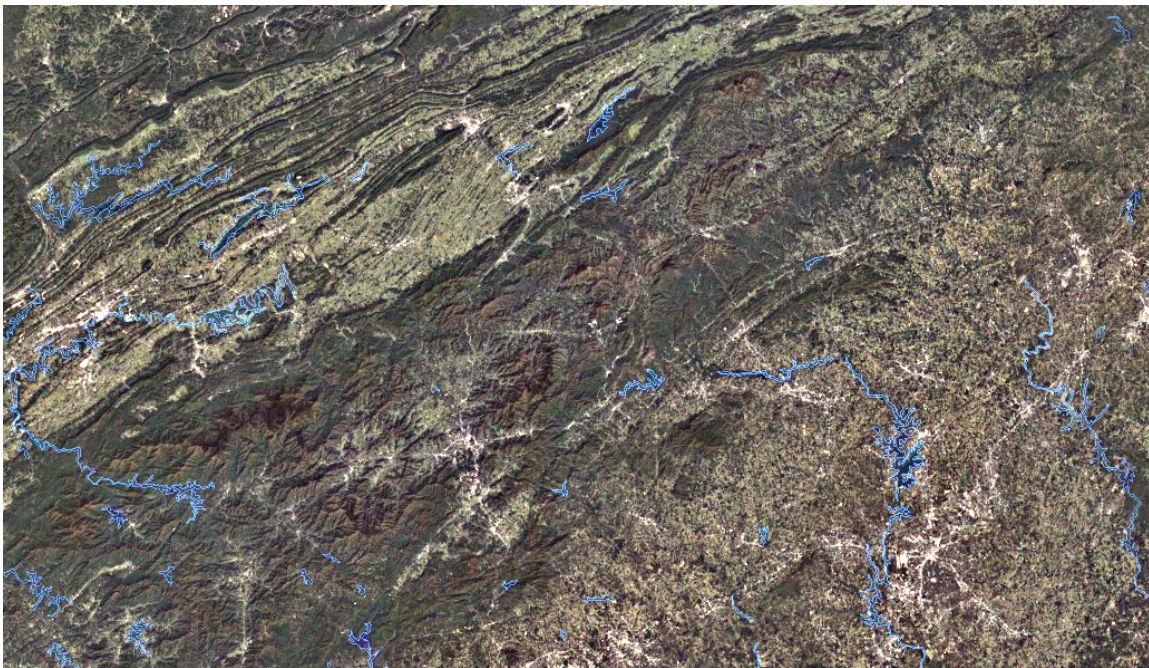


Gold In Them Thar Hills?



The above Land Sat Image circa 1969 shows the border between North Carolina and Tennessee. Pretend for a moment that you want to trace Hernando de Soto's path some 475 years after the fact. How would you do it? Fortunately for

us, Jonathan Thayn and Kathryn Sampeck both associate professors at Illinois State University have figured it out; and they share their methods in "Tracking Hernando de Soto with GPS." Now all we have to do is find the gold.



Editor's Notes

Jeff Palmer

GISNotes@ILGISA.ORG

Members, Educators, Vendors and soon to be Members

This edition of GIS Notes wears a magazine style with a concentrated focus on our up coming October Conference in Naperville. **Share this edition!**

An army of volunteers invested hundred of hours to bring the best edition ever to you. Conscripts in our army were drafted from CMS's professionals, Amber Knapp's Outreach Committee and some 20 geospatial professionals who stopped doing what they do to earn a living to contribute to your growth. **Become a member!**

Let me highlight two articles, Keisuke Nozaki reports on a Dine Smart App that links your favorite restaurant to the latest health department's inspection report; and Heena Lee's article gives you the clearest picture of the personal growth that comes from being a contributing member of ILGISA. **Contribute!**

Seriously, consider joining us at the conference in Naperville!

What you know increases with membership, Who you know grows when you volunteer, and How you communicate improves when you contribute. Your career will thank you later.

What, Who and How form a portable very powerful currency. This currency can be traded in any market and can't be taken from you. How you invest your currency is up to you.

Respectfully submitted,

Jeff

NOT YET A MEMBER OF ILGISA?

Join today at

<http://illinoisgisilassoc.wliinc16.com/join-us/application.aspx>

Contents

Editor's Notes

Executive Director's Notes

President's Notes

GeoAmazing Award Winners

Someone to Know

Contributions

- USGS National Hydrography Requirements and Benefits Study
- UAV Technology Allows Us to Better Serve Our Residents
- Public Safety --- Statewide Collaborative Data Sharing
- PINMAP, Property Information Management
- Tracking Hernando de Soto with GIS
- Cook County Municipal Incorporation Inventory
- Interactive Map Opens 300 Miles of Trails in the Quad Cities
- Dine Smart Web Map Application for the McDonough County Health Department
- Free Customizable JavaScript Web Mapping Application
- GIS Goes Mainstream: Kaskaskia College Uses a National Science Foundation Grant to Embed GIS Courses Across Curriculum
- DuPage County's Citizen Reporter App Keeps Everyone in the Loop
- Census LUCA is Coming!

ILGISA Centric

- Program Committee Update
- Conference Workshops
- Conference Sessions
- Outreach Committee Update
- Membership Committee Update
- Governance Committee Update
- Finance Committee Update
- Education Committee Update

Sponsors



ILGISA and CM Services

Rick Church

contact@ilgisa.org

Executive Director, ILGISA and Head Coach, CM Services Inc.

On January 1, 2013, The Illinois Geographic Information Systems Association (ILGISA) and CM Services, Inc. a professional Association Management Company began their nearly four year partnership. The purpose of the partnership was (and remains) for ILGISA to be able to deliver first class education, networking opportunities and communications to its members. CM Services has nearly forty years of experience in partnering with associations to identify, develop and maintain their missions.

In the first year of the partnership, the ILGISA Board and CM Services staff focused on transitioning from one management structure to a new one. This included not only the typical transition related activities such as moving physical and electronic materials, setting up the ILGISA database, etc. but also included time spent by CM Services staff team with ILGISA volunteer leaders to learn about the profession and the various activities ILGISA was currently involved in.

Beginning in 2014, under the facilitation of CM Services, ILGISA developed a strategic plan to help the leadership guide the organization over the next three years. To develop the plan, ILGISA surveyed its members on a variety of issues including their thoughts on current ILGISA programming and member benefits; future opportunities and challenges and much more.

Using that input, the Board worked diligently with the help of CM Services to develop the strategic plan including a Mission Statement, five Key Thrusts (three year priorities), and Rocks (the quarterly actions taken to achieve the key thrusts). Finally, the Board developed ways to measure the success of each Key Thrust.

The Mission of ILGISA is: ILGISA advances the understanding, communication, and effectiveness of geospatial technology in Illinois.

The Five Key Thrusts developed by the Board as the strategic areas to focus on from 2014 through 2016 are:

1. Improve member programs and services
2. Enhance and increase frequency of communication with and amongst membership
3. Create a diverse membership
4. Foster a sense of community and shared knowledge among geospatial technology users
5. Building on partnership with CM Services, Inc.

Examples of some of the Rocks or actions taken to achieve the Key Thrusts include:

- Successful launch of a new ILGISA website
- Successful development of Regional Conferences to reach members throughout the state
- Creating a Peer Networking Group (IPN) for ILGISA members to connect with each other and share knowledge between meetings
- Developing weekly communications for members about important GIS and ILGISA news

It hasn't yet been three full years under the ILGISA Strategic Plan, but ILGISA has come a long way toward achieving each of the Key Thrusts set out in the plan in 2014. We believe this success is being noticed by not only current ILGISA members but also others in the profession that aren't members of ILGISA as our membership in 2016 has increased by more than 100 members.

The ILGISA Board focuses its efforts on the strategic plan during its monthly meetings to help deliver the best possible value to members of ILGISA. At the end of 2016, the Board will review the current strategic plan and make necessary adjustments to help lead ILGISA to even greater things.



From the Desk of the ILGISA President

An update of ILGISA's events, accomplishments, and a vision for the future.

Ryan P. Meekma, GISP, CFM
 rmeekma@ilgisa.org, 217-244-6627
 ILGISA President

It seems like yesterday I was a recent graduate from the University of Wisconsin-Whitewater and a new employee with the Illinois State Water Survey attending my first ILGISA conference. The atmosphere was prodigious, the conference brochure contained more acronyms than I could decipher, and it seemed like everyone knew each other. I did what any normal person would do and hung around with the people I knew. As the 2 day conference progressed I was introduced to some fantastic GIS professionals and began hearing about all the different applications of GIS. The workshops, sessions, and expositions were loaded with information and were not taught in college. At that moment I realized how vital an organization like ILGISA is to keep members connected in a manner and encourages the professional development which make us better at what we do. It's experiences like these that influenced myself to become involved at the level I am today.

My service on the Board of Directors has been a rewarding experience especially with the 6 digit pay checks rolling in each year. Just kidding! Board members do not receive pay; ILGISA is a volunteer based organization. The rewards come in innumerable forms; a sense of accomplishment, learning how a 501(c)(6) organization functions, sharing a good laugh with friends new & old, giving back to the GIS community that has given so much, and advancing a vision that the founders of ILGISA created decades ago.

2016 has been a successful year for our ILGISA as we complete the third year of our 2014-2016 strategic plan. The next short term strategic plan will be outlined later this year. Along with revisiting our long term goals based on feedback from the ILGISA Membership. That's why I want to express the importance of filling out surveys that are distributed after training events, conferences, or general questionnaires

throughout the year. Your responses are the keystone to develop the framework to design and plan for the future of ILGISA.

GIS is evolving so fast that the definition itself varies from Geographic Information Systems to Geographic Information Sciences and from a coarse perspective we may defer as Geospatial Technologies. Is it possible for an individual to remain proficient on everything in our field? One fact is certain, GIS is an indispensable tool & science in a modern society. With this immense digital revolution we have an opportunity, and duty as an organization, to reach out to new groups of professionals to share what you do and learn together. This cooperative effort is helping to shape a smarter world. Is it time to develop specialized areas of proficiency and break our education opportunities up by capacities? For example: water resources, programming, floodplain management, environmental sustainability, supercomputing, parcel mapping, cartography, database management, modeling, business analysis, space time analytics, site location, urban planning, emergency management, e911, GIS management, GIS standards, Illinois policy, and data sharing. Also, should we encourage the State to become more involved at the legislative level? Should Illinois have a Chief Geographic Information Officer? These are some items that future members will have the opportunity to answer and take action on.

A few examples of individuals I have had the honor and privilege to work with demonstrate prospects trending across Illinois such as: Dr. John Kostelnick leading the GEOMAP Center's collaboration with the Statewide Terrorism and Intelligence Center (STIC), Dr. Mike Rudibaugh working on the Geospatial Advantage Program through the NSF, Dr. Michael Cornebise developing the Professional Science Master's

in GIS, Jonathan Hodel and Micah Williamson building a business from the ground up, Sheena Beaverson and her team handling big data through the Illinois Height Modernization Project, Mark Yacucci coordinating statewide data sharing for emergency management, Tony Comerio bridging the gap between GIS & Hydrography, and many more that I would like to list.

If you haven't had the opportunity to volunteer on the Board or a Committee, I strongly encourage your participation! An organization is only as

good as the individuals that represent it. Visit www.ilgisa.org and click the "GET INVOLVED" button. For all the current and past volunteers, I thank you for your contributions!

"Innovation through Collaboration" is the theme for the 2016 Annual Conference. I look forward to seeing everyone October 17-19 at the Hilton Lisle/Naperville. It is also exciting to announce that the 2017 Annual Conference will be held at the Marriott Bloomington-Normal Hotel & Conference Center during October 1-4, 2017.

WHY YOU SHOULD ATTEND THE ANNUAL CONFERENCE

1. ESRI, Two Day, Hands On, Instructor Lead Training.
2. Educational Presentations on the new FAA Drone Regulations, Field Data Collection Methods, LiDAR, Web Mapping, Law Enforcement Mapping and much more!
3. Workshops on ArcGIS Online, QGIS, Python, Surveying and a GISP Exam Prep Course.
4. ESRI Hands On Learning Lab featuring their latest apps and software.
5. Jobs Board
6. Social Events

LOOKING FOR A WAY TO GET INVOLVED? JOIN ONE OF ILGISA'S COMMITTEES!

ILGISA functions as a result of member participation. If you are interested in joining a committee, feel free to contact Club staff at contact@ilgisa.org. For more details, visit <http://www.ilgisa.org/committees.html>.



ILGISA 2015 GeoAmazing Award Winners

Outstanding GIS professionals being acknowledged for their contribution to the community.

Amber Knapp, GISP
 amber.knapp@cookcountyil.gov
 ILGISA Director

ILGISA is made up of an amazing community of geospatial leaders. Every year these leaders contribute to our community to make our world a better place. As Ghandi says "Be the change you wish to see in the world"; as geospatial leaders you are the change in the world. While this article is meant to highlight those who made a significant effort and were recognized at the ILGISA 2015 Conference, we want to thank the GIS community at large for their continued commitment to collaborate, innovate and elevate.

Award winners from 2015 are as follows:

Dahlberg Distinguished Achievement Award: Mary Jo Horace, Cook County

The Dahlberg Distinguished Achievement Award is presented for extraordinary service to the GIS community. The Honors committee may select a recipient for the Dahlberg Distinguished Achievement Award, as and when they deem appropriate. The recipient of the Dahlberg Distinguished Achievement Award also becomes a Distinguished Member of ILGISA. This award is presented to an individual who has made a significant contribution to the development and advancement of geographic information systems. Only one such award is made each year; it is possible that no award is presented in a given year.



Hilton Distinguished Collaboration Award: Joye Baker, Adams County

The Hilton Distinguished Collaboration Award is presented to an individual who has provided extraordinary service to the GIS community in the advancement of coordination between GIS professionals. The Honors committee may select a recipient for the Hilton Distinguished Collaboration Award, as and when they deem appropriate. This award is presented to an individual who has made a significant contribution to the promotion of cooperation within our community and with the people we serve. Only one such award is made each year; it is possible that no award is presented in a given year.

Student Scholarship: Susannah Oettle

ILGISA Outstanding Student Award: Mantas Laurinaitis; Hannah Eboh; Amy Halloran; Derek Kaden and; Alexis Araoz

The ILGISA Outstanding Student Award is presented to an undergraduate student of any major who has included GIS in their course of study, and has demonstrated exemplary proficiency and understanding of GIS, potential contribution to the GIS Community, and general success in school.

ILGISA Service Award: Alexis Araoz

The ILGISA Service Award is presented to an individual or organization, which has provided exemplary professional service or support to the GIS Community.

In Closing

Thanks again to all of our award winners and all geospatial professionals for striving to make a change. You make the world we live in and shape our environment.



SAVE THE DATE

The 2017 Annual Conference will be headed to Bloomington-Normal in 2017! Mark your calendars, the Annual Conference will take place on October 2 - 4, 2017 at the Bloomington-Normal Marriott.



Someone You Should Know: Keith Nightlinger, ILGISA Past President

A Look to Our Past with Our Future in Mind

Keith Nightlinger, GISP

GIS Manager, City of St. Charles & ILGISA Past President

knightlinger@stcharlesil.gov

ILGISA's Outreach Committee sent a few questions to Past ILGISA President, Keith Nightlinger, to get the inside scoop on his experience being an ILGISA Board Member, the future of ILGISA, and his overall thoughts on the organization.

Q: Would you run for another ILGISA office and which one would it be and why?

I really enjoyed working on the Program Committee and the Membership Committee. While all committees benefit the membership, these two have a direct impact that provide quantifiable results.

Q: How has your term as president enhanced your career?

During my term as President, I met some of the most wonderful and unique people from across the state. It allowed me work in a different capacity and build great relationships along the way. ILGISA is truly about bringing people together and during my term I was able to grow my professional network with people I would have never met otherwise. It gave me the opportunity to work closely with GIS professionals from all facets of the industry. This is also one of the areas I miss the most about finishing my term on the board.

Q: Looking back over your term was there a bigger picture that comes into focus?

Each year 50% of the seats on the board turn over, as such, multi-year initiatives would suffer considerable delays or undergo re-visioning each year as a committee chairperson transitions from one committee to another. While measures were taken to build redundancy in each committee the projects still suffered from the transition

of the leadership. In retrospect, this only delays projects and reduces the value to the membership. Measures should be considered to recognize long-term projects, assign special project teams, and separate them from routine operations.

Q: If you could have a do-over, what would you measure that is tied to the success of ILGISA (i.e. membership numbers, website "clicks", conference attendance, etc.)?

All of these metrics are extremely important, but only when you look at them holistically to determine the overall membership satisfaction levels. That is what the committees, the Board of Directors, and CM Services are ultimately working to achieve. Programs such as the Regional meetings, official ESRI training, map competitions, vendor involvement are all designed to bring the community together and meet the changing needs of the membership.

Q: Considering your experience what is your vision for ILGISA's short and long term future?

While on the Board of Directors we established the first 5-year strategic plan for the Association. This contained short and long term goals focused on increasing the membership base and improving member benefits. Once the Board of Directors reaches satisfactory levels on those initiatives, I believe there are other areas the Association has available to grow that can increase the professionalism of the GIS industry, create more opportunity for GIS departments to receive funding, serve as the voice of GIS professionals, and the coordinating entity across the state.

Q: What advice can you give members who may want to run for one of the offices?

I encourage all members to run for office at some point during their career. It's a wonderful experience and an opportunity to establish great relationships along the way. To be effective as

a Board member it is important to have team building skills, project management experience, exposure to financial management or budgeting, and above all else a vision with the motivation to lead the project and see it through to the end.

SEEKING MODERATORS FOR THE ANNUAL CONFERENCE!

Are you looking for a way to help at ILGISA's Annual Conference? Well we have the job for you! ILGISA is looking for moderators for each session at the upcoming Annual Conference. How do you apply? Simply email ILGISA staff at contact@ilgisa.org.

Innovation through Collaboration

Collaboration =

to work together especially in some literary or scientific undertaking

Innovation =

the process of introducing new methods, devices, etc.

INNOVATION
GIS Notes
COLLABORATION



USGS National Hydrography Requirements and Benefits Study

Hydrography Your Way . . .

Shelley Silch

ssilch@usgs.gov

US Geological Survey

U.S. Geological Survey (USGS) is considering an enhanced program to significantly improve the utility of hydrographic data for the U.S. and its territories. In order to determine the cost effectiveness of various enhanced program options, USGS and NRCS contracted with Dewberry to assess the requirements of users of hydrography data and the benefits to those users of improved hydrography data. The goal of this assessment, the National Hydrography Requirements and Benefits Study (HRBS), is to establish a set of national Business Uses (BUs) and requirements associated with hydrographic data. This information will then be used to evaluate the benefits of successfully supporting those requirements within the context of a national program.

In order to establish the set of national BUs and requirements associated with hydrographic data, user requirements and benefits were collected through an online questionnaire. Mission Critical Activities (MCAs) and their associated requirements and benefits were identified by select Federal agencies, states, and other organizations. The MCA results were grouped into high-level BUs for each selected Federal agency and for each of the 50 states and other selected organizations. A geodatabase was developed to capture, store, and analyze the original questionnaire data. After a quality-control process including interviews with the states and responding agencies, a second geodatabase was developed to store summaries, refined versions, and aggregated content of the original data. Further analysis of the data by USGS is anticipated, with the final outcome to be recommendations on enhanced program options and implementation recommendations.

Current Use of National Datasets

For each of the 420 reported MCAs, study participants were asked to indicate what national hydrography datasets are currently being used to address the water information needs of the MCA. Specifically, users were asked about their use of the National Hydrography Dataset (NHD), Watershed Boundary Dataset (WBD), and NHDPlus.

When another water-related dataset is used, 60 percent of the time it is state or locally developed and/or maintained hydrography data. These locally maintained data are either of higher resolution than the national datasets, having been collected or improved to fit recently collected lidar, orthoimagery, or parcel data, and/or have locally improved or added attributes that were customized to serve the MCA's business needs.

Business Uses

Study participants were requested to assign one (or more) of 25 pre-defined BUs to each MCA, in addition to providing an MCA title and description. Because study participants were asked to describe their MCA in their own words and to assign a BU to each, there was a fairly wide variety among how the BUs were assigned to the MCAs. Some BUs seemed to be interpreted broadly and multiple types of activities were associated with them.

Requirements

For each of the 420 MCAs, study participants were asked to provide detailed information about the data required to accomplish the mission. Users were asked to provide information regarding the required positional accuracy, stream density, smallest contributing watershed, smallest mapped waterbody, update frequency, post-event updates, and level of detail for each MCA. Users were also asked what characteristics or

features and analytical functions are required and about the level of integration required between hydrography data and other datasets for the hydrography data to satisfy MCA requirements. Additionally, non-MCA specific requirements were collected for hydrography data access methods including required data types or formats, geographic extents, data or service access methods, required elevation-hydrography data integration, required raster elevation-hydrography data integration, and the impact of hydrography data errors.

Benefits

Study respondents were asked to provide information for each reported MCA about their estimated annual program budgets that are supported by hydrography data. They were also asked to estimate what their current annual benefits are, and what future annual benefits they are likely to receive from enhanced hydrography data. The future benefits would be those likely to be received if all of their reported requirements were met.

Conclusions and Recommendations

The following observations and conclusions are provided based on the data collected for the HRBS and contained in the study geodatabase. Further analysis of the study data will be needed to associate benefits with fulfilling individual requirements and to plan program implementation scenarios.

- The top five requirements for integration with other datasets were elevation, stream flow, wetlands, soils, and land cover, with integration with elevation data being the top requirement. When developing program implementation scenarios for analysis, consideration should be given to evaluating whether future hydrography data models may be able to accommodate some or all of these data integration requirements.

- The HRBS results appear to refute a commonly held belief that Federal agencies need consistent data as opposed to best available. A total of 70 percent of Federal agencies and 67 percent of overall study participants reported a requirement for best available data. Study respondents did note that disparities in level of detail cause modeling problems and also noted a desire for tools that would allow best available data to be selected or generalized such that a consistent level of detail could be achieved for modeling purposes from best available data.

- The reported estimated future annual benefits are most likely underestimated. Study respondents were unable to provide dollar estimates for future annual benefits for 35 percent of the MCAs.
- While the requirements and benefits assigned to specific MCAs would not be duplicated or biased due to the way they were aggregated into BUs, the reader is cautioned to understand the inherent flaws associated with any consolidation of this information. Likewise, specific user requirements may require more detailed analysis of the study database to understand the full need or value of fully meeting a particular need.

This article has been shortened from a much larger document. Graphs and charts can be found in the full report. For more information and the complete Executive Summary and HRBS Report, please visit: <http://nationalmap.gov/HRBS.html>



UAV Technology Allows Us to Better Serve Our Residents

DuPage County Stormwater Management Team Follows FAA to Harvest Aerial Data

John Blickem

john.blickem@dupageco.org, 630.407.6721
GIS Analyst, DuPage County Stormwater

I've never liked flying. As a kid, I was afraid of going on an airplane. Even in my adult years I've never really gotten comfortable with it. It's the combination of a fear of heights and the desire to be in control, I suppose. Mostly the fear of heights though. Yet, there I sat, in a classroom at the Illinois Aviation Academy taking the Private Pilot Written Exam. Busy using an E6B Flight Computer (imagine a slide ruler on steroids) to calculate the estimated fuel burn on a flight from point A to point B with a northwest headwind at 13 knots. Do not be mistaken, I was not looking to conquer my fears by fully embracing them. I had no intention of soaring high above the ground, untethered, in a Cessna 172 looking down at tiny cars and houses from hundreds of feet in the air.

I was just looking to fly a drone.

In December 2014, the Director of DuPage County Stormwater Management, Anthony Charlton (my boss), asked me to research the Federal Aviation Administration's (FAA) rules and regulations regarding the use of drones by a public entity. The FAA website offered some information - a detailed outline of drone operator requirements published earlier in 2014 titled the Flight Standards Information Management System (FSIMS) FAA Order 8900.1 Volume 16 Unmanned Aircraft Systems. Some of the requirements listed in this document included providing an official declaration of public entity from the State's Attorney's office, successfully passing the aforementioned written exam and completing a physical administered by a certified FAA medical examiner. I would also be required to produce an airworthiness certificate and register the unmanned aircraft vehicle (UAV) with the FAA. All of this information was to be included, without exception, in my request for what they referred to as a Certificate of Authorization (COA). The COA is essentially a go-ahead from the FAA

once they've determined you have met all of the requirements. The kicker was that, every time I intended to fly, I'd have to submit a request for a COA and patiently wait for approval.

However, in late January 2015, I discovered the FAA was granting regulatory exemptions for UAV use by organizations representing several industries that promised to benefit the public. FAA Transportation Secretary Anthony Foxx found that the UAV, when used for these operations, posed no threat to national airspace or national security. Those findings are permitted under Section 333 of the FAA Modernization and Reform Act of 2012. This sounded too good to be true. If the FAA were to grant us this exemption, we could bypass the lengthy COA process.

Not knowing where or how to begin, I discovered that anyone could view both the pending and approved Section 333 exemption requests from other agencies at regulations.gov. It was clear that the FAA was interested in granting exemptions to organizations whose UAV use would benefit the public. Making a case for just how beneficial DuPage County Stormwater Management's use of the drone would be to our employees and, ultimately, County residents wouldn't be very difficult at all.

DuPage County has six main watersheds: Salt Creek, East Branch DuPage River, West Branch DuPage River, Sawmill Creek, Des Plaines River Tributaries, and Fox River Tributaries. A significant part of our work involves identifying potential improvement projects in an effort to alleviate current and anticipated flooding problems; operating and maintaining several major flood control facilities; identifying water quality problems; indexing significant natural areas, storage areas and wetlands; and improving our floodplain mapping practices. These areas have documented flood damages and water

impairments requiring capital measures to address the flooding and water quality issues. Working in these areas and around waterways is inherently dangerous. UAV technology would allow us to collect and analyze information about these large-scale operations from an angle never afforded to us in the past. Not only would the information better serve our residents, but using an UAV to gather data would further ensure the safety of our staff.

In late spring of 2015, the FAA granted our request for a Section 333 Exemption. We're still required to adhere to the same rules and restrictions set forth by the FAA for recreational UAV use. Additionally, we have to submit a monthly flight log detailing operating location, number of flights per location and hours of operation. This is a small price to pay for the freedom to deploy our drone as needed. This will have a huge impact on our ability to document high water reference marks at the moment the rivers and streams reach peak elevations during significant flood events. Where we would previously dispatch field personnel to take digital photographs at ground level, we now have the ability to produce incredible looking georeferenced images and 1080p HD video from a birds eye view.

The FAA is set to launch what they are calling the Small Unmanned Aircraft Systems Rule (Part 107) on August 29. This is encouraging for those who are looking to obtain their certification for the first time. From what I've read, the FAA relaxed a few requirements, and the approval process will be much more like it is for those who currently hold a Section 333 exemption. I did notice that you'll still be required to take an aeronautical knowledge test; however, unlike the exam I took, the questions are said to be more tailored to UAV applications. I doubt you'll ever have to touch an E6B. In which case, I don't suppose you'd be able to tell me the wind

correction angle if my course is 050 with a true airspeed of 90 knots?

For more information contact John Blickem, 630.407.6721.

<https://www.youtube.com/user/lovebluelivegreen/videos>

<http://www.dupageco.org/dot/>



West Branch DuPage River at the Warrenville Rd. Bridge in Warrenville. Re-alignment of the river will reduce water surface elevations along the river in Warrenville.



Photo of the Elmhurst Quarry above the East Lobe looking toward Salt Creek to the west.



Looking north into Armstrong Park in Carol Stream. Flood waters are diverted from Klein Creek into this large reservoir, providing relief to the flood prone neighborhoods immediately downstream.

WORKSHOPS, SESSIONS, LEARNING LABS, SOCIAL EVENTS AND MORE!

For more information on this year's Annual Conference, visit the following link
<http://www.ilgisa.org/annual-conference.html>

Public Safety Statewide Collaborative Data Sharing

A natural or man-made disaster just occurred...who has the data I need to respond?



**Mark Yacucci, Nicolas Gray,
and Pamela Brooks**

(217) 265-0747

Prairie Research Institute – Illinois State
Geological Survey, Illinois State Police,
Illinois Emergency Management Agency

Current efforts are underway to link various local and state government entities to promote data sharing during an event in Illinois. The Illinois State Police (ISP), Illinois emergency Management Agency (IEMA), and Prairie Research Institute-Illinois State Geological Survey (PRI-ISGS) have been working together along with various county and local agencies to host meetings, create an MOU, and collaborate on data sharing. Over the past year the winter flood and Shawnee Forest manhunt events have highlighted the need and effectiveness of the collaboration.

During the flood in December 2015 -January 2016, IEMA activated the State Emergency Operations center and collaborated with several state and local agencies to bring situational awareness to the event. Response efforts and damage assessments were performed to assist with incident response and recovery efforts. PRI-ISGS provided an ArcGIS.com storymap during the flood depicting flood areas, weather information leading up to the event, and post flood comparisons to previous events <http://arcg.is/1ZnmZ3V>. Information depicted was also used to highlight successful flood mitigation efforts in the state. Information in the map obtained from the National Geospatial Intelligence Agency suggested that a variety of structures in Illinois would have been affected or destroyed had previous mitigation not occurred. During the

Shawnee Forest manhunt both PRI-ISGS and local government provided Illinois State Police with information that aided the efforts in southern Illinois. Data sharing occurred in a variety of ways including e-mail, phone, and facetime.

In both cases local parcel and street data were a vital necessity. During an event this data can take time to find and ingest into GIS systems. The hope of ISP, IEMA, and PRI-ISGS is to minimize this time by knowing who the local government contacts are, how they wish to share data, and ultimately have an MOU in place to facilitate the sharing. Additional benefits to local agencies is the ability to share vital state information back with local government through the MOU process. Sensitive information can more easily be shared in this way.

JOIN US FOR OUR LARGEST EVENT OF THE YEAR!

Register for the Annual
Conference today at <http://web.ilg-isa.org/events/ILGISA-Annual-Conference-2325/details>



PINMAP, Property Information Management

How to Efficiently Manage Property and Taxing Districts

Raymond Gottner & Rodrigo Ramirez

ray.gottner@cookCountyil.gov (312)-603-7967

rodrigo.ramirez@cookCountyil.gov (312) 603-3848

Cook County Clerk's Real Estate and Tax Services Department

Cook County is the second largest County in the United States with over five million people, 1.8 million parcels, and over \$13 billion in property tax was billed and collected this year alone.

Keeping track of taxable property can be difficult. A real estate parcel in Cook County is identified by its PIN, Property Index Number. Any time there is a "Division" of a parcel (a change in the legal description of that parcel) the PIN will be voided and a new PIN will be issued.

In 1998, Cook County embarked on an enterprise-wide GIS which included the creation of a highly customized ArcSDE/ArcIMS cadastral workflow application used for managing parcel boundaries and attributes and keeping track of PIN changes due to Divisions.

While this application was revolutionary to County operations at the time, Esri ended support of ArcIMS in December 2013. This forced Cook County to upgrade the custom cadastral application and migrate its data to ArcGIS 10x. County officials decided to take advantage of the new parcellabric data model. In addition, the County wished to reduce the level of customization in the cadastral workflow application. While the original application performed admirably, it was nearly 85 percent custom code which needed to be rewritten and reinstalled on servers and on client machines any time a major database update or schema change occurred. This was both costly and time-consuming.

The new PINMAP, Parcel Information Management Application, is browser based and can be accessed by any County employee based on permissions maintained by Active Directory. All GIS or cadastral related functionality within the Cook

County property tax administration is embedded within PINMAP. All functions are available from the PINMAP dashboard which is customized based on user permissions. This allows for greater data integration which can be easily expanded in the future.

[Please see PINMAP Dashboard screenshot below.]

In addition, the County took this upgrade as an opportunity to expand the functionality of the existing application by adding modules to manage:

- Taxing Districts and Tax Codes
- Assessment by Legal Description
- PIN Lineage

Taxing Districts and Tax Codes

Cook County is composed of over 1,000 taxing districts including municipalities, school districts, park districts, Tax Increment Financing districts, Special Service Areas and other districts which provide services and are allowed to collect property tax revenue under Illinois law. Each PIN is assigned a five-digit tax code which identifies the combination of districts which provide services to that parcel. Tax code changes are now easily displayed, managed, and tracked through PINMAP. This is another new and important functionality within the PINMAP upgrade.



Assessment by Legal Description

During property tax billing, only one tax bill is issued for each parcel. Occasionally, however, a single parcel may have multiple owners. In these cases a property owner can request a bill for only his or her portion of the parcel. This is known as an ABL, Assessment by Legal Description. PINMAP now allows staff to easily track and manage ABLs.

PIN Lineage

This last enhancement, PIN Lineage, is arguably the most valuable. Property taxes in Illinois are collectable for 20 years and delinquent property taxes constitute a “first lien” on a property, preventing property owners from buying, selling, or otherwise conveying title until all property taxes have been satisfied. While it is relatively simple for property owners to identify the current PIN of their property, the process of identifying retired (“Parent”) PINs after a Division has taken place is more complicated. The new PIN Lineage module is very user-friendly and easy to use, and can be utilized by any County employee with access to the PINMAP application.

[Please see LINEAGE screenshot.]

The PIN Lineage module allows a user to simply enter a “Target” PIN in the PIN Lineage screen. The Target PIN’s “Parents” are shown on left and the Target PIN’s “Children” are shown on the right. “Sibling PINs,” any PINs created at the same time from the same “Parents” are displayed below the Target PIN. The PIN Lineage module has saved hundreds—if not thousands—of hours researching the history of PIN’s in old records. Remember, in Cook County, PIN’s change during development phases, keeping track of your correct PIN every year is very important. Because property owners are liable for tax payments for 20 years per Illinois law, it is imperative that owners pay taxes on the correct PIN for a full 20 year duration.

PINMAP is also a valuable customer service tool. Its versatile query functionality allows staff to easily research and answer questions from taxpayers, developers, lawyers, press,

and other interested parties. Querying PINMAP provides easy access to various types of parcel information, including current and historic parcel legal descriptions, current and historic tax maps, taxpayer name and address, and tax code information in an all-in-one display.

While PINMAP and its modules were built to manage Cook County property tax operations, its functionality is universal and easily transferrable to governments on all levels. Building land record management systems that have the ability to display detailed records over time including: parcel legal descriptions, boundaries, ownership and billing information, and changing property characteristics into one consolidated platform along with other cadastral data allows for undiscovered patterns to be finally visualized for better government planning and decision making.

For more information please contact Ray Gottner at ray.gottner@cookcountyil.gov.

Acknowledgements

PINMAP came about from the combined efforts of the Cook County Clerk, the Cook County Assessor, and the Cook County Bureau of Technology GIS Department using Esri as the primary Vendor and Chicago-based GreatArc Technologies and Minnesota-based ProWest & Associates with support from Scarfe Consulting.

The screenshot displays the PIN Lineage application interface. It features a central 'PIN' field with a dropdown menu showing '17-16-238-025-0000' and a 'Load' button. Below this are three main sections: 'Parent PINs', 'Sibling PINs', and 'Child PINs'. Each section contains a list of PINs with their creation and voiding dates and tax maps. For example, the Parent PINs section shows '17-16-238-023-0000' with a created division of 2013-00242 and a voided division of 2014-00302. The Sibling PINs section shows '17-16-238-026-1913' with a created division of 2014-00302 and a voided division of 2015-00621. The Child PINs section shows '17-15-238-027-0000' with a created division of 2015-00621 and a voided division of 2015-00621. At the bottom, there is a 'PIN Lineage Report' and 'Add Pin Lineage' button, along with a summary of the selected PIN's details: PIN# 17-16-238-025-0000, PINID 17-16-238-025, Tax Payer Name 235 VAN BUREN, CORP, Property Address IL, and Tax Payer Address 235 W VAN BUREN CHICAGO IL 60607-3918.

Tracking Hernando de Soto with GIS



Author: **Jonathan B. Thayn** - jthayn@ilstu.edu
Associate Professor, Department of Geography –
Geology, Illinois State University
Co-Author: **Katie Sampeck** - ksampec@ilstu.edu
Associate Professor of Anthropology, Illinois State University

The prehistoric gold mines of the northern Andes Mountains were so productive that the Inca did not use the metal as currency, they used it as roofing material. Those Spanish conquistadors who robbed from the Inca in the early 1500s became fabulously wealthy. Hernando de Soto, who had served as second-in-command under Francisco Pizarro, used his fortune to convince King Carlos of Spain to appoint him governor of Cuba and to allow him to explore and colonize North America at his own expense. De Soto was confident that the gold of North America would flow as freely as that of South America and that his efforts there would net him a second fortune.

He was wrong, of course. Instead of stealing another fortune, de Soto lost his first one (and his life) as he travelled up the Mississippi River and through the Appalachian Mountains. De Soto was unaware of the eventual dreadful finale of his North American adventure as he disembarked in Tampa Bay, Florida in May, 1539, with 620 men, 237 horses, 200 pigs, and more than 60 other animals. He eagerly marched northward, and by 21 May 1540, he and his men had arrived in Joara, a Cherokee community located to the east of the Appalachian Mountains in what is now Burke County, North Carolina. A month and half later, on July 5, they arrived in Chiaha, another Native American settlement, on the west side

of the Appalachian Mountains near Dandridge, Tennessee. While these two locations have been confidently identified archaeologically, de Soto's route between them is a mystery.

Our goal was to use GIS to identify de Soto's most likely route. This is of interest to historians and archaeologists who work in the region, and the Eastern Band of Cherokee Indians, who hope that identifying this route will help them to understand more about their heritage and their ancestral territory.

De Soto and his men would have chosen flat, gradual terrain over rough, steep terrain, especially when considering the great herd of livestock they were dragging with them. In 2000, the space shuttle Endeavor spent eleven days in orbit collecting radar imagery of the earth's surface. Spatial analysts on the ground, using the same technology that Hollywood uses to create 3D movies, used the radar data to create a 3D model of the earth. These data are the Shuttle Radar Topography Mission (SRTM) digital elevation model, which record elevation in a series of contiguous square cells, each containing the average elevation of the 90x90 meters of the earth's surface that they delimit. These data can be downloaded without cost from the US Geological Survey website . The slope of

each cell of the DEM was found using the ArcGIS slope tool from Spatial Analyst that fits a plane to the elevation values of the cell and its eight neighbors. Conceptually, the plane is rotated until the sum of the distances between each cell's elevation and the plane is minimized. The slope of the plane is then recorded in a separate raster layer.

The effect of slope on walking speed is not linear. Even a slight increase in slope leads to a dramatic decrease in walking speed. Waldo Tobler found that typical walking speed on flat terrain is just a bit over five kilometers per hour. If the slope increases to ten percent, walking speed decreases by 30 percent to about three and a half kilometers per hour; but if slope increases to 20 percent, walking speed decreases by over 50 percent to less than two and a half kilometers per hour. The estimated walking speed each cell of the terrain between Joara and Chiaha was found using Tobler's Hiking Function. The result is shown in figure 1.

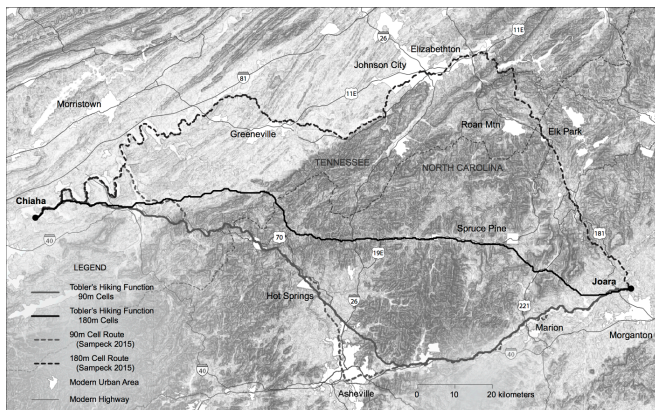


Figure 1: Estimates of walking speed across the landscape between Joara and Chiaha. The dark areas represent areas with steeper slope where walking speeds would be slower. Lighter areas represent flat terrain where walking speed would be faster. The darker area that extends diagonally from the southwest to the northeast is the Appalachian Mountains. Modern roadways and cities are included for reference.

The estimated walking speed data were submitted to two analyses to try to predict de Soto's route. The least cost path analysis tool (LCP) in ArcMAP traces a route across the landscape in several steps. First, the cost of traveling across each cell of the data is found. We used the inverse

of the estimated walking speed since a lower walking speed represents greater cost. Second, the linear, two-dimensional distance from the destination cell to each of its neighbors is found. This distance is multiplied by the mean of the connected cells' traveling cost so that cells with higher cost lead to a higher cost-distance. Once the cost-distance from the destination cell to its eight neighbors is found, the cost-distance to each of their neighbors is found, and so on until the cost-distance of every cell is calculated. Finally, the cumulative least-cost path is found. This is the route that connects the destination cell to the starting cell, moving from cell center to cell center, so that the total cost-distance of the associated cells is as small as possible. This is the route that de Soto would have followed if he had been perfectly familiar with the terrain and if he had not taken a single wrong turn.

The second analysis method, electronic circuit theory analysis (ECT), recognizes that while finding the perfect route may be mathematically possible, it is extremely unlikely from a pragmatic perspective. This method does not trace a single, well-defined route across the landscape; instead, ECT calculates each cell's relative probability of being a part of de Soto's route. Corridors of high probability pixels (think of narrow canyons) are more likely to have been a part of the route since leaving the corridor (i.e., climbing the steep canyon walls) carries a high cost. The cells of flat, accessible terrain would each have a low probability of being part of the route. De Soto may have travelled through these accessible regions, but we cannot accurately identify his exact route since he could wander a bit without incurring much additional cost.

The ECT analysis was performed using CircuitScape software, which treated the landscape as though it were electrically conductive and applied a positive charge to the origin and a negative charge to the destination. The estimated walking speed was used as the conductance of each cell so that more electricity would move through cells with lower travel costs (figure 2). This method highlighted three possible routes: along modern US highway 60 (this is a route returned by the LCP analysis), along US Route 19E, and along State Highway 181. Archaeological indigenous

sites containing Spanish artifacts from the period suggest that the northern route, along State Highway 181, is the most likely route. These results of this analysis have been published in archaeology and geography journals, and shared with the Eastern Band of the Cherokee Indians.

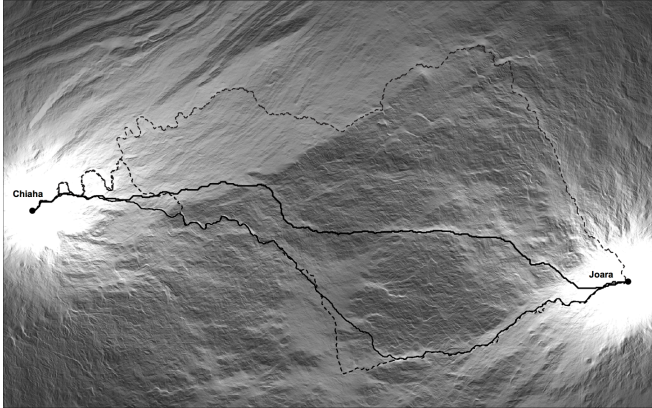


Figure 2: The results of the electric circuit theory analysis. Light areas have a greater probability of being part of de Soto's route than do dark areas.

This project illustrates the productive and broad value of GIS and spatial analysis in all branches of science. In 2011, Jerry Dobson wrote in ArcNews that "science itself is rife with errors and omissions due to lack of geographic input in formulation and testing of theory." Archaeologists are more likely to think spatially and to use GIS than many scientists, but this project was still "low-hanging fruit" in the sense that the simple application of common GIS techniques to the

questions of non-geographic researchers lead in significant and consequential results. In fact, we have been approached by archaeology textbook authors who want to include our work in their next editions.

In the same article Dobson continued: "Any well-trained geographer or GIScientist who focuses on any popular tenet of conventional theory, emphasizes the missing spatial components, and works conscientiously can make groundbreaking discoveries." I do not claim that this project was groundbreaking, but it does suggest that Dobson was right. GIScience is underutilized outside of geography, and we, its champions, have many wonderful opportunities before us.

¹ srtm.usgs.gov

² <http://help.arcgis.com/En/Arcgisdesktop/10.0/Help/index.html#/009z000000v2000000.htm>

³ [The same Tobler who wrote the first law of geography: Everything is related to everything else, but near things are more related than distant things.](#)

⁴ <http://downloads2.esri.com/campus/uploads/library/dfs/5864.pdf>

⁵ <http://www.circuitscape.org>

⁶ http://my.ilstu.edu/~jthayn/Publications_files/Sampeck%20copy.pdf

⁷ <http://www.tandfonline.com/doi/pdf/10.1080/00330124.2015.1124787>

⁸ <http://www.esri.com/news/arcnews/winter1112articles/through-the-macroscope-geographys-view-of-the-world.html>

GIS NOTES NOW OFFERING ADVERTISING SPACE!

ILGISA is now offering ad space in GIS Notes. Please see the chart below for the size and pricing options:

GIS NOTES ADVERTISEMENT OPTIONS	
Size	Cost
Full Page	\$500
Half Page	\$300
Quarter Page	\$200
Business Card	\$100



Cook County Municipal Incorporation Inventory

This article explains the project to collect with GIS all available municipal boundary changes that have occurred within Cook County, Illinois

Michael J. Hammer

michael.hammer@cookcountyil.gov

Author's affiliation: Cook County GIS Program Coordinator

In late 2015, Cook County GIS completed the Municipal Incorporation Inventory (MII) project with the intent on creating GIS polygons for all available municipal boundary change records dating back to original municipal incorporation. These boundary changes consist of municipal incorporations, annexations and disconnections. Prior to the completion of this project, no reliable or accessible comprehensive database for determining the incorporated status of properties within Cook County at any given point in time was possible. The vast majority of municipal boundary change records were in paper format and managed by a paper-based index system. Original records were stored by multiple agencies and in various formats. Municipal boundary enquires or searches required manual research and a significant effort.

This ambitious project was undertaken to resolve these issues and to provide a reliable automated resource to support the many Cook County agencies that rely on municipal/unincorporated GIS data for tracking their jurisdictional responsibility. In addition to supporting these internal agencies, this data is now being used for the submittal of municipal boundary information on behalf of 103 of its 136 municipalities for annual U.S. Census Bureau – Boundary and Annexation Survey.

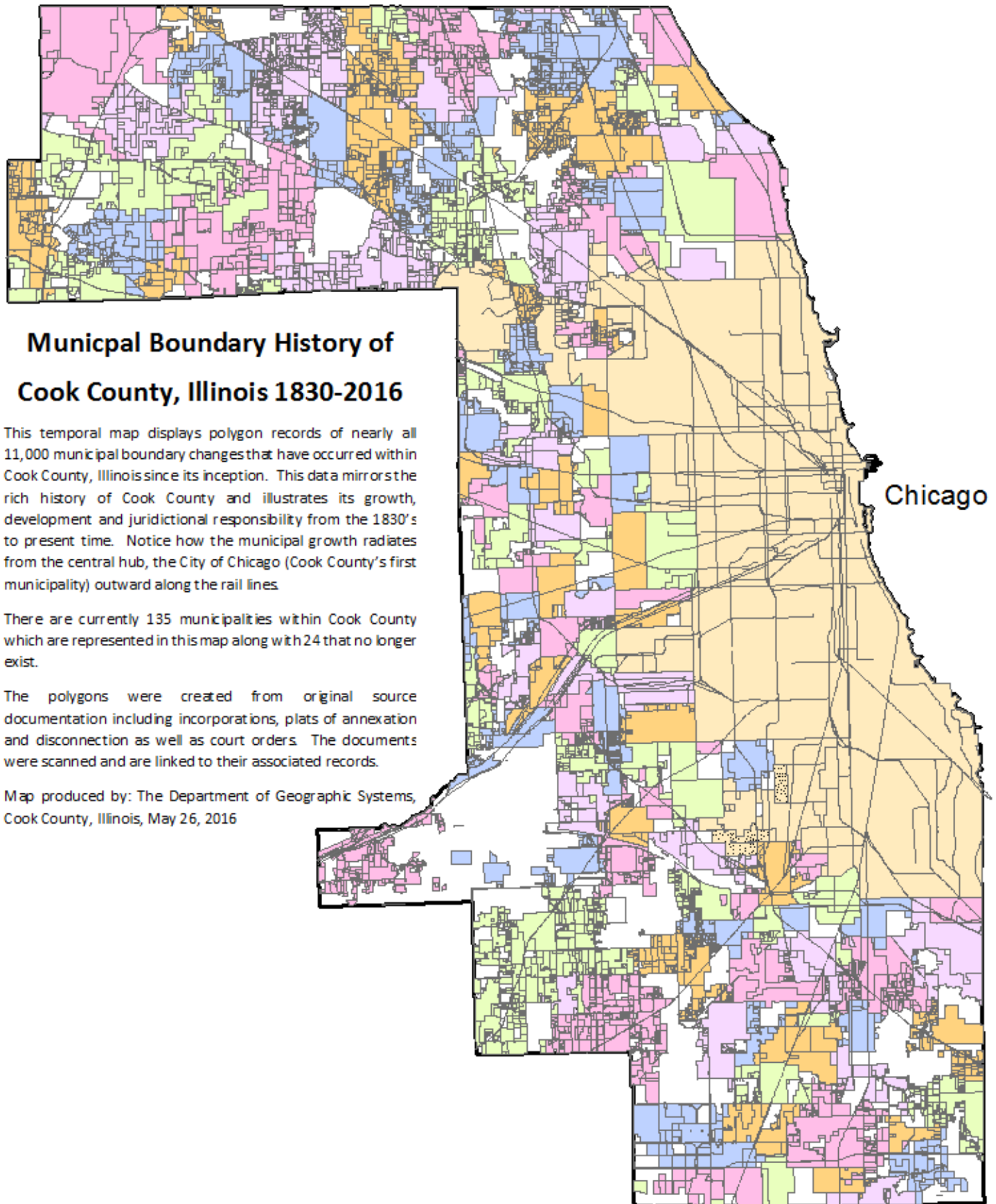
Cook County now has a valuable resource of nearly 11,000 municipal boundary transaction records as GIS polygons that are hyperlinked to

scans of the original documents dating back to the 1830s (see the attached municipal boundary map created from this data). While this database of nearly all municipal transactions over time is mostly complete, it does have missing original documentation for some boundary changes. Some records were lost during the Chicago Fire of 1871 and others may never have been recorded with the Recorder of Deeds Office (the main source of the documents in the inventory). Cook County GIS would like to share the records and GIS data captured through this effort with our municipalities and would like to encourage municipal participation in finding any of the missing documents from this record. A presentation on this subject will be provided at the Fall ILGISA conference.

For more information contact
gis@cookcountyil.gov

Acknowledgements:

Cook County agencies that participated in this project include: The County Clerk, Clerk of the Circuit Court, Department of Transportation and Highways, Emergency Telephone Systems Board, Geographic Information Systems, Recorder of Deeds. Original incorporation documentation also provided by the Illinois State Archives Office of the Secretary of State. Consulting services were provided by Pro-West and Associates, Scarfe Consulting, LLC and Urban GIS



Municipal Boundary History of Cook County, Illinois 1830-2016

This temporal map displays polygon records of nearly all 11,000 municipal boundary changes that have occurred within Cook County, Illinois since its inception. This data mirrors the rich history of Cook County and illustrates its growth, development and jurisdictional responsibility from the 1830's to present time. Notice how the municipal growth radiates from the central hub, the City of Chicago (Cook County's first municipality) outward along the rail lines.

There are currently 135 municipalities within Cook County which are represented in this map along with 24 that no longer exist.

The polygons were created from original source documentation including incorporations, plats of annexation and disconnection as well as court orders. The documents were scanned and are linked to their associated records.

Map produced by: The Department of Geographic Systems,
Cook County, Illinois, May 26, 2016



Interactive Map Opens 300 Miles of Trails in the Quad Cities

QCTrails.org is a free, user-friendly, interactive, and mobile-responsive website

Lisa Miller

lmiller@bistateonline.org, 309.793.6302 x133

Bi-State Regional Commission, 1504 Third Avenue, Rock Island, IL 61204-3368

The Quad Cities boasts stunning views of the Mississippi River and offers more than 300 miles of non-motorized recreational trails and nearly 7,500 acres of parks. QCTrails.org is a free, user-friendly, interactive, and mobile-responsive website that serves as a comprehensive resource that highlights these multi-purpose trails, parks, and side-paths. Users can track their physical activity progress and share their experiences with friends through social media.

The simplicity of walking, riding a bike, or paddling a canoe or kayak on a trail presents opportunities to improve physical activity throughout the year. QCTrails.org opens trail experiences to all members of the community regardless of age or ability and offers perfect opportunities for Quad Cities' residents to move more and be active outdoors.

Go to QCTrails.org to search a growing collection of four-season trails in the Quad Cities – whether you are looking for a weekend hike, an afternoon stroll, a new trail to run, a great place for a family bicycle ride, or want to try a new adventure like paddling a water trail. Each detailed trail posting features: an interactive map showing the trail route and important points of interest like parking areas, restrooms, cultural attractions, and parks; directions to trailheads and primary access points; a description of the trail system and experience;



information and links to trail managers; photos and video links; and comments submitted by trail managers and account holders.

Set up a free QC Trails user account and save your trail experience using "My Trails." Mark trails you've completed and indicate your favorites; create a wish list of trails; add trail logs, comments, photos, and videos about your experience; and earn electronic badges when you complete different trail challenges, then showcase your accomplishments!



This is an exciting new tool for encouraging and improving local outdoor physical activity throughout the year. QCTrails.org, developed by Bi-State Regional Commission, was made possible with funding provided by the Centers for Disease Control and Prevention (CDC) Partnerships to Improve Community Health (PICH) Grant, in support of the Be Healthy QC project administered by the Quad City Health Initiative.

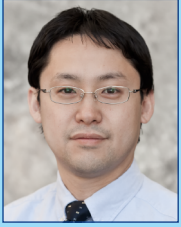
For more information:

Lisa Miller, Data | Graphics | GIS Director, Bi-State Regional Commission, lmiller@bistateonline.org. Be Healthy QC project (BHQC) is a collaborative effort of Quad Cities organizations to increase access to healthy food and beverage options and to increase access to physical activity opportunities. [The Quad City Health Initiative](#) is a cross-sector community partnership working to create a healthy community. The [Bi-State Regional Commission](#) is a local, voluntary organization serving local governments in five counties in eastern Iowa and western Illinois.

ILGISA ANNUAL CONFERENCE "INNOVATION THROUGH COLLABORATION"



October 17-19, 2016
Hilton Lisle/Naperville
Lisle, IL



Dine Smart Web Map Application for the McDonough County Health Department

Locating restaurants with their food inspection report in the county

Keisuke Nozaki

k-nozaki@wiu.edu • GIS Specialist, Western Illinois University GIS Center

Introduction

This topic was introduced in the lightning talk of the ILGISA Macomb Regional Meeting on March 23, and the author would like to discuss it further in this paper. The McDonough County Health Department (MCHD) has been publishing food inspection reports on their website. However, people must click the facility name to view the PDF report. The list is sorted alphabetically but lacks a geographic location for each restaurant. The MCDH requested the Western Illinois University (WIU) GIS Center to develop a web map of restaurants associated with the food inspection reports, which would replace the existing website.

Data Creation

The first step was creating a list of restaurants in Microsoft Excel format. The list contains permit number, facility name, address, phone number, score, inspection date, and a number of critical violations. More detailed information is available in the food inspection reports.

Since the MCDH staff does not have access to ArcGIS Desktop, we decided to make an XY event layer from the spreadsheet. Key fields are longitude and latitude obtained from geocoding if the restaurant has a valid address. If the restaurant has a missing or invalid address, the staff manually had to acquire longitude and latitude using Google Maps. The other important field is a URL to the food inspection reports stored on the server.

Both the spreadsheet (exported to csv format) and PDF reports are shared with the WIU GIS Center through Dropbox. A batch file allows us to update all files automatically.

Web Map Application

An XY event layer from the spreadsheet is published through ArcGIS Server. Open source software called the Configurable Map Viewer (CMV)ⁱⁱ allows us to design and customize a web map application without programming. The CMV

is similar to a compiled version of ArcGIS Viewer for Flex or Silverlight but based on ArcGIS API for JavaScript which is compatible with mobile devices such as smartphones and tablets.

The author configured a template used for other web map applications which includes standard widgets and basemaps. This website should be as simple as possible in order for people with little or no GIS experience to feel comfortable using it. After reading and agreeing with a disclaimer, people can access the map. As a legend indicates, blue points are food facilities which passed most recent inspection. Yellow points are those pending follow-up inspection, and red points are those closed due to the severity of critical violations.

In addition to switching basemaps and adding bookmarks, a key function is Find. People can type facility name and search on the map. Facility name does not have to be exact, and the widget can find all facilities containing characters entered. Selecting the result zooms the map to an appropriate extent. Each facility is identifiable, and the food inspection report is available by clicking "More Info" in the attribute table.

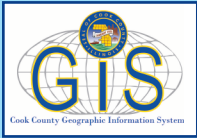
Conclusions

The MDHC announced Dine Smart Web Map Applicationⁱⁱⁱ to the mass media in July 2015. It is now easier for the public to find restaurants in McDonough County and view the food inspection reports before visiting. There have been over 1,500 hits to the website since launched, and it recorded 470 hits on the day when one of the restaurants closed due to the severity of critical violation. According to the Internet search by the MCDH staff, Dine Smart is the only web map application relating food inspections in the Midwest.

<http://www.mchdept.com/EnvironmentalHealth/Food%20Scores/FoodScoresnew.html>

ⁱⁱ <https://github.com/cmv/cmv-app>

ⁱⁱⁱ <http://gis.wiu.edu/js/health>



Free Customizable JavaScript Web Mapping Application

Cook County GIS has had great success using the Configurable Map Viewer (CMV) for web map applications

David Arfa

312-603-1362, david.arfa@cookcountyil.gov
Cook County GIS Department

Configurable Map Viewer (CMV) is a free JavaScript application template, [available on GitHub](#), which consumes ArcServer map services to create easy-to-use internet based interactive mapping applications. Cook County GIS has customized the Configurable Map Viewer for numerous mapping applications for a variety of Cook County Agencies. CMV has a flexible design that is desktop and mobile device friendly.

Cook County GIS has used the CMV template for public facing applications for the Cook County Clerk, Cook County Sheriff, the Forest Preserve District of Cook County, and the Department of Transportation and Highways. These mapping applications are the most convenient way to inform the public about services and investments provided by Cook County. For example, the [Cook County Highway Construction](#) map application depicts the location of all construction projects managed by the Department of Transportation and Highways in an interactive map with links to details about each project.

In collaboration with the Cook County Sheriff, Cook County GIS developed the [Cook County Reentry Assistance Network](#) map application. This application allows Sheriff's office staff, family, or any member of the public to find resources that assist former Cook County jail detainees. The user can type in an address, a distance from that address, select all the types of resources they need, and the application creates a printable PDF list of all the resources within that buffer area. This application began with configuring some of the widgets provided in the CMV like the Legend, Print, Directions, and Google Street View widgets. Then further development was done to make the buffer selection tool that generates the PDF resource list.

At the Fall ILGISA Conference, Greg Roberts, Wig Ingente, and David Arfa, Senior GIS Analysts for

Cook County GIS, will present the CMV based applications, demonstrate some of the simple configuration options, and explain some of the custom tools.

FOOD FOR THOUGHT... GIS STYLE

- Should the State have a Chief Geographic Information Officer?
- When should we introduce geospatial technology in our schools, 4th grade, 8th grade, 12th grade, junior college or university?
- Should geospatial technology be required in 21st century education programs?
- Did you know that Cook County has captured nearly 11,000 municipal boundary transactions, dating back to the 1830's?
- GIS... Is it Geographic or Geographical or Geospatial?

Keep the conversation going on the ILGISA Professional Network (IPN) at <http://www.ilgisa.org/ilgisa-professional-network-ipn.html>

COMING SOON... WEBINARS!

Share your current research or best practices in GIS with other colleagues throughout the State of Illinois with the new webinar series from ILGISA.

Please submit your webinar for consideration at

<http://www.createsurvey.com/c/82138-cPQc7T/>

GIS Goes Mainstream: Kaskaskia College Uses a National Science Foundation Grant to Embed GIS Courses Across Curriculum

Kaskaskia College has expanded the perception of geospatial technology course as specialized curriculum, and now has shifted the courses into existing programs as required or specialized options in drafting, IT, and law enforcement programs.



Dr. Mike Rudibaugh

mike.rudibaugh@gmail.com

National Science Foundation ATE Project ,
Geospatial Advantage, Director at Kaskaskia College

Laying the Framework

Kaskaskia College in 2013 received the institution's first National Science Foundation (NSF) grant to explore the expansion of geospatial courses, certificates, and programs across the college's curriculum. Evidence indicates from proposal research that a number of employers and industries were rapidly expanding or using more geospatial technology in the region. These findings provided key justification within the proposal to justify funding the proposal with growing regional work force demands. The National Science Foundation Advanced Technical Education Program funded a small grant to Kaskaskia College in 2013 to meet the following grant objectives:

- Establish Certificate/Associate Degree Program in GST;
- Provide GST field internships with regional employers;
- Engage and create Geospatial Technology Regional Advisory Board;
- Incorporate GST into STEM programs at KC and regional high schools;
- Conduct outreach events.

Findings

Early curriculum efforts and work with local employers indicate needs for full-time GIS professionals was minimal, however, many fields and occupations were using geospatial technology as part of their jobs in the utility, agriculture, information technology, drafting, and law enforcement? These results were consistent

with prior research on GIS jobs and technicians using a tiered internship model for meeting emerging jobs and occupations leveraging geospatial technology (Kopteva, Arkowski and Craft 2014). Many industries are needing a basic level technicians with basic or core skills; whereas, the need with full-blown GIS professionals with a formal degree or certificate was in less demand for current graduates.

Early program designs used nationally vetted workforce models from the National Science Foundation, GeoTech Center, to create a six course (18-hour) sequence of classes using the Center's model courses (<http://www.geotechcenter.org/>). This curriculum sequence was capped by a program summary experience with a GIS Internship. Findings from counselors, students, and GIS Advisory Board Members suggested that the highlight of the program, which was a paid internship class, was not going to work as most students were never going to complete five courses needed to reach this capstone experience. In addition, many students likely to take or be interested in the program were majors in other fields using GIS like agriculture, information technology and law enforcement. These students simply did not have the time or resources to add such a large academic credential into their academic schedule.

Tiered Internship and Mini-Certificates

These findings pointed the grant team to create geospatial programs to fast track student into work experiences and to assist students needing a smaller core set of GIS skills within a GIS Certificate credential. Research findings from past geospatial programs indicated some success with improving program enrollments and retention with developing tiered internship and curriculum models for students (Kopteva, Arkowski and Craft 2014). Simply put, evidence indicates geospatial technology was more likely to meet student needs as an enabling technology add-on credential to existing programs increasingly using geospatial technology at Kaskaskia College.

Moving Beyond Geospatial Technology as "Neat" or "Cool" Courses

Many students hear from counselors and teachers how geospatial technology courses are important; however, they often meet no specific program or degree requirements outside of GIS specific degrees or certificates. With limited awareness of students with geospatial and no other programs formally integrating geospatial technology into technology programs results in many programs with low headcounts. Using Kaskaskia College's NSF grant and connections with local employers led the college to engage counselors, college faculty, and GIS Advisory Board to plan how formal geospatial integration could occur within the institution. Could, in theory, geospatial courses become required to meet program and graduation requirements across the curriculum? After a series of meetings the clear answer to best serve students was yes to this question. The following actions summarize the work done to move and integrate geospatial technology across the institution's curriculum:

- Add the College's first geospatial course, Mapping your Digital World, to meet graduation requirement for all students meeting global awareness requirements within the College's curriculum as an option among four to five other classes;
- The creation of three mini-certificate options using two to three geospatial courses to assist students with adding geospatial credentials into existing programs. These smaller certificate options are listed below:

- o GIS Essentials Certificate;
- o Geospatial Essentials in Criminal Justice;
- o Geospatial Essentials in Drafting.

All of these shorter certificates included the college's first geospatial course, Mapping you Digital World, and a shorter less extensive field experience course titled GIS Work Experience. The impact, in theory, is to widen the net of students coming into contact with geospatial technology courses, and to also introduce them to the geospatial workforce faster. These actions and grant movements are happening in real-time for the Fall 2016 semester. The grant team has no results or early indications of how these actions will work, however, early indicators suggest enrollments in the Mapping you Digital World class will rapidly increase as students from multiple occupational programs will now be required to take geospatial courses. These actions do indicate a movement towards geospatial technology becoming institutionalized within a college's programming and truly becoming part of the curriculum that students are required to take within a 21st Century higher education program. The grant team hopes to publish future articles on findings and results relating to program enrollments, retention, and overall student/employer experiences with the geospatial certificates at the institution. For more information on Kaskaskia College's Geospatial Technology Program please contact Dr. Mike Rudibaugh at 2172345244 or mike.rudibaugh@gmail.com.

Acknowledgements

The author would like to thank the National Science Foundation Advanced Technical Education Program for funding Kaskaskia College's proposal, Geospatial Advantage, DUE# 1304531.

References

Irina A. Kopteva, Donna Arkowski & Elaine L. Craft (2014): Tiered Internship

Model for Undergraduate Students in Geospatial Science and Technology, Community College Journal of Research and Practice, DOI: [10.1080/10668926.2013.821960](https://doi.org/10.1080/10668926.2013.821960)



DuPage County's Citizen Reporter app Keeps Everyone in the Loop

Ryan Nosek

ryan.nosek@dupageco.org, 630-407-5019

Senior GIS Analyst, DuPage County GIS

Starting in March 2016, DuPage County released its Citizen Reporter app to the public, allowing for residents in DuPage to report Waterway issues such as blockages, water quality, erosion, and illegal dumping, directly to the County using a mobile friendly web app.

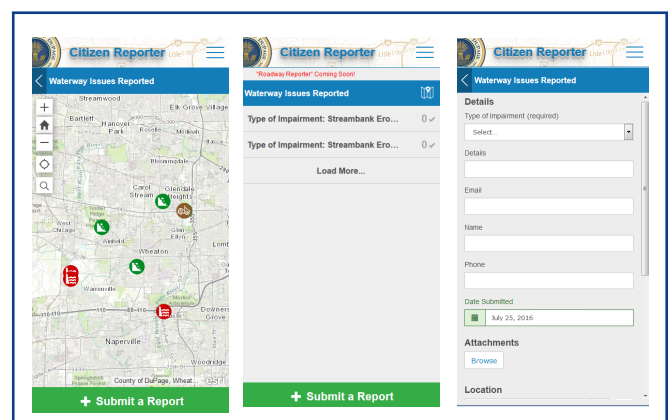
Esri's Crowdsource Reporter is a configurable gallery application template that allows users to submit problems or observations they see in the community, to a responsible organization. While an organization can quickly get started with Crowdsource Reporter by using their ArcGIS Online site to host both the feature services and the application itself, there are certain benefits to using an onsite ArcGIS Server and web host, especially when it is necessary to coordinate with other Departments and Programs that will be responsible for responding to reported incidents. This is especially true when setting up Crowdsource Reporter's companion application – the Crowdsource Manager app, which is also a configurable gallery application template.

Crowdsource Reporter and Crowdsource Manager app's provide an organization a great foundation for interfacing with the public. The user interface for the Reporter app is mobile friendly, will ge-locate users so they can submit issues where they stand, and once configured, will allow users to securely log-in to the app using social media accounts such as Twitter, Google, Facebook and even ArcGIS Online. If users choose to authenticate, they can keep track of the issues they submit and can check back to see if/when their issue has been addressed. This functionality, however, comes with great responsibility to the organization that chooses to make this app available to the public. Addressing issues in a timely manner, or even just being aware that issues are being submitted, then become very important considerations for the responsible parties involved. How often should Staff check

the Manager app for new issues? Can they be notified as new issues get submitted? How can we notify users when their submitted issue has been addressed?

Notifications and triggers are a part of the Crowdsource Reporter and Manager app workflow that goes unaddressed by simply using the out-of-the-box functionality that Esri provides. To address this need, DuPage County GIS came up with a Notification System of its own that extends the ArcGIS Platform and automates the process of checking for new issues and sending notice to Management staff, assigning jurisdictions and sending email to the appropriate entity, and sending notifications back to end users whenever their submitted issues are addressed by the County.

The success of the Stormwater Program's "Waterway Reporter" project has led to interest by other Departments at the County to get onboard with the County's Citizen Reporter app. Later this year, the County hopes to release the Roadway Reporter, which will allow Citizen's to report Road issues such as potholes, pavement conditions, flooding, tree trimming, or animal/debris pickup, and issues related to signage or traffic signals such as flashing lights, outages, broken or missing signs, and more.





Census LUCA is Coming! Will you be ready?

Review Your Jurisdictional Boundary during 2017 Boundary and Annexation Survey to Ensure Full Participation in the Local Update of Census Addresses (LUCA) Operation

Craig Best

Craig.Duane.Best@census.gov
US Census Bureau

The 2020 Census is still four years away, but you can act now to help ensure your boundaries are accurate for the upcoming LUCA Operation.

The 2020 Local Update of Census Addresses (LUCA) Operation, as mandated by the Census Address List Improvement Act of 1994 (Public Law 103-430, provides the only opportunity for tribal, local, and state governments to review the U.S. Census Bureau's residential address list prior to the 2020 Census. The Census Bureau relies on a complete and accurate address list to reach every living quarters and associated population for inclusion in the census. Your LUCA participation can help ensure an accurate count for your jurisdiction.

The primary purpose of the decennial census is to apportion the seats in the U.S. House of Representatives. However, over 1,000 federal programs utilize census data to allocate monies to tribal, local, and state governments. Census data support grant applications for funding community and regional development programs and projects, and can also help your community plan for future needs.

The 2020 LUCA Operation maps and address list provided by the Census Bureau are based on your jurisdiction's boundaries, as shown in the Census Bureau's MAF/TIGER System. Under the provisions of Public Law 103-430, LUCA participants may only view addresses within their jurisdictional boundaries. In order to ensure that you receive the full address list for your jurisdiction, it is critical that you review your boundaries during the 2017 Boundary and Annexation Survey (BAS) program, making any boundary updates and corrections as needed. This is the best opportunity for boundary updates prior to the creation of the LUCA materials, scheduled for delivery to participants in early 2018.

The 2017 BAS is not the only opportunity for boundary updates prior to the 2020 Census. The Boundary and Annexation Survey occurs annually. The Census Bureau will also institute the Boundary Validation Program prior to 2020 Census data tabulation. More information regarding the Boundary and Annexation Survey is available on the Census Bureau's website at <http://www.census.gov/geo/partnerships/bas.html>.

The LUCA Operation highlights include:

- Invited governments designate a LUCA liaison to review the portion of the Census address list covering their area of jurisdiction according to the boundaries the Census Bureau has on file. The LUCA liaison is subject to the same confidentiality requirements as census workers, prohibiting the disclosure of census information. The address list is confidential under Title 13 U.S.C. and participants must review security guidelines and sign a confidentiality agreement promising to protect the confidentiality of the addresses.
- The Census Bureau sends the designated LUCA liaison the participation materials.
- The LUCA liaison can add new addresses, delete non-existing addresses, and correct address information to improve the Census address list.
- The Census Bureau will verify suggested address updates prior to inclusion in the 2020 Census address universe.

Tentative Schedule:

- 2017 BAS: Jan 2017
- LUCA Operation Invitation: Jul 2017
- Materials Available for Review: Feb 2018
- LUCA Feedback Provided: Aug 2019

For more information, contact Craig Best, Geographer, at craig.duane.best@census.gov.



ILGISA Program Committee Update

A look back at our Regional Meetings and a preview of the Annual Conference in October

Justin Nettleton

jnettleton@ilgisa.org

ILGISA Board Director, Program Committee Chair

It has been a very busy and exciting year so far for the Program Committee. The 20+ member committee has already successfully planned and held four Regional Meetings throughout the state, with one more planned in November. The Program Committee has also been working hard on putting together this year's Annual Conference to be held October 17th-19th at the Hilton Lisle/Naperville. Keep up with all ILGISA events by visiting the website at www.ilgisa.org/events.

REGIONAL MEETING RECAP

Our first Regional Meeting of the year was ILGISA's first trip to the Bloomington/Normal area in some time. The event was held on February 22nd at Illinois State University and was a huge success with close to 70 attendees. The event included presentations, careers panel and a student poster competition.



The second Regional Meeting was a return visit to Western Illinois University in Macomb, IL. The March 23rd meeting was a great day of presentations and lightning talks. This event drew 35 attendees from the public and private sector.



DePaul University was also a repeat host and held the third Regional Meeting in 2016 on April, 22nd in Downtown Chicago. The meeting broke the record for highest attended Regional Meeting with 103 attendees. In conjunction with the Regional Meeting, ILGISA, HERE and the Geographic Society of Chicago sponsored a Student Symposium Poster Competition. First and second place received a cash prize. The day concluded with a social hour. ILGISA has already agreed to return to DePaul University for a Regional Meeting in 2017!



On July 28th, Kaskaskia College hosted a FREE regional event in Centralia, Illinois with a theme of "Big Data and Local Decisions". Ed Donaldson of the National Geospatial Intelligence Agency was the keynote for this event.



UPCOMING REGIONAL EVENTS!

This November the University of Illinois – Champaign will be hosting their annual GIS Day event that ILGISA will be co-sponsoring. In past years this event has drawn hundreds of people from throughout Illinois to celebrate GIS Day. More information on this event will be available on the ILGISA website as the event draws closer.

ILGISA ANNUAL CONFERENCE

October 17-19, 2016
Hilton Lisle/Naperville
Lisle, IL



Keynote Speakers

Tuesday Keynote Speaker: Charlie Catlett
Senior Computer Scientist
Argonne National Laboratory

Wednesday Plenary Speaker: Scott Oppmann
Local Government Project Manager/
Software Solutions Manager
ESRI

Why Should I Attend?

- ESRI, Two Day, Hands On, Instructor Lead Training.
- Educational Presentations on the new FAA Drone Regulations, Field Data Collection Methods, LiDAR, Web Mapping, Law Enforcement Mapping and much more!
- Workshops on ArcGIS Online, QGIS, Python, Surveying and a GISP Exam Prep Course.
- ESRI Hands On Learning Lab featuring their latest apps and software.
- Jobs Board
- Social Events
 - o Back by popular demand, Monday Night Trivia
 - o Tuesday Night Networking Reception with door prizes!

For more information on this year's Annual ILGISA conference, visit the website. <http://www.ilgisa.org/annual-conference.html>

Ending

I want to thank all of the volunteers who sat on the Program Committee and the host of our Regional Meetings. These events would not be possible without your help and hospitality.

If you have any questions about this year's Annual Conference or Regional Meetings, or you want to join the Program Committee, email Justin Nettleton at jnettleton@ilgisa.org.

FOLLOW ILGISA ON SOCIAL MEDIA

To stay up to date on ILGISA happenings, make sure to follow us on social media!

[Facebook](#)

[Twitter](#)

[LinkedIn](#)

[Instagram](#)

ILGISA 2016 Conference

Keynote Speaker



Charlie Catlett
Senior Computer Scientist,
Argonne National Laboratory

Register at

<http://web.ilgisa.org/events/ILGISA-Annual-Conference-2325/details>

Information at

<http://www.ilgisa.org/annual-conference-agenda.html>

Monday Workshops

Bridging the surveyed gap: How land surveying data works with GIS (Full-day)

Todd Horton and Kory Allred will guide you through: an overview of land surveying terms, use of total stations and GPS, accuracy and precision assessment, and finish with a round-table discussion.

Is Truly Understanding ArcGIS Online Possible? (Half-day AM)

If it hasn't already, ArcGIS Online will affect all GIS users in one way or another. Micah Williamson will cover some best practices and help you add ArcGIS Online to your work product.

Getting Started with QGIS (Half-day AM)

Barry J Kronenfeld will introduce Quantum GIS (QGIS), a completely free and highly capable open source geographic information system to you. He will cover: map design, editing, geo-processing, relational databases, as well as python scripting.

Introduction to Python for ArcGIS (Half-day AM)

Designed for GIS'ers who have little to no experience using the Python programming language, James Whitacre will walk us through: core Python programming concepts, ArcPy site package for ArcGIS, working with geospatial data using Python and ArcPy, simple data management and geo-processing tasks. You will need your computer and PyScripter v. 2.6.0 (32-bit version) as well as ArcGIS 10.2+ for Desktop (Standard or Advanced).

GISP 2.0: Putting GIS to the Test (Half-day PM)

Nancy J. Obermeyer discusses the evolution of certification for GIS Professionals by the GIS Certification Institute, paying particular attention to the recently introduced certification exam.

ILGISA 2016 Conference

Session List

Advanced Python for ArcGIS (Half-day PM)

James Whitacre continues with advanced work with the ArcPy site package for ArcGIS, data management and geo-processing. He will help you build and share stand-alone Python script tools for automation. He'll share tips and tricks for valid script syntax and error handling. You will need your computer and PyScripter v. 2.6.0 (32-bit version) as well as ArcGIS 10.2+ for Desktop (Standard or Advanced). Urbana-Champaign.

Training Opportunities

ESRI Leads 2 Days of Training, Introducing ArcGIS Pro

Besides covering the essentials like terminology ESRI's staff will lead enabling learning objectives: create an ArcGIS Pro project and assign tasks, import MXD files and work with both local and online data, edit 2D and 3D data, perform geo-processing and analysis tasks create 3D data and 3D scenes, and convert a 2D map to a 3D scene, create and share multiple layouts from a single map. ArcGIS Essential Workflows or equivalent knowledge is a prerequisite.

ESRI Provides a Self-Paced Hands-on-Lab

This lab lets you may explore software offerings and train yourself on some 22 ArcGIS 10.3 topics. ESRI instructors will be present to answer your questions and guide you to the next topic.

Tuesday Sessions (Alphabetical Order)

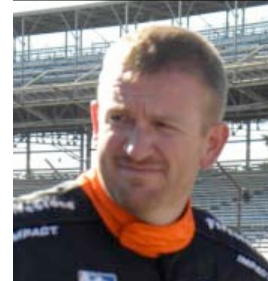
- Airborne Geiger Mode LiDAR – Latest Advancements in Remote Sensing Technology
- Apps, Apps and More Apps - Making the most of your GIS investment
- ArcGIS Online at Logan Co
- ArcGIS Online vs. ArcMap: Comparing the Geoprocessing from Three Mini Case Studies
- ArcGIS Server Security
- Building a Stream Service from a data feed
- Citizen Reporter for DuPage County
- Deployment techniques of Oblique Imagery
- Essence of Project Management
- From Mapping to Mugshot: Jaworowski Armed Robbery Analysis
- GIS Cloud Solutions for GPS Data Collection
- High Accuracy Data Collection with Collector for ArcGIS
- ILGISA - The Road Ahead
- Illinois Airborne LiDAR Data: What Will It Take to Cover the State?
- Mapping Good Hope Cemetery
- Moving towards automation: Extraction of polygon features from point clouds
- Naperville Asset Management Review
- Project Management - The Basics
- Public Safety - Statewide Collaborative Data Sharing
- The Two Sides of the Funding Equation
- Using Web Maps to Measure the Development of Global Scale Cognitive Maps
- Utilizing web GIS to support incident response - A Federal Perspective
- Web GIS Portals - Portal for ArcGIS and ArcGIS Online

ILGISA 2016 Conference

Wednesday Sessions (Alphabetical Order)

- A GIS-Based Flood Risk Assessment for the City of Rockford
- A Study of the Usage Potential of a Proposed Expanded Commuter Rail Station at Chicago State University
- ArcGIS for Land Records
- Building GIS Applications from a Pre-Established Foundation
- Cloud Collaboration in the Interest of Nature
- Cook County Municipal Incorporation Inventory
- Fast field data collection and no maps required?
- FirstNet - Dedicated Data Communications in Illinois
- Flying your Unmanned Aircraft - Safely and Legally
- GIS at Fermilab
- GIS Enhanced Field Data Collection
- GIS Field Applications- City of Joliet
- How to customize Configurable Map Viewer
- Hybrid LiDAR for Positive Train Control (PTC)
- Law Enforcement's Cell Phone Analysis Using the ArcGIS Cell Phone Analysis Toolkit
- NG 9-1-1 GIS
- Providing Workflow Efficiencies through ArcGIS Collector and Web App Builder.
- Working Together: GIS in Emergency Operations

Plenary Speaker



Scott Oppmann
Local Government
Project Manager,
Software Solutions Division Esri

Become a Member at

<https://illinoisgisilassoc.wliinc16.com/join-us/application.aspx>

Conference Location at

<http://www.ilgisa.org/annual-conference-hotel-information.html>



ILGISA Outreach Committee Update

Extending GeoCollaboration through web development, social media, and publications such as GIS Notes.

Amber Knapp, GISP
 amber.knapp@cookcountyil.gov
 Outreach Committee Chair

What does a new member need to know about your office or committee?

The Outreach committee is an innovative group of geospatial professionals who communicate the mission and vision of ILGISA to the geospatial community at large. We are constantly looking for new inventive ways to leverage technology and social media to spread the word of GIS. This committee is passionate about elevating the GIS community through collaboration and communication.

How does a new member volunteer for your committee?

We are always looking for enthusiastic and creative members. Please email Amber Knapp the Outreach Chair at aknapp@ilgisa.org to join our team!

Where does a new member go for more personalized information?

For more information regarding ILGISA and the Outreach Committee please visit the following places:

<http://www.ilgisa.org/>

Facebook

Twitter

LinkedIn

What part of you and your work is included in this package?

The Outreach Committee works on a Social Media plan to highlight the work of geospatial professionals to enable collaboration. It is our mission to provide resources in as many places as possible to share geospatial information.

What are the features and benefits of your ILGISA work?

Through social media outlets such as Facebook, Twitter, LinkedIn and now Instagram we have the privilege of sharing geospatial tips, accomplishments, applications, geocool maps and events with our Illinois GIS community. In addition to these, we manage the ILGISA website that is loaded with geospatial information along with our brand new GIS Notes magazine that you are currently reading!

Why should the new member care about what you do?

As a member you should work closely with the Outreach Committee to share your work and collaborate with our GIS community. Many of your events and accomplishments are useful to your fellow members and provide inspiration. Our goal in GIS is to collaborate, innovate and elevate our communities through spatially enabling data. Your work is what empowers positive change.



ILGISA Membership Committee Update

Looking out for our members best interests!

Eric Venden (Chair)
 evenden@ilgisa.org
 Village of Gurnee

Many of you are familiar with the activities of the Membership Committee through the yearly Map Competition associated with our Annual Conference, but the Membership Committee's function is a bit larger than that. The Committee's purpose is to promote and enhance the benefits of ILGISA membership, increase the visibility of ILGISA, and to assist in connecting the various GIS communities throughout Illinois. This Committee is also tasked with focusing on increasing membership involvement and numbers, including student outreach.

As I write this, the current member count for ILGISA is 544, which is higher than at any point last year. I am confident that this is the result of individuals seeing value in their ILGISA membership. I encourage each of you to take advantage of fellow ILGISA member's knowledge by visiting the ILGISA Professional Network (IPN) section of our website (<http://www.ilgisa.org/ilgisa-professional-network-ipn.html>). The IPN was created based on input from a 2013 member survey and is currently comprised of the Expert Directory and Discussion Forums. The Expert Directory provides a means to connect with other ILGISA members that have specific geospatial skill sets and the Discussion Forums allows users to pose questions or issues for other ILGISA members to answer.

This year I have had eight ILGISA members volunteering their time as we work on several initiatives. Our Committee has accomplished several of these initiatives thus far, which are detailed below and I hope to report to you at this fall's Conference that we have completed or made significant progress on several others. This year's Map Competition adds an additional category to the "traditional" paper map competition. We have created a Web Mapping category that will allow ILGISA members to test their application development skills. We have established a

partnership with xyHt magazine that provides advertising for ILGISA events and complimentary subscriptions to ILGISA members.

Our Committee has also established a website advertising policy for vendor sponsors at the Annual Conference as a means to increase the visibility of our sponsors and generate revenue for our organization.

The Membership Committee also put forth a proposal which was approved by the ILGISA Board to allow members employed by for-profit organizations to be on the ILGISA Board of Directors. The details of this are being worked out through by-law changes by the Governance Committee and will be brought before the membership for final approval.

Lastly, the Committee sent out a survey to all members that will guide the Membership Committee and ILGISA as a whole, on future activities and goals.

For the remainder of 2016, the Committee will focus on establishing a roadmap for the creation of a statewide coordination system for spatial information to include data standards and sharing.

Please contact me (evenden@ilgisa.org) for more information on the Membership Committee's activities or if you are interested in volunteering to serve on the Committee.

CHECK OUT ILGISA'S JOB CENTER!

The ILGISA Job Center is a resource for geospatial employers and professionals. The Jobs Center provides a listing of available geospatial jobs, internship opportunities, and resumes of geospatial professionals. Check it out today at <http://www.ilgisa.org/job-center.html>!



ILGISA Governance Committee Update

Andrew Vitale
 avitale@ilgisa.org
 Governance Committee Chairman

Your Governance Committee has been hard at work all year on a number of issues relevant to the short and long term health of the Association. Specifically, we are working on issues related to the Associations general policies and procedures, Award winners and Board candidate nominees, and of course, changes to our bylaws.

We have re-examined the Policies and Procedures document which governs general policies and standard operating procedures for all Association Committees. We have identified a number of areas that needed further clarification, particularly those relating to the reimbursement of expenses, the scheduling of Association financial audits and reviews. We also revamped the Policies and Procedures document to more accurately reflect the restructuring of Association Committees which took place back in 2014 / 2015.

The Governance Committee also took up the task of re-examining our bylaws. We came up with a few areas where change was suggested – including the eligibility of certain members to serve on the Board and the procedures to follow for discipline and vacancies on the Board. While challenging, I should congratulate every member of the Governance Committee for their thoughtful participation and careful consideration when editing these bylaws. They were constantly evaluating the current needs of the Association and still took into consideration the long term effects and possibilities of each suggested change. I think our members will be pleased with the outcome of their work.

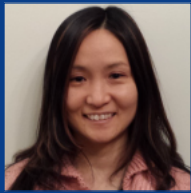
Lastly, Governance completed the task of finding and selecting qualified candidates to serve on the Association Board of Directors, as well as selecting and vetting our group of award winners.

I am proud and excited to say we have a full slate of qualified GIS professionals and students from across the state that were nominated and selected to receive awards this year. Everyone on the Governance Committee was gratified and impressed at the quality of the work nominated, but also that several members took the time to nominate their peers and colleagues as well. Recognizing the good work and contributions of others is one of the best ways to keep the Association strong and growing.

HISTORIC EVENT INFORMATION NOW AVAILABLE

ILGISA has a proud history of serving GIS practitioners throughout Illinois and the Midwest by providing professional development and education opportunities through the Annual Conference and Regional Meetings.

Past event materials including agendas and presentations are now available at <http://www.ilgisa.org/past-events.html>



ILGISA Finance Committee Update

Heena Lee
 hlee@ilgisa.org
 Finance Committee Chair

- Committee Name: Finance Committee
- What does a new member need to know about your office or committee?

The key items are -

- o Finance Committee prepares and presents an annual budget to the Board for approval.
- o Reviews annual budget, monthly revenue & expense, and memberships.
- o Finance Committee members consist of Committee Chair, President, President Elect, Past President, Executive Director, and Association Manager
- How does a new member volunteer for your committee?
 - o Send email to contact@ilgisa.org
- Where does a new member go for more personalized information?
 Go to website - <http://www.ilgisa.org/committees.html> and contact Finance Committee Chair or send email to contact@ilgisa.org.
- What part of you and your work is included in this package?
 - o Conduct monthly meetings
 - o Provide Committee Meeting Reports to the Board
 - o Attend monthly Board meetings (Committee Chair is usually a Board Member)
 - o Provide annual Finance Report to the members at annual conference
- What are the features and benefits of your ILGISA work?
 - o Personally, I have learned many different functions and gained various perspectives while working inside of ILGISA. For

example, as a GIS professional, I would not know how Financial Statement and Balance Sheet work. I would not need to consider the cash flow for my daily work. As a Finance Committee Chair for ILGISA, I have obtained knowledge of financial statement, revenues, the annual budget, etc. Do I need Finance knowledge to do my work? Maybe not. However, I understand more how finance system works and can connect to the people working in Finance better than ever. I think all knowledge is related. The understanding and experience in Finance Committee will assist me in life.

- o I am connected with more people than ever since I have been working for ILGISA. There are diverse volunteers from different organizations at ILGISA. Everybody is unique and everybody's experience is unique. Everybody's skills; the way of solving problems, the way of making decisions, the way of answering questions are totally different. Luckily, I have interacted with many different people who have different experiences. It helped me to grow and see problems and issues in different perspectives.
- o If you would like to gain experience that you lack in your daily work, volunteer at ILGISA! Based on your interests and skills, there are many different types of Committees that you can pick from. ILGISA is a place for training and developing your skills while you help others!
- Why should the new member care about what you do?
 - o If you are new member, you probably are new at GIS in Illinois. If you would like to

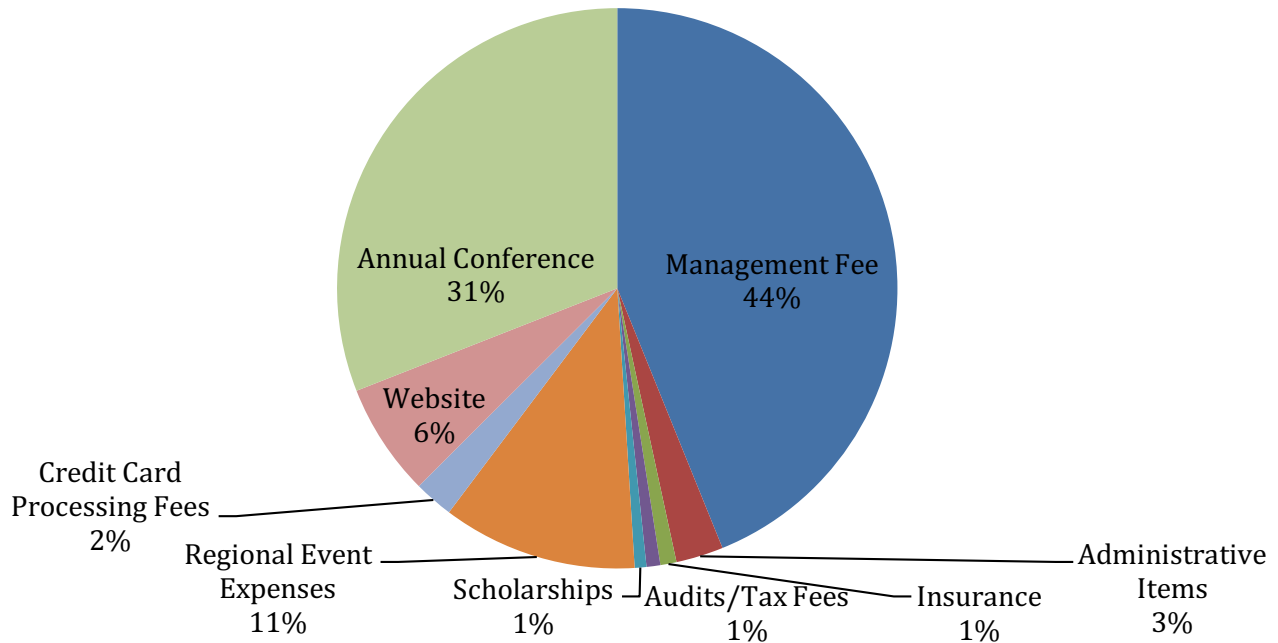
know GIS in Illinois, you should contact ILGISA. ILGISA is the only consolidated GIS association in Illinois. You can contact any Committee member or Board member at ILGISA to know anything related to GIS in Illinois.

- o As a new member, you probably have fresh insights. You might easily identify unfamiliar things and issues. You might have ideas of better way of doing things. You need to care and need to speak up on those. Because soon you might become tunnel-visioned. ILGISA constantly needs fresh visions and perspectives to lead GIS professionals in Illinois for 21st Century.

GIS NOTES ADVERTISEMENT OPTIONS	
Size	Cost
Full Page	\$500
Half Page	\$300
Quarter Page	\$200
Business Card	\$100

ILGISA Yearly Expenses Breakdown

Where do my dues go?





ILGISA Education Committee Update

Wendy Sheppard

wsheppard@ilgisa.org

ILGISA Education Committee Chair

For those who may be unaware, ILGISA's Education Committee is responsible for all educational material available to ILGISA members, both students and professionals. This includes gathering content for all Annual Conference sessions, workshops, Esri trainings, webinars, and other specialized training classes as they see fit throughout the year. The Education Committee is also responsible for actively involving ILGISA's student members and student educators to better familiarize them with the organization. Lastly, the Committee is responsible for the annual awarding of ILGISA's Student Scholarship. So, in short, the Education Committee has been mighty busy so far in 2016!

The main focus in the last few months has been the planning of the Annual Conference. To date, there are over 50 sessions, 6 workshops, and 1 Esri Instructor-Led training event that will take place. The Committee is very excited to be back up in the Chicago-land area for the 2016 Annual Conference, and hopes that all ILGISA members find value in the program they have put together. To view the agenda, visit the ILGISA website at <http://www.ilgisa.org/annual-conference-agenda.html>.

Calling all Students!

The Education Committee is looking for up to 4 student volunteers to assist with the Annual Conference on October 18 & 19 at the Hilton Lisle/Naperville. If you are a current student member (or know someone who is), we ask that you volunteer 4 hours and then attend the conference for the rest of the day for free! Take advantage of this unique networking opportunity! Please email contact@ilgisa.org by October 7th if interested.

Lastly, the Education Committee is in the process of reviewing all scholarship applications. One scholarship in the amount of \$1,000 will be awarded to a recipient at the Annual Conference.

Please contact me (WSheppard@ILGISA.org) if you are interested in joining the Education Committee or have any suggestions for the Education Committee.

COMING SOON... WEBINARS!

Share your current research or best practices in GIS with other colleagues throughout the State of Illinois with the new webinar series from ILGISA.

Please submit your webinar for consideration at
<http://www.createsurvey.com/c/82138-cPQc7T/>

GOLD SPONSOR



Thank You
For Supporting
ILGISA!



SILVER SPONSOR

Thank You



Geocortex® | by Latitude Geographics®

**Williams
Aerial &
Mapping, Inc.**

Professional Photogrammetrists

574-287-2104 www.W-A-M.com

For Supporting ILGISA



MONDAY NIGHT SOCIAL EVENT SPONSOR

Thank you



CLOUDPOINT
GEOGRAPHICS

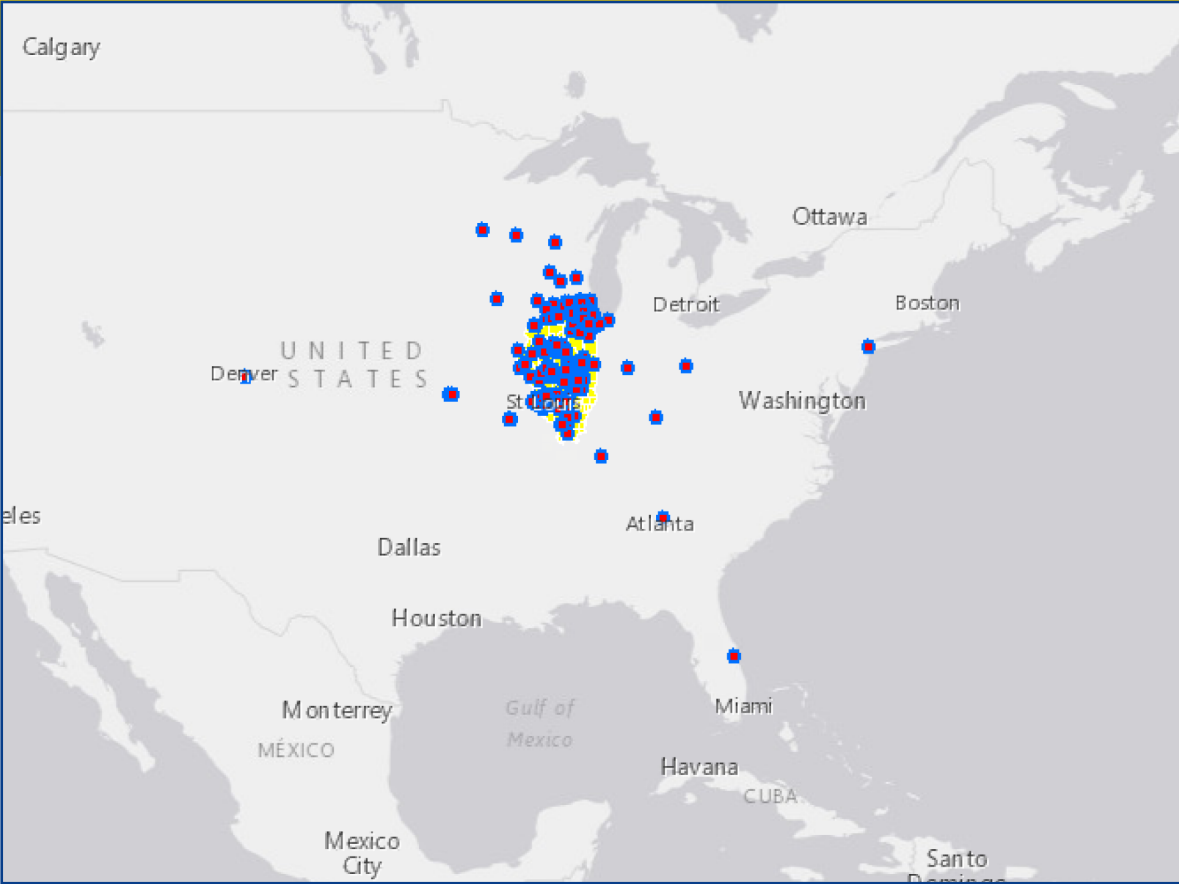
For Supporting ILGISA



KEEPING UP WITH... ILGISA!

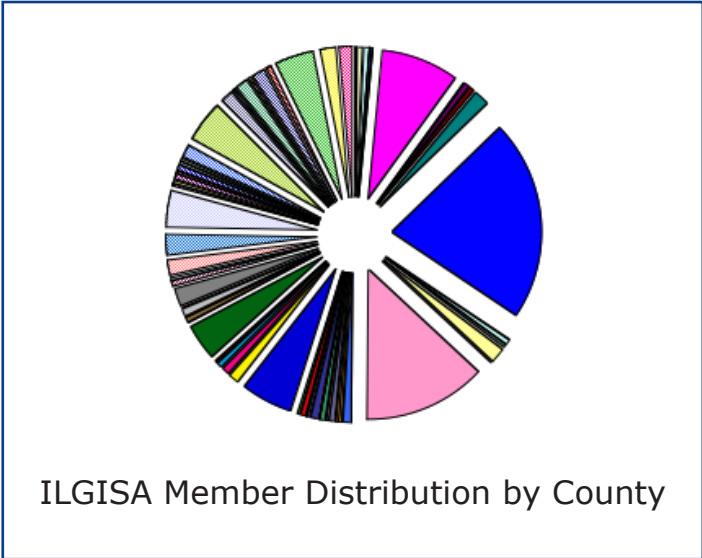
Keep up with all ILGISA events
by visiting the website at
www.ilgisa.org/events.

ILGISA 2016 Membership



Esri, HERE, DeLorme, NGA, USGS | Esri, HERE

Membership list as of July 2016, Image developed with ArcGIS Online.



39 Counties are Without the Benefit of an ILGISA Member