

Preparing Georgia for Next Generation 911 **The Data**

NG911 Data Readiness (Self-Assessed)

What is Next Generation 911 and how does it work?

Every year, nearly 11M residents, plus an additional 8M visitors from around the world count on Georgia's 911 to save their lives and property. At present, these vital services are often hindered by antiquated systems designed before today's common place technologies, like the Internet, cell phones, and sophisticated mapping technologies. Fortunately, the **Georgia Emergency Communication Authority (GECA)** is guiding Georgia toward today's 911, known as **Next Generation 911 (NG911)**.

NG911 enhances a call center's ability to more accurately route calls and emergency responders, receive actionable intelligence and location data in real time, expand communication and back up support, and improve system resiliency.

These enhancements are possible because NG911 leverages two key resources—an Emergency Services Internet (ESInet) and **Map-based Data (Data)**.

NG911 = Modern Tech + Map-based

What is Map-based Data and How does it help NG911?

Map-based Data is **location data** (where things are) merged with **descriptive information** (describing those things). NG911 uses Data to find people and places more accurately; ensures calls are sent to appropriate call centers, and enables continuity of support through cross-jurisdictional Data sharing.

The new demands placed on Data are significant and require substantial coordination and partnership with local and state governments to asses our Data Today, and develop a path to the Data of Tomorrow, which will support NG911. The Georgia **Geospatial Information Office (GIO)** is leading the way through their **NG911 Data Program**; providing common platforms, education, and tools Data creators need to help save lives.



Data Today

- Inconsistently developed, entirely non-existent in some jurisdictions
- Built in silos, no crossjurisdictional coordination
- Lacking standards, rendering it un-sharable and not interoperable
- Poor quality and accuracy
- Not maintained, no accountability
- Rebuilt from scratch for each use = wasted tax dollars

GIO NG911 Data Program



Coordinate

Across all local, regional, and state gov't; provide transparency and accountability on progress

Facilitate

Enable collaboration and reduce overall cost; build and maintain commonly-needed, secure, shared infrastructure and tools, for all to use

Best Practices

Lead standardization; make data seemless, accesible, interoperable, and reusable

Educate

Prepare and qualify workforce; provide knowledge, skills, and cultivate habits

Data Tomorrow

- Exists locally and statewide
- Adheres to a common standard
- Maintained by consistent, repeatable processes, ensuring currency
- Supported by well connected networks of highly knowledgeable professionals
- Produced through seemless cross-jurisdictional partnerships
- Transparently measured, highly accurate
- Built once, for NG911, but used many ways, supporting all local service deliveries, saving money and time

Wise Use of Tax Dollars: Build it Once, Use it Many Ways

Map-based Data is a critical component of most all government functions, not just 911. Coordinating it's development through the GIO ensures every tax dollar spent will enable countless other state priorities (like supporting small businesses, expanding broadband, reducing gang violence, expanding public/private partnerships) and thousands of other governmental functions.







Preparing Georgia for Next Generation 911 The Tools to get your GIS Data NG911 Ready

The Problem

In the past, demands on local Data did not mean life or death. With NG911, that is changing! **Neither the state nor local governments have the Data or processes needed:**

- Some Data is missing entirely, most is incomplete
- Existing Data was not built to a common Standard, making it impossible to merge with other Data
- Lack of efficient maintenance processes so Data is often out-of-date
- No shared/common Data validation tools
- Little coordination between jurisdictions resulting in incompatibility and inconsistency along shared borders
- Resource scarcity

The Solution

A suite of tools (Tools), developed by the GIO, **for all governments (including contractors) to use:**

- Clearly demarcates gaps, overlaps, and incomplete Data
- Converts Local Data to the Georgia Geospatial Data Standard for NG911 (Standard)
- Exactly pinpoints problems/errors, within and between jurisdictions
- Consistently measures progress over time as improvements are made
- Provides a secure warehouse for all data to live and be served to the ESInet
- Provides a common Platform for efficient Data rollups, from Georgia's 700+ cities and counties, to a state scale
- Enable continuous, secure, and consistent updates... Realizing significant economies of scale



Example of inconsistent road naming and address numbering across jurisdictions that must be documented

The Tools: What do they do? How do I use them?

The Tools tell you how prepared your data is to enable NG911 locally—and if problems are found, they will tell you which exact 911 rules are being broken—saving local staff hundreds of hours of laborious work, combing through millions of map-based data features.

1. SUBMIT:

Upload your data to the Tools 'as-is' and in its native format for conversion to GA NG911 Standard.

2. VALIDATE:

The Tools run your data through automated tests, each designed to ensure compliance with the required rules of NG911.

3. REPORT:

The Tools generate a Spatial Report identifying potential problems with your data. Your input Data is returned to you in GA Standard Format.

4. EDIT:

Using the Report, review areas in your data that need to be fixed or changed.

5. RESUBMIT:

Continue to resubmit your data after each round of edits, until the data is 'NG911 ready.'



To get started, visit the GIO Tools Portal

*The data is then available for use by all stakeholders.

Why build Tools once, for all to use?

While Data are ubiquitous across all governments, the tools and infrastructure required to manage them are costly and require significant support by technical experts. It is a wise use of taxpayer dollars, then, for Georgia's GIO to build them once, for all to use - eliminating overhead costs for our cities and counties, while also dramatically reducing their workload.

- Reduces Cost: GIO builds best-in-class tools; pay for them once, for all Georgia local and state government to use
- Improves Transparency: Enables accountability through consistent reporting on progress
- Facilitates Collaboration: Provides a framework to share Data, and remedy jurisdictional gaps and overlaps
- Ensures Security: Ensures Data is safe, secure, and accessible at all times (for 911 and other government services)
- Protects the Investment: Invest ONCE, use many ways

Georgia requires 6 map-based datasets to enable NG911:



- Site/Structure Address Points
- Routable Road Centerlines
- Emergency Service Boundaries
- Public Safety Answering Point (PSAP) Boundaries
- Provisioning Boundaries
- Aerial Imagery *
- * Imagery is the shared base map on which all data is built



