

9th October, 2014

Rick.becker@nebraska.gov
NITC

Re: Comments regarding NITC 3-206: Address 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 4, 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 4, 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 per the standards, this will cost NE tax payers several million dollars per acquisition and this expenditure will need to occur every few years. The most likely method of building these data will be manual placement of points on top of structures via imagery. The differences in accuracy between NAIP accuracy standards and the proposed standards for purposes of database construction to serve NextGen 911 are negligible

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 6, 1.3.1 General Address Components

“Each jurisdiction shall develop a master address database that can be referenced when new street names are created or assigned so that duplications are avoided.”

- What format should this “master address database” be in?
- What should it contain?
- Which jurisdiction does NITC recommend maintain it? The PSAP? The State? The County? The PSAP? The incorporated cities, towns and villages?
- Most counties in Nebraska already contain duplication of street names because of individual towns within a county/PSAP each containing “1st Street”, “5th Avenue” etc. How does NITC propose these existing cases are handled?

Page 7, 1.3.2 Unique Identification Code

“A unique identifier is required for the statewide address point database.”

Although this sounds useful initially, the proposed standard will quickly become a logistical nightmare without further recommendations from the NITC for jurisdictions to follow regarding the implementation and maintenance of these data elements:

- May a unique ID be reused? If so, how and when?
- What are the rules for the “stickiness” of a unique ID? For example, what if a property is demolished and later rebuilt in the same or similar physical location with the same address, does the ID remain (and therefore history) or should it receive a new ID?

We recommend some basic guidelines are considered and offered for comment...otherwise NITC runs the risk for numerous slightly different processes for the maintenance of the proposed ID scheme will result across the state, causing confusion and effecting the efficacy of the proposed standard.

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.

Page 10, 1.5 Maintenance

“Addressing authorities need to be identified at the local level for approval of new addresses and assuring the addresses are implemented towards the database. This will insure that the physical location and the attribute database is updated and maintained in a timely manner.”

- Identification of the numerous addressing authorities in NE is just the beginning. We believe only a thorough and ongoing training and education program will equip the “addressing authorities” with the knowledge and skills to comply with these standards. What does NITC propose to combat this?
- What would the NITC consider a “timely manner” for providing updates to the central database by the jurisdiction?

“This means mapping new structures by creating a geographic point as soon as (a) an address is assigned by the municipality and, if possible, (b) the physical location of the structure can be determined. For example, if a building permit has been issued and it includes a street address for the construction of a new residence, once a foundation is poured, then it would be possible to visit the site and capture that location.”

Just an informational note...there are a handful of jurisdictions in NE that do not have zoning and may not issue building permits. Therefore address assignment is hit and miss so to speak. In those jurisdictions where they DO have zoning/building permits, the general convention is that a permit MUST be issued and an address MUST be issued before any construction activity can begin (including simple dirt work). The address must be clearly displayed at the construction site before construction begins. This may render comment “b” above meaningless as address assignment always occurs before permit issuance and construction occurs in NE or we may simply be misreading the meaning of section b.

Page 12 1.6.2 Physical Location

“The quality of the physical location will be evaluated based on: a) The placement of the address point representing it’s real location and if it meets horizontal accuracy requirements. The National Standard for Spatial Data Accuracy (NSSDA) outlines a methodology for measuring positional accuracy. If additional testing is required, the NSSDA procedures outline the statistical procedures.”

This comment is a follow on from the first comment in the document regarding the overreaching accuracy requirement in section 1.2.2.1. As one would expect, probably the most common way to check accuracy requirements of the data per the NSSDA would be to use survey grade GPS (mapping grade may or may not be guaranteed to reach the accuracy requirement) and measure a subset of point locations relative to their locations on the imagery. Surely this would entail climbing up onto the roofs of structures to accurately measure the location of the point data using a GPS? Ergo: the accuracy requirement specified in 1.2.2.1 is over reaching not only

because a human or machine digitizer will hit the roof top using 1:24000 NAIP or using expensive 1:2400 “specialty” imagery, but the means to test the accuracy is simply not possible!

General Comments:

- When does the NITC propose to adopt these standards? The documentation only refers to the public comment period.
- 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 will put a heavy fiscal burden on those PSAPs/counties that have already constructed an address point database and in fact will penalize those PSAPs/counties that have chosen to move forward with this more accurate type of database as they will be forced to rebuild.
- The name “NAD” as it stands for “Nebraska Address Database” is:
 - a. too easily confused with NAD (North American Datum)
 - b. not an accurate description of the databaseSomething along the lines of “Nebraska Address Point Database” is more appropriate.

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.

Email: cinbody@gisworkshop.com
Tel: 402 436 2150