Agenda

1. Welcome And Introductions
2. Review Action Items From Puerto Rico Address Data Working Group (PRADWG)
3. PRADWG Proven Practices Report
4. Address Subcommittee Business
5. Workshop On Improving Puerto Rico Addresses For Federal Datasets
6. Review New Action Items
Welcome and Introductions

- If this is your first time attending, please email Karla at karla.c.kaywork@gmail.com so that we may capture your name and affiliation correctly.

- Attendees in the room

- Attendees on the phone

Meeting Protocols

- Presentation Location

- Parking Lot

- All viewpoints and perspectives are welcome in this important discussion, so let’s each commit to fostering a respectful and inclusive dialogue during our meeting today.
Agenda

Welcome And Introductions

Review Action Items From Puerto Rico Address Data Working Group

PRADWG Proven Practices Report

Address Subcommittee Business

Workshop On Improving Puerto Rico Addresses For Federal Datasets

Review New Action Items
Action Items

Action #: 2019 06 11-01  David Cackowski
- Send out Proven Practices Report to PRADWG for member review and approval

Action #: 2019 06 11-02  PRADWG Members
- Review Report and leave feedback in survey

Action #: 2019 06 11-03  David Cackowski
- Send out calendar invite for PRADWG wrap-up meeting at the Executive Office Building

Action #: 2019 06 11-04  David Cackowski
- Send out agenda for June 27th wrap-up meeting.

Action #: 2019 06 11-05  PRADWG Meeting Attendees
- RSVP to David Cackowski to let us know if you will be attending virtually or in person. If attending in person, please let us know if you will be bringing a guest also.
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PRADWG Background

Disaster Recovery and Preparedness

Hurricanes Irma and Maria

Unique Diversity in Puerto Rico’s Addressing System

Puerto Rico Address Data Workshop, Oct 2018

Puerto Rico Address Data Working Group
Puerto Rico Address Types

The Census Bureau maintains five (5) different varieties of Puerto Rico addresses in an internal address inventory, called the Master Address File, or MAF. Each of these addresses is residential in nature, either for a single or multi-family structure, an institutional or group quarters facility, or military housing.

**General**
1234 Calle Juan Doe
San Juan, PR 00926

**Apartment Complex**
8 Vista Suites APT 8910
San Juan, PR 00926

**Urbanización**
Urb Smith
567 Calle A
San Juan, PR 00926

**Area Name**
Barrio Juan Sectore Smith
Carretera 12
San Juan, PR 00926

**Other**
Highway Contract
Rural Route
P.O. Box

NOTE: These examples are fictional addresses that are not protected from disclosure by the Data Stewardship and Confidentiality requirements of 13 U.S.C. §9.
Puerto Rico Address Profile – Census Bureau

- Area Name: 37%
- Urbanización: 35%
- Apartment Complex: 13%
- General: 11%
- Other: 4%
**PRADWG Purpose**

- **Promote agency collaboration, transparency, and strategic prioritization in the federal address collection and management process for Puerto Rico**

- **Document use cases representing the various agency requirements for collecting and maintaining Puerto Rico address data**

- **Align with the goals of the FGDC Address Theme and Subcommittee to contribute to the National Geospatial Data Infrastructure (NSDI).**

**Participation**

[Logos of various government agencies]
Proven Practices

Summary of Responses:

<table>
<thead>
<tr>
<th>Agency</th>
<th>a. Use Data As Is</th>
<th>b. Custom Tools and Open Source Data</th>
<th>c. Third Party Data or Services</th>
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- **Use Data As Is**
- **Custom Tools & Processes**
- **Third Party Data or Services**
- **Examples of Successes**
Top Three Proven Practices

- Recognizing the differences in Puerto Rico addresses and accounting for them in the data model (e.g., adding urbanizacion name field)
- Standardizing and cleaning the data whether through manual or automated methods
- Validating the data through fieldwork or a source such as the US Postal Service.

Recommendations

- Recommend that all federal agency Puerto Rico address data stakeholders consider adopting one or more of the proven practices identified in this report, especially the top three proven practices
- Request that federal agencies publish their proven address data practices, tools, and procedures to an open platform
- Recommend a Phase II for the PRADWG to document federal agency requirements for Puerto Rico address data.
# Appendix 1-6: Proven Practices

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<thead>
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<th>Appendix 1:</th>
<th>Housing and Urban Development</th>
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<td>Appendix 4:</td>
<td>U.S. Department of Agriculture</td>
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<td>Appendix 6:</td>
<td>U.S. Postal Service</td>
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</table>
# Appendix 7: Address Data Resources

## Federal Geographic Data Committee (FGDC)
- **FGDC**
- **Address Subcommittee GeoPlatform Community Site**

## Open Data Ecosystem for Puerto Rico Address Data
- **Openaddress.io**
  - **Detailed Report**
  - **Puerto Rico Open Data Interconnection Portal**
  - **OpenStreetMap**
  - **USA Structures Database (PR data to be released in 2019)**

## Sharing Procedures and Tools
- **The Opportunity Project**
- **U.S. Data Federation**
- **GitHub**

## Address Standards
- **The National Address Database (NAD)**
- **Civic Location Data eXchange Format (CLDXF)**
- **United States Thoroughfare, Landmark, and Postal Address Data**

## Census Bureau
- **Puerto Rico Address Guidelines**
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Address Subcommittee Business

• Update on the National Address Database (NAD) – Dave Cackowski

• Open Geospatial Consortium (OGC) Disasters Interoperability Pilots

• Address Theme Strategic Plan – Lynda Liptrap

• Address Standards Templates for Puerto Rico Address Data – Lynda Liptrap

• Address Content Subgroup – Dave Cackowski
Update on the NAD
Texas Parsing

• Used an open source address parsing script hosted on GitHub developed by DataMade and the University of Sussex
  - https://github.com/datamade/usaddress

• Parsing was done in 100,000 feature blocks to minimize rework due to parsing errors

• Base code was turned into a script to minimize the parsing translation from the native format to the NAD schema
Texas Parsing – Part 2

- Of the 9.3 million points, only 315 weren’t run through the parser due to missing data
- Lots of hours expended on this effort, resulting in 7.3 million records successfully parsed
- A report was generated and supplied to Texas in late May, but it’s unlikely any corrections will be made in the short term
- The 7.3 million points will be added to the NAD and included in the next release
Wisconsin - Status

• ETL and QA complete
• Of the 2.1 million points, 1.4 million are ready for the NAD
• Of the remaining points, about 300,000 were flagged as duplicates and about 400,000 having missing or incorrect address numbers.
• Report was submitted to Wisconsin in early May
• The remaining 1.4 million had no errors and will be added to the NAD and included in the next release
New Partner – Wyoming

• No statewide address program, but WYGEO is helping to gather county data
• To date, 3 of the 24 Wyoming counties have agreed to provide data (~44,000 address points)
• Another 3 counties have parcel layers that could be turned into addresses
• Outreach continues
Existing Partners

- New Jersey and Ohio are still unable to provide updates
- Prioritizing updates from other partners by vintage of their NAD data
- Received update from New Mexico in April
- Received updates from New York/New York City and Montana last week
- Expect to receive updates from Arizona, Colorado, Delaware, Massachusetts, and Virginia over the next few weeks
Changing Status – Kansas

• Formerly in the “Not in the Public Domain” category

• Based on discussions with USDOT about the NAD, the Kansas GIO spent the last year lobbying the county data providers to grant permission to include their data in the NAD

• Of the 105 counties, 76 have agreed to release their data

• Expect a Kansas submission soon.
NAD V2 Available for Download

• A second release of the NAD was made available in early May

• File geodatabase and flat ASCII formats
  – https://s3.amazonaws.com/nationaladdressdata/NAD_r2_WithMetadata.zip
  – https://s3.amazonaws.com/nationaladdressdata/NAD_r2_ASCIIWithMetadata.zip

• Almost 47 million points
• Includes basic metadata
• Also available from the DOT website
  – www.transportation.gov/nad
• Hope to do quarterly releases
Open Geospatial Consortium Disasters Interoperability Study

• Pilot studies to develop processes for using technologies and data in response to, and planning for disasters
  • National Geospatial Data Assets to be used in pilots
    • NAD
    • Census Bureau’s boundary and road data
Address Theme Strategic Plan

• Draft Plan is in development
  • To cover short time period until new National Spatial Data Infrastructure (NSDI) is developed

• To be followed by an Implementation Plan
Address Standards Templates for Puerto Rico Address Data

• Develop examples of various types of Puerto Rico address data in three formats
  • The FGDC Standard
  • The National Emergency Number Association US Civic Location Data Exchange Format (NENA CLDXF)
  • The NAD Schema
• Census Bureau provides fictitious but representative address examples
• Vetted by standards sponsors
Address Content Subgroup
Address Content Subgroup

• Scope - identify minimum address content and other possible tiers of desired or optimum content in the NAD
• Report at next Subcommittee Meeting
• Report will include:
  • Address classes to include and exclude
  • Which address attributes are:
    • Mandatory
    • Conditional
    • Optional
    • Excluded
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Contact Information

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For more information about the PR Address Data Working Group:
Address Subcommittee

Thank You!