



STATE OF CONNECTICUT

OFFICE OF POLICY AND MANAGEMENT



Jeffrey R. Beckham
Secretary

Annual Report on Geospatial Information Systems Coordination

Submitted to the General Assembly in Accordance with CGS Sec. 4d-90

Prepared by the Office of Policy and Management
January 1, 2023

Introduction

The Office of Policy and Management (OPM) functions as the Governor's staff agency and plays a central role in state government, providing the information and analysis used to formulate public policy for the State and assisting State agencies and municipalities in implementing policy decisions on the Governor's behalf.

Pursuant to CGS [Sec. 4d-90](#), OPM is responsible for statewide GIS coordination, including setting policies for the collection, management, and distribution of GIS data, setting standards for GIS data acquisition, management, and reporting, managing the creation and use of GIS applications within state agencies, and consulting with GIS stakeholders from municipalities, regional councils of governments (COGs), state agencies, and others. These responsibilities were assigned to OPM in 2013 when [Public Act 13-299](#) eliminated the former GIS Council.

A major milestone for GIS coordination was reached in 2022 with launch of the GIS Office and hiring a state Geographic Information Officer (GIO). Pursuant to Sec. 78 of Public Act 21-2, OPM hired the State's first GIO in the second half of 2021. After an extensive search process, Alfredo Herrera was selected as the GIO from a pool of qualified applicants and began work on December 31, 2021. The GIO and GIS Office are situated within the [Data and Policy Analytics Unit](#) within the Office of the Secretary, reporting directly to the Chief Data Officer, and coordinate GIS activities with the [Intergovernmental Policy and Planning Division](#) (IGPP).

As required by CGS. Sec. 4d-90, OPM reports annually to the Planning and Development Committee on activities performed under such section. This report covers activities performed during the year beginning January 1, 2022, and ending December 31, 2022.

Special Activities Summary:

- Developed a GIS data clearinghouse ([CT Geodata Portal](#)) to better serve the CT geospatial community and launched it on Nov. 18, 2022, at the [CT GIS Network](#)'s GIS Day event at Fairfield University.
- Developed and released a Request for Proposals (RFP) for the next statewide aerial imagery and lidar acquisition. A vendor has been selected and the contract negotiations process has begun. The data acquisition period for this project is currently planned to begin in the spring of 2023, with the RFP planned to fund two series of statewide flights in 2023 and 2026.
- Coordinated with the Department of Transportation (DOT) and the Department of Energy and Environmental Protection (DEEP) on a DOT-led initiative to update the Connecticut Town Boundaries layer and published the updated boundaries on the CT Geodata Portal.
- Continued to develop proposals to use American Rescue Plan Act (ARPA) funds to support statewide GIS data collection programs to support allocation of broadband resources, particularly to unserved and underserved areas. Such programs were included in [Governor Lamont's ARPA plan](#) (pages 26-27) and enacted in SA 21-15.
- Advised and helped the Department of Emergency Services and Public Protection (DESPP) in data use licensing terms for the statewide street centerline file in an effort to make the sharing and use of such data less burdensome to state agencies.
- Completed the following broadband mapping related activities:
 - Successfully requested and received broadband availability and adoption data from service providers per PA 21-159.
 - Supported development and analysis of CCM-led broadband survey with over 2,000 respondents.
 - Launch of the [Connecticut Broadband Mapping Hub](#), with analysis of broadband data, and creation and publication of the state's first broadband availability and adoption maps
 - Presentation of methods and results from broadband mapping to the CT GIS Users Network, NSGIC, and the FCC
 - Cooperation with the FCC to improve the accuracy of federal broadband maps through meetings and fabric and availability challenges
 - Regular meetings with ISPs to improve data collection methods, ensure high levels of accuracy in both state and federal mapping, and promote cooperation toward state goals of universal access to broadband.

Legislative Work and Initiatives

No new GIS legislative work or initiatives were conducted by OPM in 2022.

General Activities Summary:

The following GIS coordination activities were conducted by OPM in 2022:

- Convened the [Geographic Information Systems \(GIS\) Advisory Council](#), established pursuant to Section 79 of Public Act 21-2 of the June 2021 Special Session, on a bimonthly basis. The

Advisory Council created workgroups on the following topics and began work to move these initiatives forward:

- Statewide Aerial Imagery and LiDAR data acquisition
 - GIS Clearinghouse development
 - Parcel Drafting Standards
 - Municipal parcel data and CAMA report (this workgroup was adopted by the GIS Advisory Council in the October meeting)
-
- Participated as a regular member of National States Geographic Information Council (NSGIC) activities, contributing to the NSGIC community through regular communications with GIS leaders from other states and presenting on broadband mapping activities.
 - Attended and presented at quarterly meetings of the [CT GIS Network](#) and functioned as the state government representative on the 17-member [Steering Committee](#).
 - Collected and processed municipal digital parcel files and CAMA files from councils of government (COGs), as required annually by [CGS Sec. 7-100I](#).
 - Implemented automated verification of parcel and CAMA submissions to allow for faster processing and process replication.
 - Collected and processed utility service locations to improve and expand the state's address database from 1.1 million to 1.4 million unique locations and developed a new schema for a next-generation address fabric for Connecticut.
 - Presented as a panelist at the fall conference of the [Northeast Arc Users Group](#) on the creation of the GIS Office and its first year of activities.
 - Presented to the Equity in Data Community of Practice group by invitation of the Connecticut Data Collaborative on the benefits, limitations, and importance of geospatial data (Recording can be seen [here](#)).
 - Coordinated with the University of Connecticut concerning the development of web-based applications and data hosting on [Connecticut Environmental Conditions Online](#) (CT ECO).
 - Coordinated with DEEP and the University of Connecticut in developing maps of Environmental Justice and State Asset Vulnerability, to support actions from the Governor's Council on Climate Change and under Executive Order 21-3.
 - Coordinated with state agencies regarding use of the [State Open Data](#) and [Geodata](#) portals to host or federate authoritative GIS datasets for public access. Developed federation methodologies and procedures to reduce fragmentation and allow access to agency-level GIS portals for DEEP, DOT, and CT ECO through the State Geodata and Open Data portals.

- Responded to myriad requests from state agencies for technical assistance or guidance concerning GIS projects or initiatives.
- Administered meetings of the Interagency GIS Workgroup and worked to increase the membership of this group to better reflect the number of GIS users working in state government. The GIS Office has also begun to create a space for this group to communicate more easily in an effort to encourage discussion, coordination, and a mechanism for seeking help from peers.
- Compiled high-value GIS data inventories from state agencies prepared annually under [CGS Sec. 4-67p](#) and published such inventories in the [CT Data Catalog](#).
- Further refined agency guidance for open data related to the retirement (or archiving) of data, publication of new data and automation of data feeds from agencies, documentation of datasets through the use of clear metadata, and standard enterprise and agency-level agreements for interagency data sharing, pursuant to C.G.S. 4-67p and 4-67z.
- Produced updated data for the update of the [2022 Recommended Disproportionately Impacted Areas](#) produced by the Social Equity Council.
- Produced a mapping application of [Qualified Census Tracts](#) within Connecticut town and school district boundaries to be used to provide context for the dataset on the Open Data Portal.

2021 Reports, Policies, and Standards:

- Supported the writing and publication of the first annual report on broadband availability and adoption to the Governor per PA 21-159.
- Contributed to the writing of the state data plan to include language inclusive of geospatial data and the use thereof.
- Worked with the CAMA working group to create and publish version 5 of the CAMA reporting standard and continued to work to create version 6 of this standard which will be used to collect data from municipalities in 2023.
- Began work to produce a parcel drafting standard for all GIS parcel data submitted to the state to promote uniformity in the way parcel data is digitized throughout the state.
- Helped to amend the state open data publishing and metadata standards to add provisions for the publication of data on both the Open Data Portal and the Geodata Portal.
- Worked within the context of the GIS Advisory Council to develop policies, recommendations, and guidelines on a number of topics listed below. This work is ongoing and will continue.
 - Aerial Imagery Acquisition
 - GIS Clearinghouse data (both the site itself and the data contained therein)

- Address management and maintenance processes
- Parcel and Assessment data

2023 Outlook

With the hiring of a GIO in late 2021 and a Broadband Mapping Coordinator in early 2022, OPM experienced a significant increase in its capacity to coordinate with and support state agencies, municipalities, utilities, and others through centralized services and coordination. The further development of the State GIS Office, led by the GIO, will help Connecticut to be competitive with peers in the northeast and nationally. As the GIS Office supports the State's broadband mapping efforts under [Public Act 21-159](#), An Act Concerning Equitable Access to Broadband, OPM hired David Lukens to fill the role of Broadband Mapping Coordinator who started work on January 28, 2022. Additional staff positions are anticipated to be filled in 2023 including a GIS Coordinator and two (2) GIS Analysts needed to support the work of the GIS Office .

The GIS Advisory Council will continue to convene and advise OPM on GIS priorities and policies. This 14- member council is nearly complete, with only one vacancy assigned to be filled by the ranking member of the Planning and Development Committee.

With these changes, 2023 is anticipated to be another transformative year for GIS in Connecticut. Some of the activities on the horizon include:

- An update to the statewide capacity and needs assessment in support of developing a Geospatial Strategic Plan with a timeline horizon of 5 years aimed at further increasing, streamlining, and broadening the reach of GIS and geospatial technologies in the State of Connecticut.
- The receipt of imagery and elevation data with associated derivative products.
- Further development of the Geodata Portal to include more state agencies.
- Further support and coordination with stakeholders of the geospatial community of all governmental levels, private industry, and the academic community.

However, it is important to note that the improvements will continue as the GIS Office develops according to the GIO's vision for the GIS Office's operation and place within state government and beyond. OPM looks forward to reporting on the progress of the GIS Office in years to come.