Iowa Geospatial Infrastructure - Status January 2009

Data Production Projects

- 1) Lidar Update Slow progress due to bad weather and other problems in 2007 and 2008. Frequent redeliveries due to various production problems. About 50% of state flown. See map.
 - ASCII and LAS tiles available from UNI Geotree site: http://www.geotree.uni.edu/LidarProject.aspx
 - Shaded Relief of some areas available on ISU Ortho Server: http://ortho.gis.iastate.edu/
- 2) Iowa Orthophoto Project 41 counties in western Iowa will be flown this spring with Leica push-broom sensors to create 2', 1':400' scale 4-band orthophotos, to be delivered in September. State contract includes buy-ups for local governments. Contact Aerial Services for details. Eastern part of state to be flown in 2010. Products include uncompressed tiles (4-band, UTM in TIFF format), compressed county mosaics (UTM, color and CIR), compressed county mosaics (state plane, color and CIR). Seventeen counties in NW Iowa completed last summer DNR working on county mosaics.
- 3) 2008 NAIP 1 meter color county mosaics (leaf on) flown in summer 2008 by Aerial Services for USDA, delivered last fall, available for viewing on ISU Ortho Server, download from NRGIS Library. No new NAIP flights in 2009 and 2010.
- 4) 2008 CAP Grant Project Stewardship of Structures and Transportation Layers for IGI and the National Map. \$50k CAP grant to develop methodology to update structures layer remotely using ArcGIS Server. 2D building footprints will be extracted from lidar data and updated by local users over the web. Need 10 volunteers to test system when it becomes available. DOT is developing WMS and WFS web services to deliver roads and other layers to users.

Research and Development Projects

- 5) Hydrography Pilot 27 subwatersheds (HUC12s) completed. USGS high resolution National Hydrography Dataset (NHD) and DNR's National Wetland Inventory (NWI) update (from 2002 CIR orthophotos) are conflated (merged) with streams and water bodies extracted from lidar DEM. Currently costs about \$2000 to do a HUC12 watershed. There are 1700 HUC12's in the state.
- 6) Iowa 2008 Flood Return on Investment Project project aimed at documenting GIS experiences during 2008 disasters: what worked, what didn't, where we can improve things. About 30 interviews have been conducted so far. Will develop a return on investment scenario for using GIS for emergency management response and/or mitigation.
- 7) High Resolution Land Cover Project DNR, ISU, UI and UNI partners developing technology and methodology to produce land cover products from 2' orthos, NAIP, and lidar. Next meeting of producers group in March.

Pending IGI Proposals

- 8) Local Government Innovation Grant for a pilot County GIS Service Bureau this project if funded will hire 2 GIS techs for two years to work with about 30 county GIS programs to get data into the ICIT Data Repository with metadata, get state GIS data and training to participating counties (for example, lidar), and put combined county/state data on a web service. Would like to start working on a master agreement between state and local for GIS data sharing. Waiting to hear from Dept of Management if program funding will be released, and who will get it. **Update Jan 16, 2009 DOM announced the funding for LGIF grants was being returned to the state's general fund to help with the budget shortfall.**
- 9) Pooled Technology Grant for Geocoding Project this project if funded will produce address points and structures (2D footprints) layers for 30-50 counties, and develop a web service for geocoding. Proposal did well in preliminary ranking, but funding not assured due to state budget woes.
- 10) CAP Grant 2009 led by others IGIC was approached by the "Carbon Project" to participate in their CAP grant proposal. Iowa is not eligible to receive any funding directly this year because of our 2007 and 2008 grants. The Carbon folks are developing web services to remotely edit and update GIS databases using WFS-T technology and GeoRSS feeds to notify partners when a change is made in a

data layer. IGIC would participate by developing best practices on workflows to update features in statewide structures and/or administrative boundary GIS databases. By participating, we hope to gain some experience with these various technologies and institutional processes to manage statewide layers with many distributed partners.

Other Proposals and Related Projects

- 11) Flood Plain Mapping for Iowa due to historic flooding last June, DNR requested \$15M to create new "approximate" flood plain maps and hydrological models from lidar data for the entire state.
- 12) DNR Skunk River Watershed Model using sediment delivery model developed for lidar DEM and high resolution land cover, create detailed erosion models for 79 subwatersheds (HUC12s). Detailed land cover mapped for Hamilton, Story, Jasper, Mahaska, Keokuk and parts of other counties. Applying for state watershed funding.

13) DOT GIS Projects:

- WMS/WFS: WMS has been ready since before Thanksgiving, we have been held up by not being able to get the URL working properly. Should be fixed very soon, then some testing before public use.
- LRS: Still getting close to having all the roads to current state. The DOT has a few project like traffic count location, sign inventory using the LRS line work and location component. Iowa DOT will be doing a discussion panel with California and Wisconsin DOT and all conference participants at GIS-T in April. This is related to our TIG grant to promote lowa's LRS model as a national guide/standard.
- GIMS: GIMS redesign development is going on. Vendor is working on the web portal component. DOT is currently testing scripts to convert Old DOT GIMS data to the new GIMS format. Contact Karen Carroll for the latest information.
- LiDAR: DOT will be doing a LiDAR presentation with Applied Imagery at GIS-T to show how lowa DOT uses
 Quick Terrain Modeler.
- ESRI state contract: State will be sending out a new simplified agreement to ESRI.

Outreach Activities

IGIC Conference - April 21-23, Cedar Falls - IGI track Wednesday 8:30am to noon Rural GIS Summit - May 20 and 21, Kirksville, Mo - GIS for rural areas ICIT Mid-year - June 10-12, West Des Moines Mariott Iowa Rural GIS Summit - Sept. 22-23, Honey Creek Resort - GIS for rural areas

Issues and Needs

- Need a really good GIS data inventory, especially for local governments, with results loaded into Ramona web tool http://ia.gisinventory.net/
- Need to start developing a master data sharing agreement, starting with local governments and state agencies
- Metadata and ICIT data repository workshops
- Lidar workshop, especially for county engineers
- What to do about a Google "Virtual Iowa"? See Alabama: http://www.dhs.alabama.gov/virtual_alabama/home.aspx?sm=g_a
- · How to expand IGI to cities, COGs, schools and private entities?
- What happens if none of the pending IGI proposals come through this year? How do we keep up momentum? Can we still do a pilot county GIS service bureau using workshops (run by IGIC and ICIT volunteers) instead of full time staff?

SPONSORED BY:









300 N. Franklin, Suite A Kirksville, MO 63501

ADDRESS SERVICE REQUESTED



kirksville MISSOURI | May 20 & 21, 2009 southwest IOWA | Sept. 22 & 23, 2009 by rural folks | for rural folks web presence www.ruralgissummit.org

EVENT DETAILS

Who is this event intended to serve?

The Rural GIS Summit IS NOT focused on the technical aspect of GIS. There will not be any technical training as part of the agenda. Instead, this event is meant to address some of the most significant administrative, policy, business and operational issues associated with GIS in small communities. If you are currently using GIS, this event is meant to enhance your thinking. If you are not using GIS, this event is meant to provide you with practical advice for your considerations. Everyone is welcome, but we extend a special invitation if you are an elected official, administrator, rural utility employee, GIS user, non-user, casual user, academic, private sector or other small community person or one-person shop faced with the issues outlined in the agenda highlights below.

What's included with registration?

- Access to all programs
- Lunch and 2 breaks, both days dessert evening reception
- Registration materials, summit guide, contact list, program materials
- Welcome bags local gifts
- Flash drive with all Summit materials and links

Summit agenda highlights (check website for agenda closer to events)

- Panel of user experience Q/A session with the experienced (for better or worse)
- "How to' workshop workbook guide for developing or expanding GIS for small scale operations
- Gee Wiz GIS ever wonder why GIS is useful and what can be done with information?
- Addressing vendors getting your needs met and establishing a constructive relationship
- Return on investment (ROI) study meeting expectations for the return on GIS investment
- Building Consortia working together to lower costs, create buying power and share skills
- Regional discussions what's hot in your area
- Resources funding options, downloadable data, free imagery, data standards
- Selling your data cents and sensibility of selling GIS databases

Need more information or have questions

Website: www.ruralgissummit.org

To register by web: Details at http://registration.ruralgissummit.org

Contact:

Pam Kelrick GIS Coordinator 660.665.0408 P gisc@cableone.net Jim Giglierano Iowa DNR – Geologist 319.335.1594 P james.giglierano@dnr.iowa.gov

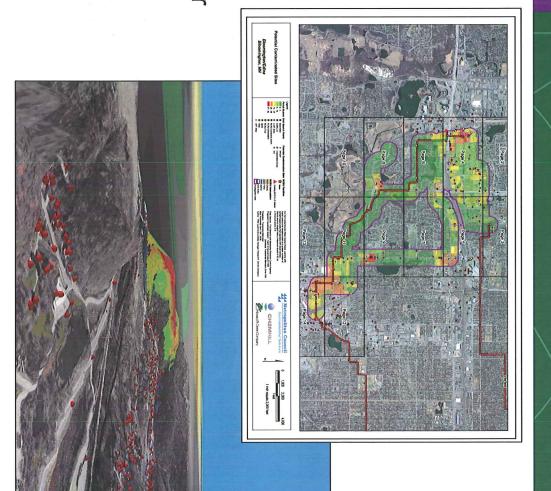
Brad CutlerGIS Specialist/Planner

515.576.7183

bcutler@midascog.net

How Howard R. Green Company benefits from IGIC: Types of Projects using GIS Data

- Annexation Projects
- Highway Corridor Impacts
 Analyses for Environmental
 Assessments
- Viewshed Studies using LiDAR data
- Precision Ag GIS
- Web Portal Community
 Mapping for Brownfield
 Redevelopment and Corridor
 Projects
- Utility Asset Management
- Mobile Traffic Analysis



How IGIC can be of further assistance.

- Statewide access to base map data (ex. Parcel data)
- Standardization of schemas for all datasets (exs. Roads, SSURGO Soil, Parcel data)
- Increased, more timely LiDAR availability
- information such as farm boundaries and crop types CLU attributes, providing public access to basic Encourage State government to expand access to
- Annual 1m. NAIP imagery and further accessible higher resolution aerial imagery. encouragement of community buy-in for publicly-
- survey-grade data Provide education to improve access to high-quality

IGIC Accounts - 2nd Quarter, Fiscal Yr 2008-09

10/7/08	DEPOSIT		Education		Statewide License	19,400.00 \$	49,825.02
10/8/2008	Anne Packard	630	orgexp		Admin "box" (org. records) (12.99) \$ 49,812.03	(12.99) \$	49,812.03
11/11/2008	A+ Conferencing	63 1	orgexp	1424751	conference calls	(303.17) \$	49,508.86
11/11/2008	A+ Conferencing	632	orgexp	multiple	conference calls	(143.07) \$	49,365.79
12/10/2009	A+ Conferencing	633	orgexp	1464080	conference calls	(53.11) \$	49,312.68
12/10/2008		634	Education	20335309	Statewide License - Data InterOp	↔	49,312.68
12/22/2008	IA DNR	635	NAIP		funds collected for NAIP project	(34,500.00) \$	14,812.68

IGIC Budget					
FY 2010 to 2012	12				
COMMITTEE	REQUESTED ITEM(S)	CATEGORY	AMOUNT	COMMENTS	IRS Code
INCOME					
CONFERENCE					
Address of the contract of the	registrations	Registrations	27,000.00		
TO THE PARTY AND ADDRESS OF THE PARTY AND ADDR		Sponsorships	4,250.00		
The state of the s	exhibitor	Exhibitor	18,150.00		
	workshops	Workshops	3,600.00		
Statewide License		The state of the s		- Angles	
Crast		license	0.00		
		grants	0.00		
Other					
	Science Convention 2009		\$180	\$180 Education	
		TOTAL INCOME	53,180.00		
TYDINGT					
EXPENSE					
EXECUTIVE					***************************************
	Projects		5,000.00	5,000.00 I'd ask/recommend that we budget \$3-5K	
				each year for projects and set up a standing	
				committee to review and	

	Conferences	1,000.0	,000.00 I'd also urge, if there be	
			enough money, that there be \$500 to \$1000 each year for sending a representative to one or other regional/national meeting. We need to establish some guidelines for using those funds, particularly so that IGIC and the State of lowa get benefit.	
			- HK	
CONFEDENCE				
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EDUCATION				
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MEMBERSHIP				
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TOTAL EVERNOE 11		GEODETIC	Printed materials for 6 metadata workshops		CLEARINGHOUSE	REMOTE SENSING	NATURAL	HEALTH	Outreach Costs 1
11,119.40	11 110 40		1350 15 participants / workshop.	2400 \$100/month					1,000.00 It might not hurt also to set aside \$1000 each year for "Outreach," but I'd want to be sure that that category (I forget what the Bylaws say) includes some gentle lobbying of legislators etc