STATE CARTOGRAPHER'S OFFICE

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 $September\ 2025$

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Science Capstone 8

Table of Contents

ABOUT THE SCO 2	
Our Staff	
Our Students	
Strategic Planning 3	
EXTERNALLY FUNDED PROJECTS 4-7	
By the Numbers 4	
Statewide Parcel/PLSS Project 4	
St. Louis River Habitat Map 5	
Remarkable Trees App 5	
Distance Analysis 5	
WisconsinView Data Archive 5	
Historic Bordner Maps 6	
Wisconsin State Highway Map 6	
Antimicrobial Resistance 6	
Starkweather Creek	
Coastal Habitat Evaluation Tool 7	
Powerful Teen Leaders Training 7	
Tribal Lands Map Project7	
FEATURED PROJECTS 8-9	
Wisconsin Historic Aerial Image Finder 8	
GeoData@Wisconsin 8	
Pronounce Wisconsin	
UW-Madison Computer	

	Bluff Erosion	8
	Bearing Trees	9
	Survey Control Finder	9
	Wisconsin's Hidden Communities	9
	SCO App Infrastructure	9
	Wisconsin Historic Aerial Imagery Access	9
DU	R ONLINE APPS 10-1	11
	Statewide Parcel Map Viewer	10
	Wisconsin's Hidden Communities 1	10
	WHAIFinder 1	10
	Find LiDAR Data	10
	Pronounce Wisconsin	10
	Aerial Photography Catalog	10
	Survey Control Finder	10
	GeoData @Wisconsin	10
	Public Land Survey System Locator	10
	Wisconsin Bearing Trees 1	11
	Coastal Bordner Survey Explorer 1	11
	Wisconsin Culvert Inventory	11
ИE	EDIA MENTIONS 1	11
	Phantom Finders	11
	Wisconsin Today Interview	11
	Hands-On GIS Training	11
PR	ESENTATIONS 1	12

WORKSHOPS 12
Operation Fresh Start Training 12
Data Carpentry Workshop 12
Powerful Teen Leaders Training 12
EVENTS ORGANIZED13
State Agency GIS Symposium13
UW-Madison Geospatial Summit 13
Public Land Survey System Forum 13
COUNCILS, ASSOCIATIONS AND COMMITTEES 13
CONTACT INFORMATION 14
SCO NEWS ARTICLES 14
SCO HELPDESK STATS 15
SCO JOB BOARD STATS15
SCO FUNDING STATS 15
IMAGE CREDITS 15
FACES OF THE SCO 16



(_{Wisconsin} State Cartographer's Office

About the SCO

Who We Are

The State Cartographer's Office (SCO) is a special program at the University of Wisconsin-Madison housed within the Geography Department.

What We Do

The SCO supports the state's geospatial community and the public through presentations and educational workshops, technical consulting, print and digital publications, web-based catalogs and data services, data development, research, and information about events, jobs and emerging trends.

The SCO's services reach a diverse array of mapping and geospatial data producers and consumers in Wisconsin. This includes helping the public find, understand and use map and geospatial data resources.

We also serve as a liaison | livery. between professionals in government, education, non-profits and the private sector, helping to expand the adoption and effective use of geospatial technology and methods in these sectors.

Our Mission

Our mission is to foster the development of Wisconsin's geospatial community by facilitating the creation and exchange of geospatial data and services, and promoting their use in support of education, innovation and delivery of services to the state's citizens.

Our Vision

Our vision is a geospatial community that is well informed, supported and collaborative, and that operates on complete, up -to-date, integrated information for effective analysis and service de-

The Wisconsin Idea

The SCO embodies the Wisconsin Idea, a principle embraced by the University of Wisconsin.

The Wisconsin Idea states that education should not be limited by the boundaries of the classroom, and that knowledge and expertise within the University should enhance the quality of life for all citizens of the state.

Contact Us

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From the State Cartographer

Wisconsin State Cartographer's Office Annual Report, 2024-25

I invite you to discover what the State Cartographer's Office has to offer, whether you are a GIS professional seeking the most up-to-date LiDAR data, a landowner looking for historic maps and air photos of your property, or an educator trying to find information on the state's coordinate reference systems.

Whatever your needs, the SCO is a great place to start. Our website provides free online apps to help you find the data you need, articles and publications on important aspects of GIS and cartography, and re-



sources to allow you to explore further.

Can't find what you need? Our Help Desk is only a few clicks away, giving you personalized advice to help direct your search.



Howard Veregin, PhD, GISP, CPM Wisconsin State Cartographer

Strategic Planning

Strategic Framework

The SCO recently completed a new strategic framework, building on and advancing concepts from our previous strategic plans. The Framework lists our current strategic priorities, reflecting our core mission and vision for the future of mapping and GIS in the state.

The framework is not a specific plan of action, but rather a chart to guide our path forward, by helping ensure that activities align to our strategic priorities.

Strategic Priorities

The new framework lists seven strategic priorities.

The Wisconsin Idea. Embody the Wisconsin Idea by expanding the use of maps and GIS in all corners of the state, including private citizens, government agencies, non-profits, educational institutions and the private sector.

Educational Content. Develop and deliver educational content to ensure map and GIS users have the information and resources they need to work effectively.

Data Development and Ac**cess.** Facilitate the creation, discovery, distribution and utilization of geospatial data needed by users.

Student Development. Help educate the next generation of map and GIS professionals.

Coordination and Leadership. Encourage the effective functioning of the mapping/ GIS community in the state through coordination and leadership.

Collaboration and Capacity Building. Support the mutual strengthening of mapping/GIS skills and expertise through collaborations with other people, groups and organizations. In this way, build capacity within the office and the community simultaneously to allow us to take on more challenging efforts in the future.

Organizational Enhancement. Do our jobs effectively and efficiently, in a working environment we enjoy, to produce results that have a mean-

ingful impact on the lives of

Statutory Responsibilities

Wisconsin's citizens.

The State Cartographer position was created in 1973 by the Wisconsin Legislature and assigned to the University of Wisconsin.

The University created the SCO to assist the State Cartographer in performance of the following statutory duties:

- Maintain a catalog of maps of Wisconsin available in municipal, county, state, and federal agencies;
- Promote cooperation amongst municipal, county, state, and federal mapping agencies and surveyors to facilitate coordination and information exchange;

- Stay up-to-date on the progress made by mapping agencies;
- Disseminate information about innovations in mapping techniques and procedures, map and air photo indexes, control data, data accuracy standards, legal aspects of map publication, and other topics in order to facilitate an effective mapping program for the state;
- Publish special maps to promote the mapping of the state and the use of maps by individuals, as long as these maps are not within the activities of another state or commercial agency;
- Assist the Department of Natural Resources in its work as the state representative of the US Board on Geographic Names and its other functions.

The specific statutory language can be found in section 36.25 (12m) of state statutes.

Our Staff

Our team includes both university-funded and externally funded positions. The team has knowledge and expertise in a wide range of subjects relevant to cartography and GIS.







ANN BUSCHHAUS, GIS RESEARCHER Ann joined the SCO in 2020. After years as a water resources engineer, Ann now works on a wide variety of GIS-based projects. She has a Bachelor's in Physics and a

HAYDEN ELZA, GIS DEVELOPER Hayden joined the SCO in 2019 after working at the Forest Ecosystem and Landscape Ecology Lab at UW -Madison and for the Sea Grant Institute. He has a Bachelor's in Forest Science and a GIS Certificate from UW-Madison

IIKE HASINOFF, GEOSPATIAL OUTREACH SPECIALIST Mike joined the SCO in 2023. He has a Master's in Cartography/GIS from UW-Madison. He formerly taught English in Japan, taught high school science and worked as a technician in genetics and biochem labs.





THOMAS KAZMIERCZAK, GIS RESEARCH ANALYST Tom joined the SCO in 2020, after 10 years at Northern Illinois University's Center for Governmental Studies. He has a Bachelor's in GIScience from Michigan State and a Master's in Geography from Northern Illinois.

JIM LACY, ASSOCIATE STATE CARTOGRAPHER Jim joined the SCO in 2004 as Associate State Cartographer. He has a Bachelor's in Geography and Information/Computing Science from UW-Green Bay and a Master's in Cartography/GIS from UW-Madison.

HOWARD VEREGIN, STATE CARTOGRAPHER Howard was appointed State Cartographer in 2009. Previously, he was Director of Geographic Information Services at Rand McNally and Professor of Geography at the University of Minnesota. He has a PhD from the University of

SCO ALUMNI

Since 1974, the SCO has provided opportunities to over 280 staff & student interns.

Check out our <u>alumni page</u>.



■ This row from left

DAVID VOGEL, GIS DATA ENGINEER David joined the SCO in 2012 and has worked on the statewide parcel project since its inception. He has a Bachelor's in Forest Management and Conservation Biology from UW-Stevens Point and a Graduate Certificate in GIS from

ANA WELLS, GIS DATA ENGINEER Ana joined the SCO in 2018, after working as a graduate assistant in Urban and Regional Planning, the Nelson Institute and the Soils Department at UW-Madison. She has a PhD in Soil Science and a Graduate Certificate in GIS from UW-

The SCO provides service learning opportunities to students at UW-Madison and other institutions, giving students experience with real-world problems.

Our Students



Top row from left

son College in 2024-25.

Madison. [GISPP Fellow]

CHRIS SUSNIK Chris recently completed his Bache-

the Professional GIS Program at UW-Madison.

lor's at UW-Superior in Environmental Science with a minor in GIS.

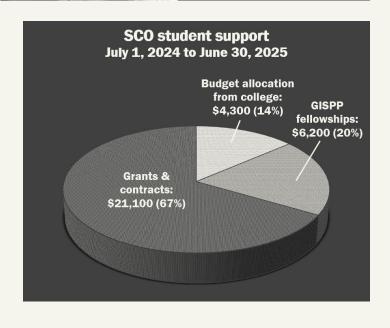
Bottom row from left

PARAM BHANDARE A graduate of Computer Sciences from UW-Madison, Param was a student at Madilor's at UW-Madison, studying Cartography and GIS, as well as Conservation Biology.

JACK DIPAOLO Jack recently graduated with his
Master's from the Professional GIS Program at UWin Geography/GIS at Augustana College in Illinois. **RAY WEIGAND** Ray recently completed his Bachelor's

COLE WILSON In fall 2024, Cole completed his Mas-**EUGENIE HUANG** Eugenie is a Master's student in the Professional GIS Program at UW-Madison. [GISPP from the Nelson Institute.

VALERIE ZHAAWENDAAGOZIKWE Valerie is currently JOSEPH KOWALCZYK Joseph is a Master's student in a student at UW-Superior, pursuing a Bachelor's in Biology/Environmental Science with a minor in



Externally Funded Projects

By the Numbers

Funded projects within the period July 1, 2024 through June 30, 2025

Parcels (Edition 7 of PLSS), Dept. of Administration	\$159,000
Version 10, Statewide	

Parcels (Edition 6 of PLSS), \$150,000

Dept. of Administration

St. Louis River Estuary

Habitat Map, National \$139,000
Estuarine Research Reserve
System Science Collaborative

WisconsinView Data Archive \$134,000 Dept. of Administration

CHET, Wisconsin Coastal
Management Program and the National Oceanic and Atmospheric Administration

\$59,000

Historic Bordner Maps, \$20,000 Dept. of Natural Resources

2025-2026 Wisconsin Official State Highway Map, \$20,000 Dept. of Transportation

Antimicrobial Resistance
Institute for Clinical and
Translational Research

\$12,500

Starkweather Creek Chloride
Monitoring Program,
Water@UW-Madison and
UW-Madison Provost's Office
\$10,000

Remarkable Trees App,
Urban Tree Alliance \$5,000
(John. C. Bock Foundation)

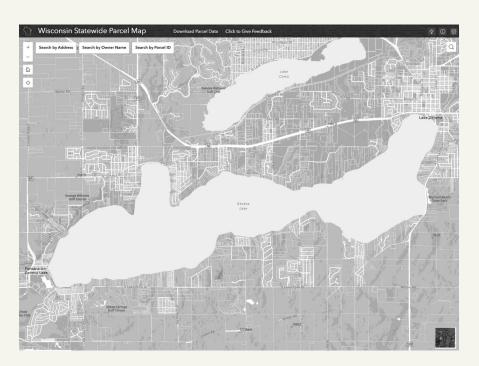
Powerful Teen Leaders Training, \$3,000 Sustain Dane

Distance Analysis,
Institute for Research on
Poverty (UW-Madison)

\$1,600

Tribal Lands Map Project, \$1,500
Torey Dolan (UW Law School)

Statewide Parcel/PLSS Project



Wisconsin Act 20, the state budget for 2013-15, created statutory directives for state and local governments to coordinate on the development of a statewide digital parcel map. The Statewide Parcel Map Initiative is an effort to create and maintain a digital parcel map for Wisconsin by aggregating local parcel datasets utilizing GIS. The Parcel Initiative is a multi-faceted, multi-year collaborative effort of the Department of Administration, the SCO and local governments.

The project makes the statewide parcel dataset publicly available online as a download and through an online app. The parcel dataset is updated annually. In addition to parcels, other GIS data layers are collected as part of a collaboration with the UW-Madison Robinson Map Library (RML). For V11, 457 new county data layers were made available through the data portal GeoData@Wisconsin. A statewide PLSS (Public Land Survey System) database is also produced annually using county data sources where available.

As detailed in the <u>V11 Final Report</u>, the SCO has developed various tools for counties to streamline the parcel submission process, including a Validation Tool that counties use to validate their data against the parcel schema.

Wisconsin is a national leader in the sphere of public, statewide parcel data. According to the <u>National States Geographic Information Council</u> (NSGIC), not all states share parcel data. The majority of states have publicly available data, but fewer states have funding to sustain their statewide parcels dataset. Statewide parcel data is important for the real estate industry, economic development, insurance, broadband mapping, engineering, utilities, environmental analysis, regulation and other government functions, researchers and the general public. Wisconsin has been developing and sharing statewide parcel data since 2014.

Version 10 of parcels/Edition 6 of PLSS ran from January to December of 2024. Version 11 of parcels/Edition 7 of PLSS runs from January to December of 2025. The project is funded through the **Department of Administration**.

Numerous SCO staff and students worked on the V10/E6 and V11/E7 projects: **David Vogel**, **Ana Wells**, **Tom Kazmierczak**, **Ann Buschhaus**, **Param Bhandare**, **Ray Weigand** and **Cole Wilson**. The RML's **Jaime Martindale** manages the county data archive and parcel metadata. **Howard Veregin** is project Principal Investigator.

St. Louis River Habitat Map

Wisconsin State Cartographer's Office Annual Report, 2024-25

This multi-institution collaboration involved a large project team: **Kirsten Rhude** (Lake Superior National Estuarine Research Reserve, Collaborative Lead), **Howard Veregin** (State Cartographer, Principal Investigator), **Jeffery Thompson** (Technical Lead) and **Olena Boiko** (both from U-Spatial, University of Minnesota), **Kristi Nixon** (Natural Resources Research Institute, University of Minnesota), **Carol Reschke** (Shoreview Ecology), **Kelly Beaster** (Tsuga Ecological Consulting), **Carl Sack** (Fond du Lac Tribal and Community College), **Ann Buschhaus** (SCO), **Chris Susnik** and **Valerie Ross Zhaawendaagozikwe** (students from the University of Wisconsin-Superior), **Emily Lockling** (student from the University of Minnesota-Duluth) and **Param Bhandare** (State Cartographer's Office student).

Support was also provided by the Minnesota Supercomputing Institute and the St. Louis River Habitat Workgroup.

The project ran from October 2023 to March 2025.

The project used a multi-phase approach that included deep learning techniques and geospatial rules to create a habitat map of the St. Louis River estuary. The map will support estuarywide habitat restoration planning and vulnerability assessment.

The final map, associated data files, scripts and documentation can be found on <u>Geodata@Wisconsin</u>, a <u>U-Spatial GitHub archive</u> and a <u>State Cartographer's Office GitHub Archive</u>. Hiresolution multi-spectral drone imagery of selected areas within the St Louis River Estuary is also available on <u>GeoData@Wisconsin</u>.

A detailed project overview is available on the <u>project website</u>.

The work was sponsored by the **National Estuarine Research Reserve System Science Collaborative**, which supports collaborative research that addresses coastal management problems important to the reserves. The Science Collaborative is funded by the **National Oceanic and Atmospheric Administration** and managed by the University of Michigan Water Center (NA19NOS4190058).



















National Estuarine
Research Reserve System
Science Collaborative

Remarkable Trees App

This crowd-sourced online map documents Dane County's most remarkable trees. Members of the public can submit their favorite trees, along with a description, location and photo.

The project was funded by the Urban Tree Alliance (**Jeremy Kane**, Director) via a grant from the John C. Bock Foundation. Other project partners included the Capital Area Regional Planning Commission and the Dane County Tree Board. The online map was built by the SCO's **Mike Hasinoff**.

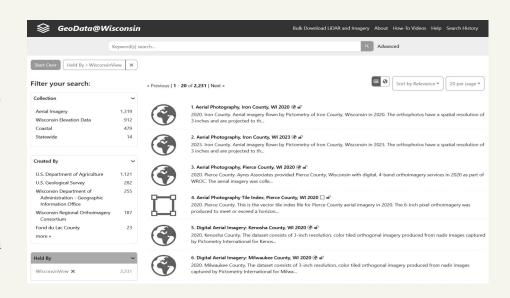
The online map is available <u>here</u>.

Distance Analysis

SCO staff computed distances from treatment providers to ZIP+4 locations in Wisconsin using shortest-line (geodesic) distance, and to ZIP5 centroids using travel distance through the road network. **Ann Buschhaus** and **Howard Veregin** worked on this project. for UW-Madison's **Institute for Research on Poverty**.

WisconsinView Data Archive

In 2024-25, the WisconsinView Data Archive Project for Aerial Imagery and LiDAR Access transitioned the management of the WisconsinView Data Archive (WDA) from its former home in the UW Space Science and Engineering Center to the Robinson Map Library (RML) and SCO.



For more than 20 years, the WDA has been the go-to place for downloading free Wisconsin aerial imagery and LiDAR-derived elevation data. With the transition, the RML and SCO now have full responsibility for providing customer support, managing the data archive and growing the collection as new LiDAR and imagery datasets are acquired by government agencies in Wisconsin. The GeoData@Wisconsin geoportal remains the main front door for finding Wisconsin aerial imagery and LiDAR data, as well as many other types of Wisconsin geospatial data.

RML and SCO partnered with experts from the UW Division of Information Technology (DoIT) to implement new enterprise-level storage solutions that are fully redundant and backed-up regularly to ensure the safety of data in the archive. In addition to the search capabilities offered through GeoData@Wisconsin, we developed procedures and a tutorial to help users bulk download large volumes of data. Over the past year, we also developed a new Python-based approach to downloading data for advanced users, along with an accompanying tutorial.

We are actively working with **Peter Herreid** (Wisconsin Department of Administration) to continue acquiring new Wisconsin LiDAR data as it becomes available, and our partner **Craig Surman** (US Department of Agriculture) to acquire new imagery from the National Agriculture Imagery Program (NAIP). The Wisconsin Regional Orthoimagery Consortium continues to provide statewide, public domain imagery every five years.

In 2025, the WisconsinView Data Archive Project was extended from its original end date of March 31, 2026 to June 30, 2030. This ensures the long-term sustainability of our efforts to archive and preserve Wisconsin data.

Jim Lacy and **Jaime Martindale** (RML) are Co-Investigators on the project. RML student assistant **Sophat Seng** helped with LiDAR and imagery metadata editing. The project is funded by the **Department of Administration**.

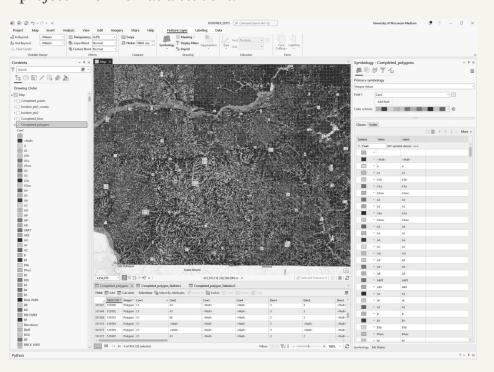
Historic Bordner Maps

In June 2025, with funding from the **Wisconsin Department of Natural Resources** (DNR), spearheaded by Research Scientist **Bob Smail**, the SCO completed digitizing of the historic Bordner Survey maps of Wisconsin and combined them into a single statewide layer.

The Bordner Survey was a massive 1930s-era effort to map land use across the state. The genesis of the project was an attempt to understand the impacts of land use decisions made decades earlier. Under the direction of John Bordner, a plant physiologist, all counties except Milwaukee and Menominee were surveyed by the mid-1940s.

The effort to digitize the maps to create a seamless GIS layer spanned a decade. The project began at UW-Madison's Forest Ecosystem and Landscape Ecology Lab in the Department of Forest and Wildlife Ecology.

The project was directed by (now Emeritus) Professor **David Mladenoff** and **Matt Noone**, now Senior Environmental Resources Planner at the Capital Area Regional Planning Commission. The SCO's **Hayden Elza** also worked on the project when he was a student.



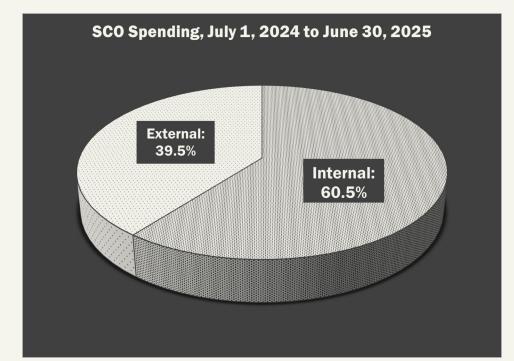
Mladenoff's funding was obtained from the UW-Madison Graduate School, the UW-Madison College of Agricultural and Life Sciences, Wisconsin Alumni Research Foundation Research Fund, and the Wisconsin Alumni Research Foundation Kellett Mid-Career Faculty Award.

The SCO joined the project in 2016 with a grant from NOAA through Wisconsin's **Coastal Management Program** (Office for Coastal Management under the Coastal Zone Management Act, Grant #NA16NOS4190108) to develop a coastal Bordner map database and geoportal for the coastal zones of Lakes Superior and Michigan.

To complete the final digitizing, students in the Department of Environmental Sciences and Society at UW-Platteville, under the direction of Professor **Lynnette Dornak**, worked on the remaining counties in their GIS courses and in summer internships. Funding was provided by the DNR.

The final step was to merge the digitized data into one statewide layer, resolve any errors and inconsistencies, and publish the final database. SCO staff and students **Mike Hasinoff**, **Jean Traudt** and **Ray Weigand** worked on this effort. **Howard Veregin** was project Principal Investigator.

The data is now available on <u>Geodata@Wisconsin</u> A new online app to display the data is also under development at the SCO by **Hayden Elza** and **Joseph Kowalczyk**.



Wisconsin State Cartographer's Office Annual Report, 2024-25

Funding for SCO staff and student salaries, travel, training and supplies comes from both internal UW-Madison funds and funding from external sponsors through grants and contracts.

Wisconsin State Highway Map

Students and staff of the SCO assisted the Wisconsin Department of Transportation (WisDOT) develop hydrographic data (lakes, reservoirs and rivers) for the new Wisconsin Highway Map, the first time this map has been produced using GIS.

Students used rule-based selection and generalization of 24,000 -scale data to create a statewide hydrography layer for the 1:800,000-scale highway map. The student team did a presentation on the project at the Annual Wisconsin Land Information Association Conference in February 2025.

The new map is now available from WisDOT and at rest stop locations around the state.

Funding for the project was provided by the **WisDOT's Bureau of Technical Services**, **Surveying & Mapping Section**, **Digital Cartography Unit**. The project ran from January 2023 to June 2024.

The following SCO staff and students were involved in the project: **Jack DiPaolo**, **Jean Traudt**, **Ray Weigand**, **David Vogel** and **Howard Veregin** (Principal Investigator). Wis-DOT staff included **Katie Ginther** and **Christine Koeller**.

Ginther, the WisDOT cartographer who developed the new GIS-based map, won an award for the new map from Esri (the makers of ArcGIS) at the 2025 Esri User Conference.

Antimicrobial Resistance

This **Institute for Clinical and Translational Research** (ICTR) project aims to identify spatiotemporal changes in antimicrobial resistance (AMR) prevalence in urban and rural settings and determine the association between patient and neighborhood-level social determinants of health.

Specific patient-level characteristics to be evaluated include age, sex, race and ethnicity, occupation, farm residence, and antibiotic and health-care utilization. Neighborhood-level social determinants of health will be captured using the Social Vulnerability Index (SVI).

This work is being done by Principal Investigator Laurel Lengenza (School of Pharmacy, School of Nursing), a team of Marshfield Clinic epidemiologists, Song Gao (UW-Madison Geography, Director of Geospatial Data Science Lab) and the SCO's Jim Lacy, Eugenie Huang and Mike Hasinoff.

Starkweather Creek

Through a community-based water research grant from Water@UW-Madison and the University of Wisconsin-Madison's Office of the Provost, the SCO and project partners established a chloride monitoring program in Starkweather Creek on Madison's east side. The goals of the project included continuous chloride monitoring along the creek, engaging with stakeholders and community members to educate them about sources of chloride contamination, beginning to establish a model for cooperation to ensure the long-term health of the creek, and expanding on partnerships with Operation Fresh Start (OFS).



OFS is a regional leader in providing alternative pathways for young individuals from disadvantaged communities. Through OFS, these individuals achieve real-world training opportunities to become prepared to enter the workforce.

Through the project, OFS crews received training in water quality monitoring and GIS-based mapping for environmental applications. In December 2024, the SCO's **Mike Hasinoff** hosted a group of OFS crew members for classroom and field-based training in GIS practices. Training included both classroom and lab work as well as field-based data collection using Esri's Survey123 tool and ArcGIS Online. Hasinoff also developed an online map of the monitors and helped install and maintain them.

Project partners included the Capital Area Regional Planning Commission (**Matt Noone**, **Liz Levy** and **Melissa Michaud**), Friends of Starkweather Creek, the US Geological Survey and City of Madison.

Two SCO student interns, **Jean Traudt** and **Param Bhandare**, also worked on the Starkweather Creek project. **Howard Veregin** was project Principal Investigator.

While funding ended in June 2025, work continues to secure additional funding to maintain the monitoring network and establish an advisory committee.



Coastal Habitat Evaluation Tool

The goal of the Coastal Habitat Evaluation Tool (CHET) project is to help the Wisconsin Coastal Management Program better plan for and implement habitat protection, restoration and acquisition projects in Brown County.

CHET will deliver a GIS-based tool for discovery, evaluation and prioritization of coastal habitat projects, based on multicriteria decision analysis, a modeling approach in which multiple input criteria are considered simultaneously. Stakeholder input at the state, tribal and county level will be woven into the implementation of the model.

The SCO's **Ann Buschhaus** is working on this project with **Howard Veregin** as Principal Investigator.

This project began in October 2024 and is ongoing. Funding was provided by the **Wisconsin Coastal Management Program** and the **National Oceanic and Atmospheric Administration**, Office for Coastal Management under the Coastal Zone Management Act, Grant #NA24NOSX419C0009.





Powerful Teen Leaders Training

The SCO's **Mike Hasinoff** conducted a three-day GIS training workshop for eight local high school students participating in Sustain Dane's Powerful Teen Leaders (PTL) summer youth employment program. The workshop included a day in the field at the Sisters of Holy Wisdom Monastery, collecting data on a vari-

ety of trees in an area that is being restored to its native status. Two days were spent in the classroom, learning principles of GIS and data analysis.



Funding for the workshop was provided by **Sustain Dane** through **Spencer Bierman**, Sustain Dane's Development and Partnership Manager. Other partners included **Matt Noone** and **Liz Levy** (Capital Region Planning Commission), **Amy Alstad** (Director of Land Management & Environmental Education at Holy Wisdom), **Ana Wells** (SCO), the UW-Madison Geography Department's GNP IT team and the UW-Madison Department of Planning and Landscape Architecture.

Tribal Lands Map Project

This project created a GIS data layer showing how county boundaries intersect with reservations and other tribal lands, to determine how these intersections split Native American populations into two or more counties. The work was done for Professor **Torey Dolan** in the University of Wisconsin Law School. SCO student **Ray Weigand** worked on this project with support from **David Vogel** and **Howard Veregin**.

These projects are funded internally using resources supplied

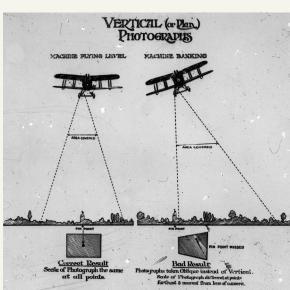
by UW-Madison. Many of these projects align to our core mis-

sion of data and information exchange, data cataloging, special-

purpose mapping and community outreach.

Featured Projects

Wisconsin Historic Aerial Image Finder



In 2025, we released a new version of our popular WHAIFinder app, designed to provide free online access to Wisconsin historic aerial photography. WHAIFinder is a joint effort of the SCO and the Robinson Map Library (RML).

The new version was created to give the public easy access to a growing archive of historic aerial photog-

raphy managed by the SCO and RML.

The new version of WHAI-Finder received two awards at the 2025 Wisconsin Land Information Association Annual Conference in Appleton — Best Public Sector Map and Best Interactive Map!

The WHAIFinder interface was built from the ground up by **Hayden Elza** using

the ArcGIS Maps SDK for JavaScript and a host of other new technologies.

Alicia Cowart and Xun Gong from the UW-Madison Cartography Lab provided assistance developing new cartographic basemaps. Jim Lacy and Jaime Martindale were project co-leads.

More information is available in this SCO news article.

GeoData@Wisconsin



GeoData@Wisconsin is a statewide data discovery geoportal maintained cooperatively by the SCO and Robinson Map Library. GeoData@Wisconsin continues to be one of our busiest web apps and is widely used to search for Wisconsin geospatial data.

In 2025, as part of the WisconsinView Data Archive Project (see p. 5), we completed a major reorganization of LiDAR and imagery data accessible through GeoData@Wisconsin. We also continue our work to automatically synchronize Geo-Data@Wisconsin with other Wisconsin geoportals.

The technologies used to build GeoData@Wisconsin are almost seven years old.
We are engaged with the Big Ten Academic Alliance (BTAA) to re-envision the technology stack used to build the geoportal, and expect to have a new version

of GeoData@Wisconsin available in late 2026.

Jim Lacy and Jaime
Martindale are co-leads of
this ongoing initiative, while
Hayden Elza provides
support developing tools
and scripts used to feed information into the archive. RML student assistants Steven Sykes and
Sophat Seng helped with
metadata editing.

Pronounce Wisconsin



We released a new version of our <u>Pronounce Wisconsin</u> app in 2025. The previous version of the app was built using Carto, Leaflet and Mapbox. For the new version, we consolidated the app into the ArcGIS Online ecosystem, using Experience Builder to create a more scalable and maintainable solution.

Pronounce Wisconsin, originally released in 2012, is a collaboration between the SCO and Jackie Johnson, creator of MissPronouncer.com. The app is an online pronouncing gazetteer of place names in Wisconsin, including counties, cities, villages and unincorporated communities. In other words, users can actually

hear the place names being spoken.

The new Pronounce Wisconsin app was built by SCO student **Eugenie Huang**. **Hayden Elza** provided technical guidance. **Howard Veregin** was also involved in the project.

More information is available in this SCO news article

UW-Madison Computer Science Capstone

In 2024, SCO staff participated as mentors for the UW-Madison Computer Science Capstone course, where Computer Science student teams worked on the Original Land

Survey Explorer app.

This app will provide a mapbased interface to explore scanned maps and field notes from the original 1830s General Land Office Survey of the state.

Hayden Elza, David Vogel, Ana Wells and Howard Veregin served as mentors.

Bluff Erosion

SCO student Param
Bhandare is working with
Howard Veregin and Ana
Wells on a pilot study of social vulnerability associated
with coastal bluff recession in
Wisconsin. Social vulnerability goes beyond the location
and magnitude of physical
hazards to include information on the populations or

infrastructure at risk.

The study uses Digital Elevation Models, bluff recession rates from the Shoreline Inventory Data and Oblique Photo Archives, parcel data, building footprints and property assessment attributes.

We are working with experts from the US Geological Survey, Sea Grant and coastal counties on the project.

Bearing Trees

We released a new version of our <u>Bearing Trees</u> app in 2025. Bearing trees, also known as witness trees, were used to establish the original Public Land Survey System (PLSS) for the state of Wisconsin. The trees played an essential role in the process of land surveying as reference points that were used to pin-

point survey markers.

The Bearing Tree app uses information from volunteers who provide pictures and documentation.

The new app was built by SCO student **Eugenie Huang**. **Hayden Elza** provided technical guidance. **David Vogel** and **Howard Veregin** were also involved in the project.

Survey Control Finder

The <u>Survey Control Finder</u> app is in the process of being redesigned utilizing new technologies and streamlining the data update process. Public release of the new app is expected late summer of 2025.

This app provides a central

point of access to control points and Public Land Survey System (PLSS) corner records in Wisconsin.

It is primarily used by the surveying community and government agencies that require accurate control data. Federal, state and county control are included in the app.

Work on the Survey Control Finder app is being carried out by **Hayden Elza** and **David Vogel**.

Wisconsin's Hidden Communities



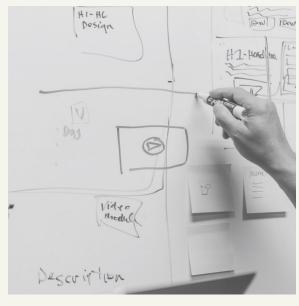
We released a new app in 2024 that displays <u>Wisconsin's hidden communities</u>. These include unincorporated places (which exist and have a recognized name, but are not legally incorporated), cartographic phantoms (places that appear on maps, but there's nothing on the ground to suggest they still exist) and unverified locales (places needing more research).

The new app is the latest evolution of the unincorporated place project, which SCO staff and students have been working on intermittently for 15 years. The goal was originally to map the state's hundreds of unincorporated places, but we have broadened the scope to include cartographic phantoms.

Mike Hasinoff and Howard Veregin continue to do research on hidden communities, with plans to explore the unverified locales. The app also invites the public to contact us if they know of a hidden community that's not on the map. More information is available in this SCO news article.

The app was built by **Mike Hasinoff**. The hidden communities project was covered by <u>Letters & Science</u> <u>Magazine</u> in 2024.

SCO App Infrastructure



We continue to improve the infrastructure that supports our web app development efforts, allowing us to efficiently develop new apps while also maintaining existing ones.

Many of our apps are in now the ArcGIS Online ecosystem and more continue to be migrated as we leverage the platform's benefits.

This year, a new Hidden

Communities app and updated versions of the Wisconsin Historical Aerial Imagery Finder, Pronounce Wisconsin and Bearing Trees apps were implemented in ArcGIS Online.

Survey Control Finder, Bordner Survey Explorer and PLSS Locator are nearing completion of their migration and are expected to be released later this year. **Hayden Elza** leads this effort.

Over 1,000,000

Number of SCO app screenviews from July 1, 2024 to June 30, 2025

Wisconsin Historic Aerial Imagery Access



In collaboration with the Robinson Map Library, we have greatly expanded the availability of digitally archived Wisconsin historic aerial imagery.

In preparation for the early 2025 release of the updated WHAIFinder web app, we processed nearly 130,000 digital photographs using the UW-Madison Center for High Throughput Computing. As part of that work, we develop a new procedure to apply basic georeferencing information to all images in the archive.

make the historic imagery archive more GIS-ready for mapping professionals. We created an online index service that can be used to find and download individual georeferenced TIFF-format images. By tapping into data storage methods available through the UW-Madison Division of Information Technology (DoIT), we now provide bulk download access for hundreds or thousands of images in an area of

We also published a com-

interest.

One of our goals has been to make the historic imagery archive more GIS-ready for mapping professionals. We created an online index ser- plete data dictionary aimed at GIS users, and created a new tutorial to help advanced users download imagery using Python.

Jim Lacy and Jaime Martindale are co-leads on this initiative. SCO student Eugenie Huang provided her expertise developing scripts to download and process imagery data from federal repositories. Craig Surman from the US Department of Agriculture has been a key partner in acquiring historic imagery for inclusion in the imagery archive.

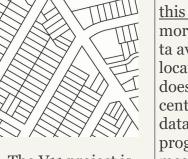
Our Online Apps

Our free online apps provide desktop access to a variety of data and resources.

Statewide Parcel Map Viewer

Over 3.56 million parcels, all in one app.

This app and the database behind it are the products of the Version 11 Statewide Parcel Map Database project, a collaboration between the SCO and the **Wis**consin Land In-



formation Program. The V11 project is part of the Statewide Parcel Map Initiative established by Act 20 of 2013.

The V11 project successfully aggregated all known digital parcel datasets within the state. The resulting statewide GIS parcel layer totaling 3.56 million parcels was made elevation data, including data from counpublicly available online on June 30, 2025.

Wisconsin's Hidden Communities

Curious about Wisconsin's history?

Hidden communities are places that do not appear on maps, or conversely, appear on maps when they shouldn't! Some hidden communities are small population centers that have thrived,



while others have disappeared.

In this app, we have mapped three categories of hidden communities. **Unincorpo**rated communities are places that still exist, have a name, but are not legally incor- was created to help porated. **Cartographic phantoms** appear people correctly pronounce the names of on maps, but there's nothing on the ground to suggest they still exist. **Unverified locales** are places that need more research.

Check out the Hidden Communities story Letters & Science Magazine.

WHAIFinder

Now updated with an expanded collection!

The Wisconsin Historic Aerial Image Finder provides free online access to digital aerial photographs of Wisconsin from 1936 to pre-

sent. Most of the photographs were acquired by the US Department of Agriculture, the US Geological Survey and additional state and local government agencies.



Depending on the source material, the images were scanned from contact prints or original film rolls. All photographs are available for download by any user without fee or use restrictions.

Collaborators with the SCO on the WHAI-Finder app include the **Robinson Map Li**brary, UW-Madison Cartography Lab, **UW Digital Collections Center** and **Wisconsin Department of Transpor**tation.

Find LiDAR Data

A quick way to find digital elevation data.

Click anywhere on this map to learn more about the data available at that location. Wisconsin does not have a centralized LiDAR data acquisition program, which



means that products and data formats may vary from dataset to dataset.

While this app provides a quick way to find LiDAR data, GeoData@Wisconsin is the primary data portal through which users can find and download Wisconsin digital ties, FEMA, the USGS 3D Elevation Program (3DEP) and others.

Pronounce Wisconsin

Sound like you're from Wisconsin, even if you're not! Newly updated!

The Pronounce Wisconsin app is a collaboration between the SCO and Jackie John-

son, creator of Mis-<u>sPronouncer.com</u>. It's an online pronouncing gazetteer of place names in Wisconsin, including counties, cities, villages and unincorporated communities.



places, elected officials, parks, famous people and other phenomena specific to Wisconsin. The Pronounce Wisconsin application links the MissPronouncer.com digital audio archive to an interactive map interface to allow users to explore Wisconsin's unique place names geographically.

Aerial Photography Catalog

Looking for historic air photos?

The Aerial Photography Catalog is a directory of historic Wisconsin aerial photog-

raphy dating back to the late 1920s. While the app does not contain individual photographs to download, it points to sources that have printed or digital copies of the products listed.



This app is a collaboration with the Robinson Map Library.

Survey Control Finder

Control data all in one location.

The Survey Control Finder app provides a central point of access to over 28,000 control points and over 200,000 Public Land Survey System (PLSS) corner records in Wisconsin. Data layers include NGS

(National Geodetic Survey) control, US Geological Survey third-order vertical control, Wisconsin DOT Heigh Modernization Program control, PLSS Corners

and CORS stations.



GeoData @Wisconsin

Thousands of geospatial datasets of Wisconsin at your fingertips.

GeoData@Wisconsin is an online geoportal that provides discovery and access to Wisconsin geospatial data, imagery and

scanned maps. It is developed and maintained by the Robinson Map Library and SCO. The geoportal combines a mapbased spatial search with traditional keyword searching and



faceted browsing options to locate and download geospatial data.

The datasets discoverable in GeoData@Wisconsin come from a variety of sources. Some datasets are housed in the Robinson Map Library's geospatial data archive, while others are hosted by the original data producers. The Robinson Map Library's archive is a curated collection originating from cities, counties, regional planning commissions, state agencies, federal agencies and researchers across Wisconsin.

Many Wisconsin counties and state agencies provide access to open data online. Metadata records from these sites are indexed into GeoData@Wisconsin to promote discovery and access.

The WisconsinView Data Archive, now part of GeoData@Wisconsin, contains remotely sensed elevation data and aerial imagery for Wisconsin, including imagery collections from the National Agriculture Imagery Program (NAIP), the Wisconsin Regional Orthophoto Consortium (WROC), the US Geological Survey and county-based LiDAR da-

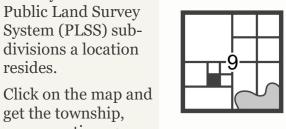
GeoData@Wisconsin also contains coastal datasets from the Wisconsin Coastal Atlas and historic aerial imagery from 1936-1941.

Public Land Survey System (PLSS)

It's whereware! Find out where you are, or where you want to be!

The <u>PLSS Locator</u> is a free tool to help users identify within which

Public Land Survey System (PLSS) subdivisions a location resides.



get the township, range, section, quar-

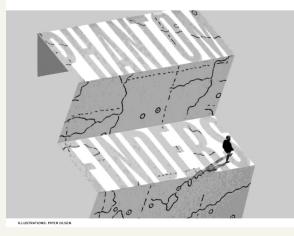
ter section and quarter-quarter section.

The State Cartographer's Office in the news, spreading the word about our mission, goals and services.

Media Mentions

Phantom Finders, by Alli Watters Letters & Science Magazine, UW-Madison, Nov. 2024

Phantom Finders



"The Wisconsin map is full of phantoms, but not the supernatural kind. These researchers are determined to track them down."

lsmagazine.wisc.edu/issues/fall-2024/phantom-

The article was highlighted in *Inside UW* Magazine on Dec. 10, 2024

This article received a Silver Award from the Council for Advancement and Support of Education.

www.case.org/awards/circle-excellence/2025/ phantom-finders

The article was also picked up by *Agri*-View Magazine in its Jan. 31, 2025 issue.

agupdate.com/agriview/lifestyles/beware-wisconsin-unfound-phantoms/article 59f9d39eddac-11ef-a93c-cf94471e0b97.html

Interview with Howard Veregin on Wisconsin Today with Rob Ferrett

Rob Ferrett is all over the map with Wisconsin's state cartographer



"From historical to high-tech, Howard Veregin shares the mysterious world of maps.'

www.wpr.org/shows/wisconsin-today-2/saukcounty-nursing-home-sale-wisconsin-mechanics-<u>shortage-state-cartographer</u>

The interview was also shared as a news story on WPR's website: www.wpr.org/news/state-cartographer-howard-

veregin-wisconsin-maps

Hands-On GIS Training for Operation Fresh Start's Conservation Academy, Capital Area Regional Planning Commission, Jan. 16, 2025

Hands-On GIS Training for Operation Fresh Start's Conservation Academy



Start's (OFS) Conservation Academy. GIS, a technology used to capture store, analyze, and visualize spatial data, is an essential tool for environmental monitoring and conservation. The three-session training combined classroom instruction with fieldwork, equipping participant

"The SCO and CARPC provided hands-on GIS training for crew members of Operation Fresh Start's Conservation Academy."

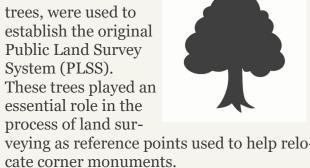
www.capitalarearpc.org/gis-training-with-ofs

Our Online Apps continued from previous page...

Wisconsin Bearing Trees

Just updated!

Bearing trees, also known as witness trees, were used to establish the original Public Land Survey System (PLSS). essential role in the process of land sur-



The Bearing Tree app was created using information obtained by volunteers. Thanks to everyone who contributed. If you have a bearing tree photo you would like to share on this map, please contact us!

Coastal Bordner Survey Explorer

Explore land use in the coastal areas of Wisconsin in the 1930s.

This app displays historic features extracted from the 1930s Wisconsin Land Economic Inventory("Bordner Survey") maps within Wisconsin's coastal regions. The

Bordner Survey was a comprehensive mapping program of Wisconsin counties conducted from the 1920s through the 1940s.

agricultural and forest cover. Cultural and physical features were also recorded. These maps provide a detailed inventory of the physical and cultural landscape of the state at a time of significant change.

This app was a collaboration with the **For**est Landscape Ecology Lab in the Department of Forest and Wildlife Ecology at UW-Madison. The app was funded by the **Wisconsin Coastal Management Pro**gram and the National Oceanic and Atmospheric Administration, Office for Coastal Management under the Coastal Zone Management Act, Grant #NA16NOS4190108



Wisconsin Coastal Management Program

Wisconsin Culvert Inventory

An inventory of culvert locations and characteristics with a focus on coastal counties.

This app contains the WICDI (Wisconsin Coastal-Management Data Infrastructure) culvert database. The WICDI Projects of Special Merit, which ended in 2023, fo-

cused on culvert inventory and mapping, so

The survey created detailed maps depicting that at-risk culverts can be identified and upgraded replacements justified.

> The project aimed to provide resources needed to respond to damage or identify vulnerable culverts before catastrophe.

Funded by the Wisconsin Coastal Management Program and the National Oceanic and Atmospheric Administration, Office for Coastal Management under the Coastal Zone Management Act, Grant # NA18NOS4190087, Grant # NA20NOS4190105 and Grant #NA21NOS4190032.

WISCONSIN COASTAL MANAGEMENT PROGRAM



The legislature has allocated funds for a major renovation of Science Hall.



The SCO will be relocated to the old Computer Sciences building while the renovation occurs.

Presentations

Sharing information about the SCO's latest initiatives, projects and apps to professionals and the public.



M. Azeem-Angel, A. Bierbrauer, P. Block, C. Gottschalk Druschke, J. Hua, L. Joaquina Morales-Whetstone, N. Li, E. Majumder & H. Veregin. Reflecting on Community-Based Water Research. Water@UW-Madison and Morgridge Center for Public Service, UW-Madison. [Panel session]

A. Dorn, S. Hoffman, F. Iausly, H. Veregin & K. Anderson. What the Judicial Privacy Act (Act 235) Really Means for You. Wisconsin Land Information Association Annual Conference, Appleton, WI. [Panel session]

H. M. Elza. The Journey of Making Our First ArcGIS Maps SDK for JavaScript Application. Wisconsin Land Information Association Annual Conference, Appleton, WI.

H. M. Elza. Beyond App Builders: When to Use ArcGIS JavaScript SDK. Wisconsin State Agency Geospatial Information Committee. [Virtual]

M. Hasinoff. The Heritage Oak Tree Project. Greentree Neighborhood Association Garden Club, Madison, WI.

J. Lacy. Processing Historic Aerial Photography with High Throughput Computing Resources. Throughput Computing 2024, UW-Madison.

J. Lacy. Making Historic Aerial Imagery Available to the World. Wisconsin Land Information Association Annual Conference, Appleton, WI.

J. Lacy & J. Martindale. Visualizing History Through Aerial Photography. Wisconsin Historical Society Archaeological Consultant Training, Madison, WI.

K. Rhude, H. Veregin, J. Thompson, O. Boiko, C. Reschke, K. Beaster, K. Nixon, C. Sack, A. Buschhaus, V. Zhaawendaagozikwe, E. Lockling & C. Susnik. Developing a Habitat Map of the St. Louis River Estuary. St. Louis River Summit, Superior, WI. [Poster]

C. Schacher, K. Kettner & J. Lacy. Research Object Storage (S3) Update. Information Technology Collaborative Coordination Committee (ITCCC), UW-Madison.

J. Traudt, R. Weigand & J. DiPaolo. Streamlining Hydrography: A GIS Methodology for Converting a Large-Scale Dataset for the Official Wisconsin State Highway Map. Wisconsin Land Information Association Annual Conference, Appleton, WI. [Student presentation]

H. Veregin. Euler Poles, Hinge Lines and the New National Spatial Reference System. GISPP Map Chat, UW-Madison.

H. Veregin. *Getting to Know the State* Cartographer's Office. County Forest Administrators Meeting, Marshfield, WI.

H. Veregin & K. Rhude. State Cartograperior National Estuarine Research Reserve. Natural Resources Institute Coffee Break. [Virtual]

D. Vogel. *MONUMENTal PLSS in GIS:* Building Wisconsin's Statewide PLSS Database. State Agency GIS Symposium,

D. Vogel. Building a Statewide PLSS

pher's Office Partnership with the Lake Su-

Madison, WI.

Layer. PLSS Forum, Richland Center, WI.

A. Wells. Individual Tree Detection Using High Resolution LiDAR in the Milwaukee Urban Forest. State Agency GIS Symposium, Madison, WI.

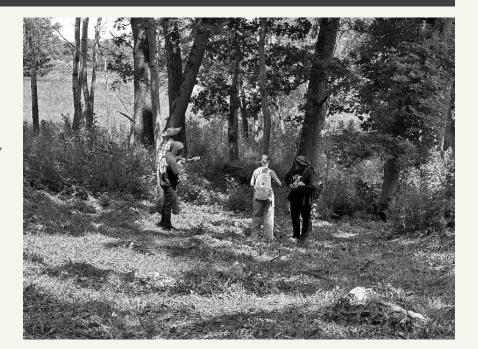
Workshops

Operation Fresh Start Training

In 2024, **Mike Hasinoff** hosted a group of OFS (Operation Fresh Start) crew members for classroom and field-based training in GIS practices. Training included both classroom and lab work as well as fieldbased data collection using Esri's Survey123 tool and ArcGIS Online. OFS is a regional leader in providing alternative pathways for young individuals from disadvantaged communities. More information on OFS can be found here.

Data Carpentry Workshop

In 2025, Hayden Elza and Ana Wells conducted a Data Carpentry Workshop at the UW-Madison Data Science Hub. More information on UW-Madison's Data Carpentry Workshops can be fund here.



Sharing our knowledge in a focused group setting. Our workshops are

aimed at geospatial professionals, students, researchers, workforce development programs and the public school system.

Powerful Teen Leaders Training

In 2025, Mike Hasinoff hosted a group of PTL (Powerful Teen Leaders) for cartography and GIS training. PTL, a program of Sustain Dane, is a summer youth employment program for Northside teens in Madison. It serves young people furthest from resources and opportunities. More detail on PTL can be found <u>here</u>.

K-12 Outreach

Ripon High School

In 2025, Mike Hasinoff and Ana Wells gave a series of Intro to Cartography and GIS lectures at Ripon High School, Ripon, WI.

Bringing together sectors of the geospatial community to learn, share and exchange ideas.

Events Organized

State Agency GIS Symposium

A free, day-long event for state agency staff and collaborators to learn about GIS projects and initiatives happening in state government. Held October 2, 2024, at Hill Farms State Office Building, Madison, WI. Co-organizer: **Jim Lacy**.

UW-Madison Geospatial Summit

An annual one-day event at UW-Madison showcasing geospatial research, teaching and service activities. The event included speakers, a career panel and a career fair. Held April 16, 2025, at the Gordon Event

Center. Organized by the SCO (Mike Hasinoff, Howard Veregin and Ana Wells), Robinson Map Library (Jaime Martindale), UW-Madison GISP Program (Janelle Greene and Stephanie **Arroyo**), UW-Madison Cartography Lab (Alicia Cowart), UW-Madison Department of Geography (Joel Gruley) and UW-Madison Department of Urban Planning and Landscape Architecture (Ed Boswell).

Public Land Survey System Fo-

A free, day-long forum about the historical

roots of the Public Land Survey System (PLSS) in Wisconsin. The forum offers a unique opportunity to learn about the important role PLSS plays in property ownership, the duties and responsibilities of those tasked with maintaining it and its future importance. Held May 15, 2025, at the Phoenix Center, Richland Center, WI. Co-organized by the Wisconsin County Surveyors Association and the SCO (David Vogel and Howard Veregin).

A thank you to the **UW-Madison De**partment of Geography for providing a Stone Travel Grant to allow SCO staff to





attend.

SCO staff serve on federal and state councils, professional associations and working groups, and university committees.

Councils, Associations and Committees

National Geospatial Advisory Committee/National Spatial Data Infrastructure Subcommittee (NGAC/NSDI)

Howard Veregin Member

Wisconsin Geographic Names Council (WGNC)

Howard Veregin Member

Wisconsin Land Information Council (WLIC)

Howard Veregin Member

Wisconsin Geologic Mapping Advisory Committee (WGMAC)

Howard Veregin Member

State Agency Geospatial Information Committee (SAGIC)

> Jim Lacy Chair; SCO Representative; Communications Committee; 2024 GIS Symposium Planning Committee

Wisconsin Land Information Association (WLIA)

> Hayden Elza Education Committee Member; Annual Conference Committee Member; Logistics/AV Conference Team Co-Chair

Howard Veregin Judicial Privacy Task Force Member

David Vogel Judicial Privacy Task Force Member

Wisconsin County Surveyors Association (WCSA)

David Vogel SCO Representative

Wisconsin Spatial Reference System (WSRS2022) Task **Force**

> Howard Veregin Task Force Co-Chair (with Richard Kleinmann)

Hayden Elza Member

PLSS Forum Organizing Com-

David Vogel and Howard Vere**gin** SCO Representatives

Geospatial Summit Organizing Committee

> Mike Hasinoff, Howard Veregin and Ana Wells

Department of Geography, UW-Madison

Hayden Elza IT Oversight Committee Member

Jim Lacy Finance Committee Member; Ad Hoc Budget Planning Committee Member

Howard Veregin Staff/Faculty **Development Committee Member**

Contact Information

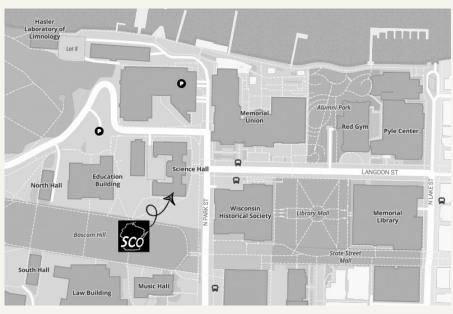
Wisconsin State Cartographer's Office

Room 384 Science Hall 550 North Park Street Madison, WI 53706-1491

Phone: (608) 262-3065 Email: help@sco.wisc.edu

Web: www.sco.wisc.edu





SCO News Articles

DIGITIZING THE HISTORIC BORDNER MAPS

Howard Veregin June 25, 2025

Through the efforts of hundreds of UW students and staff, a statewide GIS layer of the 1930-era Bordner dataset is now available on Geodaformation Program. ta@Wisconsin.

WELL THAT'S ... ODD?!

Jim Lacy June 11, 2025

Check our these fun and silly sightings found on aerial photographs.

Forum Provides **Education on Public** Land Survey System

David Vogel June 10, 2025

Presentations, a visit to a loca PLSS corner, and a game of PLSS Jeopardy!

O SAY, CAN YOU SEE?

Howard Veregin May 15, 2025

Where was Francis Scott Key when he penned his famous poem during the War of 1812, and why does it matter?

Experience the New Wisconsin Bearing Trees

Eugenie Huang May 8, 2025

Read about our new app and what it means for users.



Jim Lacy and Jaime Martindale May 6, 2025

The popular imagery and lidar data archive is now managed by the Robinson Map Library and SCO at UW-Madison.



NEW VERSION OF PRONOUNCE WISCONSIN RELEASED

By Eugenie Huang April 28, 2025

We're excited to announce the launch of our new web applica tion, now live and ready for you to explore.

ASSEMBLY BILL WOULD INCREASE WLIP GRANTS TO COUNTIES

Howard Veregin April 24, 2025 2025 Assembly Bill 216 proposes using real estate transfer fees to increase aid to counties under the Wisconsin Land In-

REGISTRATION OPEN FOR

2025 PLSS FORUM Howard Veregin

April 14, 2025 The 2025 PLSS Forum will be held in Richland Center on Thursday, May 15.

Here's the Agenda for the Geospatial Summit

Howard Veregin April 2, 2025 Now available: Full agenda of speakers for the 2025 UW-Madison Geospatial Summit.

David Hart of Sea Grant to Present Keynote at Geospatial Summit

Howard Veregin March 26, 2025 We're excited to highlight the keynote speaker for the Geospatial Summit.

GEOSPATIAL SUMMIT RETURNS TO UW-MADISON

Howard Veregin March 10, 2025

Register for the 2025 UW-Madison Geospatial Summit

NOT EXACTLY HALF WAY TO THE NORTH POLE

Howard Veregin March 9, 2025

Roadside geographical markers purporting to show their latitude may be misleading.

Governor's Budget Requests Additional Funds for County LIOs and WLIP

Howard Veregin Feb. 26, 2025

The budget proposes a doubling of funds for the state's land information community.

Mt. McKinley Gets a Re-Do

Howard Veregin Feb. 21, 2025

The Alaskan mountain peak, known as Mt. McKinley from 1917 until 2015, and then as Denali, has reverted back to being Mt. McKinley.

FAREWELL TO THE **GULF OF MEXICO**

Howard Veregin Feb. 11, 2025 IT'S OFFICIAL

New Historic Aerial Imagery Finder Now Available

Jim Lacy February 7, 2025 New web app, plus a feature service for GIS users.

RFP: City of De Pere Seeks GIS Consulting Services

Jim Lacy February 7, 2025

City seeks assistance with an ArcGIS Enterprise upgrade, Portal for ArcGIS implementa tion, and Esri Utility Network migration.

HOW TO CHANGE THE BATTERIES IN YOUR CONDUCTIVITY METER

Howard Veregin Jan. 29, 2025 It's nothing like changing the batteries in your remote!

RENAMING DENALI AND

Howard Veregin Jan. 22, 2025

President Trump's recent Executive Order.

THE STRANGE CASE OF THE GALENA AND FEVER RIVERS

Howard Veregin Jan. 16, 2025 ONE RIVER. TWO NAMES.

SCO HOSTS OFS CONSERVA-TION ACADEMY CREW FOR GIS TRAINING

Howard Veregin December 20, 2024 Part of a community-based research grant from Water@UW-Madison and the Office of the Provost.

PRESERVING THE **INTEGRITY OF** STATEWIDE PARCEL DATA UNDER THE NEW JUDICIAL PRIVACY LAW

Jaime Martindale and Howard Veregin December 12, 2024

Protecting the inherent value of owner name information and the public's right to know.

PHANTOM FINDERS: LETTERS AND SCIENCE

MAGAZINE ARTICLE Mike Hasinoff November 26, 2024 opefully you're not getting

Preparing Your Esri Data for the New National Spatial Reference System

tired of Phantoms and

Hidden Communities articles!

Howard Veregin November 14, 2024 Get ready for the new NSRS.

SCO'S NEWEST APP: WISCON-SIN'S HIDDEN COMMUNITIES

Mike Hasinoff November 5, 2024

It's been a while since we last reached out to you about hantoms and unincorporated places.

SCO 2023-24 ANNUAL REPORT AVAILABLE

Howard Veregin Oct. 17, 2024 SEE WHAT WE'VE BEEN UP

TO OVER THE LAST YEAR!

SOLAR STORM BRINGS AURO-RA BOREALIS TO MADISON THE GULF OF MEXICO

David Vogel October 11, 2024

A (very) brief interpretation of A solar storm treated residents of Wisconsin to a dazzling display of the northern lights.

Federal Register Notice Announces New Timeline for NSRS Modernization

Howard Veregin October 10, 2024

The modernized National Spaial Reference System should be approved in 2025 or 2026.

New Tools Now Available for Downloading Wisconsin Historic Aerial Imagery

Jim Lacy September 27, 2024

New options include downloadable georeferenced imagery, an online photo index, and bulk downloads.

THE SCO TURNS FIFTY!

Howard Veregin September 26, 2024

The driving force behind the creation of the SCO was Professor Arthur H. Robinson, a faculty member in the Department of Geography.

New Project Will Monitor and Map Chloride Levels in Starkweather Creek

Howard Veregin September 11, 2024 A new community-based part nership focuses on chloride contamination in the Starkweather Creek watershed on Madison's east side.

STATE CARTOGRAPHER'S **OFFICE COMPLETES NEW** STRATEGIC FRAMEWORK

Howard Veregin August 28, 2024

Γhe new Framework is a chart to guide our path forward, by helping ensure that activities align to our strategic priorities.

WISCONSIN NEXT GEN 9-1-1 STATUS MAP NOW LIVE

Howard Veregin August 6, 2024

See current statewide information on ESInet, GIS data, and GIS and PSAP grants.

NGS PUBLISHES SPCS2022 PARAMETERS ON ALPHA WEBSITE

Howard Veregin July 17, 2024

The National Geodetic Survey has published provisional parameters for the 2022 State Plane Coordinate System.

8 8 8 8

MORE LIDAR DATA NOW **AVAILABLE FROM GEODATA@WISCONSIN**

Jim Lacy July 17, 2024

For the first time you can now download LiDAR data for all 72 of Wisconsin's counties.

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Sauk County seeks proposals for Professional Land Surveyor Services

David Vogel July 3, 2024 Sauk County soliciting cost proposals for land surveyor services, to include general "county surveyor" duties.

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www.sco.wisc.edu/news

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SCO Helpdesk Stats

Wisconsin State Cartographer's Office Annual Report, 2024-25

Requests for information or assistance submitted to the SCO Helpdesk from July 1, 2024 to June 30, 2025. For the Helpdesk, call 608-262-3065 or email us at help@sco.wisc.edu

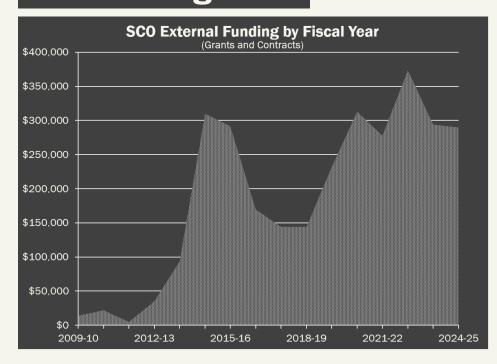
Topic	Jul '24	Aug '24	Sep '24	Oct '24	Nov '24	Dec '24	Jan '25	Feb '25	Mar '25	Apr '25	May '25	Jun '25	TOTAL
SCO Inquiry / Job Posting	4	4	2	2	3	2	9	9	10	8	9	4	66
SCO Inquiry / Miscellaneous	3	4	4	3	2	3	4	5	1	1	1	9	40
SCO Inquiry / Aerial Photography	4	3	7	1	4		2	3	2	2	3	4	35
SCO Inquiry / Parcel Submission Support							4	16	9			3	32
SCO Inquiry / Unincs and Hidden Communities	S				6	7	3	2	1	1	1		21
SCO Inquiry / Elevation and LiDAR		1	1	1	1	2		3	4	2	2	2	19
SCO Inquiry / Public Land Survey System	2	1			1		1	1	2	1		4	13
SCO Inquiry / Geospatial Data		1	1	2	1			4		1		2	12
SCO Inquiry / Find Maps	2		1		1	1	1	1		3	1		11
SCO Inquiry / Coordinate Reference Systems		1		1						1	5		8
SCO Inquiry / Surveying	1	1	1	1							2	1	7
SCO Inquiry / Topographic Maps	2			1		1	1		1	1			7
SCO Inquiry / Parcels			1			2	1	1			1		6
SCO Inquiry / Lake and Bathymetric Maps					1		2			2			5
SCO Inquiry / School Districts		1								1		2	4
SCO Inquiry / Snowmobile and ATV Maps				1						1			2
SCO Inquiry / Geographic Names										1			1
SCO Inquiry / Plat Book							1						1
SCO Inquiry / Spatial Analysis										1			1
TOTAL	18	17	18	13	20	18	29	45	30	27	25	31	291

SCO Job Board Stats

Job openings posted on the SCO Job Board sco.wisc.edu/jobs from July 1, 2024 to June 30, 2025. Please contact us at **help@sco.wisc.edu** if you have a job you want to post.

Job Type				Jul '24	Aug '24	Sep '24	Oct '24	Nov '24	Dec '24	Jan '25	Feb '25	Mar '25	Apr '25	May '25	Jun '25	TOTAL
Intern				2	1	1			1	5	1	4	1	2		18
GIS Specialist					2		2	1			3	1	1	1	1	12
GIS Analyst				1		1			1	2	1	1	2	2		11
GIS Coordinat	or/Man	ager/Administ	rator	2		1	1			3	1	1				9
Surveying/Geo	odesy							1		1			3		2	7
GIS Technician	n					1				1	1			1	1	5
GIS Developer	•									1		1	2	1		5
Remote Sensin	ng/LiDA	R/Photogrami	netry		1										1	2
Other	31725	70	1107	2	2						1	1	1	1		8
TOTAL				7	6	4	3	2	2	13	8	9	10	8	5	77
Job Sector									Wisco	nsin locati	ons with 2	or more job	postings	La	Crosse	2
County	26	City	14	Job L	ocation				Madis	son	19	Stevens P	oint 4	Por	rtage	2
State agency	16	University	4	Wisco	onsin	65	Iowa	1	Milwa	ukee	5	Janesville	3	Rh	inelander	2
Company	15	Htility	9	Minn	esota	7	Remote	4	Racin	Δ.	4	Fan Clair	a 0	Ma	chhurn	0

SCO Funding Stats



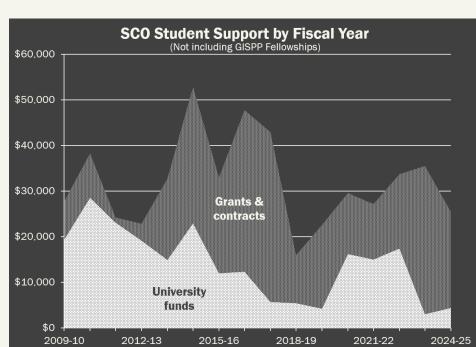


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Whiteboard

Microphone

Kaleidico on Unsplash **Historic Air Photos 2** Wikimedia Commons

David Vogel Presentation Bryan Meyer

Visiting a PLSS Corner Bryan Meyer

Geospatial Summit Janelle Greene

Operation Fresh Start Crew Howard Veregin

Powerful Teen Leads Crew Howard Veregin

Committee Work Brenda Hemstead

SCO created 1974

Governor: Patrick Lucey State Population (1970): Approx 3.95 million UW-Madison Students (1972-73):

Approx 35,000

Source: 1973 WI Blue Book

Faces of the SCO

SCO staff, students, colleagues and friends through the years

