

Wisconsin Land Information Association 2008 Annual Conference

LEAPING INTO ENTERPRISE

Building on
20 Years of Land
Records Integration

27, 28 & 29
February

Feb. 27-29, 2008

Grand Geneva Resort

Lake Geneva, Wisconsin

Wisconsin Land Information Association 2008 Annual Conference Information



LEAPING INTO ENTERPRISE GIS: Building on 20 Years of Land Records Integration

About the Conference

The WLIA Conference is the premier GIS conference in Wisconsin, with emphasis on local, regional, statewide, and federal trends, issues, and applications. This three-day conference is packed with hands-on workshops, demonstrations, and technical presentations. This is the ideal opportunity to meet others in the GIS profession and interact, learn and network.

There will be:

- 54 technical presentations covering a myriad of topics
- 14 specialized workshops including hands-on training
- Networking and fun-filled activities
- User group meetings
- Poster competition
- Exhibitors Showcase, featuring the latest in GIS technology
- WLIA town forum, business and board meetings
- Job Board

Who Should Attend?

The conference is designed to appeal to a broad spectrum of participants interested in GIS and related technologies. You should attend the conference if...

- You are thinking about incorporating GIS into your activities
- You are a current GIS user and want to further leverage the power of this technology
- You would like to know more about upcoming improvements to technology
- You are a manager or commissioner who oversees GIS and want to increase your exposure to and knowledge of the technology.

Who We Are

WLIA is a grassroots organization representing a collection of concerned professionals working to develop, maintain, and apply a network of statewide land information systems. WLIA members include staff and elected officials (from all levels of government), academics, consultants, and other private sector users of geographic information systems. We are united by an interest in land records modernization, GIS and related technologies, and by the need for government policies and programs that support their efficient and effective application. WLIA membership is open to individual, student, business, and association members.



WLIA 2008 Annual Conference Highlights

Pre-Conference Workshops

The 2008 conference will include 12 pre-conference workshops. Topics range from keys to coaching employees to soil data, with some offering Certified Public Manager Credits (CPM). Space is limited and the workshops will fill up fast, so register early to guarantee your seat.

Social Night

After a day of expanding your knowledge at workshops and training events, join your colleagues at WLIA's Team Building & Networking Social Event. Two exciting activities will be offered at this year's event — a tour of Yerkes Observatory in Williams Bay, as well as a game night at the Grand Geneva Sports Center.

Yerkes Observatory Tour

Yerkes Observatory is a facility of the University of Chicago that houses five research telescopes, one of which is the largest refracting telescope in the world. In addition, Yerkes is filled with architectural details rooted in classic mythology with hundreds of ornate representations of animals, signs of the Zodiac, and other embellishments. The tour of Yerkes Observatory will depart the Grand Geneva at 5 p.m. and last 1 hour. Seats on the bus are limited, so don't wait to sign up! Upon returning from the tour, participants are invited to join the fun at the Sports Center. Cost: \$25

Grand Geneva Sports Center

The Sports Center activities include exciting events such as a 35-foot-high rock climbing wall, pick-up basketball and volleyball, and team "Olympic" games. Or for those who prefer a more relaxed setting, the Sports Center has a glass viewing area with comfortable seating. "Olympic" games will include both physical and non-physical events that are sure to challenge the athlete and intellect in everyone. Prizes will be awarded to "Olympic" medal winners and as a random draw for event participants! Plenty of appetizers are included so bring your appetite; bar service will be available. Early sign up is encouraged; however, there is plenty of room for all to join the fun so on-site registers will not be turned away. The event is scheduled from 5-9 p.m., with the "Olympic" event scheduled for 7 p.m. Cost: \$25



Keynote Sessions:

Thursday, Feb. 28

Ron Langhelm

Mr. Langhelm is currently an Associate with Booz Allen Hamilton, having spent the past 12 years in the Emergency Management/Homeland Security environment. Formerly, Mr. Langhelm was employed with FEMA where he led geospatial field efforts on many disaster events including the 2001 Nisqually Earthquake in Washington State, the 2001 World Trade Center (WTC) Collapse in New York, the 2002 Winter Olympics in Salt Lake City, the 2003 STS-107 Space Shuttle recovery operation in Texas and the 2005 Hurricane Katrina operations in Louisiana.

Friday, Feb. 29

Molly Mangan

Ms. Mangan's expertise is in strategic planning, geographical information systems (GIS), and project management. She also has extensive experience in process analysis, functional systems architecture, and data modeling.

With a lifelong interest in the public sector, Ms. Mangan has specialized in consulting to State & Local government entities, served five years as Deputy CIO for GIS for the City of Chicago, and obtained a MBA from Kellogg with a concentration in Public Administration. While at the City of Chicago, Ms. Mangan defined and implemented a strategic plan for the City's Enterprise GIS. Several of her team's initiatives were recognized with awards from the Public Technology Institute. Ms. Mangan led the rollout of a citywide GPS program to track City vehicles and cell phones. Beyond her role in GIS, Ms. Mangan facilitated the development of an IT Strategic Plan for the BIS (IT) Department and worked with several large departments on their technology planning.

Exhibit Hall

The exhibit hall is a great place to meet our business partners and other exhibitors. The latest in technology and services will be demonstrated and on display. Exhibit hours are 10 a.m. to 7:30 p.m. on Thursday and 9 a.m. to 11 a.m. on Friday. Refreshment breaks during the conference will be offered in the exhibit hall, and on Thursday night you can be a part of game night or bid on silent auction items to benefit the Association's scholarship program.

Silent Auction and Game Night

A silent auction will be held again this year in the exhibit hall. The auction raises money for the Association's scholarship program. Last year several thousand dollars were bid on items ranging from hotel gift certificates, and publications, to electronics. In memory of one of the Association's long-term members who passed away this year, the scholarship program has been named the Damon Anderson Memorial Scholarship. This year's auction will be held in Damon's honor. In addition to bringing items to be auctioned off, we are asking that those who knew Damon bring with them written recollections of their interactions with him. These will be collated and given to Damon's family. Please help us remember Damon and fund the education of those who follow in our footsteps. The exhibit hall reception on Thursday evening is also game night. Last year this fun event packed the exhibit hall and many prizes were won based on participants' game skills ... or luck.

Poster Competition

It's always fun and interesting to see what others have been working on in the past year. The poster competition is a great opportunity to share your best work with others who appreciate quality cartography and beautiful maps. Start thinking now about what work you can enter in the poster competition. Awards will be presented for the best entrees in several categories.

Closing Luncheon Awards

Many of your colleagues and association members put in countless hours and go above and beyond what is expected of them to further the cause of what we do with GIS and land records modernization in the State. On Friday, at the closing luncheon, many of these individuals and their achievements will be recognized. Information on nominating a deserving individual is available, so please take the time to nominate them for an award.

Technical Sessions

This year's conference features 54 technical sessions across five tracks. While session presenters have indicated their target audience — beginning, intermediate and expert, attendees can expect that attending a track outside their skill set will provide them with knowledge about the subject they may not have had previously.

Municipal Track

With the success of the municipal track at the 2007 conference, we have again included it in this year's conference. If you are involved in municipal government, we promise this conference will have many workshops and technical sessions that will make it worth your time and money.

A Special Welcome Session for First-Time Conference Attendees

Two of the Association's seasoned veterans will lead an orientation session for those who are new to the WLIA and our annual conference. New members and first-time attendees can get a fast start on what we are all about.

WLIA Town Meeting

A town meeting will be conducted during the lunch break on Thursday. The meeting will contain reports from committee chairs on activities of the Association and task forces. The meeting will also afford the opportunity to discuss Association activities and future directions. The winners of the scholarship awards will also be announced.

LION Meeting

The annual Land Information Officer Network (LION) meeting will be held on Friday from 7 to 8 a.m.

Job Board

Post your job opening or look for a new opportunity. The job board will be located near the registration area.



Keynote Sessions:

THURSDAY, FEB. 28

- Ron Langhelm

FRIDAY, FEB. 29

- Molly Mangan

Sessions, Meetings and Events:

- Exhibit Hall
- Silent Auction and Game Night
- Poster Competition
- Closing Luncheon Awards
- Technical Sessions
- Municipal Track
- A Special Welcome Session for First-Time Conference Attendees
- WLIA Town Meeting
- LION Meeting
- Job Board

WLIA 2008 Annual Conference Overview

Wednesday, Feb. 27

9-12 p.m.	1:30-4:30 p.m.
Workshop 1A Keys to Coaching Employees: Part 1 Presenter: Mary Hoddy (UW-Madison) max of 35 people	Workshop 1B Keys to Coaching Employees: Part 2 Presenter: Mary Hoddy (UW-Madison) max of 35 people
Workshop 2A Collecting and Processing Differential GPS Data: Part 1 Presenters: Larry Cutforth (USDA-FSA) and Kent Peña (USDA-NRCS) max of 30 people	Workshop 2B Collecting and Processing Differential GPS Data: Part 2 Presenters: Larry Cutforth (USDA-FSA) and Kent Peña (USDA-NRCS) max of 30 people
Workshop 3A ArcObjects Everywhere: Learn how ArcObjects can be used on ESRI's platforms: Part 1 Presenter: Eric Fowler (American Transmission Company)	Workshop 3B ArcObjects Everywhere: Learn how ArcObjects can be used on ESRI's platforms: Part 2 Presenter: Eric Fowler (American Transmission Company)
Workshop 4 Enterprise GIS using AutoCAD Map 3D; presenters Bob Lenz and Neal Niemiec (Autodesk) max of 30 people	Workshop 5 An Introduction to AutoCAD Civil 3D 2008 Presenter: Jerry Bartels (Autodesk) max of 30 people
Workshop 6 Enterprise Data Management with ArcGIS Server 9.2 Presenters: TBD (ESRI-Minneapolis)	Workshop 7 ArcGIS Server 9.2 Web Applications & Services — Getting Started with Implementation Presenters: TBD (ESRI-Minneapolis)
Workshop 8 National Hydrography Dataset Applications Workshop Presenter: Jeff Simley (USGS)	Workshop 9 Soils Data Workshop Presenters: Kent Peña, Jesse Turk and Carl Wacker (USDA-NRCS)
Workshop 10 Mobile GIS... Using GPS for GIS Data Collection and Maintenance Presenter: Larry Schnipper (Seiler)	Workshop 11 Mashups, Web Services & KML: Publishing to ... or Beginning to Explore and use the GeoWeb Presenters: AJ Wortley, David Hart, Jared Chapiewski (Wisconsin State Cartographers Office)
Workshop 12 Making Mapbooks with Ease — AtcGIS Map Production Techniques Presenters: Brian McGee, Andrea Fagan and Sam Pociask (American Transmission Company)	



WLIA 2008 Annual Conference Overview

Thursday, Feb. 28

	Track 1: Surveying, Mapping and Data Development	Track 2: Data Integration and Distribution	Track 3: Politics, Policy and Administration	Track 4: Innovative Applications and Technology	Track 5: Municipal Experiences and Applications	Exhibits
7 a.m. Past President Breakfast						
8 a.m. Conference Opening and Keynote Speaker: Ron Langhelt — GIS Coordinator						Exhibitors Setup
9 a.m.	No Cost Cartography: Making maps with Free Open Source Software	Parcel Data Retrieval from Multiple Counties	What is WLIA and WLIP	The Power of Autodesk Civil 3D	Photogrammetry in a GIS Consortium	
9:30 a.m.	Minimum Standards of Land Surveying in Wisconsin	Sharing Resources/ Sharing Data	Spatial Intelligence — New Ideas for Integrating GIS Across the Enterprise	Merging GIS Worlds Together: Using AutoCad Map 3D 2008	Building a Solid Foundation for a True Enterprise Approach: MMSD Enterprise GIS Implementation	
10:30 a.m. Refreshments in the Exhibit Hall						Exhibits Open
11:15 a.m.	E-Docs Asset GIS & The Art of Spatial Information	Archeology, GIS and Historic Preservation in the Door Peninsula	Statewide Assessment of Benefits of and Challenges for GIS for Planning Applications	Oblique Imagery in Use with GIS Applications	Street Sign Inventory System with Wireless GPS and Digital Image Association	
12 p.m. Lunch, Town Meeting, and Scholarship Awards						
2 p.m.	Partnering with NGS to Deliver Surveying Information & Education to Wisconsin	Data Conversion and Integrating Enterprise GIS	Wisconsin GIS Consortium	Distributing your GIS: Bridge the gap between ArcExplorer and ArcView	Integrating GIS Into Small Municipal Utilities	Exhibits Open
2:45 p.m. Refreshments in the Exhibit Hall						
3:30 p.m.	Creating Plat Books for Maximum Accuracy and Profitability	Distributed Work Order Management Using GIS	Wisconsin Height Modernization	VRS — High Accuracy Real-time Differential GPS	"Enterprise" GIS at the City of Ashland	
4 p.m.	National Hydrography Dataset Applications Overview	Data Distribution via GIS Web sites	USGS Elevation Data Activities	Application of LiDAR and Digital Camera Data in Muncipal GIS	Using the Web to Enhance Your GIS	
4:30 p.m.	Mapping the Land of the Dead	FWS Wetlands Database	Intro to the Spatial Ontology Community of Practice (SOCoP)		Building a Practical and Scalable Municipal Public Access Site with the City of Sheboygan	
5 p.m. Poster Competition						
5:30-7:30 Exhibit Hall Reception, Game Night, Silent Auction						

WLIA 2008 Annual Conference Overview

Friday, Feb. 29

	Track 1: Surveying, Mapping and Data Development	Track 2: Data Integration and Distribution	Track 3: Politics, Policy and Administration	Track 4: Innovative Applications and Technology	Track 5: Municipal Experiences and Applications	Exhibits
7 a.m. LION Meeting						
8 a.m. Molly Mangan — Even Keel Strategies						
9 a.m.	Using Participatory Photo-Mapping (PPM) to Inform Public Health Information Network with Young People in Health Promotion Research	Commencing at the Center of the Known Universe: Spatial Integration of the Worlds Surveys in a Single GIS	Wisconsin GIS in 2008: What We Have and What We Don't	Web 1.0 and Web 2.0 Applications Using Open Source Software	CivXplorer OS-Am Open Source IMS Solution	Exhibits Open
9:30 a.m.	Develop and Grow your Web GIS					
10 a.m. Refreshments in the Exhibit Hall, Silent Auction Final Bids and Winners Announced (Ballroom B, C & D)						
11 a.m.	Lidar Data Formats and Applications	The Ohio Statewide Imagery Program: Maximizing Ortho/ LiDAR Collection for State Governments	Geospatial Decision Support Systems for Land Planning and Natural Resource Professionals	Novus LRMS -The New Wave of Records Management for the State of Wisconsin	Using Community Viz and Smart Board Technology to Develop Land Use Plans	Exhibit Takedown
11:30 a.m.	You Can Do It Too! — Enterprise GIS for Small Local Governments	Final Wisconsin Orthoimagery Task Force Recommendations				
12 p.m. Lunch: Awards and Prizes						
2 p.m. New Board Meeting						



Wednesday, February 27, 2008

WLIA 2008 Annual Pre-Conference Workshops Wednesday, Feb. 27, 2008

This year there are many opportunities for quality training on Wednesday, Feb. 27 with the pre-conference workshops. All workshops will be held at the Grand Geneva Resort. If you are not a WLIA member, please consider becoming one. By becoming a member you will receive significant cost savings in conference and workshop registration, in addition to the benefits of an Association membership that lasts all year long.

Workshop 1 (full day)

Keys to Coaching Employees

Presenter: Mary Hoddy — UW-Madison

Time: 9 a.m.–12 p.m. and 1:30–4:30 p.m.

Cost: \$80 for members / \$100 for non-members; cost includes lunch

Do you have memories of a favorite coach, teacher, or boss? How did they work with people that was so outstanding? In this workshop, we will analyze our current strengths, review research on what great managers do differently, and practice coaching skills that we can use everyday at work. We'll explore body language, tone of voice, and three levels of listening. We will practice open-ended questions and reflective responses, and learn to deliver positive feedback while practicing how to receive feedback. Come and learn to provide the coaching your employees need!

Maximum workshop enrollment is 35 people.

*** This workshop qualifies for Certified Public Manager (CPM) credits as a Personnel Management elective

*** WLIA is in the process of establishing this workshop for Assessor CEU credits

Workshop 2 (full day)

Collecting and Processing Differential GPS Data

Presenters: Larry Cutforth, GIS Coordinator — USDA-FSA and

Kent Peña, GIS Coordinator — USDA-NRCS

Time: 9 a.m.–12 p.m. and 1:30–4:30 p.m.

Cost: \$80 for members / \$100 for non-members; cost includes lunch

The objectives of this workshop are to review how a GPS works, collect GPS data in the field, and process GPS data using DNR Garmin and ArcGIS. A differential GPS unit and computers will be provided for participants. The field portion of the training will cover how to set up a Garmin differential GPS, collecting waypoints and tracks, and navigating to points using a GPS. Participants will download GPS data using DNR Garmin for use in ArcGIS. This workshop does not require previous GPS experience. Please dress appropriately for outdoor exercises.

Maximum workshop enrollment is 30 people.

Workshops will all be held on Wednesday at the Grand Geneva Resort. Workshops are not included in the Conference registration fee. WLIA reserves the right to cancel and refund registration fee for any workshop.

- **Workshop fees:**
Full Day Workshops are \$80 member/ \$100 non-member and include lunch
- **Half-day workshop = \$40 member/ \$50 non-member each — two half-day workshops include lunch**
- **You may also register separately for lunch, if you register for one half-day workshop.**



Workshop 3 (full day)

ArcObjects Everywhere: Learn How ArcObjects Can Be Used on ESRI's Platforms

Presenter: Eric Fowler — American Transmission Company

Time: 9 a.m.–12 p.m. and 1:30–4:30 p.m.

Cost: \$80 for members/\$100 for non-members; cost includes lunch

The objective of this workshop is to understand what ArcObjects is, how it works, how to navigate the object models and how to create your own code. Participants will need to bring their own laptop with ArcGIS Desktop ArcView license or higher installed. There are some differences in recent releases with ArcObjects; however, any 9.x version will work in this workshop. In addition to creating an application that can be used in ArcMap, participants will get a brief introduction on how to incorporate ArcObjects with ArcGIS Server and ArcGIS Engine.

This workshop does not require any experience, however, participants will get the most out of the session if they have an understanding of VB or VBA. This experience could be accomplished by completing the free course "Exploring the VBA Environment" on ESRI's Virtual Campus before the workshop.

Workshop 4 (half day, morning)

Enterprise GIS using AutoCAD Map 3D, Mapguide Open Source, Oracle and MySQL

Presenters: Bob Lenz, Geospatial Solutions Engineer and Neal Niemiec — Autodesk

Time: 9 a.m.–12 p.m.

Cost: \$40 for members/\$50 for non-members

This hands-on workshop will teach the novice and advanced user the ability to create and manage data using open source data access technology (FDO) with desktop GIS clients like (AutoCAD Map 3D) and Web-based Mapping application (Mapguide Open Source). Learn how to store and access data in an enterprise environment. Hardware and software will be provided for this workshop. Participants are also welcome to bring their own laptops. Evaluation software will be made available for those choosing to bring their own laptops.

Maximum workshop enrollment is 30 people.

Workshop 5 (half day, afternoon)

An Introduction to Autodesk Civil 3D

Presenters: Jerry Bartels, Civil Engineering Technical Specialist — Autodesk, Inc.

Time: 1:30–4:30 p.m.

Cost: \$40 for members/\$50 for non-members

Take a hands-on test-drive and see how AutoCAD Civil 3D 2008 can streamline, and even automate, your civil-engineering design tasks. In this session, we'll progress through a civil design scenario highlighting the unique and time-saving features that exemplify the power of 3D object-based modeling. With step-by-step instructions and hands-on exercises, you'll be able to show how typical engineering tasks are accomplished using this new, dynamic engineering model approach. Hardware and software will be provided for this workshop. Participants are also welcome to bring their own laptops. Evaluation software will be made available for those choosing to bring their own laptops.

Maximum workshop enrollment is 30 people.



Workshop 6 (half day, morning)

Enterprise Data Management with ArcGIS Server 9.2

Presenters: TBD from ESRI-Minneapolis

Time: 9 a.m.–12 p.m.

Cost: \$40 for members/\$50 for non-members

This session will introduce you to the Enterprise Data Management capabilities and new enhancements available in ArcGIS Server version 9.2. ArcGIS Server 9.2 has been significantly enhanced to enable users with tools for simple creation and administration of enterprise GIS data and services. Server GIS is used to host a centralized GIS software and application environment capable of delivering GIS Data to a large number of users within, between, and outside of your organization. The workshop will include discussion and demonstration of server-based technology that helps build enterprise information systems for data distribution/replication, data history, and data editing. This session is intended for anyone who currently manages GIS data and is interested in learning more about using ArcGIS Server 9.2 for Enterprise Data Management.

Workshop 7 (half day, afternoon)

ArcGIS Server 9.2 Web Applications & Services — Getting Started with Implementation

Presenters: TBD from ESRI-Minneapolis

Time: 1:30–4:30 p.m.

Cost: \$40 for members/\$50 for non-members

ArcGIS Server is used to host a centralized GIS software and application environment that is capable of delivering GIS functionality to a large number of users throughout your organization, and as well as across the internet. This session will summarize the capabilities of ArcGIS Server version 9.2 and the necessary steps to get started with the software. The focus of the presentation will be on implementation and deployment of the software for building Web applications and services. Implementation topics will include a detailed discussion of the ArcGIS Server System Components, configuration options, installation process, access, and system security. This session is intended for GIS and IT professionals who are in the process of, or considering the implementation of ArcGIS Server-based technology in their organization. Participation of your IT and implementation staff is strongly encouraged.

Wednesday
February 27



Workshop 8 (half day, morning)

National Hydrography Dataset Applications Workshop

Presenters: Jeff Simley — USGS

Time: 9 a.m.–12 p.m.

Cost: \$40 for members/\$50 for non-members

This class provides all of the basic information you need to exploit the power of the National Hydrography Dataset (NHD). The NHD was carefully designed for scientific applications and consists of many attributes and characteristics perfectly suited for geographic analysis using GIS. However, the data was designed to be simple enough for anyone to use, not just highly skilled GIS specialists. Thanks to this design, powerful applications can be developed with just a day's training. The class starts by looking at how others around the country are using the NHD. The NHD data structure is explored and applied to basic mapping techniques. The ability to navigate throughout the stream network is covered, opening up new approaches for conducting GIS analysis. The data structure is explored in more detail revealing many new possibilities for analysis. The important process of linking scientific data to the stream network is covered. These techniques, combined with network navigation, lead to cause and effect analysis allowing the scientist to discover how one event in the environment can impact another event. The importance of data change management, the added power of NHDPlus, and the role of ArcHydro are also covered.

Workshop 9 (half day, afternoon)

Soils Data Workshop

Presenters: Kent Peña, GIS Coordinator; Jesse Turk, and Carl Wacker, Assistant State Soil Scientist — USDA-NRCS

Time: 1:30–4:30 p.m.

Cost: \$40 for members/\$50 for non-members

This workshop is designed for GIS or other professionals desiring a practical working knowledge of NRCS official soils data, both spatial and tabular. Participants will gain a solid understanding of all the steps necessary to obtain, query, and display soils data, direct from the NRCS experts. Presentation will be lecture style, supplemented by examples and handouts. Topics covered will include: basic soil survey concepts, techniques for soil data manipulation in the Access database and in ArcGIS, understanding and using soil interpretations, GIS tips and issues, skills for properly using key soil data elements, and sources of help and information.



Workshop 10 (half day, morning)

Mobile GIS... Using GPS for GIS Data Collection and Maintenance

Presenters: Lanny Schnipper, Mapping Manager — Seiler Instrument

Time: 9 a.m.–12 p.m.

Cost: \$40 for members / \$50 for non-members

This half-day workshop will cover the essentials of Mobile GIS. Mobile GIS is the process of moving GIS data into the field for data capture and update. A variety of hardware and software solutions are available for Mobile GIS. This presentation will highlight these solutions and associated applications. Topics will include: Understanding the Global Positioning System, applications for Mobile GIS, current hardware solutions, customizing data collection, updating GIS data in the field, and seamless data flow between GPS and GIS. This workshop will include a complete field-to-GIS data collection project using Trimble's Terrasync field software. GPS equipment will be provided.

Workshop 11 (half day, afternoon)

Mashups, Web Services & KML: Publishing to... or Beginning to Explore and Use the GeoWeb

Presenters: AJ Wortley, Senior Outreach Specialist, David Hart and Jared Chapiewski — Wisconsin State Cartographers Office

Time: 1:30–4:30 p.m.

Cost: \$40 for members / \$50 for non-members

The last few years have seen new forces emerge in widespread publishing and exploring of GIS data and maps. From 3D Visualization clients (NASA WorldWind, Google Earth, etc.) to standards-based Web services and formats (WMS, GeoRSS, KML ...) to commercial Web service APIs used to create mashups. In addition, parallel to many of these advancements, open source tools have emerged providing a “free” platform with which to begin to experiment and construct next-generation Web applications and demonstrations. There are useful tools for both GIS producers and consumers alike! Come join us for a systematic exploration of these tools and their potential uses in productive environments.

Wednesday
February 27



Workshop 12 (half day, morning)

Making Mapbooks with Ease — ArcGIS Map Production Techniques

Using the Mapbook Developers Sample Tool and ESRI's Maplex Extension

Presenters: Brian McGee, Team Leader GIS Services; Andrea Fagan, Senior GIS Analyst; and Sam Pociask, GIS Analyst — American Transmission Company

Time: 9 a.m.–12 p.m.

Cost: \$40 for members / \$50 for non-members

Almost anyone can make a map. But making a functional, multi-page, multi-scale, legible mapbook can be a time consuming and daunting task. The Mapbook Developer's Sample is an easy and relatively quick way to produce a mapbook covering a large geographic area (e.g. a road atlas), a long linear feature (eg. gas pipeline) or multiple locations spread out over an area (e.g. well sampling points in a watershed). This workshop will allow for the creation and output of some sample map books by the attendees through a step-by-step demonstration. This will include setting up the data view and page layout, creating the map grids that represent each map page, and creating the map series, which will be available for updates every time you open the ArcMap project. Users should bring their own laptops if available — the map series tool will be installed on site. In addition to demonstrating the map series tool, some tips and tricks to using maplex will also be highlighted. Maplex is a labeling extension from ESRI that greatly improves legibility of labels in congested areas. It is a good companion to the mapbook tool in creating clear, functional map pages.



Thursday, February 28, 2008

WLIA 2008 Annual Conference

Thursday, Feb. 28, 2008

7-8 a.m. — Past President's Breakfast

8-9 a.m. — Opening General Session and Keynote Speaker

Welcome and Opening Remarks, WLIA President,

Jason Grueneberg, Planner — Wood County

Keynote Speaker, Ron Langhelm

Mr. Langhelm is currently an Associate with Booz Allen Hamilton, having spent the past 12 years in the Emergency Management/Homeland Security environment. Formerly, Mr. Langhelm was employed with FEMA where he led geospatial field efforts on many disaster events including the 2001 Nisqually Earthquake in Washington State, the 2001 World Trade Center (WTC) Collapse in New York, the 2002 Winter Olympics in Salt Lake City, the 2003 STS-107 Space Shuttle recovery operation in Texas, and the 2005 Hurricane Katrina operations in Louisiana.

TECHNICAL SESSIONS: Target Audience: While session presenters have indicated their target audience – beginning, intermediate and expert - attendees can expect that attending a track outside their skill set will provide them with knowledge about the subject they may not have had previously.

9-10:30 a.m. — Technical Sessions

TRACK 1: SURVEYING, MAPPING AND DATA DEVELOPMENT — 9-10:30 a.m.

No Cost Cartography: Making Maps with Free Open Source Software

Aaron Stephenson, Systems Analyst — Geo-Analytics (30 minutes)

Beginning

When we “GIS-ers” need to make a map, we go straight to our workhorse: ArcMap. For a good number of these maps ArcMap does a fine job. But what do you do when your map needs an extra splash of style - that extra “oomph” that leaves an impression on viewers? If you have the money, chances are you buy commercial software like Adobe Illustrator. But if you’re strapped for cash, or if you just want an alternative, you can turn to open source software. In this presentation I will demonstrate how to find and use free open source software to make beautiful maps with your geospatial data, as well as how such software can fit with your existing technology and processes.



Minimum Standards of Land Surveying in Wisconsin

**Renee Powers, Registered Land Surveyor/Supervisor and
Jim Logan, Registered Land Surveyor — DOA Plat Review (60 minutes)
Intermediate**

The minimum standards of A-E 7 apply to every property survey performed in Wisconsin, but how do they fit with subdivision plats, and certified survey maps, condominium plats, and other types of surveys. In some cases A-E 7 seems more restrictive and in other cases it seems Chapter 236 of Wisconsin Statutes seems to be more restrictive. This presentation will address these issues and others that may help the users of surveys understand how these documents are created. We will describe what users of these documents should expect and also address possible solutions to conflicts between different survey documents.

TRACK 2: DATA INTEGRATION AND DISTRIBUTION — 9-10:30 a.m.

Parcel Data Retrieval from Multiple Counties

**Nick Stadnyk, President and Mari Pietz, GIS Project Manager —
Applied Data Consultants (30 minutes)
Beginning**

Recently, Applied Data Consultants, Inc. (ADC) was asked to create a dataset for a client that involved gathering parcel data from multiple counties and the Wisconsin Department of Revenue. This presentation will focus on the issues we were faced with as we undertook the project. Problems encountered included not only differences between counties, but differences within the county and with the Wisconsin Department of Revenue.

Sharing Resources/Sharing Data

**Cristina Pearson, GIS Coordinator — Ozaukee County;
Mary Jean Ritchie, Land Records Coordinator — Lafayette County;
Jeff Anderson, Information Services Manager — Grant County;
Thomas Tym, Technology Services Dept Head — Ruekert/Mielke (60 minutes)
Beginning**

As all levels of government continue to struggle with managing the demands and costs associated with requests for more services and information, technology is often relied upon as the “answer” to everyone’s problem. As much as technology could be the “saving grace”, budget constraints often mean that funding is not always available. Since property records and parcel maps are frequently stored in similar format, the concept of sharing GIS technology can become a reality. In fact, for Iowa, Grant, and Lafayette Counties, it IS a reality. This presentation will include a discussion of how these Counties have joined forces and funding to develop a Tri-County GIS Web application for their property records and digital maps. A “live” demonstration of the GIS Web application will show just how they have achieved this success.



Welcome to WLIA: An Introduction to the Association

Al Miller, Professor Emeritus — UW-Madison

and D. David Moyer, Senior Consultant — D.D. Moyer Associates (30 minutes)

Beginning

This discussion session is intended for new members, but is open to anyone interested in the WLIA. Learn about the origins of the “grass root” effort to modernize Wisconsin’s land records, the background that led to the formation of the Association, and its vision to establish a network of geographic information systems throughout the state. Become aware of the Association’s mission and goals, the development of technical standards and guides, and major accomplishments during the past twenty years. Find out how the Association goes about its business, who the members of WLIA are, and how committees are established and structured. Become acquainted with the 2005 Strategic Plan. Most importantly, learn how to get involved.

Spatial Intelligence — New Ideas for Integrating GIS Across the Enterprise

David Mockert, Director State and Local Practice — GeoAnalytics (60 minutes)

Intermediate

The convergence of GIS and IS offers many new opportunities to link the power of spatial data with organizational business systems. This presentation will demonstrate examples of where this integration has occurred, bringing Spatial Intelligence to enterprise Information Systems (IS). More than a “nice to have”, locational awareness is a valuable tool in decision making, supporting most government and private sector business functions. Driven by emerging data, system, and application interoperability standards, GIS can become a vital and transparent part of business information systems; such as CRM and ERP systems. Spatial Intelligence allows organizations to make fact based decisions. It enables data to be transformed into useful knowledge and understanding to support decisions; and it supports predictive analytics. In short, organizations can benefit by evolving from “what we think” to “what we know”.

TRACK 4: INNOVATIVE APPLICATIONS AND TECHNOLOGY — 9-10:30 a.m.

The Power of Autodesk Civil 3D

Jerry Bartels, Civil Engineering Technical Specialist — Autodesk, Inc. (45 minutes)

Beginning

During this session, Jerry will use AutoCad Civil 3D to demonstrate the benefits of 3D object-based modeling to facilitate design.



Merging GIS Worlds Together: Using AutoCad Map 3D 2008

Matt Winger, Assistant Marketing Director — IMAGINiT (45 minutes)
Intermediate

AutoCAD Map 3D 2008 is a way to let your engineering staff create and maintain an integrated GIS system and still be comfortable in the program they know. Map 3D can now use your existing CAD files and merge them together into one overall system. You can now open, view, and edit any ESRI file on the fly with Map 3D. You will learn how to open AutoCAD files, bring in ESRI files and merge them together or keep them separate. Connect to ESRI Shape files, ESRI ARC/SDE servers, Oracle Spatial, MySQL, Microsoft SQL, Geo Referenced Raster images (Aerials), Surveyed points, WMS, and WFS (all in the same map), all based on the technology of AutoCAD Map 3D 2008.

TRACK 5: MUNICIPAL EXPERIENCES AND APPLICATIONS — 9-10:30 a.m.

Photogrammetry in a GIS Consortium

Jason Krueger, Project Manager — Ayres Associates (30 minutes)
Beginning

This presentation is an introduction to fundamentals of photogrammetry and its use in a GIS environment. We will examine how a consortium of municipalities with a common GIS platform uses annually recurring photogrammetric mapping to support its geodatabase. This is intended for anyone unfamiliar with the basics of Photogrammetry and/or those who don't believe that municipalities can work together and be friends.

Building a Solid Foundation for a True Enterprise Approach: Milwaukee Metropolitan Sewer District Enterprise GIS Implementation

Sara Hackbarth, Facilities Information Supervisor and Michael Benedict, Senior Systems Analyst — MMSD, Jeff Siegel, Technology Services Director and Alex Kavanagh, GIS Team Leader — HNTB Corporation (60 minutes)
Intermediate

In an effort to improve organizational efficiency and bring added value to the way the Milwaukee Metropolitan Sewerage District (MMSD) conducts business, the MMSD had developed a Geographical Information Technology Vision and Implementation Plan that provides a roadmap towards an enterprise implementation of GIS technology. In order to emphasize the true enterprise nature of the vision, the MMSD is taking a two-phased approach in its implementation. Now complete with Phase I, the survey and analysis portions of the implementation, the MMSD has a number of technical specifications and guidelines that will direct future work and aid in maximizing MMSD's return-on-investment from applying the enterprise approach. This session will describe and illustrate the development process and results of the following technical elements of the Phase I Implementation; while emphasizing each element's importance in the overall implementation:



- Software Requirements Specifications (SRS) for all planned GIS applications
- Enterprise Geodatabase Model
- Inventory of the District's existing Applications, Data, and System Architecture
- Future System Architecture
- GIS Standards
- Data Conversion Strategy
- Training Strategy
- Quality Assurance/Quality Control Plan

10:30-11:15 a.m. — Refreshments in the Exhibit Hall

11:15 a.m.-12 p.m. — Technical Sessions:

TRACK 1: SURVEYING, MAPPING AND DATA DEVELOPMENT — 11:15 a.m.-12 p.m.

E-Docs Asset GIS & the Art of Spatial Information

Mike Tully, President & CEO, Aerial Services, Inc. (45 minutes)

Beginning

Geographic information systems (GIS) are great for capturing, storing, analyzing, and managing data and associated attributes of spatially referenced points. In the strictest sense, GIS displays only geographical information, but have you ever considered other information being included? How about documents and assets – they have locations on earth. We can understand a wealth of information by adding spatial components. We'll discuss GIS's expanding role and how spatial components can be added to far more than typical GIS. As a framework of this discussion, we'll discuss how Aerial Services' award winning GIS application, E-Docs Asset GIS, and solutions like it are able to:

- Tie disjointed paper and data together to make organizations more effective
- Allow all in an organization to instantly find needed data and eliminates timely searches
- Organizes assets into a database and ties them to spatial components
- Makes data accessible via standard Internet browser

TRACK 2: DATA INTEGRATION AND DISTRIBUTION — 11:15 a.m.-12 p.m.

Archeology, GIS and Historic Preservation in the Door Peninsula

Brian Nicholls, Archeologist — UW-Milwaukee (45 minutes)

Beginning

A WisDOT highway corridor project along STH 57 in the Door Peninsula represents efforts by WisDOT project managers and engineers, interested parties, and archaeologists guided toward addressing concerns associated with the development of this highway project. A geospatial database was developed to help archaeologists provide nearly instantaneous spatial information to WisDOT engineers during the various planning and construction phases of the project. Data contained in this project include archaeological site data and survey coverages, various environmental data sets, and WisDOT design plans. The GIS developed and implemented for this project proved to be an immensely useful time and resource management saving approach.



Statewide Assessment of Benefits of and Challenges for GIS for Planning Applications

Asli Gocmen, Assistant Professor; Steve Ventura, Professor and Amy Seeboth — University of Wisconsin-Madison (45 minutes)

Intermediate

This study investigates the use and extent of use of GIS and geospatial data for planning-related applications in local and regional governments throughout the State of Wisconsin. The study further identified benefits that GIS has brought to these departments, which include improved efficiency, access to data, decision-making, and coordination among departments and organizations. Similarly, the study identified challenges and barriers to GIS use for planning related activities, among which are stated as organizational issues such as coordination and organizational support, but more significantly as budgetary issues. The research, conducted in the summer of 2007, is based on a Web-based survey of 532 respondents in municipal, county and regional governments.

TRACK 4: INNOVATIVE APPLICATIONS AND TECHNOLOGY — 11:15 a.m.-12 p.m.

Oblique Imagery in Use with GIS Applications

Craig Witmer, Regional Vice President Sales — Pictometry International (45 minutes)

Intermediate

Recent advances in technology have brought a new paradigm in how we can view the world through imagery. Geo-referenced oblique aerial imagery opens the door to many new uses for GIS data, which were not possible in the past with traditional "straight-down" orthogonal imagery. This presentation will explore some of those uses, including 3D modeling, and also cover a technical overview on the capture process for this type of imagery. The presentation will also include a demonstration detailing the recent integration of oblique imagery into ArcGIS and ArcGIS Server applications and a discussion regarding the deployment of oblique imagery in Web based applications.

TRACK 5: MUNICIPAL EXPERIENCES AND APPLICATIONS — 11:15 a.m.-12 p.m.

Street Sign Inventory System with Wireless GPS and Digital Image Association

Andy Swartz, GIS Coordinator — City of Sun Prairie (45 minutes)

Intermediate

This presentation will demonstrate the City of Sun Prairie's homegrown solution for a GPS and digital camera driven street sign inventory system. After much trial, and even more error, with camera/GPS/PC time synchronization software, we settled on a simple yet effective solution. Presentation highlights will include a creative IT solution to overcome the geodatabase domain size limitation while ensuring data quality and time savings, the low-cost camera and wireless transfer setup, digital image file size tips, and presentation of our custom database and GUI for associating signs with posts and evaluating sign conditions by office staff. Potential system enhancements will also be presented. This integrated solution could be deployed for many other visual-spatial data acquisition endeavors.



1-1:45 p.m. — Lunch, Town Meeting, & Scholarship Awards

2-2:45 p.m. — Technical Sessions

**Thursday
February 28**

TRACK 1: SURVEYING, MAPPING AND DATA DEVELOPMENT — 2-2:45 p.m.

Partnering with NGS to Deliver Surveying Information and Education to Wisconsin

Brenda Hemstead, IS Resource Technician — State Cartographer's Office and John Ellingson, Wisconsin Geodetic Advisor — National Geodetic Survey (30 minutes)
Intermediate

The State Cartographer's Office has long played a partnering role in helping to deliver NGS geodetic control information to Wisconsin data consumers-currently supported through our ControlFinder application and Surveying and Coordinate Systems Web site materials. In addition, we're working to better network together local control data sources and surveying contacts. Now we're partnering directly with NGS to provide more timely and efficient NGS control updates and better-coordinated educational materials. Come hear about our new efforts to pass-through federally served data in a local context networked together with other local resources.

TRACK 2: DATA INTEGRATION AND DISTRIBUTION — 2-2:45 p.m.

Data Conversion and Integrating Enterprise GIS

Ivan T. Gearhart, Director of Sales & Marketing — TerraScan/Gdoc, Inc.
Beginning

Real time integration of GIS creates a powerful tool that benefits every department. The goal is to have everything in one central repository where every department is on the same page or at least at the same address. This presentation will focus on some of the obvious and not so obvious areas where GIS integration can create efficiencies and improve services.

TRACK 3: POLITICS, POLICY AND ADMINISTRATION — 2-2:45 p.m.

**Wisconsin GIS Consortium (WGISC) —
GIS Alliance of Wisconsin Municipalities**

Brian Dubis, GISP, GIS Project Manager — R.A. Smith (45 minutes)
Beginning

R.A. Smith & Associates, Inc. is a proud sponsor of the Wisconsin GIS Consortium (WGISC), which is an alliance of Wisconsin municipalities that have come together to save significant costs on GIS services for their communities. Perhaps it's time to rethink your community's GIS strategy. www.wgisc.com



Distributing Your GIS: "Bridging the Gap Between ArcExplorer and ArcView"

Doug Anderson — Seiler Instrument (45 minutes)

Beginning

This presentation will cover the process of publishing GIS and GPS data to your mobile workers. Author and distribute powerful, cost effective, and easy-to-use GIS desktop viewing applications. Use ESRI's ArcPublisher to create map files (.pmf) while offering additional options to the publishing process and end-user such as geo-coding, quick searches, custom selection tools, the ability to link to external data sources, and more. This procedure offers an easy interface for searching, viewing, and printing published interactive maps. GeoSync® XG from MapSync® provides the ability for any organization using ArcGIS® Desktop software to distribute robust, user friendly, GIS applications at a very low cost per user...perfect for when you need something between the functionality of ArcExplorer and ArcView. Real-world examples will be highlighted along with a software demonstration.

TRACK 5: MUNICIPAL EXPERIENCES AND APPLICATIONS — 2-2:45 p.m.

Integrating GIS Into Small Municipal Utilities

Jon Schwichtenberg, Regional GIS Practice Center Leader — SEH (45 minutes)

Beginner

This presentation will explore the implementation of GIS into small municipalities and utilities. The presentation will look at costs, processes and benefits. We will discuss the software, hardware and data needs. We will look at integration of GIS mapping, databases and existing system (i.e. water billing, meter reading, etc.). This presentation will be focused on small, cost effective solutions for small to very small communities and/or utilities.

2:45-3 p.m. — Refreshments in the Exhibit Hall



TRACK 1: SURVEYING, MAPPING AND DATA DEVELOPMENT — 3:30-5 p.m.

Creating Plat Books for Maximum Accuracy and Profitability

Nick Stadnyk, President — Applied Data Consultants, Inc. (30 minutes)

Beginning

To help the Lincoln County 4-H club maximize profits, Applied Data Consultants, Inc. (ADC) is creating a Plat Book, which will be maintained and published by the Lincoln County Land Information Office. The process has four steps. The first step is to finish parcel mapping areas of the county that have not been officially mapped. The next is to obtain and create parcel names that are plat book friendly. Along with this step is the creation of all relevant annotation, including acres, road names, hydro, etc. The third step is to place all annotation together on each page in a format that is aesthetically pleasing and readable using a personal geodatabase and MapLogic software. The last part of the project includes preparing pages for design and information, including advertisements and index tables. Because the County Land Information Office will maintain it, it will be more accurate and less costly to produce in future years.

National Hydrography Dataset Applications Overview

Jeff Simley, Program Lead — USGS (30 minutes)

Beginning

This class provides an overview of the National Hydrography Dataset (NHD). The NHD was carefully designed for scientific applications and consists of many attributes and characteristics perfectly suited for geographic analysis using GIS. However, the data was designed to be simple enough for anyone to use. This session will briefly discuss how others around the country are using the NHD. The NHD data structure is explored and applied to basic mapping techniques. The ability to navigate throughout the stream network is covered, opening up new approaches for conducting GIS analysis. The important process of linking scientific data to the stream network is covered. The importance of data change management, the added power of NHDPlus, and the role of ArchHydro are also covered.

Mapping the Land of the Dead

Shaun Wood, GIS Technician — Iowa County (30 minutes)

Beginning

In 2004, an Intern conducted the Iowa County Cemetery Pilot Project. Every grave in the "Old" section of the Arena Cemetery was mapped and hard copy data was gathered for almost every cemetery in Iowa County. It was decided in 2007 to continue the project and map the graves in every Cemetery in Iowa County. This session will cover the history of the project, our methodology, and a demonstration of our final product for the cemeteries we have completed thus far.



Distributed Work Order Management Using GIS

**Ronald V. Bruder, Program Analyst/Application Developer —
Applied Data Consultants (30 minutes)
Intermediate**

Using ESRI's ArcGIS Server, Applied Data Consultants created a browser-based intranet application for managing the geographical features associated with a farm cooperative's agricultural products and services work order system. The custom application is accessed using a terminal services protocol from 48 branch offices spread over a 150 square mile area. With the system, work order managers in the company can quickly and easily generate a spatial record of the order details, delivery information, and application areas for their products. The interface also offers drive routing functionality for delivery planning and management. By implementing this GIS-centric order and delivery routing system, the business is now serving its 4,000 clients in a more effective and efficient manner.

Data Distribution via GIS Web Sites

**Rick Mechelke, GIS Program Manager and Mark Harter, Web Developer —
Applied Data Consultants (30 minutes)
Beginner**

GIS Web sites have become a popular method for displaying counties' spatial maps and related databases. GIS Web sites have not been sitting stagnant, more counties are sharing additional data via their GIS Web site. This presentation will look at some of the more unique data sets that are being shared by counties. We will look at GIS Web sites that allow the user to search and view results for tie sheets, various zoning permits, tax parcel data, assessment data, and ROD documents.

US Fish and Wildlife Wetlands Database

**Mitch Bergerson, Cartographer — US Fish & Wildlife Service (30 minutes)
Beginner**

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information to the public on the extent and status of the Nation's wetlands. Through an active partnership with the US Geological Survey, they have developed a national Wetlands Database for standardized storage of wetlands data and the Wetlands Mapper that functions as the wetlands data discovery portal. Recently, organizations and individuals have been provided the opportunity to contribute wetlands data to the Wetlands Database. This presentation will give an overview of the Wetlands Database, the data, the Wetlands Mapper, and contributed data, including the Wisconsin Department of Natural Resources Wisconsin Wetlands Inventory.



Wisconsin Height Modernization

Paul Hartzheim, Program Manager —

Wisconsin Department of Transportation (30 minutes)

Intermediate

WisDOT will give an update on the Wisconsin Height Modernization Program. We have completed the first of a four year implementation plan for the Continuously Operating Reference Station (CORS) Network across the State of Wisconsin. We will present the implementation plan, the benefits to the user, and how to gain access to the system, along with answering any questions regarding the network.

USGS Elevation Data Activities

Dick Vraga, USGS Geospatial Liaison-Wisconsin, US Geological Survey (30 minutes)

Beginning

As part of The National Map, the USGS is attempting to accelerate the completion of the National Elevation Dataset (NED). This presentation will cover technical and programmatic aspects of that effort. It will include a brief description of the NED, and how to get the data and the status in Wisconsin. It will also touch on related topics including the "LiDAR for the Nation" proposal, the Ramona Inventory, and the Center for LiDAR Information, Coordination and Knowledge.

Introduction to the Spatial Ontology Community of Practice (SOCoP)

Nancy Wiegand, LICGF, UW-Madison (30 minutes)

Beginning

Geospatial ontologies are likely to be integral to enterprise GIS as a means of enabling interoperability. Ontologies support information systems by providing an unambiguous machine-readable representation of the human understandable concepts and relationships used in a given domain area. A national level Spatial Ontology Community of Practice (SOCoP) was recently established as one of the committees under the Federal CIO Council. The role of SOCoP is to foster collaboration among researchers, technologists, and users of geospatial data to improve semantics through the use of common geospatial ontologies. SOCoP supports open collaboration and standards, and promotes ontologies for increased interoperability of spatial data across government. This talk will introduce ontologies and their relevance to the geospatial community and also describe the efforts of SOCoP.



VRS-High Accuracy Real-Time Differential GPS

Holly Urbain, Sales & Training Representative — Seiler Instrument (30 minutes)
Beginning

Virtual Reference Stations (VRS), a new network of continuously operating reference (Base) stations (CORS), are being constructed throughout Wisconsin developed by the Wisconsin Department of Transportation. www.MWRTK.net is an existing VRS network in Wisconsin developed by Seiler Instrument. VRS Network technology will allow GIS professionals and Surveyors to achieve their required GPS accuracies in real time no more post processing! In a VRS network, all of the stations in this network stream live data into one location and users, through a internet or cell phone data connection, receive a real-time differential signal producing highly accurate positions right then and there. The current WisDOT plan calls for approximately 26 stations added to start the Wisconsin CORS Network (WI CORS NET) deployment allowing users access to more CORS than ever before. Connections with ESRI ArcPad with GPSCorrect and Trimble TerraSync connecting via Bluetooth cell phone on Trimble GeoXH and GeoXT GPS hardware will be demonstrated.

Application of LiDAR and Digital Camera Data in Municipal GIS

Kirk Contrucci, Manager of Photogrammetry — Ayres Associate;
Dave Davis, Registered Land Surveyor, GIS Manager — City of Madison;
Felipe Avila, GIS Specialist — City of Fitchburg (60 minutes)
Intermediate

The Cities of Madison and Fitchburg are using recently acquired Light Detection and Ranging (LiDAR) data and digital orthoimagery for a variety of municipal applications, including automated extraction of impervious surfaces. A brief history of the acquisition of the high accuracy LiDAR and digital camera data will be provided, including insights on how best to time the acquisition of these very different datasets. A brief overview of the many applications for these datasets in municipal GIS will be followed with a demonstration on how Madison and Fitchburg are using color infra-red orthoimagery, in combination with high accuracy elevation data, to effectively extract impervious surfaces through automated extraction techniques. Using GIS applications, the resulting impervious surface model is providing a superior stormwater runoff model for internal applications while proactively meeting the upcoming Total Suspended Solids (TSS) requirements of the WDNR .



"Enterprise" GIS at the City of Ashland

Leah Spurduto, Civil/GIS Technician and

Leslie Jagger, GIS Coordinator — City of Ashland (30 minutes)

Beginning

While the City of Ashland is small with 8,600 residents, it's a regional hub that daily draws 40,000 people from as far as 60 miles away. Though it doesn't have the issues of other communities experiencing heavy growth, its present infrastructure is taxed, partly due to this regional draw, but mainly due to neglect of the infrastructure over the past 30 years with the subsidence of the resource-extraction and manufacturing-based economies of the region. To help remedy this, the City has aggressively pursued soft monies for infrastructure improvements, which in turn has funded an internal "Engineering Enterprise" in the Department of Public Works, of which GIS is a part. Although very new and not yet "Enterprise" in the sense of the term within the geospatial community, GIS at the City of Ashland is a unique story with lessons and discussion for similar municipalities looking to adopt GIS.

Using the Web to Enhance Your GIS

Scott Kiley, GIS Specialist and Josh Stroessner, GIS Analyst —

MSA Professional Services (30 minutes)

Intermediate

Most organizations have a wide variety of very accurate and precise spatial data. However, many organizations don't have comprehensive databases behind their spatial data. It is difficult to utilize the true power of a GIS without a robust database. The dynamic nature of GIS data requires an equally dynamic management system. Through the use of Internet GIS, Web input forms, and a relational database management system, it is possible to change underlying GIS databases using only an internet connection.



Building a Practical and Scalable Municipal Public Access Site with the City of Sheboygan

Andrea Bell, Technical Manager — Pacific Data Resources, Inc and Tom Horness, Senior Civil/GIS Technician — City of Sheboygan (30 minutes)

Beginning

In an ongoing effort to better service its residents, the City of Sheboygan has recently empowered its residents with knowledge by implementing a publicly available Web-based GIS. This presentation will explain the methodology used by the City of Sheboygan and how you can use this same methodology. Included in the presentation will be an overview of the technologies used, and a look at the basic system architecture of those technologies along with options for expanding and customizing the core technologies. Since every GIS starts with data, we'll examine various data used in the Web-based GIS and how to efficiently distribute that data. Searching for data and reporting results are key components to any enterprise GIS. Incorporating search and reporting features will be discussed. After attending this presentation, attendees will have a methodology they can use to deploy a practical and scalable publicly accessible enterprise GIS solution.

5-7:30 p.m. — Reception in the Exhibit Hall

Don't miss this opportunity to see the latest and the greatest that the exhibitors have to offer. Also check out the poster competition entries, win prizes by participating in the game night competition, and bid on fabulous items in the silent auction.



Friday, February 29, 2008

WLIA 2008 Annual Conference

Friday, Feb. 29, 2008

7-8 a.m. — LION Meeting

**8-9 a.m. — Opening General Session and
Keynote Speaker — Molly Mangan**

Strategic GIS in the Enterprise

You have an Enterprise GIS. Does your Enterprise know about it?

GIS is no longer just a niche technology for a handful of specialists. In fact, a centralized GIS repository alone can no longer define an Enterprise GIS. Today's GIS should be a strategic enterprise technology for any organization with location based operations. The challenge is twofold:

1. Building a GIS Functionality Suite that truly supports enterprise needs, and
2. Demonstrating the value of GIS to the enterprise at large.

It is often necessary to demonstrate value before resources can be made available to develop a full Enterprise GIS. Ms. Mangan will define the critical components of an Enterprise GIS and strategies for building enterprise endorsement of its value.

9-11 a.m.— Exhibit Hall Open



9-10 a.m. — Technical Sessions

TRACK 1: SURVEYING, MAPPING AND DATA DEVELOPMENT — 9-10 a.m.

Using Participatory Photo-Mapping (PPM) to Inform Public Health Information Network with Young People in Health Promotion Research

William Buckingham, Cartographer — UW Applied Population Laboratory; Samuel Dennis Jr., Assistant Professor and Suzanne Gaulocher, Population Health Fellow — UW-Madison (30 minutes)

Beginning

The Community Health Assessment Mapping Partnership (CHAMP) is a transdisciplinary working group that integrates multiple methods to collect and track data that will inform health information networks, local health departments, state and federal policy makers, and community design. We have developed a mashup that combines geographic information system (GIS) technology alongside community-based participatory research (CBPR) data to facilitate community input that provides insights to emerging and ongoing public health questions. Our overarching goal is to combine population-based data with assessments of the built and natural environment in order to better understand the multiple determinants of health and to address both the social and environmental causes of health disparities.

Develop and Grow Your Web GIS

Scott Hameister, Director of Product Development — mPower Technologies (30 minutes)

Beginning

There are many common barriers and roadblocks that state/local/federal governments face when developing their Web GIS applications. In this session we will show you ways of overcoming these obstacles and building your own dynamic Web GIS. We will review the growing range of options available to government agencies from their vendors. Increasing your return on investment in your Web GIS investments will also be featured.

Here are some of the benefits of this presentation:

- Learn how to build a user-based system that staff can actually use on a daily basis.
- See how this can be done with limited IT or consulting resources.
- Discover how to increase ROI of Web GIS by involving more and more departments.
- Leverage your GIS investment further by using this same methodology to create numerous public Web sites.



At the Center of the Known Universe: Spatial Integration of the Worlds Surveys in a Single GIS

**Aaron Ford, GIS Technical Manager — R.A. Smith, and Robert Jones,
Registered Land Surveyor (60 minutes)**

Global Navigation Satellite Systems, Continuously Operating Reference Stations, network RTK, and the fantastic long-term accuracy of space geodesy, make it possible to position surveys within global coordinate systems with accuracies sufficient to meet the relative positional standards for ALTA\ACSM land titles surveys. Presented will be a live demonstration of Boundless, an enterprise Web-based GIS application operating on ESRI's ArcGIS Server 9.2 platform that automatically integrates multiple globally referenced survey drawings and databases onto one low distortion map projection automatically created on the fly. Because Boundless is an enterprise solution, all that is required to operate it is Internet access and a Web browser. A wireless laptop connection makes Boundless immediately usable by a crew in the field. Data collector software can calibrate integrated Boundless output to whatever coordinate basis is needed. If a crew is working within a network RTK, the corrector will transform the calibrated output into spatial reality. The presentation will include a discussion of the role played by the modern integrated survey system, touch briefly on space geodetic techniques, and contemplate the impact that tens of thousands of surveys in an enterprise GIS with statistical process controls may one day have on the survey profession.

TRACK 3: POLITICS, POLICY AND ADMINISTRATION — 9-10 a.m.

Wisconsin GIS in 2008: What We Have and What We Don't

**Ted Koch, State Cartographer — State Cartographer's Office (60 minutes)
Beginner**

Throughout the State of Wisconsin GIS is flourishing and maturing. We have seen GIS be embedded in government and business decision-making. Across organizations - government, non-profit, private business - GIS solutions are applied to solve a variety of problems and for exposing the underlying spatial patterns behind complex issues. Using on-line GIS data inventories and Web-accessible data and map examples, we'll provide a vignette of the diverse and extensive use of GIS across Wisconsin - providing evidence of what has and is being accomplished. After setting the stage with "what we have," we'll take a look at "what we don't" with some suggestions on how to continue to advance and mature our Statewide GIS capability for continued success in the future.



Web 1.0 and Web 2.0 Applications Using Open Source Software

Bob Lenz and Neal Niemiec, Geospatial Solutions Engineer — Autodesk Inc. (60 minutes)
Intermediate

This presentation will discuss the differences between Web 1.0 and 2.0 and how open source Web based mapping technology like FDO and Mapguide can be used to develop these applications. Attendees will take away a clear understanding of how these technologies can be implemented today.

TRACK 5: MUNICIPAL EXPERIENCES AND APPLICATIONS — 9-10 a.m.

CivXplorer OS — an OpenSource IMS Solution

Suzanne Fliege, GIS Project Manager — Allied Information Solutions (60 minutes)
Intermediate

Does the high cost and ongoing overhead of today's new Internet Mapping software get you down? Do Open Source Internet Mapping alternatives seem like they have too many drawbacks? Are you looking for an alternative that is the perfect balance of functionality and price? If so, then we have you covered. Allied introduces CivXplorer 5, the perfect blend of form, function, and price! Allied's latest version of our award-winning Internet Mapping application tailored for local governments has been completely rebuilt on an exciting new platform that combines the functionality you might expect from a very expensive Internet Mapping software with the savings you would get from Open Source. Too good to be true? Join us and see for yourself. We are thinking outside of the box.

10-11 a.m. — Refreshments in the Exhibit Hall

Silent Auction Final Bids and Winners Announced

11 a.m.-12 p.m. — Technical Sessions

TRACK 1: SURVEYING, MAPPING AND DATA DEVELOPMENT — 11 a.m.-12 p.m.

LiDAR Data Formats and Applications

**Todd Thies, Photogrammetric Technician and Matt Vinopal, Supervisor,
GIS and LiDAR Services — Ayres Associates (30 minutes)**
Intermediate

LiDAR technologies play a crucial role in the development of high-resolution digital terrain models. Recently, Wisconsin counties have been acquiring LiDAR data for applications ranging from FEMA update mapping to engineering design. While the data has proven very useful, many organizations are overwhelmed by the size of the datasets and can be confused by the various types of data delivered at the end of a project. This presentation is intended to provide information on LiDAR delivery formats, LiDAR data uses beyond contour mapping, useful software tools for working with and managing LiDAR data, and typical hardware and software considerations.



You Can Do It Too! Enterprise GIS for Small Local Governments

ESRI Staff; staff from a Wisconsin local government (30 minutes)

Beginning

Many local units of government feel they are too small to be able to adopt an enterprise approach to GIS. In this session you will hear about the experiences of a small Wisconsin local government that is taking an enterprise approach to GIS. You will also learn about enterprise GIS best practices for small local units of government.

TRACK 2: DATA INTEGRATION AND DISTRIBUTION — 11 a.m.-12 p.m.

The Ohio Statewide Imagery Program

Steve Root, Project Director and Brian Stevens, Project Manager — Woolpert, Inc. (30 minutes)

Beginning

State agencies are taking a more direct involvement in reducing the level of geospatial data duplication between local and state governments, including the creation of digital orthophotography and acquisition of LiDAR. This presentation will outline the Ohio Statewide Imagery Program. Topics will include a discussion surrounding the cooperation between Ohio Local Governments and State Agencies, the technology used, project logistics (client and prime contractor) and the benefits of acquiring LiDAR versus other methods of DEM production. This presentation will also demonstrate actual project data and review some of the benefits that local, state and federal agencies are realizing from the use of the completed base mapping products.

Final Wisconsin Orthoimagery Task Force Recommendation

Andrew M. Jennings, Emergency Management Planner — East Central Regional Planning Commission; Dick Vraga, US Spatial Liaison — USGS; and Andrew Faust, GIS Specialist — North Central WI Regional Planning Commission (30 minutes)

Beginning

The Wisconsin Orthoimagery Task Force has been very active gathering insight on the possibility of a 2010 Statewide Imagery Project. Our efforts will ultimately be rewarded by the development of a standing Statewide Data Acquisition Program lead by the GIO, WIGICC, or some other state/regional department. Our findings and recommendations will be presented. This will include base level project specifications, propositions on funding options, and the finding of a state Champion to lead, administer, or/and coordinate a sustaining program.

**Friday
February 29**



Geospatial Decision Support Systems for Land Planning and Natural Resources Professionals

Dreux J. Watermolen, Chief of Science Information Services;

Adam Mednick, Natural Resources Education and

Jerry Sullivan, GIS Project Manager — Wisconsin Department of Natural Resources
(60 minutes)

Intermediate

WDNR is engaged in a nationally recognized program to increase the capacity of decision makers and planners to use Internet-based spatial decision support tools. The program targets those who make land-use decisions (elected officials, planners), and those who influence decisions (Extension educators, natural resource professionals, conservation organizations), with the goal of increasing the use of spatial data, information, and scientific methods within these inherently political processes. Hands-on workshops, step-by-step instructional materials, Web resources, and a built-in evaluation process measure the programs efficacy. Dreux presents the conceptual learning framework of the initiatives, and the outcomes of evaluating the different target groups. Adam compares a suite of runoff modeling tools. Jerry presents current research to develop distributed, interoperable watershed management tools, through the National Environmental Information Exchange Network. Lessons learned related to maps, GIS, and IMS technologies, key findings from audience needs assessments, and insights from audience-specific capacity building efforts, are presented.

TRACK 4: INNOVATIVE APPLICATIONS AND TECHNOLOGY — 11 a.m.-12 p.m.

Novus LRMS — The New Wave of Records Management for the State of Wisconsin

Christopher Lucas — Manatron, Inc. and Kathy Swingle (60 minutes)
Expert

Novus is an internet-based software which takes advantage of the inter-connectivity of the internet and the convenience of browser technology. Easy access to land information is available where and when needed to those whom need it. In this session learn how Novus helps you make the most efficient use of your time while facilitating better time between your staff and other county departments.



Using Community Viz and Smart Board Technology to Develop Land Use Plans

Debra Sielski, Assistant Administrator and Karen Long, GIS Analyst — Washington County (60 minutes)
Intermediate

Washington County and 11 local communities are working together to complete a multi-jurisdictional comprehensive plan. Washington County used Community Viz and Smartboard technology to conduct a series of public visioning sessions to consider areas for protection, such as environmental corridors, agriculture and woodlands, and to determine areas for future residential growth. Community Viz relies on both spatial and demographic information to allow participants to choose residential densities. Participants were able to draw on the Smartboard to outline areas for growth. Community Viz enabled them to see the amount of growth displayed on a series of bar charts, including the change in population and households and the amount of land converted to residential, all in real time. This technology was also used in local plan commission and board meetings to create their 2035 Land Use Plan Maps and helped officials assess the pattern and land conversion implications of land use decisions.

Map Gallery Competition/Poster Contest

2008 WLIA Poster Competition — ON-LINE SUBMISSIONS

It is always fun and interesting to see what others have been working on in the past year. The Poster Competition is a great opportunity to share your best work with others who appreciate quality cartography and beautiful maps. Start thinking now about what work you can enter in this year's poster competition. Awards will be presented for the best entrees in each category, the People's Choice, and the President's Choice.

This year we are adding one new category. Map Books & Atlas' will be judged as their own group. Other categories include: Base Maps, Small Format Map, Thematic Map, Map Poster, Orthophoto-based Map, Black & White Map, Brochure, and Interactive Web-Based Mapping Site.

Please submit your entry by going to <http://gis.rasmith.com/WLIA/wliaproposal.aspx> and filling out all required fields.

Entries will require a digital copy of the map be submitted at (or prior to) the conference in order to be eligible for award. Please provide digital submissions in Adobe Acrobat format, however, TIF, PNG, JPEG and GIF are also acceptable. The resolution of the output file should be between 80-133 DPI. Files should be less than 5 MB in size.

Judging will take place on Thursday, Feb. 28 from 5-7:30 p.m.



Directions to the Grand Geneva Resort in Lake Geneva

From Madison: Take I-90 south to Beloit and Janesville, and then take Delavan exit Hwy. 11 just south of Janesville. In Delavan, change to Hwy. 50 and proceed through Lake Geneva heading east. Grand Geneva Resort will be on your left.

From Milwaukee: take I-894 and I-43 south and exit at Hwy. 12/Lake Geneva exit at Elkhorn. Follow Hwy. 12 to Hwy. 50 East/Lake Geneva, the second exit. Take off ramp, continue east under the overpass. Grand Geneva Resort will be on your left.



Thank you to our 2008 Conference Sponsors

- Applied Data Consultants is sponsoring half the 2008 Lanyards
- Ayres Associates is sponsoring the entire Grand Opening Reception
- ESRI is sponsoring the 2008 Conference DVD
- R.A. Smith & Associates is sponsoring the 2008 Conference Web site
- Ruekert/Mielke is sponsoring part of Friday's award luncheon
- SEH, Inc. is sponsoring half of Thursday's Opening Luncheon
- Woolpert is sponsoring part of Friday's award luncheon
- Joe Mucciolo sponsored the 2008 Conference Logo

Thank you to our sponsors for their support.

They help make it possible to provide a quality program.

Opportunities for sponsorship are still available! Contact Ann Barrett at 800-344-0421



HOTEL INFORMATION

Hotel Information: The WLIA conference will be held at the Grand Geneva Resort at 7036 Grand Geneva Way at Highways 50 East and 12, Lake Geneva, WI 53147. Toll Free: 800-558-3417 or Main Number: 262-248-8811, FAX: 262-249-4763, Email: info@grandgeneva.com, Web site: www.grandgenevaresort.com. WLIA has a block of rooms at \$82 for single/double occupancy. The hotel will also offer \$62 single/\$82 double for those who qualify for state rate. That rate will apply upon check-in for those with proper identification from state, county or city positions. If you'd like to stay for the weekend, the room rate is \$149 single/double/triple/quad. Call the hotel directly for reservations.

CONFERENCE CD

We will again produce a WLIA Conference CD for 2008. It will include digital presentations from the conference, digital versions of poster contest submissions, and more. WLIA publishes a membership directory and membership list on a conference CD. These are distributed only to WLIA members and member organizations.

GENERAL INFORMATION

Meals: The conference fee includes breaks and lunches on Thursday and Friday, and the reception on Thursday evening.

Dress Code: Business casual is appropriate for the entire conference.

Registration/Badges: Be sure to register when you arrive at the conference. You will need a name badge to attend all conference functions. A final program will be distributed at the conference.

NOTE

Conference Fees do not include membership but there is that option on the registration form. Be sure to join WLIA before the conference or with conference fees to receive the member rates! You can do that on the conference registration form or go to www.wlia.org to download an application to renew.

MEMBERSHIP CATEGORIES

Individual: Available to anyone with an interest in the Association's mission.

Business: For any for-profit organization with an interest in marketing to the other WLIA members. One person will receive all mailings. The organization will receive a list of members, be able to exhibit, advertise in the newsletter and have a company description on the WLIA Web site. This is not a group rate.

Association: For any non-profit organization or institution of higher education with an interest in marketing to other WLIA members. One person will receive all mailings. The organization will receive a list of members, be able to exhibit, advertise in the WLIA electronic newsletter, and have a company description on the WLIA Web site. This is not a group rate.

Student: Available to any individual enrolled in a post-secondary educational institution.

CANCELLATION POLICY

Written cancellations received by Feb. 22, 2008 will receive full refund of the conference registration less a \$25 processing fee. No refunds will be made after Feb. 22, 2008.

2008 Conference Committee

Chairperson: Jodi Helgeson, WLIA
President-Elect
Kristen Anderson
Ann Barrett
Tony Bellovary
Rich Colbert
Justin Conner
Kirk Contrucci
Paula Cummings
Larry Cutforth
Adam Derringer
Kelly Felton
Aaron Ford
Scott Galetka
Marge Geissler
Jason Grueneberg
Sara Hackbarth
David Haines
Fred Halfen
Todd Halvorson
Mike Koutnik
Melissa Kraemer-Badtke
Tim Lehmann
Brian McGee
Peter Miller
Doug Miskowiak
Ken Pabich
Jon Schwichtenberg
Aaron Stephenson
Jerry Sullivan
Chris Vanderheyden
Dick Vraga
Cindy Wisinski
Terry Woodman
Connie Woolever
AJ Wortley
Michelle Yanda

Registration Form • 2008 WLIA Annual Conference

FEB. 27-29, 2008 AT THE GRAND GENEVA RESORT IN LAKE GENEVA

Registration and Badge Information

(A separate form is needed for each attendee; please copy this form for additional persons)

NAME _____ TITLE _____

ORGANIZATION _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____ COUNTY _____

PHONE _____ FAX _____

EMAIL _____

____ Please indicate if you have any special dietary or accessibility needs _____

____ Check here if this is your first WLIA Conference

Conference and Workshop Fees

I. Full Conference Registration — Thursday, Feb. 28 and Friday, Feb. 29, 2008

MEMBER

NON-MEMBER

____ Individual Full Conference Registration Fee	____ \$175	____ \$250	\$ _____
____ Student* Full Conference Registration Fee	____ \$25	____ \$75	\$ _____

II. One-Day Registration: Thursday, Feb. 28, 2008

MEMBER

NON-MEMBER

____ Individual Thursday Conference Registration Fee	____ \$150	____ \$225	\$ _____
____ Student* Thursday Conference Registration Fee	____ \$20	____ \$40	\$ _____

III. One-Day Registration: Friday, Feb. 29, 2008

MEMBER

NON-MEMBER

____ Individual Friday Conference Registration Fee	____ \$150	____ \$225	\$ _____
____ Student* Friday Conference Registration Fee	____ \$15	____ \$35	\$ _____

*Student registration must include copy of current student ID

IV. Wednesday Evening Social

MEMBER

NON-MEMBER

____ Yerkes Observatory Tour, Bus & Reception	____ \$25	____ \$35	\$ _____
____ Sports Center Fun & Reception	____ \$25	____ \$35	\$ _____

V. Membership

____ Individual — \$50 Available to anyone with an interest in the Association's mission	\$ _____
____ Student — \$25 Available to any individual enrolled in a post-secondary educational institution	\$ _____
____ Business — \$200 For any for-profit organization with an interest in marketing to WLIA members.	\$ _____
____ Association — \$200 For any non-profit organization or institution of higher education with an interest in marketing to WLIA members.	\$ _____

Organizations will receive a mailing list of members, be able to exhibit, advertise in the WLIA Electronic newsletter, and have a company listing on the WLIA Web site. This is not a group rate.

TOTAL AMOUNT THIS PAGE: \$ _____

Continued on next page

Registration Form • 2008 WLIA Annual Conference

FEB. 27-29, 2008 AT THE GRAND GENEVA RESORT IN LAKE GENEVA

(Continued from page 38)

NAME _____

ORGANIZATION _____

VI. Workshop Registration - Wednesday, February 27, 2008

Please check the workshop you want to attend (#1 - #12 below) See workshop descriptions on pages 7 -11

____ Workshop # 1 — Keys to Coaching Employees	(9 a.m.-4:30 p.m.)	\$80 member, \$100 non-member
____ Workshop # 2 — Collecting/Processing GPS	(9 a.m.-4:30 p.m.)	\$80 member, \$100 non-member
____ Workshop # 3 — ArcObject Everywhere	(9 a.m.-4:30 p.m.)	\$80 member, \$100 non-member
____ Workshop # 4 — Enterprise GIS w/AutoCAD	(9 a.m.-12 p.m.)	\$40 member, \$50 non-member
____ Workshop # 5 — Intro to Autodesk Civil 3D	(1:30-4:30 p.m.)	\$40 member, \$50 non-member
____ Workshop # 6 — Enterprise Data Mgmt.	(9 a.m.-12 p.m.)	\$40 member, \$50 non-member
____ Workshop # 7 — ArcGIS Server 9.2	(1:30-4:30 p.m.)	\$40 member, \$50 non-member
____ Workshop # 8 — National Hydrography	(9 a.m.-12 p.m.)	\$40 member, \$50 non-member
____ Workshop # 9 — Soils Data	(1:30-4:30 p.m.)	\$40 member, \$50 non-member
____ Workshop # 10 — Mobile GIS	(9 a.m.-12 p.m.)	\$40 member, \$50 non-member
____ Workshop # 11 — Mashups, Web Svcs & KML	(1:30-4:30 p.m.)	\$40 member, \$50 non-member
____ Workshop # 12 — Making Mapbooks..ArcGIS	(9 a.m.-12 p.m.)	\$40 member, \$50 non-member

____ Lunch on Wednesday at Hotel: 12-1:30 p.m. — is included with a full day or two half day workshops, or you can purchase lunch for \$20 member, \$25 non-member for anyone not involved in two workshops or a full day workshop

Total for Workshops and/or lunch \$ _____

TOTAL AMOUNT FOR BOTH PAGE 1 and PAGE 2: \$ _____

VII. PAYMENT OPTIONS

Please make check payable to WLIA; and mail to WLIA, P.O. Box 389, Wild Rose, WI 54984 or pay by credit card:

Credit card: fill in information, mail to WLIA or fax to: 715-366-4501: Visa ____ MasterCard ____

Number _____ Exp. Date _____

Signature _____

Amount \$ _____

Wisconsin Land Information Association

P.O. Box 389
Wild Rose, WI 54984
800-344-0421
715-366-4501 fax
abarrett@uniontel.net
www.wlia.org



WLIA 2008 Annual Conference

Feb. 27-29, 2008

Grand Geneva Resort

Lake Geneva, Wisconsin

Wisconsin Land Information Association

P.O. Box 389

Wild Rose, WI 54984

800-344-0421

fax 715-366-4501

abarrett@uniontel.net

www.wlia.org
