National Collaboration

Bicycle, Pedestrian, and Accessibility Infrastructure Data

April 25, 2024

U.S. Department of Transportation
Office of the Secretary of Transportation

Bureau of Transportation Statistics

FGDC.GOV
FEDERAL GEOGRAPHIC DATA COMMITTEE

Facilitators

Co-Chairs

- **Anat Caspi**, University of Washington
- **Daniel Pelaez**, Cyvl.ai
- **Jeff Whitfield**, Centers for Disease Control and Prevention

Bureau of Transportation Statistics

- **Grace Bowen**, ORISE Fellow
- **Cyrus Chimento**, ORISE Fellow
- **Jay Davis**, Presidential Innovation Fellow
- **Justyna Goworowska**, Spatial Transportation Data Analyst

Housekeeping

- **This meeting will be recorded.**
- Please stay muted to reduce background noise. If you would like to speak or ask a question, please raise your hand and unmute when acknowledged.
- Please type your affiliation in the chat.
- Type any questions you have into the chat. We will be monitoring the chat and will respond or raise your questions.
- Slides, recording, and notes will be available within about a week at: https://github.com/dotbts/BPA/wiki

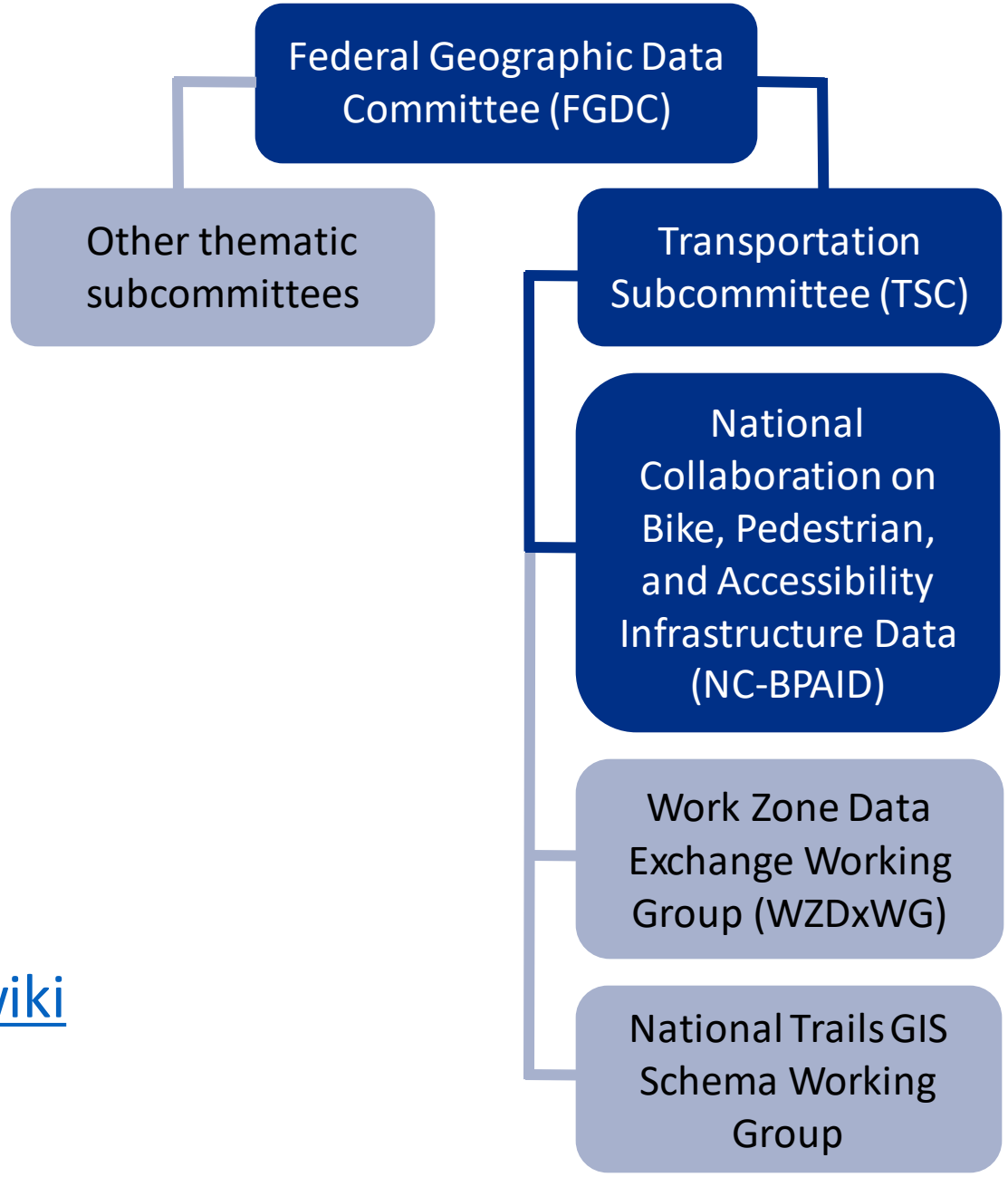
Agenda

Welcome • Housekeeping • Recap • Meeting objectives	Jeff Whitfield & Justyna Goworowska	5 minutes
NC-BPAID status updates	Justyna Goworowska	5 minutes
Open floor for announcements	Justyna Goworowska	5 minutes
Data representations overview	Anat Caspi & Cyrus Chimento	15 minutes
Breakout discussions	Jay Davis	30 minutes
Closing	Jeff Whitfield	<1 minute

Recap

- Why are we here?
- Why is the Bureau of Transportation Statistics (BTS) facilitating?
- What happened at the last meeting?

Details: https://github.com/dotbts/BPA/wiki



Objectives of Today's Meeting

1. Provide status updates for completed work and work in progress
2. Understand the data representations for modeling bicycle, pedestrian, and accessibility infrastructure

Updates

- Purpose and scope incorporated into the collaboration framework

PURPOSE

The purpose of NC-BPAID is to advance a state of comprehensive, interoperable, and routable data on bike, pedestrian, and physical accessibility infrastructure that informs decision-making for individual travelers—as well as the government, private, nonprofit, and academic sectors—through the mechanism of open data standards.

SCOPE

The scope of the NC-BPAID is limited to:

- Developing or endorsing open standards and practices that support the objective collection, exchange, portability, and refutability of high-quality data.
- Facilitating adoption of these standards and practices by data producers and consumers.
- Promoting the findability, accessibility, interoperability, and reusability of bicycle, pedestrian, and physical accessibility infrastructure datasets.

NC-BPAID—as an entity—will not collect or publish data.

Ultimately, the NC-BPAID should designate an independent and sustainable bicycle, pedestrian, and physical accessibility infrastructure data governance organization that will lead the work of maintaining and adapting the standards over time to reflect evolving real world conditions and soliciting representative involvement from the broad spectrum of stakeholders.

Updates

- Use Case Catalog cleaned up and summarized
- Upcoming: Collaboration Framework adoption
  - Decision-making procedures
  - NC-BPAID objectives
  - Subgroup formation

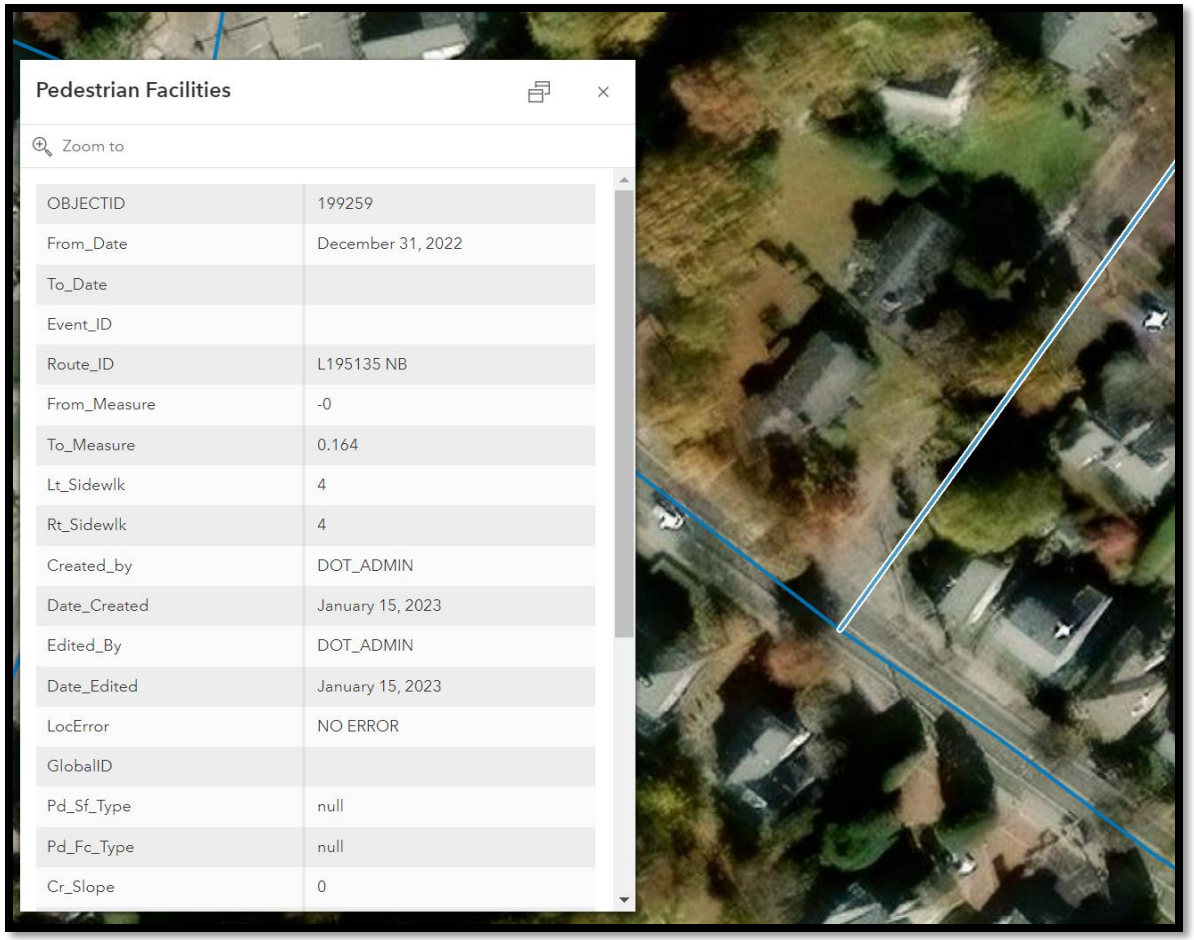
Open Floor for Announcements

Data Representation Categories

Which representation best accomplishes our purpose?

- 1D
- 2D
    - Disconnected linear features
    - Connected linear features
    - Polygonal features
- 3D

1D



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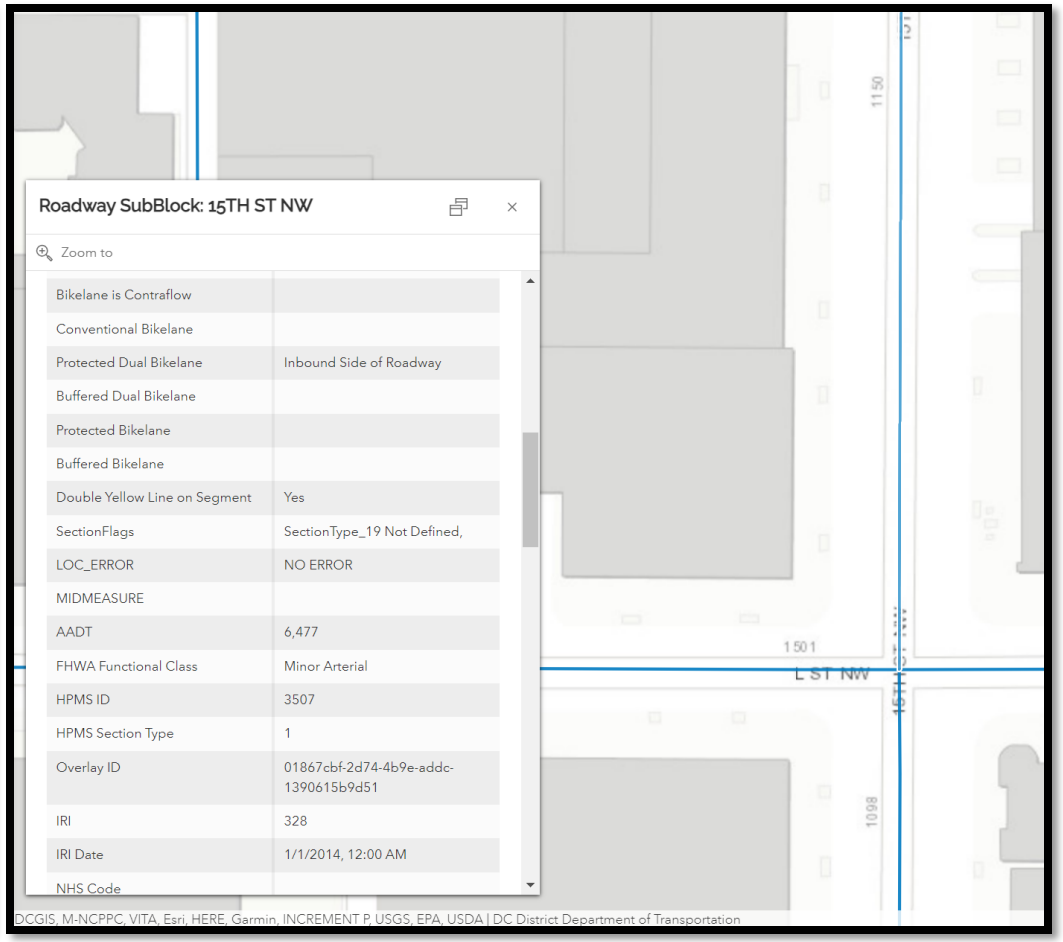
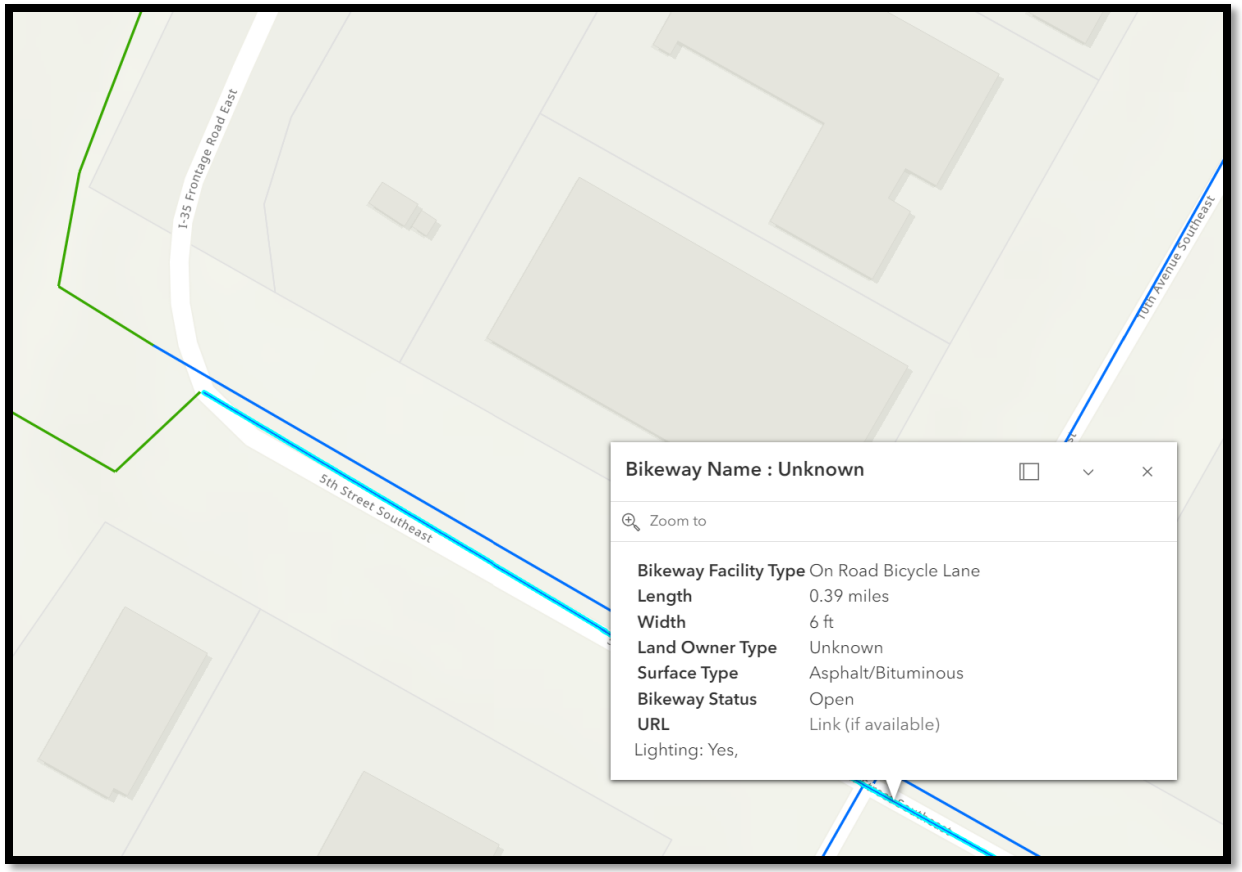
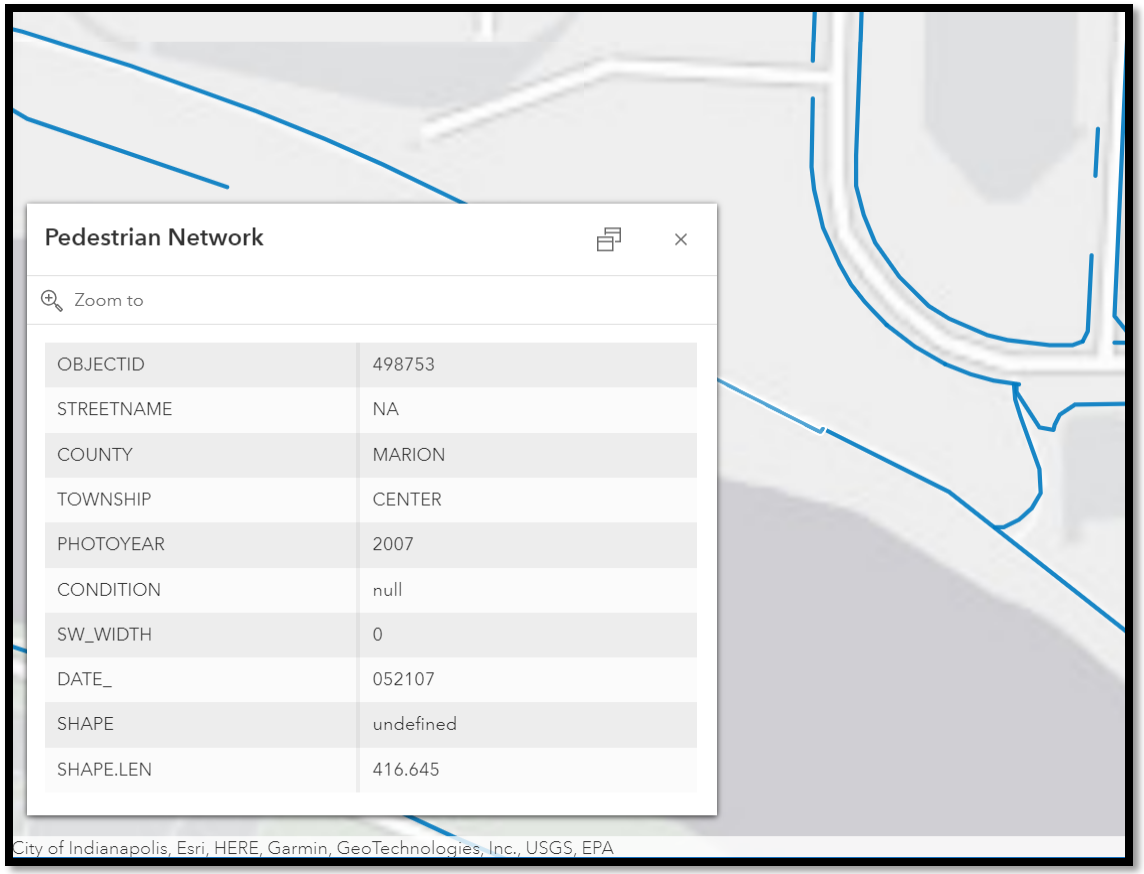


DDOT

2D: disconnected linear features

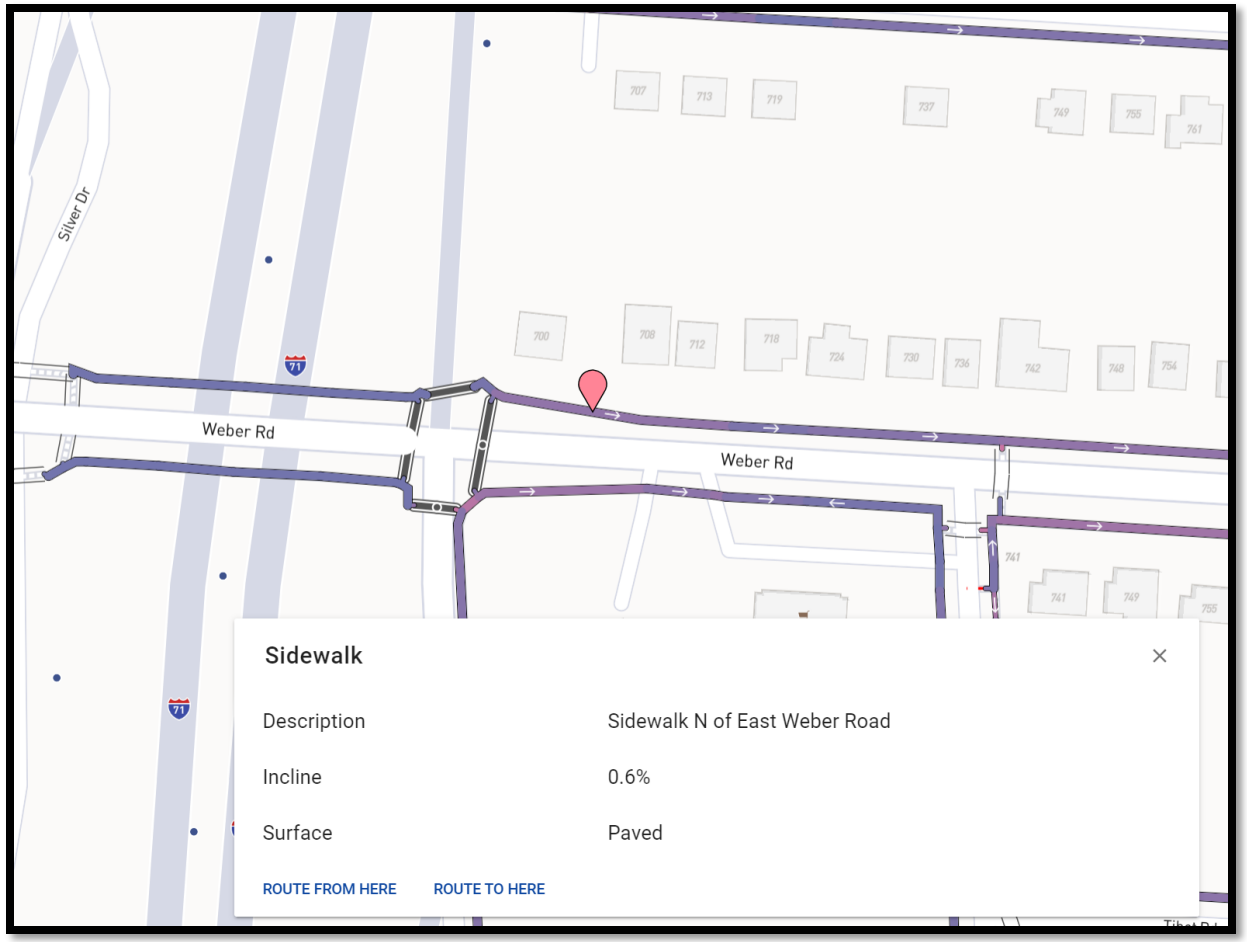


[MnDOT]

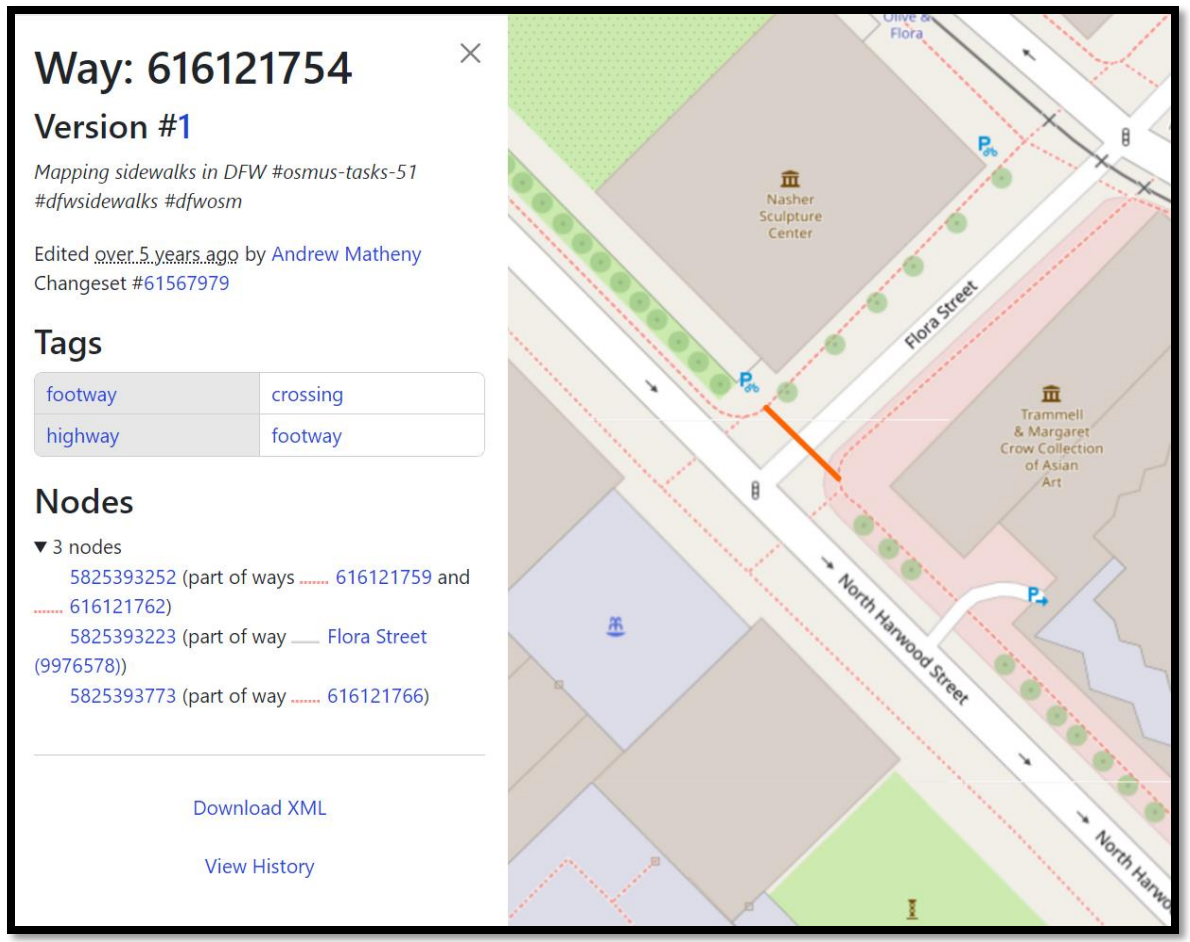


[Indianapolis]

2D: connected linear features

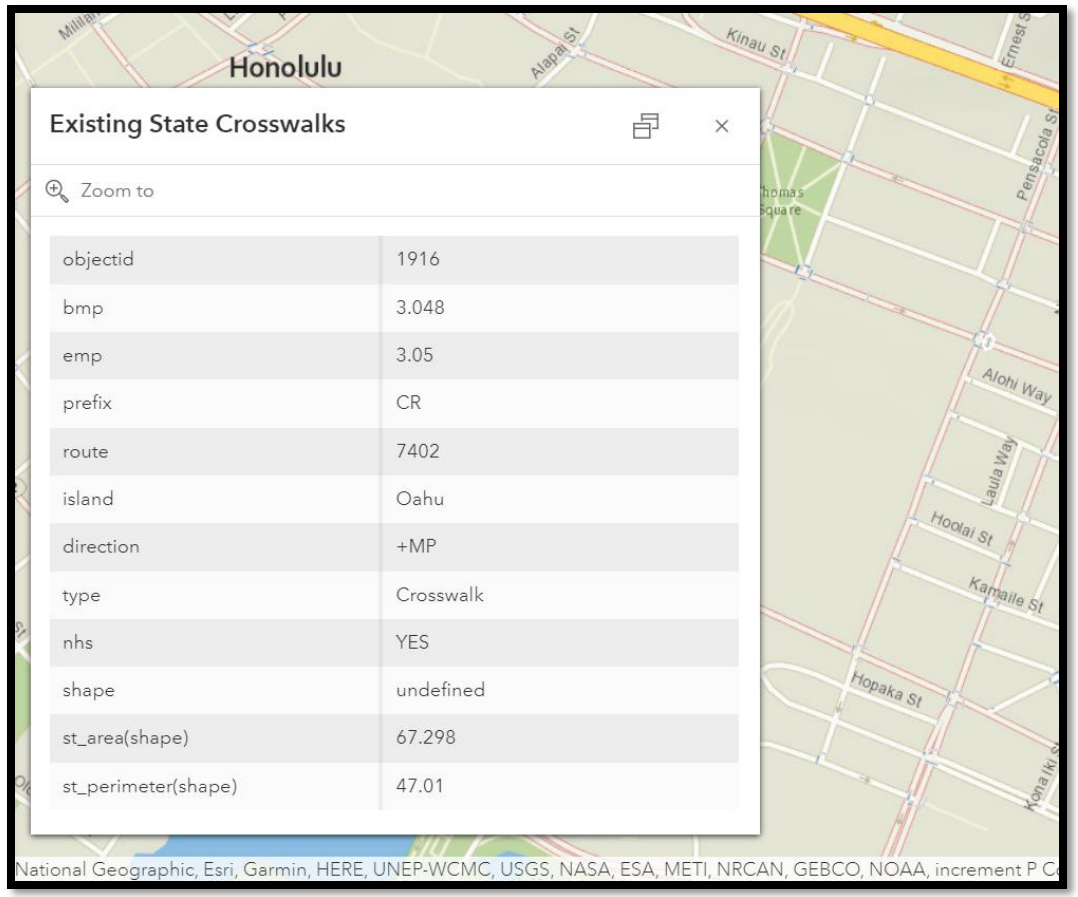


AccessMap

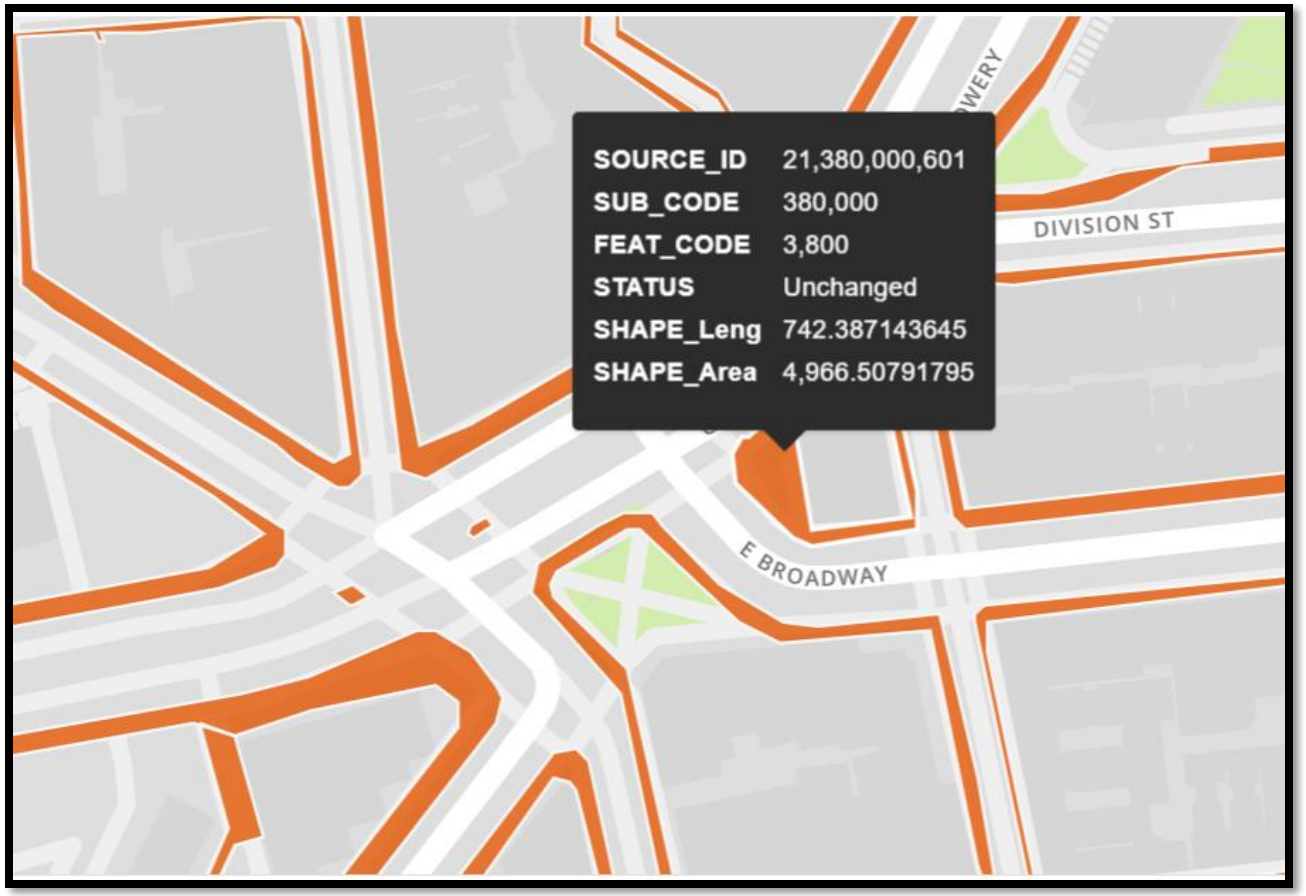


OpenStreetMap

2D: polygonal features

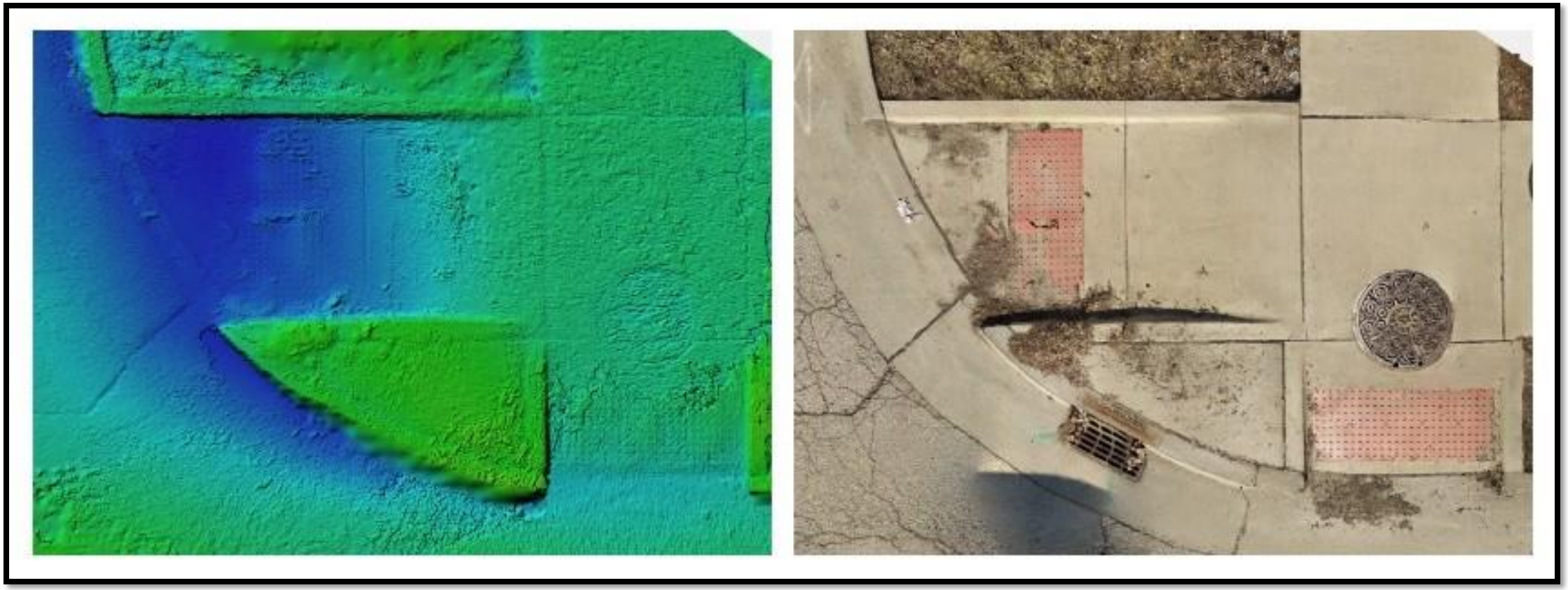


Hawaii DOT



NYC

3D



DeepWalk on LinkedIn

Breakout Discussion

Breakout Rooms

What are you doing?

Clarify the data representation categories

- Definition
- Drawbacks/benefits
- Gaps
- Priority
- Use case alignment

How are you doing it?

- 6 breakout rooms
  - 5 virtual
  - 1 in-person (Open the Paths)
- 30min discussion
- Contribute via shared document

Thank you!

Next full meeting: Thursday, May 30th @ 3pm ET

Suggestions? Email Cyrus (cyrus.chimento.ctr@dot.gov) or open an issue on GitHub (https://github.com/dotbts/BPA/issues)!