

To whom it may concern:

Geo-Comm, Inc. (GeoComm) respectfully submits the following comments in response to the Nebraska Public Service Commission (PSC) Application No. 911-057/PI-187.

Regarding the Application document:

Therefore the Commission seeks additional comment on whether funding beyond the allocations provided to the PSAPs through the 911-SAM should be made available for the costs to develop a statewide address point layer for GIS data. Interested parties providing comment should provide comment on the following:

1. *Any preliminary steps necessary for the development of a statewide address point data layer. Commenters should identify the necessary step; the estimated costs and possible funding sources for each step; any established standards; and reference the appropriate governing authority responsible for the activity.*

Steps	Comments	Estimated Cost	Funding Sources	Standards
Statewide Address Point Layer Standard	The state may either follow the NENA site/structure workgroup recommendations or hire a consultant to work with state stakeholders to define the needs of the state and align them to NENA recommendations.	The State of Nebraska may work with a consultant and expect the price to be \$230,000 to \$300,000.	The only currently available funding source for this work that GeoComm is aware of is the Wireless E-911 Fund managed by the Nebraska Public Service Commission.	NENA has established a Site/Structure Address Point (SSAP) workgroup to establish standards for Address Points. To-date, the standard has not been published.
Determine statewide or county level approach	The state, even after identifying a statewide standard, may still choose to have the efforts be from the county-level or at a statewide level. Two nearby states are each	Cost efficiencies may be gained by approaching the project as a statewide effort, combining project management tasks and on-site fieldwork tasks. The	The only currently available funding source for this work that GeoComm is aware of is the Wireless E-911 Fund managed by the Nebraska Public	

doing this. In North
 Dakota, the state has
 contracted with
 GeoComm to create a
 statewide address
 point layer.
 Contrastingly, Kansas
 pre-qualified GIS
 vendors and is
 providing county-level
 funding to do the
 work on a county by
 county level.

<p>Determine methodology for validation or creation of address points</p>	<p>Considerations for methodology include: the level of accuracy desired by the state, point placement, required attributes, project timeline, what is considered an addressable structure (only habitable structures or also out-buildings, garages, etc.), what resources currently exist to develop the point layer, then; the size of the jurisdiction has a correlation to the number of address points – and volume of address points makes a difference too.</p>	<p>Depending on the methodology and the degree of in-the-field creation or verification of the layer, this may range anywhere from \$3,000,000 to \$5,500,000.</p>	<p>The only currently available funding source for this work that GeoComm is aware of is the Wireless E-911 Fund managed by the Nebraska Public Service Commission</p>	<p>NENA has established a Site/Structure Address Point (SSAP) workgroup to establish standards for Address Points. To-date, the standard has not been published.</p>
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2. *The specifications for the development of the data should a request for proposal be issued and the potential costs involved in the development of the data.*

Items to include in a formal Request for Proposal include, but are not limited to:

- Description of point placement determination, location, and whether it is on habitable structures of all structures (including out-buildings, garages, etc.)
- A definition of how to place multi-unit addresses; as a single point or as a point for each unit in a building or area
- Clear scope definition around any other GIS layers that will be part of the work, if any will be
- Provide any and all information available regarding existing point layers across the entire state, or an inventory of available resources by county. Provide sample data where possible.
- Definition around topology resolutions required as part of the project
- Clarification around required attributes for the project and how the attribute information will be provided

3. *Any other relevant information.*

An address point layer, related to E9-1-1 is beneficial for:

- Faster and more accurate location identification in dispatch mapping application
- Better decision making in an emergency and for disaster planning
- Additional data about a location
- Identification of addressing anomalies
- Advanced synchronization of GIS data, Mater Street Address Guide (MSAG), and Automatic Location Identification (ALI) database

Using an address point layer, a caller's actual location – rather than estimated location – is displayed in your 9-1-1 call center mapping software. Emergency responders will be directed right to the doorstep of an emergency instead of the other end of the block, as may be the case currently with plotting calls based on address ranges on the road centerline.

An address point file may also provide dispatchers and emergency response personnel access to special attribute information to help them better assess the emergency situation. Additional information may include: resident/business/other location name, phone number(s), parcel and property ownership info, apartment number, number of apartments, suites, units within the building, special notes: dangerous animals, wheel chair, sex offender, hazardous materials, etc.

Accurately pinpointing the location of a 9-1-1 caller can be difficult if inaccurate addressing exists within your jurisdiction. Address anomalies such as house numbers out of sequence, duplicate addresses, or incorrect odd/even parity can cause confusion as to where the caller is actually located. With the development of an address point layer, agencies can accurately map the location of such anomalies so 9-1-1 calls plot in the correct location in the dispatch center. Also, by identifying anomalies, an agency has the opportunity to correct the anomaly.

An address point file promotes better synchronization of your GIS data with the MSAG and ALI database than the centerline alone is able to provide. By comparing the ALI database to your address point layer, incorrect addresses in the ALI database can be easily identified and investigated. Also, a comparison of the address point layer against the road centerline and/or MSAG will ensure that both resources accommodate all addresses in the county – not just those with landline telephones.

Accurate and reliable GIS data is essential for accurately routing NG9-1-1 calls and responding to emergency incidents. Many different layers of GIS data are used to support NG9-1-1 call routing and emergency response today. One of the most important GIS data layers is an address point layer.

An address point layer related to NG9-1-1 is beneficial for:

- Ensures accuracy in NG9-1-1 call routing
- An address point layer provides the core location validation database for NG9-1-1 and can validate sub-address elements of building name, unit, room, seat, and place type, unlike tabular 9-1-1 MSAGs.
- It also provides the core emergency call routing GIS database for devices referenced by civic address locations, such as wireline telephones and other fixed location devices.
- There is also a critical linkage between caller location and NG9-1-1 additional data associated with a location for discovering additional premise, owner, and tenant data using an Emergency Call Routing Function (ECRF).
- An address point layer is able to store more finite information about a location than an MSAG or road centerline; such as building name, unit, room, etc.
- Discovers additional data about a location

NENA 71-001 v1 NG9-1-1 Additional Data describes several informational data structures that can be associated with a 9-1-1 call. The call data structure includes device specific information, such as make, model, and type of device, from which a 9-1-1 call is placed. The

call data structure includes human information, such as emergency contacts and potentially other information such as electronic health records. The Public Safety Answering Point (PSAP) data structure includes information added by the PSAP, such as call taker notes.

Finally, the location data structure can include information about a premise such as:

- Owner and tenant contact information
- Security contact information
- Building maintenance and structural engineering contacts
- Floor plans
- HVAC, alarm, and sensor status
- Automatic defibrillator locations
- Surveillance

A location data structure for a premise is referenced by a Uniform Resource Identifier/Uniform Resource Locator (URI/URL). The additional location information URI/URL is an attribute field within an address point layer provisioned to the NG9-1-1 ECRF. An authorized application, such as a PSAP mapping system, discovers the additional location data URI/URL by querying an ECRF provisioned with an address point layer containing the additional location data URI/URL attribute field. Therefore, address point layers are critical for discovering NENA 71-001 NG9-1-1 Additional Data associated with a location.