

# Building Connections

With a rich history of locally funded land records and GIS data development, Wisconsin has a pressing need for interoperable technologies for cataloguing and integrating both data and efforts. The Wisconsin State Cartographer's Office (SCO) endorses the Open Geospatial Consortium's (OGC) geospatial publishing and exchange standards, which leverage the benefits of more than a decade of local geospatial data production. SCO has been providing the State of Wisconsin with outreach and education services on issues related to mapping and GIS for over thirty years. The statutory mission calls for the SCO to act as a clearinghouse and to compile a union catalogue of maps and mapping efforts in the state, as well as periodically embarking on experimental map products.

## Outreach

OGC standards provide a foundation for regional data integration, accessible cartographic publishing and interoperable access to remote geographic resources. With these goals in mind, the SCO became a Consortium member and has deployed OGC standards in its suite of online mapping applications for state outreach and education. OGC standards have played a central role in our various grant activities and web-based application development, such as an integrated catalogue of geodetic control called ControlFinder and a clearinghouse-based map service viewer called WiscMap. Using these tools, the SCO can educate Wisconsin users on the advantages of integration and interoperability.

## Collaboration

OGC standards-based technologies have enabled local sharing of best practices and economic efficiencies on the University of Wisconsin-Madison campus, particularly in regard to the Sea Grant office and Environmental Remote Sensing Center. Adopting OGC standards has led to unique opportunities in collaborative interdisciplinary research with a range of partners. Whether demonstrating map-based communication for the non-profit Association of State Floodplain Managers, exploring regional GIS tool development with the Institute for Application of Geospatial Technology or augmenting the outreach goals of the Great Lakes Commission's Great Lakes Observing System, OGC influence is deeply rooted in the SCO approach.

## Metadata

As cartography and map data collection went digital, the SCO tapped into the efforts of the Federal Geographic Data Committee at national level, as well as similar state efforts to advance standardised versions of foundational-level mapped information. An emerging momentum ensued toward interoperable publishing of map-based information for use in multiple interfaces and clearinghouse development and metadata education. The Consortium played a major role in early efforts. As a new affiliate member, the office now acts as a Wisconsin-based resource for providing current information on OGC activities and potential use in government and academic GIS integration/interoperability projects.

## Advancing SDI

OGC efforts will be influencing Wisconsin in other ways as the SCO embarks on registering newly standardised county coordinate system definitions, engaging in new catalogue services for the web (CSW) via a national GIS data inventory, Ramona, and further encouraging local spatial-data infrastructure advancement in the state.