

# GIS Advisory Council Meeting

CT GIS Office

Date: January 29, 2026



**CONNECTICUT**  
Policy and Management

# Agenda

Introductions/Attendance

Council Administration

Parcel Drafting Guidelines Discussion

GISO Priority Topics updates

Annual Report

Imagery Working Group

Housing Bill (HB8002) Data Tools Plan Update

Update on 3DHP and PA25-33

Public Comment

Closing Remarks

Adjourn



# Introductions and Attendance

# GIS Advisory Council

Appointing Authority	Appointee
OPM	Alfredo Herrera
OPM	Scott Gaul
DEEP	Stuart DeLand
ConnDOT	Elizabeth Congo
DESPP	Dan Czaja
DPH	Gary Archambault
CTCOG	Erik Snowden
CTCOG	Mark Hoover
CCM	John Guskowski
CCM	Tracy DeGrazia
UConn	Emily Wilson
PURA	Peter Sampiere
GA	Meghan McGaffin
GA	Vacant



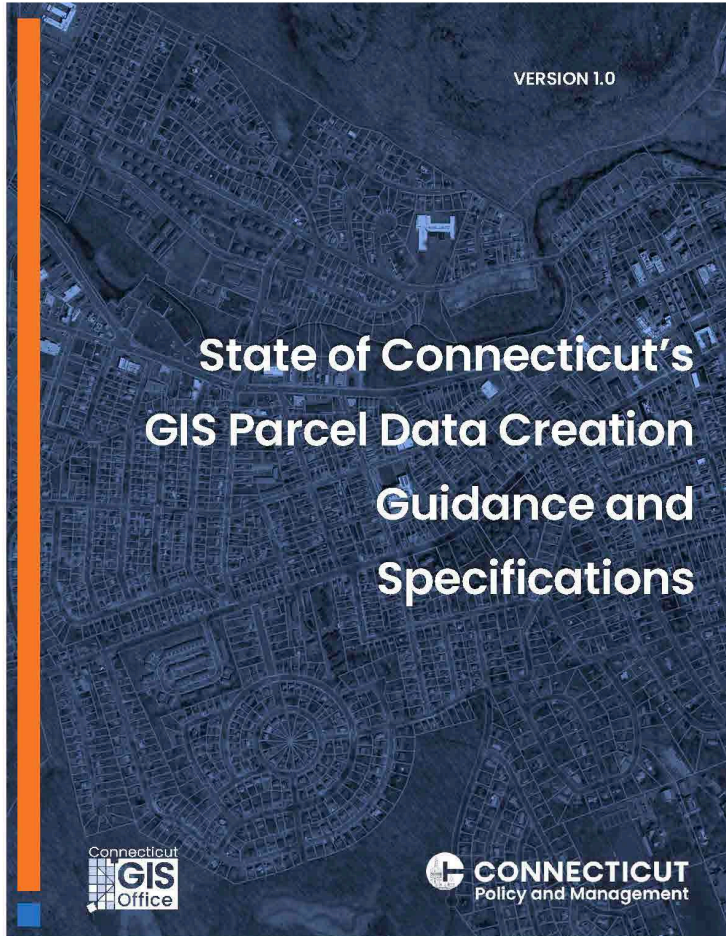
# Council Administration

# Parcel Drafting Guidelines

Thanks to all the Parcel Drafting Working Group members:

- Jacob Conshick (Geographic Information Systems Analyst, City of New Haven)
- Thad Dymkowski (Transportation Supervising Planner, ConnDOT)
- Kristen Labrie (GIS Project Manager, Tighe&Bond)
- Eric Lindquist (Water Resources Planner, DPH)
- Meg McGaffin (US Manager of Geospatial & Data Solutions, SLR Consulting)
- Mark Hoover (GIS Director, MetroCOG)
- Carl Zimmerman (Program Manager, NYC Department of Youth & Community Development)

# Contents



## Stakeholders & Collaboration

- Roles across municipalities, and intercollaboration

## Understanding Land Records

- Components, CAMA integration and cardinality

## Source Data Types

- Surveys, AutoCAD, paper maps, deeds, GPS
- Accuracy levels

## Parcel Creation & Maintenance

- Common modifications (joins, splits, merges)
- Topology rules, municipal borders
- Parcel management tools and data formats
- Parcel drawing methods by source type
- Complex parcels (condos, boat slips, multi-part, etc.)

## Feature-Level Metadata

- Attribute schema and standard fields

# External Feedback

- ESRI Consultant
- Regrid (property data and location intelligence company):  
*"You are leaders in this space and clearly documenting and sharing this information is a huge service."*
- GIS Specialist from NY GIS Program Office
- Parcel and CAMA Collection Working Group (assessors, vendors, regional GIS managers, and state agency representatives)

## Section 4.2: Parcel Management Tools:

A range of GIS software tools are available to support the ongoing maintenance of parcel data. The choice of tools depends on the volume of updates, staffing capacity, licensing availability, and long-term maintenance goal. If a municipality conducts infrequent updates or has limited GIS staffing, parcel data can be effectively managed using any standard GIS software to manipulate polygon layers while using snapping and topology tools. To support more complex workflows such as historical tracking, coordinated updates across departments, or editing of related cadastral features (e.g., easements, ROWs), more structured environments may be required.

Tools like ESRI's Parcel Fabric (available as an extension in ArcGIS Pro) provide a records-driven framework with built-in support for topology, versioning, and change tracking. The tool also benefits from multi-user editing environments (e.g., enterprise geodatabases) and is best suited to municipalities or regions with consistent editing needs and moderate to advanced GIS capacity. **To fully leverage Parcel Fabric, users should have an understanding of geodatabase structure, topology concepts, and ideally access to a network of surveyed control points. The complex and often irregular parcel geometries found in many New England towns can present challenges for accurate implementation of Parcel Fabric. In addition, many municipalities in Connecticut currently lack the density of surveyed control points needed to support robust fabric adjustment. In towns where adequate control does exist, implementing Parcel Fabric adjustment may be feasible and worth further exploration; however, this capability is not yet consistent statewide.**

See *Metes and Bounds* in the [Key Concepts](#) and [References and Resources](#) Sections.

# Recent updates to the document

## Section 4.5: Data Formats

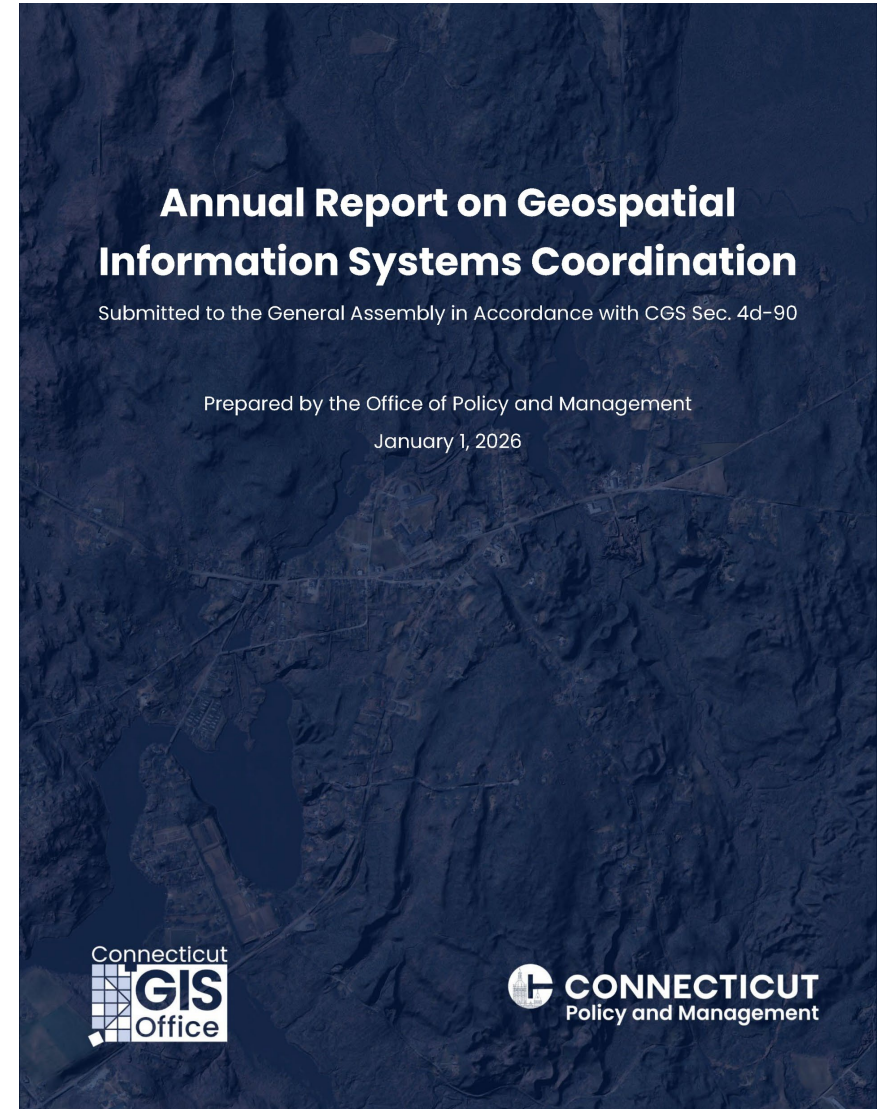
**See Section 4.2 *Parcel Management Tools*.** In Connecticut, the utility of certain Parcel Fabric capabilities (particularly adjustment and survey-based workflows) is constrained by the prevalence of metes-and-bounds data and limited availability of surveyed control points.



# GISO Priority Topics and Working Group Updates

# CT GIS Office 2025 Annual Report

The 2025 Annual Report on GIS Activities was completed and sent to the Planning and Development Committee at the legislature in December.



# Imagery Acquisition Working Group

2026 Acquisition still on schedule.

- Plans are set and we are just waiting on weather.

Looking Forward:

- Starting up the working group again.
- Discussions will center around:
  - Future flights
  - Funding Opportunities
  - Collaboration Opportunities

# Housing Bill Data Tools Plan

## PA 25-1 – An Act Concerning Housing Growth

Mandates municipalities to develop **housing growth plans** to promote affordable housing (due 2028-2029) every 5 years, plus annual progress reports

### GIS Office to provide:

Guidelines that specify **mapping standards** for annual reporting

March 1, 2026

Develop **standardized symbology** guidance for maps

**Data and tools** to enable COGs and municipalities to determine what developable lands they have available for housing

July 1, 2026

Stand up **Hub site** with collection of relevant data, tools, and resources

issue publicly available guidelines that specify formats, mapping standards, and standardized metrics for municipalities' annual reporting. These include permits issued, certificates of occupancy, and

(g) On or before July 1, 2026, and every five years thereafter, the Geographic Information Systems Office within the Office of Policy and Management, in consultation and coordination with the regional councils of governments, shall develop state-wide data tools for municipalities to use, together with local data, to compile an inventory of developable land, as defined in section 4 of this act.

# Principles of the Data Tools

## Local control

Determinations of developable land remain a community-level decision.

## Flexibility over prescription

Different communities value different criteria

## Avoid a “kitchen sink” tool

Not attempting to build a single, all-encompassing analysis tool

## Transparency

All tools and data will be public and reviewable by anyone

## Growth over time

The Hub will evolve over time based on user feedback and changing needs

# Mapping standards

Guidelines that specify **mapping standards** for annual reporting

March 1, 2026

Develop **standardized symbology** guidance for maps

- Integrated with other reporting guidance
- Defines symbology and map layout standards for required maps
- Ensures consistency and clarity across reports

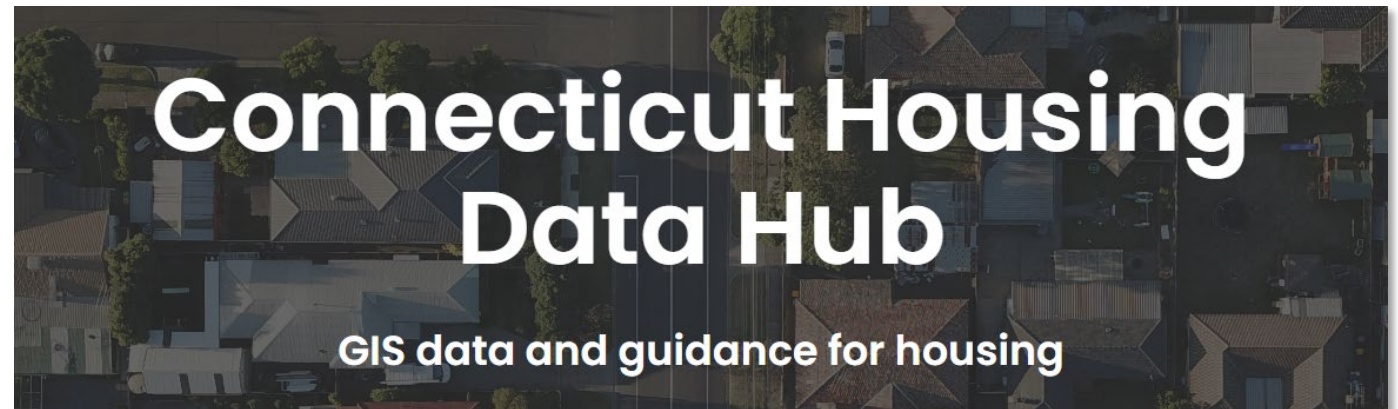
# Data tools

**Data and tools** to enable COGs and municipalities to determine what developable lands they have available for housing

July 1, 2026



Stand up **Hub site** with collection of relevant data, tools, and resources



# CT Housing Data Hub

## Data Library

Spatial data relative to housing and housing studies

Collections for specific topics:

CT Town Housing Dashboard data

PA 25-1 Developable Land Inventory data

## PA 25-1

Thematic high-level map viewers

Scenario-based walkthroughs for GIS analysis

Collection of relevant datasets

## Other housing resources

CT Town Housing Dashboard

Housing Program Studies

Links to external CT housing websites and resources

+ more!



## Data Inventory

- Land use & built environment
- Natural resources & conservation areas
- Soils
- Agricultural resources
- Water attributes
- Natural hazards & climate risk
- Infrastructure, transportation, economic contexts

(This will *not* include local datasets)

## Map Viewers

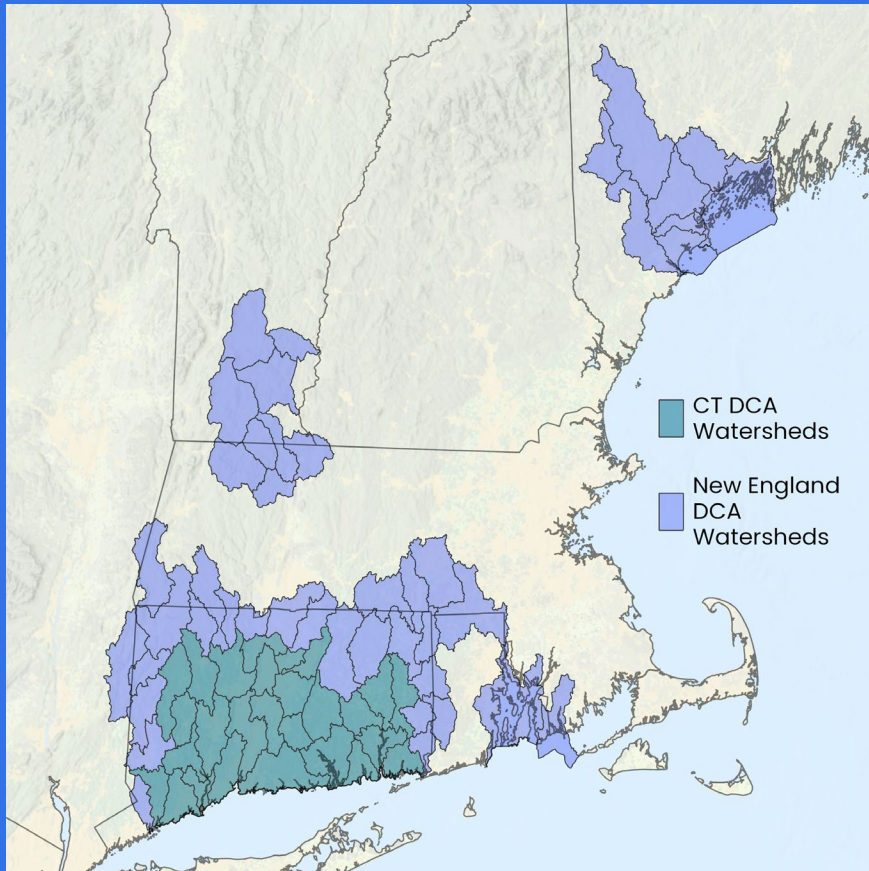
- Agricultural
- Natural resources
- Infrastructure
- Transportation

## Scenario Based Analysis

- Urban
- Suburban
- Rural

What statewide datasets, context, and scenarios should we be considering and including?

# 3DHP



- 3D Hydrography Program (3DHP)
- Both the CT & New England DCAs have been approved by USGS
- Work starting summer 2026
- Finalizing Add-On products from the vendors

Automated Bankfull	Wetlands	ESRI Stormwater Schema Integration
Additional Attributes: Flow Accumulation, Slope, Stream Order	Landcover update	Additional Attributes: Conflation (Thermal, Fish, etc.)
Base Capture Specs (Minimum Mapping Units)	3DHP Stormwater Integration (pilot area TBD)	WBD update, reach-scale catchments

# 3DHP will support Culverts and Bridges Req.

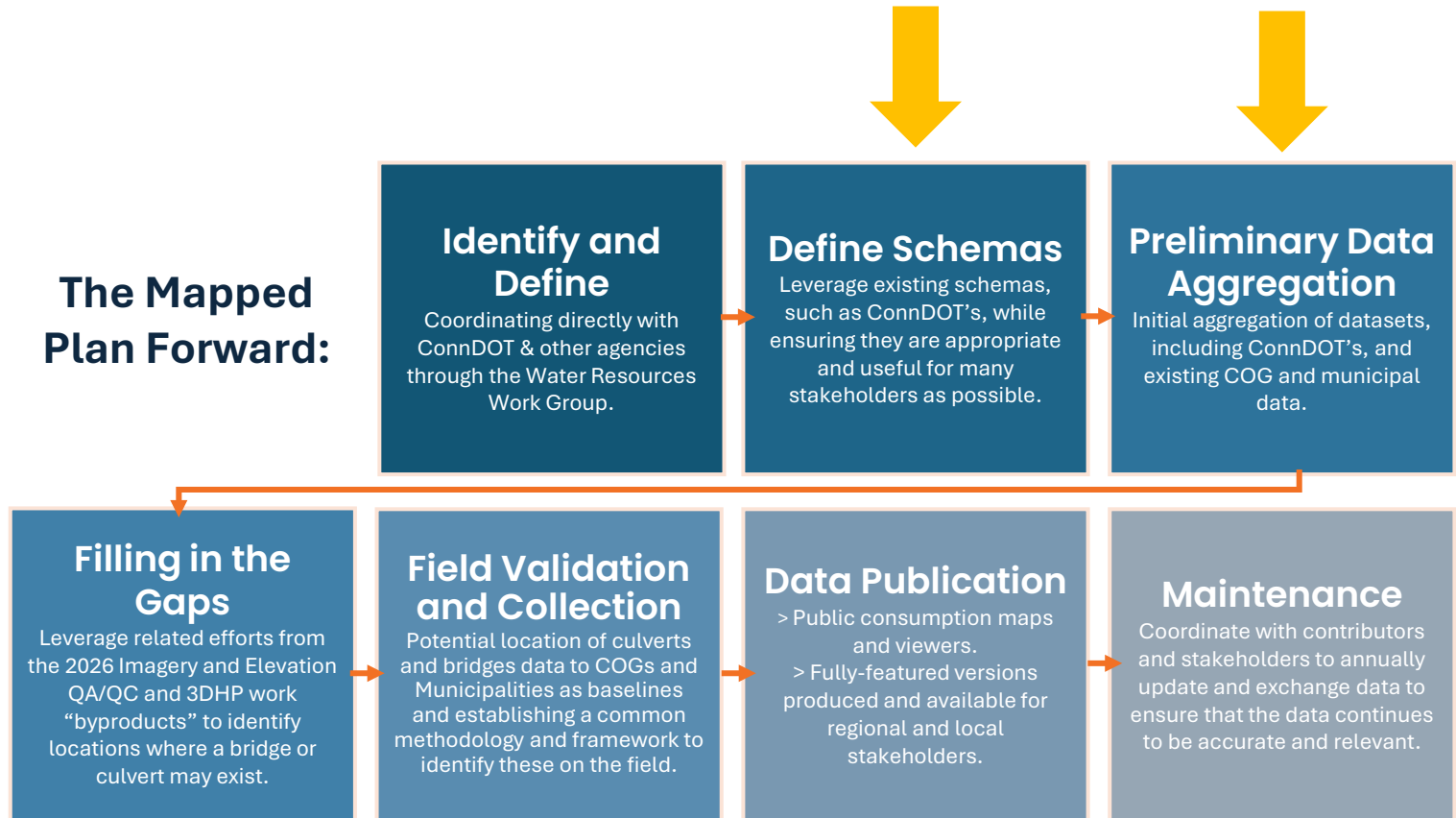
Sec. 8. (NEW) (Effective July 1, 2025) On or before May 1, 2028, and annually thereafter, each municipality shall submit a geospatial data file of each culvert and bridge within the control and boundaries of such municipality to the regional council of governments of which it is a member in a form and manner prescribed by the Office of Policy and Management, in consultation with the Departments of Transportation and Energy and Environmental Protection. Such geospatial data shall

## Public Act No. 25–33: An Act Concerning The Environment, Climate and Sustainable Municipal and State Planning...

Each municipality shall submit a geospatial data file of each culvert and bridge within the control and boundaries of such municipality.

- 3DHP will identify **Elevation Breaching Connectors** = where water flows under roads and other barriers
- Potential spots for culverts

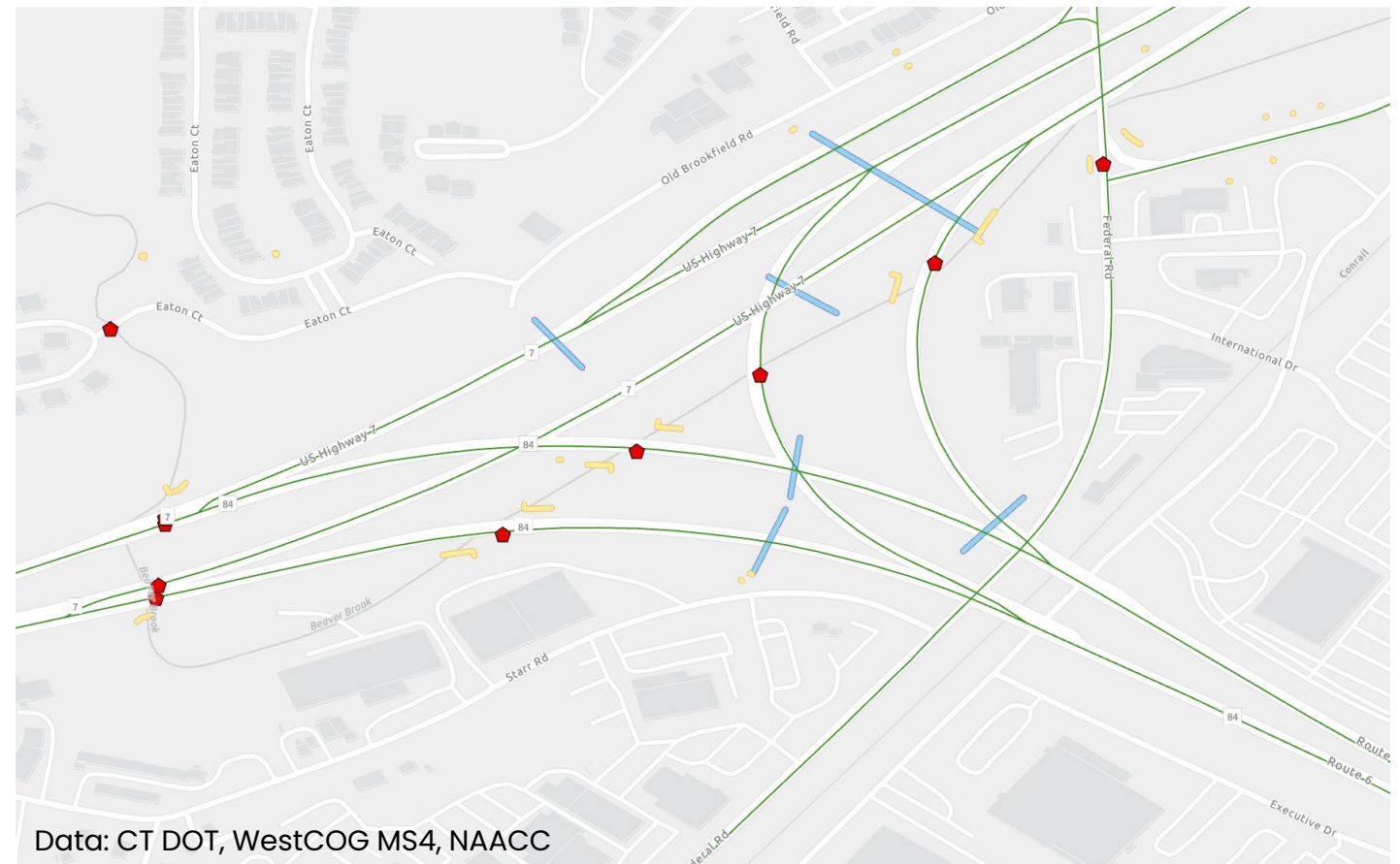
# PA 25-33: Culvert and Bridge Data Collection



PA 25-33 focuses on flood resiliency; data schema must align with flood modeling input requirements

# Data Definition, Schema Development, & Data Conflation

- Preliminary review of available culvert data shows incomplete alignment across datasets.
- Developing a schema to be able to integrate datasets and standardize the information.



A decorative graphic on the left side of the slide, consisting of white, irregular, concentric lines that resemble a topographic map or contour lines, set against a solid blue background.

# Public Comment



**Thank You**

