



. 7

Annual Report, 2010-11

About the State Cartographer's Office

Established in 1974, the Wisconsin State Cartographer's Office (SCO) is a resource for information about maps, cartography, geographic/land information systems, and geospatial technology. We support Wisconsin's geospatial community and the general public through presentations, workshops, consulting, publications, data catalogs and services, and information about events, jobs and emerging trends.

The SCO serves as a liaison between professionals in government, education, non-profits and the private sector, helping to expand the effective use of geospatial technology. We maintain ties with geospatial communities in other states and nationally to stay on top of trends and policies, and we collaborate on statewide initiatives with mapping agencies and associations.

As a unit within the Geography Department at UW-Madison, the SCO embodies the "Wisconsin Idea" by facilitating the transfer of knowledge and expertise from the university to the citizens of Wisconsin.

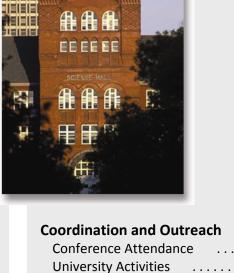
This report summarizes our activities and accomplishments for July 1, 2010 to June 30, 2011 (Fiscal Year 2011). This was an eventful year for the office and the first year covered by our 2010-13 Strategic Plan. Our activities for 2010-11 include a number of internal technology projects, including upgrades to our online geospatial applications and our Web site. These upgrades bring these tools in line with modern standards and facilitate more effective delivery of information and data to our constituents. In addition we invested effort in revamping our publications list and produced a number of new publications.

This report includes an assessment of progress relative to our 2010-13 Strategic Plan, as well as a list of high-priority projects for 2011-12 identified in our annual business planning process.

Contents

Major Projects and Initiatives2
Online Mapping Applications2
Wisconsin Historic Aerial Image Finder 3
SCO Web site Redesign4
SCO Publications5
Conference Presentations6
Grants

SCO in the News	•••••



Coordination and Outreach8
Conference Attendance
University Activities
Professional Associations9
Mapping Agencies
Stratogic Plan Porformanco 11

Strategic Plan Performance	•	•	•	• •		•••	•	11
Business Plan, 2011-12	•	•	•	•			•	12
Staff, Students and Support	•	•	•	• •		••	•	13

Online Mapping Applications

Rationale

The SCO's ControlFinder and PLSSFinder online applications provide access to geospatial control datasets. A new codebase for these applications will enable us to take advantage of modern Web mapping frameworks and design an interface that is in step with modern Web map standards.

Goals

- Rebuild code to make use of modern Web mapping frameworks.
- Redesign interface to align with modern standards and user expectations including functionality, system behavior, and cartographic design.
- Use commercial Web map APIs to allow access to standard base maps and base functionality.

Results

New versions of ControlFinder and PLSSFinder were rolled out in the spring of 2011. The new applications are built on open source software, including the GeoMoose web application framework, the OpenLayers Javascript Library, JQuery Javascript functions, the MapServer mapping engine, and a PostGIS/Postgresql database for storing geospatial data. The new apps make use of the Google Maps API for base map display, providing consistency with other modern Web-mapping applications.

Other features of the new Finder applications include:

- Improved cartography, including better visualization of point and line symbols for geodetic control, PLSS corners, and PLSS and county linework.
- Clearer visualization of point ID numbers on the map for selected points.
- Better search functionality, including the ability to search by feature name, county, PLSS feature, and point attributes.
- Enhanced navigation functions for zooming and panning.

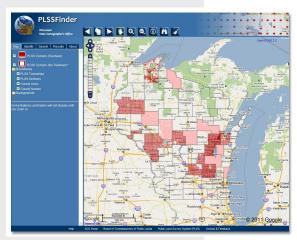
Additional Resources

ControlFinder application <u>http://maps.sco.wisc.edu/ControlFinder</u> PLSSFinder application <u>http://maps.sco.wisc.edu/PLSSFinder</u>

ControlFinder Infosheet http://www.sco.wisc.edu/images/stories/publications/SCO ControlFinder 2011.pdf

PLSSFinder Infosheet http://www.sco.wisc.edu/images/stories/publications/SCO_PLSSFinder_2011.pdf

Mapping Bulletin article <u>http://www.sco.wisc.edu/index.php?option=com_content&view=article&id=2802&Itemid=490</u>





Wisconsin Historic Aerial Image Finder

Rationale

Development of the Wisconsin Historic Aerial Image Finder (WHAIFinder) is the final component of a three-year grant ("The Changing Landscapes of Wisconsin") from the Ira and Ineva Reilly Baldwin Wisconsin Idea Endowment. This grant is a joint project through the SCO, the Robinson Map Library, and UW Digital Collections. The WHAIFinder provides online discovery and downloads of a rare collection of some 38,000 air photos from 1937-41 covering Wisconsin. Winner of the 2011 Governor's Award for Archival Innovation

Wisconsin Historical Records Advisory Board

Goals

- Build an online application to allow users to explore, identify and download historic air photos.
- Design interface to align with modern standards of Web map design and application functionality.
- Use open source software to provide flexibility in user-oriented interface design and the integration of Google base maps and functions.

Results

The WHAIFinder was released in February, 2011. Features of the application include:

- Access to photos in several formats and resolution levels.
- Navigation and search functions that mirror traditional paper index maps.
- Nearly 100% photographic coverage of the state.





Additional Resources

WHAIFinder application http://maps.sco.wisc.edu/WHAIFinder/

WHAIFinder Infosheet

http://www.sco.wisc.edu/images/stories/publications/SCO_WHAIFinder_2011.pdf

WHAIFinder technical description

http://www.sco.wisc.edu/images/stories/publications/2010/SCO baldwin autocarto2010 paper.pdf

SCO Web Site Redesign

Rationale

The SCO Web site is our primary mode of communication with the public. However, much of the information content and organization of the current site is based on the original SCO Bulletin Board System developed in the early 1990's. In addition, the back-end structure of the site has become difficult to maintain, leading to excess effort on the tool itself rather than the content.

Goals

- Update or replace outdated information content.
- Migrate to a new system that streamlines content maintenance.
- Update organizational structure, search effectiveness, and overall usability.
- Update the graphical look.
- Integrate new technologies such as RSS feeds and social network bookmarking.
- Integrate current Mapping Bulletin content into main SCO site.

Results

The new site went live in mid July, 2011. It features a new look and feel, new search functions using tags, and new technologies including bookmarked "hot links". The Mapping Bulletin is now integrated into the main site, and all content is managed through an underlying CMS (Content Management System). Much of the content has been updated and refreshed, a process that will continue through the remainder of FY12.





SCO Publications

Rationale

Publications are a primary way for the SCO to communicate with our constituents. However, output of Mapping Bulletin articles has lagged in recent years and there are opportunities for additional informational brochures on a variety of topics. In addition, the SCO should make an effort to develop professional publications to engage with the research community.

Goals

- Increase the frequency of SCO publications and increase SCO staff participation in the process.
- Establish target publication frequencies for different publication types.
- Expand SCO publications to include professional publications.

Results

We published 48 Mapping Bulletin articles in the period covered by this report, up from 34 in the previous year. Our goal is to increase this number to 75.

We redesigned and updated most of our SCO infosheets, including

- About the SCO
- ControlFinder
- PLSSFinder
- Understanding Elevation
- Wisconsin Orthophotography

We added two new infosheets:

- Wisconsin Historic Aerial Imagery Finder
- Statewide Orthophotography Planning

We produced three new professional publications:

- H. Veregin, P.C. Gorman, J. Stoltenberg, AJ Wortley & M. Bricknell. (2010). An open source web application for historic air photo display and distribution in Wisconsin. *Proceedings, AutoCarto 2010*.
- H. Veregin. (2011). GIS and geoenabled cartography. *Cartography and geo-graphic Information Science, 38*(3), 299-301. (Forthcoming)
- H. Veregin & T. Kennedy. (2011). Online information dissemination at the Wisconsin State Cartographer's Office using map services and APIs. In M. Peterson (Ed.), *Online Maps with APIs and Mapservices*. International Cartographic Association Commission on Maps and the Internet. (Forthcoming)



Conference Presentations

- H. Veregin & C. Pulford, J. *Statewide GIS Councils*. NSGIC Annual Meeting, Minneapolis, Minnesota, Sept. 2010.
 (Discussion session)
- H. Veregin. *Next Steps for WIGICC: Legitimacy and Sustainability*. Presentation to Minnesota Statewide Geospatial Advisory Council, St. Paul, Minnesota, Sept. 2010.
- H. Veregin, J. Stoltenberg, AJ Wortley & M. Bricknell. *Development and Testing of an Open Source Web Application for the University of Wisconsin's Historic Air Photo Collection.* NACIS Annual Meeting, St. Petersburg, Florida, Oct. 2010.
- H. Veregin, C. Pulford, J. Sullivan, R. Wencl & AJ Wortley. *National Geospatial Initiatives and Summary of NSGIC Annual Meeting*. WLIA Regional Meeting, Stevens Point, Wisconsin, Oct. 2010.
- H. Veregin, P.C. Gorman, J. Stoltenberg, AJ Wortley & M. Bricknell. *An Open Source Web Application For Historic Air Photo Display and Distribution in Wisconsin*. AutoCarto 2010, Orlando, Florida, Nov. 2010.
- H. Veregin. *The Wisconsin State Cartographer's Office: Data Access for Surveyors.* Madison Area Surveyor's Council Meeting, Madison, Wisconsin, Dec. 2010.
- B. Hemstead & H. Veregin. Data Access on Your Desktop. 62nd Annual Surveyor's Institute, Wisconsin Society of Land Surveyors, Wisconsin Dells, Wisconsin, Jan. 2011.
- B. Hemstead & H. Veregin. *Enhanced Web-based Delivery of Wisconsin Control Data*. WisDOT Annual Survey Training Workshop, Madison, Wisconsin, Feb. 2011.
- J. Lacy. An Update on National Imagery Programs. WLIA Annual Conference, Madison, Wisconsin, Feb. 2011.
- P. Worrall, B. Cutler, I. Weichert, T. Loesch, J. Schwichtenberg, C. Pulford, H. Veregin & AJ Wortley. *Midwest State Leaders Panel: Coordination Trends – Wisconsin in the Next Two Years*. WLIA Annual Conference, Madison, Wisconsin, Feb. 2011. (Panel session)
- J. Stoltenberg & H. Veregin. *1937-1941 Historic Aerial Photographs of Wisconsin: Discovery and Access*. WLIA Annual Conference, Madison, Wisconsin, Feb. 2011.
- H. Veregin & B. Hemstead. *Enhanced Web-Based Delivery of Wisconsin Control Data*. WLIA Annual Conference, Madison, Wisconsin, Feb. 2011.

- H. Veregin & T. Kennedy. *Developing a Statewide Digital Basemap for Wisconsin*. WLIA Annual Conference, Madison, Wisconsin, Feb. 2011.
- J. Lacy. Overview of the Wisconsin Regional Orthophotography Consortium—Building a Statewide Partnership. USGS National Map Users Conference, Denver, Colorado, May 2011.
- J. Lacy, S. Hall, R. Jackson, G. Lee, & K. Williams. *National Digital Orthophotography Program Partnerships*. USGS National Map Users Conference, Denver, Colorado, May 2011. (Panel Session)
- AJ Wortley, B. Hemstead & T. Kennedy. *PLSS Inventory, Status and Access in Wisconsin*. WLIA Regional Meeting, La Crosse, Wisconsin, May 2011.

Grants

Establishment of the Wisconsin Geographic Information Coordination Council (WIGICC)

Source: US Geological Survey Partnership Program, \$38,968 Principal Investigator: H. Veregin Status: Completed September, 2010

Description: Helped guide WIGICC through its first two years, providing funds for meetings and publications.

The Changing Landscapes of Wisconsin: A Digital Archive of Historic Aerial Photographs

Source: Baldwin Wisconsin Idea Endowment, \$97,569 Principal Investigators: H. Veregin and P. Gorman Status: Completed December, 2010.

Description: A collaborative 3-year project with the Robinson Map Library and UW Digital Collections which led to the development of the WHAIFinder online application serving historic aerial imagery for Wisconsin.

Business Plan Development for a Wisconsin Aerial Imaging Program

Source: Federal Geographic Data Committee (FGDC) Cooperative Agreements Program, \$39,999 Principal Investigator: H. Veregin Status: Awarded February, 2011.

Description: SCO is the lead organization in collaboration with the Wisconsin Department of Military Affairs and North Central Wisconsin RPC on this grant which seeks to develop a business plan for aerial image acquisition.

The Changing Landscape of Wisconsin

Source: National Endowment for the Humanities (NEH), \$223,972

Status: Not funded.

Description: Collaboration between the SCO, the Robinson Map Library, and UW Digital Collections. Proposal to augment the digital aerial image collection in the WHAIFinder with additional historic digital resources.

US National Grid Adoption

Source: Wisconsin Office of Justice Assistance/Homeland Security Program, \$8000.

Status: Pending.

Description: Subcontract to Wisconsin Department of Military Affairs for Web site development for a US National Grid adoption program.

SCO in the News

2011 Governor's Award for Archival Innovation

Awarded to the SCO, the Robinson Map Library, and UW Digital Collections for their joint "Changing Landscapes of Wisconsin" project. Awarded by the Wisconsin Historical Records Advisory Board in association with the Wisconsin Historical Society.

Outstanding Contribution Award

Awarded to Brenda Hemstead by the Wisconsin County Surveyors Association (WCSA), Jan. 2011.

National News Feeds

"Too many cooks?" Mapping Bulletin article (Veregin) picked up by Directions Magazine. <u>http://</u> <u>www.directionsmedia.net/newsletters.archive/index.php?</u> <u>ID=1715</u>

"Wisconsin welcomes new crop of GIS/cartography professors" Mapping Bulletin article (Veregin) picked up by Directions Magazine Education GIS Tidbits. <u>http://</u>

apb.directionsmag.com/entry/education-gis-tidbits-6-2-11/181364

"USGS Hosts National Map Users Conference" Mapping Bulletin Article (Lacy) picked up by USGS. <u>http://</u> <u>nationalmap.gov/uc/index.html</u>

Point of Beginning Interview

Howard Veregin and Brenda Hemstead interviewed for Point of Beginning magazine article on surveying activities in Wisconsin. <u>http://www.pobonline.com/Articles/</u> <u>Cover Story/BNP GUID 9-5-</u> 2006 A 100000000000981457

Letters and Science News

FGDC CAP grant highlighted in College of Letters and Science News and Notes, April 21, 2011. <u>http://</u>news.ls.wisc.edu/?p=6089

Coordination and Outreach

Conference Attendance

- National States Geographic information Council Annual Meeting, Minneapolis, Minnesota, Sept. 2010 (Veregin, Lacy, Wortley)
- Wisconsin Counties Association Annual Meeting, Milwaukee, Sept. 2010 (Veregin, Hemstead)
- North American Cartographic Information Society (NACIS) Annual Meeting, St. Petersburg, Florida, Oct. 2010 (Veregin)
- Minnesota GIS/LIS Meeting, Duluth, Minnesota, Oct. 2010 (Wortley)
- Wisconsin Land Information Association Regional Meeting, Stevens Point, Oct. 2010 (Veregin, Hemstead, Kennedy, Lacy, Wortley)
- AmericaView Partners Meeting, Madison, Oct. 2010 (Lacy, Kennedy)
- Esri Wisconsin Users' Group (EWUG), Middleton, Nov. 2010 (Veregin, Kennedy, Lacy, Wortley)
- UW-Milwaukee GIS Day, Milwaukee, Nov. 2010 (Wortley)
- AutoCarto 2010, Orlando, Florida, November, 2010 (Veregin)
- National Digital Orthophoto Programs Steering Committee Fall Meeting, Pascagoula, Mississippi, Nov. 2010 (Lacy)
- Madison Area Surveyor's Council Meeting, Madison, Dec. 2010 (Veregin, Hemstead)
- Annual Surveyor's Institute, Wisconsin Society of Land Surveyors, Wisconsin Dells, Jan. 2011 (Veregin, Hemstead)
- Wisconsin Land Information Association Annual Meeting, Madison, Feb. 2011 (Veregin, Hemstead, Kennedy, Lacy, Wortley)
- American Society for Photogrammetry and Remote Sensing (ASPRS) Western Great Lakes Chapter Meeting, St. Paul, Minnesota, Feb. 2011 (Lacy)
- Governor's Conference on Economic Development, Madison, Feb. 2011 (Veregin)
- WisDOT Annual Survey Training Workshop, Madison, Feb. 2011 (Veregin, Hemstead)

- National States Geographic information Council Midyear Meeting, Annapolis, Maryland, Feb. 2011 (Lacy)
- Iowa Geographic Information Council 2011 Conference, Dubuque, Iowa, April 2011 (Veregin)
- American Society for Photogrammetry and Remote Sensing (ASPRS) Annual Meeting, Milwaukee, May 2011 (Lacy, Kennedy)
- GITA Geospatial Seminar, La Crosse, May 2011 (Veregin)
- Wisconsin Cooperative Soil Survey Work Planning Conference, Madison, May 2011 (Veregin)
- National Map Users Conference, Denver, Colorado, May 2011 (Lacy)
- Wisconsin Land Information Association Regional Meeting, La Crosse, May 2011 (Hemstead, Kennedy, Wortley)

University Activities

Department of Geography, UW-Madison

- Collaboration on Baldwin Wisconsin Idea Endowment grant with Robinson Map Library and UW-Digital Collections
- Collaboration on National Endowment for the Humanities (NEH) grant application with Robinson Map Library and UW -Digital Collections
- Collaboration with Tanya Buckingham and Jaime Stoltenberg for 2010 Science Olympiad at UW-Madison (Lacy)
- Faculty Search Committee (Veregin)
- External Relations Committee/Geography Open House Planning (Veregin, Hemstead)
- Science Hall Computing Committee (Wortley)
- Geocomputing Committee (Lacy)

Geospatial Alliance (formerly SIAC)

- Coordinated Geospatial Steering Committee meetings on Feb. 10 and May 26, 2011.
- Organized and hosted the annual Geospatial Summit on April 28, 2011. Over 40 faculty and staff attended and 14 presented research summaries.
- Developed a new Web site for the Geospatial Alliance with an underlying content management system to allow easier updates by Alliance members (<u>www.geoalliance.wisc.edu</u>).

Coordination and Outreach

UW-Madison

- College of Letters and Science Committee on Academic Staff Issues (Lacy)
- Guest lecture in Urban and Regional Planning on Web services, mashups and KML (Wortley)
- Presentation on visual complexity and mapping, Office of Human Resources Development workshop (Wortley)

UW System Campuses

- Participation in UW-Milwaukee GIS Council meetings (Veregin)
- Reviewer, UW-Stevens Point GIS Center (Lacy)
- Organized meetings between Center for Land Use Education, UW-Stevens Point, and Wisconsin GIO regarding parcel data (Kennedy)
- Outreach visits and guest lectures at UW-Platteville and UW-La Crosse (Veregin)

Other Universities

• Member, Advisory Board, Masters of Geographic Information Science Program, University of Minnesota-Twin Cities (Veregin)

Professional Associations

Wisconsin Geographic Information Coordination Council (WIGICC)

- Ex officio member of WIGICC (Veregin)
- Member, Internal Operations Team (Veregin)
- Member, Outreach/Communications Team (Veregin)
- Participation in Permanence Working Group, formed to identify a pathway for the council to obtain permanency (Veregin)
- Participation in Elevation Data Working Group, created to develop an inventory of elevation data in the state, provide education and outreach, and develop standards for quality assurance and data acquisition (Veregin)
- Participation in Economic Development Working Group, created to develop a plan for the state to use GIS in economic development applications (Veregin)
- Administrative support to WIGICC, including coordinating and hosting meetings, maintaining WIGICC Web site, posting WIGICC news and events, and helping organize elections (Veregin)
- Completion of US Geological Survey CAP grant "Establishment of the Wisconsin Geographic Information Coordination Council" (Veregin)

- Development of promotional materials including new poster and mailer for WIGICC (Veregin with Outreach/ Communications team)
- Outreach and presentations on WIGICC to Minnesota Statewide Geospatial Advisory Council and National States Geographic Information Council (Veregin)

Wisconsin Land Information Association (WLIA)

- WLIA President (Wortley)
- Chair, Conference Committee, responsible for setting up annual conference in Madison (Wortley)
- Member, Board of Directors (Veregin)
- Chair, Membership Committee (Veregin)
- Member, Legislative Committee (Veregin, Lacy)
- Member, Technical Committee (Veregin)
- Member, Education Committee (Hemstead, Veregin)
- Member, Communications Committee (Hemstead)
- Member, Conference Committee (Hemstead)

County Land Information Offices

• Outreach to Land Information Offices in Dodge County, Lafayette County, Iowa County, Grant County, St. Croix County, Jackson County, Trempealeau County (Hemstead, Lacy, Veregin)

Wisconsin Society of Land Surveyors (WSLS)

- Liaison to the professional geodetic and surveying community to facilitate the discovery of user needs related to office online Finder applications (Hemstead)
- Coordinated with WSLS and WCSA regarding management and maintenance of online county surveyor's directory (Hemstead)
- Outreach and presentations at annual institute conferences (Hemstead)

Wisconsin County Surveyors Association (WCSA)

- Participated and reported on SCO activities in all WCSA Board meetings, Neillsville, Aug. 2010, Nov. 2010, March 2011, May 2011 (Hemstead)
- Developed promotional materials including new brochure, exhibit booth display panel, and Web content (Hemstead)

SAGIC (State Agency Geographic Information Coordination team)

- Coordinated and attended SAGIC Meetings, January and April 2011 (Lacy)
- Attended SAGIC Meeting, April 2011 (Veregin)

Coordination and Outreach

Wisconsin President's Council

- Coordinated and attended October, 2010, meeting (Lacy)
- Attended October, 2010, meeting (Veregin, Wortley)

Wisconsin Regional Orthophotography Consortium (WROC)

- Participated on WROC steering committee (Lacy)
- Wrote documentation for the WROC Web site (Lacy)
- Participated in developing specifications for delivery of WROC imagery via WisconsinView (Lacy)
- Presentation at US Geological Survey National Map Users Conference on WROC (Lacy)

Minnesota Statewide Geospatial Advisory Council

- Presented summary of WIGICC activities at Sept, 2010 meeting, St. Paul, Minnesota (Veregin)
- Participated in June, 2010, conference call (Veregin)

National States Geographic Information Coordination Council (NSGIC)

- Wisconsin State Representative (Veregin)
- Member, state caucus (Veregin, Lacy, Wortley)
- National Digital Orthophoto Steering Committee Liaison (Lacy)
- Member, Communications Committee (Lacy)
- Member, GIS Inventory Working Group under Technical Committee (Wortley)

American Society for Photogrammetry and Remote Sensing (ASPRS)

- Elected Treasurer, Western Great Lakes Chapter (Lacy)
- 2011 National Conference Planning Committee (Lacy)

Mapping Agencies

GIO (Wisconsin Geographic Information Office)

- Share WIGICC ex officio duties with Curt Pulford, GIO (Veregin)
- Joint presentations with GIO at WLIA and NSGIC conferences (Veregin)

Wisconsin Department of Transportation

- Report and recommendations for incident locator tool for WisDOT Traffic Safety Council (Wortley)
- Collaborated with Surveying & Mapping Section on WISCORS and Height Modernization Program status and datasets (Hemstead)

Department of Administration

• Work on 2011 Land Information Office survey (Wortley)

Wisconsin Department of Military Affairs

- Collaboration with WI DMA on successful Federal Geographic Data Committee grant, "Business Plan Development for a Wisconsin Aerial Imaging Program"
- Collaboration with WI DMA on Wisconsin Office of Justice Assistance/Homeland Security Program grant for US National Grid adoption program (Status pending)

Wisconsin Department of Natural Resources

- Ex Officio Member, Wisconsin Geographic Names Council (Veregin)
- Collaboration with DNR Floodplain Mapping program to develop elevation inventories per FEMA and NOAA requests for information (Lacy)
- Provided maps and background for boundary dispute with Minnesota for DNR attorneys (Lacy)

Regional Planning Commissions

- Collaboration with North Central Wisconsin RPC on successful Federal Geographic Data Committee grant, "Business Plan Development for a Wisconsin Aerial Imaging Program"
- Outreach to Southwest Wisconsin Regional Planning Commission, April 2011 (Veregin)

United States Geological Survey

- State Champion for National Enhanced Elevation Assessment (Veregin)
- Outreach to Upper Midwest Environmental Sciences Center, La Crosse (Veregin)

National Geodetic Survey (NGS)

- Collaborated with State Geodetic Advisor on creating a Wisconsin Web page with associated content (Hemstead)
- Coordinated and reported issues and recommendations pertaining to station condition report forms submitted by surveyors (Hemstead)

US Department of Agriculture

• Participation in developing specifications for delivery of NAIP imagery (Lacy)

Strategic Plan Performance

In the spring of 2010 the SCO developed a new strategic plan for 2010-13. The plan identifies five strategic priorities, each with a number of strategic initiatives. This page is a summary of how we think we're doing.

Priority I. Develop methods and best practices for statewide data development and data integration initiatives.

- Began work on statewide PLSS data integration pilot project, including a statewide survey and a WLIA presentation.
- Secured FGDC grant to support statewide air photo business plan development.
- Initiated conceptual phase of statewide mid-scale cartographic database.

Priority II. Improve online data discovery and access for the geospatial community with the goal of providing efficient access to best available local and state data sources.

- Improved access to statewide control and PLSS data through upgraded Finder applications.
- Provided discovery and download access to 38,000 historic air photos of the state through the new WHAIFinder application.
- Increased completeness of ControlFinder and PLSSFinder coverage through expanded relationships with data contributors. Now have 18+ counties in ControlFinder and 20+ in PLSSFinder.
- Partnered with the Robinson Map Library and UW Digital Collections in seeking sustained funding for the historic air photo repository, through a grant application to the National Endowment for the Humanities.

Priority III. Develop and maintain a coordination role between and within campuses of the UW system and other institutions of higher education in Wisconsin.

- Created new Web site for the Geospatial Alliance (formerly SIAC).
- Coordinated Geospatial Steering Committee meetings, and organized a Geospatial Summit for geospatial practitioners on campus.
- Increased visibility of non-traditional geospatial users on campus (e.g., public health) through Geospatial Summit.
- Interacted with other UW campuses including Milwaukee, Stevens Point, Platteville and La Crosse through meetings, guest lectures, and outreach visits.

 Collaborated with other units of the UW-Madison Geography Department on mutual projects such as the Changing Landscapes project and Geography Open House.

Priority IV. Engage in applied research and innovation to develop and disseminate information about new methods and practices.

- Presented information on SCO projects at national conferences (NACIS and AutoCarto).
- Published professional articles in journals, books and conference proceedings.
- Developed and implemented cartographic standards for the ControlFinder, PLSSFinder and WHAlfinder applications, as a model for implementing cartographic design practices in a web environment.

Priority V. Continue efforts to engage, educate, and support the Wisconsin geospatial community.

- Served in leadership roles on various state and national organizations, including WLIA, WIGICC, NSGIC, ASPRS, and others.
- Supported professional organizations at the state and national level through coordination efforts.
- Worked toward establishment of permanent coordination council (WIGICC) through efforts to sustain the interim council, achieve visible successes, and develop a pathway to permanence.
- Redesigned and rolled out the new SCO Web site with enhanced content, functions and design.

For a detailed copy of our 2010-13 strategic plan see <u>http://www.sco.wisc.edu/images/stories/SCO/</u> SCO_Strategic_Plan_2010-2013.pdf

Business Plan, 2011-12

In the spring of 2011 the SCO developed its business plan for 2011-12 (Fiscal Year 2012) with several key initiatives tied to our strategic plan.

Initiative I. Upgrade WiscLINC, Wisconsin's NSDI clearinghouse node.

- Enhance functionality to provide data access paths for download as well as reporting data existence.
- Improve ease of back-end maintenance through software platform upgrade.
- Provide simple mapping interface to preview Web services.
- Provide access to Robinson Map Library data holdings and SCO informational materials.

Initiative II. Conduct grant-based air photo business plan development project.

- With the aid of consultants, plan and implement a comprehensive information-gathering process to assess needs for statewide image acquisition.
- Develop a written business plan outlining the steps necessary to implement the program.
- Outreach throughout the state to reach a broad spectrum of stakeholders.

Initiative III. Initiate PLSS integration pilot project.

- Determine standards and models to use for statewide PLSS data integration.
- Work with local partners to obtain datasets to integrate for a pilot area of the state.
- Evaluate issues and problems as a precursor to a statewide integration effort.

Priority IV. Initiate mid-scale digital cartography project.

- Begin developing a statewide, mid-scale GIS database for cartographic purposes.
- Identify and interview stakeholders to develop requirements for data and product types/features.
- Document project goals and timelines and begin to identify and integrate data sources.

Priority V. Expand and augment SCO publications.

 Publish SCO whitepaper on the WROC process and funding model, as an offshoot of the FGDC air photo business plan project.

- Submit for publication as many as two professional publications detailing SCO projects.
- Present papers detailing SCO projects at a national conference such as NACIS.

Priority VI. Support WIGICC in its efforts to gain permanence.

- Help sustain efforts in Economic Development and Elevation Data working groups to achieve council successes.
- ✓ Support and assist with efforts to gain permanence.
- Outreach to other councils in other states to promote the exchange of information and ideas.
- Continue to support WIGICC administratively through web site updates, blogs, meeting coordination, etc.

Staff, Students and Support

Permanent Staff

Howard Veregin, State Cartographer veregin@wisc.edu 608-262-6852

Jim Lacy, Associate State Cartographer lacy@wisc.edu 608-262-6850

Brenda Hemstead, IS-Resource Technician hemstead@wisc.edu 608-263-4371

AJ Wortley, Senior Outreach Specialist Iwortley@wisc.edu 608-265-8106

Tim Kennedy, Admin Program Specialist ttkennedy@wisc.edu 608-890-3793

Affiliated Staff

Suzanne Harris, IT Manager, Science Hall Susan Sauer, Financial Specialist, Geography Dept.

The SCO provides support to the Science Hall IT Manager and shares a Financial Specialist with the Geography Department.

Student Assistants

Michael Bricknell Molly Evjen Derek Grisbeck Shuguang Hao Simon Ignatowski Jessica Moths Genevieve Schaad

Funding

The SCO is a unit within the Department of Geography, in the College of Letters & Science (L&S), at the University of Wisconsin-Madison. The SCO receives most of its funding from an annual base budget allocation from L&S.

In addition, ongoing financial support from the Division of Continuing Studies has directly facilitated the SCO's role in promoting the Wisconsin Idea through presentations, workshops, and participation in a variety of professional organizations focused on mapping and GIS technology.

Committee on State Cartography

The Committee on State Cartography (CSC) is the SCO's steering committee, providing advice and feedback on office initiatives. CSC members are drawn from the SCO's broad user community, and are appointed to three-year terms 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. Beginning in August 2011, our newest CSC chair is Robert Roth (<u>http://www.geography.wisc.edu/faculty/roth</u>).

The Wisconsin Idea

The Wisconsin Idea is the principle that the university should improve and enrich people's lives beyond the classroom. The SCO embodies this principle by providing direct assistance to Wisconsin's professional mapping community and to all citizens of the state. Our goal is to help make the educational mission of the University of Wisconsin more relevant and accessible through such outreach efforts.

For more information on the Wisconsin Idea see <u>http://wisconsinidea.wisc.edu</u>

Contact Information

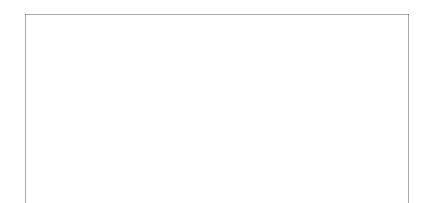
Wisconsin State Cartographer's Office 384 Science Hall 550 N. Park Street Madison, WI 53706-1491

Phone: (608) 262-3065 Fax: (608) 262-5205

Email: <u>sco@wisc.edu</u> Web: <u>http://www.sco.wisc.edu</u>



Wisconsin State Cartographer's Office 384 Science Hall 550 N. Park Street Madison, WI 53706-1491







Contents

Annual Report 2010-11

Major Projects and Initiatives

Online Mapping Applications Wisconsin Historic Aerial Image Finder SCO Web Site Redesign SCO Publications

Conference Presentations

Grants

SCO in the News

Coordination and Outreach

Conference Attendance University Activities Professional Associations Mapping Agencies

Strategic Plan Performance

Business Plan, 2011

Staff, Students and Support