FGDC Address Subcommittee

August 12, 2020
11:00 pm– 12:30 pm Eastern
Meeting Agenda

1. Welcome and Introductions/Roll Call – 5 min
2. NAD Updates – Steve Lewis – 5 min
3. NAD Strategy Working Group Update – Steve Lewis – 5 min
4. Address Workflow Subgroup Update – Matt Zimolzak – 5 min
5. Puerto Rico Civic Address Vulnerability Evaluation (PRCAVE) Update – Raul Rios-Diaz – 5 min
6. Puerto Rico Address Data Working Group (PRADWG) Phase 3 Update – Dave Cackowski – 5 min
7. Address Workflow Validation Matrix, FGDC Validations Tab – Martha Wells – 20 min
8. NAD Content Recommendations (Continued) – Ed Wells – 35 min
9. Action Item Review – Dave Cackowski – 5 min
10. Adjourn
NAD Updates
NAD Strategy Working Group Update
Address Workflow Subgroup Update
Puerto Rico Civic Address Vulnerability Evaluation (PRCAVE) Update
Puerto Rico Address Data Working Group (PRADWG) Phase 3 Update
Address Workflow Validation Matrix, FGDC Validations Tab
NAD Content Recommendations (Continued)
Topics

1. Summary of the July Presentation
2. Subaddress Elements
3. Landmark Names
4. Address Attributes

5. Deferred to next meeting: Place Names
Summary of July Presentation

Content Framework
1. Scope – capability - content
2. Six address classes
3. Address elements and address attributes
4. Simple address elements and complex address elements

Recommended Content
1. Address number elements
2. Street name elements
Subaddresses

Simple Elements
Subaddress Type (e.g., Room in “Room 536”)
Subaddress ID (required) (e.g., 536 in “Room 536”)

Complex Elements
Subaddress Element (e.g., “Fifth floor”; or “Room 536”)
= { Subaddress Type + Subaddress ID* } 

Complete Subaddress (“Fifth floor, Room 536”)
= A series of one or more Subaddress Elements

Optional in:
Numbered Thoroughfare, Unnumbered Thoroughfare, Landmark, Community addresses.

Prohibited in:
Intersection, Two-number Address Range addresses
Landmark Names

Simple Elements
Landmark Name

Complex Element \[NAD\ recommendation\ deferred\]

Complete Landmark Name
  \= A series of one or more Landmark Names

Mandatory in:
Landmark and Community addresses

Optional in:
Numbered Thoroughfare, Intersection, Two-number Address Range, and Unnumbered Thoroughfare addresses
Address Attributes

- Address ID, Source, and Reference Area
- Address Coordinate Position(s)
- Address Relationships
- Additional Address Attributes (Mandatory)
- Additional Address Attributes (Optional)
- Attributes of Address Elements
Address ID, Source, and Reference Area

*Address UUID – Unique, persistent Address ID

*Address Authority – Agency with authority to create/alter/retire the address

Address Reference System Name – Name of the ARS within whose extent the address is located (and can be presumed unique)

* = Mandatory attribute
Address Coordinate Position(s)

*Address Longitude
*Address Address Latitude
*US National Grid Coordinate

• Address Elevation

*Address Placement – Method used to place the address point within the addressed location (rooftop, main entrance, etc.)

*Address Point – Mappable point or Point Z, constructed as a WKT Point or Point Z from the XY or XYZ coordinates, plus the Address Placement attribute
Address Relationships

Address-to-address Relationships

- Related Address ID
- **Address Relationship Type** (official to alias; predecessor to successor, etc.)

Address-to-parcel Relationships

- **Address Parcel Identifier Source**
- **Address Parcel Identifier**
**Additional Address Attributes (Mandatory)**

*Address Classification* – The class of address, as described in previous slides

*Address Last Revision Date* – The date the address record was last updated within the NAD

*NAD Data Provider* – Organization or person providing data directly to the NAD

*Data Set ID* – An identifier that associates each record of a transmitted dataset with the file-level metadata for the dataset
Additional Address Attributes (Optional)

- **Address Lifecycle Status** – e.g., potential, proposed, active, retired
- **Address Start Date** – Earliest date on which the address is known to exist
- **Address End Date** – The date on which the address is known to be no longer valid
- **Address Anomaly Status** – Flag or note for a known exception to local addressing rules
- **Location Description** – Text description of how to identify or find the addressed feature
- **Address Feature Type** – The type of land use or feature at the address.
Attributes of Subaddress Elements (all Optional)

- **Subaddress Component Order** – the order in which the Subaddress Type and Identifier appear within a Subaddress Element

- **CLDXFv1 Subaddress Type** – CLDXFv1 subaddress category (if any) into which a NAD Subaddress Element should be classified

- **CLDXFv2 Named Location Type** – CLDXFv2 named location category (if any) into which a NAD Subaddress Element should be classified
Attributes of Address Elements (all Optional)

- **Element Sequence Number** – the sequence in which a series of Subaddress Elements, or Landmark Names, or Place Names should be ordered when they are presented together.

- **Place Name Type** – The type of Place Name used in an address (County, Municipal, Postal City, etc.)

- **Delivery Address Type** – Whether the Delivery Address includes or excludes the Complete Subaddress
Content Recommendations for the National Address Database (NAD)

Place Geography
Why Include Geography in NAD?

- Technically not required
- Can derive any geography for address points by point/polygon relationships with geographic area layers.

So why?

- Industry standard / Best practice
  - States and counties/equivalents minimum requirement in a spatial database of national scope.
- Convenience
  - Enables easy filtering/subsetting by included geographies
  - Enables multiple selections in a geography class, without selecting the whole class.
  - Enables cross-spatial geography relationships
- Useful in conveying the location of an address
Guiding Principles for Inclusion

• Include commonly used/referenced governmental units.
• Primarily focused on legally defined and “functioning” governmental units.
  • Ability to levy taxes
  • Authority to provide citizen services
  • Elected officials (usually)
• Include some geographic areas defined for statistical, planning or commercial purposes (not legally defined), when it serves a useful or unique place geography purpose.
  • Unincorporated communities
  • Native peoples’ communities
  • Neighborhoods
• Must have documented and maintained spatial boundaries.
  • ZIP Code is the exception
Guiding Principles in Execution

• Single value for each Place Type (or null)
• Consistency in variable element population
  • “Massachusetts” or “Commonwealth of Massachusetts,’ but not both.
  • “Montana” or “State of Montana,” but not both.
  • “Ramsey” or “Ramsey County,” but not both.
  • “Terrebonne” or “Terrebonne Parish,” but not both.
• Positive indicator of null values (not global)
  • For unincorporated areas in some states - Municipality = “Unincorporated”
  • Postal City Name - “None”

• Positive indicator of unknown value (not global)
  • Postal City Name - “Not stated”
States and Equivalents (Name)

- Mandatory
- No null or unknown values
- “State” and “Commonwealth” treated the same/equivalent
- District of Columbia is a state equivalent
- US Territories are state equivalents
  - Puerto Rico
  - American Samoa
  - Guam
  - Northern Marinas
  - US Virgin Islands
Counties and Equivalents (Name)

- Mandatory
- No unknown values
- County equivalents:
  - Parishes in Louisiana - Same concept in a different cultural context.
  - Boroughs in Alaska - Similar concept but in a low population / low density context.
    - Some areas in Alaska are not included in a Borough; these are defined as the “Unorganized Borough” and is essentially a null value for county equivalent.
  - Municipios in Puerto Rico
  - Various islands and districts of US Territories (except Guam)
    - Some of these are non-functioning.
County Equivalents - Alaska

Unorganized Borough - Alaska

Alaska County Equivalents
- Alaska Boroughs
- Unorganized Borough

Miles

300

US Census Bureau
Geography Division
August 1, 2020

FGDC.Gov
Counties and Equivalents (Continued)

• County equivalents (continued):
  • Independent Cities - Incorporated Municipalities that are independent of any county, but are treated as equivalent to counties by the Federal Government for data presentation and other purposes.
    • Baltimore City, Maryland
    • St. Louis City, Missouri
    • Carson City, Nevada
    • Independent cities in Virginia (Approx. 40)
  • Fictitious county equivalents:
    • District of Columbia
    • Guam
Deferred to the next meeting, complicated concepts related to the Content Proposal requiring detailed graphics.
Postal City Name

- Mandatory
- Preferred postal city name for the ZIP Code of an address, as prescribed by the USPS City-State file and indicated on USPS.com
- Only the “preferred” postal city name should be used, the “recognized” postal city name should not be used for this data variable in reference to the previous bullet.
- Null and unknown are acceptable entries for this data variable.
  - Use “None” if the address is in a location not served by the USPS.
  - Use “Not stated” if the postal city name is not known.
Postal City Name - Preferred vs. Recognized

Cities by ZIP Code™

For more rapid delivery, please use the recommended or recognized city names whenever possible for this ZIP Code™.

<table>
<thead>
<tr>
<th>You entered:</th>
<th>08096</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECOMMENDED CITY NAME</td>
<td>WOODBURY NJ</td>
</tr>
<tr>
<td>OTHER CITY NAMES RECOGNIZED FOR ADDRESSES IN THIS ZIP CODE™</td>
<td>BLACKWOOD TER NJ, BLACKWOOD TERRACE NJ, DEPTFORD NJ, WEST DEPTFORD NJ</td>
</tr>
<tr>
<td>CITY NAMES TO AVOID</td>
<td>ALMONESSON NJ, DEPTFORD TOWNSHIP NJ, JERICHO NJ</td>
</tr>
</tbody>
</table>
Census Designated Place (CDP) Name

• Optional
• Null values allowed
• Exist in unincorporated areas of counties and non-Incorporated Place (Census definition) municipalities.
  • Townships in Pennsylvania, New Jersey, Ohio, Michigan, others.
  • Towns/Plantations/Grants/Gores/Locations in the New England states, New York, Wisconsin.
• Not legally defined, and does not “function.”
• Broadly inclusive representation of unincorporated communities across the nation.
• Advantage of defined and maintained boundaries.
• Cannot also include an Unincorporated Community Name for the same address, one or the other.
• Extensive information on and TIGER/Line Shapefiles with CDPs available from www.census.gov
Unincorporated Community Name

- Optional
- Null values allowed
- Can exist in unincorporated areas of counties and non-Incorporated Place (Census definition) municipalities.
  - Townships in Pennsylvania, New Jersey, Ohio, Michigan, others.
- Not legally defined, and does not “function.”
- Not the same as a CDP; either a different community entirely or the portion of the community not included in the CDP.
- Most frequently exist in rural and less densely populated areas.
- Cannot also include a Census Designated Place Name for the same address, one or the other.
- Cannot also include a Neighborhood Name for the same address, one or the other.
Neighborhood Name

- Optional
- Null values allowed
- A subsection, sub-area, sub-place or portion of an incorporated municipality, or CDP.
- Primarily defined as communities within cities or other more densely populated areas.
- Not legally defined, and does not “function.”
- Not the same as a Unincorporated Community; neighborhoods tend to be urban and unincorporated communities tend to be rural.
- Frequently associated with a planning and/or commercial purpose.
- Cannot also include a Unincorporated Community Name for the same address, one or the other.
Questions?

Address Content Subgroup
David Cackowski, Chair
Florinda Balfour
Christian Jacqz
Ed Wells
Matt Zimolzak
Action Items
Thank You

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