



NG9-I-I & MEGIS

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Overview

- E9-I-I
 - Technology
 - Role of GIS
 - Role of MEGIS
- NG9-I-I
 - Technology
 - Role of GIS
 - Role of MEGIS
- Looking forward
 - Technology
 - Role of GIS
 - Role of MEGIS

E9-1-1 Technology

- Resident makes a call to 9-1-1
- Central Office sends call into 9-1-1 Tandem office
- Tandem determines correct ESN for ALI and routes call to PSAP
- PSAP sends ALI to ANI database for location information retrieval
- ANI/ALI is displayed on call takers screen when line rings in PSAP
- Device is locationally aware prior to call
- Location Query to Location Information Server(LIS)
- Location response (civic or geo) – pre-validated
- Device acquires location before a call is made
- Device (or network) queries ECRF for routing
- Location of Service Protocol (LoST)

GIS Data

E9-1-1

- Developed in the 1990's to support address creation.
- Late 90's introduction of WE9-1-1 required "maps" in the PSAP
- Additional attributes identified and added over the past 15 years
- Spatial accuracy 1:24000
- GPS new features as time permits
- Roads only, no points, no polygons

NG9-1-1

- Used to route calls
- Any device, any place, anytime
- New attributes and data content requirements
- Spatial accuracy 1:5000
- New features need immediate validation
- MEGIS data to be provisioned daily
- Points, roads polygons all required

Evolution of MEGIS

Current

- Provided addressing support to all communities.
- Late 90's developed plan to maintain data for use in the PSAP
- 2002 Began supporting current MO application in PSAP's
- 2009 Began maintaining MSAG
- Developing new layers
- Conflating geometries between MeDot and E9-1-1 centerline data

Future

- Continue to maintain data
- Develop new process to begin comprehensive review of data town by town
- Secure new applications for local communities to use for data maintenance
- Provide GPS collection tools/service
- Provide error resolution
- Provide community outreach and training
- Ensure smooth transition of data to new standards and methods

Looking Forward

- Continue to provide Addressing Support
- Create a State Wide Address Point Layer
- Create 1st Responder layers
- Plan transition plan to achieve 1:5000 scale data
- Develop process for comprehensive review of existing data
- Develop new topological rules for data
- Educate Municipal Addressing Officers on changes and new responsibilities
- Continue to maintain legacy systems and databases until full NG9-1-1 implementation
- Identify and secure GIS application for Addressing Officers, PSAP's, 1st responders to use.

Questions

- MEGIS 9-1-1 for data, and maps
 - <http://www.maine.gov/megis/e911/index.shtml>
- NENA for NG9-1-1 documents and standards
 - http://www.nena.org/http://www.l.cs.columbia.edu/~hgs/papers/Schu07_LoST.pdf<http://www.geo-comm.com/>
- Columbia University for Lost Protocol documentation
 - http://www.l.cs.columbia.edu/~hgs/papers/Schu07_LoST.pdf<http://www.geo-comm.com/>
- GeoComm Current 9-1-1 GIS Maintenance Software vendor
 - <http://www.geo-comm.com/>