

# Address Subcommittee Meeting



**August 14, 2019**

**11:00 am– 12:30 pm Eastern**

***US Department of Transportation***

# Meeting Agenda

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1. Welcome and Introductions/Roll Call
2. NAD Updates – Steve Lewis
3. Address Content Subgroup Recommendations for the NAD – Dave Cackowski
4. Puerto Rico Workshop Update – Lynda Liptrap
5. Address Theme Strategic Plan – Lynda Liptrap
6. Workflow Subgroup Update – Matt Zimolzak
7. Action Item Review – Dave Cackowski
8. Adjourn

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# NAD Updates

# NAD Release 3

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- Originally scheduled for release in the first week of August
- During final QC during the last week of July, problems were discovered in the Texas data
  - Parsing not as successful as we originally thought and reported
  - Too many errors to fix and still meet an August release
  - Texas pulled from Release 3

# NAD Release 3

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- Now contains only 1 new state: Wisconsin
- Contains updates from
  - Arizona
  - Arkansas
  - Massachusetts
  - Montana
  - New Mexico
  - New York (and New York City)
  - Rhode Island
- 48.6 million records
- Available next week

# New Partners

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- Georgia, Louisiana, and Wyoming (all without a statewide address programs) will be submitting data from individual counties and parishes
- Have already received data from Campbell, Crook, and Teton counties in Wyoming
- Have already received data from East Baton Rouge and Terrebonne parishes in Louisiana
- Nebraska, who is a year away from being able to provide data, became a partner and was added to the “In Queue” category

# New Partners - Tribal

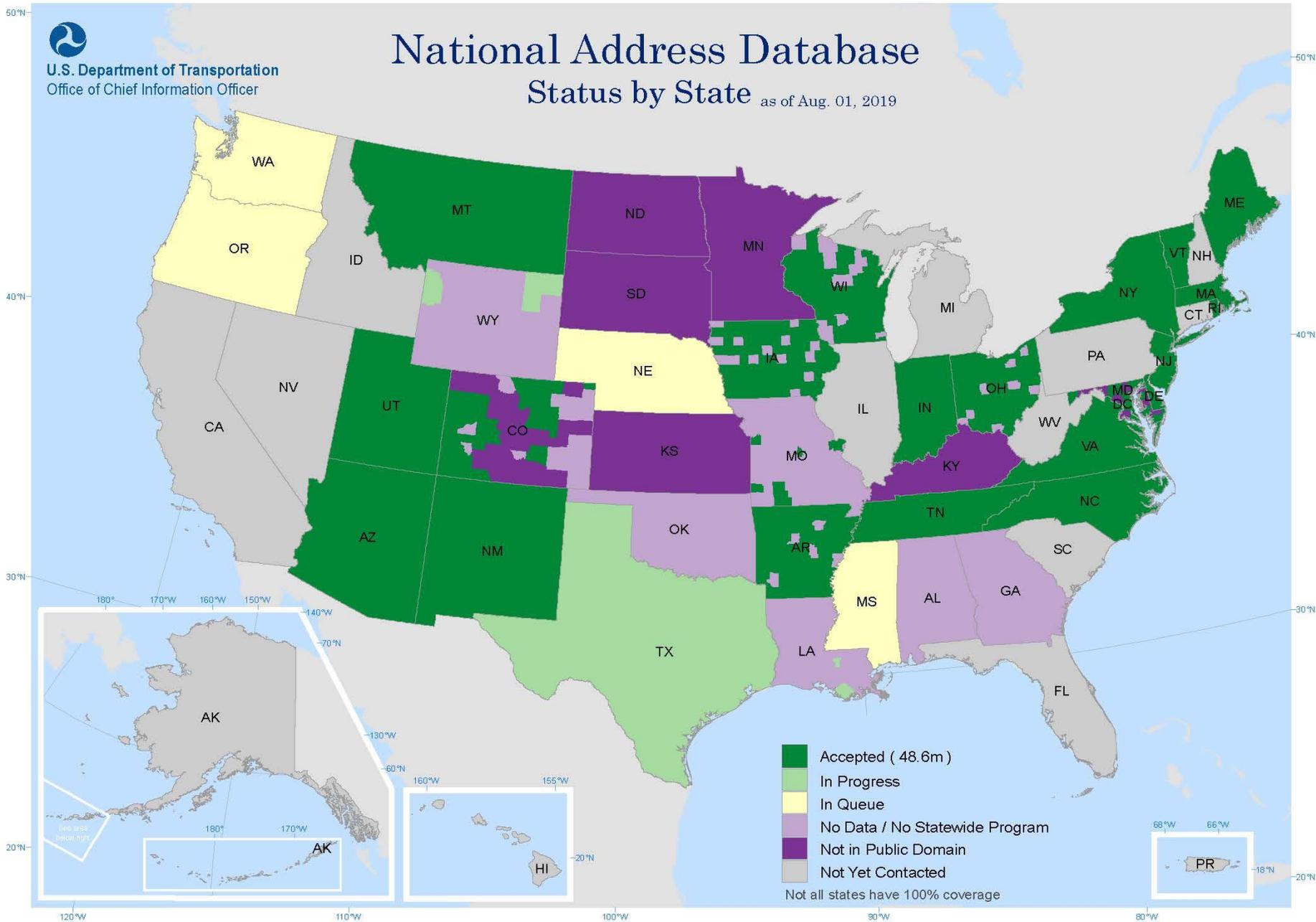
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- The National Tribal Geographic Information Support Center has been encouraging tribes to participate in the NAD
- The Rosebud Sioux Tribe in South Dakota has agreed to become a partner and will provide data this week
- The Seneca Nation in New York has agreed to become a partner, but their data is already included in the New York roll-up of address points



U.S. Department of Transportation  
Office of Chief Information Officer

# National Address Database Status by State as of Aug. 01, 2019



# Possible Domain Addition

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- In general, domain values come from Pub28
- The current domain values for “Address Type” are
  - Residential
  - Commercial
  - Multi-Use
  - Industrial
  - Government/Public Services
  - Religious
  - Recreation
  - Educational
  - Institutional
  - Other
  - Unknown
- Latest Arkansas data had 70,000 records marked “Agricultural”. New Domain Value?

# Contract for ETL Developer - Update

- On Monday, the DOT Contracting Officer informed OCIO that the period of performance on the existing contract would not be allowed to continue through September
- Based on the original award date (July 2017), the period of performance on the original contract ends on 8/31/2019
- NHTSA has promised additional funding in FY2020
- Contract must be re-competed
- Estimated 30 – 120 days of “stop work”

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# Content Recommendations for the National Address Database (NAD)

Address Content Workgroup of the  
Address Theme Subcommittee,  
David Cackowski, Chair

# Outline

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- Subgroup Scope
- Sources, Procedure, Results
- NAD Purpose and Scope
- Recap of Workflow Recommendations
- NAD Capabilities
- NAD Content
- Deferred Questions
- Next Steps

# Subgroup Scope

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The scope and purpose of the Address Content Subgroup is to identify the minimum address content and other possible tiers of desired or optimum content for inclusion in the National Address Database (NAD).

The Address Content Subgroup will coordinate with other subgroups to ensure that minimum content supports workflows and other requirements.

The Subgroup will report our recommendations to the FGDC Address Theme Subcommittee.

# Sources, Procedure, Results

## Sources

- FGDC address data standard (v2015)
- NENA CLDXF standard (v2014)
- NAD Pilot Project schema (2016)
- Address Workflow Workgroup recommendations (2019)

# Sources, Procedure, Results (Cont.)

## Procedure

1. Develop a preliminary list of desired NAD capabilities.
2. Review each content item in each source.
  - a. Determine which items are needed to support each capability.
  - b. Refine the capability list.
  - c. Exclude items not needed for any capability.
3. Review definitions for comparable items across the three sources.
  1. If the definitions were substantively the same, use the FGDC definition.
  2. Otherwise, select the most appropriate definition for NAD purposes.
  3. Adapt as needed for NAD purposes.
  4. Review for consistency with FDGC definitions.
4. Based on the above, refine the statement of NAD purpose and scope.

# Sources, Procedure, Results (Cont.)

## Results

Recommendations for:

- Refined NAD statement of scope and purpose
- NAD capabilities needed to fulfill the purpose within the scope.
- Content items needed for each capability
  - Minimum data set (mandatory items)
  - Maximum data set (mandatory and optional items)
  - Excluded items
- Definitions for all items
- Compiled as a formal profile of the FGDC standard

# NAD Purpose and Scope

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Inclusions: The national address database shall organize and store, in a single spatial database, all United States addresses of the following classes, as defined in the FGDC address data standard:

## **Thoroughfare Classes**

Numbered thoroughfare addresses (*“123 Main Street”*)

Intersection addresses (*“Boardwalk and Park Place”*)

Two-number address ranges (*“4641-4651 Tanglewood Drive”*)

Unnumbered thoroughfare addresses (e.g., *“Ili-Ili Airport Road”*)

## **Landmark Classes**

Landmark addresses (*“United States Capitol Building”*)

Community addresses (*“23B Edgewater Park”*)

Exclusion: Road centerlines and four number address ranges

# Recap of Workflow Recommendations

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- Roles: Local Address Authority, Intermediate provider, NAD administrator, automated system
- State agency processes:
  - Receive local data
  - Test (accept, fix, reject)
    - Load
    - Normalize
    - Validate
    - Aggregate
  - Publish to NAD (Note: Federal workflow follows state workflow)
- UUID Recommendation

# Recap of Workflow Recs. (Cont.)

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- **UUID Recommendation**
  - UUID shall be unique for each record in the address database, and shall not be duplicated for a different address record in said database.
  - UUID shall persist for its address record in each iteration of the address database, immutable.
  - If an address record in the address database is retired, its UUID is retired with it and cannot be used again for another address record.
  - If the provider does not have the capability to maintain a persistent UUID for individual address records across iterations of the address database, the responsibility for assigning a persistent UUID to address records in the database evolves to the state level aggregator and as necessary, the federal level aggregator.

# NAD Capabilities

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1. Provide the address data elements and data record structures needed for the six address classes
2. A unique, permanent UUID that persists for each address
3. Address authority
4. Address mapping: XYZ coordinates and position
5. Address-to-address relationships.
6. Address-to-parcel relationships
7. Address documentation and quality control
8. Address provider and dataset identification
9. Support for NAD workflows

# NAD Content

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## Address Elements

- Address number, Street name, Subaddress elements
- Landmark name elements
- Place and state name elements

## Address Attributes

- Address UUID, address authority
- Address coordinates and address position
- Address relationship type
- Address-parcel ID and ID source
- Address classification and other documentation and QC attributes
- Address direct source and dataset ID
- QC test results

## NAD metadata and dataset metadata

# NAD Content (Cont.)

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## Proposed Changes

- For elements where the FGDC definition and CLDXF definition are the same or similar, the FGDC definition will be used
- Bulk Delivery ZIP Code, Bulk Delivery ZIP Plus 4 Add – Excluded
- Building, Floor, Unit, Room, Additional Location Info combined into Subaddress Element
- GUID changed to UUID

# NAD Content (Cont.)

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## New Attributes

- Mandatory
  - Address Classification – One of the six NAD address classes
  - Data Set ID
- Optional
  - Address Elevation
  - Address Feature Type
  - Address Lifecycle Status
  - Address Anomaly Status
  - Related Address ID
  - Address Relation Type
  - Address Parcel Identifier Source
  - Address Parcel Identifier
  - Address Anomaly Status
  - Location Description
  - Subaddress Component Order
  - Element Sequence Number
  - Place Name Type
  - FIPS State County Code
  - Delivery Address Type

# Deferred Recommendations

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- Complex elements
  - Complex elements are constructed from simple elements
  - Example: Complete street name
  - Interim recommendation: Decide during the database design phase

# Next Steps

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1. Create detailed data item descriptions (data dictionary)
2. Collaborate with Workflow Subgroup on integrating both groups' recommendations.

# Questions?

## Address Content Subgroup

Florinda Balfour  
David Cackowski  
Christian Jacqz  
Ed Wells  
Matt Zimolzak



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# Puerto Rico Address Data Working Group Update

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# Address Theme Strategic Plan

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# Workflow Subgroup Update

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# Action Items

# Thank You



**Contacts:** Lynda Liptrap  
[lynda.a.liptrap@census.gov](mailto:lynda.a.liptrap@census.gov)  
301-763-1058

**Steve Lewis**  
[steve.lewis@dot.gov](mailto:steve.lewis@dot.gov)  
202-366-9223