

MMA Executive Committee

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- 1st Year Director - Carla Palmer
- Immediate Past President - Lisa Mendpara

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MMA News



Volume 29 Issue 4

October 2013

Letter from the President

First, I would like to thank you for entrusting me with the leadership of the Missouri Mappers Association for the upcoming year. I look forward with anticipation to what the year holds.

I would also like to thank all of you who are currently serving the Missouri Mappers Association in any capacity. Without you, our organization would fall apart. For those of you not currently serving, I would like to encourage you to become a larger part of your Missouri Mappers. There are many opportunities. Listed below are a few:



- Become involved in a committee. Whether you volunteer to be a chairperson, or simply a committee member, get involved. You can see a complete list of committees along with a list of all committee members and chairs at www.missourimappers.org/committees/ There is something for everyone!
- Add your skill set to a professional body by obtaining the Professional Missouri Mapper designation. More information is available at www.missourimappers.org/professional-missouri-mappers/
- Attend a board meeting. If you aren't free to attend in person, you can attend via conference call. If you are interested, contact any board member to obtain the dial-in procedure.

Remember that your Missouri Mappers Association is what you make it...make it the best it can be!

Respectfully submitted,
Tim Keen
MMA President

SAVE THE DATE!
Missouri Mappers Association
30th Annual Conference
July 22nd – 25th 2014
Country Club Hotel & Spa
Lake Ozark, MO

Annual Meeting Committee Report

The 2014 Missouri Mappers Conference will be held at the Country Club Hotel & Spa in Lake Ozark from July 22nd – 25th. This is a smaller property, so everything (meeting rooms and guest rooms) will all be in one building. The Annual Meeting Committee met on October 23rd via conference call to start making plans. This will be our 30th year, so we are going to try to tie the conference theme into that. We will have breakout sessions again this year, and would also like to include roundtable discussions. As we continue to work towards preparing the agenda, your comments and suggestions are always welcome. Feel free to contact me at lisac@casscounty.com.

Respectfully submitted,
Lisa Mendpara
Annual Meeting Committee Chairperson

Education Committee Report

GIS Training

The Education Committee has been in consultation with Ms. Shannon White, PhD, with the Missouri 4 H Extension Service in Columbia Mo. Shannon was previously with the MU School of Geography. Shannon's specialty is Education and Geographical Information. Shannon's current position is to promote GIS in the 4 H program and youth activities.

Ken Olive has been in discussions with Shannon about training opportunities in basic GIS. In June of 2012 Shannon instructed a three day course in Camden County entitled ArcGIS Driver's Permit. The first day was basic introduction to ArcGIS Desktop 10.0 version. This was basic instruction in the software and how to use the toolbar and various functions of the GIS.

The second and third days were training on a more intermediate and advanced level culminating in the use of Model Builder creating analysis scenarios.

Shannon has agreed to instruct the ArcGIS Driver's Permit program again for the Missouri Mappers Association in conjunction with employees from the MU 4 H Extension Service. The plan is to hold the first training in January 2014 at the MU 4 H Extension Service Office in Columbia Mo. This will be a hands on training experience with computers loaded with the most current ArcGIS Desktop version. The dates are to be set for either the week of January 10 to 14, 2014 or January 21 to 24, 2014. We will need to decide the dates in the immediate future.

Students will have the opportunity to sign up for either one day of Basic GIS training for \$99.00 or all three days for \$300.00. The fee will cover the cost of location, software, computers, training material and instructor. There is a motel approximately 3 blocks from the training site that will be contacted by Shannon to arrange a block of rooms for those who wish to stay overnight.

...continued page 3

Education Committee Report *continued*

For the first course MMA members will be limited to 10 members to attend the course with the remaining seats to be filled by 4 H Extension staff.

The MU 4 H Extension Service has an extensive youth development program and one of the programs is career development. In return for the joint training opportunity, the MU 4 H Extension Service has asked for MMA members to volunteer to give a 10 to 15 minute presentation on the County Assessor's Office or your office of employment talking about the office's functions and responsibilities, job opportunities, and how your office uses "GIS". I believe this is a small request from an excellent program for youth and a great opportunity for MMA members to promote their field of employment. Please consider volunteering 10 to 15 minutes of time to the 4 H when called on. Also, if possible, you may want to set up a tour of your facility.

If the first course is successful, plans are in place to take the ArcGIS Driver's Permit training course on the road to the four corners of the state on a quarterly basis. More details on this as we progress with this fantastic training opportunity.

Shannon will have a website created that will give all the details about the training and motel. On the website will be a registration area for first come first serve basis. The MU 4 H Extension service will handle all billing and registration. They are prepared to take cash, checks, credit cards, and county/city purchase requisitions for payment and processing.

There was a false start to this program last year, but now the negotiations are coming together. Shannon is a very knowledgeable instructor and sits on many governing boards in the GIS field and sits on the ESRI Education Advisory board.

From my experience with her training courses, they are fun, entertaining, and a real learning opportunity. Camden County Assessor's Office asked Shannon to return earlier this year for a special one day training session with the Assessor's Mapping Department. It was a good training day in how to make a map from scratch with all the things you need to be on the map. The first course may not be at the right time for you or your office, be patient, we will be in an area near you in the near future.

We will send out an email to all member announcing the website and details in the near future.

If you have any questions or comments, please contact:

Ken Olive
Chief Deputy Assessor
Camden County Assessor's Office
Phone: 573-317-3811
Email: ken_olive@camdenmo.org (there is an under score _ mark between the first name and last name in the email).

GISday

November 20, 2013

<http://gisday.com/>

Membership Committee Report

I have mailed out Membership Certificates to all new members along with the Welcome letter from President Tim Kean. I have also mailed out most of the Certificates for all the rest of our current members. The feedback has been positive.

I will be attending the Arkansas Assessor's Conference next month.
I hope to get some more ideas for growing our Membership and to bring back possible workshop ideas.

Erika Hagg

MISSOURI MAPPERS ASSOCIATION ANNUAL MEETING TREASURER'S REPORT October 23, 2013

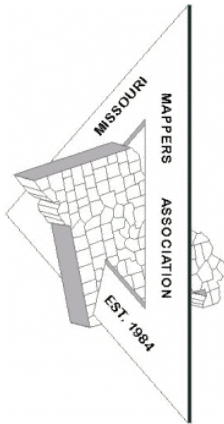
BALANCE as of July 22, 2013		\$22,760.64
RECEIPTS		\$1,985.00
BALANCE + RECEIPTS		\$24,745.64
DISBURSEMENTS		\$12,959.53
ANNUAL MEETING	\$11,905.61	
AWARDS	\$279.36	
POSTAGE	\$0.00	
HISTORICAL	\$0.00	
EDUCATION	\$0.00	
DONATIONS	\$0.00	
ADVERTISING	\$150.38	
MISC. EXPENSES	\$624.18	
MILEAGE	\$0.00	
INFO TECH	\$0.00	
BALANCE as of October 23, 2013		\$11,786.11

(Misc. Expenses: Director of Revenue \$15.00, Mark Duewell \$87.00, Check Charge .50, Embosser & Seal \$74.19, Deluxe Checks Re-Order \$87.91, Hotel for Arkansas Conference \$291.54, Parking for Arkansas Conference \$27.00, Stan Balsman \$41.04)

Publication Committee Report

The Publication Committee needs your input for future newsletters! We have had some awesome articles submitted in the past; everything from current events, educational opportunities and technical articles. The Braggin' Board entries are a nice touch that allows us to get to know each other better. Please keep those coming! If you have written a how-to article you would share, or would like to please send it to me for our Map Talk! feature. It can be beginner to advanced; GIS or pen and ink. Help to make our newsletter something people look forward to reading each quarter! Also I am always looking for help coming up with content so if you would like to volunteer just send me an email (mjohnson@colecounty.org) or give me a call at 573-634-8901.

Melissa Johnson, Publications Chair



**Need to
update your
Aerial Imagery?**



Go to www.flymoimagery.com
for information about the **Missouri State
Wide Imagery Program**, and see how you
may be able to save money on your next flight!

MAPPING EQUIPMENT AVAILABLE!

Stoddard County has the following equipment available that they no longer need:

- I - Diazit Omni 120 Trac Blue Line Machine
- I - Diazit Dart 100 Blue Line Machine
- I - Vacuum Press

If anyone could use these items, contact the Stoddard County Assessor's Office at 573-568-3163.

East Central MMA Chapter Report

The Fourth Annual Southeast Missouri Geographical Information Systems GIS Symposium was held on Wednesday, September 18, 2013 at the Cape Girardeau Career and Technology Center in Cape Girardeau Missouri. The symposium was sponsored by MGISAC, Cape Career and Technology Center and by the East Central Missouri Chapter of the Missouri Mappers Association.

The symposium featured Aaron Addison (Washington University) as the keynote speaker with eight additional speakers, Mark Duewell, Charlie Ellis, Heather Milton, Frank Wideman, Shannon White, Indi Braden, Steve Duke, and Stan Balsman. Vendors that participated included Seiler (Pat Stack), ESRI (Jean Jeanette), Smith & Co (Bill Robinson), Horner & Shifrin (John Gilmore), Surdex, Woolpert (Sam Moffat), Bootheel RPC (Steve Duke), Pictometry, OCE (Don Dillenberger), Southeast Hospital, and East Central Missouri Mappers. Lunch was provided by the Culinary Arts Dept. of the career center.

The symposium was an excellent opportunity to meet and network with others in the GIS field from many different locations around the state. In all seventy nine people attended which is a 32% increase from our past symposiums.

The East Central Missouri held our chapter meeting at the symposium during the hour and a half lunch break. Those in attendance were Richard Kramer, Sarah Anderson, Debbie Evans, Debbie Glastetter, Bob Adams, Charlie Triller, Kelly Ponder, Dr Indi Braden, Jeremy Tanz, Stan Balsman and Frank Wideman. The meeting was called to order by chapter president Richard Kramer, minutes were read and approved. The treasurer report was given by Sarah Anderson and approved. There was no old business and new business included a discussion about including people in other counties in southeast Missouri in our chapter. We also discussed holding our quarterly chapter meetings at the Perry County RPC. Stan Balsman agreed to host the meeting on behalf of the RPC. We then discussed supporting an event held by Dr Indi Braden at the SEMO Univ. campus for GIS DAY. Next meeting will be held on Nov. 20 at SEMO University and the meeting was adjourned.

We wish to thank David Dickey with the CCT, Mark Duewell with MSDIS, MGISAC, MISSOURI MAPPERS ASSOCIATION, and all the chapter members who made the symposium a success this year. Hope to see more members participate in 2014.

Richard E Kramer



Southwest Chapter Report

Our next meeting will be on November 1st at the Lawrence County Judicial Bldg in Mt Vernon. Josie Bock will be teaching an ArcGIS 10.1 class from 10:00-3:00. We have reached out to and invited everyone in our area. We have some chapter members that are planning on bringing an interested guest. We hope to add more members to the chapter as well as to MMA.

Erika Hagg

West Central Chapter Report

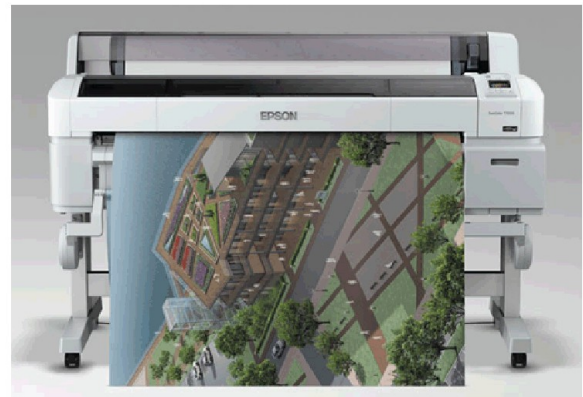
The next meeting will be on November 15th in Sedalia, MO.

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Map Talk!

Take Your Data Mobile: A Guide to Mobile GIS and GPS Technology

By: Ethan Herbek, Municipal Project Supervisor – Midland GIS Solutions

With everything “going mobile” these days, many of us use the latest and greatest mobile devices to simplify our daily lives – manage schedules, pay bills, create weekly grocery lists and have 24/7 access to an endless array of apps aimed at everything from social networking and photography to analyzing the stock market and watching gas prices.

Mobile devices can also play an integral role in our daily lives as mappers and planners, when used appropriately and effectively. As geospatial and GIS technology continues to evolve and encompass the mobile culture we are moving into at full speed, the idea of taking GIS data into the field is not a new concept. There are some real benefits to this! This article will give you a brief look at the different types of Global Positioning System (GPS) technology and how mobile devices can be used for daily mapping, maintenance and data management tasks.

Although it's important to know what your cell phone or mobile device can do to make your life as a mapper a little easier, it is also important to understand what it *can't* do, particularly if you're in the business of managing utility data or land records and recording that data in the field. For example, utilizing a mobile device to manage and maintain utility maps or edit features in the field yields tremendous results in terms of time and cost-saving benefits. However, using an “as-is” mobile device (cell phone, iPad, etc.) without additional GPS software or antennas to actually GPS locate a feature for the purpose of maintaining utility infrastructure is not a practice that is recommended.

All GPS-enabled devices are created equal, right? Although the concept of GPS technology is uniform in thought, the differences between units are vastly different and for good reason. For example, it is important to the integrity of your GIS program to recognize and understand the variances in GPS accuracy tolerances in mobile phones or iPad versus survey grade GPS units.

To simplify this explanation, consider three types of GPS collection technology. Real-Time Kinetic (RTK) or survey-grade receivers are accurate below 1 centimeter (0.4 inches). This technology is ideal for consistently locating utilities such as sewer manholes or water mains. A mapping grade GPS unit ranges in accuracy from 10 centimeters (4 inches) to 1 meter (3.3 feet) and is ideal for projects such as 911 addressing and locating buildings for assessment or county bridges.

For the recreational user, a less expensive, handheld Garmin purchased at your local sporting goods or department store would be perfect for camping, biking or even geocaching. The tolerance on many of those devices, including navigational GPS units for vehicles and cell phones is around 2 ft. or higher in ideal conditions and satellite coverage. These are only average estimations for the recreational GPS units and all devices should indicate average accuracies. It is important to note that the

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Map Talk! *continued*

recreational GPS units, tablets or mobile phones do not have settings in place to prevent the user from collecting “bad” or inaccurate GPS data, as do other devices intended only for data collection.

So which GPS technology is right for you? If you have a sewer main break and need to locate a buried manhole, is a few feet going to make a difference? Absolutely! Do you need to GPS-locate a bridge with centimeter accuracy? That probably isn’t as critical. Although some mobile devices can be adapted with a GPS chip to connect to an external GPS receiver and apps can be downloaded to improve GPS accuracy (check out GPS Cable in the Apple Store), it is best to use the device for what it is intended for. Utilizing your smartphone or tablet in the field with the GPS enabled can also drain the battery quickly and cellular service and canopy coverage will widely affect data collection. Although your cell phone or tablet is not recommended for GPS locating precise points, it is exceptionally convenient to use when updating attributes or taking photographs to upload into your mapping program.

The GIS user with these mobile device capabilities can record manhole inspection data, add attribute information, log maintenance orders for roads and bridges, and maintain addressing data or record street sign reflectivity ratings very effectively. Having a web-based GIS program with mobile capabilities allows authorized users to add, edit and maintain their GIS attribute data from a mobile device in the field, eliminating the tedious step of recording information by hand in the field and then hand entering that data, which is time consuming and can yield mistakes.

Mobile GIS technology is the obvious wave of the future. As this technology continues to develop, more and more applications will become available and the capabilities will also become improved. Throughout this all, however, it remains important to identify and utilize the proper technology for the proper task, to save the user frustration and avoid the need to revisit inaccuracies in data collection later.

About the Author: Ethan Herbek is a Municipal Project Supervisor for Midland GIS Solutions in Maryville, MO. Ethan oversees field data collection, utility inspections, GPS personnel, safety procedures and quality control for all municipal and utility GIS projects for Midland. With nearly 10 years of GIS and GPS experience, Ethan has overseen the GPS collection of tens of thousands of utility features for GIS data integration. He earned his degree in Geography, with a minor in GIS from Northwest Missouri State University.

If you have tips and tricks for mapping or for GIS, comments on articles or suggestions for articles you would like to see please share them for future Map Talk columns! To submit a tip or if there is a specific topic you would like to see, please contact:

Melissa Johnson—mjohnson@colecounty.org or call me at 573-634-8901

MDSIS Report - Mark Duewell, MSDIS Program Manager

September MSDIS Report to the MGISAC – provided October 8th, 2013

1. Virtualization of the MSDIS-Imagery Servers and storage space upgrade:

While still working out a very few of the finer details, it can now be said that while next year's MSDIS may look very similar to users outwardly – the server\storage configuration and overall architecture will be significantly different.

The broad strokes of the plan are the following: There will still be North Node (NN) and Telecom (TC) sites for the public facing servers (usually transparent to users) – they will however be attached to a single iSCSI stack of storage that will triple our storage space. Exact numbers will be forthcoming in future reports. That begs the question of how we're going to back up data. That will occur at our new DR site in Rolla on an identical storage stack and occur automatically. This site will usually be in "dark" mode – data transfers from the primary node in Columbia will be its typical activity. The site will be spun up often enough to insure ensure its functionality in case it is called upon to support a specific event. All servers will finally be virtualized and the OS\application software will be bought up-to-date. Having done this three years ago we know this will keep us very busy for some time in the future.

2. GeoPortal: Adding metadata records for imagery and services to the portal:

More services and data sets have been added (389 recs). Progress on this task will be slow until we have the prerequisite staff hours to throw at what is looking like a very large undertaking – depending on how we approach it. Some work is going on with Bill Burgess (NSGIC) regarding harvesting MSDIS to the GIS Inventory and eventually to Data.Gov. Initial testing went well – over 90% of records harvested in the test. Data file corrections are being made. NAIP 2012 is now slowly becoming discoverable in the geoportal.

3. Broadband "Structures" Project:

Mark Duewell will be presenting to STARRS membership at East-West Gateway on October 17th. Structure project staff will now be 3.5 part-time students with severely curtailed hours due to class schedules and University policies that limit them to 20 hours per week. Progress will be slowed. MARC region is getting final touches and will soon go into our review process before going to MARC. East West Gateway will be next and the final region to digitize. All other RPCs are going into University review.

Progress: We're now at 3,415,591 points as of last Wednesday - and 46,536 footprints completed.

Reminder - MOLiDAR – has been launched. Public comments are always welcome.

The service is available in both LAS: (<http://www.msdis.missouri.edu/data/lidar/download/index.html>)

And DEM form:

<http://www.msdis.missouri.edu/data/lidar/download/modem.html>

Missouri K-12 GIS License 2013 Update

Shannon H. White, PhD, Missouri Geographic Alliance Coordinator and State 4-H Science Specialist

As you may or may not know, there is a statewide GIS license for youth and educators across the state of Missouri. This is a license for ArcGIS desktop and Online tools for all public and private schools, youth serving organizations and homeschool populations. This effort launched last year and is spearheaded by volunteer efforts in the Missouri Geographic Alliance, along with a number of partnership organizations. All information about the license is located at: <http://gis.missouri.org/> and requests by an educator, organization or school district are made through filling out the online request form found on that site.

So far, in Missouri the 2,323 licenses that have been issued will reach 3,765 students in the state. These have been requested mostly by public schools (64%), private schools (28%), and informal/non-formal youth serving organizations (8%), unfortunately we have had no participation by homeschool organizations or homeschool parent requests to date. The majority of the requests have indicated classroom use in science, geography and instructional technology classes. Those requesting the licenses have not been experts in using or teaching with GIS software. Most indicated some (27.3%), a little (27.3%) or no experience (27.3%). The requests have spanned over the K-12 spectrum from elementary to high school aged students with a majority in the middle and high school age ranges.

About the License

Geographic Information System (GIS) software is "critical thinking technology" which allows users to explore and analyze geographic data, good for solving problems. ESRI (Environmental Systems Research Institute, Inc) makes GIS software. The agreement between Esri and the state of Missouri partnership organizations providing access to all of ESRI's GIS software and online instruction for all K-12 schools, districts, staff, students, and formal youth clubs in the state. Esri technology is used by millions in business, government, and agencies large and small, all over the world, in all walks of life. See www.esri.com/industries and www.esri.com/mapmuseum.

The statewide license covers all instructional uses in all K-12 schools (public and non-public), homeschool students, and formal youth clubs. Examples include standard classroom content, career technical education, individual merit badges, group service projects, and so on. The statewide license also covers all administrative uses in all K-12 schools (public and non-public), all school districts (local and intermediate), and formal youth clubs. Examples include school demographic analysis, on-campus facilities management, safety mapping, pupil transportation, district logistics, and so on. Commercial use is strictly prohibited.

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Missouri K-12 GIS License 2013 Update *continued*

The price of the software for K-12 educators, K-12 administrators, and leaders of youth groups is at no cost. There is a required match of the Missouri partner organizations for the K-12 state license which is based roughly on the student FTE, but the total cost is extremely low, in consideration of the available funding for and mission of K-12 education. The current contract period for this initiative is through 31 July 2014. Extensions are negotiable. Questions about the license and appropriate use of the license should be sent to mga@missouri.edu.

The poster for the MAGIC 2014 conference features a background of a faded map. The word "Magic" is written in a large, red, cursive script, followed by "2014" in a bold, black, sans-serif font. Below "Magic" is the MidAmerica GIS Consortium logo, which includes the text "MidAmerica GIS Consortium" and a stylized "GIS" in a red and grey box. To the right of the logo, the text "SAVE THE DATE. MAP YOUR COURSE." is displayed, followed by social media handles "@magicgis" and "facebook.com/magicgis". Below this, a paragraph states: "As the premier conference in the region, MAGIC promotes the advances of GIS and geospatial technologies." A red horizontal band across the middle contains the text "SHORT COURSES | CONCURRENT SESSIONS | EXHIBITS | NETWORKING" in white. Below the band, the location and dates "WESTIN CROWN CENTER • KANSAS CITY, MO • APRIL 27 - MAY 1 • WWW.MAGICGIS.ORG" are listed. At the bottom, contact information for the MAGIC Symposium Chair, Tony Spicci, and a planner, Jamie, is provided.

Magic 2014

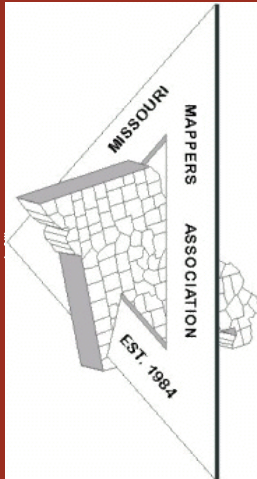
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As the premier conference in the region, MAGIC promotes the advances of GIS and geospatial technologies.

SHORT COURSES | CONCURRENT SESSIONS | EXHIBITS | NETWORKING

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For more information please contact the MAGIC Symposium Chair:
Tony.Spicci@mdc.mo.gov or Planner: Jamie@custommeetingplanners.com



Visit the MMA web-
site!
[www.
missourimappers.org](http://www.missourimappers.org)

We have plenty of ad space available for upcoming issues! Please contact Melissa Johnson at mjohnson@colecouny.org for more information. Rates are as follows.

Business Card	\$25 per issue	4 issues—\$75
1/4 Page	\$50 per issue	4 issues—\$175
1/2 Page	\$75 per issue	4 issues—\$275
Full Page	\$100 per issue	4 issues—\$350

Article and News Submissions

Article and news submissions for topics that cover issues that are important to all of us can be sent via email or snailmail to the following address for consideration for future publications.

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