CT GIS Advisory Council Meeting

June 29, 2023





Introductions

Introductory Remarks

Public Comment

Meeting Administration

GISO Priority Topics Update

GAC Discussions

- Data Collection Platform
- Geospatial Data Improvement
- Strategic Plan Data Collection

Adjourn

Introductions



Appointing Authority

Appointee

GIS Advisory Council

OPM OPM DEEP ConnDOT DESPP DPH CTCOG CTCOG CCM CCM UConn **PURA** GA GΑ

Alfredo Herrera Scott Gaul Stuart DeLand Jennifer Petrario Dan Czaja Gary Archambault Erik Snowden Mark Hoover Thad J. Dymkowski John Guszkowski **Emily Wilson** Peter Sampiere Meghan McGaffin Vacant

Introductory Remarks



OPM's Geographic Information Systems (GIS) Office was established in 2022 following passage of Public Act 21-2 during the 2021 June Special Session. It is directed by a Geographic Information Officer (GIO) and resides within the Data and Policy Analytics Unit of OPM.

Coordinating the collection, compilation and dissemination of GIS data across the state, including from and to state agencies, regional councils of governments, municipalities and other constituencies;

Managing a publicly accessible geospatial data clearinghouse;

Using GIS to support economic development efforts in the state;

Provide training and outreach on the use of GIS;

Administering a statewide orthoimagery and lidar program;

Adopting geospatial data standards, guidelines, and procedures;

Performing technical data processing to aggregate and organize existing datasets and create new datasets; and

Develop broadband data and mapping in accordance with Public Act 21-159.

GIS Office & GIO

The GIS Office is responsible for:

CT Geographic Information Office (GIO)

Alfredo Herrera – Geographic Information Officer

David Lukens – Broadband Mapping Coordinator

Carl Zimmerman - GIS Coordinator

Leah Hodges – GIS Analyst

Sarah Hurley – GIS Analyst

GIS Office Staff

CT Geodata Portal is live!

Important Milestones

Aerial Imagery and LiDAR acquisition complete, processing underway.

Broadband availability and adoption maps complete, second round of updates underway.

5-year Strategic plan stakeholder engagement completed.

2023 Parcel and CAMA collection complete, analysis is underway.

GIS Office Priority Topics



Broadband Mapping

Aerial Imagery and Elevation Data Acquisition

CT Geodata Portal

Topics List

Statewide Addressing and Geocoding

Parcel Data Collection and Standardization

Parcel Drafting Standards

CT GIS Strategic Plan



Aerial Imagery Data Acquisition

Two imagery and LiDAR captures in Spring 2023 and Spring 2026.

Dewberry selected as the vendor, aerial acquisition complete, processing now beginning.

3" 4-band imagery

QL1 LiDAR data (20ppsm coastal, 15ppsm inland)

DEM

Products

captures.

purchased for both

Contours

Building Footprints

3D Terrain and (LoD2) Building Models

CT Geodata Portal About Data Library CT ECO (

T ECO CT Open Data

DEEP DOT

CT Geodata Portal

Search or browse public geospatial data provided for the State of Connecticut

New & Noteworthy | CT at a Glance | Data Categories | Highlighted Partners

ArcGIS Hub based GIS Clearinghouse.

The GDP will share partner agency data to make it more available.

Geospatial Data Portal

The launch edition of the site is live now!

geodata.ct.gov

Reviewing other states' clearinghouses and synthesizing results as part of a recommendations document. Creating a guidebook for GIS professionals to encourage a standardized approach to parcel boundary digitization and presentation.

Parcel Drafting Standards

The initial draft is done, the editing and revision process is ongoing.

Working group meeting on July 31 to finalize changes.

Statewide Addressing and Geocoding Improving statewide addressing datasets to increase their utility by implementing new schema.

Increase of unique locations from 1M to 1.4M through the use of broadband, utility, and other data sources.

Automated verification process utilizing existing state agency (DRS, DMV, SOTS, etc.) data sets under development.

Collaborating with DESPP and DOT to ensure maintenance workflow is established.

Broadband Mapping

- Three rounds of ISP submissions completed
 - Data as of 12/31/22 being processed
- FCC Fabric Challenges completed for all unserved and underserved areas
- No update has been made to the published maps due to inherent conflicts between CostQuest location-IDbased submissions and other sources.
- DEEP has been provided with all data required to manage the ConneCTed Communities (ARPA) program and there are no outstanding requests for data or applications from partner agencies.

Availability by Block (Unserved Locations)

Percent of Locations Unserved by Block

Less than 2.5% of all Locations are unserved (25/3)

Between 2.5% and 5% of all Locations are unserved (25/3)

Between 5% and 10% of all Locations are unserved (25/3)

Between 10% and 25% of all Locations are unserved (25/3)

Between 25% and 50% of all Locations are unserved (25/3)

More than 50% of all Locations are unserved (25/3)



CT Broadband Availability Map

(Unserved Locations)

Parcel Data Collection

- 2022 Parcel and CAMA collection
 - Parcels from all towns, roughly 73% compliance with CAMA standard, but...
 - Over ¼ of CAMA submissions did not have a working CAMA link without manipulation

• 2023 Parcel and CAMA collection

- Implemented Version 6 of the CAMA schema
- Still picking up stragglers from the May 1 submission date (Town to COG)
- Preliminary analysis of parcel data indicates an increased match rate, further verification is required.
- First GIS Office report on compliance to be published in July/August

Data Collection Application/ Platform

- Identified areas of exploration:
 - Create a simple, no-install interface that is as easy to operate as a webmail client to...
 - Create a scalable workflow for parcel and CAMA data that can be utilized for address collection and other processes as GISO expands its role.
 - Improve the ability for the state to automate geoprocessing and aggregation of CAMA and parcel data.
 - Reduce the burden on COGs to collect individual town files and metadata

Application Structure Concept

1) Towns log in to upload

2) Web application:

- 1) Collects basic metadata from towns
- 2) Verifies the presence of a linking field with 90% or greater match
- 3) Verifies the presence of minimal viable product fields*
- 4) Checks for correct naming conventions
- 5) Produces a report on compliance with schema and the match rate
- COG representatives would be notified of upload(s) (perhaps weekly) and could access content
- 4) Data would be uploaded to GISO server, and a local process can then be used to clean and prepare for upload to AGOL



* To be determined through discussions, but will be significantly less than the current 139 fields

Geospatial Data Improvement

How can the GIS Office help CIGs and municipalities improve local GIS data?

Challenges with local GIS data quality:

Digitization quality.

Lacking metadata and attribution.

Valid link-fields for parcels.

Regularity of updates.

Anything else?

Questions and Discussion

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