

LAND RECORDS QUARTERLY

President's Message

By Kelly Felton, WLIA President

May 2010

Greetings!

Time is flying by and we are already into springtime. It's hard to believe that it has been 2 months since the annual conference. There has been a lot going on, and work is continuing on the new WLIA website. We hope to have the site available soon with a fresh look, new features and a Members Only section. Look for details coming soon.

I hope everyone who attended the Annual Conference had a great experience. Special thanks to all the Sponsors and Exhibitors for the Annual Conference. Without your support it would not be possible to provide this type of event. Thank you to all who attended the conference and provided feedback through our online survey polls. This information is invaluable to the Conference Committee and the WLIA Board, providing assistance in the planning of conferences, and in providing essential content and focus for the upcoming year.



W I S C O N S I N
L A N D I N F O R M A T I O N
A S S O C I A T I O N

May 2010 Issue Includes:

Annual Conference Highlights
2010 WLIA Award Winners
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Committee Reports

Building off the annual conference, we are fast approaching our Spring Regional Conference in June at the Chula Vista Resort in Wisconsin Dells, June 3-4. The Education Committee has been planning for the spring conference prior to the annual conference, and is hard at work finalizing the agenda and activities for this event. The conference theme is 'Refining WLIP: Delivering Effective Services' focusing on communication and cooperation among our stakeholder groups, those groups that many of us have our own affiliation with in addition to our participation in WLIA. Please look for details on the agenda and activities soon and plan to attend.

The Board of Directors met in March for their annual planning meeting and the various committees and their activities were discussed. Chairs for each committee have been chosen. Some of you have stated interest in being part of a specific committee; we thank you for your involvement. If you are interested in being on any of the committees, please let myself or Ann Barrett know. Look to the WLIA website for information on committees, meeting minutes, as well as activities and information.

AJ Wortley, WLIA's President Elect, is beginning the planning for next year's annual conference, which will take place Feb. 16-18, 2011 at the Monona Terrace and Hilton Madison. I encourage everyone to be on the Conference Committee and be part of this exciting event. If you are interested in helping out with the conference planning, please contact AJ Wortley or Ann Barrett.

There have been several legislative bills circulating related to land records issues. WLIA has been watching the progress on some of these bills, such as 'The Surveyors bill' AB271/SB194, the 'Flat Fee etal..bill' SB507/AB727, and newly introduced in late 2009 AB638 related to the format and fees for obtaining copies of public records. All of these are

continued...

Land Records Quarterly

The Wisconsin Land Information Association's Land Records Quarterly is published quarterly. The newsletter is intended to inform the WLIA membership of association business, policies and activities, as well as developing land information issues that affect its membership.

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News items, articles, important dates/events and correspondence should be sent to: Ann Barrett, Executive Services Manager of WLIA via email to abarrett@uniontel.net or to the WLIA office at PO Box 389, Wild Rose, WI 54984.

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being referred to committee at various stages, and as this letter is being written decisions are being made as to whether these will be taken up on the floor for final vote. We will keep you posted and please look to the Legislative report and the WLIA website for more details and links on these and other issues.

The WLIA Board values your input and opinions, as always feel free to contact any WLIA Board member or myself with issues, input or questions. The upcoming Spring Regional Conference will be a great informational event with engaging topics. If you have ideas for future conferences please don't hesitate to forward them to us.

The new WLIA website will have features and opportunities to keep you up to date on what is going on in WLIA, provide input, and get information and links regarding related land information activities. We are excited to launch this new site and hope you will find it a beneficial supplement to your WLIA membership.

Thank for your participation and I look forward to working with you this year!

Communications Committee Report

Mission: The Committee shall promote communication, interaction and cooperation among the Association, other professional associations and organizations, and the public.

2010 Chairs: Justin Conner — jconner@co.wood.wi.us
Bill Shockley — bill.shockley@co.clark.wi.us
2010 Members: Andy Hess — Hess.Andy@co.calumet.wi.us
Steve Geiger — surveyor@polk.wi.us

A main goal for the Communications committee this year is to get the new website up and running. The website will include:

- a members-only section
- conference registration
- group emails to members
- discussion forum for members, and much more.

The WLIA Booth will be visiting numerous events this year. Volunteers are always needed to set up, take down and staff the booth during these events.

- WI Sheriffs & Deputies July 18 – 21 Green Bay
- Chiefs of Police August 8-15 thru 8-19 Wausau
- Municipal Assessors Institute September 14 - 17 WI Dells
- Wisconsin Counties Assn September 26 - 28 Milwaukee
- Wisconsin Realtors Assn September 26 - 28 WI Dells
- Wisconsin Real Property Listers September 2010
- Wisconsin Towns Association October 3 - 6 La Crosse
- League of Municipalities October 13 - 15 Middleton
- ESRI Users Group November 3 - 4 Middleton
- GIS Day & WI Emergency Management November 2010

Statewide Parcel Coordination

Curtis Pulford, Wisconsin Geographic Information Officer

I believe you should be aware, through community discussions or participation at recent WLIA events, of an increased interest in coordinating efforts on statewide land parcels. Of course, this interest has actually been there for a long, long while - We all recognize the need and value.

This article will try to shed some light on the future direction towards this goal. It will explain how we arrived here in 2010 ready to start, what issues there are, and the processes and working relationships that can make this the year that significantly advances us towards the elusive long desired goal of an integrated Wisconsin statewide parcel base.

Many recent activities have brought us to this point in 2010. The WLIA Parcel Data Task Force recommendations, the production of statewide data services through the Wisconsin Spatial Data Repository, the ramping up and requests from WiDOR's Integrated Property Assessment System, and the involvement of several tireless proponents of the shared parcel idea - and ideals.

There has been a long-standing concern that a statewide parcel data set could never come to fruition due to the wide variety of custodial data policies specific to redistribution. Perhaps there is a new solution to that, or work-around, in our new plans to differentiate between custodian and statewide data.

Surely, we all recognize that there would be good and logical reasons to share this information more broadly across the state. A statewide parcel layer could help us all in some of the most basic functions of a GIS – including planning, logistics, routing, asset distribution and other analyses — with additional and very important value also provided to the statewide emergency managers.

A relatively recent development, you will also be aware of, is The Department of Revenue mandate to collect a wide variety of assessment and valuation information tied to individual parcel records. Some of you will have already received communication regarding DOR requests for information. The Integrated Property Assessment System (IPAS) is a multi-year process improvement and computer system project that will eventually replace the State and Local Finance Division's current processes and systems to increase efficiency and provide easy access to assessment data for internal and external stakeholders. There is ongoing dialogue between DOR, the Parcel Task Force, and the GIO on the need to bring parcel geometry, GIS and IPAS needs to an eventual common solution. Currently it is simply more efficient to work on the related pieces that will eventually incorporate.

The ultimate goal for a statewide GIS parcel layer is a completely unobtrusive, efficient, and automated system. This system should singularly handle all of the related needs through a re-distribution of the information for different needs and objectives. It would allow for the transformations, geometric unification, cartographic representation,



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and would produce several controlled distributions of a statewide parcel layer. That end would also need to see the appropriate checks, balances, security, reliability and performance necessary to meet our community requirements and usability needs. This goal will definitely require partnerships. Hopefully we can forge these partnerships based on common interests and very real and similar objectives.

For now, in 2010, what can we do? Well, we would like to begin the GIS challenge by addressing the relationship between custodial and unified data model attribute relationships, and the rectification of geometric irregularities along shared governmental boundaries.

To start this project, we will be asking for your assistance in two areas:

- The completion of a short 50 item attribute crosswalk table, and
- Providing access to your parcel GIS data for integration into the Phase I statewide compilation.

It should be noted here, that the intention is not to completely replicate custodian data, or to interfere with the business drivers that have driven the grass roots development of this information. It is very clear that a strong local autonomy has been instrumental in allowing for the creation and maintenance of this valuable data, and that strength must endure.

And while it will probably easiest for the custodian if we initially use their unaltered GIS data – much of it will be stripped away from the final products. We expect you will keep your records and data as you see fit, and for how you need to use it. Keep the detailed localized information that is useful to your organization. We respect that need. What we want to provide, for you and others, is more basic information on parcels – delivered in a unified and seamless manner.

A simple mechanism will be provided for creating the crosswalks using a survey format that will map results to a database. We can then use these tables for the transformation workflows. Developing the transformation processes up front will allow us to update and maintain the layer more efficiently in the future.

We will set up a secure FTP site, and accept digital media, or file attachments for the spatial and tabular data submissions. The Geographic Information Office role in this is one of facilitator – We have the capabilities to work through the data transformations, correct the geometric issues along borders, and distribute the information back to our partners (custodians, .gov, .edu), and to the public. Of course we also have a small staff and other work concerns, so any help and collaboration on this will be very much appreciated.

The resulting distributed versions of the statewide parcel geographic information set will take two initial forms:

- The first will be a publicly viewable map service that only presents cartographic line work, the parcel ID, and identification of the custodial source of record.
- The second would be a controlled access partner service available only to the custodians, .gov, and .edu domains. In other words, the public service will be a representation of the geometry with pointers back to the owner / custodian, and the partner service will include all the fields in the data model enabling more complex spatial analyses.

Now is when we need to get this started. I believe that it is important for us to take some collective control over the destiny of our spatial data and its use in government applications. We also want to provide the very best information to the other wider audiences. The best way I can see to do that is through unification on important GIS data themes and issues. Let us now try to unify and collaborate behind this most useful and fundamental element of our world – parcel level spatial data.

Look for further information on this in May, and please work with us on making 2010 a year where we strengthen and expand our Wisconsin statewide coordination and GIS capabilities to a higher level.

Geotagging in Green Lake County

Gerald Stanuch - GIS Specialist, Green Lake County

The Green Lake County GIS Office has written a simple script to geo-reference photos taken with any standard digital camera. Applications for this script may include road sign inventory, shoreline inventory, etc. Along with a digital camera, a handheld recreational grade GPS is needed.

To use the script, you take pictures while a GPS is recording your position every second to a track file. The GPS does not need to be linked to the camera. At the office, you download the pictures and the GPS track file, and run the script. The script works by comparing the time stamp on the photo .jpg file with the time stamps on the coordinate pairs in the GPS track file. The photo hyperlink and XY coordinates are written to a text file when a match is found. The text file can be imported into your mapping system to overlay the photo points on a map. Click on the point on the map and see your photo at that location! The script includes variables if you need to correct for your camera clock not being exactly synced to your GPS clock.

The script is written in Visual Basic Script® and runs in Windows Script Host® on Windows® computers. A search of the internet will reveal other similar software and hardware applications available to geo-reference photos, but this script is free and can be customized. The script can be customized to take any GPS input such as .gpx, and produce any format of output file such as an XY text file with hyperlinks or a Google Maps® .kml file. Using a .kml file you can make your photos viewable on the internet with Google Maps® as the base map. See our shoreline inventory of Puckaway Lake in Green Lake County at <http://maps.google.com/maps?q=http://gis.co.green-lake.wi.us/output/kml10.kml>.

A graphic user interface could be developed for the script by wrapping it in an HTML Application (.hta). This fun, short script is as simple as computer programs get, and everything you need to tinker with it is already installed on your computer. Plus, the little knowledge you gain in scripting by experimenting with this script will reveal to you a multitude of applications for scripting technology in your GIS Office. Our GIS Office has also written a simple script to add GPS support to a standard ArcReader application. Please contact the Green Lake County GIS Office if you would like a copy of either script.

Members Complete Certificate Program

Sara Hackbarth, Facilities Information Supervisor of Milwaukee Metropolitan Sewer District and Jodi Helgeson, Adams County Register of Deeds/LIO recently completed the Certificate in Project Management program offered through University of Wisconsin, Madison, Certified Public Manager Program.

The course provided education and tools to assist with project management from defining the project, through implementation, and completion and evaluating the project.

During the 4 day course, each group was assigned a sample project. One of the projects assigned was to develop a statewide GIS. Jodi and Sara were not in this group. It was interesting to note at the end of the group analysis, they determined that their goal was too challenging – that they couldn't meet all of their stakeholders goals (county, local government, state agency, private entities), so they decided to facilitate preparation of the data and then allow each stakeholder to create solutions to meet their own needs.

Sound familiar??



Membership in WLIA

WLIA promotes land records modernization and legislation, and provides education as well as professional networking for members. This united and informed membership has had a significant impact on legislation, regulation, and the future of the industry here in Wisconsin.

Benefits of WLIA include:

- Interact with land records professionals and GIS professionals from many disciplines.
- Learn about spatial information technologies through regular conferences, meetings, and special seminars.
- Stay abreast of emerging spatial information technologies, land use and land records issues, and land information policies.
- View and compare land records modernization equipment, software, and professional services at the annual conference.
- Participate in the development and implementation of standards that affect land records.
- Influence land records policy, laws, statutes and administrative code through a common voice.
- Receive a newsletter, technical publications, meeting notices, and membership info.
- Visit the WLIA web site for the most current information at www.wlia.org

WLIA Membership Committee Report

*Peter Miller (outgoing chairperson) and
Howard Veregin (incoming chairperson)*

Initial membership numbers for 2010 are down significantly. As of March 2010 there were 421 paid memberships which represent a decrease of about 13.5% from the end-of-year 2009 total (478) and are about 17% less than the average over the previous 5-year span. Previous years suggest that membership renewals will continue to be received throughout the year, particularly in advance of the Spring and Fall regional meetings, so these numbers are anticipated to rise. In any event... if you haven't renewed your membership dues, please do so. Membership dues make up about 20% of the annual budget and make it possible for the Association to host three events throughout the year.

Work is underway to build a new and improved WLIA website. As part of this reconstruction, each member will be given a member log-in and password. Each member will have the ability to update their own contact information, view a membership directory, register for events on-line, renew membership on-line, and access 'Members Only' content within the website. During June you can expect to receive an email from WLIA containing your initial log-in and password information which you will be able to change when you first log in.

We plan to hold a committee meeting sometime in the next few months to talk about plans and ideas for the coming year. If you have an interest in serving on the Membership Committee, or you just have ideas or comments, especially related to member retention and recruitment, please contact Howard Veregin (veregin@wisc.edu).

GIS in Transit On-line Course from UW Milwaukee

The Center for Transportation Education and Development (CTED), at the University of Wisconsin Milwaukee's School of Continuing Education, is offering the "GIS in Transit On-line" course from July 12 through September 24, 2010. This course is an asynchronous on-line course requiring only 3 hours of log in time per week, with live chat sessions available with the instructors on the weekends. This course teaches and demonstrates best techniques and practices for implementing GIS applications to public transit operations, as well as give an excellent hands-on overview of ARCGIS software usage (even for non-public transit use). For more information, please visit our website:

<http://www4.uwm.edu/SCE/course.cfm?id=5141>

Building an Enterprise Address Geodatabase for Varied Municipal Operations

Kevin Bruhn and Brooks E. Kelley

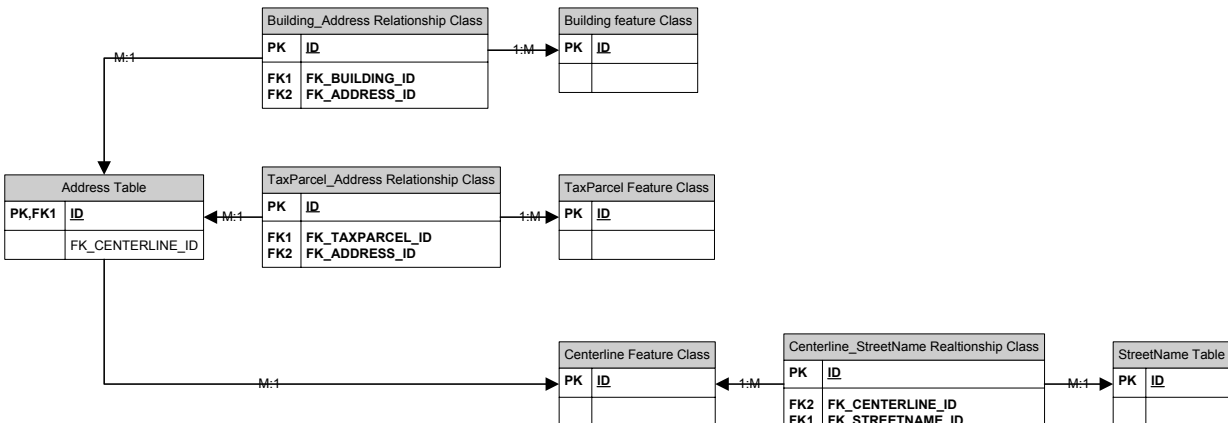
The Milwaukee County Land Information Office (MCLIO) is responsible for producing a complete and accurate address system. This has proved to be a challenge due to the lack of address maintenance custodial rights. Each of 19 municipalities within Milwaukee County maintains their own addresses for their own internal purposes. This means that they lack a common format and many have legacy systems and processes in place. Thus restricting their flexibility to standardize or change to a new format. Regardless, there are numerous underlying reasons to consolidate the various local address information into a single centralized enterprise database whereby the MCLIO can support and supply addressing information to a wide array of consumers including 911 authorities, police incident dispatch, facility asset and tracking, mailing purposes, and public inquires.

The MCLIO believes this challenge can be overcome through standardizing and flattening of the key components in the addressing system. Utilizing the power of RDBMS (Relational Database Management System) and GIS server software including Microsoft SQL Server and ArcGIS Server Basic (nee ArcSDE) coupled with a clever geodatabase structure designed to harness this power, the MCLIO are able to produce an address configuration that can accommodate the many data acquisition methods and variations in format. This means the data can be stored centrally in a highly efficient and non-redundant manner but served to many users in the manner in which they're most familiar.

RDBMS, Relationships, and Normalization

Within RDBMS, information about things such as addresses, buildings, and centerlines are stored as records within tables. Attributes of these records are stored in fields. Individual records within different tables are related to one another through common field values or keys. The process of efficiently allocating information within one or more tables is known as Normalization.

For example, a parcel may have zero or more addresses and be associated with zero or more buildings. Likewise, a building may be located on one or more parcels and be associated with zero or more addresses – which may be different than those of associated parcel(s). Finally, a section of a street may be associated with zero or more addresses and, in turn, zero or more parcels and/or buildings. Diagrammatically, these relationships can be depicted as follows:



This ER Diagram (short for “entity-relationship diagram”) presents the address, street name, buildings, centerline, and tax parcel tables as well as the association or intersection tables that model the many-to-many relationships between them. Note that all tables contain a unique primary key and these keys are the basis for all relationships. Also note that certain tables, and all association tables, contain foreign keys. These foreign keys allow repeating primary key values. Taken together these primary and foreign keys facilitate one-to-many relationships. For example, one centerline record can be associated with many address records.

De-normalization and Views


De-normalization is, as the name implies, the opposite of normalization i.e. the process of re-introducing redundancy. De-normalization at the data level is often done for the sake of performance. De-normalization at the presentation level is always done for human interpretation. Within RDBMS such as Oracle or SQL Server, de-normalization can be accomplished through SQL-based queries and formalized within views.

Structured Query Language, more commonly known as SQL, is the language of the modern RDBMS. Think of it as the means by which to “talk” to the database. Except instead of an actual stimulating conversation, one’s interaction will be in terms of rather rigid, well-structured queries. For example, the following query would present all fields within the addresses table as well those related records in the centerline table:

```
SELECT
*
FROM
ADDRESS A,
CENTERLINE C,
WHERE
A.FK_CENTERLINE_ID = C.ID
```

This is useful as one can now determine which individual addresses are associated with each street segment. SQL-based queries can range in complexity from simple ones such as this to much, much more sophisticated ones.

continued...

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Views are queries persisted within the database. They look like ordinary tables. They simplify user interaction by encapsulating (and hiding) complexity. A view based on the previous query, for example, would provide users a single, de-normalized, table-like source for all address information. Put another way, a user would not have to know the underlying mechanics of how these tables are related but only that there's a single, easy-to-use source of address information.

Maintenance

Maintaining a normalized geodatabase, such as this sample one, is surprisingly easy provided you understand the design and the interaction of the geodatabase and underlying database. This is especially true when it comes to versioned-based editing.

Many people have implemented core RDBMS objects such as views and triggers only to discover that they did not work as planned. More often than not, this could be traced back to versioning. Keep in mind, the default version within a versioned geodatabase, is still a version and should not be confused with the underlying base tables. The base tables are only updated when data is compressed from the delta tables. For many implementations this may only occur when the geodatabase is unregistered as versioned.

To overcome this limitation, the option to move edits to base was added at ArcSDE version 9.2. This option allows edits to be reconciled and posted not only to the default version but also the base tables. While this option does impose certain limitations (in terms of topologies, archiving AKA "history", and geodatabase replication), it guarantees better synchronicity between the default version and base tables. This means users of both ArcGIS and other client application "see" the same thing. It also provides better support for views as these are based on the base tables, not a version.

Another area of concern is keeping the centralized enterprise address geodatabase in sync with other external address systems; most notably the MSAG (Master Street Address Guide) datasets used by the County's various 911 authorities. To help ensure this, all data modified within the address database is reconciled against up-to-date copies of the County's various MSAG tables using SQL queries. When conflicts are detected, differences are resolved by all parties involved.

Supporting Varied Operations

Now, the true power and elegance of the RDBMS "concept" is the separation of data storage (in tables) and the presentation of this data (via queries and views). GIS users in particular should appreciate the merits of this. Consider the flexibility provided by storing spatial data in a single location and then symbolizing it many different ways within many different map documents (that can all be used concurrently). Contrast this with the CAD world, for example, where the image, for all practical purposes, is the database. The first concept is flexible; the second is ridged.

So, using RDBMS views, different users can "see" the same data in different ways. For example, one 911 authority may want the source address fields parsed/concatenated one way with a specific set of field names while another 911 authority may want these same fields parsed/concatenated a different way with an entirely different set of field names. This can be done using SQL-based layer views within the enterprise geodatabase. Put another way there would be two layer views on the same source tables that return feature records in a user-specified format.

Taken further these user-specific layer views can constitute the first step of a data movement process using ETL (extract, transform, and load) tools such as ESRI's Data Interoperability extension or InfoGeographics' GeoConnector product. Back to the 911 example – suppose the first 911 authority needs their view-based information in file geodatabase format while the second needs their view-based information in shapefile format. Further suppose the first 911 authority's service area is changing faster than the second one's and

for this reason the first 911 authority needs its information refreshed once a week (whereas the second 911 authority is content to have its information refreshed once a month).

Not a problem. The data movement process for the first 911 authority can be configured to export their view-based information to file geodatabase format every week whereas the data movement process for the second 911 authority can be configured to export their view-based information to shapefile format every month. Both data movement processes could end with the information being “shipped” directly to the end-user via the Internet.

This is but one, rather simple, example of the utility of a well-designed RDBMS-based enterprise geodatabase for supporting varied operations.

Conclusion

Overall, the new enterprise address geodatabase is helping the MCLIO realize efficiencies in several areas. First, the centralized data repository makes maintenance and overall management easier. As partners provide updates and corrections to the centralized database, the model is poised to scale along with the additions. Along with additions, a more granular approach is possible whereby internal addresses can be modeled too. Second, the “move to base” editing makes the maintenance available to the views that populate the model. The views created from the flattened files are flexible enough to adapt to the complexity of the model. Third, and perhaps most importantly, the new model makes deployment and distribution easier. The MCLIO can customize the delivery to clients needs. If there is a need for geocoding, routing, or primary/secondary addressing, it can alter the views or queries to fill the specific request. The technology is allowing the MCLIO to begin supporting the various needs and consumer demands.

Currently the MCLIO are in the testing phase of the enterprise addressing system. The new relational model is designed to meet the original goals and expectations that initiated the redesign. The MCLIO is looking forward to implementing the new system within its production environment to be utilized by all the various address partners and user agencies in Milwaukee County.

- Milwaukee County GIS Specialist Kevin Bruhn can be reached at (414) 278-3927 or kbruhn@milwcnty.com
- InfoGeographics, Inc. Senior Consultant Brooks E. Kelley can be reached at (231) 995-8266 or bkelly@infogeographics.com

The advertisement for North Point Geographic Solutions features a blue and white color scheme. At the top left is a compass rose logo with the text "NORTH POINT GEOGRAPHIC SOLUTIONS" and the website "www.northpointgis.com". Below the logo, it states "JSA GIServices is now North Point Geographic Solutions. Same great services, easier name!". The website "WWW.NORTHPOINTGIS.COM" is prominently displayed. A list of services includes: WEB MAPPING APPLICATIONS, DESKTOP CUSTOMIZATION, DATA MANAGEMENT, SERVER OR DESKTOP BASED GIS SOLUTIONS, and INTRODUCING THE GEOMESH DATA VIEWER. A testimonial from UPM-Blandin Paper Company reads: "North Point Geographic Solutions gives us high-level service with quick turn-around. Both are essential to our business." Contact information at the bottom includes phone number 218.720.6747, email INFO@NORTHPOINTGIS.COM, and address 31 W. SUPERIOR STREET, SUITE 100D, DULUTH, MN 55802.

WROC Update

The Wisconsin Regional Orthophotography Consortium(WROC) is a multi-entity group led by seven regional planning commissions (RPCs). The RPCs are assisting in coordinating the mapping services for the participating members of WROC. The goal of the consortium is to build and sustain a multi-participant program to acquire digital orthoimagery and elevation data throughout Wisconsin.

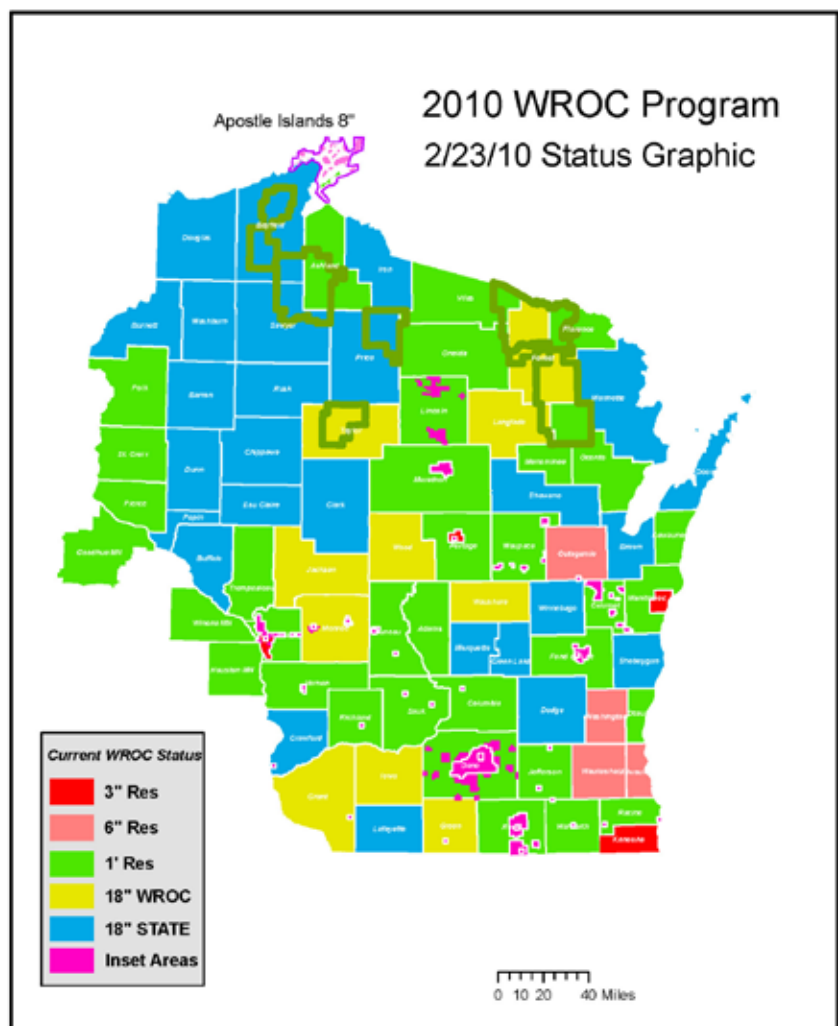
WROC has developed into a state-wide program. With support from many state, federal, and local agencies the reality of a leaf-off state-wide imagery program is here! Many individuals and agencies throughout Wisconsin stepped forward to lend their support. Without everyone doing their part it would not have been possible.

Several agencies provided exceptional leadership and effort in building and executing the early steps of the program. These include:

- RPCs providing the leadership to start the program and the counties that committed to the program principles and completed local projects.
- DMA writing the Homeland Security Grant for \$700,000 to kick start the effort toward a statewide program.
- USGS coordinating the federal agencies to bring an additional \$400,000 to drive a state-wide program towards reality.
- The team of Ayres Associates / Aero-Metric for building and managing the program and acquiring 56,000 plus square miles of leaf-off imagery in a shortened flying season .

Everyone involved in the WROC program should be proud of what we have achieved. This is a case study of what can be done in the land records community if we all work together.

For more information, you can visit the WROC website at <http://www.ncwrpc.org/WROC>
You can also contact Andy Faust, GISP, at 715-849-5510 (ext 305) or send him an email at afaust@ncwrpc.org



2009 WLIA Legislative Report

by David Mockert

The 2009 Session involved a number of bills related to WLIA membership at the statehouse. Of particular note was Senate Bill 507 (SB 507), related to changing to a Flat Rate structure for fees collected by a register of deeds, the redaction of social security numbers from electronic documents, and changes to the land information program. SB 507 passed both houses and now the Governor has until June 16th to sign this legislation into law.

A brief synopsis of the Flat Fee Law: This law will change the collection of fees by a county from the current \$11 for the first page and \$2 for additional pages to a flat rate fee of \$25, regardless of the number of pages, for most instruments that are recorded or filed with a register of deeds. Counties must remit \$10 of each fee to the Department of Administration (DOA), which DOA uses to make modernization grants. If a county has, in addition to the three requirements under current law for retaining DOA fees, established a land information council, the county may retain \$8 of each \$10 fee that would otherwise be payable to DOA. Also under this bill, counties may temporarily collect a \$30 fee for recording or filing these instruments or for recording certain probate certificates or preparing and mailing certain probate documents if the county uses \$5 of each fee for purposes of redacting social security numbers from certain electronic format records. The \$30 fee reverts to a \$25 fee upon the earliest of the following: 1) completion of redaction of social security numbers from certain electronic format records; 2) January 1, 2012, unless an extension of time is granted by DOA; or 3) January 1, 2015.

Also, when the register of deeds transfers instruments filed with or recorded by the register of deeds before April 1, 2006, to an electronic format, he or she is required to make a reasonable effort to redact social security numbers from the instrument's electronic format. The law also requires each county to submit a report to DOA describing the expenditure of those funds. These funds must be used to design, develop, and implement a land information system and to make the system accessible on the Internet before being used for any other purpose and thereafter for purposes related to land records modernization. If DOA determines that these funds have been used for unauthorized purposes, DOA may suspend the eligibility of the county for further grants or retained fees.

Another piece of legislation that received a great deal of attention from the land information community this year was The Land Surveyor's Bill AB 271/SB 194. The Professional Land Surveyor's Bill passed the Assembly but failed to pass in the Senate.

In addition, the Legislative Committee kept tabs on a number of other bills including the following:

AB 638/SB 426 - AB 638 related to Copies of public records passed both houses and awaits action by the Governor.

SB 442/AB654 - requiring local units of government to use the qualifications-based selection (QBS) process for certain consulting contracts, did not pass.

SB 185 - regarding regulation of wind energy systems and granting rule-making authority was enacted in November.

SB 426 - regarding the format and fees for obtaining copies of public records, still on the table.

AB 349 - regarding limiting the searchability of a governmental Internet listing of property taxes assessed and the privacy of personal information on recorded documents accessed over the internet did not reach the floor.

AB 2 - regarding state procurement of contractual services to be performed inside the United States was enacted 03-17-2010.

AB 171 - regarding unlawful use of a global positioning device and providing a penalty, did not pass.

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The GIS Certification Institute (GISCI) Welcomes New Board Members and Officers

Des Plaines, IL – During its Annual Meeting on April 28, 2009, the GIS Certification Institute (GISCI) welcomed new Board members, elected new officers, and recognized the contributions of those who had completed their leadership terms.

Each of GISCI's five member organizations have appointed new representatives or reappointed existing representatives to serve on the Board of Directors:

Association of American Geographers (AAG) David DiBiase, GISP, Penn State University; Doug Richardson, GISP, Association of American Geographers

National States Geographic Information Council (NSGIC) Ed Arabas, GISP, State of Oregon; Michael Vanhook, State of Alabama Geospatial Office

University Consortium of Geographic Information Science (UCGIS) Rakesh Malhotra, GISP, North Carolina Central University; Steven Prager, GISP, University of Wyoming

Urban and Regional Information Systems Association (URISA) David Hansen, GISP, USGS; Kim McDonough, GISP, Tennessee Department of Transportation

Geospatial Information & Technology Association (GITA) Robert Austin, GISP, City of Tampa; Ian Fitzgerald, GISP, Truckee Donner Public Utility District

Officers were also elected by the Board to lead GISCI for the next year:

President — David DiBiase, GISP, Penn State University

Vice President — Ed Arabas, GISP, State of Oregon

Secretary — Michael Vanhook, State of Alabama Geospatial Office

Treasurer — Kim McDonough, GISP, Tennessee Department of Transportation

The number of GISPs has grown during the past twelve months, with 4,648 individuals earning the credential since the program's inception. For more information about GISCI, visit www.gisci.org.

Waukesha County Hosts GIS User Meetings

On April 13th Waukesha County was the host site for two separate GIS user groups.

WI Geocortex Users Group

The first meeting represented the inaugural launch of the Wisconsin Geocortex Users Group. This is a group of users that is either currently using, or considering, Geocortex Server software as their web mapping solution.

About 15 users attended the morning meeting. The meeting agenda began with a technology overview, presented by Jason Close of Latitude Geographics. The overview covered the existing technology including the Geocortex Essentials ArcGIS Server products and extensions, as well as the REST API components.

Two short user presentations followed the technology discussion. The first presentation was given by Don Nehmer of the Milwaukee Metropolitan Sewerage District. The focus was on their challenge of implementing a multitude of enterprise wide applications using a common interface. They have successfully implemented a few internal web based GIS applications already, and have a goal of releasing a handful more by May/June 2010.

The second presentation was given by Eric Fowler of American Transmission Corp. He outlined their experience with the Geocortex Essentials product as it related to their intranet utility mapping. The advantages and challenges of using Bing maps as a basemap inside their application were also discussed.

After a short discussion of user technical and support related issues, the meeting closed with a sneak peek at Geocortex's Workflow product that will enable developers using Essentials to tailor applications to a specific task or function.

It is the goal of Latitude Geographics to hold these statewide user meetings twice a year. This meeting proved to be good chance to meet with other users, as well as provide feedback to the software solutions provider.

SE WI ESRI Technical Users Group

The afternoon meeting featured approximately 15 governmental ESRI users from the Southeastern Wisconsin area. The bulk of the meeting consisted of a round robin description by each agency outlining their existing and future web mapping applications, in light of the change in web technology from ArcIMS to ArcGIS Server.

Kenosha County gave a sneak preview of their developing, ArcGIS Server web mapping application. The application provides a robust toolset including search capabilities, markups, links to tax data, and printing.

The City of Muskego followed with a demonstration of their secure Police Crime Mapping Application built with Flex technology utilizing ArcGIS Server services. The application provides web-editing capabilities for officers in the field and office.

SEWETUG meetings are held twice annually, and provide a fantastic forum for users to share knowledge and talk through technical issues with others who have been down the road before. For more information on SEWETUG visit the website at: <http://www.mapmuskego.com/sewetug/>

Why GIS and Why Now?

By Thomas A. Thomey, MGP Inc.

Contributor Kelsey Rydland, MGP Inc.

With communities facing unprecedented economic challenges it may seem like a curious time to write about geographic information systems (GIS). Local governments are looking for answers to today's challenges and technologies like GIS can help navigate this new era. Communities are challenged with an abundance of technology decisions ranging from social networking to public mandates. It is not a matter of whether these tools can help but rather can they support the evolving charter of local government. GIS is a technology that supports the core business processes of the community and it is well positioned to help communities through these challenging times.

There is a long history of mapping in local government dating back to the original subdivision of land. It is used to identify ownership, regulate property, deliver services, manage infrastructure and plan our communities. Mapping is unique because it is used in every department of local government. The function of mapping in local government has evolved like most record systems from a manual process to an automated one. Like many technologies it was initially adopted at the department level. This led to systems that were task oriented and did not consider other processes of the organization.

GIS is an information system that organizes data geographically. This enables users to visualize their area-of-interest spatially and reveal relationships otherwise unseen. GIS is often confused with computer-aided-design (CAD) and more recently with commercial mapping sites like Google™. Although these technologies present maps, they are designed for specific purposes. They are limited in their ability to deliver sophisticated data storage, query, and analysis. GIS is an information system that empowers the user to combine data in any form. It has the ability to create maps but this represents only a small portion of its capability.

GIS attaches spatial intelligence to our data. Spatial relationships like connectedness, adjacency, and proximity automate the location of valves that isolate a water main for repair, the assessment of properties zoned residential within a flood plain, and the emergency response time to at-risk facilities. GIS connects traditional information to locations so that relationships are better understood.

Too often GIS programs are developed to support a single project, department, or public mandate. It is common to find multiple isolated GIS programs within a single community. This is a byproduct of how software is sold to the local government sector and it substantiates the department silo tradition. A single GIS can support most any local government process including unwelcome public mandates.

So how does GIS help communities in the current economic environment?

Cost savings

GIS increases the efficiency of an organization in two ways. First, many of the daily operations can be more efficiently performed using GIS. Simple tasks like property lookup, address notification, field measurement, and incident mapping are within a few clicks of any staff member. In addition, many public requests for information can be provided without staff interaction through the use of Internet applications. A GIS can relate service or regulatory information to any address automatically. This information can be presented on the community website for public consumption.

The other category of cost savings is project based. Communities face a large number of special projects directed by the board/council or by public mandate. Many of these projects can be accomplished using GIS with minimal effort.

The cost savings generated by a GIS varies by community. Savings are largely based on the level of use by staff. The limiting factor on the return-on-investment is not the technology. It is the adoption by the community.

Personnel

Technology remains on the fringe in some communities. There are a number of factors that contribute to this including the age and technical level of the staff. While we may not be able to influence the behavior of the entire staff we must recognize that younger professionals entering the workforce will require technical solutions. If communities are to attract qualified candidates they must develop technologies like GIS that enable professionals to be successful. This same pattern is evident in our elected officials.

Communications

Mapping provides a powerful method for demonstrating complex analysis and present recommendations. How we present solutions is evolving rapidly. Communities are increasingly using live GIS to present information to decision makers and residents.

Enterprise environment

Many communities are evolving from department technologies to enterprise information systems. A centrally managed GIS is a key component of the enterprise solution. Its function is to support all processes that are geographic. In addition it must support the community enterprise mission by integrating and supporting all departments. GIS plays an important role in dissolving the information chasms between departments. It provides staff with a visual and tangible purpose for sharing information and buying into the enterprise methodology.

Flexibility

Local government is the authoritative agency for many types of information including addresses, infrastructure, land use, and services. This information helps decision makers analyze community needs. In addition it will increasingly be used to determine how we perform our responsibilities. For example, which processes should be staffed, out-sourced, or joint-serviced. By maintaining authoritative information communities retain the greatest flexibility of determining their future.

As communities gravitate toward their core business function technologies like GIS will be increasingly relevant in managing the community. It is a technology that touches every aspect of local government, provides a favorable return-on-investment, and empowers the community to meet the challenges of the future.

2010
WLIA Regional Meetings

June 3 - 4, 2010
Spring Regional Meeting
Chula Vista Resort, Wisconsin Dells

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October 21 - 22, 2010
Fall Regional Meeting
Holiday Inn, Stevens Point

“One Square of Floor”

By Don Dittmar, Waukesha County LIS Manager/LIO

The Business Law students from 2 local Waukesha high schools requested a tour of the Courthouse (three groups of 15 students each). They were set up to visit the Sheriff, a courtroom, the Register of Deeds, and the Land Information System (LIS) Division. I have had tours through the LIS Division before where I have showed various maps and displayed what was available via the web. This time, I wanted to do something different.

When each group entered the LIS office, I asked for a volunteer. I selected a student who had raised their hand, write their name on a piece of paper, and then read the paper to the other students. The paper said:

“This Deed, made between Don Dittmar, LIS Manager, Grantor, and (student name), Grantee.

Grantor, for a valuable consideration, (raising your hand), conveys to Grantee the following described real estate in WAUKESHA county, State of Wisconsin:

ONE SQUARE OF FLOOR

Signed: Don Dittmar”

I then took the student over to a 3'X3' square that was marked on the floor with tape. It was great! One student told his teacher to move out of “His” square as the teacher was trespassing. The other 2 rolled their chairs into the square and announced they were going to build a house there or just have a party spot. I went over to them and asked to see their “Deed”. I then said, “I am sorry, I believe your square is back here” and lead them to a small 1”X1” taped square in the back of the room. One student looked at me and said “Oh no! I bought that square!” I responded with “Prove it!” The best part came next when I asked the entire class “What should there have been on the ‘Deed’ to prevent this.” All three class groups stated that it needed “location and description.” Wow.

At that point, I showed them a house on the air photo with an associated tax system legal description of “Lot 23 Hidden Crossing Subdivision.” I displayed a copy to the subdivision plat and showed how LOT 23 was actually described on the plat and then show how the tie to the section corner was included to determine location. The last piece of information I presented was a survey control sheet referencing the section corner that indicated the corner was first marked “...in March 1836 by Garret Vliet, Deputy United States Surveyor...” At this point I indicated that all owners of that land, since before Wisconsin was even a State, had been able to use that corner as a reference point to describe what they owned.

I ended my presentation by asking if anyone believed I could actually sell a section of my floor. They all agreed that I could not so I told them that knowing that the seller has the right to sell the property is as important as determining the “location and description.” At that point I sent them to the Register of Deeds office, who used the same property to display and explain recorded documents and chain of title. All in all, a pretty successful tour.

WLIA 2010 Awards

2010 WLIA Annual Awards

Each year the Wisconsin Land Information Association recognizes and thanks individuals and organizations that have contributed to the modernization of land records in Wisconsin. Congratulations to the 2010 winners!

- **Al Miller Award – Fred Halfen, Ayres Associates**

Fred is a past President of WLIA, a pioneer of the land information community in the State of Wisconsin and he was instrumental in assisting WLIA in establishing relationships with the land records community. He is the Vice-President of the Energy Corridors at Ayres Associates working to assist the development of green energy in the United States. The “Allen H. Miller Sustained Service” Award is given to an individual or organization that demonstrates sustained service to WLIA and the Land Information Program, through continued exemplary contributions. The Allen H. Miller Sustained Service Award is named after our first President and continuing friend and supporter.



Fred Halfen accepts the “Al Miller” Award

- **Outstanding Contribution Award - Paula Cummings, Portage County**

Paula has been involved for many years with WLIA and is one of the most cheerful, helpful and charming people we know. She assists with the WLIA conference every year with registration, moderators, silent auction and proof reading everything. She is the executive assistant for the Portage County Planning Office. The “Outstanding Contribution” Award is given to an individual or organization that is a WLIA member that has made a significant contribution to WLIA activities and/or the advancement of the Wisconsin Land Information Program.



Paula Cummings accepts the 2010 Outstanding Contribution Award

WLIA 2010 Awards

• Local Government Achievement Award – Douglas County and City of Superior

The City of Superior and Douglas County have been proactive in setting up collaborative agreements throughout Northwestern Wisconsin and Northeastern Minnesota. Currently they have a formal data sharing agreement with Superior Water, Light and Power, a quasi-public utility, to share GIS data to create greater efficiencies for development and growth in NW WI. Other agreements that are in place to help foster growth and open data sharing have been formalized with regional planning organizations: Northwest Regional Planning Commission (NWRPC), Arrowhead Regional Development Commission (ARDC), the Duluth/Superior Metropolitan Interstate Council (MIC) and the Northspan Group, Inc. Additionally agreements have been reached with the Western Lake Superior Sanitary District (WLSSD) in Duluth, MN and St. Louis County, MN. All the agreements create a seamless data sharing network to bring efficiencies to all level of government to give the taxpayers better service and reduce costs. Agreements are being discussed with Pine and Carlton counties in Minnesota, both of which border Douglas County.

To help promote collaboration and cooperation City of Superior and Douglas County staff have presented numerous times at state and regional GIS conferences. Those conferences include the WLIA Annual Conference In 2009 and 2010, the MN GIS/LIS in 2009 and the Regional Pictometry Conference in 2009.

The “Local Government Achievement Award” is given to a local, municipal, tribal, county government or consortium that has implemented modernization using WLIP funds in such a way as to exemplify the goals of the program in the areas of innovative applications (best bang for the buck), local data sharing with statewide accessibility and cooperative agreement.



Ben Klitzke with Douglas County (left) and Brad Theien from the City of Superior (right) are presented with the 2010 Local Government Achievement Award

Photography in part
provided by Jim Lacy



WLIA 2010 Awards

- **Local Government Achievement Award - City of West Allis**

The City of West Allis has developed an enterprise-wide GIS system over the course of the past 15+ years. Data compiled under the MCAMLIS consortium has been leveraged to departmental GIS users using desktop software and a browser based intranet mapping system. The City has also made some of the data available in a public facing interactive web map, and in the form of downloadable PDF maps. The City's GIS data is used to map sewer, water and other utility lines, recycling collection, snowplow routes, zoning boundaries and a host of other municipal layers. The city is also looking into streamlining workflows and field data collection using mobile devices and wireless technologies.

Much of the GIS program at the City was built with minimal staffing and funding, and reflects on the Coordinator's passion for Land Information and GIS. Pat Walker, GIS Coordinator has been a member of WLIA for a number of years and is very active in the technical user community, sharing ideas, and technology tips and tricks, as well as an occasional war story.

The City of West Allis's support and embracement of GIS technology should serve as a model for other municipal governments.

The "Local Government Achievement Award" is given to a local, municipal, tribal, county government or consortium that has implemented modernization using WLIP funds in such a way as to exemplify the goals of the program in the areas of innovative applications (best bang for the buck), local data sharing with statewide accessibility and cooperative agreement.



Pat Walker is presented with the 2010 Local Government Achievement Award

WLIA 2010 Awards

- **Friend of Land Records Award - Electronic Recording Council of WI**

The Electronic Recording Council Wisconsin was established under the Uniform Real Property Electronic Recording Act, adopted in Wisconsin as 2005 Act 421. The Council is charged to develop administrative rules and guidance on implementing electronic recording of land documents by Wisconsin Registers of Deeds. Wisconsin Department of Administration provides administrative support to the Council.

The “Friend of Land Records” Award is given to an individual or organization that is not a WLIA member that has contributed to the success or advancement of land records modernization in Wisconsin.



Cathy Williquette accepts the Friend of Land Records Award on behalf of the Electronic Recording Council Wisconsin

- **Friend of Land Records Award - St Louis County MN**

St Louis County was instrumental in assisting the City of Superior and Douglas County in creating their GIS system. Cross jurisdictional cooperation is extremely important especially when those jurisdictions also cross state lines. St Louis County is well deserving of this award.

The “Friend of Land Records” Award is given to an individual or organization that is not a WLIA member that has contributed to the success or advancement of land records modernization in Wisconsin.



Darren Jablonsky accepts the Friend of Land Records Award

WLIA 2010 Awards

• 2010 President's Awards - Scott Hameister, mPower Innovations & Thomas Tym, Ruekert/Mielke *Presented by Cristina Richards, WLIA President 2009 - 2010*

This year has been such a wonderful experience for me. I have gotten to know so many people on such a more personal basis than I had in the past. I have looked forward to this moment when I could select candidates for the 2010 President's Award who have had a large impact on me throughout my career and within the WLIA. I wish I could give this award to every single one of you since your commitment to WLIA is award-winning!

I struggled with whom to give this award to and after deep consideration, and looking into the by-laws, I have determined the award would go to two individuals because of two largely different impacts they have made to my life.

The first individual is being recognized because he had the greatest impact on my involvement within the WLIA. I remember it was my first conference in 1998 and I was walking down the hall with this "deer in the headlights" look. So many members, so many sessions and I knew nobody! When out of the blue, he came and put his arm around my shoulders and said, "You must be new here!....Stick with me and I will show you the ropes!" I gladly took him up on his offer and met many people within the WLIA whom I have become very fond of over the years. He has become a good friend to me and I look forward to seeing him at every conference. I hope other veterans of the WLIA take this example given by Scott Hameister, to take that extra effort to welcome all those "deer in the headlight" looking new members!

The second individual I would like to give the President's Award to is an individual whom had the greatest impact on my career in GIS. He started out as purely a contact person for a vendor we were working with in Iowa County. I quickly learned, however, whenever I would bother him with my unending questions he was always understanding and friendly. Over time, I began to utilize his friendship to bounce ideas off him. He was the confidant I could bounce my out-of-the-box ideas off of such as the Tri-County website or editable applications which ride on top of our website. He is my "go-to-guy" when I want advice on dealing with anything from politics to just venting in order to keep the sanity! Thomas Tym's knowledge, enthusiasm, encouragement and friendship are qualities which will always go beyond the vendor/client relationship.



Scott Hameister accepts the
2010 President's Award



Scott Daniel accepts the
2010 President's Award for Thomas Tym

WLIA 2010 Awards

- **2010 WLIA Distinguished Service Awards** were presented to the Board members who completed their two year terms.



Outgoing board members include (from left to right); Chris Diller with the WI Dept of Military Affairs, Doug Miskowiak at UWSP – GIS Center, Lisa Morrison with WI DATCP, Larry Cutforth with USDA



A very special thank you goes to our Outgoing Past President, Jodi Helgeson (left) and our Outgoing President, Cristina Richards (center). Your time, dedication and support of WLIA is greatly appreciated! Kelly Felton (right), is our incoming President.

More 2010 WLIA Conference Highlights:

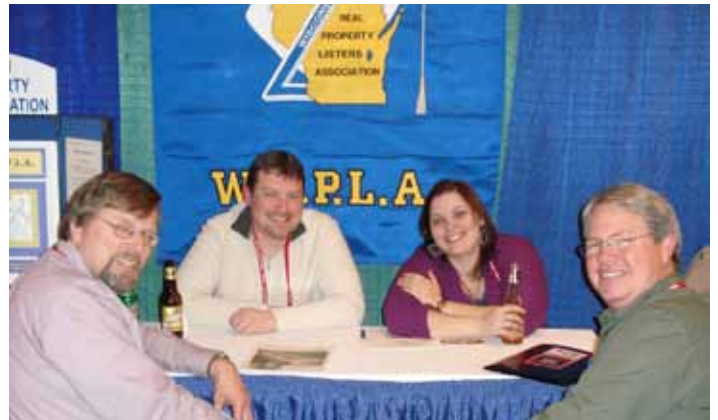


Thank you to Ayres Associates our Gold Sponsor!
Kirk Contrucci is pictured here with Julie Gleeson and Karen Miller from Ashland County

More 2010 WLIA Conference Highlights:



Kelly Felton, 2010 WLIA Annual Conference Chair and President Elect, opens the Exhibit Hall



Members of the WI Real Property Listers Association exhibited at the Conference. Pictured here are Al Brokmeier (left), Jeremiah Erickson, Lauree Kratcha and Andy Erdman



The illustrious group of Mike Koutnik (left), Jodi Helgeson, Nancy von Meyer & AJ Wortley



WLIA Foundation, Inc. Silent Auction Shoppers; D. David Moyer, Trish Nau and Peter Miller



Your Conference Management Team of Ann Barrett, WLIA Executive Services Manager, Kim Peters and Cindy Mueller

WLIA 2010 Organization Members

Thank you for your support of the Wisconsin Land Information Association

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the **A** **B** **C**'s
of **GIS**

ACCESS, BUILD, COMMUNICATE

Logo designed by Jamie Hagen with ADC Consultants - thank you!

Visit the WLIA web site at
www.wlia.org
for more information