

GeoComm

October 9, 2014

Mr. Rick Becker
Legal Counsel & Government Information Technology Manager
Nebraska Information Technology Commission
501 South 14th Street, 4th Floor
P.O. Box 95045
Lincoln, NE 68509-5045

Re: NITC 3-205: Street Centerline Standards

Dear Mr. Becker:

GeoComm, a 19 year public safety industry veteran, respectfully submits comments on the draft document "NITC 3-205: Street Centerline Standards."

GeoComm supports the standards outlined in the document. If the standards are adopted by the Nebraska Public Service Commission, there will be additional work required to bring existing county datasets into compliance – beyond the work which is currently being done by GeoComm in the State of Nebraska. Original GIS data development contracts and methodology were based on enhanced E9-1-1 requirements. GeoComm has continued to maintain GIS data to these standards for the PSAPs and, upon request, created supplemental data to enrich E9-1-1 technology capabilities. The newly emerging standards for NG9-1-1 differ from E9-1-1 standards due to the new uses, including criticality of spatially accurate GIS data, requiring additional attribute and spatial development. As such, additional funding should be provided via the existing wireless fund or via a future NG9-1-1 fund to support the data update processes and services.

Comments and questions pertaining to specific standards within the document follow.

1.2 Spatial Representation

1.2.2.1 Digitizing

Imagery, LiDAR, or other source document that was used to digitize street centerlines that is newly acquired or not made available for public access will need to be provided to entity conducting quality control of the data.

- Who is reviewing the data quality?

1.2.4 Feature Type and Tables

1.2.4.1 Lines (Polylines)

A line represents the estimated center of a street or road and is not the legal right of way. Attribute data consists of four address range fields representing low to high on odd and even side of road segments necessary for geocoding. Address range values represent the actual address ranges for the line segment and stored in the feature attribute table of the data set.

- “Actual address ranges” should be further defined. In rural settings, theoretical address ranges (following the addressing scheme) allow for more accurate address geocoding. It is best to consider both actual and theoretical address ranges when adding address attributes to a road centerline.

1.3.4 Street Name

Numeric streets shall be written using numbers rather than spelled out. For example, using “1ST” rather than “FIRST”. The numeric street names should use “TH”, “RD”, “ST” or “ND” characters as part of the street name.

- There may be exceptions to this standard if a jurisdiction’s Master Street Address Guide (MSAG) reflects the number written out. GeoComm’s recommendation is to state whether or not jurisdictions are required/encouraged to update MSAGs according to this standard.

Please contact me directly, Stacen Gross, Regional Sales Consultant, if you have questions throughout this evaluation process. I can be reached via email at sgross@geo-comm.com or by telephone at (320) 281-2186.

Sincerely,



Stacen Gross
Regional Sales Consultant

9th October, 2014

Rick.becker@nebraska.gov
NITC

Re: Comments regarding NITC 3-205: Street Centerline Standards

Dear Mr. Becker and the Technical Panel of the Nebraska Information Technology Commission:

As both a vendor working in this arena and as a resident of the State of Nebraska that utilizes E911 services GIS Workshop, Inc. (GISW) and its employees appreciate the hard work and dedication that have gone into creating and drafting these standards. GISW thanks you for the opportunity to comment and provide input on these important standards.

Where possible we will attempt to reference the appropriate page number and section on the standards document. Comments and questions that don't reference a particular section and are more general in nature will be confined to the end of this document.

Page 2, 1.2.2.1 Digitizing

The document refers to several elements related to map accuracy. The primary references being "Capture Scale for digitizing: 1:2400" and "...verified horizontal accuracy requirements for spatial resolution (12 inch minimum)..." Are we to assume that the document is referring to National Map Accuracy Standard (NMAS) 1:2400 mapping accuracy requirements per the National Standard for Spatial Data Accuracy (NSSDA)? If so, we recommend this be explicitly stated AND the actual statistical test for this accuracy be stated somewhere in the document and referenced in the document. This will help draw attention to the (well intentioned) but unnecessarily high accuracy requirements. In addition it will help GIS practitioners perhaps more completely understand the statistical requirements of the NSSDA. Note: section 1.6.2 goes a little further in expressing accuracy requirements, but we feel it is still not enough.

Page 2, 1.2.2.1 Digitizing

"...The NAIP imagery therefore does not meet these accuracy standards"

We applaud the effort to increase the accuracy of digital products. However, if NITC (via these standards) forces the acquisition of leaf off, higher accuracy imagery, this will cost NE tax payers will cost several million dollars per acquisition and this expenditure will need to occur every few years...the benefit in higher spatial accuracy just simply isn't worth the expense especially as the proposed standard will only mean meaningful gains in accuracy of centerlines measured in a handful of feet and inches. In practical language...the majority of in car navigation systems and smart phones today use data digitized from NAIP imagery...and it looks and works very well.



GIS Workshop

The NAIP imagery provides an excellent, “free” source of imagery that is updated periodically by the federal government. As an agricultural state, Nebraska is unlikely to be cut from the NAIP program, thus this “free” imagery will be available for many years to come.

We recommend the NITC technical panel revert to accuracy standards that allow use of the free NAIP imagery, but maintain a recommendation to use higher accuracy imagery where it is already available.

Page 5, 1.3.6 Odd/Even Numbering (Address Parity)

There is a broader problem regarding addressing in Nebraska and this is as good a section as any to once again address it. County to county addressing schemes for many counties do not match. In other words, not only is there no numbering parity, but the road names are also different. This occurs at approximately 50% of the county borders in NE. These standards do not address this issue, neither do these standards provide a way to handle or record these mismatches (and note, these issues were born because each PSAP/County was allowed to implement their own addressing/naming conventions across the state and were not caused by NEPSC or NITC).

We recommend that the NITC educate themselves about this issue and resolve to support an effort to get county to county border addressing to match. Without resolution of this issue, NE will **NEVER** be able to enjoy a seamless, statewide street centerline database....

Page 10, 1.4 Data Format

“The data format will need to be in an Esri Enterprise Geodatabase format...”

Historically, NITC and the State of Nebraska have employed a “vendor neutral” stance with regards to GIS data. As an Esri “Gold” business partner and long time Esri data user, this standard certainly assists GISW! However it amounts to a “sponsorship” of a private corporation by the State of Nebraska. We might add it is also becoming increasingly difficult to move data in and out of these proprietary formats and maintain ALL the information. By its nature, the proprietary Esri Enterprise Geodatabase contains functions and capabilities that no other format does...thus making export/import of all the information within the database impossible.

We recommend that NITC consider additional suitable data formats so as to not favor one particular vendor.

General Comments:

1. When does the NITC propose to adopt these standards? The documentation only refers to the public comment period.
2. When does the NITC propose these standards become enforceable? Will existing data be “grandfathered in”? Will there be a grace period for adoption? These standards in their current form, while laudable, will put a very heavy fiscal burden on PSAPs, counties and the NEPSC (to the tune of millions of dollars) as it will require a complete rebuild of



all existing 911 street centerline data to meet these standards....we recommend a grace period of at least 5 years to ease adoption of these standards

Thank you once again for inviting our participation. If you should have any further questions, please contact me using the information below.

Sincerely

Claire Inbody
Executive Vice President, Technical Services
GIS Workshop, Inc.

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