

SECRETARY'S RECORD, NEBRASKA PUBLIC SERVICE COMMISSION

BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

In the Matter of the Commission,) Application No. 911-061/
on its own motion, seeking to) PI-192
investigate and review funding,)
standards and policies relating)
to Geographic Information) ORDER ADOPTING STANDARDS
Systems data necessary for the)
provision of Next Generation 911)
service.) Entered: October 17, 2017

BY THE COMMISSION:

On March 21, 2017, the Nebraska Public Service Commission opened the above-captioned docket, on its own motion, for the purpose of investigating and reviewing various issues, including funding, standards and policies, relating to the use of Geographic Information Systems (GIS) Data in connection with the provision of Next-Generation 911 service.

Written comments of interested parties were requested on or before April 24, 2017, pursuant to Hearing Officer Order.¹ On May 1, 2017, the Commission held a workshop ("Workshop") to further explore the issues presented in the docket and the written comments filed. Numerous interested parties filed comments and participated in the Workshop. On September 12, 2017, the Commission adopted a Final Report and Action, reflecting the outcome of the Workshop², and directing, among other things, that Commission staff develop a policy (i) governing the funding of certain GIS data layers, including the address point layer, (ii) the funding of qualified in-house GIS personnel for public safety answering points and (iii) providing for adoption of the NITC Standards and Guidelines for the Nebraska 911 Service System. Commission staff has prepared proposed policy addressing the above-referenced matters, which is attached hereto as Appendix A and incorporated herein by this reference.

¹ In the Matter of the Commission, on its own motion, seeking to investigate and review funding, standards and policies relating to Geographic Information Systems data necessary for the provision of Next Generation 911 service, Application No. 911-061/PI-192, ORDER OPENING DOCKET, SEEKING COMMENT AND SCHEDULING WORKSHOP (March 21, 2017).

² In the Matter of the Commission, on its own motion, seeking to investigate and review funding, standards and policies relating to Geographic Information Systems data necessary for the provision of Next Generation 911 service, Application No. 911-061/PI-192, FINAL REPORT AND ACTION (September 12, 2017).

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O P I N I O N S A N D F I N D I N G S

Based on the foregoing, the Commission is of the opinion and finds that the policy attached hereto as Appendix A should be adopted as proposed.

O R D E R


IT IS THEREFORE ORDERED by the Nebraska Public Service Commission that the proposed policy shall be, and hereby is, adopted as set forth in Appendix A.

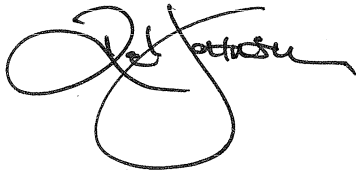
ENTERED AND MADE EFFECTIVE at Lincoln, Nebraska, this 17th day of October, 2017.

NEBRASKA PUBLIC SERVICE COMMISSION

COMMISSIONERS CONCURRING:




Chairman



ATTEST:


Executive Director

//s//Frank E. Landis

//s//Tim Schram

APPENDIX A to 911-061/PI-192
10-17-2017
Nebraska Public Service Commission
Next Generation 911 GIS Data Policy

Geographical Information System (GIS) data is a critical component of Next Generation 911 (NG-911). The full benefits of GIS only can be realized with the adoption of critical standards that ensure that the data is usable, effective, accessible, and sharable. It is vital that the NPSC define, follow, and implement applicable standards internally and across the State. Therefore, it is the policy of the Nebraska Public Service Commission (NPSC) to follow the standards for GIS data that the National Emergency Number Association (NENA) and the Nebraska Information Technology Commission (NITC) have set in place.

NPSC State 911 GIS Repository

The three required data layers for NG911 under Proposed NENA standards are Street Centerlines, Emergency Service Boundaries, and Public Safety Answering Point Boundaries. The Proposed NENA Standards also strongly recommend that Site/Structure Address Points be included as an additional layer. The NPSC maintains an online repository of statewide GIS data, known as “GIS Data for 911”¹ which shall house the three NENA core data layers plus the Site/Structure Address Points layer. These four data layers shall be publicly available without the need for an individual login or password.

Street Centerlines

Street Centerlines are one of the three core layers needed for NG911. The Street Centerlines represent the best location for the centerline of any given road and are used for geocoding and routing in the NG911 system. The requirements for the database, development, and maintenance of this layer can be found on the NITC 3-205 Street Centerline Standards document.² Street Centerline layer data delivered to the Repository must comply with the NITC standards or it will be returned to the data creator for changes necessary to achieve compliance.

For most of the State, the Street Centerlines layer has already been created but needs updates, topology fixes, and maintenance to achieve compliance with NITC NG911/NENA i3 standards.

Emergency Service Zones (ESZ) Boundaries

ESZ Boundaries are one of the three core layers needed for NG911. This layer consists of polygons representing a unique combination of emergency service agencies designated to serve a specific range of addresses. Each ESZ has a three to five digit identifier called an Emergency Service Number (ESN). The requirements for the database, development, and maintenance for this layer can be found on the NENA website³; currently the NENA standard for the ESZ layer is in draft form and, upon its completion, the NPSC will fully adopt the same standards. ESZ Boundary layer data delivered to the Repository must comply with the NENA standards or it will be returned to the data creator for changes necessary to achieve compliance.

¹ <https://nebraska911.ne.gov/>

² <http://nitc.ne.gov/standards/3-205.html>

³ https://dev.nena.org/higherlogic/ws/public/download/9828/20161206_NG9-1-1%20GIS%20Data%20Model_PubRvw.pdf

For most of the State, the ESZ layer has already been created but needs updates, topology fixes, and maintenance to achieve compliance with the NENA NG911 standards.

Public Safety Answering Point (PSAP) Boundaries

PSAP Boundaries are one of the three core layers needed for NG911. This layer consists of polygons encompassing the area that the PSAP is responsible for when answering a 911 call. The requirements for the database, development, and maintenance for the PSAP Boundary layer can be found on the NENA website⁴; currently the NENA standards for the ESZ layer is in draft form and, upon its completion, the NPSC will fully adopt the same standards. PSAP Boundary layer data delivered to the Repository must comply with NENA standards or it will be returned to the data creator for changes necessary to achieve compliance.

The PSAP Boundary layer has not been created for the State and will need to be created and maintained to meet the NENA NG911 i3 Standards.

Address Points

The Site/Structure Address Points layer represents the location of all structures that have an assigned street address.

The requirements for the database, development, and maintenance of the Site/Structure Address Points layer can be found on the NITC 3-206 Address Standards document.⁵ Site/Structure Address Points data delivered to the Repository must comply with the NITC standards or it will be returned to the data creator for changes necessary to achieve compliance. Counties that wish to create Site/Structure Address Points layers are encouraged to obtain proposals from at least two NPSC-approved GIS vendors.

Although this layer is not one of the three core NG911 layers, NPSC will provide funding for the creation of Site/Structure Address Points layers, provided that the following requirements are met:

1. The Site/Structure Address Points layer is created alongside the creation or update of the related Street Centerline Layer. This will insure accuracy and save time and money.
2. Each proposal submitted by a vendor for the creation or update of the Site/Structure Address Points layer must include a detailed breakdown of the cost per address point.
3. The Site/Structure Address Points layer must comply with the NITC 3-206 Address Standard.

Site/Structure Address Points data delivered to the Repository must comply with the NITC standards or it will be returned to the data creator for changes necessary to achieve compliance.

Metadata

All GIS data delivered to the Repository must include metadata complying with the NITC 3-201: Geospatial Metadata Standard.⁶ GIS Data delivered to the Repository that does not comply with NITC standards will be returned to the data creator for changes necessary to achieve compliance.

Datum

⁴ https://dev.nena.org/higherlogic/ws/public/download/9828/20161206_NG9-1-1%20GIS%20Data%20Model_PubRvw.pdf

⁵ <http://nitc.ne.gov/standards/3-206.html>

⁶ <http://nitc.ne.gov/standards/3-201.html>

In order to meet NG911 display requirements, all GIS data delivered to the Repository must be in a geographic coordinate system and not projected. Below is the approved geographic coordinate system:

EPSG: 4326 WGS84 / Latlong

Projection: Geographic Coordinates, Plate Carrée, Equidistant Cylindrical, Equiarectangular

Latitude of the origin: 0°

Longitude of the origin: 0°

Scaling factor: 1

False easting: 0°

False northing: 0°

Ellipsoid: WGS84

Horizontal Datum: WGS84

Vertical Datum: WGS84 Geoid

Units: decimal degrees

Global extent: -180, -90, 180, 90

Funding of In-House GIS Personnel

Counties are permitted to use annual funding allocated under the 911-SAM to pay the 911-related portion of costs associated with in-house GIS personnel, provided that such personnel are properly qualified. Such minimum qualifications shall include:

- 1.) Degree: geography; or related physical or social science such as geology, meteorology, economics, statistics, sociology, anthropology, political science, history, cartography, computer science, urban studies, or planning that included at least 24 semester hours in geography or related fields.
- 2.) Combination of education and experience: courses equivalent to a major in geography, or a related field that included at least 24 semester hours in geography or related fields, as shown in A above, plus appropriate experience or additional education.

Any finalists for a GIS position must be approved by the State 911 Department before hiring.