CT GIS Advisory Council Meeting

April 17, 2025

Data & Policy Analytics

CONNECTICUT
Policy and Management

Agenda

- Introductions/Attendance
- Introductory Remarks
- Council Administration
- GISO Priority Topics and Working Group updates:
  - Broadband Mapping
  - Parcel and CAMA Improvement Grants
  - Parcel and CAMA Data Collection
  - Geodata Portal Publishing Guidelines Draft
  - Imagery and LiDAR Data Update
  - Lessons learned from State Interagency-users group meeting
- Annual Strategic Plan Update
  - GIS Office Priorities Discussion
- Public Comment
- Closing Remarks
- Adjourn

Introductions and Attendance

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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 Guszkowski
CCM	Tracy DeGrazia
UConn	Emily Wilson
PURA	Peter Sampiere
GA	Meghan McGaffin
GA	Vacant

Introductory Remarks

Council Administration

GISO Priority Topics and Working Group Updates

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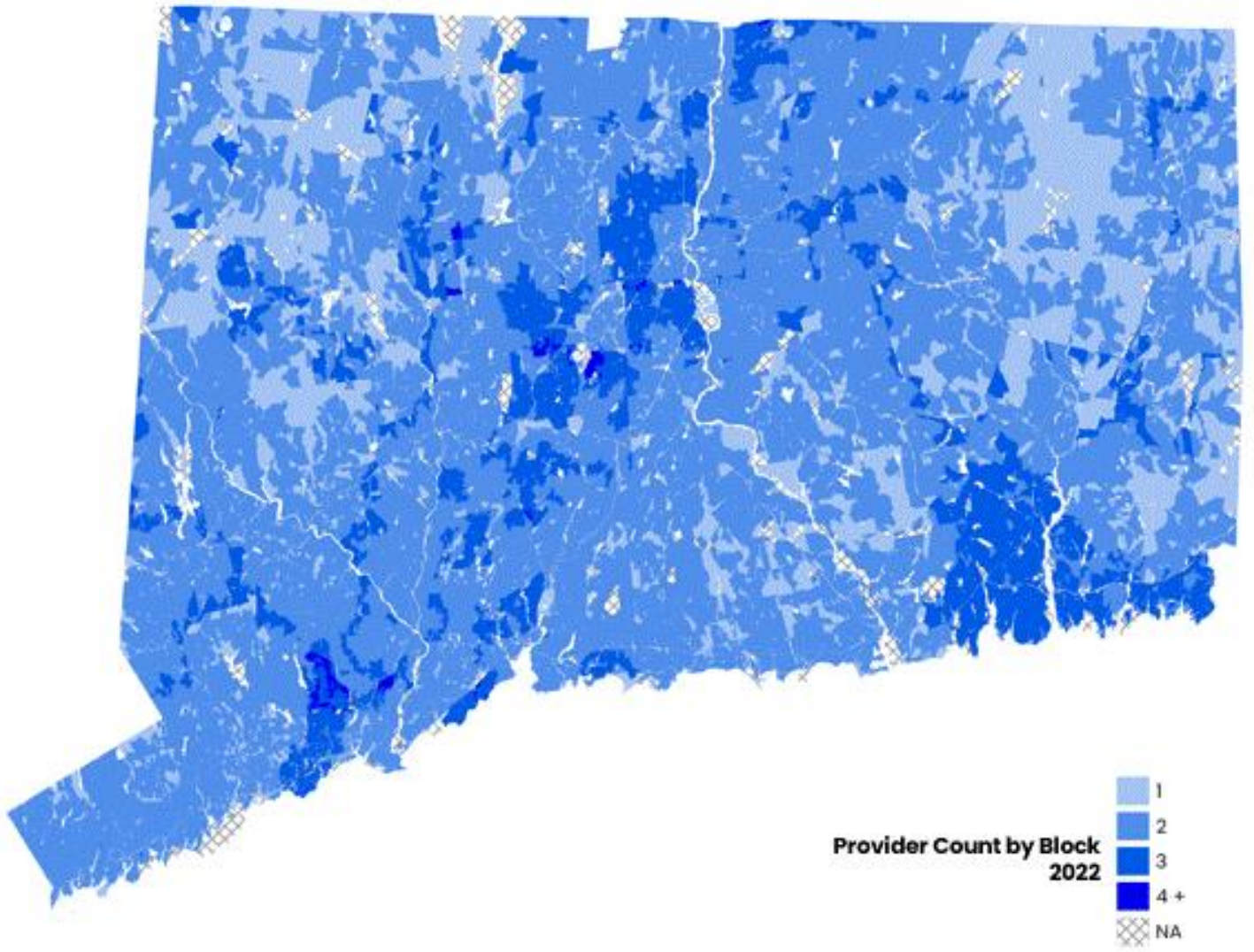
Broadband Mapping

https://broadbandmaps.ct.gov/



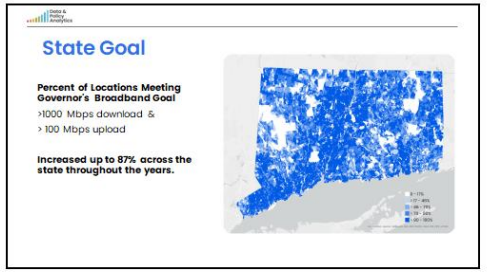
Change of No. of Internet Service Providers per Census Block (2022 vs 2024)

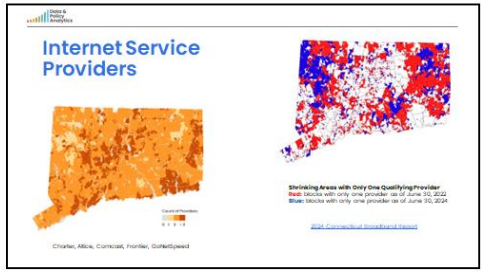
Broadband Mapping

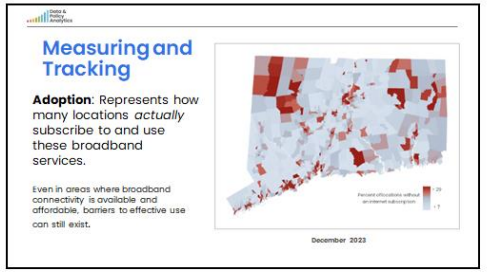
In progress:

- CT Broadband Data Collection (data as of December 31, 2024).
  - Conducted meetings with ISPs to request data on availability and adoption with data aligning Fabric Version 6.
  - No changes to schema.
- Working on several updates to Broadband Hub.
  - Visit our hub and let us know your suggestions!

Intro to Broadband Data in CT
Webinar recording available:
https://clear.uconn.edu/webinars/2025-webinar-library/







Availability: presence of broadband internet service that meets a minimum standard of speed and quality at a specific location
Adoption: the extent to which households or individuals subscribe to and use broadband internet services that are available to them.
Fabric: Broadband Serviceable Location Fabric (Fabric) is a dataset developed by CostQuest of all locations where fixed broadband internet access service is or could be installed.
FCC: Federal Communications Commission
ISPs: Internet Service Providers

Parcel and CAMA Improvement Grants

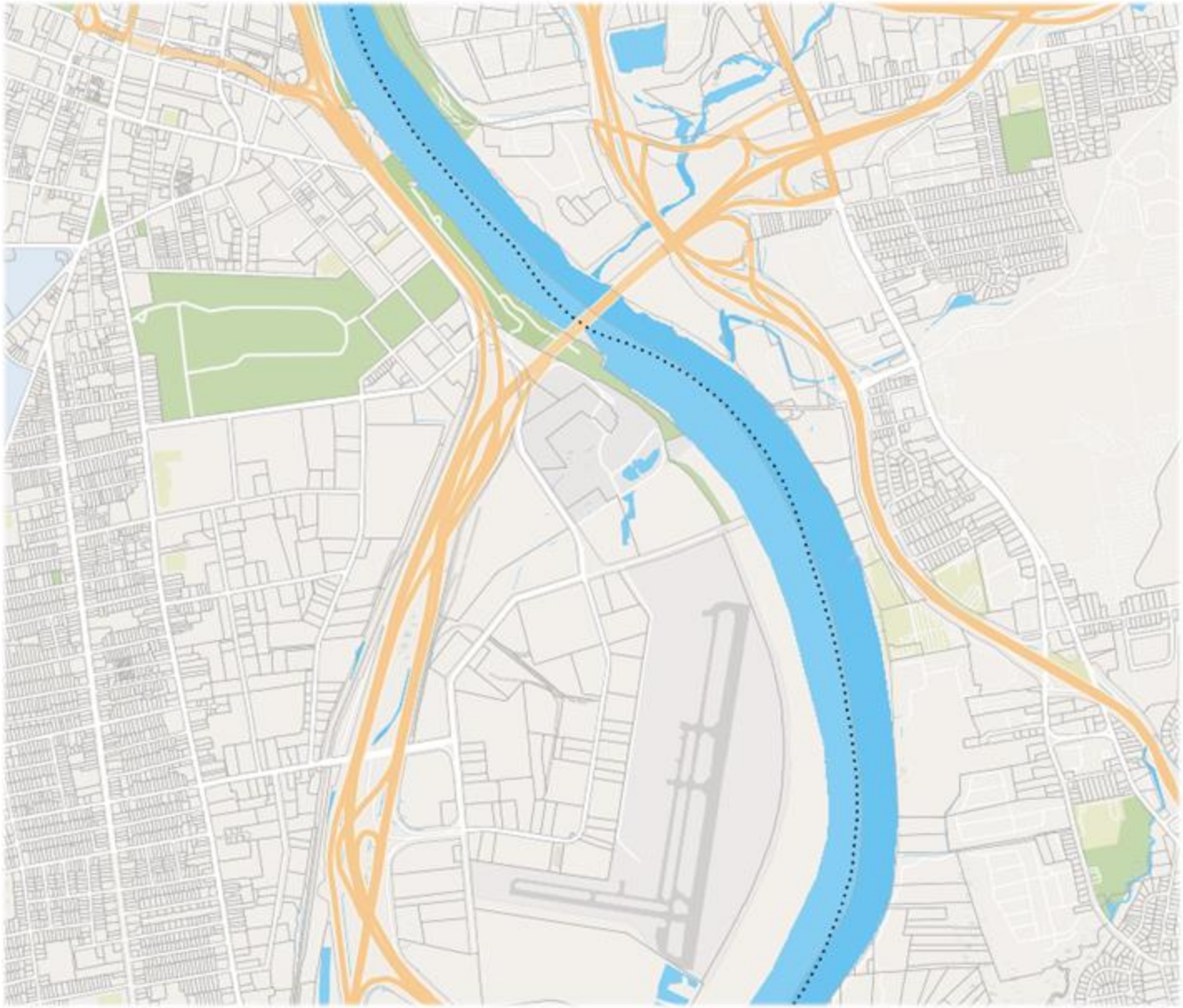
Funding to the Council of Governments to support the improvement of parcel & CAMA data in the following areas:

- Recency
- Match Rates
- Data Completeness
- Geometry

Preliminary workplans have been submitted by all COGs.

Next steps:
COGs will be coordinating with municipalities and vendors to move forward with implementation activities based on their approved plans.

Parcel and CAMA Data Updates



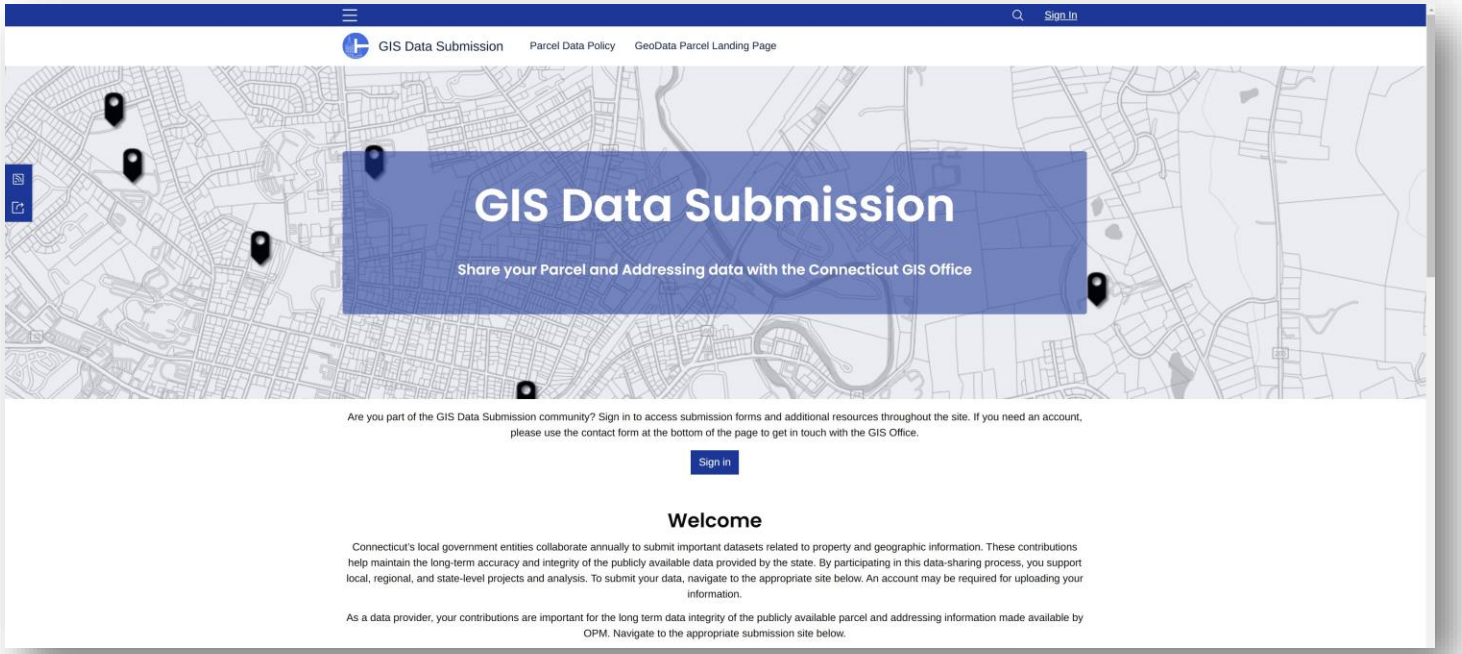
https://geodata.ct.gov/pages/parcels

2025 Collection Updates

- This year's focus is on Parcel Type Field.
- The Updated domain is available in the FGDB on the Parcel and CAMA Data Policy site.

Parcel Type
Standard Parcels
Right of way (ROW)
Water
Condo Main
Condo Unit
Flag

New CAMA and Parcel Submission site



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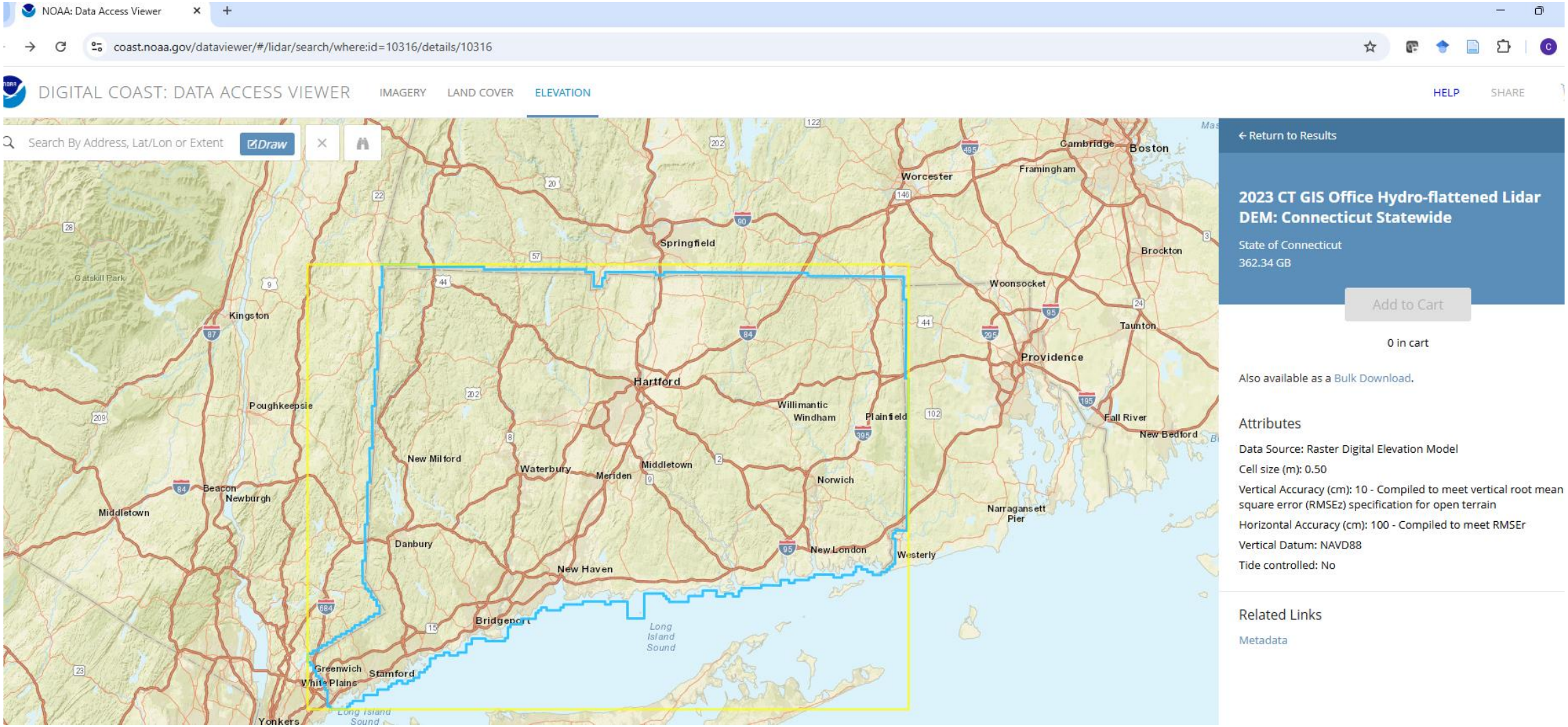
Imagery and Lidar Updates

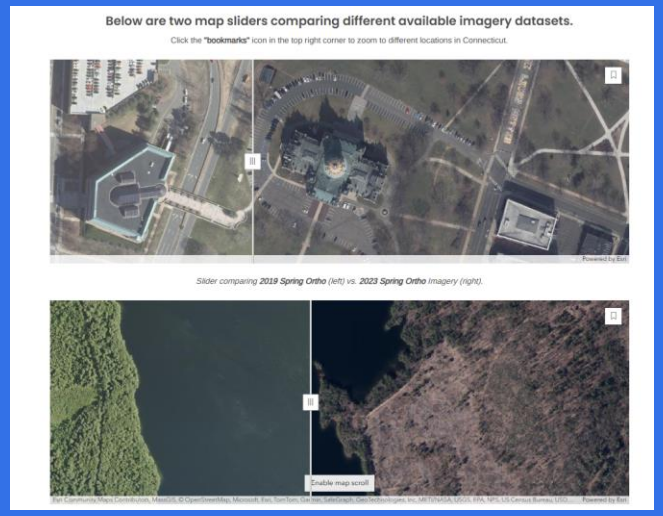
- ❑ All data received
- ❑ Derived IC data collection finishing legal review
- ❑ Buildings
  - ❑ 2d (beta), second review with IC data creation
  - ❑ 3d building available on CT Eco download portal, services needed
- ❑ Other derivative products
  - ❑ Vegetation data created for CT
  - ❑ Need to create web service
- ❑ Contours
  - ❑ Working on 1’ service, 5’ (beta) available

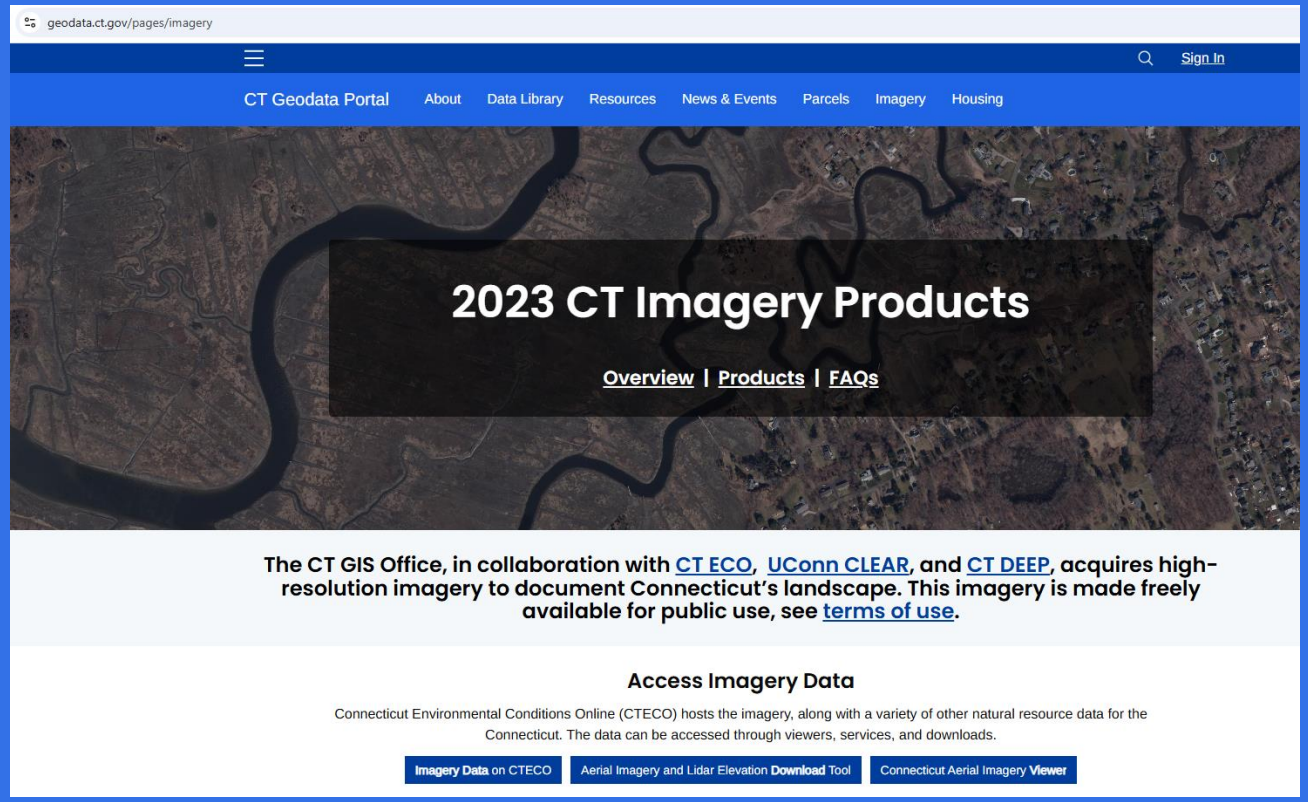
Distribution of Data

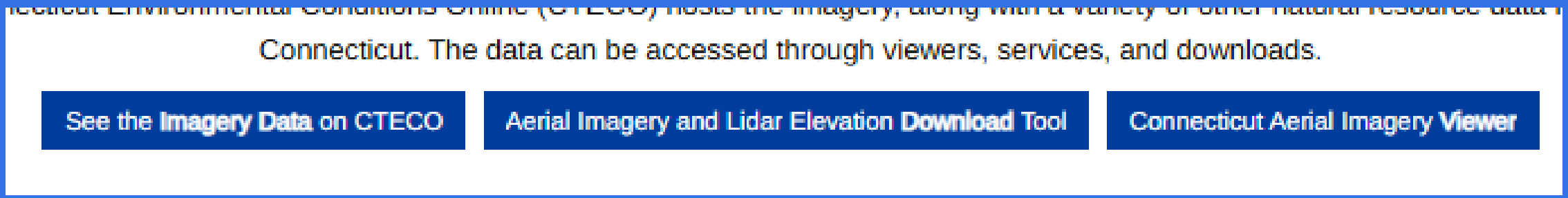


Imagery Hub

Now available







Discussion Topics

Strategic Plan (CGS 4d-92)

Sec. 4d-92. Geographic Information Systems Advisory Council (June Sp. Sess. P.A. 21-2, S. 79.)

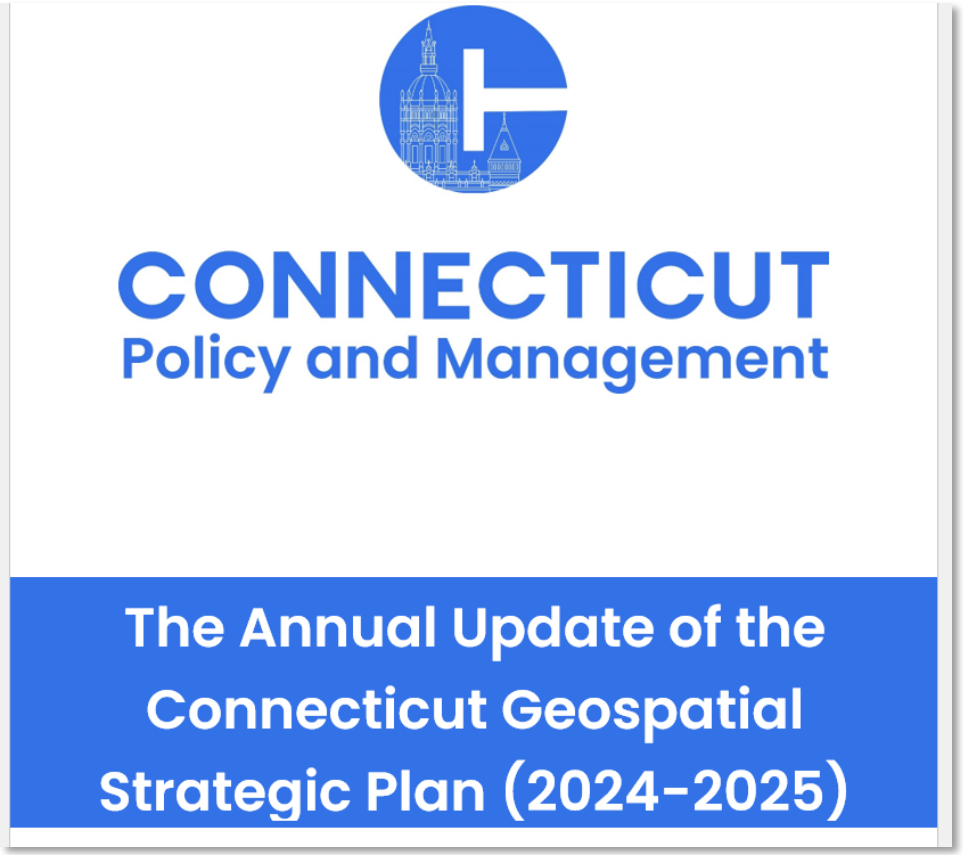
Connecticut General Statutes Sec. 4d-92 created the Geographic Information Systems Advisory Council to consult with the Geographic Information Officer (GIO) on matters relating to GIS data. The GIS Advisory Council is tasked with:

- Developing priorities for GIS and developing an annual five-year plan for those priorities and
- Making recommendations to the GIO on GIS priorities and planning.

Year	Cycle
2024	1st five-year Strategic Plan
2025	Annual Update
2026	Annual Update
2027	Annual Update
2028	Annual Update
2029	New Strategic Plan

CT Geospatial Strategic Plan (2023-2028)

Annual Update of the CT Geospatial Strategic Plan



- Focus
  - Annual achievements
  - Evaluation of progress for Objectives and Activities
  - Operational goals
- Draft finished w/ internal review

Contents of Annual Update Document

1. Vision and Mission Statement (unchanged)
2. Five Strategic Goals (unchanged)
3. Executive Summary
4. Background and Maturity of GISO
5. Progress and Achievement reporting
6. Data Collection and Stakeholder Outreach
7. Risks
8. **Annual Goals and Under-addressed Objectives**
9. Reference and Appendices

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Vision and Mission Statements (Unchanged)

VISION AND MISSION STATEMENT

The Vision and Mission Statement remain unchanged for this Annual Update. The **Vision Statement** describes the aspirational goals and desired future state of the GISO:

> *"The CT GIS Office will be the leader in data collection, analysis, and dissemination for the Connecticut geospatial community. We will serve as a center for collaboration, innovation, and excellence in GIS and will improve the quality and quantity of geospatial data to enable better decision-making."*

The **Mission Statement** describes the operational values of the organization and how the GISO plans to use them to achieve its established vision.

> *"The mission of the CT GIS Office is to effectively coordinate and promote the development and sharing of geospatial information for Connecticut stakeholders. We support the geospatial community by facilitating capacity-building, providing expertise, and establishing policies for the collection, management, and distribution of geospatial information."*

Strategic Goals (Unchanged)

Goal 1: *Use effective governance, policies, and standards to manage geospatial data.*

Goal 2: *Implement a sustainable funding model for imagery acquisition, GIS data, and geospatial technologies.*

Goal 3: *Increase access to data, spatial analysis, web services, and visualization capabilities for local and regional governments, community organizations, the private sector, and other stakeholders.*

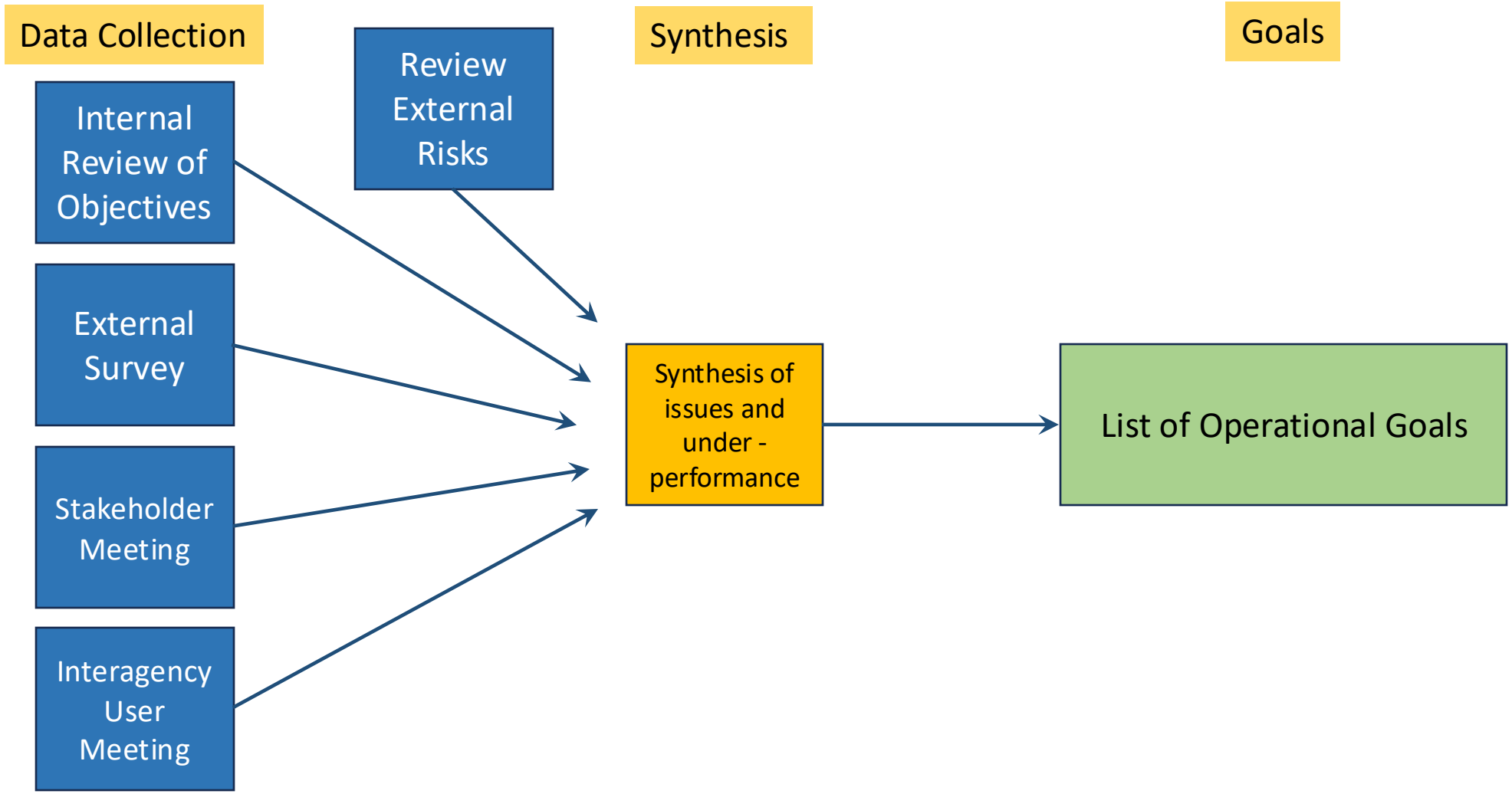
Goal 4: *Provide direct analytic support and enhance capacity building for State Agencies.*

Goal 5: *Broaden communication and engagement across different levels of government and other organizations.*

Annual Achievements and Progress

- 2024 Update of CT Parcel and CAMA Data, Intake Portal, and Parcel Improvement Grant program
- Lidar, Imagery, and Buildings data delivery, QA/QC, services, Imagery hub site
- Data download site (CT ECO)
- Regular delivery of GIS Newsletter and improved communication
- Infrastructure improvements (hardware and software)
  - Storage, servers, RS software, more AGOL storage
- CT webinars and Interagency GIS User Group Trainings
- High-resolution vegetation data set
- SAG Award (ESRI)
- Outreach and networking with users and stakeholders

Progress Evaluation, Data Collection, and Goal Setting for Annual Update



Stakeholder Outreach and Data Collection

Goal: Identify any critical changes in user needs or GIS community issues

- External survey
  - 13-question survey with open-ended questions (n=37)
  - Closed in March
- External Stakeholder Meeting
  - March 20th, 2025 (n=18)
- Interagency GIS User Group Training Survey (n=52)
- Internal evaluation of progress towards Objectives and Activities

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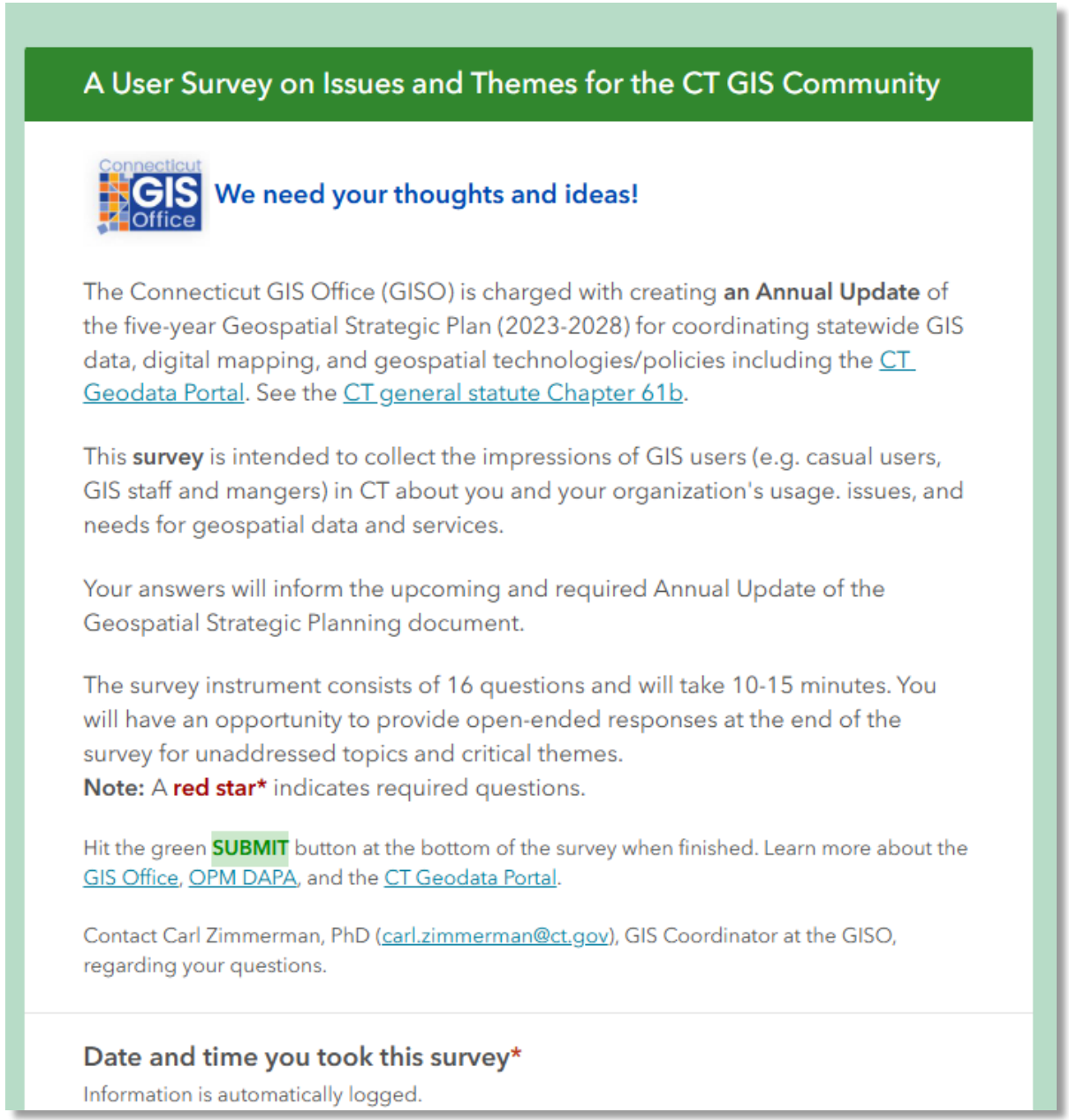
Stakeholder Outreach: External Survey



A User Survey on Issues and Themes for the CT GIS Community

Connecticut GIS Office

We need your thoughts and ideas!

The Connecticut GIS Office (GISO) is charged with creating **an Annual Update** of the five-year Geospatial Strategic Plan (2023-2028) for coordinating statewide GIS data, digital mapping, and geospatial technologies/policies including the CT Geodata Portal. See the CT general statute Chapter 61b.

This **survey** is intended to collect the impressions of GIS users (e.g. casual users, GIS staff and mangers) in CT about you and your organization's usage. issues, and needs for geospatial data and services.

Your answers will inform the upcoming and required Annual Update of the Geospatial Strategic Planning document.

The survey instrument consists of 16 questions and will take 10-15 minutes. You will have an opportunity to provide open-ended responses at the end of the survey for unaddressed topics and critical themes.
Note: A **red star*** indicates required questions.

Hit the green **SUBMIT** button at the bottom of the survey when finished. Learn more about the GIS Office, OPM DAPA, and the CT Geodata Portal.

Contact Carl Zimmerman, PhD (carl.zimmerman@ct.gov), GIS Coordinator at the GISO, regarding your questions.

Date and time you took this survey*

Information is automatically logged.

Annual Update External Survey (closed 03/13/25)

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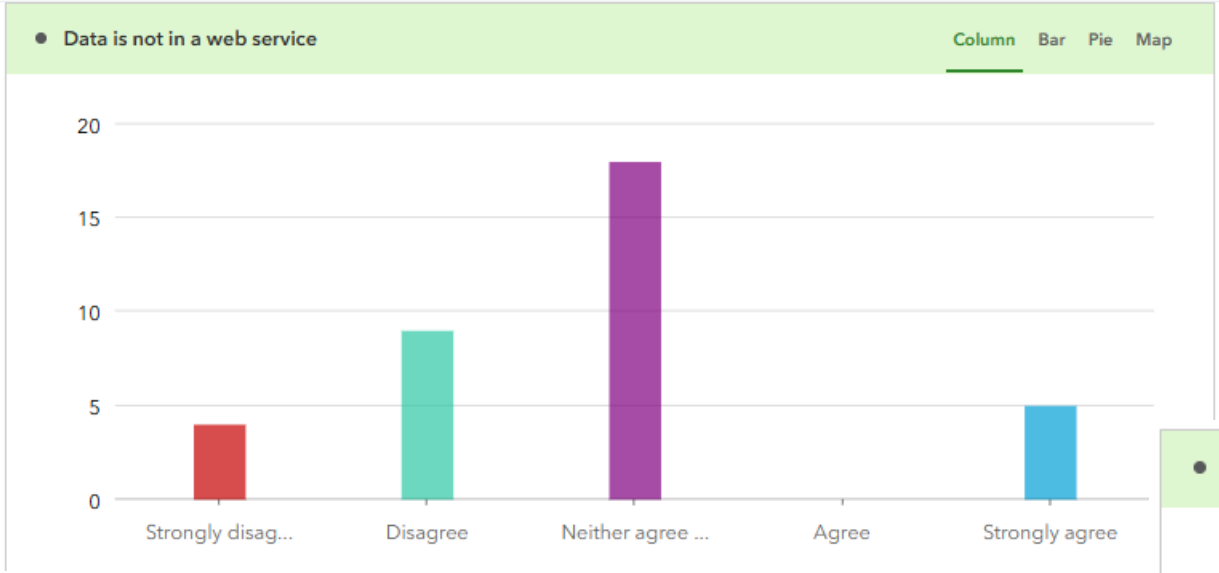
Example Question

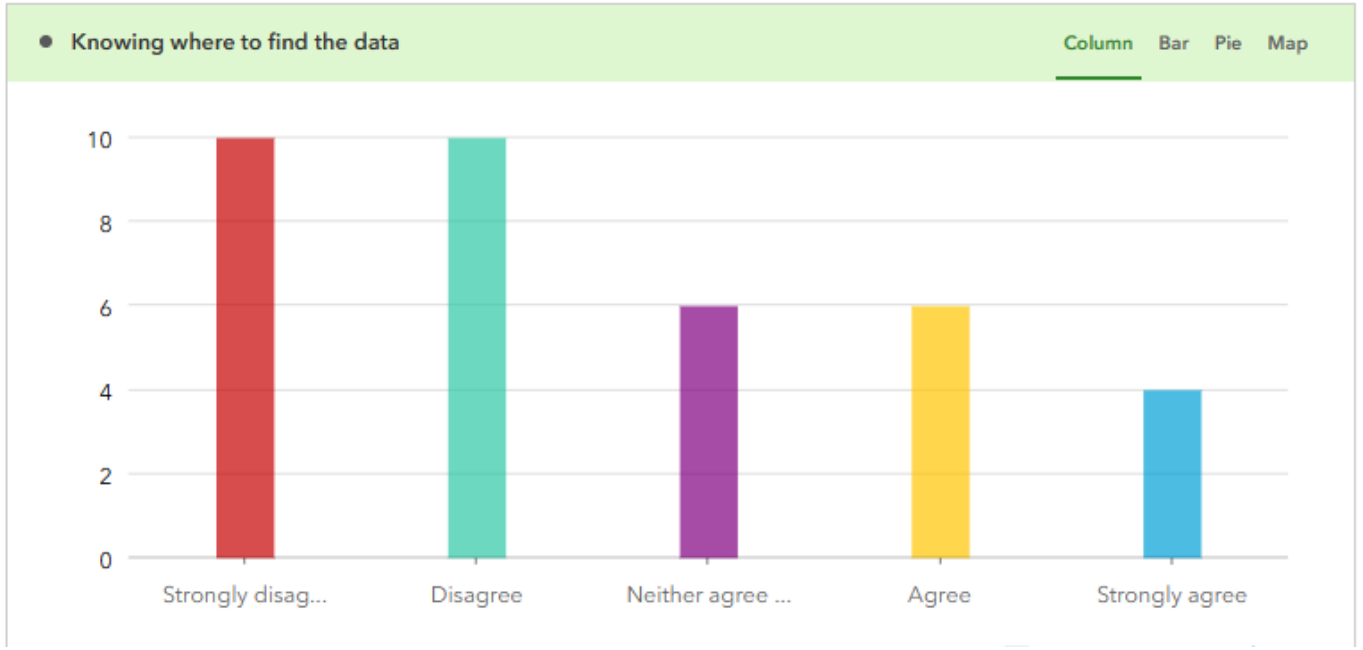
For the GIS data sets in this question, evaluate the importance of having an authoritative GIS web service for you and your organization.

Note: Creating geospatial web services and data **requires a significant financial and organizational investment** in maintenance, coordination, and acquisition by the State of CT.
Select one answer in each row.

	Very unimporant	Unimportant	Neither important or unimportant	Somewhat important	Very important
State-wide Cadastral data (e.g. parcel geometry)*	○	○	○	○	○
State-wide CAMA data (e.g. parcel assessment)*	○	○	○	○	○
Building footprints*	○	○	○	○	○
Addresses*	○	○	○	○	○
Other planimetrics (e.g. sidewalks and driveways)*	○	○	○	○	○
Hydrography*	○	○	○	○	○
Governmental units (e.g. town boundaries)*	○	○	○	○	○
Ortho-imagery (leaf-off)*	○	○	○	○	○
Elevation data (e.g. LiDAR, DEM, contours)*	○	○	○	○	○
Transportation data sets*	○	○	○	○	○

Example response: Barriers





Stakeholder Outreach: External Stakeholder Meeting

Reminder: GIS Strategic Planning Stakeholder Event

ZC Zimmerman, Carl
To CTGIS-L@listserv.uconn.edu

Reply

*Join the CT GIS Office in a **GIS Strategic Planning Stakeholder and User Event***
This is an in-person event, only.

When: **Thursday, March 20, 2025 @ 9:45 to 11:30am +/-**
Where: The Annex at UCONN Middlesex County Extension Center (map below)
1066 Saybrook RD., PO Box 70
Haddam, CT 06438

Event Summary:
Join the State of Connecticut GIS Office to discuss your needs, opinions, and concerns regarding the status of GIS data and geospatial tec event will include time to network, open-ended discussions, and activities. We will discuss data sets, current and future goals for GIS statewide GIS system. Last year, we completed the first ever CT Geospatial Strategic Planning Document for the 2023–2028 timeframe. **Update** of the strategic planning for 2025-2026 and get your input on managing the CT GIS system.

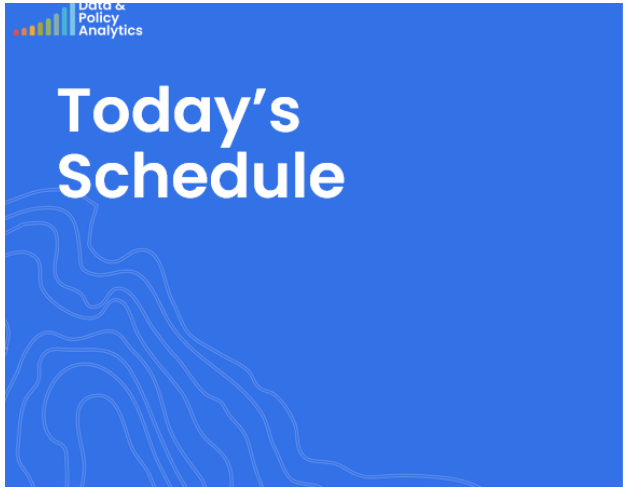
Agenda:
9:45-10:00: Coffee and Networking (*Meeting starts promptly at 10am*)
10:00-10:25: GIS Office discusses new data, capabilities, and infrastructure, and review of stakeholder survey.
10:30-10:55: Group activities
11:00-11:20: Focused discussions on specific issues: Data, support, training, distribution, funding.
11:10-11:30 +/-: Open questions and discussion
11:30-11:40: Closing and clean-up

Questions ???
Contact: Carl Zimmerman (carl.zimmerman@ct.gov) or Alfredo Herrera (alfredo.herrera@ct.gov)

Location
Parking in back of building, directions: https://maps.app.goo.gl/KRkqWQ1tjJhvRVZJ7

Example: Focused group & policy discussion #1

- How do we best encourage collaboration between different domains, different agencies, different levels of government?
- What are policies, events, or practices that would continue to improve rapport and communication?



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Time	Item
9:45-10	Coffee and Networking
10:00-10:25	GISO presentation
10:30-10:55	Group activities
11:00-11:20	**Focused discussion (coming year)**
11:20-11:40+/-	Open discussion and questions
	Closing and clean-up

Stakeholder Outreach: Interagency GIS Users' Meeting

Hi all:
Please join the CT GIS Office for the kick-off **Interagency** **GIS group** meeting **this coming Wed, the 19th of March at 1:00 pm**. This will b

We will (re)introduce the team at the GIS Office, discuss the plans for this group, and then have some time to learn more about you and
to learn about.

After this introductory meeting, we will periodically schedule trainings, demos, discussions, and "office hours."

Reminder that all are welcome to listen, learn, and discuss GIS, geospatial solutions, and general data / analytic issues. If you know som
group list, please let us know or forward invite.

Kind regards,
Carl Zimmerman, PhD
GIS Coordinator
CT GIS Office, OPM DAPA

CZ Zimmerman, Carl 3/18 10:57 AM

GIS User and Needs Survey for tomorrows meeting

Hi,
Please let us know about your needs and interest regarding GIS tools, data, and software **by filling out this short survey**.
See you tomorrow for the Interagency GIS Users meeting.

Use this link: https://forms.office.com/g/6SyDnnE8gP

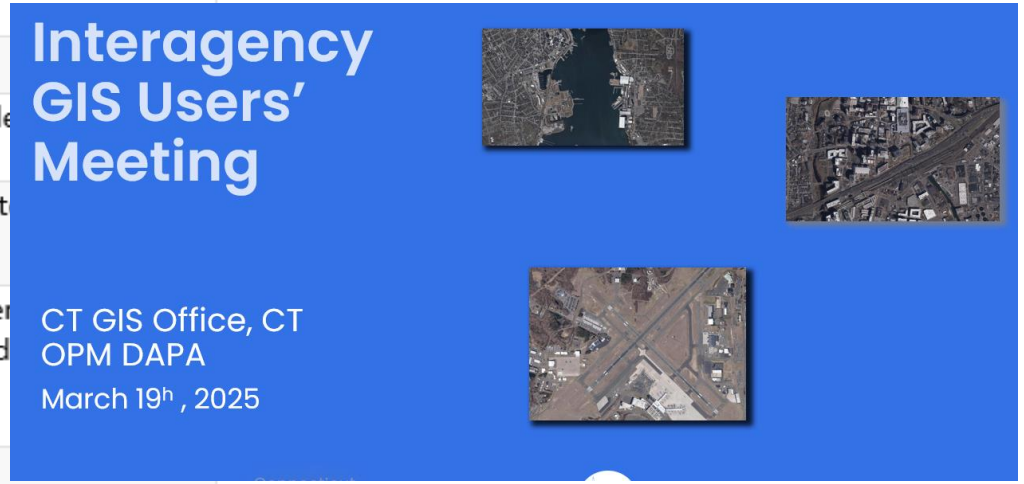
Thanks,
Carl Zimmerman, PhD
GIS Office, Dapa

A post on Microsoft Forms provided by: forms.office.com

forms.office.com

Appendix 5: State Agency Use Cases

1	Visualize
2	Case by case
3	I'd love to tell more DEEP stories using Storymap
4	Display data to the public with interactive capabilities
5	Typically mapping chronic disease statistics by town or region or mapping resources available chronic diseases at some local level.
6	Identifying contaminated sites in the vicinity of child care centers. Mapping public and privat across the state.
7	Visualizing overlays of natural resources, topography/LiDAR, and political boundaries (proper boundaries/town boundaries) helps me determine resource impacts and potential stakehold permitting decisions.
8	State/Local/Federal voting districts for use at Secretary of State
9	Site and resource conditions for wetlands and floodplain regulatory management
10	Analysis using difficult data sources, such as unstructured data. Or combining multiple software systems to improve analysis, e.g. geolocation calc data in R fed into ArcGIS Pro.
11	NA



Examples of use case needs for State Agency Users

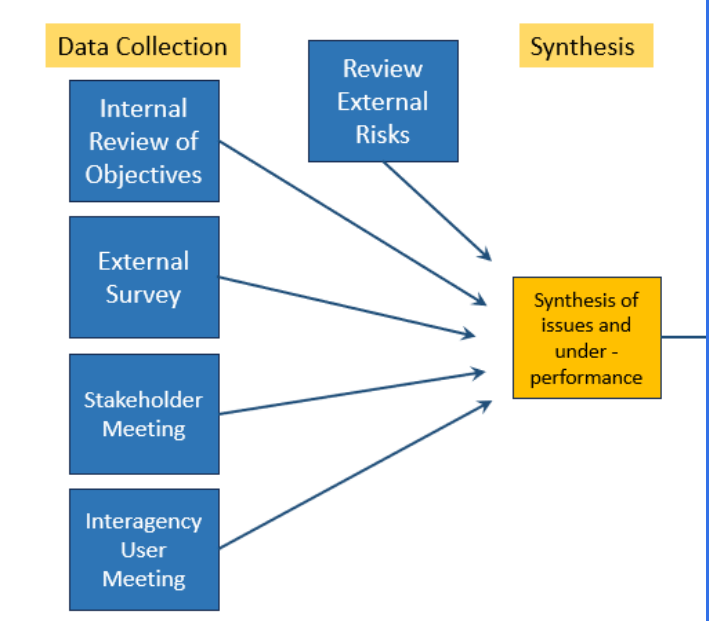
Internal Staff Progress Review: Objectives and Activities

Goal 1	Use effective governance, policies, and standards to manage geospatial data		Keep Activity	Finished	Annual Completion % Estimate	Progress Narative	S c
Objectives	**Activities**	**Output / Date**					
Objective 1.1	A. Create a framework for developing policies and standards for all SDI data sets and provide supplemental technical documentation.	Release standards and guidance for priority data sets (2026)	Y	N	20%	Finished CAMA schema update	
Implement and strengthen data standards and governance to facilitate reliable access to authoritative versions of the Spatial Data Infrastructure (SDI) core data		Provide one-time grant support for towns and COGs to meet parcel standards. (2025)	Y	N	85%	Finished grant creation and support	
	B. Publish standardized parcel geometry and assessment data for all 169 towns of CT	Complete parcel geometry and assessment standards (2025)	Y	N	75%	Parcel geometry standard is partial finished. Assessment standard is not.	
		Annual update and evaluation of parcel data set (2025)	Y	Y	100%	Finished	
	C. Hold GIS Stakeholder Meetings, bi-annually.	Create regular forums with stakeholders to discuss issues related to governance, interoperability, technical issues, and standards	Y	N	30	underway. Communication outreach planning document created.	
Objective 1.2	A. Develop quality assurance processes for core datasets and build or acquire capacity to conduct automated checks on acquired data sets	Plan for tool (2025). Statewide Data Upload and Aggregation Tool (2026)	Y	N	50	Working with ESRI on a plan	
Develop data management and	B. Provide staff with analytic tools and access to	Have GIS Office staff attend a minimum of 1 conference or technical				Staff is attending ESRI	

Internal Grading of Progress

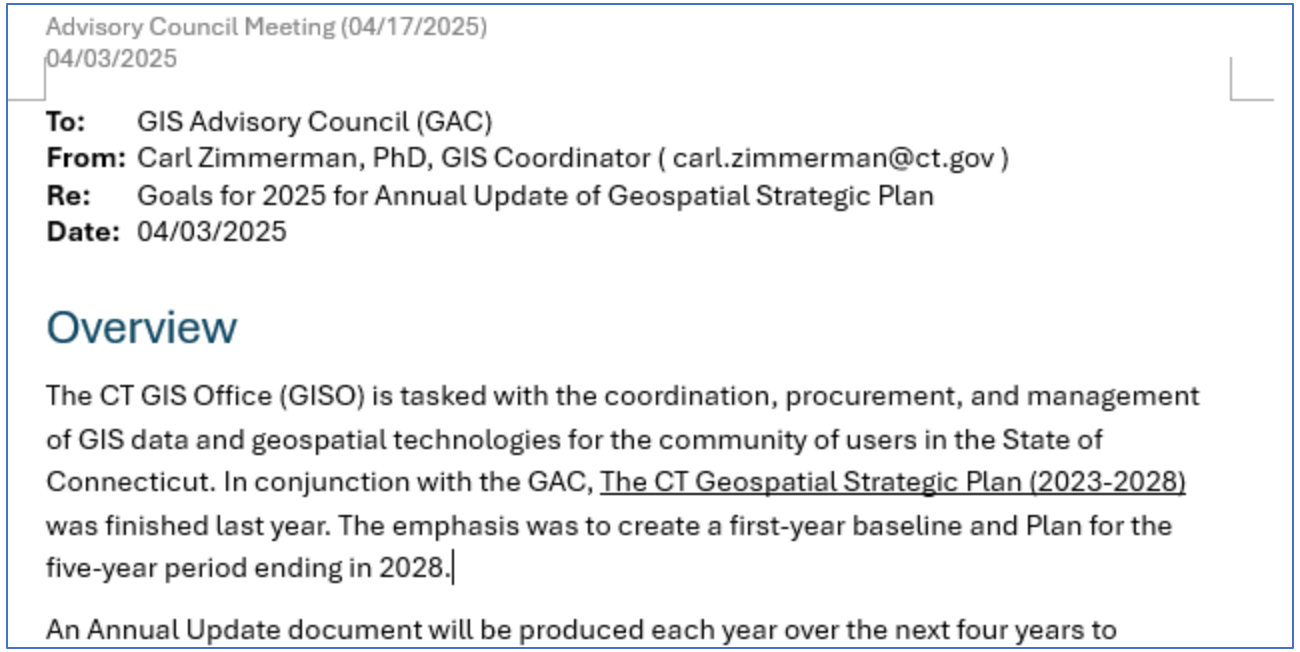
Objectives	Overall Grade	Notes
Obj 1: Use effective governance, policies, and standards to manage geospatial data…	C	
Obj 2: Implement a sustainable funding model…	B	
Obj 3: Increase access to data, spatial analysis, web services, and visualization capabilities for stakeholders….	B	
Obj 4: Provide direct analytic support and enhance capacity building for State Agencies	C+	
Obj 5: Broaden communication and engagement across government…	A-	
Overall	B-	

Composite Results



- Limited participation and new information
- More visibility for GAC, GISO, and CT Geodata portal
- Most Agency users have access to GIS software but need help in their respective use cases
- Parcel system integration and guidelines are still a concern despite improvements
- Same data sets (parcels, addresses boundaries, imagery) are important, elevation moved up
- GIS users not worried about finding data or data in web services
- Funding environment possible risk
- Users want training on whole ecosystem
- Only minor tweaks to Objectives and Activities
- **Summary:** Solid progress

Memo on Annual Update Document and Proposed Operational Goals



Advisory Council Meeting (04/17/2025)
04/03/2025

To: GIS Advisory Council (GAC)
From: Carl Zimmerman, PhD, GIS Coordinator (carl.zimmerman@ct.gov)
Re: Goals for 2025 for Annual Update of Geospatial Strategic Plan
Date: 04/03/2025

Overview

The CT GIS Office (GISO) is tasked with the coordination, procurement, and management of GIS data and geospatial technologies for the community of users in the State of Connecticut. In conjunction with the GAC, The CT Geospatial Strategic Plan (2023-2028) was finished last year. The emphasis was to create a first-year baseline and Plan for the five-year period ending in 2028.

An Annual Update document will be produced each year over the next four years to

- Sent last week for GAC review
- Operational goals included for discussion and review
- **From internal review and five least addressed Activities**

GAPS and Annual Goals

Issues / Gaps	Proposed Goals	Source
Significant staff time spent on annual improvements to Parcel and CAMA data. Increase interactions w/ Assessors.	Continue to increase and **improve automation of parcel and data cleaning using Python coding.** Present at Assessor "University" in June 2025. Finish guidelines.	Staff
Lack of a permanent funding source for imagery, Lidar, and other data acquisition. Uncertain federal and state funding levels over the next few years.	Create a **Return on Investment and funding alternatives White Paper** to understand issues related to the funding of imagery, parcels, and ancillary data sets.	Objectives / Activities and Staff
Limited data usage and data frameworks for emergencies. Uncovered during the Oxford flood and Hawthorne fire.	Complete a set of **framework data sets for emergency management and resiliency** with packages and printing templates.	Staff
Dated water resource information and new 3DHP goals. Unidentified flooding risks outside of major rivers.	Kick off the water resources data working group and create an outline of a **plan for CT Water Resources data improvements**.	Staff
Limited interaction with smaller towns, and non-profits	**Meet with all eight COGs (in-person)** and their related communities.	Staff
Demand for geocoding from State Agencies and the high cost of private-sector geocoding	Update master address data sets, establish workflows, and **provide an authoritative geocoder (2026).** Establish maintenance/update processes.	Objectives / Activities and Staff

GAPS and Annual Goals

Issues / Gaps	Proposed Goals	Source
Enable access to templates and automation for standard geospatial workflows, especially CT Geodata Portal	Provide access to Python and R automation scripting **for new GitHub site** and access to templates.	Objectives / Activities and Staff
Collaborate with CT institutions of higher education, including community colleges, to utilize their skill sets to solve community problems…	**Continue to enhance and develop relationships with higher education centers …** professional development opportunities, share data, and collaborate on data production. Participate in at least one academic annual event.	Objectives / Activities
Conform to principles laid out in the State Data Plan	Create **an intake process** with a digital form.	Objectives / Activities
Support increased access to GIS desktop software and open-source scientific computing tools	Provide statewide **ELA plan and/or access to open-source GIS tools. Provide regular training sessions** such as GIS-themed webinars (interagency and webinars)	Objectives / Activities
Improve data access and quality	**Complete acquisition of impervious data sets and distribute**, and create a hub site for elevation data. Provide training for 3D GIS.	Objectives / Activities
Improve access to foundational data sets	**Create services for IC data sets.** Create a 3D building service and determine use cases to best utilize it. Theme groups data access and **similar distribution packages**.	Objectives / Activities and staff

GAC Discussion on Annual Update Memo: Questions or Comments?

Advisory Council Meeting (04/17/2025)
04/03/2025

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Date: 04/03/2025

Overview

The CT GIS Office (GISO) is tasked with the coordination, procurement, and management of GIS data and geospatial technologies for the community of users in the State of Connecticut. In conjunction with the GAC, The CT Geospatial Strategic Plan (2023-2028) was finished last year. The emphasis was to create a first-year baseline and Plan for the five-year period ending in 2028.

An Annual Update document will be produced each year over the next four years to supplement the primary Strategic Plan. The emphasis for these updates is on identification of current gaps, operational goals, and programmatic successes. For the current year, this planning document is called the **Annual Update of the Geospatial Strategic Plan (2024-2025).** A draft is nearly complete.

The Annual Update Planning document is focused on a progress review for the Objectives and Activities and updating operational goals for the coming year. To support this effort, we had an internal staff review of our progress; information from stakeholders was collected through an external stakeholder web survey (closed the second week of March); and the in-person stakeholder event (March 20th, 2025) was completed.

For this Annual Update, the core Mission, Values, and Objectives remain the same. A small number of Activities were modified to make them more relevant. At the upcoming GAC meeting (04/17/25), the internal evaluation, operational progress, and survey results will be

Geodata Portal Publishing Guidelines Draft

Purpose of the document: To help GIS data publishers follow a clear, consistent process when contributing to the CT Geodata Portal.

Publishing Guidelines

Discussion Questions

1. Where could we provide more clarity or detail?
2. Are there specific use cases or data types that the guidelines don’t address well?
3. What feedback or suggestions do you have to make this document more helpful for data publishers?
4. How could the guidelines better support data quality, consistency, or long-term maintenance?

Public Comment