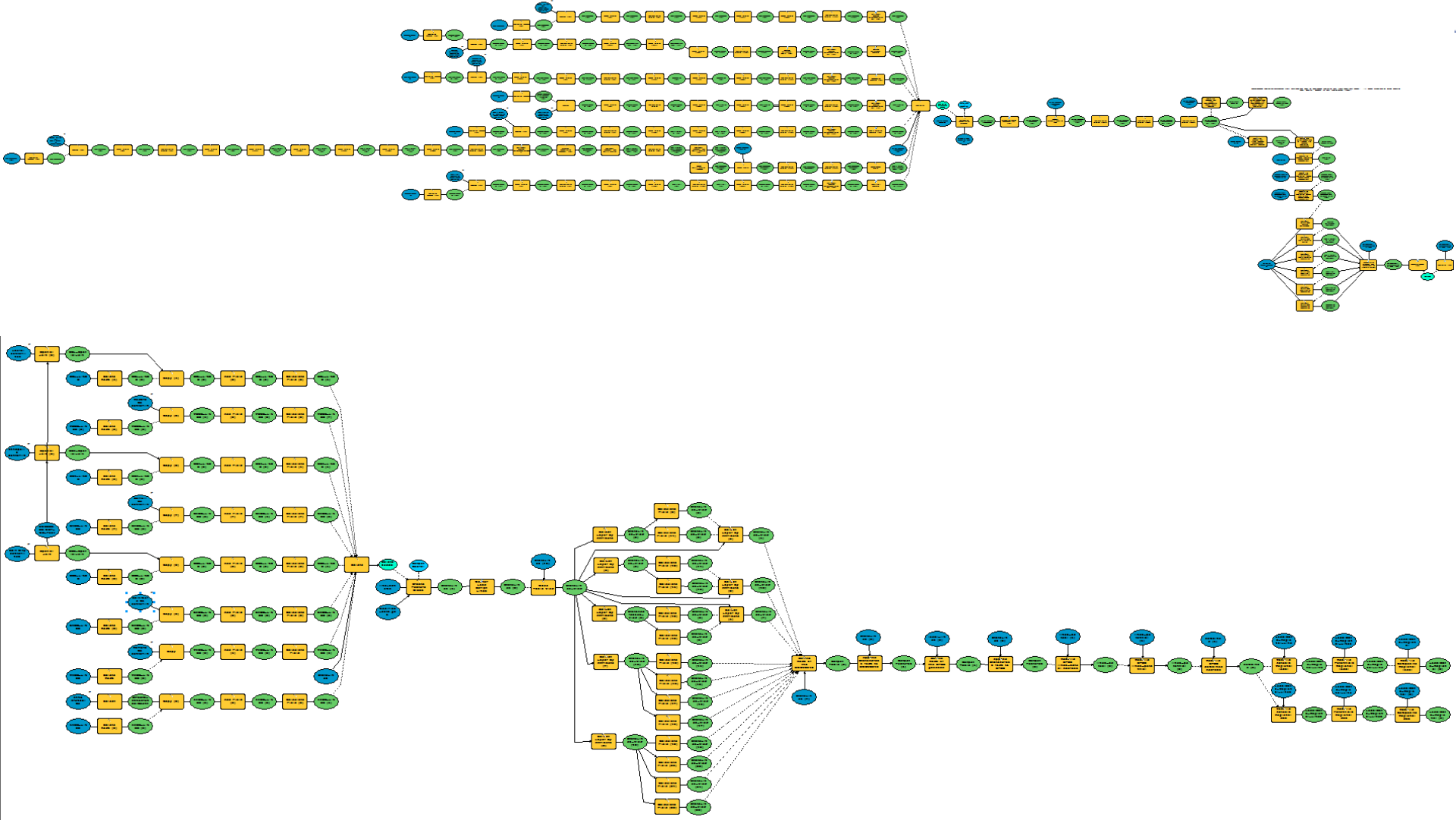- Script automation

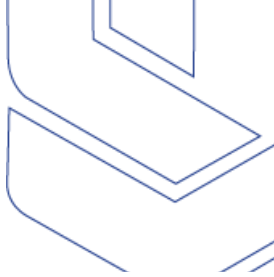Baltimore Metropolitan Council
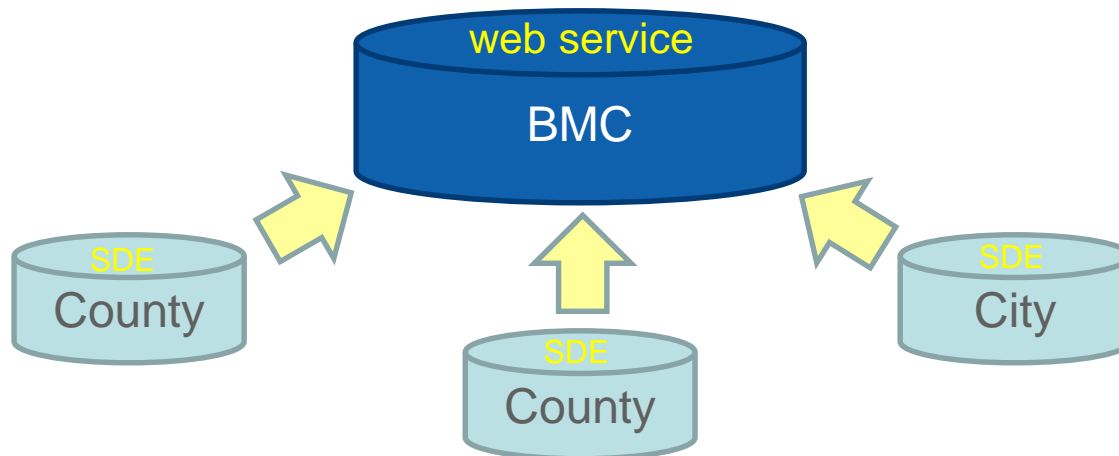
Data Replication
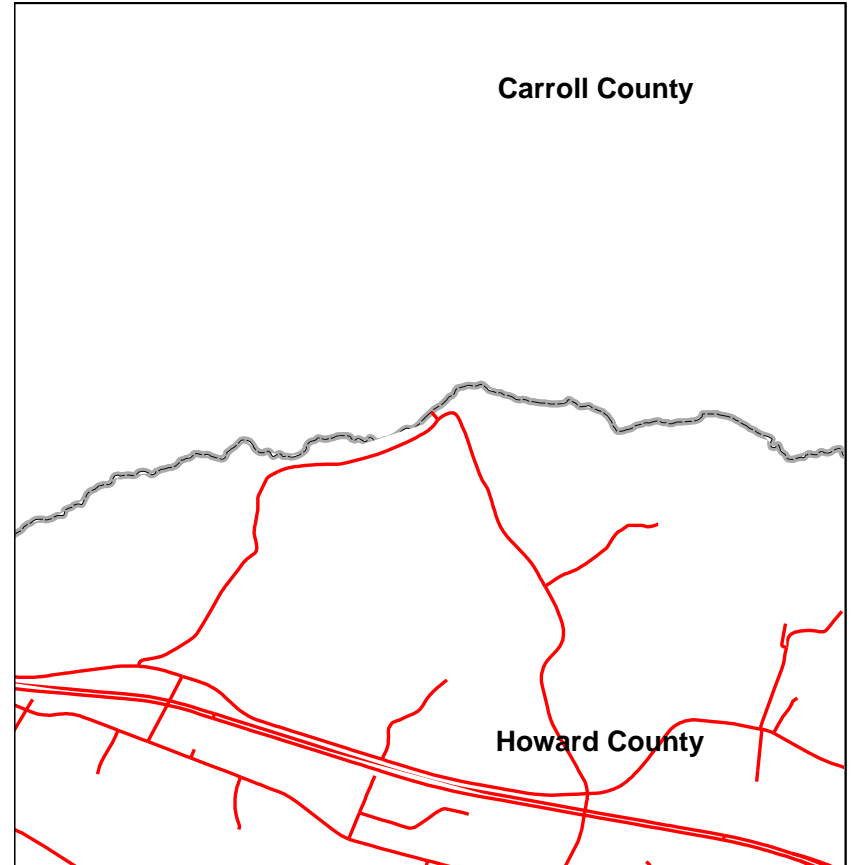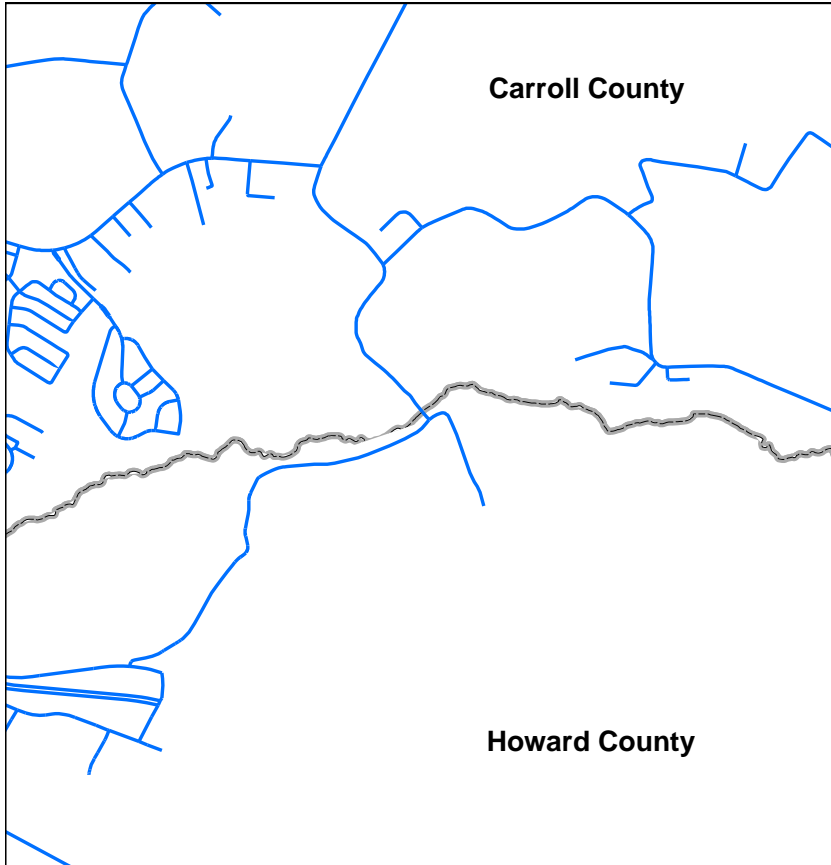
Data Replication

- Best when data owner maintains and replicates data on same SDE

- Other technical set-ups caused problems

- Great tech support from ESRI

- Currently 50% of jurisdictions use Distributed Database method, 50% send their data using other methods
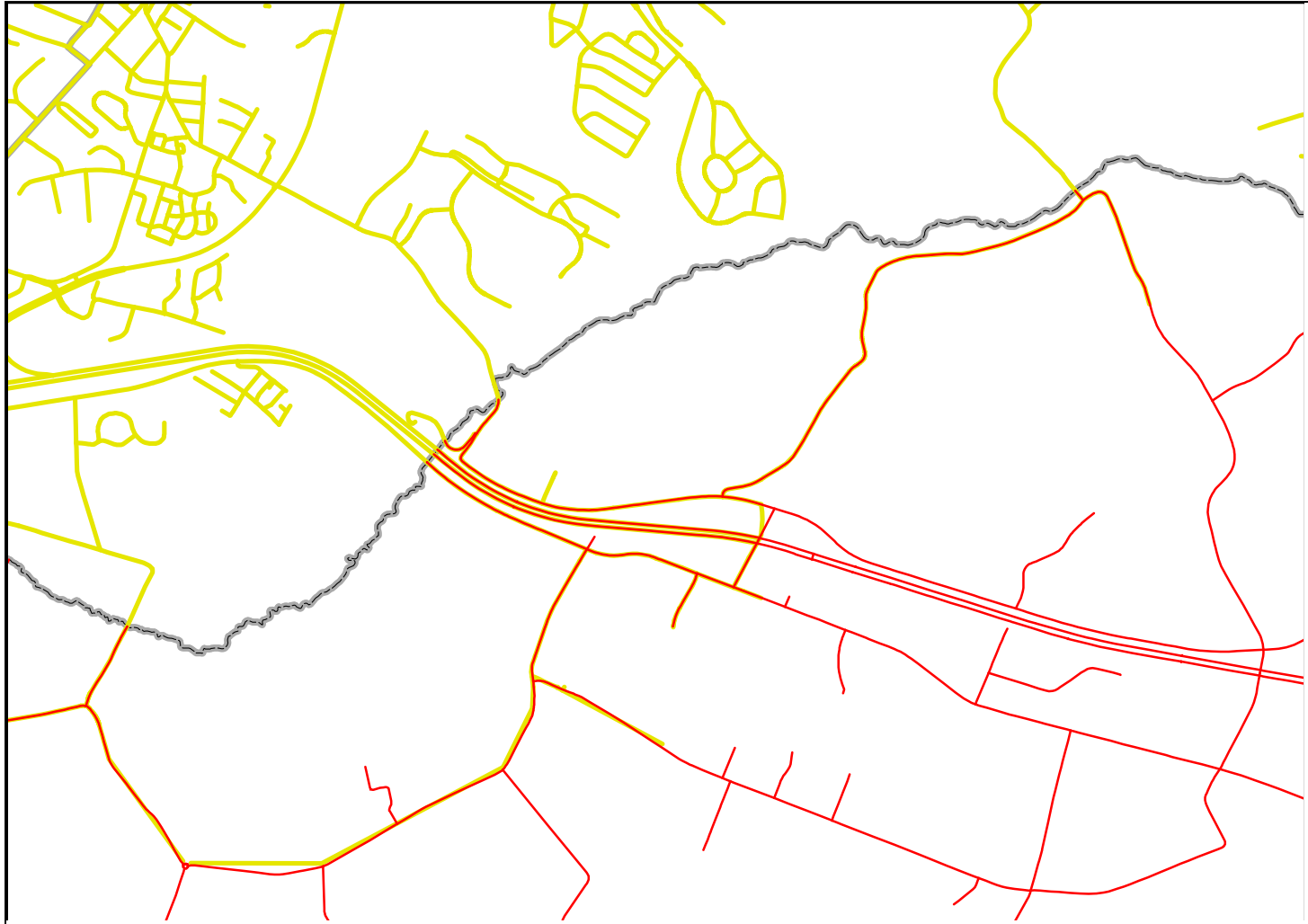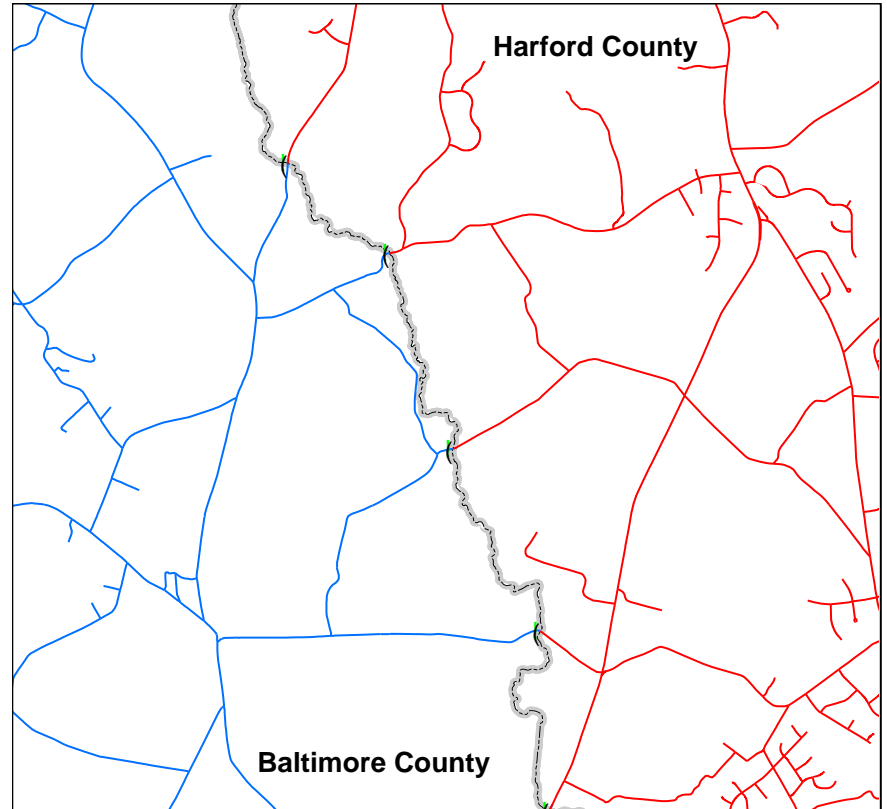
Data Model

Centerline Conflation

Centerline Conflation

Centerline Conflation

- Snap-to points
- Spatial conflation
- Address range adjustment
- Line directionality
- Lane segments

Data Access

- Data available to locals on request or via a web application

- Regional geocoding web service
  http://gis.baltometro.org/arcgis/rest/services/RegionalGeolocator/GeocodeServer

- Centerline available via iMap

- Error reporting to jurisdictions

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Data Access
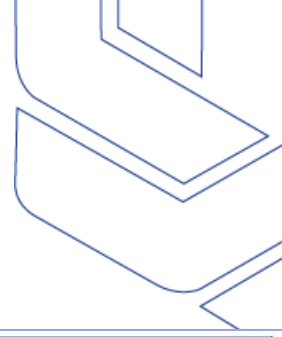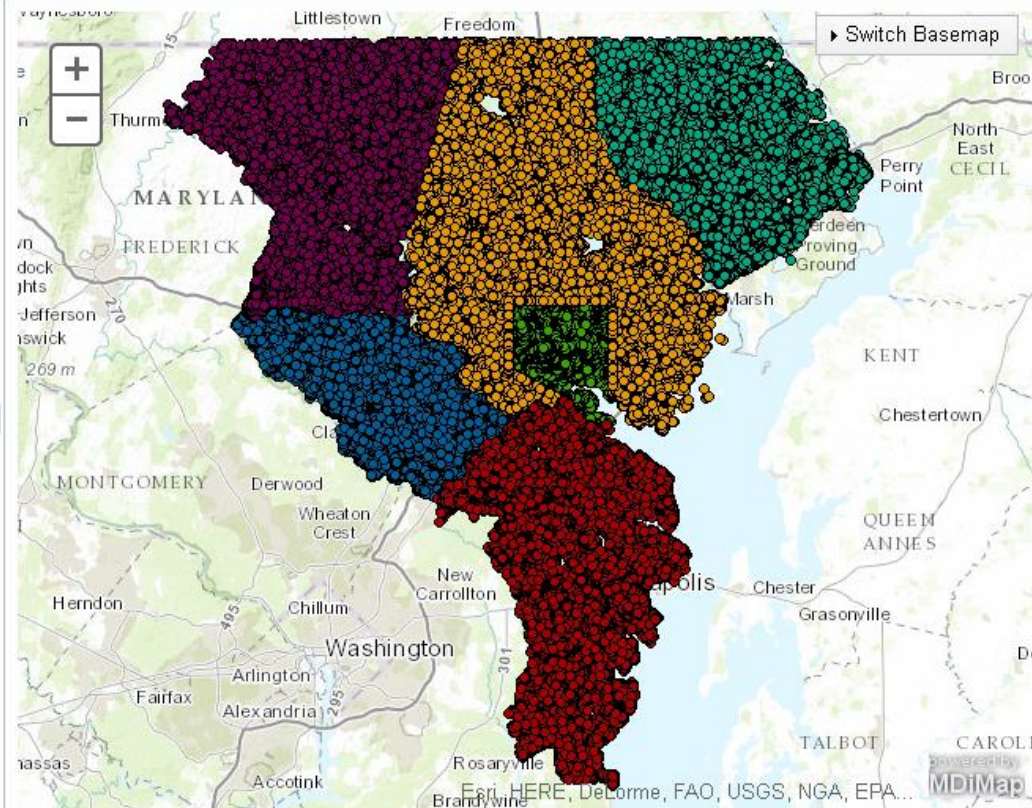
Data Uses
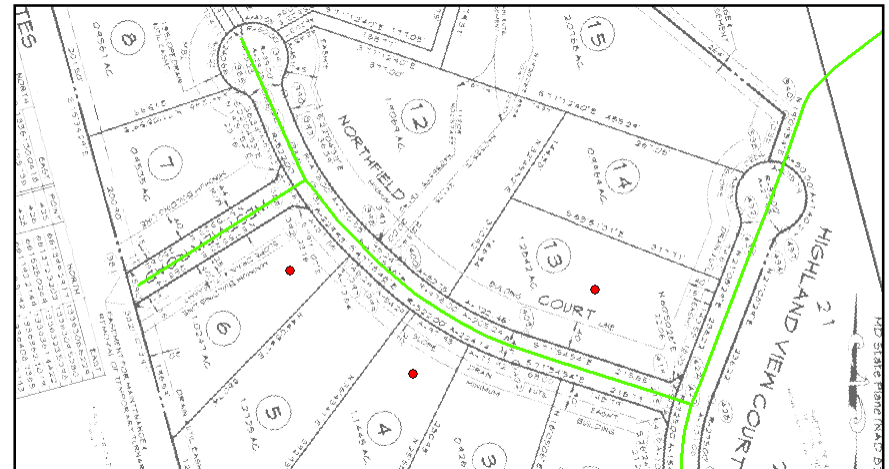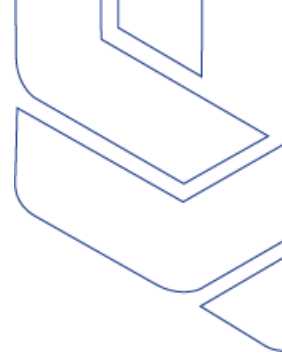
- 911 dispatch systems

- Public geolocator

- BMC internal geolocators

- Custom geocoding for building permits

- General mapping

Collaborate with State

- Work closely with Maryland DOIT, iMap, and CGIS

- Statewide Addressing Initiative

- Data sent to state as a region

- Less work for member jurisdictions

- Win-win-win situation!

Takeaways

- Product > Process
- Consider staffing needs
- Project depends on advanced GIS capabilities
- Keep local jurisdictions engaged

Next Steps

- Continue conflation
- Routable centerline
- Expanding to other jurisdictions
- Additional regional layers

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For More Information

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