



**WLIA**  
**Conference 2004**

“Making a Splash with GIS”

March 3-5, 2004

Kalahari Resort and Conference Center

Wisconsin Dells, Wisconsin

**WELCOME** to the 17th Annual WLIA Conference at the Kalahari Resort and Conference Center in Wisconsin Dells, Wisconsin. As I am sure you will find this year’s conference is filled with exciting activities: including workshops, plenary sessions, technical sessions, an exhibit hall, map gallery, as well as special interest meetings.

I would like to take this opportunity to personally thank the entire conference committee, WLIA Board of Directors, conference sponsors and, of course, Ann Barrett, our Executive Services Manager. Without their help this event would not have been possible.

Please take a few minutes to complete the conference evaluation forms. We need your feedback to continue to improve the conference for years to come.

Now as President of WLIA- I am personally challenging you to help us improve our organization. My goals for the next year include increasing membership and providing additional opportunities for others to participate and become involved. Therefore, I am asking each of you to recruit one new member over the next year and to volunteer to help with one activity. Whether it’s serving on a committee, helping with the conference/regional meeting, writing a short article for the newsletter, or making a presentation at a meeting, we all have great ideas and information to share. This organization is what we all make it. Let’s work together to make it the best it can be!

With that in mind, I want to extend to each and every one of you the opportunity to express your ideas and concerns with me throughout the year. Please don’t ever hesitate to contact me either via phone (262) 317-3382 or via email at [alissa.bails@rasmith.com](mailto:alissa.bails@rasmith.com).

Thanks again for coming, and enjoy the conference. Be sure to make a splash at the water park while you are here, too.

Alissa Bails  
President

# WLIA 2004 Annual Conference Highlights

## **Pre-Conference Workshops**

This year's conference will include eight (8) pre-conference workshops, including two (2) free workshops! Space is limited so register early for these popular, in-depth workshops.

## **Opening Plenary Session**

This year's opening session will highlight the Next Dimension GIS/LIS in Wisconsin with a presentation by William Holland and Peter Thum from GeoAnalytics.

## **Exhibit Hall**

See the latest in GIS technology and speak with the "experts" in the Exhibit Hall. The Exhibit Hall hours will be: Thursday, March 4th from 2:00 pm - 7:30 pm and Friday, March 5th from 8:00 am to 11:30 am.

## **Scavenger Hunt**

Come and join in on the great scavenger hunt. Information on the hunt has been included in your conference registration packet. Be sure to complete the hunt before the deadline and have the opportunity to WIN prizes.

## **Keynote Speaker**

Mr. Hank Garie, Executive Director of the Geo-Spatial One Stop, will present on Friday during lunch. He will enlighten us on what's happening with data sharing and how it will benefit all of us in the future.

## **Lunch with Adena Schutzberg**

We are lucky to have lunch with Adena Schutzberg, Editor of GIS Monitor. She will enlighten us on how the recent events in history have changed the way we think about our data and how our focus will continue to change in 2004.

## **Map Gallery Competition**

The Map Gallery is the place to see and be seen; enter your own map into the contest. There are two additional categories in this year's competition: Web-based Mapping Site and brochures.

## **Awards**

Once again, WLIA will present awards to the "best of the best". This is our equivalent to the Academy Awards. Nominations are coming soon. Be sure to nominate your favorite project and join in congratulating our 2004 winners.

## **Technical Sessions**

This year's conference boasts over 50 technical sessions in ten different tracks. Take a careful look at the sessions listed – you are sure to find something for everyone.

## **WLIA Town Meeting**

This annual event is our members' opportunity to discuss upcoming events and directions for our organization's future. Please plan on attending and voicing your interests!

## **User Group/Special Interest Meetings**

What a great opportunity to network and learn from others. Planned user meetings include: ESRI users, tribal users, Land Information Officers and more.

## **Job Board**

Bring your job posting to the conference and find a great professional to add to your staff. The job board will be accessible to all conference registrants.

## **Internet Café**

The internet cafe will be open during exhibit hall hours for all conference attendees to check their email and surf the web. The Cafe' will be located in the exhibit hall.

# WLIA 2004 Annual Conference Overview

## Kalahari Resort, Wisconsin Dells, Wisconsin

### Wednesday, March 3, 2004

7:30 - 8:50 a.m.	WLIA Board Meeting
9:00 - 11:50 a.m.	Workshops
Noon - 1:20 p.m.	Lunch (round table)
1:30 - 4:30 p.m.	Workshops
5:00 - 7:00 p.m.	Task Force/User Group/Special Interest Meetings

### Thursday, March 4, 2004

7:00 - 7:50 a.m.	<b>Past President's Breakfast</b>	<b>Exhibit Hall Set Up</b>
8:00 - 8:50 a.m.	Welcome and Opening Remarks from WLIA President, Jeff Bluske <b>Opening Plenary Session - Bill Holland and Pete Thum, GeoAnalytics</b>	
9:00 - 11:50 a.m.	Technical Sessions	
Noon - 1:50 p.m.	Lunch Town Meeting/Business Meeting	
2:00 - 5:00 p.m.	Technical Sessions	<b>Exhibit Hall Open</b>
5:00 - 7:30 p.m.	Exhibitors Reception & Poster Judging	

### Friday, March 5, 2004

8:00 - 10:50 a.m.	Technical Sessions	<b>Exhibit Hall Open</b>
11:00 - 11:20 a.m.	Break in Exhibit Hall	
11:30 a.m. - 1:50 p.m.	Lunch Keynote Speaker, Hank Garie, Executive Director, Geo-Spatial One-Stop Awards Presentation	<b>Exhibit Hall Closed</b>
2:00 - 3:50 p.m.	WLIA Board Meeting (New Board)	

# Pre-Conference Workshops

Wednesday, March 3, 2004

Workshops will be held on Wednesday, March 3 at the Kalahari Resort, Wisconsin Dells. 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 workshop = \$75 member/\$85 non-member  
Half-day workshop = \$40 member/\$50 non-member  
Registration fee includes lunch for full day or two paid half-day workshops only. Lunch tickets can be purchased separately as well for \$20 each.

## Workshop 1

Wednesday, 9:00 a.m. – 4:20 p.m.

### Turning Imagery into Information

*Amy Zeller, Leica Geosystems*

Turning imagery into information is a hands-on workshop introduction to using ERDAS IMAGINE for remote sensing. You'll learn valuable tips you need to extract information for imagery, including simple land cover analysis, change detection, classification and other common processes. We'll also explore the properties of imagery, the creation of vectors for your GIS from imagery, and the power of communicating GIS data and imagery in a 3D environment. Additional topics to be discussed include: Data display, data source and availability, Orthorectification, classification, change detection, mosaicking, imagery analysis, 3D image visualization and vector editing.

Cancelled

## Workshop 2 - Banyan Room

Wednesday, 9:00 a.m. – NOON

### A Community Resource for Comprehensive Planning

*Jeff Sledge and Nidhi Agerwall, LICGF, UW-Madison*

The Land Information Computer Graphics Facility of UW-Madison has developed a Web template to help coordinate Comprehensive Planning activities at a local level. This template will be available free of charge to all Wisconsin Communities. This workshop will demonstrate its' installation, configuration, and use.

## Workshop 3 - Crown Palm Room

Wednesday, 9:00 a.m. – NOON

### Smarter Decision-Making with the Aquatic & Terrestrial Resource Inventory (ATRI)

*Jim Woodford, Jill Rosenberg, and Sally Kefer, Wisconsin DNR*

The Wisconsin DNR and the State Herbarium have developed a Web-based application designed to inventory and provide access to ecological data. The goal is to create a public and private partnership that promotes the inventory, collection, and dissemination of data for decision making efforts throughout Wisconsin. To date, more than 300 data sources have been added to the inventory. Data sources include tabular and spatial databases, Web pages, reports, images, and summary documents. Project activities include multiple Web-based mapping application, a complete assessment of current data collection activities, development and implementation of data collection standards. This workshop will concentrate on how and where to find and access datasets, internet mapping functionality and tools, and guidance information on datasets useful for comprehensive planning. Live demonstrations of the database inventory and mapping sites are planned.



Workshops continued on page 5...

*Workshops continued...*

### **Workshop 4 - Cypress Room**

Wednesday, 9:00 a.m. – NOON

#### **Delivering GIS Functionality and Geospatial Data with Map Services**

*Jason Grootens and Mike Koutnik, ESRI, Minneapolis*

Advancements in technology and the growing acceptance of on-line services offer new options for providing GIS data and functionality available over the internet. A well-designed map service can significantly reduce the burden on staff responsible for responding to routine requests, while improving service delivery to customers, whether those customers are citizens or other government agencies. The ability to use and view data ‘on-the-fly’ from various organizations, without having to actually download the data, has made map services very appealing. To develop successful map services requires consideration of a variety of technical, policy, and organizational issues. In this workshop we will work through these issues by discussing the best practices, exploring real world examples, and providing demonstrations.

### **Workshop 5 - Bamboo Room**

Wednesday, 9:00 a.m. – NOON

#### **GIS in the Classroom — FREE SESSION!**

*Al Miller, Professor Emeritus (retired)*

Workshop participants will learn how geographic information systems (GIS) can be used in the classroom to develop analytical thinking. They will learn about GIS, what they are, and how they can be used to understand issues and geographic relationships. Class exercises will teach the use of GIS tools through map analysis, tables, charts, and layouts using ArcVoyager software. Participants will receive a free CD “GIS for Schools and Libraries” that can be used in their own classrooms.

**\*\*\*\*This will be a hands-on session. Enrollment is limited to 15 teams of two working on one computer each\*\*\*\***

Wednesday, March 3, 2004      *Noon – 1:20 p.m.*

**Suite D**

#### **Lunch with Adena Schutzberg - GIS: The Challenge of Too Much Information!**

While we marvel at what GIS can do, at this point in its evolution we are running headlong into situations where there are simply too much data, too much information, and perhaps too much technology available. In 2004, we must think about how much public information should be easily available on the Internet in these times of terrorist alerts, and how we as professionals even find the data we are looking for in the ever-expanding online world. I want to look at the impact of this overabundance on us, and the public we often serve, and share some thoughts on potential solutions.

About the Speaker: Adena Schutzberg has over ten years experience using, developing, and marketing mapping and GIS products. She’s worked as a CAD/GIS manager in a consulting firm, and held positions at GIS vendors ESRI and Cadcorp. She launched GIS Monitor ([www.gismonitor.com](http://www.gismonitor.com)) and the Ultimate Maps/GIS Directory while at TenLinks.com. She currently runs a GIS consulting business, ABS Consulting Group, Inc., in addition to serving as the Editor of GIS Monitor.

### **Workshop 6 - Banyan Room**

Wednesday, 1:30 p.m. – 4:20 p.m.

#### **Preparing for GIS Certification**

*Bill Huxhold, Professor UW-Milwaukee*

*David Flack, Ruekert-Mielke and WLIA’s GIS Certification Task Force*

In October 2003, URISA adopted a nationwide GIS certification program based on a pilot program run in Georgia. Certification is a great way to benchmark your experience and contributions, but first you have to understand the process and come prepared with a lot of documentation. During the workshop, the presenters will road map the certification process, including:

- ❖ An overview of the process
- ❖ How the point system works
- ❖ What grandfathering provisions exist
- ❖ How to apply

At the end of the workshop there will be time for participants to ask questions and start work on their portfolios. Participants are asked to bring along documents of their education, experience and professional contributions.

*Workshops continued on page 6...*

Workshops continued...

Wednesday

### Workshop 7 - Crown Palm Room

Wednesday, 1:30 p.m. – 4:20 p.m.

#### State Agency Resources for Comprehensive Planning

*Dreux Watermolen, Sally Kefer & staff from 5 state agencies.*

Through a cooperative effort, six state agencies will demonstrate important planning data and information sources that they maintain in an effort to improve the quality of comprehensive plans. Representatives for the Wisconsin Department of Administration, Agriculture, Trade and Consumer Protection, Natural Resources, Revenue, Transportation and the Wisconsin Historical Society will showcase ways to access and use various agency resources available for use in local planning processes. Learn about DNR's Aquatic and Terrestrial Resources Inventory (ATRI) and WHS's Wisconsin Archaeological and Historical Resource Database (WiscAHRD). Learn how to access state transportation plans. Find out how to use demographic data from the DOA, as well as, how to apply economic information from DOR and agricultural data from DATCP.

### Workshop 8 - Cypress Room

Wednesday, 1:30 p.m. – 4:20 p.m.

#### Introduction to GIS for Local Government Officials — FREE SESSION!

*Mike Schlecht and Mike Koutnik, ESRI, Minneapolis*

This session is intended to orient local government decision makers to GIS and to have them learn how they can work with their local GIS resources. This workshop will use ArcView 8 to introduce attendees to GIS including: using GIS data sources; thematic mapping; simple queries; and basic map production. Each attendee is asked to bring a GIS person from their jurisdiction. For any unit of government that does not have a GIS person, we ask that you bring your County GIS Person.

**\*\*\*\*This will be a hands-on session. Enrollment is limited to 15 teams; of a local government official/manager and their chosen GIS Person\*\*\*\***

### Workshop 9 - Bamboo Room

Wednesday, 1:30 p.m. – 4:20 p.m.

#### LiDAR Acquisition and Data Applications

*John Erickson & Tim Barnett, Ayres Associates*

This workshop will cover the components of an airborne LiDAR system including airborne GPS and IMU systems, acquisition considerations for a LiDAR mission including system calibration, error, budget, accuracy standards, and LiDAR data processing and quality assurance/quality control (QA/QC). The second part of the workshop will cover LiDAR data applications including DEMs, DTMs for contours, hydraulic analysis, utility mapping, and disaster mapping applications. There will be a demonstration of LiDAR point cloud classification to a surface model, contour generation, photogrammetry's role in LiDAR data application and QA/QC.

#### User/Special Interest Meetings

5:00 p.m. - 7:00 p.m.

The LION Group will be meeting in the Bamboo Room

The ESRI User Group Meeting will be held in the Banyan Room

### Join Us for a Scavenger Hunt

Inside your registration packet is a flyer for the scavenger hunt. Be sure and take some time during the conference to find the clues scattered throughout the hotel and return your form for the chance to WIN prizes!!! Prizes will be on display at the conference registration desk.

# 2004 WLIA Conference Overview

Thursday, March 4, 2004

7-7:50	Past President's Breakfast			
8-8:50	Welcome and Opening Remarks Opening Plenary Session – The Next Dimension GIS/LIS in Wisconsin – Beyond Maps, Data and the Enterprise			
	<b>Surveying &amp; Mapping</b> Bamboo Room	<b>Planning &amp; Conservation</b> Crown Palm Room	<b>Real Estate, Tax &amp; Assessment</b> Banyan Room	<b>Technology and the Future</b> Ironwood Room
9-9:45	<i>ArcMap Samples Tools for Enhanced Map Production</i> 45 minutes	<i>Milwaukee River Basin Wetlands Assessment Pilot Project</i> 45 minutes	<i>What's New in the Register of Deed's?</i> 45 minutes	<i>Enterprise-wide Content Management/Imaging &amp; GIS Solutions</i> 45 minutes
9:45-10:45	<i>Introduction to Digital Aerial Camera Systems and Uses</i> 20 minutes  <i>Wisconsin Cropland Data Layer</i> 20 minutes  <i>New Parcel Mapping Strategies</i> 20 minutes	<i>Wisconsin Mineral Development Atlas</i> 30 minutes  <i>GeoScience Information as a Basic Tool in Comprehensive Land-Use Planning</i> 30 minutes	<i>Maximizing the Use of GIS to Enhance Assessment Models</i> 30 minutes	<i>Introduction to Semantic Web Technologies</i> 30 minutes
			<b>Public Health</b> <i>Enhancing Public Health Surveillance with GIS</i> 30 minutes	<i>Addressing and Road Centerlines</i> 30 minutes
10:50-11:50	<i>Mapping Sauk County: From Paper to Integrated GIS</i> 60 minutes	<i>Enhancing Local Land Use Decisions through the Evaluation &amp; Use of Web-based Tools</i> 30 minutes  <i>Using GIS Tools for Approval of Developments</i> 30 minutes	<i>GIS Visualization through the Public Health Information Network</i> 45 minutes	<i>New Tools for Web GIS Development</i> 60 minutes
12-1:50	Lunch Town/Business Meeting			

	<b>GIS Data and Applications</b> Bamboo Room	<b>Technology &amp; the Future</b> Crown Palm Room	<b>Municipal</b> Banyan Room	<b>Special Interest</b> Iron wood Room
2-2:30	<i>GeoCoding in ArcGIS 8</i> 30 minutes	<i>Migrating Parcels to a Spatial DBMS Model</i> 30 minutes	<i>Culvert Data, Locations and Condition are important to Towns and County Government</i> 30 minutes	<i>Modeling Land-Use Suitability, Growth Impacts in Dane County, Wisconsin</i> 30 minutes
2:30-5:00	<i>Data Are Alive! Visualizing People, Places, and Things in ArcIMS</i> 60 minutes  <i>Highlights of ArcGIS 9</i> 90 minutes	<i>GIS – The Next Generation</i> 45 minutes	<i>Mapping for Municipal Emergency Services</i> 45 minutes	<i>Rock County: 0 to 120 with GIS</i> 45 minutes
		<i>Wisconsin Land Information System Pilot Projects</i> 90 minutes	<i>Using 3D Analyst in Community Redevelopment</i> 45 minutes  <i>Building Sun Prairie's Integrated City Management Software Suite, e911, Enterprise GIS and Database Systems</i> 60 minutes	<i>FEMA's Multihazard Map Modernization Initiative</i> 30 minutes  <i>GIS Certification</i> 45 minutes

*Thank you to our presenters who have donated their time and expertise to make this conference informative and stimulating!*

# Conference Overview

Thursday, March 4, 2004

8:00 a.m. – 8:50 a.m.

Suites CDEF

Welcome and Opening Remarks, *WLIA President, Jeff Bluske*

**Opening Plenary Session – The Next Dimension GIS/LIS in Wisconsin –**

**Beyond Maps, Data, and the Enterprise**

*Presenters: William Holland and Peter Thum, GeoAnalytics*

Since the inception of the Wisconsin Land Information Program in 1989, tremendous intellectual and monetary investment has been expended in designing and developing databases, adopting spatial technologies, and forging creative organizational arrangements to establish collaborative land information systems. Despite these accomplishments and the significant benefits they have yielded, we are only at the beginning of the potential use and incorporation of GIS/LIS technology and data into our everyday business.

The convergence of GIS/LIS with IS offers extraordinary new opportunities. Driven by emerging data, system and application interoperability standards, GIS/LIS can now become a central and transparent part of business information systems such as asset, financial, human resource, and customer relationship management. Major advances in mobile computing and wireless communications now offer potential for anytime, anywhere location-based information access and decision support.

Honoring our history, this presentation defines the next dimension of GIS/LIS, including key technical, organizational, and management success factors.

## Technical Sessions

9:00 a.m. – 11:50 a.m.

**Surveying & Mapping Track**

**Bamboo Room**

Room Moderator: Jon Schwichtenberg

**• ArcMap Sample Tools for Enhanced Map Production**

*Presenter: Jason Grootens, ESRI Minneapolis (45 minutes)*

Getting maps into the hands of the people who need them is often the GIS professionals most difficult task. This session focuses on how the ArcGIS user can apply out of the box tools, developer samples, and extensions to publish maps and data to the masses. Demonstrations will also focus on several key workflow tools that improve productivity.

**• Introduction to Digital Area Camera Systems and Uses**

*Presenter: Jason Nyberg, Ayres Associates (20 minutes)*

Digital aerial camera systems are providing new methods for aerial photography acquisition. This short introduction to digital aerial photography will cover the basic characteristics of several types of camera systems. It will discuss the potential benefits and limitations of digital collection methods and explore the applications for this technology. Finally, the presentation will outline how digital aerial photography may impact future mapping projects.

*Surveying & Mapping Track continued on page 9...*

Thursday

Thursday

*Surveying & Mapping Track continued...*

**• Wisconsin Cropland Data Layer**

*Presenter: Patrick Willis, USDA (20 minutes)*

The USDA, National Agricultural Statistics Service (NASS) began a land cover mapping project in Southwestern Wisconsin in 2001. This project is entitled the Wisconsin Cropland Data Layer and in 2003 it was expanded to include the entire state. Satellite imagery is used to categorize Wisconsin’s agricultural, woodland, urban, and water resources on an annual basis. Land use planners can use this type of data to track farmland conversion or to monitor the state’s natural resources. The project represents a cooperative venture among three USDA Agencies (headquarters units of NASS, the Foreign Agriculture Service, and the Farm Service Agency), plus an in-state agreement with the Wisconsin State Statistical Office.

**• New Parcel Mapping Strategies**

*Presenters: David Flack, Ruekert-Mielke and Michael Romportl, Oneida County (20 minutes)*

Parcel Mapping has evolved considerably over the last generation, moving from Mylar to CAD, and now high-tech databases. This shift to a parcel database has important ramifications for data capture and mapping. Furthermore, these designs can affect how users access, use, and maintain the data. Based on our experiences designing a parcel database for Oneida County, we will provide recommendations about the design process and how it can be used to positively influence the outcome of a project.

**• Mapping Sauk County: From Paper to Integrated GIS**

*Presenters: Ted Brenson, Kelly Felton and Sally Cobb, Sauk County (60 minutes)*

Being a rural county with extensive tourism, and highlighting some of Wisconsin’s greatest geographical features, presents Sauk with some challenging mapping scenarios. From pen and ink paper maps in the 1980’s to now developing integrated Countywide GIS datasets and interactive maps, Sauk has grown to be one of the more progressive counties in GIS developments. The road to developing accurate digital maps and geographical information systems has been a long and sometimes arduous process for Sauk County. This presentation will showcase the methods Sauk County used to develop products over the years from paper maps to present GIS datasets, as well as illustrate the current structure of their system involving MapGuide and RIT.

9:00 a.m. – 11:50 a.m.

<b>Planning &amp; Conservation Track</b>	<b>Crown Palm Room</b>
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Room Moderator: Andrew Jennings

**• Milwaukee River Basin Wetlands Assessment Pilot Project**

*Presenter: Kate Barrett, Marsha Burzynski and Tom Bernthal, Wisconsin DNR (45 minutes)*

This pilot project is developing tools to improve planning wherever wetland resources are a concern. We start with the understanding that all wetlands have value, but not all wetlands perform the same functions in the same way or to the same degree. Our aim is to produce a big picture view of the varying roles wetlands play to maintain water quality, prevent flooding, and provide habitat in the basin. Through the use of GIS tools, we’ll identify where we have lost wetlands. We’ll also identify where in the basin restored wetlands will provide food, cover, shelter, and travel corridors for animals, trap sediment, and take up nutrients to maintain downstream water quality, and where wetlands detain water long enough to reduce flooding. The data layers and maps will help governments and conservation organizations better understand which wetland restorations are most likely to achieve flood prevention, enhance habitat, or improve water quality.

*Planning & Conservation Track continued on page 10...*



• **Wisconsin Mineral Development Atlas:**

**An old data set finds new life in the digital environment**

*Presenter: Mike Czechanski and Bruce Brown, Wisconsin Geological and Natural History Survey (30 minutes)*

The Wisconsin Mineral Development Atlas consists of a series of section maps covering the historic lead-zinc mining region of Grant, Iowa, and Lafayette Counties. The atlas was compiled by the Wisconsin Geological and Natural History Survey in cooperation with the U.S. Geological Survey as a record of existing mines, historic lead digs, and drilling records that could be used as an exploration guide.

Since the closing of the last zinc mine in 1978, this extensive set of mine maps has seen little use, due in part to the difficulty of accessing and reproducing the maps, which were hand drafted on large linen sheets. Plans to rebuild U.S Highway 151 through the heart of the mining region, made locating old mine workings, in relation to construction activity, a necessity. The maps were scanned and the images geo-referenced. Maps of mine workings can now be brought into a GIS and overlaid on a modern topographic or orthophoto base.

• **GeoScience Information as a Basic Tool in Comprehensive Land-Use Planning**

*Presenter: Bruce Brown and Mike Czechanski, Wisconsin Geological and Natural History Survey (30 minutes)*

Geoscience information includes a variety of data sets containing information on the physical and chemical properties of earth materials and their spatial distribution. Surface soil types are a function of underlying glacial deposits and bedrock. Bedrock and glacial deposits are the plumbing system for our groundwater, the medium for isolating our waste, the source of most of our building materials, and the foundation for our infrastructure.

Data are usually presented as primary maps (bedrock geology, water table elevation, depth to bedrock, water quality, etc.) derivative maps (suitability for landfills, crushed stone resource potential, aquifer contamination susceptibility, etc.) or used to construct groundwater flow and mineral resource potential models. Geoscience information is essential to understanding the limitations of the natural environment to support continued intense urban and rural development.

We will demonstrate the application of geoscience data in addressing natural resource issues in comprehensive planning with examples from Wisconsin.

• **Enhancing Local Land Use Decisions through the Evaluation & Use of Web-based Tools**

*Presenters: Dana Lucero and Matthew Murrell, Wisconsin DNR (30 minutes)*

In this session, participants will learn about the Wisconsin DNR's ongoing effort to improve the quality of land use decisions through the promotion and use of decision support and impact assessment tools. These relatively new types of tools allow users to separate the personal and often contentious issues surrounding land use decisions from science-based issues. The presenters will describe "Changing Landscapes" and "Changing Landscapes 2" workshops designed to evaluate tools that met predetermined criteria and to determine how the tools might be applied in a local setting. Presenters will overview the structure of the workshops, the tools investigated, the evaluation process used, and the results obtained. They will describe the shared attributes of tools found to be most useful by workshop participants and will highlight upcoming opportunities to become involved in the next stage of this effort.

**• Using GIS Tools for Approval of Developments**

*Presenter: Tim Penfield, MSA (30 minutes)*

This presentation will highlight various GIS tools utilized to assist municipalities in the review and approval process for areas of subdivision development. In the past, City officials have approved development projects based on current land use planning policies, and by reviewing developer’s proposals and plans. Aided with the spatial analysis tools and other university created analysis tools across the nation, City staff can now review the proposed developments and determine if the impacts to wetlands, neighboring properties, and visual impacts are negative. Site visits, including soil borings, surveying, and drainage analysis can all be minimized through the use of these GIS tools. This improves the City’s tasks of review and approval for new developments, and saves time and money.

9:00 a.m. - 10:15 a.m.

**Real Estate, Tax & Assessment Track**

**Banyan Room**

Room Moderator: Marilyn Mueller

**• What’s New in the Register of Deed’s?**

*Presenters: Mark Ladd, Racine County and Jane Licht, Dane County (45 minutes)*

The Constitutional Office of the Register of Deeds has long preserved and provided access to important real estate documents for our citizens. The number of real estate documents that are recorded with the Register of Deeds has increased exponentially over the past four years. Coupled with the cut-backs in aids to counties, local registers are scrambling to provide services required by law. This situation of increasing demands for service in the face of increasingly limited resources is a challenge for all state and local offices.

Most Wisconsin registers have already implemented modern computerized imaging and indexing system, and many offer online access. A few are also in the beginning stages of recording documents electronically. Mark Ladd, the Racine County Register of Deeds, and Jane Licht, the Dane County Register of Deeds, represent counties that were among the first to offer new technology for professional customers and individuals. They will provide an update on these advances that promise improved productivity and a means for customers to help themselves.

**• Maximizing the Use of GIS to Enhance Assessment Models**

*Presenter: Charlie Magruder, NovaLIS (30 minutes)*

Individuals in the assessment industry are still realizing the benefits that wider use of GIS technology can bring. This session will discuss how the ability to move seamlessly between a GIS environment and Computer Assisted Mass Appraisal (CAMA) system enhances the assessor’s capability to see, query, analyze, and manipulate data in both spatial and database environments. It will argue that assessors need a powerful CAMA system that manages workflow, integrates with GIS, and has the flexibility to value property using industry standards, as well as client-specific methodologies to provide the most accurate information and best level of customer service.

Thursday

10:15 a.m. - 11:30 a.m.

**Public Health Track** **Banyan Room**

Room Moderator: Marilyn Mueller

Thursday

• **Enhancing Public Health Surveillance with GIS**

*Presenter: Aaron Weier, State of Wisconsin, Division of Management and Technology (30 minutes)*

Mapping has been a powerful tool used by public health practitioners for centuries. More recently, the availability of web-based GIS capabilities has driven a more efficient workflow for capturing, reporting and analyzing public health incidents. This session focuses on how GIS is being applied to assist with early detection, response to, management of, and post-incident analysis of maladies such as SARS, West Nile virus, chronic wasting disease, etc. We will pay particular attention to how GIS is helping coordinate public health efforts amongst local, state and federal levels, and integrating their efforts with health providers.

• **GIS Visualization through the Public Health Information Network**

*Presenters: Jennifer Hansen, University of Wisconsin-Madison, LICGF  
and David Pluyms, State of Wisconsin, Division of Public Health (45 minutes)*

The Department of Health and Family Services is beginning to implement a statewide mapping system through the Public Health Information Network (PHIN). This session will discuss the needs, functions and issues used to address this undertaking. A prototype of the ArcIMS implementation of the West Nile Virus module within the PHIN will be demonstrated and discussed.

9:00 a.m. - 11:50 a.m.

**Technology & the Future Track** **Ironwood**

Room Moderator: Joyce Fiacco

• **Enterprise-wide Content Management Imaging & GIS Solutions**

*Presenters: John Haugen, ACS, and Chris Hermann and Brian Sovik, ACS-GTG (45 minutes)*

Local government agencies face many of the same challenges as private industry. Both types of organizations must continually strive to boost productivity and reduce costs. Both are struggling to manage huge, ever-increasing volumes and varieties of data. The first half of this session will cover content management solutions that boost productivity, reduce physical space requirements, and improve security by seamlessly storing, retrieving and viewing content (paper documents, electronic documents, print streams, e-mail) associated with spatial data. The second half of this session will cover GIS solutions for local government. Counties and Cities of all sizes need cost-effective and practical solutions for GIS. The success of any GIS initiative requires: (a) Planning, (b) Designing, (c) Implementation, and (d) Software Integration. ACS and Geographic Technologies Group (GTG) offer a presentation illustrating an award-winning strategy for integrating a suite of GIS solutions.

*Technology and the Future Track continued on page 13...*

**• Introduction to Semantic Web Technologies**

*Presenter: Nancy Wiegand, LICGF (30 minutes)*

The Semantic Web is an extension of the current web in which information is given well-defined meaning, better enabling computers and people to work in cooperation.” (Tim Berners-Lee, James Hendler, Ora Lassila, “The Semantic Web”, Scientific American, May 2001). The Semantic Web would be able to be processed directly or indirectly by machines. Computer Science researchers have been working on technologies to approach the Semantic Web vision, and this talk gives an overview of some of these technologies. An example is marking documents and data sources in XML. However, semantic problems still remain because data distributed over the Web tend to be highly heterogeneous in terms and their meanings. In this session, I will describe some of the new methods being proposed and project how these methods may be applicable to GIS or spatial data.

**• Address and Road Centerlines**

*Presenter: Eric Fowler, R.A. Smith & Associates (30 minutes)*

Geocoding, using road centerlines, greatly enhances a municipality’s GIS. However, many municipalities’ road centerlines do not have attributes assigned to them, or a municipality does not have any centerlines to start with. This presentation will show why centerlines are useful beyond geocoding; routing, linear reference and dynamic segmentation. The presentation will look at how users can create centerlines with existing Rights-of-Way data, and how to add address attributes to new or existing centerline features. Finally, the different aspects of geocoding, including address parts, geocoding services, and working with unmatched records will be discussed.

**• New Tools for Web GIS Development**

*Presenter: Randy Beck, Taylor Technologies (60 minutes)*

Rapid Integration Toolkit is an advanced software solution that takes Web GIS functionality and ease of use to a new level. With RIT you can access any ODBC data source, perform administrative tasks, assign user rights, and passwords. RIT has intuitive, easy to create, easy to use queries and reports, all without expensive and time-consuming programming.

Learn how Rapid Integration Toolkit gives you the power to:

- Create multiple web sites, as needed, no programming required.
- Create customized, dynamic queries, no programming required.
- Create customized, dynamic reports, no programming required.
- Reduce your reliance on programmers or consultants.
- Reduce costs of managing your Web GIS.
- Make your sites Dynamic: Get the right data to the right users.
- Build tools: graphic to dbase connect functions such as zoom to, buffers, which are linked to reporting, auto-reporting, no programming/hard coding required...and much more.

Thursday, March 4, 2004

**Suite CDEF**

Noon – 1:50pm

**Lunch & Town and Business Meeting**

The WLIA business meeting will discuss many upcoming topics of interest to our membership, including the status of state program funding, and the existing sunset of the program. This time period also includes our Town Hall forum, which provides all attending an opportunity to bring up ideas and topics for discussion by the membership.



Thursday Afternoon, March 4, 2004

2:00 p.m. – 4:50 p.m.

## GIS Data and Application Track

Bamboo Room

Room Moderator: Don Dittmar

### • GeoCoding in ArcGIS 8

*Presenter: Jason Grootens, ESRI, Minneapolis (30 minutes)*

This session will introduce you to geocoding in ArcGIS 8. The session will begin by describing geocoding services and how to build geocoding services for various types of geocoding reference layers. The session will then cover how to use geocoding services in ArcMap, and show examples of geocoding various address styles typically used in Wisconsin, including: county trunks, streets with dual names, grid-based addresses, etc.

### • Data Are Alive! Visualizing People, Places, and Things in ArcIMS

*Presenter: Kathy Gambie, ESRI Business Solutions, Washington, DC (60 minutes)*

Columns of numbers and statistics are dry, but contain key information. This presentation will illustrate the People, Places, and Things behind the statistics. We'll show how data is brought to life in real-world ArcGIS and ArcIMS analyses. ESRI Business Information Solutions will provide three community-based People, Places, and Things scenarios that can be implemented with ease. This demonstration will culminate with a demonstration of Business Analyst Online, an e-commerce site built with ArcWeb Services, Oracle databases, and ArcIMS technology.

### • Highlights of ArcGIS 9

*Presenter: Jason Grootens, ESRI, Minneapolis (90 minutes)*

ArcGIS 9 is the next major release of the ESRI ArcGIS platform. ArcGIS 9 builds on the strengths of the previous releases of ArcGIS and also extends important functionality and capabilities in the areas of geoprocessing, 3D visualization, developer tools, Web Services, and much more. This session will introduce some of the new features and capabilities of ArcGIS 9.

2:00 p.m. - 4:50 p.m.

## Technology & the Future Track

Crown Palm Room

Room Moderator: Kelly Felton

### • Migrating Parcels to a Spatial DBMS Model

*Presenters: Jim Landwehr and William Cozzens III, Waukesha County (30 minutes)*

Two years ago Waukesha County made a commitment to move away from a file-based GIS system to a spatial DBMS, to better enable enterprise-wide GIS data access. Additional anticipated benefits of this migration were data enrichment and cleanup, scalability, and improved performance and user access. The design process of building this database took into consideration many factors, including incorporating previously standalone databases, providing links to ROD Tract Indexing and Imaging systems, maintenance workflows, data distribution, and cartographic considerations. Migration issues encountered included ensuring data integrity prior to conversion, annotation concerns, topology rule definitions, metadata, and data distribution. This presentation will cover the processes, successes, and lessons learned during the Waukesha County spatial DBMS database migration, with a specific focus on parcel data.

*Technology & the Future Track continued on page 15...*

*Technology & the Future Track continued...*

**• GIS - The Next Generation**

*Presenters: Diann Danielsen, Dane County and Peter Thum, GeoAnalytics (45 minutes)*

Dane County’s GIS system is approaching 15 years of age. An aging system, coupled with new technology opportunities, offered the county an opportunity to re-engineer its GIS infrastructure for the “next generation”. GeoAnalytics assisted Dane County with developing a workplan that will upgrade the current loosely integrated GIS system to a true enterprise-wide GIS. Projects include establishing a central GIS data repository based on ArcSDE technology, bringing GIS and mapping to the Internet, migrating ArcView 3.x applications to ArcGIS 8.x, geodatabase design and development, improving department work flows and data maintenance processes, developing a master street centerline and address data management system, and modernizing the conservation planning system. Organizational issues related to delivering a sound enterprise GIS Program will also be addressed. This presentation reviews the roadmap before Dane County - the migration projects, timelines and inter-relationships - and provides a status report on developing this second generation GIS.

**• Wisconsin Land Information System Pilot Projects**

*Presenters: Mike Bohn and Jim Lacy, Wisconsin Department of Natural Resources; Tony Bellovary, Lakes Regional Planning Commission; Steve Hansen, Kewaunee County; Thomas Tym, Ruekert-Mielke; David Hart, UWM - Sea Grant Institute (90 minutes)*

In 2002, DOA requested that DNR assist with developing and implementing some of the technological pieces needed for implementation of a Wisconsin Land Information System (WLIS). Shortly thereafter, DOA awarded \$25,000 in funding to Kewaunee County and the Bay-Lake Regional Planning Commission to initiate the first local/regional WLIS node. This session will demonstrate the accomplishments of these two projects as of March 2004. The first 15 minutes will be devoted to a discussion of the evolution of WLIS and the interoperability of web mapping services. This will be followed by half hour presentations each on the DNR and Kewaunee/Bay-Lake efforts. The last 15 minutes will be dedicated to a Q&A period on the future of WLIS.

2:00 p.m. - 4:50 p.m.

<b>Municipal Track</b>	<b>Banyan Room</b>
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Room Moderator: Corrine Rogers

**Culvert Data, Locations and Condition are important to Towns and County Government**

*Presenter: Scott Galetka, Lincoln County (30 minutes)*

We had the need to obtain the locations of culverts in our County Roads and Town Roads. We will show you a step by step process how we accomplished obtaining the culvert data, converting the data in a usable format, when is the best time to collect the data, who did the field and office work, and what we learned from the process. The main reasons we needed the location of the culverts, was for watershed delineation, and the other was having a map of county culverts to easily identify the culverts affected by new road construction. To our pleasant surprise, we have found more uses for the culvert data. Because of the high turn over rate of elected officials in town government, many of the culverts are lost, only to be found when a culvert fails. The Sheriff’s Department also uses the data for crash site mapping. At times an officer will measure a distance of a crash from a culvert. Our office feels that we benefited greatly working with all levels of Town and County Government to build a better working relationship.

*Municipal Track continued on page 16...*



- **Mapping for Municipal Emergency Services**

*Presenters: Andrew Brandl, City of Fitchburg and Middleton Fire Department, Fire Marshall Tom Weber, City of Middleton Fire Department, and Fred Iausly, Dane County (45 minutes)*

This presentation will discuss local efforts to leverage county and municipal GIS programs for emergency services applications. The City of Middleton Fire Department has been working closely with city departments and the county to integrate locally available GIS data. Making the most of what is already available has allowed the department to save development time and focus their efforts on providing greater detail, increasing data accuracy, and enhancing data sets for fire response. The department has developed an ArcView application that is loaded on a Tuff Book mobile PC for use in field vehicles. This application allows the department to provide better response and pre-plan enroute to an incident.

- **Using 3D Analyst in Community Redevelopment**

*Presenters: Jeff Muenkel and Emily Champagne, City of Muskego (30 minutes)*

In spring 2002, the City of Muskego adopted a resolution to create a Community Development Authority (CDA) and produce a Redevelopment Plan. The purpose of the Plan was to revitalize a declining urban area, spur reinvestment in the community, and transform it into a better place to work, live, and play. One of the key phases of the plan was a project area known as the former Parkland Mall site. The property owner of the site proposed a development to the CDA that was of considerable height and density. ESRI's 3D Analyst software was used extensively for detailed site analysis, as well as visualization of various development options for the project area. The software permitted a better understanding of the development's concepts in a visual form, ultimately allowing the City of Muskego, its residents, and the CDA to make more informed decisions.

- **Building Sun Prairie's Integrated City Management Software Suite, e911, Enterprise GIS and Database Systems**

*Presenter: Andy Swartz, City of Sun Prairie (60 minutes)*

A central database for contacts, land information, assessing, building inspection, and other City records was our original vision. After considering custom development and reviewing several products, the Hansen Solutions municipal management suite was purchased. It is an open architecture, SQL database, with many optional modules from code enforcement to fleet maintenance to customer service. Concurrently, Public Safety selected a vendor for a new GIS-based e911 and police records management system. This led to the need for a proper enterprise GIS to support these products. Implementation caused us to look hard at data needs, quality, timeliness, and maintenance issues. Evaluation of, and changes to, workflows and relationships with data providers naturally occurred.

The presentation will cover key tasks, considerations, lessons learned, and future steps. The case will be made for the value of data integration while conveying our keen understanding that one thing leads to another.

2:00 p.m. - 4:50 p.m.

## Special Interest Track

Ironwood Room

Room Moderator: Paula Cummings

Thursday

### • **Modeling Land Use Suitability, Growth Impacts in Dane County, Wisconsin**

*Presenter: Tom McClintock, UW-Madison (30 minutes)*

UW–Madison LICGF, in partnership with various other agencies, is conducting an analysis of rural Dane County to model affordable housing suitability, farmland preservation, and environmental protection to address issues related to various land-use pressures. Digital parcels are an important multi-purpose database. Growth allocation, farmland suitability modeling, impact analysis and visualization are done using various GIS programs including WhatIf? PSS, CommunityViz and ESRI's Spatial Analyst. One example is assessing the impact on cold-water trout fisheries by calculating impervious surface area from various future development scenarios. Another is visualizing development and open space in real time using various policy decisions.

### • **Rock County: 0 to 120 with GIS**

*Presenter: Kurt Wheeler, Rock County (45 minutes)*

This is an informative presentation describing the rapid development of Rock County Planning, Economic, and Community Development Agency's GIS Program. It describes conversion of data, organization methods, key projects, dealing with technological change, and a look to the future.

### • **FEMA's Multihazard Map Modernization Initiative**

*Presenter: Alan Lulloff, Wisconsin DNR (30 minutes)*

FEMA is now part of the Department of Homeland Security. The presentation will discuss how this is impacting FEMA, states, and communities. The specific focus for this presentation will be on FEMA's Multihazard Flood Map Modernization Initiative. Congress has provided a substantial (500 percent) increase in funding to improve the nation's floodplain maps. Details on Wisconsin's plan for Flood Map Modernization will be provided including: how projects will be prioritized, how Wisconsin engineering consultants will be included in the process, and what Land Information data is needed. Information will also be provided on the Wisconsin Land Information Program Strategic Initiative Grants for Floodplain Mapping and how they were used to leverage additional FEMA funding for Wisconsin.

### • **GIS Certification: It's Here!**

*Presenters: Professor Bill Huxhold, University of Wisconsin-Milwaukee, David Flack, Ruckert & Mielke, and members of WLIA's GIS Certification Task Force (45 minutes)*

In October 2003, URISA adopted a nationwide GIS Certification program based on a pilot program run in Georgia. Certification is a great way to benchmark your experience and contributions, but do you have to do it? What do you have to do to apply for certification? How does certification affect WLIA members and those around them?

Thursday, March 4, 2004

5:00 – 7:30 pm

Exhibitors Reception & Poster Judging

Suites ABGH

## 2004 WLIA Conference Overview

**Friday, March 5, 2004**

	<b>Emergency Services &amp; Public Safety</b> Suite C	<b>Government &amp; Policy</b> Suite D	<b>Surveying &amp; Mapping</b> Suite E	<b>Utilities</b> Cypress Room	<b>Technology &amp; the Future</b> Banyan Room
8-10:50	<p><i>City of Milwaukee COMPASS Project</i> 30 minutes</p> <p><i>Data Warehousing and Integration in Support of Incident Response</i> 30 minutes</p> <p><i>Mapping Emergency Services Response Zone for Planning Purposes</i> 45 minutes</p> <p><i>AutoDesk Emergency Response Solutions</i> 60 minutes</p>	<p><i>It's a Snap Now: Waukesha County's New Address Maintenance System</i> 30 minutes</p> <p><i>County &amp; Municipal Cooperation: Cost sharing of Data &amp; GIS</i> 30 minutes</p> <p><i>US Census Bureau Update on TIGER</i> 30 minutes</p> <p><i>Evolution in National Data Sharing</i> 80 minutes</p>	<p><i>Multi-Regional Cooperation for Imagery Acquisition</i> 30 minutes</p> <p><i>Dodge County Plat Book: Lessons Learned and Future Plans</i> 30 minutes</p> <p><i>Low Cost Solutions for Plat Book Creation</i> 30 minutes</p> <p><i>Quick Rectified Digital Aerial Photography</i> 40 minutes</p> <p><i>Advantages &amp; Disadvantages of the Next Generation Digital Orthos</i> 40 minutes</p>	<p><i>Utilities on the Move</i> 30 minutes</p> <p><i>Using GPS data with GIS</i> 30 minutes</p> <p><i>Data Mining: MMSD – Managing and Delivering Geotechnical</i> 30 minutes</p> <p><i>GIS Applications in Utilities</i> 60 minutes</p>	<p><i>Streaming Web Services to Your Desktop</i> 45 minutes</p> <p><i>Determining Quality of Life</i> 45 minutes</p> <p><i>WisconsinView: A New Technical and Institutional Model for Statewide Remote Sensing Data Access, Education and Applications Development</i> 80 minutes</p>
11-11:20	Break in Exhibit Hall				
11:30-1:50	Lunch Keynote Speaker – Hank Garie – “Our Spatial Odyssey: Thinking About a Vision for a Preferred Future” Awards Presentation				
2-3:50	WLIA Board Meeting				

*Thank you to our presenters who have donated their time and expertise to make this conference informative and stimulating!*

# TECHNICAL SESSIONS

8:00 a.m. – 10:50 a.m.

## Emergency Services & Public Safety Track

Suite C

Room Moderator: Jeff DuMez

Friday

### • City of Milwaukee COMPASS Project

*Presenter: Nancy Olson, City of Milwaukee (30 minutes)*

COMPASS (Community, Mapping, Planning, and Analysis for Safety Strategies) is a data driven approach for enhancing community safety through collaborative, proactive problem solving. Its key components are collaboration among local agencies and community interests; creation of a comprehensive data infrastructure containing crime, demographic, and other neighborhood level information; and strategic analysis of the data. This presentation reviews foundation-building activities, system design, and analytic contributions to date toward public safety problem-solving at Milwaukee's COMPASS site.

### • Data Warehousing and Integration in Support of Incident Response

*Presenter: Andrew Faley, PlanGraphics (30 minutes)*

During an emergency incident, first responders and emergency centers need access to critical infrastructure data such as GIS, CAD, AVL, Video, Wireless and 3D in support of an incident response. However, most of that data is located in disparate systems throughout an organization.

PlanGraphics, Inc. successfully proved the need and benefit of a formal data warehouse and data integration in support of the incidents of 9/11 within New York City. This data warehouse set the framework of having critical data to responders and rescue, hours after the incident. This proven solution spans across organizations and relates to any incident response, whether it is man-made (terrorist, hostage), natural (tornado, flood) or utility (gasline break).

The attendees will see first hand how this data warehouse was implemented before 9/11, its successful use during and after the attack, lessons learned, and implementations that can support your organization.

### • Mapping Emergency Services Response Zone for Planning Purposes

*Presenter: Jon Schwichtenberg, S.E.H., Inc. (45 minutes)*

This presentation will take the audience through a step by step process of how to accomplish mapping EMS response time zones. Accurate response time zone planning can help organizations when planning for adding new station locations and modifying old locations to better serve their areas. The presentation will utilize the Dane County EMS response zone mapping project for examples.

*Emergency Services & Public Safety Track continued on page 20...*

• **AutoDesk Emergency Response Solutions**

Presenter: Bob Lenz, Autodesk, Inc. (60 minutes)

The Autodesk Solution for Emergency Response, which combines interoperable technology and services to help professionals plan for and respond to disasters, will be presented. By integrating design, physical assets, and emergency response information with location, emergency response professionals make informed decisions quickly and confidently.

Autodesk Crisis Command and Mobile Command provide tactical and strategic capabilities for first responders and emergency response officials. These products provide many capabilities, including fire attack pre-planning, fire-flow and bomb-blast analysis, sniper/counter sniper capabilities, dynamic 3D visualization, and command and control functionality.

Crisis Command is web-based and is intended for situations where the users have web access. Mobile Command is a stand-alone product for situations where there is no web access, such as in a vehicle at the scene of an incident. Autodesk and our emergency response partners provide a variety of products that can be integrated with both of these tools for additional capabilities.

8:00 a.m. – 10:50 a.m.

<b>Government &amp; Policy Track</b>	<b>Suite D</b>
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Room Moderator: Jay Tappen

• **It's a Snap Now: Waukesha County's New Address Maintenance System**

Presenters: Eric Fowler, R.A. Smith & Associates and Don Dittmar, Waukesha County (30 minutes)

The Address Maintenance System provides municipalities the tools to change, update and add addresses for parcels via the internet. In the past, address changes were handled in a manual way with a delay in time between when the municipalities submitted their changes to when the County reviewed and posted the changes. Due to the manual process, inherent problems would arise, including accuracy, timeliness, and tracking of changes. This presentation will discuss why an internet tool was needed and how the solution was implemented. The internet approach makes the changes directly to the County's parcel address database so all users of the system can see those changes immediately.

• **County & Municipal Cooperation: Cost sharing of Data & GIS**

Presenters: Cristina Pearson, Iowa County, Theresa Michek, Village of Highland & Laura Lisowki, Village of Avoca (30 minutes)

Iowa County has entered into agreements with local municipalities in order to make more efficient use of taxpayer dollars. We have arranged cost sharing and data sharing agreements with the local municipalities with orthophotography and the GIS Website the County implemented. This presentation will focus on what those agreements were, how it affects the County and the local municipalities, and plans for future agreements. Examples of the website and orthophotography will be presented.

• **US Census Bureau Update on TIGER**

Presenter: Gail Krmenek, U.S. Census Bureau (30 minutes)

The U.S. Census Bureau's MAF/TIGER Accuracy Improvement Program (MTAIP) is the first of five objectives that have been established for the overall MAF/TIGER Enhancement Program. The goal of the MTAIP is to improve the spatial coordinate accuracy of TIGER. The issues driving MTAIP, the strategies for accomplishing MTAIP's goal, including the acquisition of state, local, and tribal GIS files for use as source files, spatial accuracy requirements, desired digital layers, the timeline, and the overall status of the MTAIP in Wisconsin, will be presented.

Friday



*Government & Policy Track continued...*

**• Evolution in National Data Sharing**

*Presenters: Ted Koch & AJ Wortley, State Cartographer's Office (80 minutes)*

During the first half of this session, Ted Koch and AJ Wortley from the Wisconsin State Cartographers Office will describe several high profile national data sharing and integration initiatives including the National Map sponsored by the US Geological Survey, Geospatial One-Stop, an E-Gov initiative from the Office of Management and Budget, and several other innovative federal initiatives. Many of these initiatives claim to make geospatial life easier, faster and cheaper. Ted and AJ will discuss organization, content, and commitment to open standards represented in these initiatives, and take us on a tour of relevant websites, demonstrating current program progress. Finally, they will consider partnering opportunities, and how these federal programs may relate to current Wisconsin activities.

The second half of the session will involve a panel of federal agency representatives who will have the opportunity to respond to the presentation, and then provide their perspective on a number of pre-selected topics of national importance. The purpose of the panel is to tell us what is happening with federal agency geospatial data activities, partnering, and interagency coordination.

8:00 a.m. – 10:50 a.m.

**Survey & Mapping Track**

**Suite E**

Room Moderator: Mark Teuteberg

**• Multi-Regional Cooperation for Imagery Acquisition**

*Presenters: Andrew Jennings, ECWRPC and Andrew Faust, NCWRPC (30 minutes)*

ECWRPC has been providing technical expertise to the region for quite some time. We, as an agency, have contracted four different air photography projects in the last 35 years. In 2005 we hope to do our fifth project and we would like to cooperate for funding purposes. We are currently exploring alternative imagery products including: high and low level multi-spectral imagery, digital air photography, LIDAR, and other satellite products. Our hope is to cooperate with Bay Lake Regional Planning Commission and North Central Wisconsin Regional Planning Commission, as well as all the counties contained in this three region area.

**• Dodge County Plat Book – Lesson's Learned and Future Plans**

*Presenters: Jerry Happel, PlanSight and Dan Carpiaux, Vierbicher Associates*

*Joyce Fiacco and Stephanie Jansen, Dodge County (30 minutes)*

Dodge County staff teamed with PlanSight to produce the 2003 Plat Book using ArcView 8.3 and PlanSight's Plat Book Pro extension. The County now has the ability to update and republish the Plat Book in-house. This session will address the lessons learned from the initial project and review staff experiences using the application to reproduce plat books. Advantages and disadvantages of this methodology of plat book production will be weighed in terms of the technical, financial, and managerial aspects. The final Plat Book product will be reviewed and future plans discussed.

**• Low Cost Solutions for Plat Book Creation**

*Presenter: Nick Stadnyk, Applied Data Consultants (30 minutes)*

With the advent of Geographic Information Systems and continuing development of digital data at the county level, many counties are exploring the possibility of using existing software and in-house tools to develop their plat book. This presentation will highlight some of the techniques and tools that may be useful for plat book development.

*Survey & Mapping Track continued on page 22...*

• **Quick Rectified Digital Aerial Photography**

*Presenter: Jennifer Ward, Pro-West & Associates (40 minutes)*

This presentation will discuss the uses and benefits of digital aerial photography quick rectified with GPS. You will learn how spot cover photography is utilized in natural resource management, urban planning and development, forest fire fighting, and insect and disease control in timber. Topics will also include film types and seasonal/scale sensitivity. Quick rectified digital aerial photography is a cost effective, timely addition to your GIS.

• **Advantages & Disadvantages of the Next Generation Digital Orthos**

*Presenter: Jim O’Loughlin, ImageAmerica (40 minutes)*

GIS professionals know the importance of reliable, accurate and up-to-date ortho imagery in building an effective GIS. Traditionally obtaining ortho photography has been expensive and time consuming. There are now alternatives to traditional film based ortho projects available, ImageAmerica offers one of these solutions. Today, next generation DDP-2 camera offers another solution for photography needs This presentation will discuss this type of photography and the advantages associated with it.

8:00 a.m. - 11:50 a.m.

**Utilities Track**

**Cypress Room**

Room Moderator: Scott Galetka

**Utilities on the Move**

*Presenter: Kendis Scharenbroich, Pro-West & Associates (30 minutes)*

One thought that comes to mind when thinking about GIS and utilities is...mobility. Field computing is increasingly attractive to today’s mobile workforce. Providing maps and data by way of mobile computing devices—through either in-office download or a wireless link—can bring obvious benefits to those entities with field crews, such as those in the utilities. Using mobile computing technologies, and specifically mobile GIS, such agencies can transfer current spatial data efficiently between field crews and the centralized GIS department, eliminating the need to travel to the office to grab hardcopy maps or drawings.

Utilizing GIS software and tablet computers, a complete mobile mapping solution for utilities is a reality. The mobility issues to be discussed here involve taking data from a central office-based geodatabase to the field in disconnected mode and returning data collected in the field back to the office system. Using portable printers in the field, as well as tablet pen tools, will also be discussed.

• **Using GPS data with GIS**

*Presenter: Felipe Avila, City of Fitchburg (30 minutes)*

To meet GASB 34 requirements, the City of Fitchburg decided to create a GIS database of city assets. Some of these assets include street signs, light poles, street trees, and sanitary and storm sewer utilities. As the city expands, maintaining and updating the database is key for performing accurate GIS analysis and keeping the inventory up to date. To keep the Public Works GIS database current, the city is using Global Positioning System (GPS) technology to collect missing features from the database and gather new features as the city grows. This talk will look at how Fitchburg collects, uses, and incorporates GPS data into its existing GIS database.

*Utilities Track continued on page 23...*

Friday

*Utilities Track continued ...*

**• Data Mining: MMSD – Managing and Delivering Geotechnical Information**

*Presenters: JoAnne Blank, STS Consultants and Urban Boudjou, MMSD (30 minutes)*

The Milwaukee Metropolitan Sewerage District (MMSD) holds a wealth of subsurface geotechnical information collected throughout Milwaukee County over a period of nearly one hundred years. This information changes minimally with time, allowing present-day contractors to utilize the data collected in the past. The challenge exists in trying to efficiently and economically gather and provide the information to the contractors in a user-friendly format they can use without extensive training. This goal is complicated by the fact that the desired data resides in various locations, and exists in many formats, including bound reports, micro-fiche documents, and a previously built electronic database (circa 1980's). Lower anticipated costs for future MMSD projects are providing the incentive for building this database, as contractors utilize the existing data, which should allow for fewer or more strategically placed subsurface bores. STS Consultants, Ltd. was chosen to assist MMSD in this challenging and worthwhile project. JoAnne Blank and Urban Boudjou, the project managers for STS Consultants and MMSD, respectively, will present and discuss the challenges, the solutions and the final product - The MMSD Geotechnical Cores/Boring Log Data Project.

**• GIS Applications in Utilities**

*Presenter: Mark Midas, ESRI, Minneapolis (60 minutes)*

This session will introduce you to the ways that electric, water, and wastewater utilities employ GIS to improve the way they conduct their business. Discussion will include how utilities can optimize operations using GIS as a tool for integrating data historically housed in disparate systems. Technology demonstrations will illustrate various tools that utilities can take advantage of to manage their facilities data.

8:00 a.m. - 11:50 a.m.

<b>Technology &amp; the Future Track</b>	<b>Banyan Room</b>
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Room Moderator: Melissa Kraemer

**• Streaming Web Services to Your Desktop**

*Presenters: Jerry Sullivan, AJ Wortley and David Hart (20 minutes)*

This presentation will consist of a synoptic tour of Wisconsin's state and local internet map services. Comparisons will be made of Open GIS Consortium (OGC) compliant Web Mapping Services (WMS), and others. Browser access will be compared with streaming to clients including the free ArcExplorer 4.01 Java edition, free ArcReader, ArcView 3.x, and ArcMap 8.3. Issues explained will include map projection on-the-fly, controlling transparency, theme drawing order, data extraction, and metadata use. Attendees will gain first hand knowledge of the state-of-the-art in the state, and can apply it to their daily workflows. The paradigm is shifting; you don't necessarily need to acquire a copy of geospatial data in order to use it, if you can rely on web services.

**• Determining Quality of Life**

*Presenter: Rebecca Colwell, University of Minnesota (45 minutes)*

This presentation addresses new approaches for determining neighborhood livability from crime data. In law enforcement, determination of neighborhood health is commonly accomplished by producing tables, graphs or maps depicting Part I (or Index) offenses. The Quality of Life Indices introduced in this session shed light on commonly overlooked aspects of neighborhood well-being that can be derived from police incident reports and calls-for-service datasets. Methods of improving data display for administrative and public awareness purposes will also be discussed.

*Technology & the Future Track continued on page 24...*

• **WisconsinView: A New Technical and Institutional Model for Statewide Remote Sensing Data Access, Education and Applications Development**

Presenter: Tom Lillesand, UW-Madison and others (80 minutes)

The UW-Madison Environmental Remote Sensing Center, in cooperation with the State Cartographer's Office, is in the process of forming a statewide multi-sector consortium to facilitate remote sensing data access, education, and applications development. Called WisconsinView, this consortium is being proposed to become a node in the USGS-supported AmericaView, Inc. program, which is now active in 10 states and planned for eventual implementation nationwide. Panel members will describe AmericaView; characterize the future of remote sensing data distribution and WisconsinView's potential interaction with the educational, governmental, private, tribal, and non-profit sectors. This will be followed by an interactive dialog among session attendees on how best to advance the goals of WisconsinView.

**Break in Exhibit Hall**

Join us for a special conference break in the Exhibit Hall. This is your chance to see the latest in GIS technology and speak directly with the "experts" in the field. It is also your chance to win prizes. So don't miss out!

Friday, March 5, 2004

Luncheon Keynote Speaker: *Hank Garie, Executive Director, Geospatial One Stop,  
U.S. Department of the Interior*

**Plenary Session**

**Keynote Address – "Our Spatial Odyssey: Thinking About a Vision for a Preferred Future"**

Much progress has been made in the last 10 years in creating spatial data that provides benefits in many ways. But terrorism, natural disasters, and biological incidents in recent years suggest there is more to do. This talk will address the opportunity at our hands to extend the productive use of our spatial data resources. How can we make use of geospatial information faster, easier, and less expensive? Why should we do it? What are the benefits in making the effort? What components are needed? How do we move forward?

**About the Speaker:** Hank Garie is the Executive Director of the Geospatial One Stop, one of 24 e-government initiatives sponsored by the Federal Office of Management and Budget. Prior to accepting this Geospatial One Stop position in January 2003, Hank served as the GIS coordinator for the State of New Jersey. In 2001, he was appointed to the New Jersey Geographic Information Council. He led a State agency GIS partnership that included membership of all seventeen cabinet-level agencies and served as Chair of the New Jersey State Mapping Advisory Committee.

Mr. Garie is a past president of the National States Geographic Information Council (1997-98) and served on the Mapping Sciences Committee of National Research Council (1998-2000). He was a member of the Steering Committee for the 1999 National Geo-Data Forum and has served on numerous national advisory groups.

**About Geospatial One Stop:**

As part of President Bush's Management Agenda to enhance government efficiency and improve citizen services, the Geospatial One Stop:

- improves access to existing geospatial information across the nation;
- facilitates sharing of information and planning for future investments in geospatial data;
- expands collaborative partnerships to help leverage investments and reduce duplication of data;
- works collaboratively to develop and implement standards to facilitate sharing and use of best practices.

The centerpiece of Geospatial One Stop is the Portal, found at [www.geodata.gov](http://www.geodata.gov). Geodata.gov is a Web-based portal for one-stop access to maps, data, and other geospatial services that simplifies the ability of all levels of government and citizens to find geospatial data and learn more about geospatial activities.

Friday

# Map Gallery Competition

Make a SPLASH with your best map!!!

Now is the time to enter your map in the WLIA 2004 Conference Map Gallery. Please complete the entry form (available at the conference registration desk) and drop off your map (including a digital copy of map) at the conference registration desk. Maps may be any size or shape, though suitable for “conference-style” viewing. Winners will be acknowledged at the Conference Awards Ceremony Luncheon on Friday, March 5, 2004. Awards will be presented for all 8 application categories in addition to three others: *President’s Choice Award*, *People’s Choice Award*, and *Best Student Award*.

For the Interactive Web-Based Mapping category, a computer is on-site for conference attendees to view the Web site. No digital submissions are required for this category, but please complete an entry form.

**Entries require a digital copy of the map be submitted at the conference in order to be eligible for an 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, March 4, 2004 from 5-7:30 pm.

Good Luck!!!



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# 2004 WLIA Annual Conference Details

## Conference Sponsors

SEH sponsored part of the Opening Luncheon on Thursday

Ayres sponsored parts of the Continental Breakfasts, the Soda Breaks, the Opening Reception & Awards Lunch

R.A. Smith sponsored part of the WLIA Lanyards

Ruekert/Mielke sponsored part of the WLIA Lanyards

ESRI sponsored the Conference CDs

Patrick Engineering sponsored part of the Continental Breakfasts

Horizons sponsored part of the Grand Opening Reception

Kapur & Associates, Inc. sponsored part of the Grand Opening Reception

Woolpert LLP sponsored part of the Grand Opening Reception

Vierbicher provided General Conference Sponsorship

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*Thank you to our conference sponsors!! They helped make it possible to provide a quality program.  
Opportunities to help sponsor the conference are still available! - contact Ann Barrett at 800/344-0421*

## • 2004 Conference Committee

**Chairperson: Alissa Bails, WLIA President-Elect**

Marilyn Mueller	Jodi Helgeson
Tom Faella	Doug Fuller
Jeff Bluske	Fred Halfen
Scott Galetka	Mark Walter
Todd Halverson	Jeff DuMez
Mark Teuteberg	Ken Pabich
Jim Johnston	Marge Geissler
Paula Cummings	Mark Harris
Kelly Felton	Jay Shambeau
Jon Schwichtenberg	Diann Danielsen
Ted Koch	Jane Licht
Al Lulloff	Joyce Fiacco
Jerry Sullivan	Melissa Kraemer
Brian Braithwaite	Andrew Jennings
Don Dittmar	Mike Koutnik
Jay Tappen	Chris Lucas
Ann Barrett	Cristina Pearson

## • General Information

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

**Dress Code:** Business casual.

**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.

**Job Board:** We will have a bulletin board available near registration for you to post your job openings or resumes.

### NOTE!

• **Conference Fee does NOT include Membership:** Your 2004 conference fee this year does NOT include membership in WLIA. The membership voted to separate them so you will note that conference fees are lower than last year. **Be sure to join WLIA before the conference to receive the member rates!** You can do that on the conference registration form, or call the WLIA office for a membership form at 800/344-0421, or go to [wlia.org](http://wlia.org) to download an application to renew. Membership will now run on a calendar year; January through December.

## 2004 Conference Moderators

Jon Schwichtenberg	Corrine Rogers
Andrew Jennings	Paula Cummings
Marilyn Mueller	Jeff DuMez
Joyce Fiacco	Jay Tappen
Don Dittmar	Mark Teuteberg
Kelly Felton	Scott Galetka
Melissa Kraemer	

## 2003 WLIA Board of Directors

Jeff Bluske - President	Jodi Helgeson
Alissa Bails	Jane Licht
Brian Braithwaite	Alan Lulloff
Jeff DuMez	Ken Pabich
Tom Faella	Cristina Pearson
Joyce Fiacco	Jon Schwichtenberg
Scott Galetka	Jay Shambeau

## • Membership Categories

**Individual:** Available to anyone with an interest in advancing the association's mission.

**Organization:** For any for-profit or non-profit organization or institution of higher education, with an interest in advancing the association's mission. One person will receive all mailings. The organization will receive a mailing list of members, be able to exhibit, to advertise in the WLIA newsletter & offer a company description in the membership directory and on the website.

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

• **Conference CD:** We again are producing a WLIA Conference CD for 2004. 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.

# 2004 WLIA Exhibitors

## 2004 WLIA Exhibitors

Be sure to visit the businesses, public agencies, and professional and academic organizations that are here to highlight their latest technology, applications, products and services in the WLIA Exhibit Hall.

- ACS
- Aero-Metric, Inc.
- Applied Data Consultants, Inc.
- Assessment Technologies of WI, LLC
- Ayres Associates – SPONSOR!**
- Computer Technologies of Wisconsin, Inc.
- Continental Mapping Consultants, Inc.
- ESRI-Minneapolis – SPONSOR!**
- GCS Software, Inc.
- General Code
- GeoAnalytics, Inc.
- Horizons Inc – SPONSOR!**
- ImageAmerica
- IMAGETek, Inc.
- Kapur & Associates, Inc. – SPONSOR!**
- Mastergraphics
- MSA Professional Services
- NovaLIS Technologies
- NSC, Inc. Software Solutions
- Patrick Engineering - SPONSOR!**
- PlanSight LLC
- Pro-West & Associates
- R.A. Smith & Associates, Inc. – SPONSOR!**
- Ruekert/Mielke – SPONSOR!**
- SEH, Inc. – SPONSOR!**
- Seiler Instrument/Trimble Navigation
- State Cartographer's Office
- Taylor Technologies Inc.
- Turning Point Systems Group
- UW LICGF
- Vierbicher Associates– SPONSOR!**
- WI Geological & Natural History Survey
- WI Society of Land Surveyors
- Woolpert LLP - SPONSOR!**

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# Application

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Wisconsin Land Information Association, Inc. P.O. Box 389 Wild Rose, WI 54894 phone 800/344-0421 fax:715/366-4501 abarrett@uniontel.net	Number	<b>Click type below For more info</b>	Amount
	_____	Individual	\$ 50
	_____	Organization	\$200
	_____	Student	\$ 25
	Amount Enclosed		\$ _____

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