

National States Geographic Information Council (NSGIC) 2011 Midyear Meeting

Next Generation 911 (NG911)

What's Location Got To Do With It?

What is Next Generation 911?

- **Today's 40-year old 911 system has not kept pace with advanced communications technologies**
 - Existing infrastructure is based on decades-old analog technology
 - Constant adaptation of legacy 911 is expensive and slow
 - 911 is unable to capture benefits of a growing data-rich environment

What is Next Generation 911?

- **NG911 is a transformational process that allows the 911 service infrastructure to leverage emerging communications technologies**
 - Provides compatibility with numerous modern communications devices, improving access to 911 for people with disabilities
 - Allows receipt of voice, text, or video information sent over Internet Protocol (IP)-based networks
 - Delivers automatic, advanced data sharing between callers, 911 centers, first responders, and other public safety organizations
 - Supports dynamic rerouting of callers based on geographic location and public safety answering point (PSAP) availability
 - Creates enhanced backup abilities

Today's 911 vs. NG911

- **Changes in NG911:**

- 911 calls will be routed based on the **caller's location** using GIS datasets to determine the proper Emergency Service IP Network (ESInet), for routing to the most appropriate Public Safety Answering Point (PSAP)
- Location arrives with the call (instead of an after-the-fact lookup, like today's wireline ALI query)
- No Master Street Address Guide (MSAG), no Selective Router
- Made up of a “system of systems”

Today's 911 vs. NG911

- **Stays the Same in NG911:**
 - Location remains the single most important piece of caller information. “Even if you don’t know **what** is wrong, if you know **where** a caller is, you can still send help...”
 - Call takers will still need to validate the caller’s location
 - Responsibility for development and maintenance of high-quality geographic data likely remains at the local level
 - Need for local, regional and statewide coordination, and stakeholder management

GIS Professional's Role In NG911

- Ensure accurate and well-maintained geographic datasets
- Engage public safety stakeholders early and often to understand user requirements and evolving mission needs
- Comply with GIS and public safety standards for geographic data
- Assist with awareness and training opportunities (PSAP and GIS personnel alike, managers, and other stakeholders)
- Develop partnerships both within and outside of public safety to share relevant data

What is Next Generation 911?

- Technical
 - Design/Architecture
- Operational
 - Transition Plan
 - Procurement Tool Kit



<http://www.its.dot.gov/ng911/index.htm>

National 911 Program

- Purpose
 - Facilitate coordination among public and private stakeholders at local, state and federal levels
 - Serve as an information clearinghouse
 - Administer grant program for the benefit of PSAPs
 - Provide a Federal focus for 911
- Contact Information
 - Phone: (202) 366-3485
 - Email: nhtsa.national911@dot.gov
 - Web: <http://911.gov>