



City of Grand Island

Tuesday, June 9, 2020

Council Session

Item G-8

#2020-133 - Approving Address Point Layer Updates for Next Gen E911

Staff Contact: Jon Rosenlund

Council Agenda Memo

From: Jon Rosenlund, Emergency Management Director
Meeting: June 9, 2020
Subject: E911 Address Point Layer Update
Presenter(s): Jon Rosenlund, Emergency Management Director

Background

As the Department prepares to migrate to Next Generation 911 technologies and operations, necessary updates to the GIS Address Point Layer are required to meet necessary data standards as defined by the Nebraska Public Service Commission. GeoComm currently maintains the 911 MSAG data for the Grand Island Emergency Center and has been authorized by the PSC to complete the necessary updates to the Address Point Layer to meet these standards. The PSC has authorized the GIEC to use E911 Wireless Fund set aside funds to pay for 100% of the cost of this GIS update. GeoComm has provided a contract proposal for this project for the total of \$21,845.00. The Wireless E911 Fund (216) currently has a balance of \$105,808.28, sufficient to cover this project.

Discussion

As the Grand Island Emergency Center prepares to migrate to Next Generation 911 technologies, necessary updates are required to our local GIS Address Point Layer in order to meet current NextGen911 standards adopted by the Nebraska Public Service Commission. In NextGen911 operations, emergency calls are routed to 911 Public Safety Answering Points (PSAPs) through GIS mapping of landline and mobile telephone calls. As such, the Address Point Layer will be necessary in routing calls properly to the correct PSAP and meeting those standards is necessary for NextGen911 functions.

According to is proposal, GeoComm will update the Site/Structure Address Point (SSAP) layer for Hall County addresses to comply with the NENA Standard for NG9-1-1 GIS Data Model (NENA-STA-006.1-2018) and NENA guidelines for SSAP layer development (NENA-INF-014.1-2015). Following that update, the data layer is submitted to the Public Service Commission for their review. Upon verification by PSC staff that the data layer will meet standards, the PSC will authorize payment from the City's Wireless E911 set aside funds for the work provided. Cost for the layer updates is \$21,845.00. The fund balance as of April 30, 2020, in the Wireless E911 Fund (216) is \$105,808.28.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council approve the Site/Structure Address Point Layer Updates for a cost of \$21,845.00 from the Wireless E911 Fund set aside balance.

Sample Motion

Move to approve the Site/Structure Address Point Layer Updates with GeoComm for a cost of \$21,845.00 from the Wireless E911 Fund set aside balance.

SECRETARY'S RECORD, PUBLIC SERVICE COMMISSION

BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

In the Matter of the Nebraska) Application No. 911-042.06
Public Service Commission, on)
its own motion, seeking to)
administer funding for public) ORDER APPROVING FUNDING
safety answering points for)
the implementation and)
provision of Enhanced Wireless)
911 service: City of Grand) Entered: May 19, 2020
Island

BY THE COMMISSION:

On or about March 25, 2020, the City of Grand Island public safety answering point ("Grand Island PSAP"), which serves Hall County, filed a request to use set aside funds to hire GeoComm to develop geographic information system ("GIS") site/structure address point data for Hall County at a cost of \$21,845.00.¹

The Wireless Enhanced 911 Advisory Board considered the funding request at its May 13, 2020 meeting and recommended that the request be approved.

D I S C U S S I O N

Pursuant to the 911 Service System Act² (the "Act"), the Commission is responsible for allocating funding to PSAPs from the 911 Service System Fund.³ Costs incurred by PSAPs for GIS systems and data are eligible for funding.⁴

PSAPs are permitted to set aside up to seventy-five percent (75%) of their annual funding allocation for future purchases of equipment and software.⁵ The GIS site/structure address point data

¹ This amount equates to a cost of 84 cents per point.

² Neb. Rev. Stat. §§ 86-1001 to 86-1029.03.

³ Neb. Rev. Stat. §§ 86-1025(5).

⁴ See, e.g., *In the Matter of the Nebraska Public Service Commission, on its own motion, seeking to administer funding for public safety answering points for the implementation and provision of Enhanced Wireless 911 service: Clay County*, Application No. 911-042.03, ORDER APPROVING FUNDING (October 31, 2017).

⁵ *In the Matter of the Nebraska Public Service Commission, on its own motion, to implement provisions of LB 1222 [2006] and to establish a permanent funding mechanism for wireless enhanced 911 service*, Application No. 911-019/PI-118, FINAL ORDER ADOPTING MODEL AND APPLICATION PROCESS (Feb. 23, 2010).

SECRETARY'S RECORD, PUBLIC SERVICE COMMISSION

Application No. 911-042.06

Page 2

development is an eligible expense which may be paid entirely from a PSAP's set aside funds.⁶

The Commission's 911 GIS Data Policy⁷ provides that GIS site/structure address point data must meet the following requirements in order to be eligible for funding:

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 Nebraska Information Technology Commission ("NITC") standard for GIS data that consists of address points.⁸

OPINION AND FINDINGS

Based upon the request for funding, supporting documentation, and the Advisory Board's recommendation, the Commission finds that the site/structure address point data development costs requested by the Grand Island PSAP are eligible for funding pursuant to the Act.

Based upon the above, the Commission finds that the Grand Island PSAP's request to use set-aside funds should be approved in an amount not to exceed **\$21,845.00, provided, however,** that pursuant to the GIS Policy, payment to the vendor for the GIS site/structure address point data shall not be made until written confirmation by the Commission's GIS Specialist that the data delivered by the vendor meets applicable NITC standards, including NITC 3-206 Address Standard.⁹

⁶ *In the Matter of the Nebraska Public Service Commission, on its own motion, seeking to administer funding for public safety answering points for the implementation and provision of Enhanced Wireless 911 service: City of Alliance, Application No. 911-042.57, ORDER APPROVING FUNDING (Mar. 3, 2020).*

⁷ *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 ADOPTING STANDARDS (Oct. 17, 2017).*

⁸ *Id.*, Appendix A.

⁹ <http://nitc.nebraska.gov/standards/3-206.pdf>.

SECRETARY'S RECORD, PUBLIC SERVICE COMMISSION

Application No. 911-042.06

Page 3

O R D E R

IT IS THEREFORE ORDERED by the Nebraska Public Service Commission that the funding request for the Grand Island PSAP is hereby approved in an amount not to exceed **\$21,845.00, provided, however,** that pursuant to the GIS Policy, payment shall not be made to the vendor until written confirmation by the Commission's GIS Specialist that the data delivered by the vendor meets applicable NITC standards, including NITC 3-206 Address Standard.

ENTERED AND MADE EFFECTIVE at Lincoln, Nebraska this 19th day of May, 2020.

NEBRASKA PUBLIC SERVICE COMMISSION

COMMISSIONERS CONCURRING:


Rob Johnson
Cystal Knudsen
Tom Schram
Dee Watson

Mary Redden

Chair

ATTEST:

Michael P. Hyl
Executive Director

	Site/Structure Address Point Layer Updates Work Authorization # 20191105 – HCNE November 6, 2019
Geo-Comm, Inc. 601 West St. Germain St. Cloud, MN 56301 Phone: (320) 240-0040 www.geo-comm.com	Hall County, Nebraska Jon Rosenlund, Emergency Management Director 100 E First Street Grand Island, NE 68801 Phone: (308) 385-5362 Email: jonr@grand-island.com

Scope of Work

Upon execution of Agreement, GeoComm will provide solutions and services as described in the exhibits.

Pricing and Payment Terms

Hall County will pay GeoComm \$21,845 plus applicable sales taxes* as further described in Exhibit A – Pricing upon project completion and certification by the Nebraska Public Services Commission (PSC).

Hall County Authorization	
Signature	
Print Name	
Purchase Order # (if required)	
Date	

**If entity is tax exempt, please email tax exemption certificate to dhaus@geo-comm.com.*

Exhibit A – Pricing

Prices are valid for a period of 90 days.

Total does not include sales tax. Hall County is responsible for paying all sales taxes.

One Time Cost	Price Per Point	Total Price
Site/Structure Address Point Layer Updates	\$0.84	\$21,845
Total:		\$21,845

Exhibit B – Scope of Work

GeoComm will update the Site/Structure Address Point (SSAP) layer for Hall County to comply with the NENA Standard for NG9-1-1 GIS Data Model (NENA-STA-006.1-2018) and NENA guidelines for SSAP layer development (NENA-INF-014.1-2015).

The SSAP layer will be updated following industry best practices, which will result in a final SSAP layer that can be used in the most common public safety/9-1-1 applications, including future Next Generation 9-1-1 address validation and call routing. GeoComm's approach includes leading industry experts who will complete the following phases to provide an exceptional product that will meet the needs of Hall County as well as future Next Generation 9-1-1 (NG9-1-1) Location Validation/Call Routing in the State:

- Phase One: Project Initiation
- Phase Two: Site/Structure Address Point Layer Updates
- Phase Three: Quality Control
- Phase Four: Final Review and Updates

GeoComm will provide regular status updates that will include:

- General progress updates
- Meetings held, planned, or needed
- Issues/problems encountered or anticipated
- Goals for the next reporting period
- Schedule review
- Hall County responsibilities

Phase One: Project Initiation

After receiving a signed contract, one of the first steps is to make certain the GeoComm project team has an in-depth understanding of Hall County's project goals. To accomplish this, our staff will hold a project initiation conference call with you to:

- Introduce project stakeholders to the GeoComm project team
- Review project objectives and goals
- Define mutual expectations
- Establish communication processes
- Review the project timeline, including periodic progress reporting
- Review State of Nebraska GIS data standards
- Discuss initial GIS data schema
- Discuss existing resources that may be used in developing the GIS data layer

Phase Two: Site/Structure Address Point Layer Updates

GeoComm will update the SSAP layer for Hall County to comply with the NENA Standard for NG9-1-1 GIS Data Model (NENA-STA-006.1-2018) and NENA guidelines for SSAP layer development (NENA-INF-014.1-2015).

Site/Structure Address Point Layer Updates

GeoComm will update the SSAP layer for Hall County based on resources provided by the County. If there are any discrepancies between approved project resources, GeoComm will work with Hall County for verification.

SSAP layer update processes will include:

<p>GIS Schema Review and Updates</p>	<p>The GIS data schema for the SSAP layer will be reviewed to determine compliance with NENA-STA-006.1-2018, while ensuring the final layer also remains in compliance with specifications for local systems.</p> <p>GeoComm will attribute fields defined as Mandatory by NENA if needed and resources are available.</p>
<p>Spatial Updates and Address Development</p>	<p>Using the tax parcels as a guide, GeoComm will review and update the existing SSAP layer for Hall County. Points will be placed on structure when possible. As part of the update process, GeoComm will review all existing SSAP's using the provided parcel layer and ortho imagery to ensure all addressed structures are accounted for in Hall County. Point placement methodology will follow recommendations outlined by NENA.</p> <p>For multi-unit structures (e.g., apartment complexes, strip malls, mobile home parks) where a point does not already exist, GeoComm will create one new point for each building with a unique street address number (not including unit numbers) and will work with Hall County to establish an agreed-upon point placement methodology. If multiple points already exist for individual units of a multi-unit structure, these points will be retained but will not be moved. Alignment for individual units can be provided for an additional fee.</p>
<p>Confirmation of Point Placement and Address Accuracy</p>	<p>Points that cannot be accurately added or updated using available resources will be placed at the best-known location and flagged as needing further/or future investigation. After GeoComm has finished initial SSAP layer updates, a shapefile or list of address points that could not be confidently built will be provided to Hall County for review. This list will include assessment codes or notes detailing why the address or location is in question.</p> <p>Hall County would be responsible for confirming the correct address or address location and providing that information to GeoComm within 30 days or agreed upon timeframe. GeoComm will adjust address points based on feedback provided within this timeframe.</p> <p>Note: Alternatively, Hall County may contract with GeoComm for field verification to investigate questionable addresses. This service can be provided upon request, for an additional fee. Pricing will vary based on the number of points requiring verification.</p>
<p>Synchronization</p>	<p>GeoComm will compare the SSAP layer to the following:</p> <ul style="list-style-type: none"> • Road centerline • ALI database • Master Street Address Guide (MSAG) <p>Addresses in the SSAP layer that do not match the above noted resources, will be reviewed and appropriate updates will be made to either the SSAP layer, Road centerline layer, MSAG, or ALI database.</p> <p>Note: Updates to the road centerline layer, MSAG, or ALI will be completed as part of Hall Counties existing GIS Maintenance agreement.</p>

Phase Three: Quality Control

Quality control (QC) is an integral part of all our projects. Before the final GIS data is provided to Hall County, GeoComm's GIS Specialists will complete numerous QC audits to ensure the final map data deliverables are accurate.

GeoComm's QC methods are specific to the GIS data needs of the public safety industry; we have developed and implemented a structured QC program to increase the accuracy of public safety GIS data. GeoComm's QC procedures are powered by GeoComm GIS Data Hub, which offers the ability to export detailed results to ensure that all errors are found and fixed.

After Hall County's GIS data updates are complete, it will be run through the QC checks and data condition results will be compiled. Issues detected outside of scope will be referred back to Hall County for resolution. The QC process will proceed as follows:

- GeoComm will perform quality control checks on the submitted data
- GeoComm will correct the GIS data errors outlined in the data quality reports provided by the system that are within scope of the project agreement
- The data will be rerun through the QC checks to verify the changes have been properly made

Phase Four: Final Review and Updates

After initial map data updates are complete, GeoComm will provide a list of remaining errors for Hall County to review.

GeoComm will complete one additional comparison of the ALI database and MSAG to the map data layers if updated versions are provided within one month of the delivery of the suggestions. GeoComm will review the results of this comparison and complete additional map data updates, if deemed necessary.

When the final updates are complete, GeoComm will provide Hall County with the deliverables outlined in the following section.

Exhibit C – Customer Responsibilities

It is requested that Hall County provide the following general project support:

- Provide pertinent project information and documentation
- Assist in ongoing quality control
- Provide a single point of contact at Hall County available for communication throughout the project and system implementation
- Submit required GIS information (e.g. GIS map data, public safety databases, and/or other resources) to our website (<http://www.geo-comm.com/industries/gis/data-submission/>)

In addition to the requirements above, Hall County will be responsible for the following project-specific support:

- Assist in coordinating and attend periodic conference calls
- Existing GIS data in Esri format including map projection information
- Current copies of Hall County's ALI database and MSAG in Microsoft Excel format
- Provide current copy of the parcel layers for Hall County with associated property address (SITUS) for each parcel
- Confirm location of questionable addresses provided by GeoComm within a 30-day or agreed upon timeframe

RESOLUTION 2020-133

WHEREAS, the City of Grand Island, Nebraska, operates the Grand Island Emergency Center, an emergency 911 Public Safety Answering Point (PSAP) through Interlocal Agreement with Hall County; and

WHEREAS, the Grand Island Emergency Center, managed by the Grand Island Emergency Management Department is the Public Safety Answering Point (PSAP) for all of Hall County; and

WHEREAS, the Grand Island Emergency Center is preparing its data and technology to migrate to Next Generation 911 operations; and

WHEREAS, the Nebraska Public Service Commission requires all PSAPs to have GIS Address Layer data that is compatible with current Next Generation 911 data standards to qualify for migration, and

WHEREAS, on May 19, 2020, the Nebraska Public Service Commission has authorized the Grand Island Emergency Center to utilize set aside balances of the Wireless E911 Fund to pay for 100% of this data layer update to be provided by GeoComm Inc. of St. Cloud, MN, for \$21,845.00, and

WHEREAS, the current balance of the Wireless E911 fund, as of April 30, 2020, is \$105,808.28.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the Mayor is hereby authorized and directed to approve the contract with GeoComm Inc. of St. Cloud, MN, for \$21,845.00 for updates to the GIS Address Point Layer, in accordance with Public Service Commission Next Generation 911 standards.

Adopted by the City Council of the City of Grand Island, Nebraska, June 9, 2020.

Roger G. Steele, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☐ _____
June 5, 2020	☐ City Attorney