# State Cartographer's Office & State Geographic Information Office Joint Broadcast

September 23, 2009 • 2:00 pm – 3:00 pm









### **Agenda**

2:00	Welcome/Introductions	Curt
2:05	New State Cartographer	Howard
2:20	Interoperability	Erik/AJ/Lee
2:35	WIGICC Update	Curt
2:40	News/Announcement	Jim/Brenda
2:50	Q&A	Brenda
2:58	Closing Remarks	Brenda





### Welcome / Introductions

- Welcome to our 3rd Broadcast
- Purpose
- Next Date(s)
- Session questions / Feedback
- Introductions





# New State Cartographer





### Howard Veregin Background

#### Involved in GIS for almost 30 years

- Director of GIS Operations at Rand McNally, 2000-09
- 25+ staff (research, data development, map production)
- National and international map products
- Data development for B2B and consumer digital products
- Editor, Goode's World Atlas, 21<sup>st</sup> and 22<sup>nd</sup> editions





### Howard Veregin Rand McNally

- Collaboration
  - NCGIA gazetteer, Joel Morrison, Goode's Board, map/data providers
- Data development
  - Population estimation, custom geographies, selection tools, commercial & public-domain data integration
- Process improvements
  - Tracking updates, consumer feedback, editorial revisions management, data migration
- Cartographic methods
  - Line generalization, raster smoothing, relief colorization, thematic map development, reference mapping





### Howard Veregin Univ. of Minnesota/Kent State Univ. (1992-2000)

- Improve quality/minimize error for GIS analysis
- Image classification accuracy, resolution effects, computational intelligence (P. Sinčák)
- Microsoft software proofing tools (D. Lanter, N. Chrisman)
- Cartographer, CWRU's Encyclopedia of Cleveland History
- Data quality visualization, NCGIA Maine (Kate Beard)
- Data quality parameterization, EMSL (M. Hewitt)
- Spatial data quality book in Italian (A. Giordano)





### Howard Veregin Graduate Education

- PhD, 1991, UC Santa Barbara
- NCGIA Initiative #1: Spatial Data Quality
- David Simonett, Michael Goodchild, Waldo Tobler
- Introduced to computer mapping as a grad student at Univ. of Manitoba, 1982





### State Cartographer's Office

Period of change in geospatial technology and practice.

## What does this mean for Wisconsin GIS community?





### GIS in Transition Technology Change

#### **Emerging ubiquity of geospatial technology**

- Lower-cost desktop GIS environment
- Enhanced mapping tools/innovative mapping methods
- Web-based data dissemination and map services
- Mobile mapping: customized, portable geo-enabled tools

Reorientation of GIS skillsets

Changes in user expectations and practices
Increased awareness





### GIS in Transition Application Domains

#### Non-traditional applications

- Government agencies (e.g., Cultural Resource Mgmt)
- For-profits (e.g., Business Intelligence)
- Higher Education (e.g., MBA programs)
- Non-profits (e.g., Public Defenders)

Unrecognized and unrealized spatial dimensions Information management → policy analysis





### GIS in Transition Data/Policy

#### Reorientation of traditional roles

- Digital geospatial data comes of age!
  - Diversity of themes, global in scale (e.g., DOE's LandScan)
  - Higher resolution, quality (e.g., Digital Globe's QuickBird)
  - Web: Accessibility, usability, interoperability
- The private sector
  - Commercialization of remote sensing
  - Commercial activities (e.g., NAVTEQ vs. Census MAF)
  - Federal-private partnerships (e.g., NGA/Google for GeoEye-1)

#### Increased relevance of private sector





### Opportunities & Challenges Non-Traditional Users

#### Promote GIS use where skillsets are undeveloped

- State/local agencies (e.g., SHPO)
- Professional organizations (e.g., Realtors' Assn.)
- University departments (e.g., Business Admin.)
- For-profits (e.g., commercial trucking)
- General public (e.g., genealogy and place names)

Embrace change to grow/integrate GIS

Promote novel, unanticipated GIS applications





### Opportunities & Challenges New Methods & Technologies

#### Conduct R&D, engage thought leaders

- Research emerging technologies (e.g., Open Source)
- Disseminate research results (e.g., "WI GIS Case Studies")
- Data development and mapping (e.g., WI gazetteer)
- Mobile mapping tools (e.g., Finders)
- Spatial analysis in web map services
  - Temporal GIS/change over time (e.g., land use)
  - Look to private sector examples: <u>www.neighborhoodscout.com</u>

### Embrace new technology to improve GIS ROI SCO can "make it real" (technology+ constituents)





### Opportunities & Challenges Local, Regional, State, National Stakeholders

#### Build on successful relationships/initiatives

- WLIA, LION, WSLS, WIGICC, SIAC, NSGIC, others...
- Phase II of data inventory
- Help facilitate completion of framework layers
- Promote data sharing, accessibility, interoperability (GIO)
- Enhance/update WiscLINC, Finders, AP Catalog
- Smaller geographic scales (neighborhoods, uninc places...)
- Participate in data preservation efforts

#### Help justify expenditures in GIS technology





#### **Outreach**

- ✓ Beginning outreach travel in Wisconsin
- ✓ Participation at conferences

What are your concerns and how can SCO help?

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### Interoperability





### Spatial Data Repository Project Goal

- Provide a facility for the
  - aggregation
  - integration,
  - and distribution
- of common statewide geospatial data layers
- and reduce redundant costs related to their use





### Spatial Data Repository Project Deliverables

- Basic Web Services (Available To All)
  - ArcGIS Server Map Services
  - Open Geospatial Consortium (OGC) Services including
    - WMS (Web Map Service)
    - KML
    - WFS (Web Feature Service)
  - Basic cartographic web services
- Data Download (Available To State Agency Partners)



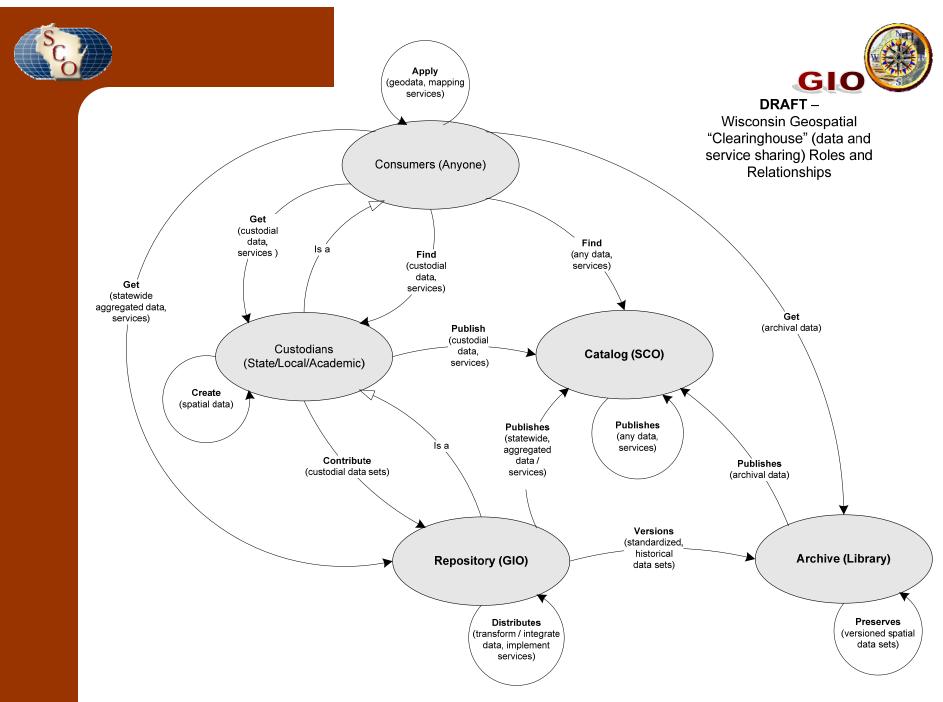


### Spatial Data Repository Project Data

- County Boundaries
- State Boundary
- School Districts
- Voting Districts
- LandNet (a PLSS Representation)
- 24k Hydrography

- Minor Civil Divisions(Cities, Villages, Towns)
- Roads
- State Facilities
- Land Parcels
- Zip Code Boundaries
- Census Blocks

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### WIGICC Update





### WIGICC Update (http://wigicc.org)

- Organizational
  - Business Sector: <u>jschwichtenberg@sehinc.com</u>
  - New Members:
    - Donna Genzmer, UWM Education,
    - Howard Veregin, SCO Ex-Officio
- Business Planning
- Recent Activities
  - WLIA/WIGICC relationships
  - Supporting initiatives (HS Strategic, Orthos, Interop...)

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- MCD Committee formation (<u>lisa.morrison@wi.gov</u>)
  - Kick-off meeting Sept. 28<sup>th</sup>, DOA





# News and Upcoming Events





### **National Broadband Mapping**

- \$240 million for states to feed broadband "maps" to feds, part of ARRA
- PSC designated as the "single entity" eligible to receive mapping funds for WI
- WI requested \$3.1m grant; \$1.3m match
- Joint Assembly/Senate committee hearing today





### Status of Pending Legislation

### AB-271 "Surveying Modernization"

- Surveyors seek clarification of statutory language
- Scope of bill concerns GIS/mappers
- Discussions, meetings, amendments

### AB-349 "Internet search by name for tax records"

- Concerns raised by opponents
- Outcome from Aug. 25<sup>th</sup> public hearing





### **WROC Webinar Re-cap**

- 42 counties expected to fly in 2010, seven more possible
- State of WI received \$700k federal grant for statewide aerial photography
- Seeking additional partnerships from state agencies, feds, and several MN counties
- See news.sco.wisc.edu for Webinar summary

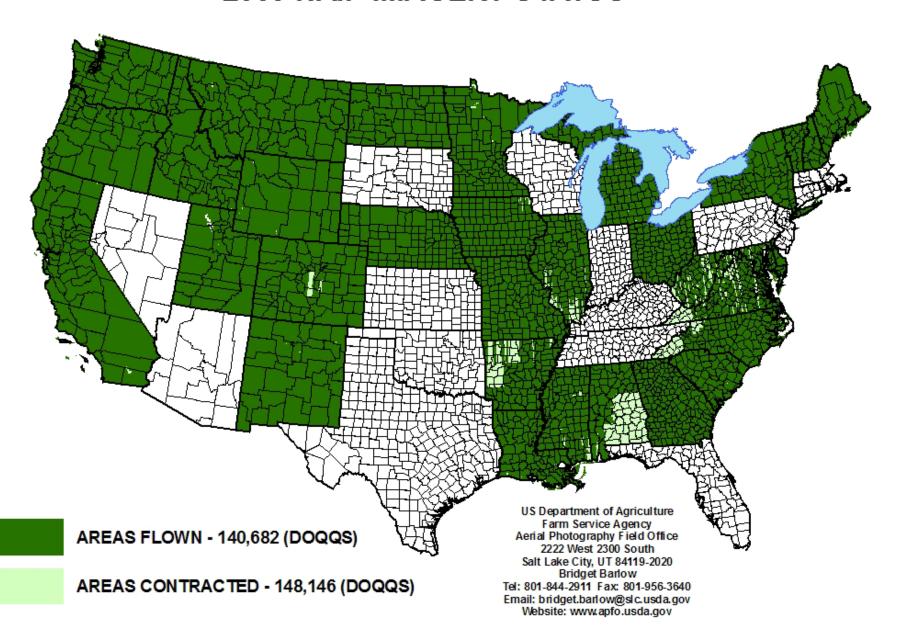




### Status of 2010 Wisconsin NAIP

- Originally scheduled for 2011, moved up to 2010
- Same specs as 2005 and 2008 (1m resolution, color, leaf-on)
- Majority of U.S. flown in 2009

#### **2009 NAIP IMAGERY STATUS**







### **Upcoming Events**

#### news.sco.wisc.edu/calendar.html

- GITA, Oct 8 Waukesha
- WLIA, Oct. 20-21 Eau Claire
- ESRI Wis. User Group, Oct. 29-30 Appleton
- UW-Milw. & ECRPC GIS Day, Nov. 18th
- UW-Madison GIS Day, Nov. 20 UW-Memorial Union
- Wis. Geospatial User Group, Sept. 23 Sheboygan





### **National News**

- NSGIC Annual Conference, Oct 4th 8th, Cleveland
- Imagery for the Nation "record of decision"
- Santa Clara County, CA open records case
  - See <u>news.sco.wisc.edu</u>





### Looking for more news and current events?

## Check out the *Mapping Bulletin* at news.sco.wisc.edu





## Questions & Answers





## SCO/GIO September 23 Meeting Feedback survey

http://doa.wi.gov/WEBSurveys/TakeSurvey .aspx?SurveyID=94KJ478K





### Contact us - in Madison

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