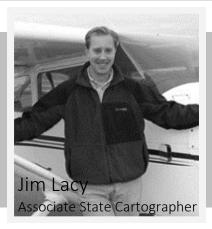




WHO WE ARE

STAFF





PROJECT STAFF









ALUMNI

For information on the 200+ alumni who have worked at the SCO over the past 40+ years see

www.sco.wisc.edu/sco/alumni.html

CONTACT INFORMATION

384 Science Hall 550 N. Park Street

Madison, WI 53706-1491

Phone: (608) 262-3065

Email: sco@wisc.edu
Web: www.sco.wisc.edu



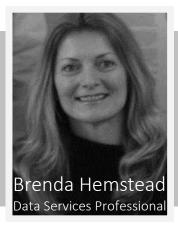
www.youtube.com/user/wistcart

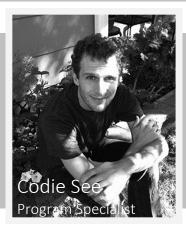


twitter.com/wistcart



www.linkedin.com/company/state-cartographer%27s-office







STUDENT ASSISTANTS

Dawson Bancroft-Short. GIS Certificate student, Geography Dept., UW-Madison. SCO student assistant beginning in May, 2016.

Matt Bougie GIS Certificate student, Geography Dept., UW-Madison. Currently completing work on the SCO's ControlFinder and PLSSFinder applications.

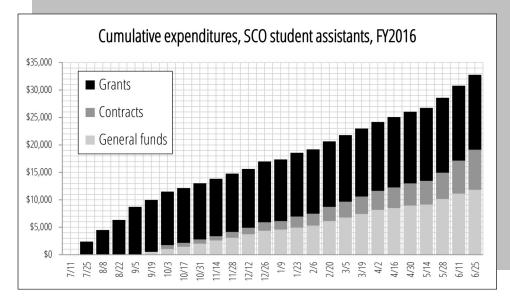
Mitch Johnson GIS Certificate student, Geography Dept., UW-Madison. Graduated in 2015. Currently employed with the Wisconsin DNR.

Tobin McGilligan Undergrad student, Geography Dept., UW-Madison. SCO student assistant since December, 2014.

Chris Scheele GIS Certificate student/graduate student, Geography Dept., UW-Madison. SCO student assistant since May, 2015.

Ben Schroeder. GIS Certificate student, Geography Dept., UW-Milwaukee. SCO student assistant beginning in 2016.

Will Westbury GIS Certificate student, Geography Dept., UW-Madison. SCO student assistant since December, 2014.



In FY2016 the SCO spent approximately \$33,000 to support student assistants. Approximately two-thirds of all student funding (almost \$21,000) was obtained from external funds, including grants and contracts.

WHAT WE DO

STATUTORY RESPONSIBILITIES



- **1. MAINTAIN A CATALOG** of current and historic reference and thematic maps of Wisconsin available in municipal, county, state, and federal agencies.
- 2. COORDINATE AND PROMOTE COOPERATION amongst municipal, county, state, and federal mapping agencies and surveyors to facilitate coordination and exchange information on mapping and cartographic activities.
- **3. STAY UP-TO-DATE** on the progress made by mapping agencies and their mapping developments.
- **4. COLLECT AND DISSEMINATE INFORMATION** about innovations in cartographic techniques and procedures, map and air photo indexes, control data, map accuracy standards, legal aspects of map publication, and other topics in order to facilitate an effective cartographic program for the state.
- **5. PUBLISH AND DISTRIBUTE SPECIAL MAPS** and map information to promote the mapping of the state and the use of maps by individuals, as long as such publication and distribution is not appropriately within the activities of any other state or commercial agency.
- **6. ASSIST THE DEPARTMENT OF NATURAL RESOURCES** in its work as the state representative of the US Board on Geographic Names and its other functions.

Source: Wisconsin State Statutes, Chapter 36.25 docs.legis.wisconsin.gov/statutes/statutes/36/25

MISSION



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

OUR VISION is a Wisconsin geospatial community that is well-informed, supported, and collaborative, and that operates on complete, up-to-date, integrated information for effective analysis and service delivery.

OUR MISSION EMBODIES THE WISCONSIN IDEA, the principle that education should influence people's lives beyond the classroom, and that knowledge and expertise within the University of Wisconsin should enhance the quality of life for all citizens of the state.

Source: SCO 2013-16 Strategic Plan www.sco.wisc.edu/images/stories/SCO/SCO Strategic Plan 2013-2016.pdf

STRATEGIC PRIORITIES, 2013-16



EDUCATION AND TRAINING. Deliver and support geospatial education and training opportunities.

RESEARCH AND INNOVATION. Engage in applied research and innovative projects to develop and disseminate information about new methods and practices.

DATA DEVELOPMENT AND INTEGRATION. Develop methods and best practices for statewide data development and data integration, with the goal of supporting regional, state, and national analysis and decision support.

DATA DISCOVERY. Improve online data discovery and access for the Wisconsin geospatial community and citizens, with the goal of providing efficient and timely access to best available data sources.

SUPPORT AND ENGAGEMENT. Continue efforts to engage, inform, coordinate, and support the Wisconsin geospatial community.

Source: SCO 2013-16 Strategic Plan www.sco.wisc.edu/images/stories/SCO/SCO Strategic Plan 2013-2016.pdf

FUNDING



THE SCO IS A STATUTORILY ENABLED SPECIAL PROGRAM AT UW-MADISON. The office sits within the Department of Geography in the College of Letters & Science. We receive an annual base budget allocation from the College for personnel and operating expenses. Additional financial support from the Division of Continuing Studies facilitates our outreach mission. Grants and contracts make up the remainder of our funding.

COMMITTEE ON STATE CARTOGRAPHY



THE COMMITTEE ON STATE CARTOGRAPHY (CSC) is the SCO's steering committee, providing advice and feedback to the office. CSC members are drawn from our user community, and are appointed by the Dean of the College of Letters & Science at UW-Madison. Traditionally, the CSC has been chaired by a faculty member in the Department of Geography at UW-Madison. Our current CSC chair is Professor A-Xing Zhu.

SELECTED PROJECTS

WISCLAND 2

GOAL Create a new digital statewide land cover dataset to replace the current 1990s-era data.

PARTNERS Department of Forest & Wildlife Ecology, UW-Madison; Wisconsin Department of Natural Resources (DNR).

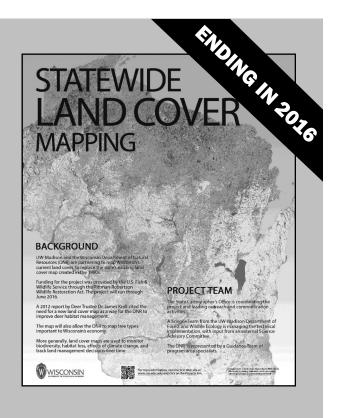
FUNDING \$432,000 from the DNR through the US Fish & Wildlife Service/Pittman-Robertson Wildlife Restoration Act

TIMELINE May 1, 2014 to August 31, 2016.

STATUS The completed dataset has been delivered to the DNR for distribution.

WEBSITE

<u>www.sco.wisc.edu/projects/landcover.html</u>



STATEWIDE PARCEL PROJECT, VER. 1 & 2

GOAL Create a digital statewide parcel dataset from county and municipal data, including all attributes required by statute, and make the layer publicly available online.

PARTNERS Wisconsin Dept. of Administration (DOA); county/municipal land information offices.

FUNDING \$248,000 from the DOA.

TIMELINE July 1, 2014 to Dec. 31, 2016.

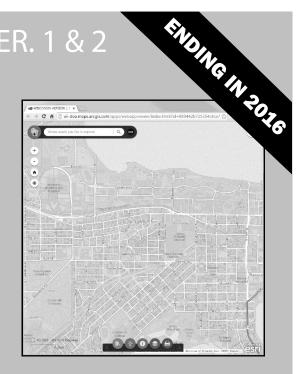
STATUS The Ver 1 dataset was released online in 2015. The Ver 2 dataset will be released in fall, 2016.

WEBSITE

www.sco.wisc.edu/projects/v1-parcels.html

PUBLIC DATA

www.sco.wisc.edu/find-data/parcels.html



STUDENT INVOLVEMENT Chris Scheele

AND GRANTS

WISCONSIN HISTORIC LANDSCAPE DATABASE

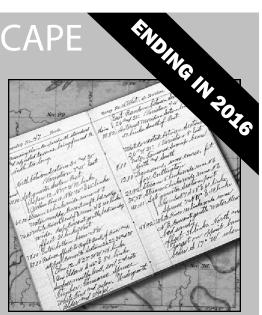
GOAL Identify ways to improve access to a digital database of the Government Land Office survey of Wisconsin conducted in the 1800s

PARTNERS David Mladenoff Forest Ecosystem and Landscape Ecology Lab, UW-Madison

FUNDING \$4000 mini-grant from the Ira and Ineva Reilly Baldwin Wisconsin Idea Endowment, UW-Madison

TIMELINE July 1, 2015 to June 30, 2016

WEBSITE www.sco.wisc.edu/glo/



HISTORIC COASTAL GEOPORTAL

GOAL Develop a historic geospatial database and portal to help address coastal management issues in Wisconsin. The portal will facilitate distribution and use of the Wisconsin Land Economic Inventory ("Bordner") data for coastal counties, and support visualization and mapping of data for a broad set of users.

PARTNERS David Mladenoff Forest Ecosystem and Landscape Ecology Lab, UW-Madison.

FUNDING \$56,600 from the Wisconsin Coastal Management Program.

TIMELINE July 1, 2016 to June 30, 2017



STUDENT INVOLVEMENT Chris Scheele

SELECTED PROJECTS

STATEWIDE PARCEL PROJECT, VER. 3 & 4

GOAL Continue to enhance the statewide parcel database through automated asynchronous aggregation of local datasets, movement to a contributor model of aggregation, improvements to zoning data, and prototyping of public lands information delivery.

PARTNERS Wisconsin Dept. of Administration (DOA); county/municipal land information offices.

FUNDING \$234,000 from the DOA.

TIMELINE January 1, 2017 to December 31, 2018.



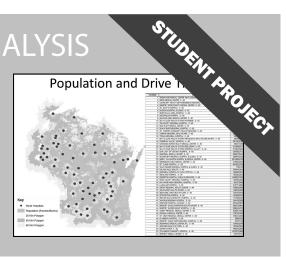
RURAL HOSPITAL DRIVE TIME ANALYSIS

GOAL Generate drive time service areas for 64 rural hospitals in Wisconsin to model rural hospital demographic coverage.

PARTNERS Wisconsin Office of Rural Health.

STUDENT INVOLVEMENT

Mitch Johnson, Chris Scheele, and William Westbury



OTHER PROJECTS

Mitch Johnson did an Independent Study course to explore dasymetric mapping in rural Wisconsin using data from the statewide parcel dataset.

William Westbury is helping develop a prototype of the LifeMapping application for Dean Olson. geography.wisc.edu/madgeognews/2015/12/life-mapping/

Matt Bougie completed his GIS Certificate Capstone project on the SCO's ControlFinder and PLSSFinder interface.

Tobin McGilligan is developing a new interface for the historic air photo WHAIFinder application.

STUDENT PROJECTS

SCO WEB APP UPGRADES

The SCO is upgrading several of its most widelyused online apps to make use of new web mapping software and improve performance, functionality, and ease-of-use.

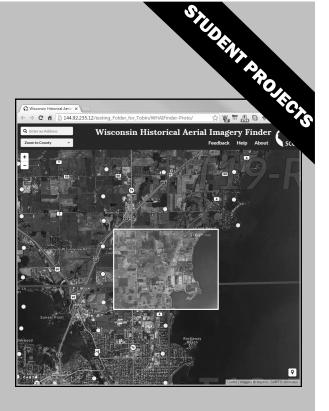
WHAIFinder, which delivers scans of 1930s-era aerial photographs for the entire state, is being upgraded using the Leaflet JavaScript library and the Carto platform.

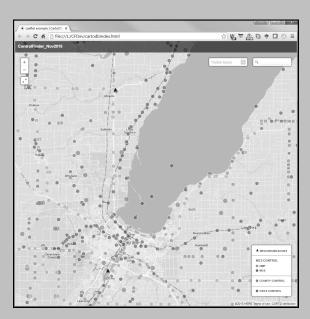
ControlFinder and PLSSFinder, which provide access to geodetic control data, Public Land Survey System corner data, county tie sheets, and National Geodetic Survey data sheets, are being merged into a single application.

The Aerial Photography Catalog is being upgraded in an effort to provide a more intuitive interface, improve database quality, eliminate obsolete records, and streamline the process for managing database updates.

Students involved in these projects include Dawson Bancroft-Short, Matt Bougie, Tobin McGilligan, and Ben Schroeder.







SCO IN THE NEWS

Getting away from it all. Isthmus, November 24, 2015.

The SCO's Codie See shares his analysis of the most remote square meter in Dane County. isthmus.com/news/news/dane-county-remotest-place/

Pronouncing Wisconsin's Cities Can Leave You Tongue-Tied. NPR.org, February 19, 2016.

Local radio anchor Jackie Johnson, aka Miss Pronouncer, talks about Wisconsin place names and her collaboration with the SCO on Pronounce Wisconsin, a pronouncing gazetteer of Wisconsin place names. www.wpr.org/pronouncing-wisconsins-cities-can-leave-you-tongue-tied www.sco.wisc.edu/pronounce-wisconsin/pronouncewisconsin.html

Highs and Lows. Ishthmus, July 21, 2016.

The SCO's AJ Wortley discusses Madison's high and low points. isthmus.com/news/cover-story/highs-and-lows-views-from-above-and-below/

Digging up evidence of Madison's 'Lost City' in the Arboretum. The Cap Times, July 28, 2016.

How the WHAIFinder app helped uncover information about Madison's doomed Lake Forest development. host.madison.com/ct/news/local/digging-up-evidence-of-madison-s-lost-city-in-the/article_f2946081-bd5c_5344-b7fc-544b0f13261c.html www.sco.wisc.edu/whaifinder/whaifinder.html

<u>AWARDS</u>

1st Place for Interactive Web-Based Mapping, Annual Map Contest Award, Wisconsin Land Information Association. State Cartographer's Office for the Wiscland 2 Reporting and Status Application. www.wlia.org/2016/02/15/2016-poster-contest-winners/

2nd Place for Map Poster and Best Student Map, Annual Map Contest Award, Wisconsin Land Information Association. Mitch Johnson for Demographic Drive Time Analysis of Rural Hospitals. www.wlia.org/2016/02/15/2016-poster-contest-winners/

Outstanding Contribution Award, Wisconsin Land Information Association. Jim Lacy.

www.wlia.org/member-services/past-award-recipients/

Special Achievement in GIS (SAG) Award, Esri. State Cartographer's Office and Wisconsin Department of Administration for the V1 Statewide Parcel Project.

www.sco.wisc.edu/wisconsin-geospatial-news/state-cartographers-office-receives-special-achievement-in-gis-award-from-esri.html

CONFERENCES

PRESENTATIONS

- **B.** Hemstead. Updates on SCO activities. Wisconsin County Surveyors Association annual membership meeting and quarterly board meetings.
- **B.** Hemstead. *The Role of PLSSFinder with the WLIP 2016 Strategic Initiative Grants*. WLIA Annual Conference, Elkhart Lake, Feb. 2016.
- **J. Horton** and **C. Mertes**. *Wiscland-2: Wisconsin Land Cover Mapping for Wisconsin*, WLIA Annual Conference, Elkhart Lake, Feb. 2016.
- **J. Horton** and **C. Mertes**. *Wiscland-2: Methods Overview*, DNR Evaluation Team meeting, Madison, March 2016.
- **C. See** and **D. Vogel**. *Benefits and Uses of the Wisconsin Statewide Parcel Map*. WLIA Annual Conference, Elkhart Lake, Feb. 2016.
- **C. See** and **D. Vogel**. *Wisconsin's Statewide Parcel Layer and the PLSS*. Parcel Mapping and the Public Land Survey in Wisconsin, Eau Claire, March 2016.
- **H. Veregin**. *Wisconsin Statewide Parcel Database Now Online*. Annual Meeting, West Lakes Division, Association of American Geographers, Eau Claire, September 2015.
- **H. Veregin**. *Status of the Wisconsin Statewide Parcel Map Initiative*. Minnesota GIS/LIS Annual Conference, Duluth, Minnesota, October 2015.
- **H. Veregin** and **B. Hemstead**. *The Role of PLSS Data in Wisconsin's Statewide Parcel Map*. 67th Annual Surveyor's Institute, Wisconsin Society of Land Surveyors, Wisconsin Dells, Jan. 2016.
- **H. Veregin**, D. Mladenoff, J. Forrester and M. Noone. *Improving Access to Statewide Historic Geospatial Data: Results of the Wisconsin Historic Landscape Project Community Forums*. WLIA Annual Conference, Elkhart Lake, Feb. 2016.
- AJ Wortley. Recent Initiatives of the Wisconsin State Cartographer's Office. Upper Midwest Geospatial Conference (UMGEOCON 2016), La Crosse, May 2016.
- AJ Wortley and M. Johnson. Demographic Drive Time Analysis of Rural Hospitals in Wisconsin. WLIA Annual Conference, Elkhart Lake, Feb. 2016.

CONFERENCES ORGANIZED

- **GEOSPATIAL SUMMIT** UW-Madison, April 2016. Co-organized by the UW-Madison Geospatial Alliance. This was the 7th annual Summit, attracting almost 140 registrants. Highlights included an Educational Roundtable, 15 research presentations by staff, students and faculty, and a keynote presentation by Esri's Joseph Kerski.
- PARCEL MAPPING AND THE PUBLIC LAND SURVEY IN WISCONSIN UW-Eau Claire, March 2016. Facilitated by a \$500 Statewide Outreach Incentive Grant to the SCO from the Office of University Relations, University of Wisconsin-Madison and a matching grant from the UW Eau Claire Department of Geography and Anthropology. This was the 2nd annual Forum, with almost 100 registrants.

COORDINATION AND

GEOSPATIAL ASSOCIATIONS & AGENCIES

AMERICAN SOCIETY FOR PHOTOGRAMMETRY & REMOTE SENSING (ASPRS) WESTERN GREAT LAKES REGION Board of Directors, Treasurer (Lacy)

CARTOGRAPHY AND GEOGRAPHIC INFORMATION SOCIETY (CAGIS) Board of Directors (Veregin)

LAND INFORMATION OFFICERS NETWORK (LION) SCO Rep (Wortley)

MASTER OF GIS PROGRAM, UNIVERSITY OF MINNESOTA Advisory Board member (Veregin)

NATIONAL DIGITAL ORTHOPHOTO STEERING COMMITTEE NSGIC liaison (Lacy)

NATIONAL GEODETIC SURVEY (NGS) Coordination for condition reports (Hemstead)

NATIONAL STATES GEOGRAPHIC INFORMATION COORDINATION COUNCIL (NSGIC) State Reps (Lacy, Veregin) :: NSGIC Representative, National Digital Orthophotography Steering Committee (Lacy)

PUBLIC LAND SURVEY SYSTEM (PLSS) WORKGROUP Founding members (Hemstead, Veregin)

STATE AGENCY GEOSPATIAL INFORMATION COMMITTEE (SAGIC) SCO Rep (Lacy) :: Member, Geospatial Strategy Working Group (Lacy) :: Member, Operations Team (Lacy) :: Chair, Aerial Imagery Working Group (Lacy)

WISCONSIN COUNTY SURVEYORS ASSOCIATION (WCSA) SCO Rep (Hemstead)

WISCONSIN DEPARTMENT OF ADMINISTRATION (DOA), DIVISION OF INTERGOVERNMENTAL RELATIONS

Project partner for statewide parcel project :: Collaboration to develop and distribute V1 statewide parcel database, and create standards and benchmarks for data submission and integration (See, Veregin, Vogel)

WISCONSIN DEPARTMENT OF NATURAL RESOURCES (DNR) Project partner for WiscLand 2 project :: Collaboration to develop statewide land cover database :: Participation with the DNR Guidance and Evaluation teams (Horton, Lacy, Mertes, Veregin)

WISCONSIN LEGISLATIVE TECHNOLOGY SERVICES SUREAU (LTSB) Coordination of statewide parcel data access options (See, Vogel)

WISCONSIN GEOGRAPHIC NAMES COMMITTEE Ex officio member (Veregin)

WISCONSIN LAND INFORMATION COUNCIL (WLIC) Ex officio member (Veregin)

WISCONSIN LAND INFORMATION ASSOCIATION (WLIA) Board of Directors (Lacy) :: Communications Committee member (Lacy) :: Conference Planning Committee member (Hemstead, Lacy, Wortley) :: Education Committee member (Lacy) :: Legislative Committee member (Wortley) :: Membership Committee Chair (Lacy) :: Scholarship Committee member (Wortley)

WISCONSIN PRESIDENTS' COUNCIL Coordination, meeting facilitation (Lacy) :: Ex officio member (Veregin)

WISCONSIN SOCIETY OF LAND SURVEYORS (WSLS) Web Site Committee, SCO Rep (Hemstead)

OUTREACH

CONFERENCES ATTENDED

ASSOCIATION OF AMERICAN GEOGRAPHERS WEST LAKES DIVISION Annual Meeting, Eau Claire, September 2015

GEOSPATIAL SUMMIT UW-Madison, April 2016

LAND INFORMATION OFFICERS NETWORK MEETINGS Oshkosh, Oct. 2015 :: Elkhart Lake, Feb. 2016 :: Wisconsin Rapids, June 2016

MINNESOTA GIS/LIS CONSORTIUM Annual Meeting, Duluth, Minnesota, Oct. 2015

NATIONAL DIGITAL ORTHOPHOTO STEERING COMMITTEE Telecon, Nov. 3-5, 2015 :: Telecon, May 3-4, 2016

NELSON INSTITUTE EARTH DAY SUMMIT Madison, April 2016

PARCEL MAPPING AND THE PUBLIC LAND SURVEY IN WISCONSIN UW-Eau Claire, March 2016

PRAIRIE ENTHUSIASTS ANNUAL CONFERENCE Madison, February 2016

UPPER MIDWEST GEOSPATIAL CONFERENCE (UMGEOCON 2016) La Crosse, May 2016

WISCONSIN COUNTIES ASSOCIATION (WCA) Annual Meeting, La Crosse, Sept. 2015

WISCONSIN COUNTY SURVEYORS ASSOCIATION (WCSA) Board Meetings, Neillsville, 2015-16 :: Annual Membership Meeting, Wisconsin Dells, Jan. 2016

WISCONSIN LAND INFORMATION ASSOCIATION (WLIA) Fall Regional Meeting, Oct. 2015, Oshkosh:: Annual Conference, Feb. 2015, Elkhart Lake:: Spring Regional Meeting, June 2016, Wisconsin Rapids:: Board of Directors Retreat, Arbor Vitae, March 2016

WISCONSIN PRESIDENTS' COUNCIL Annual Meeting, Wisconsin Dells, Oct. 2015

WISCONSIN SOCIETY OF LAND SURVEYORS (WSLS) Annual Meeting, Wisconsin Dells, Jan. 2016

UNIVERSITY ACTIVITIES

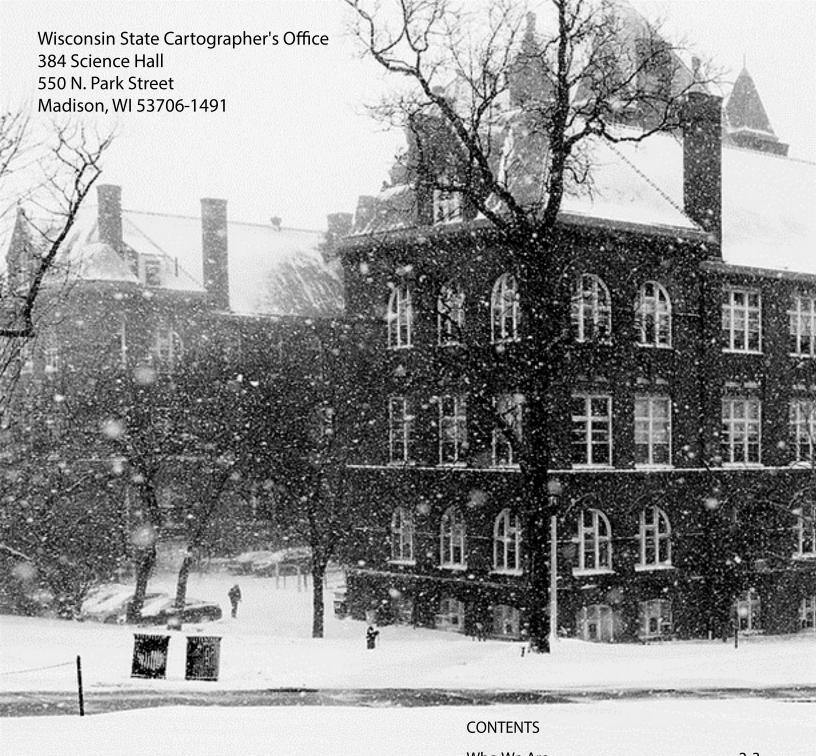
UW-MADISON COLLEGE OF LETTERS AND SCIENCE, COMMITTEE ON ACADEMIC AFFAIRS Member (Lacy)

UW-MADISON COLLEGE OF LETTERS AND SCIENCE, WORKPLACE CLIMATE COMMITTEE Member (Veregin)

GUEST LECTURES Intermediate Remote Sensing, UW-Madison (Mertes):: Core Competencies of Sustainability, UW-Madison (Veregin):: Geographic Information Systems, UW-Platteville (Veregin):: Interactive Cartography and Geovisualization, UW-Madison (Wortley)

GEOGRAPHY DEPARTMENT, UW-MADISON Science Hall Building Committee member (Hemstead) :: Geocomputing Committee Chair (Lacy) :: External Relations Committee member (Veregin, Wortley) :: Faculty and Staff Development Committee member (Veregin)

UW-MADISON GEOSPATIAL ALLIANCE Website development and maintenance (Lacy) :: Organization and hosting of Geospatial Summit (Hemstead, Veregin)





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