Kansas Association of Mappers
36th Annual Conference

October 26-29, 2021

On behalf of the KAM Board, I would like to welcome you to the 36th Annual KAM Conference. Yes, even during COVID, we held our 35th Annual KAM Conference virtually last year. Our Conference Program Committee and Custom Meeting Planners has been hard at work to ensure that you will have a great time, meet new people, and learn a few new skills all while being safety conscience.

It has been a challenging year. We have had to adapt and grow with an ever-changing work environment (many have or are still, working remotely), and continuous technological and software updates from work to our personal lives. Conference is your opportunity to meet new people, see what others are doing across the state, learn new skills and techniques and share. Share what you are doing, what you have learned and what ideas and visions you have. We have some great Exhibitors; visit with them and find out what they are offering. They have the same challenges as we do, find out what they have done to keep up with the changing environment.

How do we as an organization continue to grow and prosper? It is time to revisit our reasons for being an organization and what we want and need from KAM. I challenge each of you to find one thing to take home from KAM Conference and implement in your organization to highlight the abilities and vision of your department. And last, but not least, **volunteer** on a committee, **mentor** someone, **engage** in conversation, **take an active role** in our organization, KAM is only as good as its members.

Pamela Dunham
2020-2021 KAM President

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Schedule of Events

Tuesday October 26th

8:00 am to 5:00 pm	Registration *(Conference Foyer)*
9:00 am to 12:00 pm	Pre-Conference Workshop – Kansas NG911 Data Maintainer Class *(Bison Room)*
9:00 am to 4:00 pm	Pre-Conference Workshop – Creating a GIS Cemetery Census with GPS Receivers and Esri Field Maps *(Wheat Room)*
1:00 pm to 5:00 pm	Pre-Conference Workshop – ArcGIS Pro: Intermediate/Advanced *(Homestead Room)*

Wednesday October 27th

8:00 am to 5:00 pm	Registration *(Conference Foyer)*
9:00 am to 9:30 am	Continental Breakfast *(Shawnee Ballroom)*
9:30 am to 11:30 am	Opening Remarks, Keynote Speaker, GIO Update and KAM Business Meeting *(Shawnee Ballroom)*
11:30 pm to 12:30 pm	Plated Lunch *(Shawnee Ballroom)*
12:30 pm to 1:30pm	Breakout Sessions
1:45 pm to 2:30 pm	Breakout Sessions
2:30 pm to 3:00 pm	Refreshment Break with Exhibitors / Exhibitor Lightning Talks *(Shawnee Ballroom)*
3:00 pm to 3:45 pm	Breakout Sessions
4:00 pm to 4:45 pm	Breakout Sessions
5:00 pm to 6:00 pm	Past President and New Member Reception *(Governor's Suite)*
6:00 pm to 8:30 pm	Exhibitor Reception and Trick or Treating/Games *(Shawnee Ballroom)*
8:30 pm to 11:00 pm	Hospitality Room Open *(Governor's Suite)*

Thursday October 28th

8:00 am to 9:00 am	Continental Breakfast with the Exhibitors and Board Voting Begins *(Shawnee Ballroom)*
9:00 am to 9:45 am	Breakout Sessions
10:00 am to 10:45 am	Breakout Sessions
10:45 am to 11:15 am	Refreshment Break with Exhibitors *(Shawnee Ballroom)*
11:15 am to 12:00 pm	Breakout Sessions
12:00 pm to 1:00 pm	Lunch with the Exhibitors, Map Gallery Opens *(Shawnee Ballroom)*
1:00 pm to 2:00 pm	Breakout Sessions
2:15 pm to 3:00 pm	Breakout Sessions
3:00 pm to 3:30 pm	Refreshment Break with Exhibitors / Exhibitor Lightning Talks *(Shawnee Ballroom)*
3:30 pm to 4:15 pm	Breakout Sessions
4:30 pm	Board Voting Concludes
7:00 pm to 11:00 pm	Halloween Ball with a Dessert Bar and DJ *(Costume Contest starts at 8:30 pm)* *(Shawnee Ballroom)*
11:00 pm to 12:00 am	Hospitality Room Open *(Governor's Suite)*

7:00am to 8:30 am   Coffee in the Registration Area (Breakfast on Your Own) *(Conference Foyer)*
8:30 am to 9:15 am   Breakout Sessions
9:30 am to 10:15 am   Breakout Sessions
10:30 am to 11:15 am Brunch *(Shawnee Ballroom)*
11:15 am to 12:15 pm Closing KAM Business Meeting, Announcement of New Board, Map Gallery
                      Winners, and Door Prize Winner *(Shawnee Ballroom)*

Pre-Conference Workshops
Tuesday, October 26th

9:00 am – 12:00 pm

Kansas NG911 GIS Data Maintainer Class
Instructor: Sherry Massey, Dickinson County GIS Coordinator

(Bison Room)

In the Kansas NG911 GIS Program, the Data Maintainer is the person who will be performing the actual maintenance of GIS data for the NG911 Program. Every PSAP (Public Safety Answering Point) must have a certified Data Maintainer or have a maintenance contract with a vendor that has a certified Data Maintainer on staff. Those completing this class will be certified as Kansas NG911 Data Maintainers.

Topics to be covered: The role of GIS in NG911; an update on the status of the NG911 program in Kansas; the role of the Data Maintainer and the responsibilities that come with the position; the Kansas NG911 GIS Data Model and its requirements; the tools available to assist in data maintenance; and a discussion of geoMSAG maintenance and the GIS role in telephone record accuracy. During the Behind-the-Scenes of the NG911 Toolbox, we will go in-depth covering the details of certain tools and how they work and how users can leverage the tools to make their data life easier.

9:00 am – 4:00 pm

Creating a GIS Cemetery Census with GPS Receivers and Esri Field Maps
Instructor: Amy Roust, GISP, Kansas Department of Health and Environment

(Wheat Room)

Learn how to create and execute a field data collection project from start to finish. We will start the day using ArcGIS Pro and ArcGIS Online to create a shared project for field data collection inside ArcGIS Field Maps. Next, we will pair Trimble R1 GPS receivers with participants' smart phones in preparation for sub-meter accurate point data collection. Then, we will drive out to Valencia Cemetery near Topeka and work in pairs

to map and photograph headstones. Once data collection is done, we will return to the conference site to complete the data entry process in ArcGIS Pro or ArcGIS Online. Time permitting, we will also create a searchable web app to display our results.

Participants **must** provide for their personal use:
- A smart phone with two free apps already installed: Esri's Field Maps and Trimble's GNSS Status. Both apps are available in Google Play or the Apple Store.
- A laptop for data editing. You will either need ArcGIS Pro installed or access to the internet so that you can do data editing via ArcGIS Online.
- Appropriate clothing for field work. Be mindful of the forecast. We will only cancel the field trip portion if there is severe weather (e.g., storms that include lightning or heavy snow). While a gray, rainy day is not ideal for GPS data collection, we can make it work. Plan to bring your rain gear if necessary!
Trimble R1 GPS receivers will be provided for use during the class, courtesy of Seiler Instruments.

1:00 pm – 5:00 pm

Editing in ArcGIS Pro: Intermediate/Advanced
Instructor: *Lee Allen, GISP, and Steven Scheetz, Shawnee County*
(Homestead Room)

This class will explore editing in ArcGIS Pro. Topics include:
1. Editing points, lines, and polygons
2. Setting up templates
3. Adding attribute rules to feature classes
4. Data management
5. Tips, tricks, tools, etc.

The class will cover some generic ArcGIS Pro topics but will also include hands-on practice for setting up NG911 data to be edited in ArcGIS Pro and discussion on the Parcel Fabric.

Participants should have basic understanding of ArcGIS Pro/editing and be able to supply their own computer with ArcGIS Pro installed. Familiarity with Arcade scripting language helpful.

Meet our Keynote Speaker:

Joseph Kerski

Joseph Kerski is a geographer with a focus on the use of Geographic Information Systems (GIS) in education. He has served as the President of the National Council for Geographic Education and has given 2 TED Talks on "The Whys of Where". He received his master's degree from the University of Kansas and holds 3 degrees in geography. He has served as geographer in four sectors of society, including government (NOAA, US Census Bureau, USGS), academia (Penn State, Sinte Gleska University, University of Denver, others), private industry (as Education Manager for Esri), and nonprofit organizations (with roles in geography and education associations). Joseph authored over seventy-five chapters and articles on GIS, education, and related topics, and visits thirty-five universities annually. He conducts professional development for educators. He has created 5,000 videos, 750 lessons, 1,000 blog essays, and authored eight books, including Interpreting Our World, Essentials of Environment, Spatial Mathematics, Tribal GIS, International Perspectives on Teaching and Learning, and the GIS Guide to Public Domain Data. But as a lifelong learner, he feels as though he is just getting started and thus actively seeks mentors, partners, and collaborators.

Wednesday Breakout Sessions

TIME	SESSION TITLE	ROOM NAME	SPEAKERS NAME
12:30 – 1:30 pm	How Do you Embed GIS Into Your County Workflow?	Bison Room	Cara Mays
	State Plane Coordinate System 2022	Wheat Room	Stephen Thompson
	Kansas Floodplain Mapping	Homestead Room	Tara Lanzrath
1:45 – 2:30 pm	Redistricting: How to Download and Use 2020 US Census Data	Bison Room	Mark Schmidt
	Online Resources for Floodplain Management & Community Engagement	Wheat Room	Erika Stanley and Joanna Rohlf
	Developing EOPMapper: Putting GIS Tools Directly in the Hand of EM	Homestead Room	Mike D'Attillo
3:00 – 3:45 pm	ArcGIS Enterprise: Migration and Administrative Workflows	Bison Room	April Friedl
	Precision Parcel Mapping in ArcGIS Pro	Wheat Room	Tyler Fleming
	Confronting New and Old Challenges using ArcGIS Online	Homestead Room	Luke Finley
4:00 – 4:45 pm	LIDAR Extraction of Building Footprints for US and Flood Management	Bison Room	Daniel Gwartney

| | What's Involved with Getting Involved with KAM | Wheat Room | Amy Roust |
| | Migration of the DASC Catalog to the ArcGIS Platform | Homestead Room | Eileen Battles |

Thursday Breakout Sessions

TIME	SESSION TITLE	ROOM NAME	SPEAKERS NAME
9:00 – 9:45 am	Geophysical Investigation of Valencia Cemetery Creating Sign Quality Maps in ArcGIS Pro: Valencia Cemetery Overview	Bison Room	Madison Rice Lee Allen
	ArcGIS and Trails of the Southwest	Wheat Room	Norman Conley
	11 Trends in GIS	Homestead Room	Matt Hoehn
10:00 – 10:45 am	Kansas Perinatal Community Collaboration (KPCC) Planning Map	Bison Room	Shannon Lines
	Utilizing Drone Technology for Targeted Orthophotography	Wheat Room	John Spickelmeier
	What's New in ArcGIS Enterprise	Homestead Room	Scott MacDonald
11:15 am – 12:00 pm	PVD Update	Bison Room	Melissa Crane
	Equity and Social Justice Implications of GIS 2021 Census Data	Wheat Room	Dan Rose
	Working with Drones Imagery and Machine Learning Using ArcGIS	Homestead Room	Chase Fischer
1:00 – 2:00 pm	Using Augmented Realty to Communicate Flood Risk and Risk Management Solutions	Bison Room	Daniel Gwartney
	Late Summer Catfish in Kansas Reservoirs	Wheat Room	Bryce Hirschman
	Partnered Collaborations in ArcGIS 2021	Homestead Room	Nicole Grams
2:15 – 3:00 pm	Augmenting Mass Appraisals	Bison Room	Shawn Showman
	Take Your NG911 Data Editing to the Next Level	Wheat Room	Lee Allen
	ArcGIS Field Maps: One App to Rule Them All	Homestead Room	Nicole Grams

TIME	SESSION TITLE	ROOM NAME	SPEAKERS NAME
3:30 – 4:15 pm	Fancy Maps	Bison Room	Jared Trembley
	Working with Vector Data in ArcGIS Online	Wheat Room	Kristen Jordan-Koenig
	ArcGIS Dashboard for Collaborative Data Exploration and Analysis	Homestead Room	Will Trimble

Friday Breakout Sessions

TIME	SESSION TITLE	ROOM NAME	SPEAKERS NAME
8:30 – 9:15 am	What Kansas Mappers Want, What Kansas Mappers Need	Bison Room	KAM Roundtable
	Collection of Leavenworth County Road Wear and Tear Using AI	Wheat Room	Tyler Wehr
9:30 – 10:15 am	Dashboards & Apps - Ways to Present Data or Monitor Progress	Bison Room	Pamela Dunham
	Using GIS to Support Cemetery Preservation	Wheat Room	Nolita LaVoie and Amy Roust

Wednesday, October 27th
12:30 pm to 1:30 pm – Breakout Sessions
Bison Room
How Do You Embed GIS Into Your County Workflow?
Cara Mays, Coffey County
You can often find a GIS office at the end of a dark hallway, no windows and all alone. We have so much to offer but at times we are forgotten or excluded. Here is an open-ended discussion on how to embed yourself into a workflow to emerge as a valuable asset.

Wheat Room
State Plane Coordinate System of 2022?
Stephen Thompson, Independent Consultant
Tentatively in 2022, the National Spatial Reference System (NSRS) will be modernized. Existing reference frames (horizontal datums & vertical datums), including the North American Datum of 1983 (NAD83) & North American Vertical Datum of 1988 (NAVD88), will be replaced with new reference frames. Additionally, the US foot will be replaced with the international foot. The State Plane Coordinate System of 2022 (SPSC2022) is being developed as part of this transition. In April 2019, the National Geodetic Survey released the policy, procedures, and timeline that will govern this transition. Attend this session to learn more about the Kansas SPSC2022 plan.

Homestead Room
Kansas Floodplain Mapping
Tara Lanzrath, Kansas Department of Agriculture, Division of Water Resources
The State of Kansas has undertaken a large initiative to provide updated flood risk information across the state through the development of Base Level Engineering (BLE) data utilizing 2D modeling techniques. Come to this session to learn more about these efforts including an overview of the mapping process, modeling, LiDAR derivatives, flood risk products, GIS web resources, technical assistance, mitigation, and more.

1:45 pm to 2:30 pm – Breakout Sessions
Bison Room
Redistricting: How to download and use 2020 US Census Data
Mark Schmidt, Butler County
The US Census Bureau conducts a decennial Census and provides that data to be used in many different analysis projects including redistricting. There is a lot of data that is provided, and it is not always clear what is in the data. This presentation will go over what the data contains along with how to access, download, and export the data into a useful and intuitive format.

Wheat Room
Online Resources for Floodplain Management & Community Engagement
Joanna Rohlf, KDA and Erika Stanley, Wood, E&IS
As FEMA Cooperating Technical Partners, the States of Kansas and Missouri both work with their respective communities to complete flood risk projects and use web mapping applications to encourage coordination and feedback throughout the life of these projects. This session will explore the web mapping applications and use of other online resources that are used in each state. We will discuss the development of these applications and their day-to-day management. The session will also cover how online resources were used to facilitate community coordination during the COVID-19 pandemic.

Homestead Room
Developing EOP Mapper: Putting GIS Tools Directly in the Hands of Emergency Managers
Mike D'Attilio, Kansas Division of Emergency Management
As part of a larger Kansas Division of Emergency Management (KDEM) Local Emergency Operations Plan (LEOP) program effort, KDEM GIS embarked on a project to develop online GIS tools that county emergency managers can use to aid them in maintaining the data and maps that comprise portions of their LEOP. EOPMapper is a custom application that utilizes ESRI's ArcGIS API for Javascript with GIS data stored in ArcGIS Enterprise. We will cover how EOPMapper fits in to the overall LEOP process and program and we will also discuss the development of the software, user interface, data model, coding, and goals.

3:00 pm to 3:45 pm – Breakout Sessions

Bison Room
ArcGIS Enterprise: Migration and Administrative Workflows
April Friedl, Unified Government of Wyandotte County/Kansas City, Kansas
In 2021, the Unified Government of Wyandotte County & Kansas City, KS (UG) migrated from an ancient standalone ArcGIS Server to ArcGIS Enterprise 10.8.1. Editing datasets in Portal using ArcGIS Pro is now standard practice instead of via direct connect to SQL Server with ArcMap, and branch versioning is slowing being implemented as a replacement for traditional versioning. Portal groups are being used to provide permissions to the data via Portal users instead of SQL Server groups. This presentation will focus a little on the UG's migration processes as well as changes and new workflows in ArcGIS Enterprise and Portal.

Wheat Room
Parcel Mapping in ArcGIS Pro
Tyler Fleming, Douglas County
Let us migrate our COGO data editing skills to ArcGIS Pro! In this brief demonstration using ArcGIS Pro, I will show you best practices and how to set yourself up for success with a proper editing environment using COGO to draw property ownership, parcels, plats, etc. Why wait, let us go Pro!
*This session should interest ALL parcel maintainers.
*Demonstration will not include Parcel Fabric.

Homestead Room
Confronting New and Old Challenges using ArcGIS Online
Luke Finley, Kansas Division of Emergency Management
Learn about how the Kansas Division of Emergency Management established webhooks in ESRI's Survey123 to support the Kansas Covid Testing Supply Request project. Discussing the survey creation itself, setting up connections between Survey123 and two automation services, their differences and lessons learned.

Also see how we used ESRI's Experience Builder application to create the new Kansas Situation Report site that released in October 2021. The Kansas Situation Report is a collection of Weather, Emergency Management, and other various mapping platforms to provide a single point of Situational Awareness for Stakeholders as well as other Emergency Management professionals in the State of Kansas.

4:00 pm to 4:45 pm – Breakout Sessions

Bison Room
LiDAR Extraction of Building Footprints for Use in Floodplain Management
Daniel Gwartney, Wood E&IS
Microsoft has developed comprehensive building footprint polygons covering the United States, stored in Geographic JavaScript Object Notation (GeoJSON) format for public use. While

the building footprints are generally accurate, they are derived from older base imagery and elevation datasets, rendering many of them outdated or obsolete. The Missouri State Emergency Management Agency (SEMA) is currently performing Hydrologic and Hydraulic modelling across the state, which includes procuring updated LiDAR data. Laser pulses can peer through vegetation, and algorithms can be run to remove objects above the ground level for detailed bare earth digital elevation models (DEMs). In addition to bare earth representation, points that are above the earth's surface can be analyzed to determine if features are related to vegetation, roads, or building structures. Wood Environment & Infrastructure was contracted by SEMA to classify points as buildings, render a polygon boundary of the building footprints, compare the results to existing Microsoft Building Footprints, and compute the Highest Adjacent Grade (HAG) and Lowest Adjacent Grade (LAG) elevations as attributes for each building feature across the State of Missouri. This information could then be used for future mitigation action and emergency management preparedness. That data will be made available for public use by sharing with Esri Base Map and through custom data extraction portals at a later date.

Wheat Room
What's Involved with Getting Involved in KAM
Amy Roust, moderator, panelists Lee Allen, Pamela Cannon, Cara Mays, Erika Stanley, and Lisa Olson
This informal conversation will focus on the ways that KAM members can become more active in the organization. Each member of the panel is a current or previous committee chair who will share their experiences and answer attendee questions. We will include an overview of all eight standing committees and, time permitting, the Executive Board's roles and duties. Our goal with this conversation is to encourage greater participating so that we have representation from as many different industries and experience levels as possible.

Homestead Room
Migration of the DASC Catalog to the ArcGIS Platform
Eileen Battles, DASC
Actual presentation title is: Hubba - Have you seen the new DASC website?
A big, and I mean BIG, change is coming to the Kansas Data Access & Support Center (DASC) website! Come to this session to get a sneak preview of our new look and learn how DASC is leveraging Esri's ArcGIS Online and Hub architecture to improve access to GIS content, as well as enhance user interaction with Kansas public domain GIS data.

Thursday, October 28th
9:00 am to 9:45 am – Breakout Sessions
Bison Room
Geophysical Investigation of Valencia Cemetery
Madison Rice, KS Geological Survey

- Geophysical methods have emerged as a valuable tool for surveying graveyards and cemeteries. Previous research has focused less on understanding how factors such as body orientation, soil type, age of the individual, and burial type affects the detecting capabilities of GPR. Understanding how these factors impact the success rate of GPR, as well as identifying which burial methods provide the maximum detection success rate, will be a valuable contribution in future research and excavations. For this project, Valencia Cemetery, located in Topeka, KS, was surveyed with GPR. Valencia Cemetery was established in April 1879, with the oldest marked grave in the cemetery from 1868 and the newest grave from 2020. Additionally, the cemetery is socially stratified: those buried on the west side were usually wealthier than those buried on the east side.

- Based on these characteristics of the cemetery, GPR data was collected on known graves of different ages and burial types. This goal of this research project is to study 1) how GPR data varies with the age of the bodies as well as the length of time since burial and 2) how differing burial conditions, such as those between the wealthy and poor, impact GPR detection capabilities. This presentation will provide an overview of the preliminary results collected so far, as well as future steps to produce an accessible, interactive map that can be used by the cemetery board to guide future plans for the cemetery.

Creating Sign Quality Maps in ArcGIS Pro: Valencia Cemetery Overview
Lee Allen, Shawnee County
ArcGIS Pro is very suited to creating high quality graphics for permanent signs. Shawnee County recently created a permanent sign for the Valencia Cemetery that explains the historical locations and significance of the Valencia area.

Wheat Room
ArcGIS and Trails of the Southwest
Norman Conley, WSU Archaeology Mapper
Wichita State University professor emeritus Dr. Donald Blakeslee is writing a book that you could review on the Academia website. The subject is "North American ecumene in the protohistoric and early historic eras– the system of interactions that linked the various native nations of the continent." This author is working with Chapter 4. Traders and Venues Market v. Marketplace which deals with "Southwest trails and the structure of transmission." The book will describe Native American trails from the Pueblo's on or near the Rio Grande and locations in New Mexico to the Heart Land. In order to support the illustrations in the book ArcGIS Pro was used for a Geographic Information System (GIS) platform. The project started using ArcGIS Pro existing Satellite, highway, and US Topographical base maps. The base US Topographic map includes the location of most of the Pueblos or ruins of recorded Pueblos. Finding trails on a

map that has the early historic data was a challenge. We stated this project with a geo-referenced 1859 Capt. R. R. Marcy map of New Mexico. The pioneer/ Indian Trails in Kansas will also be demonstrated, and a status report will be given.

Homestead Room
11 Trends in GIS
Matt Hoehn, ESRI
This session will walk through Jack Dangermond's list of eleven important innovations in GIS for 2021. We will discuss the current state of cloud GIS options that let you choose just how much control and flexibility you want. We will see the latest trends in analysis and visualization. And with open-source APIs and SDKs and the new ArcGIS Platform, we will show how organizations can reduce friction with collaborators. From integrating your field operations to GeoAI and ML, and from cloud-native imagery to real-time GIS, join us to learn more about this year's hot topics.

10:00 am to 10:45 am – Breakout Sessions
Bison Room
Kansas Perinatal Community Collaboration (KPCC) Planning Map
Shannon Lines, Kansas Department of Health & Environment
The Kansas Perinatal Community Collaborative (KPCC) brings together public health and clinical care services to assure coordinated supports for pregnant women and their families. Piloted in Salina, Kansas in 2010, this successful model has been launched in both rural and urban areas of the state through a partnership between the Kansas Department of Health and Environment, Bureau of Family Health, and the March of Dimes. As of July 2021, there are 20 KPCC sites across the state, including county, multi-county, and regional models. In early 2021, a KPCC map was created to support the program with identifying high-need areas and inform decision making related to expansion. The state team requested a map that allowed them to easily view the location of existing KPCC sites; priority maternal and child health data (preterm birth rates, infant mortality rates, percent of children living in households in economically disadvantaged census tracts) by county; and birthing hospitals.

Wheat Room
Utilizing Drone Technology for Targeted Orthophotography
John Spickelmeier, 2021 John Cowan Memorial Scholarship Recipient
Orthophotography has been a vital tool in the creation of high detail and accurate maps for over one hundred years. The value of having a map with real images of locations has continued to be an invaluable resource for understanding the world. From balloons to planes to helicopters the technology that has enabled aerial photography has advanced significantly over the course of time. With the miniaturization and increased economic feasibility of drone systems the power of orthophotography is now more available and versatile than ever. This presentation will highlight how accessible and practice the uses of drone photography are in a GIS environment.

Homestead Room
What's New in ArcGIS Enterprise
Scott MacDonald, ESRI

With every new release of ArcGIS Enterprise and ArcGIS Online, their capabilities and possibilities continue to grow. But effective administration of your organization's users, groups, and content does not have to be a headache. This session for Web GIS administrators will review current best practices in security to keep your organization secure and your content in the right hands. We will discuss the newest offerings for Web GIS organization administration. Finally, we will explore automation tools to reduce the time you spend actively managing your organization while boosting your awareness of what is going on.

11:15 am to 12:00 pm – Breakout Sessions
Bison Room
PVD Update
Melissa Crane and Zoe Gehr, Kansas Property Valuation Department
- PVD Update
- Overview /demo of Commercial Sales Database Project with DASC
- Agricultural Mapping updates and recommendations
- Mapping Compliance
- Answer any questions you have for PVD

Wheat Room
Equity & Social Justice Implications of GIS, 2021 Census Data
Dan Rose, City of Columbia, MO

Where a person was born, or lives is a key success factor for individuals and families to try to thrive throughout their lives. Analysis of the equity and social justice (ESJ) impact of public agency policies, projects, and programs is an emerging practice of many government agencies. GIS can be a powerful tool to analyze and predict social justice issues and to help government agencies, we can apply an equity lens to every aspect of their overall administration of public resources. "Fairness does not mean everyone gets the same. Fairness means everyone gets what they need." — Rick Riordan, The Red Pyramid The 2020 Census data release on August 12th (2021) presented fantastic insight, but also created issues... The many requests we get for Census data analysis - at the data's release - sometimes causes more of a burden for the analysts (and confusion to the requester) than it does answer questions. The Census data is also critical for the above ESJ analysis, but who works on the 'between-the-Census-years' estimates to try to predict the future? Waiting a full 10 years to align our models without considering year-to-year prediction analysis can be problematic. U.S. Census Bureau: 'We All Count'

Homestead Room
Working with Drones, Imagery, and Machine Learning Using ArcGIS
Chase Fisher, ESRI
Learn about Esri's complete end-to-end drone mapping software, designed to revolutionized imagery collection. Automate repeatable drone flights. Create and view 2D & 3D outputs on the web. Discover insights about your project, track changes, conduct inspection, measure volumes, and elevations, all in the cloud. As well as combine powerful built-in tools with machine learning and deep learning frameworks to automatically detect and extract features from your project.

1:00 pm to 2:00 pm – Breakout Sessions
Bison Room
Using Augmented Reality to Communicate Flood Risk & Risk Management Solutions
Daniel Gwartney, Wood E&IS
Communicating Flood Risk Data and Risk Management alternative impacts is an important step in building a community's floodplain management program. Typical communication uses paper floodplain boundary maps which do not convey the depth or magnitude of the risk. Enhancements in communication using 3-D imaging and/or animations has attempted to convey an understanding of the true risk. Virtual Reality is the next obvious step in truly conveying the sensation of the risk and the reductions of risk per mitigation solutions. Stakeholders with typical 3-D or Virtual Reality based systems are immersed in the flood risk data environment and tied to a desktop or stuck to a specific location in which the virtual environment has been developed. Many of the new flood risk projects have enhanced data development activities using 2-D flow modeling and resultant geospatial analytic data. The next step is a fully interactive communication method in the field called Augmented Reality. This presentation (and demonstration) will discuss an application of an Augmented Reality Mobile Flood Risk Application performed in a Kansas community. The requirements, advantages & challenges of the application as a flood risk data and risk management communication tool will be provided. Attendees will be able to assess whether the application is applicable in their community. This application will provide a vision of future of flood risk communication which can be utilized throughout the globe.

Wheat Room
Late Summer Catfish in Kansas Reservoirs
Bryce Hirschman, Douglas County
Who knew GIS principles are related to catching catfish? Catching catfish in Kansas Reservoirs can be either easy or tough, depending on many factors that are truly spatial in nature. In this presentation we will examine some of the factors that must be considered to increase success and minimize failure while on a quest for catfish. A story map will guide us as we examine a mix of technology, equipment, and tested methods that put late summer catfish in the boat. By practicing selective harvest and proper handling, this sustainable resource will be safeguarded for future generations.

Homestead Room
Partnered Collaborations in ArcGIS 2021
Nicole Grams, ESRI
This year's introduction of Partnered Collaborations to ArcGIS Online opens new possibilities for Web GIS. Now, you can share content between ArcGIS Online organizations in a trusted, secure pipeline - and enable one-way or two-way synchronization of edits made to your items. This session will discuss the back-end structure of partnered collaborations and how they differ from distributed collaborations. We will share use patterns and best practices for content authority, security, and transparency, and help you begin imagining how your Web GIS workflows might be transformed by this new functionality.

2:15 pm to 3:00 pm – Breakout Sessions
Bison Room
Augmenting Mass Appraisal with GIS
Shawn Showman, Douglas County
GIS helps produce a much better and efficient mass appraisal product. This presentation will highlight some of the beneficial ways our office uses GIS and will discuss some considerations when implementing these solutions.

Wheat Room
Take Your NG911 Data Editing to the Next Level
Lee Allen, Shawnee County
Editing attributes for NG911 data can be very cumbersome, but can be streamlined in ArcGIS Pro. This presentation will discuss editing NG911 data in ArcGIS Pro using attribute rules, in addition to the pros and cons of using attribute rules and data limitations.

Homestead Room
ArcGIS Field Maps: One App to Rule Them All
Nicole Grams, ESRI
Is your organization currently using ArcGIS Collector, Explorer, or Tracker? If you answered 'yes,' this session is a must-attend! ArcGIS Field Maps integrates the capabilities of these and other classic apps and streamlines the process of mobile collection and inspection. The companion Field Maps web app simplifies configuring the web maps you own and introduces new capabilities such as smart forms and offline map configuration. Join us to learn how Esri is unifying field workflows and mobile device management with ArcGIS Field Maps.

3:30 pm to 4:15 pm – Breakout Sessions

Bison Room
Fancy Maps
Jared Tremblay, Flint Hills Metropolitan Planning Organization
Bring your laptop and learn to play around with the free InDesign-like program Inkscape. Break free of ESRI restrictions and see how Inkscape can open a world of quick & beautiful maps.

Wheat Room
Working with Vector Data in ArcGIS Online
Kristen Jordan-Koenig, DASC
ArcGIS Online provides multiple ways to leverage vector data. This session explores data uploads, ArcGIS Online views, publishing from ArcGIS Pro, and vector tile caches.

Homestead Room
ArcGIS Dashboard for Collaborative Data Exploration and Analysis
Will Trimble, City of Lawrence
- ArcGIS Dashboards burst into the public consciousness in 2020 and 2021 with the COVID-19 outbreak. Most people have at least seen, and many interacted with, a dashboard as a way to consume and monitor data metrics.
- ArcGIS Dashboards are approachable and intuitive but there is a lot of potential beyond the common usage for high level status monitoring. Through the use of filters and actions, you can guide exploration through a data set to collaborate with others to answer questions, explore options for action, and review metrics from potential decisions.
- In this presentation we will review several implementations of ArcGIS Dashboards used for collaboration within the City of Lawrence for various projects across multiple departments. After discussing the uses for each we will take a look at the tools and settings used to implement the exploration and analysis functions demonstrated.
- The goal for participants: Leave with some new ideas and ways to implement ArcGIS Dashboards into your projects and workflows.

Friday, October 29th
8:30 am to 9:15 am – Breakout Sessions

Bison Room
What Kansas Mappers Want, What Kansas Mappers Need
KAM Roundtable
"I would love to talk to someone who has successfully..."
"I wish someone would show me how to..."
"A challenge I am facing at work is..."

How do Kansas mappers complete these sentences? Throughout conference week, all of our attendees will be asked to participate in an asynchronous brainstorming exercise on these topics. During this session, we will review and discuss the contributions in a group setting. This conversation will be guided with the overarching goal of asking, "In what ways can KAM as an organization best support its members into next year and beyond?"

Wheat Room
Collection of Leavenworth County Road Wear and Tear Using AI
Tyler Wehr, Leavenworth County
The Leavenworth County GIS Department is working with an emerging lightweight Artificial Intelligence device that uses image detection and machine learning to processes and analyze captured video footage to identify and keep a record of potholes. The program reaches around a 95% accuracy when identifying an issue. County employees have also incorporated ArcGIS QuickCapture to aid in identification of road obstructions including potholes, debris, and road damage.

9:30 am to 10:15 am – Breakout Sessions
Bison Room
Dashboards and Apps - Ways to present data or monitor progress - How to Showcase GIS
Pamela Dunham, Butler County
- Do you struggle during budget? Is GIS looked at as just mappers in your organization? Do you struggle getting people on board with what vision is in your head? This session will focus on ideas to create quick mobile apps, hubs or dashboards to present data that does not require a lot of ongoing maintenance and upkeep. We will talk about how to implement small projects throughout your organization to help others see the power of GIS and to streamline some of your current processes.
- We will look at some ideas to share information with supervisors such as a mobile app for field appraisers to toggle parcels complete as they perform their field work and connect that data live to a dashboard for office staff and supervisors to see progress daily, weekly, etc. How to make Neighborhood maps, sales maps, value comparison maps so they are not just static maps that have to be redone annually. We will look at some road and bridge apps to help make presentations to the commission or to share data with the public easier such as road closures, bridge replacements, or road maintenance plans for the summer. We will also take a look at some crime data and how this can be shared back with the Sheriff's Department.
- This session will discuss how to put together some simple applications to showcase the power of GIS and make we invaluable in the organization or help show some return on investment (ROI).

Wheat Room
Using GIS to Support Cemetery Preservation
Nolita LaVoie and Amy Roust, Kansas Department of Health and Environment (KDHE)
This session will feature two short talks on how GIS technology has been used recently to assist in mapping cemeteries in Kansas. Nolita LaVoie will discuss mentoring her son who used GIS for his Eagle Scout project to map the locations of all veteran graves in Sabetha Cemetery in Nemaha County. Amy Roust will discuss using GIS and historical documentation to create a headstone census for Colyer Cemetery in rural Douglas County.

Board Nominations:
President Elect:
Joanna Rohlf GISP, CFM, is a Floodplain Mapping Specialist with the Kansas Department of Agriculture. She started working in GIS more than 14 years ago, as a Cartographic Technician at Garmin, where she worked about 1.5 years. After that, she waded into the floodplain world and has been there ever since. She worked for nearly 10 years on the private side as a GIS Analyst before accepting a position with the state 3 years ago. Joanna holds a B.S. in Geography from Kansas State University and a M.A. in Environmental Studies, with a focus on Public Administration, from the University of Illinois. She has been an active member in KAM since 2012 and has participated on the program committee, including being Chair one year. Joanna lives in the country near Topeka, KS, with her husband, daughter and two dogs. She enjoys camping with her family and is an avid reader.

Secretary:
Tyler Wehr began with Leavenworth County GIS in 2017. He has a bachelor's in Professional Meteorology from Ball State University in Indiana with a Broadcast Television background. He is currently pursuing an MS in GIS from Northwest Missouri State University. Tyler has since been working with Kansas Mapping Association, ESRI, Mid-American Regional Council, and other organizations across KCMO to better Leavenworth County's GIS capabilities. He works closely with the cities and businesses in Leavenworth County to collaborate and improve the county's expanding GIS and mapping network. Tyler served as Secretary from 2020 to present.
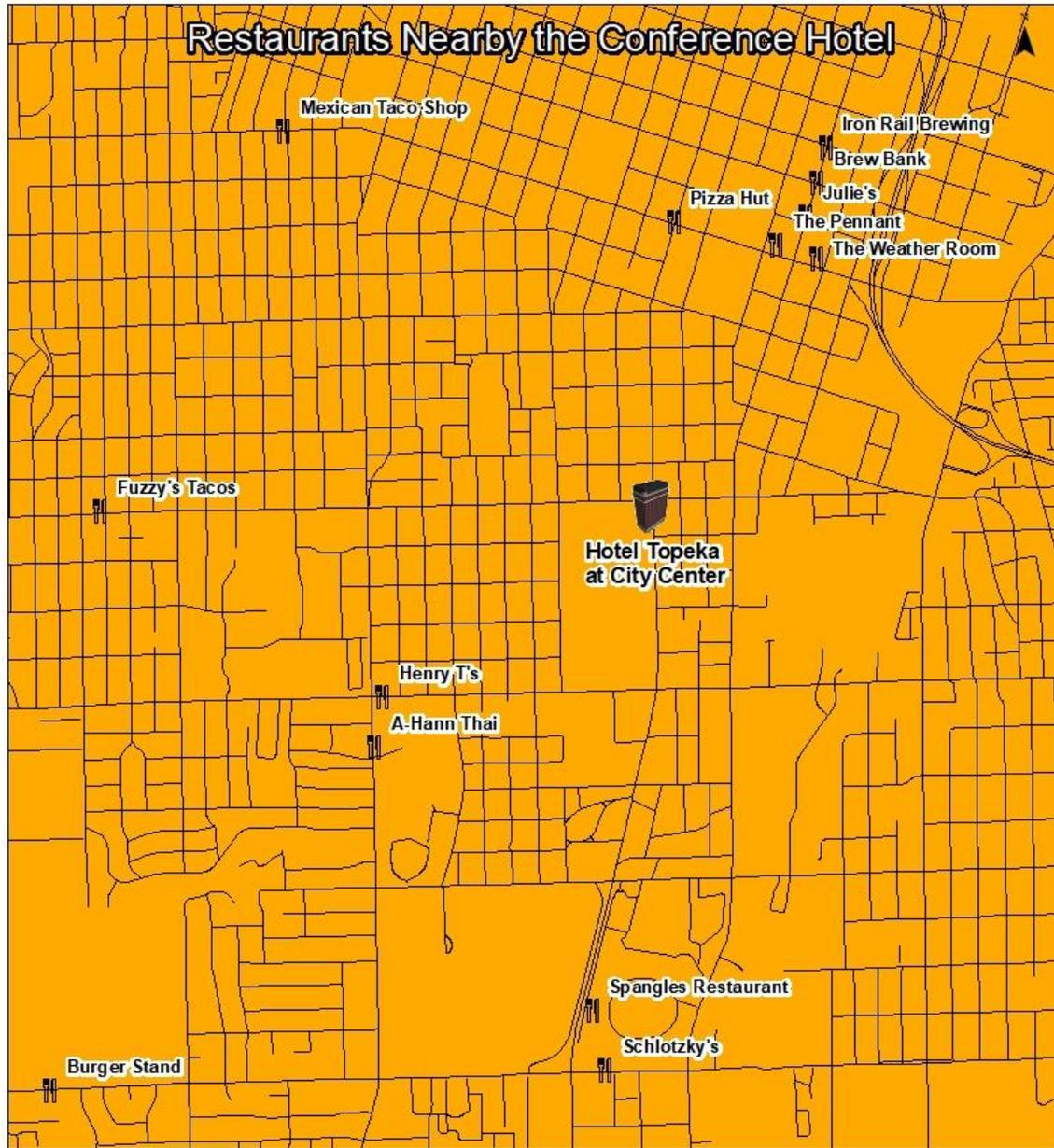
Treasurer:
Drew Bean currently works for Saline County as a GIS Analyst. He has been a KAM member since starting at Saline County in 2013. He earned a bachelor's degree in GIS and Geography from South Dakota State University. He has served as treasurer for the last two years and hopes to continue serving in that role.

Director:

Tyler Fleming is the senior GIS analyst for Douglas County, Kansas. Tyler has a B.S. in Geography/GIS from South Dakota State University, and a combined 10 years of professional GIS experience in both private and public sectors. He served as KAM director for the past two years in addition to serving on the program committee for several years. Tyler hopes to continue serving as director for the organization that has given so much over the years.

Scout Stanley is a GIS Technician at Douglas County, KS. Spatial learning is a part of who she is, which means GIS is the peanut butter to her jelly (Spatial Learning) or cheese to her macaroni… whatever phrase you like… GIS, spatial learning, and Scout's brain are harmonious. At Douglas County, she is providing visual elements of data through precision parcel mapping, data manipulation, and creating well-designed maps and solutions for the organization as well as the public. Previously, she has worked in the private (EN Engineering) and non-profit (Kansas Geographic Alliance) sectors advancing precision mapping in the private sector and supporting geographic literacy in K-12 education. Her involvement with KAM began in the fall semester of 2020 when she became a member and joined the Communications Committee. Throughout her various experiences, Scout has come to have a passion for continuing to further the cognizance and joy of mapping and GIS to Kansas as well as the importance of continued learning. Outside of work Scout enjoys going to restaurants and coffee shops with superb food, coffee, and ambiance. Life is fun with excellently designed maps and an artisanal cup of coffee to drink.

Lee Allen, GISP, KGISD, is currently the GIS Manager for Shawnee County. He has been involved with local government for over 15 years, including city and county entities. His primary focus tends to be utilizing the latest technologies to provide innovative solutions to geographic problems. He has served KAM previously as President and Director, and as committee chair for several years. He is running as director again because he misses all the action, adventure, and drama that unfolds within the veil of the KAM Board.

Restaurants Nearby the Conference Hotel

Restauraunt	Address		Restauraunt	Address
Henry T's	1521 SW 21st St Topeka KS		Pizza Hut	500 SW 10th Ave Topeka KS
A-Hann Thai	2222 SW Washburn Ave Topeka KS		Mexican Taco Shop	1901 SW 10th Ave Topeka KS
Fuzzy's Tacos	2614 SW 17th St Topeka KS		The Weather Room	918 S Kansas Ave Topeka KS
Burger Stand	2833 SW 29th St Topeka KS		Iron Rail Brewing	705 S Kansas Ave Topeka KS
The Pennant	915 S Kansas Ave Topeka KS		Brew Bank	822 S Kansas Ave Topeka KS
Julie's	911 S Kansas Ave Topeka KS		Spangles Restaurant	440 SW 29th St Topeka KS
			Schlotzky's	400 SW 29th St Topeka KS

Next Year's Conference – Oct 18-21, 2022, at The Hilton Garden Inn in Manhattan!