Kansas NG911 Geographic Information System Governance Policy

Initial Release   March 6, 2015
Last Revised   March 6, 2015

Prepared by   Ken Nelson and GIS Subcommittee
Prepared for   Scott Ekberg

Document Change Record

Date	Author	Purpose

Contents

Tables

1 Introduction

The Geographic Information System (GIS) and associated statewide data layers are the cornerstone of a Next Generation 911 (NG911) system. Geographic data, including address points, road centerlines, and emergency service boundaries, will be developed and locally maintained and aggregated into a statewide geodatabase. All location information required to support NG911 call routing will be derived from the statewide geodatabase; therefore it is vital that this information is accurate, authoritative, standardized, current, and highly available. Policies shall be developed to govern all aspects of the GIS system (people, processes, data, and systems) and enforce consistency in how standards are applied across jurisdictions. Additionally, change management procedures must be followed to ensure effective system management. Accurate GIS data is required to power NG911. Without it, NG911 will fail.

2 Scope and Purpose

The purpose of this GIS Governance Policy is to articulate the details for GIS data management as it relates to and supports our statewide NG911 Governance Policy. To ensure the safety of Kansans, the integrity of our NG911 system cannot be compromised. To accomplish this objective, the GIS Subcommittee and the GIS Stakeholders must work together to develop and adopt the essential policies and accountability that govern the GIS portion of Kansas NG911.

The body of this document has two main sections: Policy and Compliance. The GIS Subcommittee assumes a leadership role for developing and maintaining GIS data policies. The GIS Data Stakeholders ensure the integrity of NG911 through compliance with those polices.

This document defines the roles, responsibilities, organization, structure and methods for establishing GIS policy and assuring compliance with that policy.

Unlike Basic 911 and E911, NG911 is state regulated, while allowing PSAPs the greatest latitude and freedom without compromising the integrity of the NG911 system or citizen safety of Kansas.

This GIS Governance Policy is intended to address the technical aspects of NG911 that depend on local jurisdiction support in order to ensure that integrity. The Technical Policy Structure for Kansas is shown in Figure 1.

The following Articles and Sections hereby establish and affirm the governance of Kansas GIS Data as related to NG911.

3 Applicable Documents

   a. The GIS Subcommittee is responsible for monitoring and advising the Kansas 911 Coordinating Council of all existing and emerging national standards relevant to NG911. For example, NG911 standards and specifications developed and released by the Federal Communications Commission (FCC) and National Emergency Number Association (NENA).
   b. In the event of conflict among our various supporting documents:
        1. The Kansas legislative statute(s) take precedence over the NG911 Governance Policy
        2. The NG911 Governance Policy takes precedence over this GIS Governance Policy
        3. This GIS Governance Policy takes precedence over ancillary supporting documents
   c. All GIS documentation related to NG911 shall reside in the NG911 Program Portal. Such documentation shall be retained for at least seven (7) years.

3.1 National Standards and Documents

a) NENA
- o NENA Standard for the NG9-1-1 GIS Data Model
- o NENA 02-014 v1 GIS Data Collection and Maintenance
- o NENA 71-001 v1 NG9-1-1 Additional Data
- o NENA 71-501 v1 Synchronizing GIS Databases with MSAG and ALI
- o NENA Standards for the Provisioning and Maintenance of GIS data to ECRF/LVF
- o NENA 08-003 v1 Detailed Functional and Interface Standards for the NENA i3 Solution

b) USPS Publication 28
c) FGDC Metadata

3.2 State Standards and Documents

a) Kansas NG911 Strategic Plan
b) Kansas NG911 Public Relations Plan
c) Kansas NG911 GIS Data Model
d) NG911 Change Management Plan, GIS Section
e) GIS Data Use Agreement(s)
- o SURDEX-Valtus License Agreement
- o LOA
- o MOU

f) Kansas Open Meeting Act (KOMA) K.S.A. 75-4317 et. seq.
g) Kansas Open Records Act (KORA) K.S.A. 45-215 et. seq.

4   GIS System Governance

a. The GIS Subcommittee has been tasked by the Kansas 911 Coordinating Council to take such steps as it deems necessary to organize, establish, implement and administer all GIS areas pertinent to the statewide GIS data management program for NG911 ("NG911").

b. As part of developing this statewide GIS data management program, the GIS Subcommittee shall:
   i. set program decisions, direction and priorities;
   ii. define objectives and policies;
   iii. inform, educate and train stakeholders of policy purpose and method(s);
   iv. execute policies and supporting processes;
   v. monitor and report to the Coordinating Council on stakeholder compliance with policy and supporting processes.

c. GIS governance is shared by the Council, the GIS Subcommittee and NG911 stakeholders defined in Table 2.

d. Major policy decisions made by the GIS Subcommittee shall first be approved by the Council. "Major" is defined as those decisions that impose some duty and cost upon local jurisdictions.

e. Minor decisions made by the GIS Subcommittee may be implemented without Council approval, but shall be communicated to the Council by email and during quarterly Council meetings. "Minor" is defined as those decisions that do not impose some duty and cost upon local jurisdictions.

f. "Supporting processes" may include such details as: project directives, project plans, program procedures, Service Level Agreements (SLAs), Key Performance Indicators (KPIs), reports, dashboards, stakeholder surveys, etc.

5   GIS Governance Organization

5.1   Council Standing Committees

a. The 911 Council provides executive leadership to the following standing committees
   1. Administration Committee
   2. Operations Committee
   3. Technical Committee
        i. GIS Subcommittee
            1. GIS Change Control Board

5.2   GIS Subcommittee

b. The GIS Subcommittee shall have, to the fullest extent possible, a broad and balanced membership representation from such NG911 related groups as:
   a. Data Access & Support Center
   b. Mid-America Regional Council
   c. KDOT
   d. Local PSAP and GIS staff
   e. NG911 Liaison
   f. NG911 Program Manager
c. Membership on the GIS Subcommittee shall serve on a rotational basis so as to allow representatives of various stakeholders the opportunity of serving and contributing to the GIS governance process. Nomination and selection of membership is at the discretion of the Chair of the GIS Subcommittee.
d. The GIS Change Control Board (CCB) has responsibility for maintaining the Kansas NG911 GIS Data Model standard and administering changes to PSAP or state-level data. The Chair of the GIS Subcommittee shall serve as chairperson of the CCB. At a minimum, one Board member shall be from Local PSAP and GIS staff.
e. The GIS Subcommittee reports to the Council while representing all the GIS stakeholders as shown in Table 2.
f. The GIS Subcommittee shall have no more than eleven (11) and no fewer than five (5) voting members. The GIS Subcommittee Chairperson shall be appointed by the 911 Council Chairperson.
g. With the approval of the Council Chairperson, the GIS Subcommittee Chairperson shall appoint the remaining 4-10 members of the subcommittee, designating one as the Co-Chairperson. The GIS Subcommittee Chairperson may, at their discretion, appoint non-voting advisors.
h. The makeup of the GIS Subcommittee shall have the education and experience necessary to address all facets of GIS planning, implementation and operations as it relates to NG911.

5.3   GIS Regions

Within the GIS Program, the state has been divided into six regions, as shown in the map below. Any activity in this policy described as regional or occurring in a specific region shall use this division.
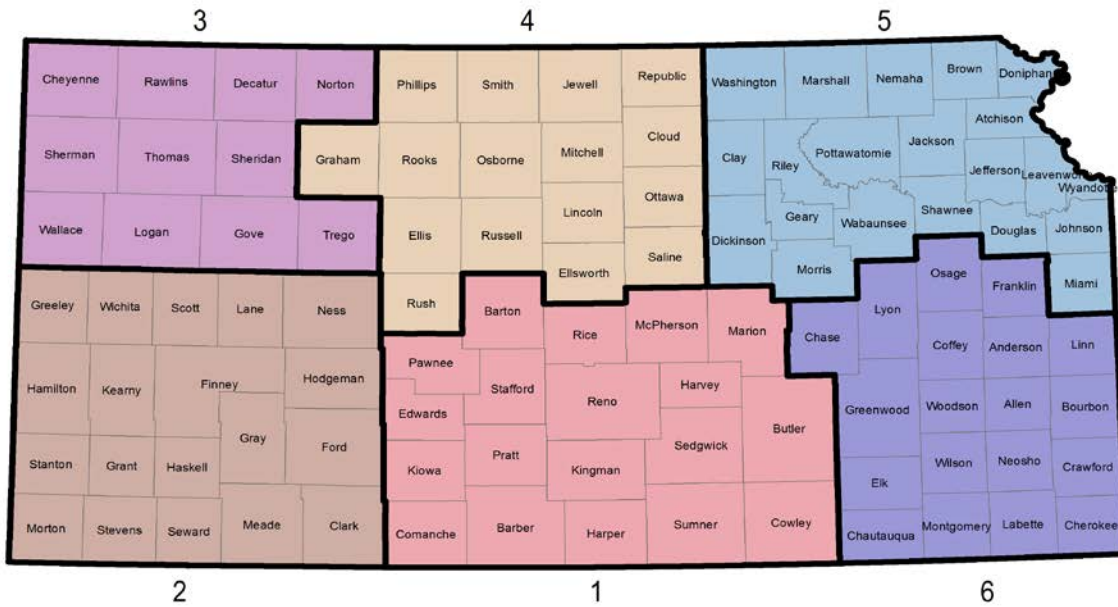
Figure 1 Kansas NG911 GIS Program Regions

5.4   Parliamentary Practice

Robert's Rules of Order shall govern the GIS Subcommittee in all cases in which they apply. The GIS Subcommittee Chairperson shall serve as the parliamentarian of all such applicable meetings.

5.5   Policy

The GIS Subcommittee shall prepare, review and implement policies required to develop and maintain the Kansas NG911 GIS Master Repository.

5.6   GIS Governance Policy Amendment

a. This Policy may be modified and amended by the GIS Subcommittee with final approval by the Council.
b. The GIS stakeholders shall provide suggestions and recommendations for Policy revisions.
c. The current Policy will be made available with all other supporting documents on the NG911 Program Portal. It is the responsibility of all stakeholders to download the current Policy for the purpose of adherence and making change recommendations.

6   GIS Strategic Plan

a. Each year, the GIS Subcommittee shall submit a GIS statewide Strategic Plan to the Council for approval.
b. The GIS Strategic Plan shall consider short-term, medium-term, and long-term goals and objective. "Short-term" is defined as those target objectives intended for completion within one (1) year. "Medium-term" is defined as those target objectives intended for completion within a one to three (1-3) year planning horizon. "Long-term" is defined as those target objectives intended for completion within a three to five (3-5) year planning horizon.

c. The GIS Strategic Plan shall be developed through a combination of strategic planning workshops, review of existing regional strategic plans and GIS subcommittee meetings.
d. The GIS Strategic Plan shall be consistent with applicable provisions of NG911 guidelines of the FCC, NENA and other GIS-related decision making bodies.

7 GIS Operations Work Plan

a. Each year, the GIS Subcommittee shall submit a GIS statewide Operations Work Plan to the Council for approval.
b. The GIS Operations Work Plan shall include the defined objectives stated in or implied by the GIS Strategic Plan.
c. The GIS Operations Work Plan shall be developed through GIS subcommittee meetings.
d. The GIS Operations Work Plan shall provide for the on-going maintenance of the Kansas NG911 GIS Master Repository.

8 GIS Data Standards and Remediation Guidelines

a. GIS Subcommittee shall maintain the *Kansas NG911 GIS Data Model*. This document establishes GIS data standards for NG911 required data layers (road centerlines, address points, authoritative boundaries, emergency service boundaries, emergency service zones, and road alias table), and recommended data layers (states, counties, cell sector, municipal boundaries, among others).
b. Input from GIS Subject Matter Experts (SME) from State and local government, as well as the private sector will be considered on updates to the *Kansas NG911 GIS Data Model*.
c. To the extent practical, the *Kansas NG911 GIS Data Model* will align with the most recent version of the NENA Standard for NG911 GIS Data Model.

9 Communication Plan

a. The GIS Subcommittee shall communicate with NG911 stakeholders shown in Table 2.
b. The GIS Subcommittee shall prepare the GIS related portion of the NG911 Communication Plan and submit it to the Operations Committee no later than March 1.
c. Elements of the GIS Communication Plan include, but are not limited to:
    i. Project status
    ii. Project directives and announcements
    iii. Applicable document changes
    iv. Change Order Request approvals and rejections
    v. Testimony before legislative committees
    vi. Information for legislative research or post audit, as required
d. Communication tools will include, but are not limited to, meetings, websites, the Program Portal, direct e-mail, and social media.

10 Training Plan

a. The GIS Subcommittee shall develop and deliver a training and certification program that addresses GIS as it relates to NG911.

b. The objective of the training program is to ensure that all stakeholders understand the importance of GIS to NG911 and their responsibilities within the GIS program.

c. The GIS Subcommittee shall prepare the GIS related portion of the NG911 Training Plan and submit it to the Operations Committee no later than March 1.

d. The GIS Training Plan shall include, but not be limited to:
   I. GIS and NG911 Orientation;
   II. GIS data maintenance and data submission;
   III. Responsibilities of Local Data Stewards.

e. The GIS Subcommittee Chairperson shall maintain certification records on the NG911 Program Portal.

f. Training will focus on two (2) major elements. Technical training will focus on GIS data maintenance and data submission as per the standard presented in the Kansas NG911 GIS Data Model. Policy training will focus on the GIS Program as a whole and the responsibilities of Local Data Stewards.

g. Training will be a mixture of live classes and webinars. Some sessions will be recorded and made available for viewing on the Kansas NG911 website.

11 Public Relations Plan

a. The GIS Subcommittee shall prepare the GIS Public Relations (PR) Plan and submit it to the Administration Committee no later than March 1.

b. The GIS Public Relations Plan will include materials and presentations directed toward increased understanding of the project.

c. The GIS Subcommittee will utilize professional conferences attended by stakeholders to educate communities regarding the NG911 system.

d. All GIS PR materials intended for official public dissemination shall be pre-approved by the Council Chairperson.

12 Change Management Plan

a. The GIS Change Management Plan, a dedicated section of the NG911 Change Management Plan, shall address changes to the GIS Master Repository and the Kansas NG911 GIS Data Model.

b. Any stakeholder may request change by completing and submitting a Change Order Request (COR). The COR shall define the requested change, describe fully the rationale for the change, and address the impact (cost, schedule, performance, training).

c. The GIS Change Control Board (CCB) shall be composed of the Chairperson and two members of the GIS Subcommittee appointed by the Chairperson.

d. The GIS Change Control Board shall accept and review CORs, providing recommendations on the CORs to the GIS Subcommittee as a whole. The GIS Subcommittee will then vote to approve the change, deny the change, or request more information from the originator of the COR or another subject matter expert. The CCB will carry out the action chosen in the vote.

e. The GIS Change Control Board (CCB) shall hold meetings as needed to address CORs.

13 Security Plan

A formal security plan will be drafted after the NG9-1-1 Infrastructure RFP has been awarded to ensure proper alignment with network protocols and procedures.

14 Reports

    a. The GIS Subcommittee Chairperson shall prepare various reports such as:
        i. GIS Status Report submitted to Council quarterly and as required
        ii. GIS Progress Report submitted to Council annually at the end of each fiscal year
        iii. GIS Financial Report submitted to Council annually at the end of each fiscal year

15 GIS Budget

    a. Each year, starting the first week of October, the GIS Subcommittee shall review and refine the GIS operations budget for the new fiscal year. The final GIS Budget shall be submitted to the Council for review and approval in December of each year. The format of the GIS Budget shall directly derive from and be compatible with the Council Annual Budget format.
    b. The GIS budget shall consider and capture any new or emerging cost elements resulting from all GIS Program plans.

16 GIS Calendar

    a. Each year, in collaboration with all stakeholders, the GIS Subcommittee shall, establish, coordinate, communicate and accomplish a calendar of events as shown in Table 1.

Table 1 GIS Activities

GIS Activity or Event	Purpose	Timeframe	Product
Strategic and Operational Planning	Update Strategic Plan for existing conditions	Yearly in October	Strategic Plan Operations Work Plan
Initial Maintenance Workshops (2015 only)	Program and Data Model Introduction	Region 5 Jan Region 6 Mar	Educate local PSAP and GIS staff on the GIS Program
GIS Program Policy and Procedure Training	Overview of the GIS Program including latest NENA and KS NG911 GIS Program developments	Region 1 May Region 2 July Region 3 Sep Region 4 Nov Region 5 Jan Region 6 Mar	Certification of local data stewards
GIS Program Data Standards and Maintenance Training	Overview of GIS Data Standards with concentration on recent changes and maintenance tips	Region 1 May Region 2 July Region 3 Sep Region 4 Nov Region 5 Jan	Certification of vendors and GIS staff

		Region 6 Mar	
GIS Data Change Management and Audit	Submission of local data changes and preparation for integration into state-wide database	Data changes submitted by PSAP as needed. Acknowledgement of no changes quarterly.	GIS Master Repository

b. Regional Workshops will have minimum registration requirements
c. Regional meetings are open to the public. In fact, the GIS team welcomes the involvement and interaction with counties and PSAPs.
d. Some preparatory meetings of the GIS team are not open to the public or subject to disclosure. For example, sessions dealing with procurement issues, if open to the public, would compromise the integrity of the procurement process. Likewise, discussion of proprietary or confidential data or trade secrets of a corporation is not open to public. In addition, some executive meetings may be closed in order to discuss preliminary or sensitive topics that are not yet fully vetted for public disclosure.

17 Stakeholder Compliance

17.1 Local Data Stewards

17.1.1 Definition

The Local Data Steward is the person responsible for assuring maintenance is performed on the GIS data for the agency. Every PSAP must designate a Local Data Steward. The Local Data Steward must be a staff person for the City or County responsible for the PSAP, even if a vendor handles the actual data maintenance. The Local Data Steward may also serve as the Data Maintainer, but they must receive both certifications to do so.   PSAPs may choose to designate a secondary Local Data Steward, as well.

17.1.2 Local Data Steward Certification

Certification as a Local Data Steward shall be obtained by attending the GIS Program Policy and Procedure Training. Attendance in person is required to obtain initial certification. Certification is renewed yearly by attending the training in person or by viewing the training online through the Kansas NG911 Project Portal.

17.1.3 Contacts

The Local Data Steward is responsible for maintaining current contact information on the Kansas NG911 Project Portal for the Local Data Steward, Data Maintainer whether a local GIS staff person or a vendor, and the 911 Director. A single person may serve as no more than two of these three roles at any given time.

17.1.4 Data Maintenance

NG911 data shall be maintained to the current standard as presented in the latest version of the Kansas NG911 GIS Data Model. If a Local Data Steward finds that they cannot maintain data to the current standard, they shall notify the 911 Liaison, who will help the Local Data Steward find the assistance or resources required.

17.1.5 Submission to GIS Master Repository

a. Local Data Stewards are responsible to submit data updates to the GIS Master Repository.

b. Data updates shall be submitted in the Kansas NG911 Template Geodatabase format.

c. If actual maintenance of the GIS data is performed by a vendor, the Local Data Steward may authorize the vendor to submit data changes on their behalf. However, the Local Data Steward is still responsible for the submission.

d. The frequency of data updates is a local decision to be determined by local needs and the amount and frequency of changes. If no data changes are needed, Local Data Stewards shall submit a "No Changes" statement via Kansas NG911 Project Portal at least quarterly.

17.2 Data Maintainers

17.2.1 Definition

The Data Maintainer is the primary person who will be performing the actual maintenance of the GIS data for the agency. The Data Maintainer must acquire and maintain certification for the role.

17.2.2 Local GIS Data Maintenance Staff

Certification for Local GIS Data Maintenance shall be obtained by attending the GIS Program Data Standards and Maintenance Training. Attendance in person is required to obtain initial certification. Certification is renewed yearly by attending the training in person or by viewing the training online through the Kansas NG911 Project Portal.

17.2.3 GIS Vendors contracted for local data maintenance

a. Certification for Local GIS Data Maintenance shall be obtained by attending the GIS Program Data Standards and Maintenance Training. Attendance in person is required to obtain initial certification. Certification is renewed yearly by attending the training in person or by viewing the training online through the Kansas NG911 Project Portal.

b. Vendors must have current Local GIS Data Maintenance certification before 911 funds can be used to pay their contracted fees.

17.3 Data Consumers

17.3.1 Definition

Data Consumers are individuals or groups that may have need for the data in the GIS Master Repository outside of its primary purpose in NG911.

17.3.2 Approved Use

The Memorandum of Understanding (MOU) signed by the Chairman of the 911 Coordinating Council and by a representative of each PSAP allows that the GIS data collected in the GIS Master Repository may be used by PSAPs, local governments and state governmental agencies for other governmental business purposes. The GIS data may not be sold, released to or otherwise provided to businesses and other non-governmental organizations without the written authorization of the 911 Coordinating Council.

17.3.3 Data Requests

Individuals and agencies wishing to request access to the data in the GIS Master Repository shall submit their request through the Kansas NG911 Program Portal.

17.4 Program Contributors

Program Contributors are entities that will provide direct support to the GIS Program either by assisting with technical aspects of the program such as website development or by assisting with Program Administration.

17.5 Program Supporters

The success of the GIS Program relies on the support and participation of a wide variety of public and private entities. It is critical that these Program Supporters provide feedback about this policy and all GIS-related initiatives that support NG911.

Table 2 GIS Stakeholders

GIS Stakeholder	Role in the GIS Program
911 Coordinating Council	Program Administration
911 Coordinating Council Committees	Program Contributors
Data Access and Support Center (DASC)	Program Contributors
Kansas Department of Administration	Program Contributors
PSAPs	Local Data Stewards Data Maintainers Data Consumers Program Supporters
Local Government *including County and City Commissions, County Administrators, City Managers, Appraisers, GIS Coordinators and County Clerks among others*	Local Data Stewards Data Maintainers Data Consumers Program Supporters
Local Collection Point Administrator	Support of Local Data Stewards
Kansas Department of Transportation	Program Contributors Data Consumers Program Supporters
Kansas Adjutant General's Department – Kansas Division of Emergency Management	Program Contributors Data Consumers Program Supporters
Professional Organizations • Kansas Association of Counties • League of KS Municipalities • Kansas Association of Mappers • Kansas Police Chief's Association • Kansas Sheriff's Association • Kansas Fire Chief's Association • Kansas County Appraisers Association • Association of Public-Safety Communications Officials, Int.	Program Supporters
State Agencies • Kansas Highway Patrol (KHP) • Kansas Fire Marshall's Office • Kansas Board of EMS	Data Consumers Program Supporters

GIS Stakeholder	Role in the GIS Program
• Others	
Military & Tribal Emergency Response Agencies	Data Consumers Program Supporters Possibly Local Data Stewards and Data Maintainers
University PSAPs	Data Consumers Program Supporters
Mid-America Regional Council (MARC)	Local Data Stewards Data Maintainers Data Consumers Program Supporters
School Districts	Data Consumers Program Supporters
Kansas GIS Policy Board (Kansas One Map)	Program Supporters Possible Program Contributors with One Map
Kansas One-Call System	Data Consumers Program Supporters
USPS	Program Supporters
GIS Educators (Colleges and Universities)	Data Consumers Program Supporters
Telecommunication Providers LEC, CLEC, ILEC	Program Contributors Data Consumers Program Supporters
National Weather Service, USGS and other federal agencies	Program Supporters
GIS Vendors, Subcontractors and Consultants	Data Maintainers Program Contributors Program Supporters
CAD/Emergency Service Software vendors	Data Consumers Program Supporters
I3 Solution Vendors	Program Contributors Program Supporters