National States Geographic Information Council (NSGIC)  
2011 Midyear Meeting

Next Generation 911 (NG911)

What’s Location Got To Do With It?
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
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
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”
• **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