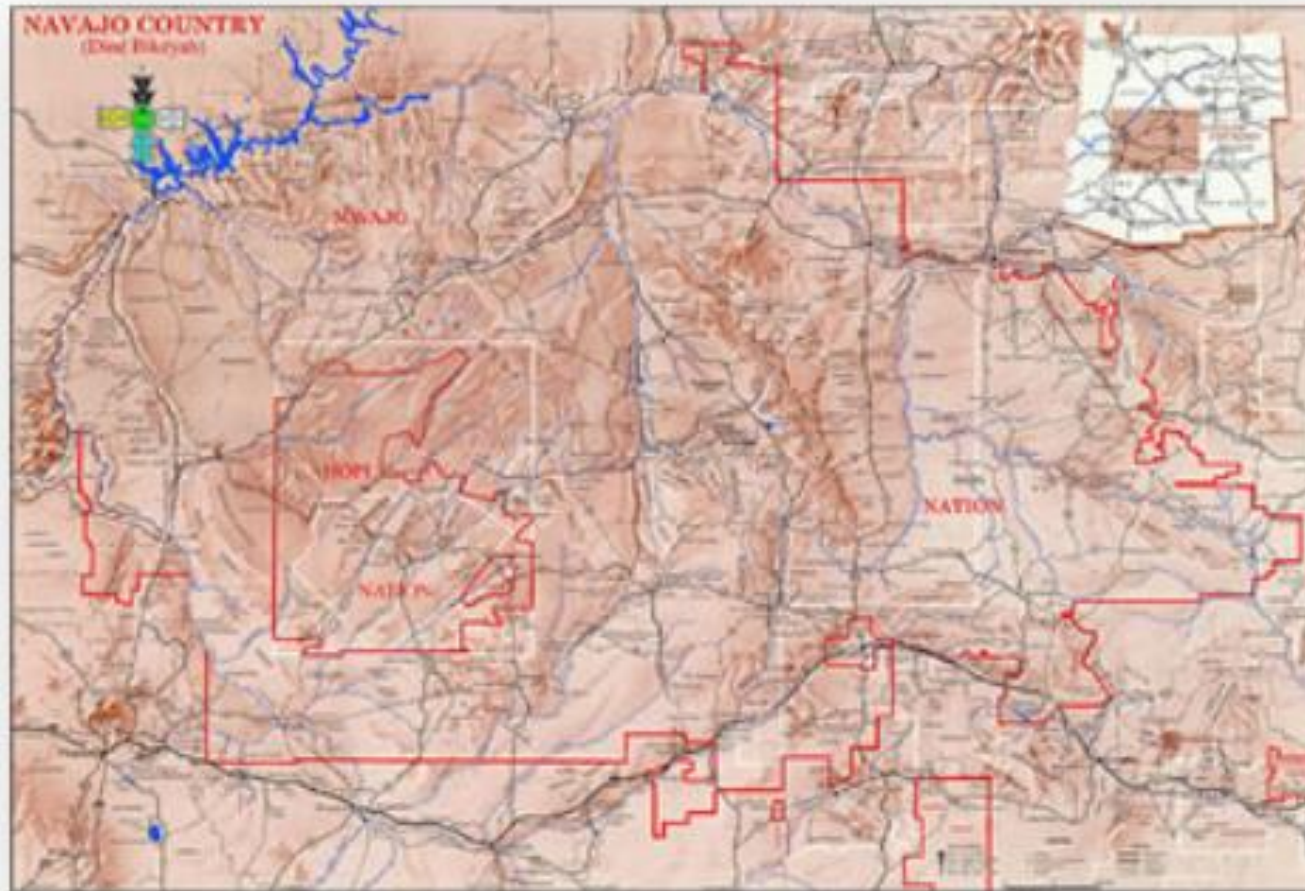
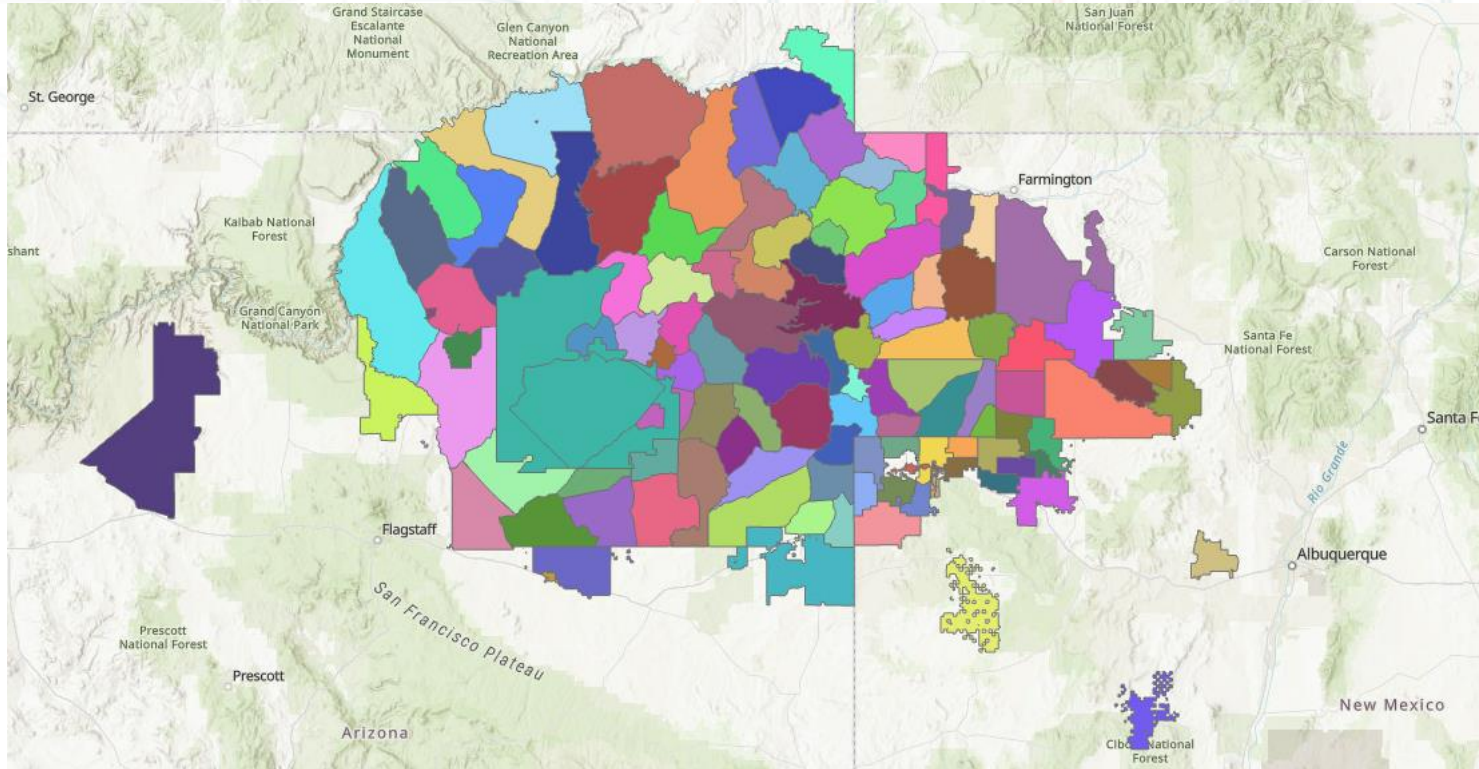


# Overview of the Navajo Nation Addressing Pilot Project

Theo Sheppard, Geographer  
Geography Division  
U.S. Census Bureau  
October 16, 2024



# Improving Coverage in the Geospatial Frame



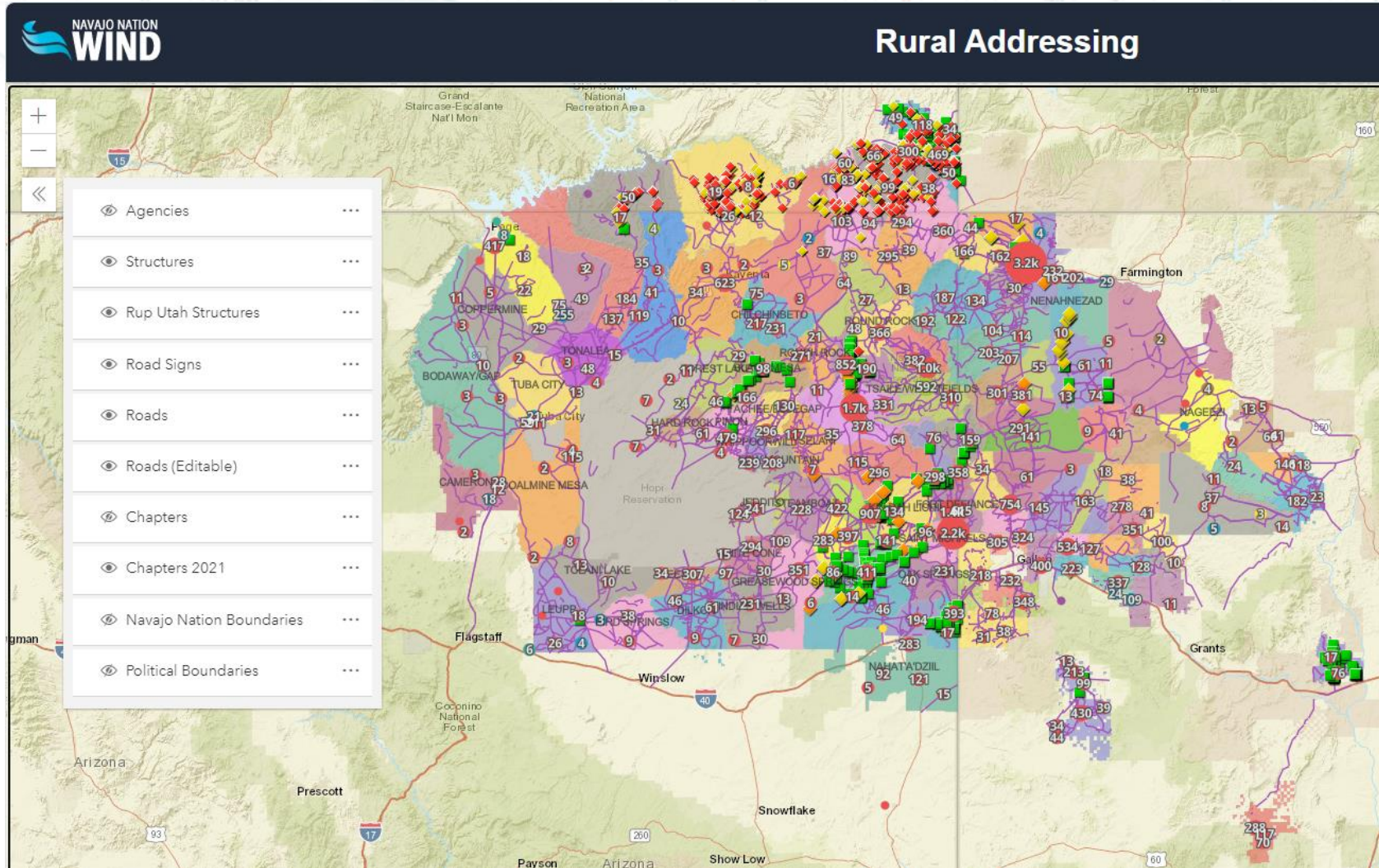
## Address Review Flags

- Identifying New Housing Units
- Moving Existing MAF Units
- Deleting Existing MAF Units

## Road Feature Review Flags

- Deleting Road Segments
- Reshaping Road Segments
- Naming Road Segments leading to 4 or more housing units

# Navajo Nation WIND Portal



# Navajo Nation Addressing Pilot Project – Our Process

The screenshot displays a GIS application window with a 'Contents' pane on the left and a 'Map' window on the right. The 'Contents' pane includes a search bar, a toolbar with icons for layers, drawing, and editing, and a 'Drawing Order' list. The 'Drawing Order' list contains the following layers from top to bottom:

- Map
- Leupp\_Census\_Blocks
- LeuppChapter
- Leupp\_Navajo\_Points
- Leupp\_NSI\_Points
- Leupp\_Tab20\_Blocks
- Leupp\_Regrid\_Footprints
- Leupp\_ORNL\_MS\_Footprints
- Leupp\_ORNL\_Footprints
- Leupp\_Lightbox\_Footprints
- Leupp\_Change\_Detection\_LULC
- Leupp\_Change\_Detection\_GEE
- DigitalGlobe:ImageryTileService
- Current Census Imagery

Below the 'Current Census Imagery' layer, the 'RGB' settings are shown:

- Red: Band\_1
- Green: Band\_2
- Blue: Band\_3
- World Imagery

The 'Map' window shows an aerial satellite image of a desert landscape. A thick blue line outlines a large, irregular polygonal area. Within this area, several small red and green squares are visible, representing specific geographic features or points of interest.

# Reviewer Workflow



Building Footprints



Navajo  
Structure Point



NSI Point



Provisional  
Housing Unit



# Example of Road Feature Updates



# Roads Flagged as Eligible to Receive Names



# Not an Easy Task



Go to XY



# NNAPP Summary

- By 8/28/2024, staff completed the Addressing and Road Feature reviews of the 10 chapters of Leupp, Many Farms, Shiprock, Fort Defiance, Dilkon, Chinle, Saint Michaels, Tuba City, Kayenta, and Crown Point.
  - Potential MAF Units Added - 3,942
  - MAF Unit Accuracy Improvements – 5,941
  - MAF Units flagged for deletion – 193
  - TIGER edges deleted – 12,792
  - TIGER edges reshaped - 436
  - Distinct roads flagged as eligible for naming – 739
- In-field research and verification has affirmed the effectiveness of the in-office methodology used in this project.
- We are currently developing the project that will apply the NNAPP methodology to Navajo Nation's 100 remaining chapters, as well as other rural and tribal areas across the country.



# Questions?

Feel free to contact  
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