

Meeting Notes
FGDC Address Subcommittee
May 12, 2021
Webinar

Attendance (31 Total):

Andrew Bailey, Department of the Interior
Florinda Balfour, Department of Veterans Affairs
Dierdre Bevington-Attardi, U.S. Census Bureau
Martin Caballero, U.S. Postal Service
Dave Cackowski, U.S. Census Bureau
Michael Fashoway, State of Montana
Jason Ford, GISinc/U.S. Department of Transportation
Chris Friel, Michael Baker International
John Halverson, U.S. Citizenship and Immigration Services
Laura Henderson, U.S. Census Bureau
Ashley Hitt, Connected Nation
Steve Lewis, U.S. Department of Transportation
Phil Markert, U.S. Citizenship and Immigration Services
James Meyer, State of Arizona
Jeremy McMullen, State of Vermont
Julia O'Brien, Federal Emergency Management Agency
Carlos Olmedo, Puerto Rico Department of Housing
Ted Payne, Housing and Urban Development
Donna Pena, State of California
Christopher Portell, Federal Emergency Management Agency
Raúl Ríos-Díaz, iCasaPR
Richard Robinson, Housing and Urban Development
Karen Rogers, State of Wyoming
Dan Ross, State of Minnesota
Andy Rowan, State of New Jersey
Diane Snediker, U.S. Census Bureau
Jon Sperling, iCasaPR
Thomas Springsteen, HIFLD/Booz Allen Hamilton
Ed Wells, URISA
Martha Wells, URISA
Matt Zimolzak, U.S. Census Bureau

Meeting Summary

National Address Database (NAD) Updates, Jason Ford, Steve Lewis (DOT)

- Changes since the last release:
 - 28 states are partners and 6 states have local governments participating directly. Addresses have been submitted from 33 states.
 - New county level participation from Iowa. Now there are only 3 counties without data in Iowa.
 - New data for Sioux Falls, SD, Merced, CA, and two Alaska localities.
 - Colorado submitted updated data.
 - Kansas is a new partner – added 1 million records.
 - Connecticut is also a new partner since release 5. Had been a partner but just submitted data. Matt Zimolzak is reviewing the Connecticut data.
 - Total count with this release – just over 60 million points in the database.
 - New York and Arizona numbers dropped because of removed duplicates.
- Defense Information Systems Agency (DISA) is in midst of project to collect NextGen 911 compliant address points for all military installations and will share them to the NAD.
 - DOT had a second meeting with DISA staff.
 - DISA is collecting addresses to the NENA standard.
 - They have 100% finished with the Marine Corps and are now working on the Army. Have done 12 of 55 installations targeted for work.
 - Work on Air Force addresses is just getting started.
 - Navy has had address points for several years, but not collected to NENA standards. This will be good seed data, but it will take work to get it into NextGen 911 compliant format. Work will continue as resources allow.
 - DISA has requested an MOU with DOT outlining which attributes will be shared. This will be our first MOU with a NAD partner.
 - DISA may not share the data until the project is complete. We asked for Marine Corps data prior to project completion but DISA does not want to share yet.
- Discussion
 - Matt – just wanted to clarify that the work to get the addresses into compliance with the NENA standard is being done by DOD, not DOT. Steve – Yes, DOD is working on this.

NAD Content Recommendations – Final Discussion on NSGIC NAD Content Position and Next Steps, Matt Zimolzak, Ed Wells

- Matt – Completion of the discussion on elements that are strongly influenced by the FGDC standard. Outcome will be either agreement now or make these elements part of the vote.
- Remaining elements to discuss:
 - Address Class – mandatory element.
 - 6 classes
 - Numbered Thoroughfare Class

- Intersection Address Class
- Two Number Address Range Class
- Unnumbered Thoroughfare Address Class
- Landmark Address Class
- Community Address Class
- This element is a way of classifying what kind of address is being represented in the address data.
- Purpose – To identify as a particular style of address, which means it has a particular suite of tests for data validation and logical consistency.
- NSGIC Discussion:
 - Andy Rowan – I’m not aware that NSGIC has discussed with each other, but I don’t see any problem with it.
 - Karen Rogers – We don’t object to the FGDC address standard. We argue that it just makes more sense for a NAD generated from locally created data to be stored using the NENA standard, so some of these issues are technical and in the weeds and aren’t the reason for our argument.
 - Dan Ross – The challenge is that making Address Class mandatory will create a burden on our local partners. It could lead to leaving out records.
 - Matt – Would the states be willing to take on FGDC Address Classes if the locals don’t provide it?
 - Dan – right now that field doesn’t even exist in Minnesota’s standard, so it would create difficulty in submitting our addresses to the NAD.
 - Andy – New Jersey data is only going to have the numbered thoroughfare class and two number class. We can derive the class. We don’t carry this attribute but could figure it out.
 - Dan – I’m not suggesting we couldn’t derive this attribute, but we don’t have it today.
 - Matt – It’s been identified as a mandatory element. This might not be much of a lift to derive, but it’s not zero effort.
 - Matt –I don’t know if Community Type is in the NAD, but I’ve seen all the other classes.
 - Karen –NextGen 911 will be the push that starts our statewide address database. To have to add these things for another standard is going to be an added burden.
 - Matt – Based on the comments, there isn’t unanimous consent. There are two ways to go on this: 1. Maintain as a variable but make it optional or 2. Remove it altogether. We will put the question in the bucket for voting. Steve, Dan, and Andy agree.

- Ed – classification of addresses is based on the data record structure in the database. The elements present or absent indicate what the class is. If the record has the class, it then tells you if it's misclassified or missing elements required for that class. It invokes a set of QC tests that add power to the ETL. The tests can also be done as a routine.
 - Dan – We agree this can be derived. But it doesn't exist today, so it would put a burden on the state or locals. I think you have to consider all of those things for elements that are mandatory in the NAD. What is the minimum viable content that you need to create a viable dataset for the nation? That is how states think of it – what's the threshold states have to meet to submit our data.
 - Matt – That is a key point. I'm glad we were able to tease this out. In the voting process we will decide between mandatory and optional. The variable itself is not going into the voting column, only whether it's mandatory or optional.
- UUID/GUID
 - Ed – The definition of UUID is a universally unique identifier assigned to an address.
 - It is a technical standard, a way of constructing an ID that will not be replicated even though it is a decentral assignment.
 - UUID is a 16-byte, 128-bit number written in hexadecimal form and computed according to a standard algorithm.
 - In order to manage the NAD over time, an identifier that is unique over time is needed, that will retain its uniqueness over time and in a situation where multiple authorities are maintaining ID's.
 - The Workflow Subgroup made the recommendation to use UUID, which was accepted in 2019.
 - The UUID differs from the GUID specified in the NENA GIS Data Model (not part of CLDXF). GUID is constructed to meet the same purposes but not as strong as the UUID.
 - GUID is constructed according to a different standard called Uniform Resource Identifiers. It is a combination concatenated of a prefix identifying the feature class, ex. (RCL for road centerlines), an identifier which might be integer or text, an @ sign, and the domain handle of the issuing agency.
 - This suffices for exchange, but over the long term these could change as domain names or feature classes change and is not manageable as a primary key in a table because they include text.

- GUID can be constructed on export, but is difficult to manage as the primary key, whereas the UUID can be a primary key and can be treated as a numeric value.
- Dan – NSGIC hasn't had a deep conversation about UUID. In Minnesota we are using UUID. I will bring it to the NSGIC Addresses and Transportation Committee.
- Andy – in New Jersey we are also using UUID, so this isn't an issue for us either.
- Jason – one of the GUID flaws is the risk of not being unique across database. Does the UUID have this risk?
- Ed – the risk is much lower for UUID.
- Voting on Content Report – Matt:
 - Today is last day to offer opinions.
 - Three items will be voted on and possibly a fourth (UUID).
 - Voting membership is comprised of federal agency members.
 - Timeline for the vote is flexible, tentatively in July.

Proposed FGDC Address Standards Subgroup, Matt Zimolzak

- This is an open call for membership.
- Looking for 5-7 people to consider changes to the FGDC Address Standard.
- There will be one member from Census Geography Address area, TBD.
- If interested send an e-mail to Dave Cackowski.
- The subgroup is related to the formal maintenance efforts to incorporate changes to the standard.

Puerto Rico Civic Address Vulnerability Evaluation (PRCAVE) Update, Raúl Ríos-Díaz, Jon Sperling (iCasaPR):

- Agenda for discussion
 - Critical importance of Puerto Rican style addresses and spatial databases
 - Discuss addressing pilot program in Vieques
 - Defining the path to producing NAD records and inform USPS Pub 28, FGDC, NENA, and NAD procedures for Puerto Rico
- Background
 - In 2021 the local government will initiate a plan so that “Puerto Rico becomes a Spatially Enabled Society (SES).”
 - GeoFrame Project (Puerto Rico Department of Housing) is working to implement geospatial strategies for PR.
 - “The need for information in Puerto Rico is defined by gaps in understanding the spatial or place-based context to inform decision-making and local policy.”

- The goal of this project is that “Puerto Rico becomes a Spatially Enabled Society (SES), one whose citizens, governmental and non-governmental entities make decisions informed by geospatial data.”
- One of the issues we have with geospatial data is can’t geocode in Puerto Rico mostly because of the Urbanization, Spanish elements and local procedures that are not recognized outside Puerto Rico.
- Also have problems with standards that do not recognize PR addresses.
- Vieques pilot – Addressing Project
 - Street Assignment and Role of community leaders to identify the challenges faced by the communities from lack of:
 - Street naming—only 85 streets are named out of 300+
 - House numbers
 - Impacts on Communities
 - Rescue operations
 - Package delivery
 - Online orders
 - Approach
 - Community-led project
 - Work with the municipality to assign official names
 - Work on implementation
- Issues
 - The need to “map” USPS Pub 28 URB field to other federal standards and data usage
 - Define an “authoritative” document on URB usage
 - Regulate consistent usage to ensure NAD results
 - URB splitting a Barrio (see map)
 - Puerto Rican Style Addresses (NENA CLDXF Standard)
 - Issues mixing elements in a field
 - Postal vs Municipio
 - How to store for two use cases
- In FGDC standard street names are parsed. Do we split URB elements?
 - Urb Designator
 - Urb Name
 - Urb Section
- Other Issues
 - Use of post directional in Puerto Rico
 - The need to specify correct usage
 - Technical staff in Puerto Rico need to translate Spanish to comply with standards (shouldn’t be needed)
 - Add definitions of terms to the existing documents
 - Identify crucial needs for Puerto Rican style addresses

- Add these issues in the workflow to NAD
- How standards work with Puerto Rico addresses
- What do we need?
 - Address Subcommittee
 - Templates for FGDC, CLDXF, and USPS usage
 - Puerto Rico profile of NAD Content Standard
 - Puerto Rico profile of FGDC Standard
 - A position paper for existing and future standards to the Subcommittee.
- Procedures
 - iCasaPR identify implementation issues with pilot site
 - Create online draft documents for review
 - Work with a small review panel for comments
 - Share results with group
- Next steps
 - Put docs online and talk with Dave and Matt for assistance
- Discussion
 - Matt – Subcommittee is willing to help.
 - NAD is already structured to the NENA CLDXFv1 (see online resources).
 - The proposed content includes urb and is referenced in the proposal.
 - FGDC address standard is available at the FGDC website.
 - Consider participating in the address standard subgroup if they are not meeting PR needs, or present needs to this group.
 - Get in touch with NENA addressing folks about the NENA Standard (Ed Wells and Cheryl Benjamin can help).
 - Raul – Has worked with CLDXF standard.
 - PR has a path forward, but resulting elements using NENA are not satisfactory.
 - The fundamental core philosophy is how to handle Puerto Rico addresses overall with standards.
 - Matt – If PR has particular ways to handle urbs, get this information to Dave asap because we are wrapping up this discussion. We can discuss accent marks offline.
 - Ed – FGDC does address character sets.

Action Items

- NSGIC will report back on use of UUID.
- Matt, Steve, Dave will get the voting procedures together and schedule the vote on the NAD Content.
- Contact Dave to volunteer for the FGDC Address Standard Working Group.

Next meeting: Wednesday, June 9, 2020 at 11am ET.