

*President James Theisen *President Elect Matt Sorensen *Secretary Arron Kettle *Treasurer Lisa Perry *Director 2019-2020 Amanda Bybee *Director 2019-2021 Tonja Friend *Past President Sue Ann Stokes Inside this issue:

2
3
4
6
8-
8- 1(1

MMA News

Volume 36 Issue 2

July 2020

Letter from the President

Hello Mappers!

It has been my pleasure to serve as the Missouri Mappers Association President this year. Although it has been a very unique and challenging year, myself and the board worked hard to represent you the best we could.

It was not an easy decision for the board to cancel this year's MMA Conference. We understood that for most of us, it is the best opportunity to network and attend classes that have an impact in the mapping community. But it was the right decision for the health of our membership as well as our communities. I look forward to seeing some of you at the upcoming regional meetings and all of you at next year's annual conference.

Please share any ideas, concerns, comments and/or questions you may with the Executive Board. We value your feedback!

Respectfully Submitted, James Theisen MMA President

Important News

The difficult decision was made to cancel our 36th Annual MMA conference. We will be back bigger and better than ever in 2021!!! Mark your calendars now!!! August 3rd - 6th, 2021 Oasis Hotel and Convention Center Springfield, MO

Please see page 14 for Special Announcement

Page 2

Missouri Mappers Association Board Members Meeting April 16th 2020 1:30pm Special Meeting for Information and Summer Event Discussion

Call in # 877-396-8103 Code # 73105555

Attendance-James Theisen – Ordered the meeting Matt Sorensen Arron Kettle Lisa Perry Amanda Bybee Sue Ann Stokes

James T. called the meeting to order. First topic for discussion was the Covid-19 and how it would effect the 2020 conference. Amanda B. made a motion to cancel the 2020 conference Lisa P. 2nd the motion Motion was voted on and passes

Decisions made on how to precede now that is conference will not be held. There will be an e-mail election for any and all open offices Membership forms will be sent out All vendors will be contacted and checks returned There will be a nomination committee consisting of Amanda Bybee Jody Paschal Matt Sorensen All presenters will be contacted

All committees and committee chairs will remain the same for 2021 conference as listed for previous year unless the individuals express a desire to step down.

A confirmation of cancellation will be obtained from Oasis Hotel.

The conference for 2021 proposed dates are July $27^{th} - 30^{th}$ and will be decided at a later time.

Meeting was adjourned.

Next scheduled meeting is May 13th 2020 at 9:30 am

Arron Kettle

2019-2020 MMA Secretary

St. Clair County Upgrades to GIS

After years of maintaining parcel edits on mylar maps, St. Clair County, Missouri staff will now have greater workflow efficiency thanks to a comprehensive GIS program and web-based GIS from Midland GIS Solutions. This project will bring decades of hand-written map edits and the county's CAMA data into a centralized GIS. This will allow staff to view and maintain all GIS map data in an intuitive GIS interface.

The GIS program will eliminate map edit redundancy and greatly increase efficiencies within the Assessor's office. The county will have the ability to enter metes and bounds descriptions from deeds or recorded surveys directly into the GIS software to ensure mapping accuracy.

As in every county mapping project, Midland GIS acquired available survey research to assist with data layer development. This method provides a solid foundation for the GIS program to ensure an accurate and long-term solution. Available data in the county's newly developed GIS will include parcel boundaries, lots, blocks, subdivisions, road centerlines, rights-of-way, water boundaries, city limit, sections, Township & Range boundaries, MoDOT bridge data and FEMA flood data. Property values, legal descriptions, acreage and deed information will also be accessible within the GIS. Additional data layers and functionality can easily be added as necessary.

Midland GIS staff will conduct an on-site training session with St. Clair County. Client training remains a Midland GIS standard to ensure the GIS remains a functional tool for county departments that rely on the most up-to-date information.

Visit <u>www.midlandgis.com</u> for more information about how Midland GIS can provide mapping and GIS solutions for your county or municipality.



MMA News

Page 4

MISSOURI MAPPERS ASSOCIATION TREASURER'S REPORT February 05, 2020

BALANCE as of Dec. 18, 2019	\$28,444.06
RECEIPTS	\$0.00
BALANCE + RECEIPTS	\$28,444.06
DISBURSEMENTS	\$28.42
ANNUAL MEETING	\$0.00
AWARDS	\$0.00
POSTAGE	\$0.00
HISTORICAL	\$0.00
EDUCATION	\$0.00
DONATIONS	\$0.00
ADVERTISING	\$0.00
MISC. EXPENSES	\$0.00
MILEAGE	\$0.00
INFO TECH	\$0.00
CONFERENCE CALLS	\$23.42
Misc. Service Fee for Checking	\$5.00

BALANCE as of Feb. 05, 2020 \$28,415.64



Did You Know?

Africa is the only continent that is in all four hemispheres. Istanbul is located on two continents, Europe & Asia. The Amazon River is the fastest flowing river in the world. The Grand Mesa in Colorado is the largest flat-top mountain in the world. Ontario's Wasaga Beach is the longest freshwater beach in the world. The highest point in Oregon is Mount Hood. Greenland is considered to be the largest island on Earth.



Discover a GIS solution for your County or City at www.midlandgis.com

Proud member of Missouri Mappers since 2005!



Midland GIS Solutions has been mapping Missouri for more than 20 years and provides a wide-range of dependable and accurate GIS solutions for every aspect of local government. We look forward to serving you for many years to come!

Midland GIS Solutions 501 N. Market Maryville, MO 64468 660.562.0050



Historical Committee Report:

I have finally gone through all the historical records and located the newsletters and conference books we have on hand.

At some point soon I will be sending out an email or newsletter article asking the membership if they have a copy of the ones we are missing.

Below is an outlined plan of what I would like to accomplish with the historical records on the website this year by matter of importance.

- 1. All Newsletters back to Volume 1 Issue 1
- 2. All Annual Meeting Minutes
- 3. All Board Meeting Minutes
- 4. All Conference Booklets

Once I have located as many as I can, I will contact Ryon about the easiest way to get them on our website.

The next phases will be Awards, PMM's and identifying members in historical photos.

Respectfully Submitted, Sue Ann Stokes 2019-2020 MMA Historical Committee Chair

Media Committee Report:

The next newsletter will be going out by the end of June. I will be sending out emails soon asking for article ideas and committee reports.

Respectfully Submitted, Sue Ann Stokes 2019-2020 MMA Media Committee Chair

West Central Chapter Report:

No news is good news or so they say. Our chapter had to cancel our spring meeting due to the Covid-19 closing of the colleges. We have had no news about if we will be able to reschedule the trip that was organized by North West President Matt Sorensen. Hope to see everyone soon.

Stay Happy and Safe, Arron Kettle 2019-2020 West Central Chapter Chair



Surdex is an approved Statewide Geospatial Services Provider

Photogrammetric Mapping Products and Services

Contact Surdex to find out more information on how to use the Missouri Contract for your future ortho imagery, mapping and LiDAR projects.

Missouri Contract # CS170285002 Tim Donze , VP Business Development surdex.com • 636-368-4400

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Tiffany Rogers

Sales Representative

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Your Strategic

Geospatial Resource

Surdex Captures Jefferson City, Missouri, Tornado Damage

Rapid Response Disaster Mapping Process Provides Imagery and Lidar within 24 Hours

On May 22, 2019, an EF-3 tornado hit Jefferson City, Missouri. Within a few hours, several geospatial entities within the state established a data acquisition plan. Because of the emergency nature of this project, it was essential to provide data as quickly as possible to assist first responders in relief and recovery activities.

The project included two datasets: 6" Ground Sample Distance (GSD) aerial imagery and 2 points per square meter (ppsm) lidar data. Surdex acquired both datasets for 56 square miles of damaged area and posted both datasets to a web service within 24 hours of acquisition.



Strong Geospatial Network Facilitates Quick Acquisition

The Missouri GIS Advisory Council (MGISAC) enabled communication between various geospatial entities in the state, which worked together to quickly develop a plan for aerial data acquisition. The State of Missouri had an existing Statewide Contract for Photogrammetric Mapping Products

and Services with Surdex. This contract enabled the State to reach out to Surdex to relay the acquisition plan and establish a project on May 23rd, just hours after the tornado. The strength and resolve of this network enabled acquisition to commence as soon as possible after the tornado—on May 24th. Surdex sent two aircraft to the area in order to simultaneously capture imagery and lidar data.

Specialized Processing and Data Sharing Maximize Data Utility

After collecting both datasets, Surdex implemented our rapid response disaster mapping procedures so that we could hand off the data to first responders and others who needed to assess the damage as soon as possible. We posted orthoimagery to our web service *within 12 hours* of acquiring the data, and lidar data *within 24 hours* of acquisition. In addition to Surdex's web service, two other servers hosted the disaster mapping data. Missouri Spatial Data Information Service (MSDIS) and Esri posted

the orthoimagery and lidar data to their sites, enabling a larger number of users to view the data simultaneously without risk of excessive lag or server crashes. Providing these datasets quickly using a reliable network enabled more effective response and recovery efforts by first responders, as well as more accurate damage assessment.

www.surdex.com • 636-368-4400 • info@surdex.com





Roger Arnzen, Cape Girardeau County was the winner and MMA News was born!!

Page 10

History of Assessment Mapping in Missouri

By Dan Roe, PMM

Prior to 1980, there was no organized standard for mapping throughout the state of Missouri. Some of the larger counties in the state had a mapping system in place. A few counties utilized the 660 scale USDA hard-copy aerial photographs and drew property lines on them. The Missouri Supreme Court Decision of State ex rel. Cassilly v. Riney, 576 S.W.2d 325 (Mo banc 1979) found the system of assessment in St. Louis County to be in violation of the uniformity provisions of the Missouri Constitution. The Supreme Court further stated that the State Tax Commission had the responsibility to resolve the assessment inequities in that county, and throughout the state where they exist, and they possessed administrative powers to do so. This led to the first mandated statewide reassessment program that was completed and implemented in 1985.

In developing the reassessment program, the State Tax Commission recognized that assessment maps were one of the key components to an effective assessment system. They knew that maps would help to determine the location of the property, indicate the size and shape of each parcel, ensures that all parcels are inventoried, and reveal its relation to pertinent features that affect value. Maps are an extremely valuable record in an assessor's office and were worth the significant investment.

GIS is said to have begun in 1832 when Charles Picquet, a French geographer and cartographer, created a map by in which the 48 districts of Paris were represented by color gradient according to the percentage of deaths from cholera. In 1854 British physician, John Snow began adding the locations of Cholera cases to a map of London and saw they were commonly found near a drinking water pump that was located nearby to a cesspit of sewage contaminated by Cholera. This was the beginning of spatial analysis.

From the time of John Snow into the 1950's, maps remained simple and were used mainly for routing, new development planning and locating points of interest. Sieve Mapping, a system where each feature was drawn on a separate sheet of transparent paper and then the layers were overlain on each other and viewed using a light table, was being used for planning purposes. However, calculating areas was next to impossible, data was often inaccurate, and measuring distance was cumbersome.

The developments in computing from 1960 to 1975 spurred the advancement of GIS. Roger Tomlinson, a Canadian is credited with the development of the Canadian Geographic System in 1964. The US census Bureau utilized some of the principals of GIS that led to the digital input of the 1970 Census using the format GBF-DIME (Geographic Base File – Dual Independent Map Encoding). In the mid 1970s, Harvard Laboratory Computer Graphics developed the first vector GIS. They called it Odyssey GIS. Esri's ARC/INFO used this framework that led to the commercialization of GIS software. In 1982, ARC/INFO for minicomputers was launched. As the State Tax Commission began planning and developing the "Specifications For Ownership Mapping" the use of a GIS was not considered for creating and maintaining the assessment maps. The specifications were written to create maps using Pelican (or equivalent) ink on .004", double matte, polyester stabilized Mylar (or equivalent).

The first step in the development of the existing mapping program was the acquisition of aerial photography. Aerial photography provided a complete pictorial record of all land within the county and indicated the type of improvements to the land, their location, the use of the land, and other features relevant to the assessment process. To be an effective tool the aerial photography must be relatively accurate. At this time, this was a specialized field requiring the employment of skilled technicians using precision equipment at a significant cost. For the statewide reassessment completed in 1985, the State Tax Commission utilized two types of base photography. Rectified Photo Enlargements in areas with a minimal ground relief, small towns, and rural in nature were provided with rectified photo enlargements. Orthophotography was only provided in highly developed areas and areas having considerable ground relief.

The creation of the cadastral map was recognized as a highly specialized activity requiring skilled personnel. Most counties did not have staff capable of completing the mapping in-house so the counties contracted with various sources such as surveyors, engineers, or title companies. In most cases, it was the responsibility of the vendor to gather the deeds, plats, and other information needed to compile an overlay. Once the overlay was completed, the last step was the drafting of the final ownership map.

In Missouri the development and installation of the cadastral mapping system was costly. Once the mapping system had been installed, it was an absolute necessity to carry on with a maintenance program. Otherwise, the initial effort and expense in installing would have been negated in a year or two. Today, the majority of counties have converted to digital mapping and are no longer keeping the maps updated manually.

Page 12				
MAPPERS ASSOCIATION Martine Martine Martine San Inter	OUTSTANDING BOSS OF THE YEAR APPLICATION			
The "Outstanding Boss of the Year" award is presented at the Missouri Mappers Association annual conference. It is presented to honor the "Top Boss" who has displayed outstanding leadership abilities. Nominees must be a current member of MMA and have been a member for at least one year. Nominations should explain why the nominee merits this award. Name of Nominee:				
Nominee's Position:				
l believe	should be nominated for "Outstanding			
Boss of the Year" because_				
(Continue on additional she	et if necessary)			
Your Name (Printed):				
Signature:				
Phone Number:	Email Address:			
Mail Application to:				
Alice Lee PO Box 103				
Morse Mill, Mo 63066				
Or email to: alee@jeffcomc	o.org			

age 13 The MMA News MAPPER OF THE YEAR OF THE YEAR APPLICATION The "Mapper of the Year" award is presented at the Missouri Mappers Association annual conference. The award is designed honor an individual who has displayed outstanding abilities in the mapping field. Nominees must be a current member of MM/ and have been a member for at least one year, and be technically profident in mapping techniques and standards. Nomination should coplan why the nominee merits this award. Name of Nominee: Nominee's Employer and position: Libelieve		
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I believeshould be nominated for "Mapper of the Year" because	honor an individual who has displayed o and have been a member for at least on should explain why the nominee merits Name of Nominee:	outstanding abilities in the mapping field. Nominees must be a current member of MMA be year, and be technically proficient in mapping techniques and standards. Nominations this award.
the Year" because	Nominee's Employer and position:	
	l believe	should be nominated for "Mapper of
Your Name (Printed):		
Phone Number: Email Address: Mail Application to: Alice Lee PO Box 103 Morse Mill, Mo 63066		
Mail Application to: Alice Lee PO Box 103 Morse Mill, Mo 63066	Signature:	
Alice Lee PO Box 103 Morse Mill, Mo 63066	Phone Number:	Email Address:
	Alice Lee PO Box 103 Morse Mill, Mo 63066	

Page 14

Due to the cancellation of this years conference we find ourselves pivoting in a new direction regarding our Missouri Mappers Association Annual Business Meeting.

The Executive Board is officially posting the following nominations.

Treasurer — Lisa Perry Secretary — Arron Kettle Second Year Director — Carla Palmer First Year Director — Vacant

The following will move forward to their new positions on the Executive Board. President — Matt Sorensen Vice President — Amanda Bybee Past President — James Theisen

If there are no other nominations from the membership by July 24th, 2020 all <u>MMA 2020-2021 Executive Board positions will be appointed by Acclamation.</u> ***Please contact President James Theisen, gis@pettiscomo.com if you have a nomination ***

<u>Current Committee Chairs and members will be continued for the 2020-2021 year.</u> ***Please contact incoming President Matt Sorensen, sorensen@midlandgis.com if you do not wish to remain on/or want to sign up for a committee***

Committee Members 2019-2020

Annual Conference Cer

Jody Paschal *Chair* Alice Lee Lora Miller Arron Kettle Brenda Dryer Lisa Mendpara

Alice Lee *Chair* Lisa Mendpara

Awards

<u>Certification</u> Alice Lee *Chair* Stephanie Hyder-Stevens

Education Brenda Dryer Chair

Historical Sue Ann Stokes Chair Legislative Bob Boyer Chair Chrissy Gillis Roger W Hurlbert

Media Sue Ann Stokes Chair

<u>Membership</u> Tonja Friend *Chair*

Please remember to send in your Annual Membership Application. It's usually included in the conference fee and will be easy to overlook this year.

Missouri Mappers Association Membership Application 2020-2021 Dues (Expires August 1st 2021)

First Name	Last Name
Government Organization, Company or Consultant I	Name Title
County	
Employment Address	City, ST Zip
Home Address	City, ST Zip
Email	Work Telephone Home Telephone
Newsletter Mailing Preference E-r MMA will email your copy of the bi-annual newslette	
Membership T	ype & Annual Dues (Please Check One):
	ppers, Cartographers, Mapping Supervisors, Assessors, Surveyors, onnel and other persons involved with mapping.
Subscribing Members (\$25) - interested in property mapping.	- Individuals or firms not eligible for regular membership that are
	tudent that attends a University, College, Vocational Institute or her membership and interested in property mapping.
*Membership dues for Missouri Mappers Associatio	n are not tax deductible as a business expense.
	o in the Missouri Mappers Association. If admitted, I will ives. I have enclosed my membership dues with this application.
Signature:	Date:
Ple	ase make checks payable to Missouri Mappers Association Mail Form and Payment to:
	1555000 MAPPER
OFFICE USE ONLY:	Tonja Friend MMA Membership Director
Date Received:	16317 US Hwy 160, Suite C
By (Initialed):	PO Box 1569
	3.

Forsyth, MO 65653



MMA News



The Historical Committee is looking for the following MMA Newsletters and Conference Books.

Newsletters:

1986 Volume 02 Issue 4 1987 Volume 03 Issue 1, 3, 4 1988 Volume 04 Issue 2, 3, 4 1989 Volume 05 Issue 1, 2, 3 1990 Volume 06 Issue 1, 3, 4 1991 Volume 07 Issue 2, 4 1992 Volume 08 Issue 1 1993 Volume 09 Issue 1, 2, 3, 4 1994 Volume 10 Issue 1, 2, 3, 4 1995 Volume 11 Issue 1, 2, 3, 4 1996 Volume 12 Issue 1, 2, 3 1997 Volume 13 Issue 1, 2, 3, 4 1998 Volume 14 Issue 1, 2, 3, 4 1999 Volume 15 Issue 1, 2, 3, 4 2001 Volume 17 Issue 1, 2, 3, 4 2002 Volume 18 Issue 1, 2, 3, 4 2003 Volume 19 Issue 1, 2, 3

Conference Booklet/Program:

If you have a copy you would like to donate to the Historical Committee Archival Project please forward to Sue Ann Stokes. <u>sueann.stokes@mcdonaldcountymo.gov</u>

We have plenty of ad space available for upcoming issues.

Business Card	\$25 per issue
1/4 Page	\$50 per issue
1/2 Page	\$75 per issue
Full Page	\$100 per issue

For your advertising needs contact Sue Ann Stokes sueann.stokes@mcdonaldcountymo.gov

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