

# 2020 MAGIP Mini-GeoCon

Wednesday Oct 21, 2020	
Morning Session	Moderator: Jeff Hedstrom
9:00 - 9:55a	Transitioning from ArcMap to ArcGIS Pro ESRI
	Stretch/Coffee Break
10:05 - 11:00a	Transitioning from ArcMap to ArcGIS Pro Geodata Services, Inc.
OUT TO LUNCH	LUNCH BREAK
Afternoon Session	Moderator: Brandy Holstein
2:00 - 2:55p	ArcGIS Enterprise and ArcGIS Online ESRI
١	Stretch/Coffee Break
3:05 - 4:00p	Montana ArcGIS Enterprise & ArcGIS Online User panel
Thursday, Oct 22, 2020	
Morning Session	Moderator: Heather Wildlund
9:00 - 9:55a	ArcGIS Experience Builder ESRI
١	Stretch/Coffee Break
10:05 - 11:00a	COVID-19 Hub Site Missoula County
OUT TO LUNCH	LUNCH BREAK
Afternoon Session	Moderator: Jenny Connelley
2:00 - 2:55p	Montana Forest Action Plan Hub Site DNRC
	Stretch/Coffee Break
3:05 - 4:00p	COVID-19 Recovery Dashboard City of Bozeman



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### **Transitioning from ArcMap to ArcGIS Pro**

Wednesday, October 21: 9:00 - 9:55a

Presenter: John Sharrard, Esri

Abstract: Many ArcMap users are making the switch to ArcGIS Pro for the advantages it offers for modern GIS desktop workflows. ArcGIS Pro is tightly integrated with the rest of the ArcGIS platform, allowing you to share and consume content more efficiently. It also combines 2D and 3D into a single application, allowing you to work with multiple maps and multiple layouts in the same project. ArcGIS Pro is the future of desktop GIS and it is where new ideas and enhancement requests will appear.

**Bio:** John Sharrard is a GIS Solutions Engineer for Esri and works as part of team supporting Esri customers in the Pacific Northwest. He has been working in the GIS field for 33 years. John concentrates on GIS solutions for Local Government, 3D GIS, Geo-Design, Land Records, and Transportation solutions. John is a graduate from the GeoScience program at Oregon State University.

# **Transitioning from ArcMap to ArcGIS Pro**

Wednesday, October 21: 10:05 - 11:00a

Presenters: Ken Wall & Kyle Balke, Geodata Services Inc.

Abstract: This presentation will cover two interrelated topics regarding ArcGIS Desktop and ArcGISPro. In the first half we will offer the successes and failures we found in our own transition process from using ArcGIS Desktop to using ArcGISPro as our primary GIS software. In the second half, we will discuss the advantages of maintaining ArcGIS Online hosted feature layers with ArcGISPro using rural Montana use cases and real world examples. These techniques are most useful in smaller state agencies and by rural local governments who do not maintain enterprise environments.

**Bios:** Ken Wall – President, Geodata Services, Inc. Thirty years of GIS experience in GIS, beginning at the University of Montana in 1986 and founding Geodata Services, Inc. in 1993. Geodata Services has been a business partner with ESRI for 22 years. Ken has served as a GIS consultant and training instructor in GIS since 1988, and is a CompTIA CTT+ Certified Technical Trainer. Ken was appointed by the Governor to the Montana State Library Commission in 2015 and has served in that capacity for five years.

Kyle Balke – Senior GIS Analyst, Geodata Services, Inc. Mr. Balke has 15 years of applied GIS experience in planning, engineering fields. He has worked as a GIS analyst for firms in Wisconsin and Montana. His professional experience includes programming an GIS data workflows, project development, CAD and GIS integration, geodatabase design, spatial and statistical analysis, cartography, 3-D modeling. Kyle has served as an adjunct faculty for the University of Montana Department of Geography and taught Introduction to GIS courses at UM for several years.

## **ArcGIS Enterprise and ArcGIS Online**

Wednesday, October 21: 2:00 - 2:55p

Presenter: Shane Clarke, Esri

**Abstract:** ArcGIS Enterprise and ArcGIS Online are essential components of the ArcGIS platform for any enterprise GIS to meet the needs of both internal and external customers. But, when do you use ArcGIS Enterprise and when do you use ArcGIS Online? Can you get by with only using Enterprise OR Online? Do you really need both? And how do you realistically manage both Enterprise and Online environments? These questions (and more) will be covered in this session.

While similar in some aspects, both ArcGIS Enterprise and ArcGIS Online have unique capabilities that make both components indispensable for an enterprise GIS. This presentation will discuss common deployment patterns of ArcGIS Enterprise and ArcGIS Online, their unique capabilities, and tools for managing and integrating both environments. The intent of this presentation will be an interactive discussion, so questions will be anticipated!

**Bio:** Shane Clarke is a Solution Engineer on the State and Local Government sales team for the Esri Olympia regional office. Shane has been working in GIS for more than 30 years, during which time he has focused on a variety of areas including GIS projects, technical support, product release, and product management for mobile GIS apps. His current focus is helping cities and counties in the Pacific Northwest to use GIS to both meet the many challenges being faced as well as to build thriving communities.

#### **Montana ArcGIS Enterprise and ArcGIS Online User Panel**

Wednesday, October 21: 3:05 - 4:00p

**Panel members:** Jeremy Grotbo, Butte-Silver Bow; Michael Krueger, HDR; Tara Preston, City of Bozeman; Joe Tosoni, MT ST Library

**Abstract:** A user panel of a few folks around the state that have all implemented different GIS Enterprise environments. We'll be discussing with the panelists a number of different topics related to issues they have encountered, things to consider while deploying, and how their GIS infrastructure is set up. This panel was set up to advise those around the state that are in similar positions with one of the four panists, so come to learn all about the different Enterprise environments, hear tips and tricks while deploying/implementing Enterprise and ask plenty of questions to any of the four panelists.

#### Jeremy Grotbo, Butte-Silver Bow

Jeremy Grotbo is a GIS Specialist with Butte-Silver Bow's Planning Department. Over the last four years Jeremy has overseen the expansion of Butte-Silver Bow's online and mobile services, as well as its gradual transition toward ArcGIS Enterprise. Until recently the City and County of Butte-Silver Bow relied on a basic ArcMap licensing package and used ArcGIS Online for data collection and distribution. With increasing demand for spatial information between agency partners and private parties, the City and County determined that a new platform would be necessary to manage and share resources more efficiently. In the past year, Butte-Silver chose ArcGIS Enterprise for its future GIS needs, and is amid transition toward this environment. Following installation and configuration of the basic ArcGIS Enterprise components, Butte-Silver Bow is currently determining system architecture based on current and future GIS needs. Additional discussions are also taking place in establishing how many servers, users, and primary administrators will also be necessary over the coming years.

#### Michael Krueger, HDR Inc.

Michael is a GIS Manager with HDR Engineering based out of Billings, MT with over 10 years of experience in utility data modeling and analysis, geospatial database and server management, web service deployments with ESRI ArcGIS platforms, and workflow automation using various programming languages. He leads HDR's Geospatial Practice Group in Montana and administers ArcGIS Online subscriptions for a number of different rural utilities in the region. Working with smaller organizations that don't have the IT infrastructure, resources, and personnel to maintain robust GIS environments and datasets makes general data stewardship challenging. ArcGIS Online has proven to be the perfect platform for these organizations to both extend key asset data and provide a means for staff to update that information while in the field or at their desktop. The ArcGIS API for Python has enabled these utilities to continue to integrate key data feeds into GIS such as real-time outage data, work order management information, and customer information systems without the need of a complex system architecture.

#### Tara Preston, City of Bozeman

Tara Preston is the City of Bozeman's Asset/GIS Systems Administrator. She has been in the GIS industry for 13 years and has been with the City for over 5. Her primary role is to implement, manage, and administer the GIS and Asset systems. This includes ArcGIS Enterprise, FME Server, Geocortex Essentials & Analytics, Cityworks, as well as many integrations between these and other systems across the City. The City of Bozeman's ArcGIS Enterprise environment consists of a Portal, Datastore, Web Adaptor, a single Hosted ArcGIS Server, an additional federated ArcGIS Server Site (consisting of two servers), and ArcGIS Image Server (image hosting and raster analysis on separate servers). This

environment utilizes web tier authentication. Therefore, our Portal is only accessible by City staff. In order to allow external use, the City uses Distributed Collaborations and ArcGIS Online to provide resources to partners and the public. Prior to implementing Enterprise, it was determined that the City requires high availability for all services utilized in Cityworks (the City's workorder management system), but not necessarily for the rest of the applications. Highly Available implementations of Enterprise are quite complex. To avoid this added management and complexity, the City has a separate unfederated, highly available ArcGIS Server site, consisting of two servers that supports Cityworks. This system was built to continue to support growth over several years and can be scaled with additional resources as the need arises.

#### Joe Tosoni, Montana State Library

Joe Tosoni is the GIS Database/ArcGIS Server Administrator at the Montana State Library in Helena, MT. He has been working with GIS and other software technologies in State Government for nearly 8 years and has been at the State Library for over 4 of them. Some of his primary duties include administration, implementation, and maintenance of the ArcGIS Enterprise platform, underlying SQL Server database environments, and FME Server. He also oversees the IT infrastructure and VM resources supporting these environments and software. Currently, MSL has a web-tier based Dev ArcGIS Enterprise environment in place which consists of ArcGIS Portal (includes Parcel Fabric extension), federated ArcGIS Server, Datastore, and WebAdaptor. Additionally, a Production environment is also in place which consists of ArcGIS Server and Web Adaptor while the integration of their Prd MSL Portal is currently in progress. Both ArcGIS Server environments do have public facing domains but all services are tightly secured to support internal applications and state employee use only at this time. However, with the official MSL Portal near completion, many services and mapping applications in AGOL plan to be migrated and made more publicly available which will allow MSL staff easier access and control over the underlying data and service performance.

### **ArcGIS Experience Builder**

Thursday, October 22: 9:00 - 9:55a

Presenter: John Sharrard, Esri with special guest David

Howes

**Abstract:** ArcGIS Experience Builder empowers you to quickly transform your data into compelling web apps without writing a single line of code. Build apps with or without maps and display them on a fixed or scrolling screen, on single or multiple pages, and configure for mobile devices. Choose the tools you need from a rich set of widgets, design your own templates, and interact with your 2D and 3D content—all within one app.

The format of this presentation will consist of segments from multiple Tech Workshop videos from the 2020 Virtual Esri User Conference together with live Q&A during and after each video.

**Bio:** John Sharrard is a GIS Solutions Engineer for Esri and works as part of team supporting Esri customers in the Pacific Northwest. He has been working in the GIS field for 33 years. John concentrates on GIS solutions for Local Government, 3D GIS, Geo-Design, Land Records, and Transportation solutions. John is a graduate from the GeoScience program at Oregon State University

#### **Missoula County COVID-19 Hub Site**

Thursday, October 22: 10:05 - 11:00a

Presenter: Mike Snook, Missoula County

Abstract: The Missoula City-County Joint Information Center COVID-19 website was created in the early stages of the pandemic response to help provide critical information such as school closures, housing resources, testing information, and daily case rates for members of the public. The main informational site was created by the Missoula County Technology Department and supplemental mapping information on the site was created by the Missoula County GIS Department using ArcGIS Hub Site builder through ArcGIS Online.

**Bio:** Mike Snook has been the Missoula County GIS Manager for the last 8 years and is the currently the GIS lead under the planning section for the Missoula County COVID-19 Incident Response Team.

# ArcGIS Hub in State Government: Opportunities, Challenges, and a New Home for Information

Thursday, October 22: 2:00 - 2:55p

**Presenter:** Brian Collins, Montana Department of Natural Resources and Conservation.

Abstract: ArcGIS Hub provides an exciting way for GIS Professionals to make information available within an interactive and unified platform. The Montana Department of Natural Resources and Conservation has begun to utilize this resource as a new means of engaging and sustaining stakeholders interested in the agency mission to help ensure Montana's land and water resources provide benefits for present and future generations. Learn about how the Montana DNRC GIS Team has discovered incredible opportunities, faced unanticipated challenges, earned executive sponsorship, and started to build a new home for information. data, and agency initiatives.

**Bio:** Brian Collins is the GIS Manager for the Montana Department of Natural Resources and Conservation. The DNRC GIS team strives to empower more than 500 agency staff members with geospatial intelligence in the realms of water resources, forestry, state trust land management, wildland fire protection, and conservation efforts. Brian has a B.A. in Geology (UM-1997), M.A. in GIS & Cartography (UM-2002) and over 20 years experience in GIS, Enterprise Information Technology and Systems Integration.

#### **COVID-19 Recovery Dashboard**

Thursday, October 22: 3:05 - 4:00p

Presenter: Chris Kangas, City of Bozeman

Abstract: The City of Bozeman, along with partners throughout Gallatin, Park, and Madison Counties, developed a COVID-19 Recovery Dashboard HUB to help local communities with their transition to reopening the economy following the COVID-19 shutdowns. The Intent of this tool is to provide information to the community regarding reopening measures. A variety of data is represented to show progress with our state's recovery, including unemployment rates and claims, PPE resources; tourism numbers, Governor's Emergency Fund distribution figures, etc. Additionally, this is meant to be a one stop page for COVID-19 related resources. Since implementation, this page has been used by private and public entities across Montana to help gauge the success of the economic recovery in the new COVID-19 world.

**Bio:** Chris Kangas is a GIS Analyst for the City of Bozeman, and has been with the City for over 6 years. Chris excels at developing processes and clean and easy to use applications to support user needs.